The Vista

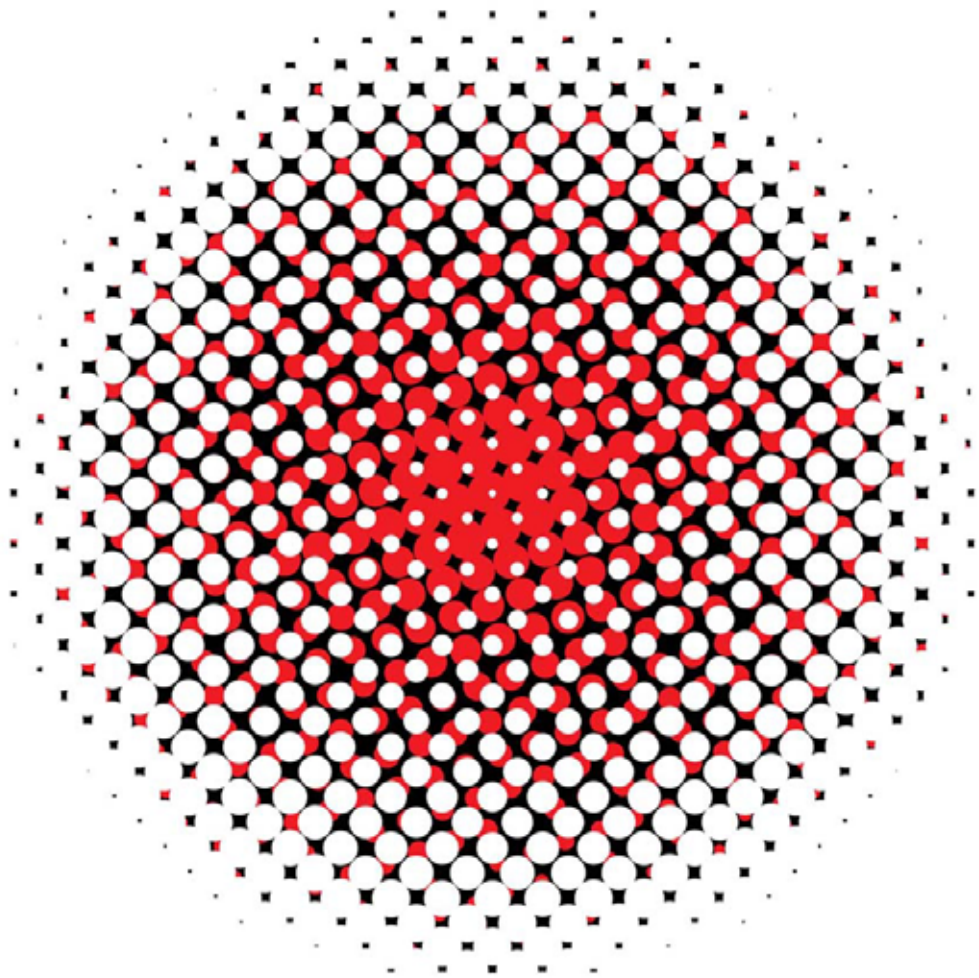## Simple, Powerful, Visual

Version 2.3 A

JANDS

Copyright & disclaimer

This product is approved for use in Europe and Australia/New Zealand and conforms to the following standards:

	European Norms	Australian / New Zealand Standards
·	EN55103-1	AS/NZS 4251.1
·	EN55103-2	AS/NZS 4252.1
·	EN60950	AS/NZS60950

Conformance has been achieved for intended usage in environment E1: Residential.

To ensure continued compliance with EMC Directive 89/336 and the Australian Radio communications Act 1992, use only high quality data cables with continuous shield, and connectors with conductive back shells. Examples of such cables are: DMX: Belden 8102 (100% Aluminium foil screen, 65% Copper braid)

TIP: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not properly installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

· reorient or relocate the receiving antenna;

· increase the separation between the equipment and receiver;

· connect the equipment into an outlet on a different circuit from that to which the receiver is connected;

· consult the dealer or an experienced radio/television technician for help.

Disclaimer

Information contained in this manual is subject to change without notice and does not represent a commitment on the part of the vendor. Jands Pty Limited shall not be liable for any loss or damage whatsoever arising from the use of information or any error contained in this manual. It is recommended that all service and repairs on this product be carried out by Jands Pty Limited or its authorised service agents. Jands Pty Limited cannot accept any liability whatsoever for any loss or damage caused by service, maintenance or repair by unauthorised personnel, or by use other than that intended by the manufacturer.

Jands lighting products must only be used for the purpose they were intended by the manufacturer and in conjunction with the user manual. Disconnect mains power when not in use.

Ó Copyright JANDS PTY LIMITED 2004 - 2015 All rights reserved. Printing in non-commercial quantities is permitted.

Manufactured in Australia by:

JANDS Pty Limited ACN 001 187 837
Locked Bag 15 (40 Kent Rd) MASCOT NSW 1460 Sydney Australia
Phone: +61-2-9582-0909
Fax: +61-2-9582-0999
Web: www.jands.com.au (Australia) www.jands.com (International)

Contents

Contents

1.   Welcome to the Vista

Welcome to the User Guide for the *Jands Vista* lighting console. This guide is intended to give you the information you need to get your Vista up and running as quickly as possible.

Note that this guide will be regularly updated as enhancements are made to the Vista. A current version of the manual is available at jands.com/support-vista-v2/download/.

What's different about the Vista?

You'll have noticed that the Vista is a bit different to most other consoles you've used. Instead of a keypad, it uses a graphic interface; instead of relying on you entering hundreds of key combinations, the Vista lets you do everything visually; instead of representing your show as numbers, the Vista represents it as events happening over time.

If you've seen any of the digital editing software packages for sound and video that are available these days, the most different aspect of the Vista, the timeline, will be instantly familiar to you. If not, don't worry, once you start using it you'll pick it up very quickly.

The Vista is different, but that's what makes it so much easier to use. Once you've read this guide you'll have enough of an idea of how this console works to create your first lightshow.

What things are the same as on other consoles?

Apart from the pen and the timeline concept, the Vista contains all the basic elements of live lighting that you're familiar with. You'll find controls for intensity, colour, beam, gobos and so on; you'll find libraries of all the manufacturers' most popular fixtures to choose from; you'll find a console that has the usual faders, buttons and LCD displays.

So don't worry, the Vista has a lot in common with other consoles – we've taken all the best elements of existing consoles and added a whole new dimension to them. You'll soon be right at home with the Vista.

About the generic fixture model

One thing about the Vista that's not immediately obvious is the 'generic fixture model'. What is it? It's a part of the software that works in the background and enables all fixtures, no matter what type or manufacturer to be treated the same way.

Lets say you've programmed a show using one brand of fixture but need to replace some of them with a different kind. Normally this would be a major hassle because you'd have to find a similar fixture then re-program each and every cue.

With the Vista, you can replace a fixture and you don't have to do any re-programming. Why? Because everything you've programmed is stored in generic form rather than as specific DMX channel values. For instance if you've programmed the lights to be red, the Vista can send that information to any light and achieve the same colour.

Sure, if you replace a fixture that has colour mixing with a fixture that has a fixed colour wheel, you won't expect to get the exact same result, but even in this case, the Vista will adapt and provide as near a match as the replacement fixture is capable of.

Need more information?

If you have questions about the Vista or you'd like more information, go to our website at www.jands.com/lighting, or call us on +61-2-9582-0909.

2.   Getting started

Setting up the console

Power

Connect the Vista L, T, I or S series console to any mains supply between 100 and 240vAC. The Vista M series obtains power via the USB port.

External displays

You can attach two external displays, including touch screen monitors to the Vista T series consoles using standard VGA connectors.

Vista I series consoles have connections for one DVI and one VGA monitor. A DVI – VGA cable can be used if you prefer to use two VGA monitors.

Vista L series consoles have connections for one DVI ∕ HDMI and one DVI ∕ VGA monitor.

Ü Vista has been tested with Wacom pen tablet LCDs and ELO 'Intellitouch and Accutouch' monitors. ELO makes many different touch screen monitors and not all models may be compatible. Please check for compatibility before purchasing touch screen monitors for use with your Vista console.

For Vista M and S series control surfaces, monitor configuration will depend on the configuration of the computer you are using.

Desk Lights

You can attach two Littlelite or equivalent desklights to the Vista L and T series console and one to the I and S series consoles.

Switching on

When you switch the console power on or launch the application on your PC, Vista starts up and displays the opening splash screen:

Once it finishes loading the program offers you the option to open or import an existing show file or create a newone. If you choose 'Create a new show…' Vista displays the Patch window:
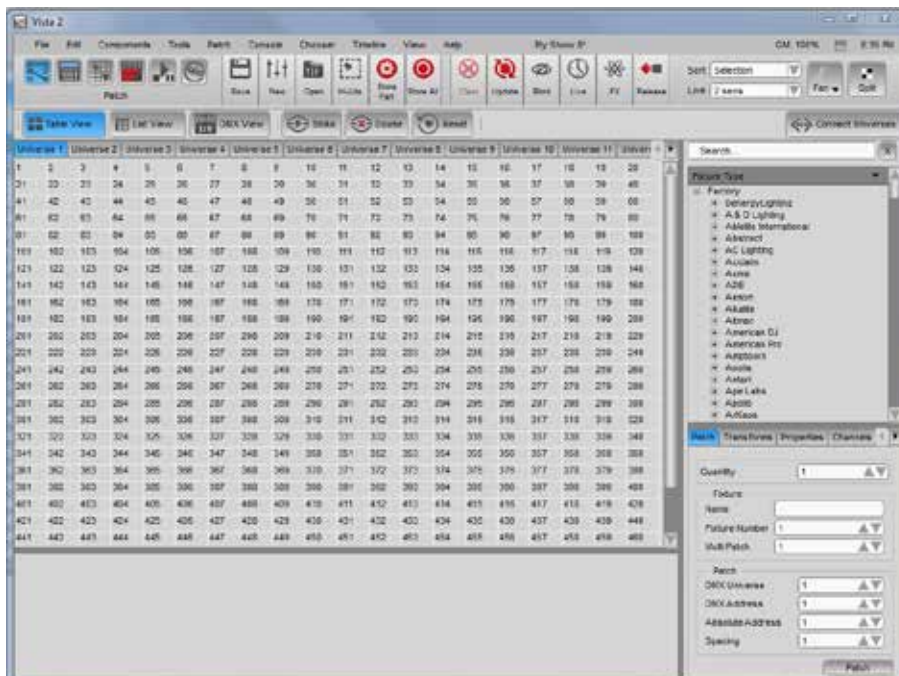
This is the Patch window, waiting for you to start creating a new show. To see the other Vista windows you use the buttons on the toolbar at the top left of the screen:

This button…	does this…
	displays the Patch window
	displays the Console hardware simulation window
	displays the Programmer Fixtures window
	displays the Programmer Timeline view.
	displays the Playback control window
	displays the fixture Output window

Creating and loading shows

Creating a show

To create a new show at any time, choose the New Show option from the File menu.

Loading existing shows

To load a show you've already created, choose the Open Show option from the File menu. Vista displays the Open Show window:
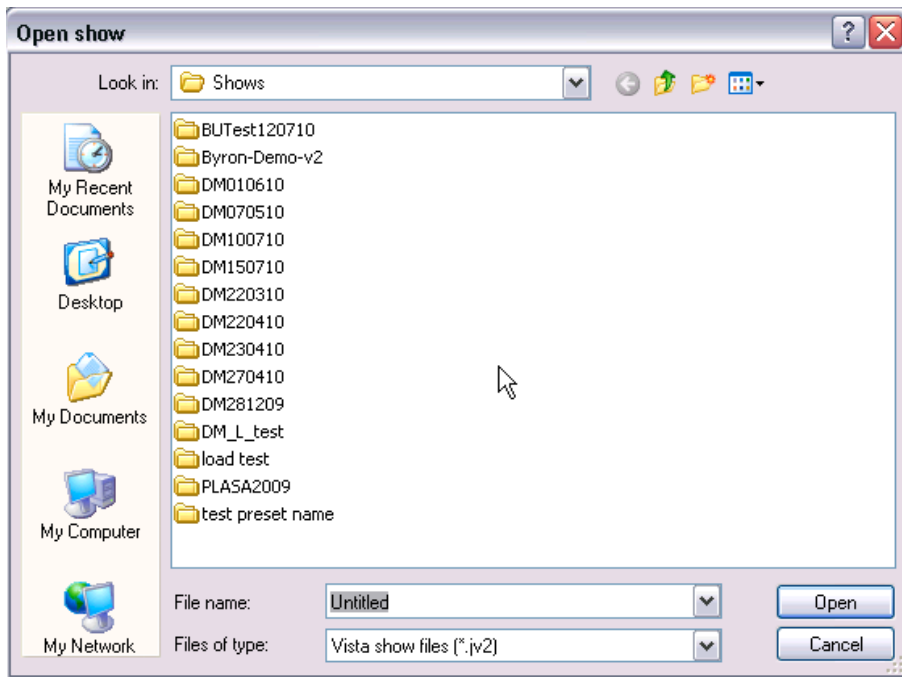
To load a show archive you've previously saved (or transferred to the console using the export / import function), find the directory containing it, then click on the filename to select it and hit the Open button to load it.

Saving shows

To save a show at any time, choose the Save Show option from the File menu. As with any computer, it's a good idea to save regularly in case of power failure.

The first time you save a new show, Vista displays the Save As window:
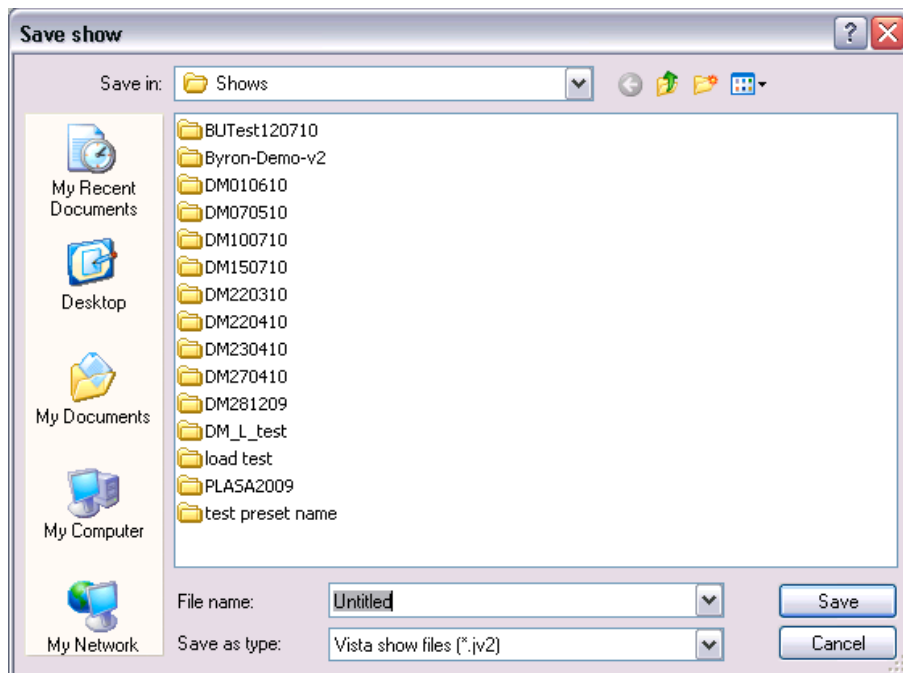
Type a name for the file and then click the Save button. Vista automatically creates a show folder, with the same name and puts the show file inside it. Once you've named the file, each time you choose the Save option from then on, Vista overwrites that file with the new details without displaying this window.

Saving copies of shows

To save a separate version of a show with a different name, choose the Save Show As… option from the File menu. You can then give the file another name and save it in a separate show folder.

Importing show archives

You can also open shows you've created on a PC or another console onto the Vista. The shows must be on a CD or any kind of storage device that connects to the Universal Serial Bus (USB) port (such as a memory stick).

To open a show, attach the USB device or put the CD in the CD drive (if available) and choose the Import > Show… option from the File menu.

Exporting show archives (backing up)

It's extremely important to make backup copies of your show user data folders. Like any other computer, the Vista stores your shows on a hard drive, and although it's extremely unlikely, if this drive were to fail (e.g. if the console was dropped) you could lose all the show files stored on it.

For this reason we recommend that you make regular backups of your work, onto a storage device that you can connect via a USB port.

To export a show archive onto an external storage device:

1.   Connect a USB Flash drive or external disk to the USB port.

2.   Choose the Export option from the File menu. Vista displays the Export
     window:
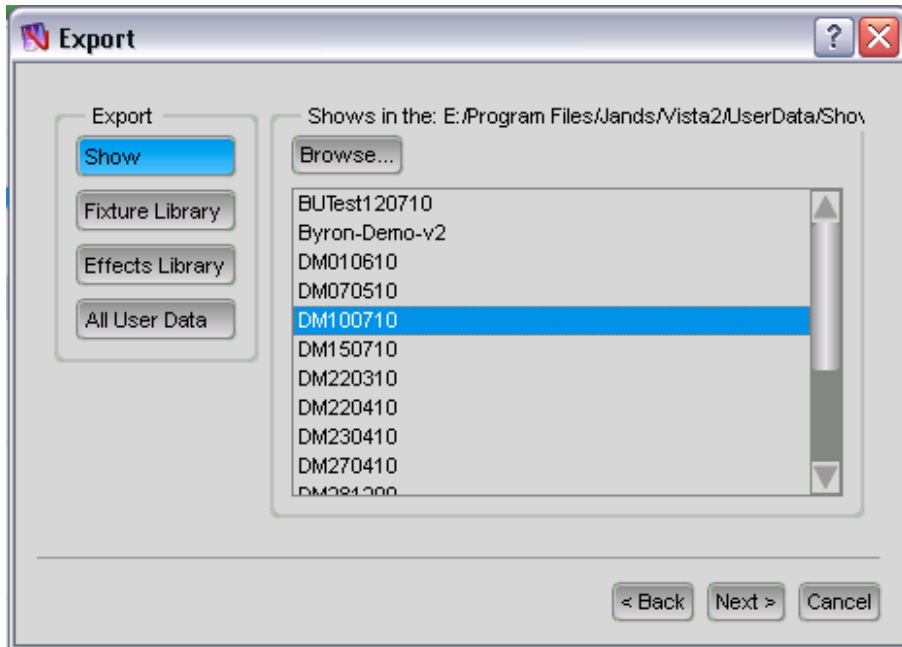
3.   Click on the Show button and then select the show(s) to backup from the list
     of show files.

4.   Click the Next button. Vista displays the Export window:
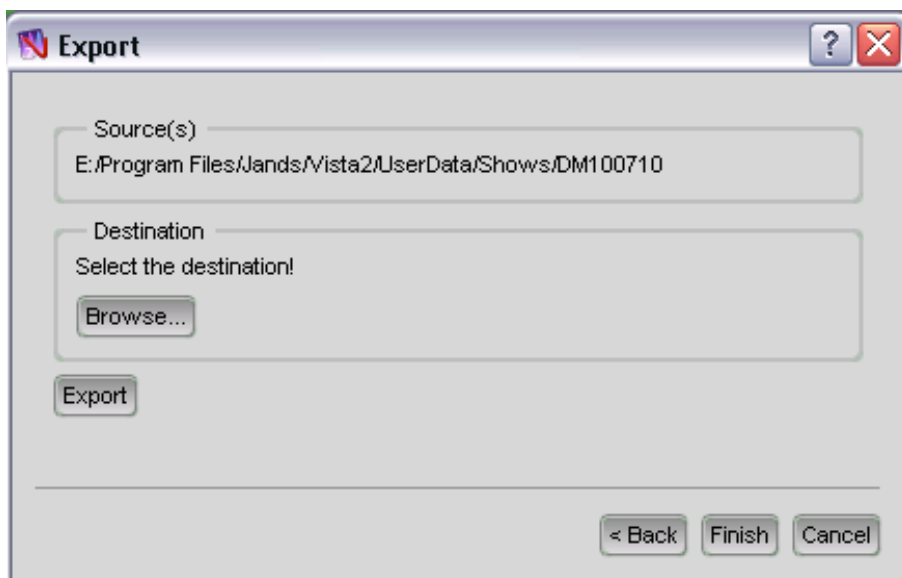
5.   Click the Browse button and choose a drive and directory on the computer
     or storage device and hit the Export button.

6.   Click the Finish button to close the Export window.

Deleting shows

To delete a show, choose the Open show option from the File menu, then right-click on the show folder name and choose 'Delete' from the popup menu.

Password-protecting your console or show

You can lock your console or show file or disable editing, with a password. To do this:

1. Choose the Lock option from the File menu. Vista displays a popup menu with three options:

This option…	does this…
Lock entire console	the password is required to use any console functions or controls.
Disable all editing	the password is required to edit cuelists, groups, presets and all other show components
Lock current show	the password is required to save changes to the show file

2. Select an option from the popup menu. Vista displays the Password window:

3. Enter your password in both boxes and click 'OK'

Your show or console is now password protected.

User Preferences

There are a number of user preferences that configure and determine how the Vista software operates. To set these preferences, choose the 'User Preferences' option from the File menu. Vista displays the User Preferences screen:
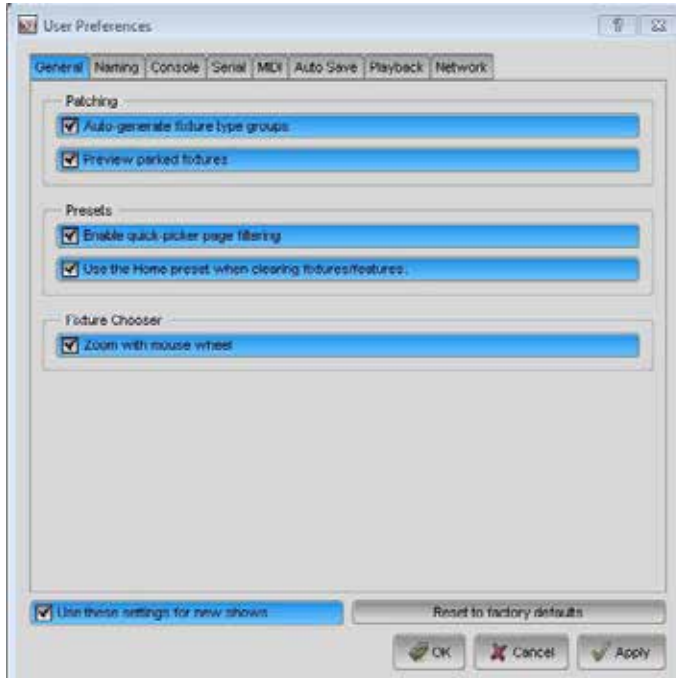
This window has 8 tabs:

General

This tab includes options for Patching, Presets and the Fixture Chooser.

This option…	does this…
Auto generate fixture type groups	Automatically creates fixture group icons, in the Chooser window whenever new fixture types are added to the patch
Preview Parked Fixtures	Shows changes on the Fixture icons even though the fixture(s) or some features are parked .
Enable Quick Picker page filtering	When a preset containing multiple features (i.e. Intensity, Position, Colour, etc) is selected from a filtered page (i.e. Presets > Colour) only one feature type will be applied to the selected fixture(s).
Use the Home Preset when clearing fixtures or features.	When fixtures or individual features of fixtures are Cleared, in the programmer, they will go to values saved in the Home preset. If there are no values saved for the fixture(s) they will go to their defaults.

This option…	does this…
Zoom with mouse wheel	Allows you to zoom in and out on the chooser window by using the scroll wheel on your mouse.
Use these settings for new shows	Makes the current settings the default for all new shows.
Reset to factory defaults	Resets all settings on the current tab to their factory defaults.

Naming

Most components are identified by a number (ID) and name.

You can adjust how the names of Cuelists, Cues, Fixtures, Groups, Presets, Extracts, SmartFX FX Templates, Fixture Layouts and Snapshots appear by setting a format for each component.
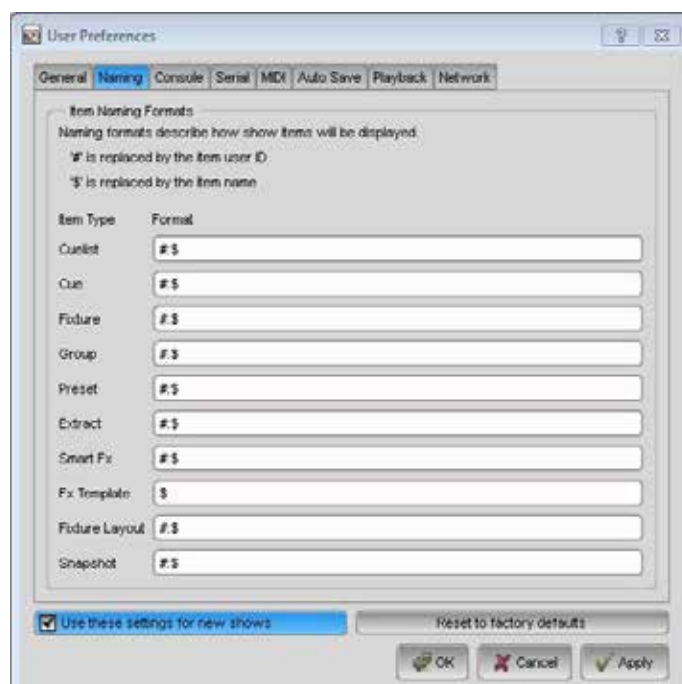
This option…	does this…
#	displays the components ID number
$	displays the components name.
Use these settings for new shows	Makes the current settings the default for all new shows.
Reset to factory defaults	Resets all settings on the current tab to their factory defaults.

Console

The console preferences
control how some of the
Vista hardware controls
operate .

This option…	does this…
Fader action threshold	Adjusts the amount a fader must be moved before triggering an action. For example when a cuelist is set to play when the fader is moved up (Auto-Play) this setting will control how far off zero the fader needs to be moved to play the cue.
Encoder sensitivity	Adjusts how many times an encoder needs to be rotated to go from minimum to maximum value.
Encoder acceleration	Sets the encodes to make bigger changes the faster they are turned.
Grand Master locked	Locks the Grand Master at it's current setting
Page holdover when active	Prevents cuelists and groups from being paged out if they are contributing to the current output. Components that are held will join the new page when: • The component is released or fully over-ridden or · You press the page up and down buttons simultaneously
Inhibit fader jitter	Old or dirty faders may 'jitter' and cause small level changes. Adjusting this setting to a higher level reduces the effect of this problem.

This option…	does this…
Use these settings for new shows	Makes the current settings the default for all new shows.
Reset to factory defaults	Resets all settings on the current tab to their factory defaults.

Serial input

To trigger cuelists with ASCII text messages the Vista serial port must be configured to match the sending device.

For more details on using serial devices with Vista see *Appendix 8, Using serial communication to control cuelists on page 21-1*
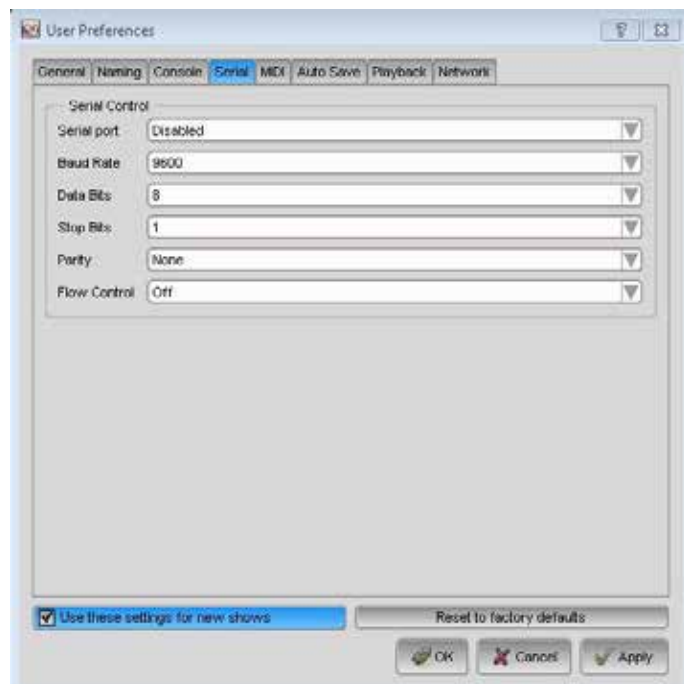
This option…	does this…
Serial port	Enables or disables the serial input
Baud rate	Sets the speed used for the serial port.Use a lower Baud rate for more reliable performance
Data bits	Sets the number of data bits. 8 data bits is almost always used in newer applications.
Stop bits	Sets the number of stop bits. Most devices use one stop bit.
Parity	Sets the Parity to None, Odd, Even, Mark or Space. The most common parity setting, is "none".
Flow control	Sets whether signals are used to pause and resume the transmission of data. Normally set to Off

This option…	does this…
Use these settings for new shows	Makes the current settings the default for all new shows.
Reset to factory defaults	Resets all settings on the current tab to their factory defaults.

For more details on using serial devices with Vista see *Appendix 8, Using serial communication to control cuelists on page 21-1*

Midi input

To use Midi Timecode (MTC), Midi Show Control (MSC) or Midi Notes to control Vista the Midi preferences must be configured to match the sending device.
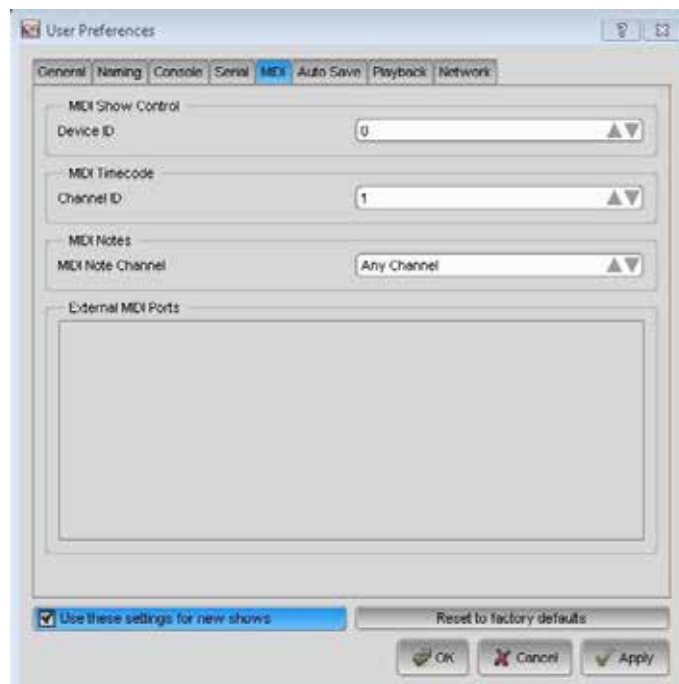
This option…	does this…
Midi Show Control	Sets the Midi device ID used for MSC messages. (0 – 128)
Midi Timecode	Sets the channel ID used for MTC. (Any channel or 0 – 127)
Midi Show Control	Sets the channel ID used for Midi Note messages. (Any channel or 0 – 16)
External Midi Ports	Displays a list of any external Midi ports that are available on a Mac or Windows systems. To select an external port tick the corresponding checkbox.

This option…	does this…
Use these settings for new shows	Makes the current settings the default for all new shows.
Reset to factory defaults	Resets all settings on the current tab to their factory defaults.

For more details on using Show Control with Vista see *MSC lighting messages on 20-2*

For more details on using Midi Notes with Vista see *Midi Notes on page 7-29*

For more details on using Midi Timecode with Vista see *Using Timecode to control Cuelists on page 10-1*

Autosave

You can set Vista to automatically save copies of your show while you are programming.

This option…	does this…
Auto save current show	Sets Autosave on or off for the current show. If Autosave is on a disk icon appears in menu bar.

This option…	does this…
Auto save every	Sets the interval, in minutes, between autosaves. If autosave is on the colour of the disk icon indicates its status: Grey - autosave is enabled but idle. Blue - autosave is saving a copy of the show. Red - autosave has not been able to save a copy of the show for 2 x the specified interval because the console has been busy with other tasks.
Use these settings for new shows	Makes the current settings the default for all new shows.
Reset to factory defaults	Resets all settings on the current tab to their factory defaults.

Playback
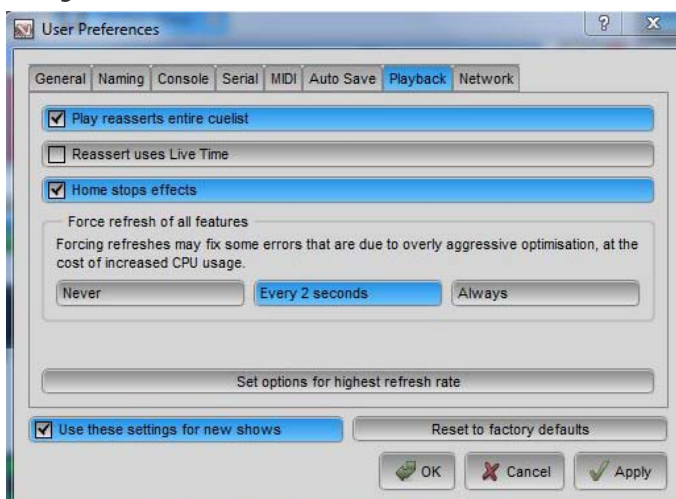
The playback preferences set how some playback actions are performed.

This option…	does this…
Play reasserts entire cuelist	Plays the tracked state of a cue even if it has been partially over-ridden by other playbacks.
Reassert uses Live Time	Uses the Live Time setting, rather than the cue timing when a cue is reasserted.
Home stops effects	Stops any effects running on a fixture feature when it is sent to its Home setting.

This option…	does this…
Force refresh of all features	Forces Vista to recalculate the output state more regularly. Normally only required for troubleshooting output errors on very large shows.
Set options for highest refresh rate	Sets 'Reassert uses Live time' On and Force refresh to Never. Has no effect on 'Home stops effects'
Use these settings for new shows	Makes the current settings the default for all new shows.
Reset to factory defaults	Resets all settings on the current tab to their factory defaults.

Network

This tab is used to set networking options for Tracking Backup and for systems using D1 processing units.
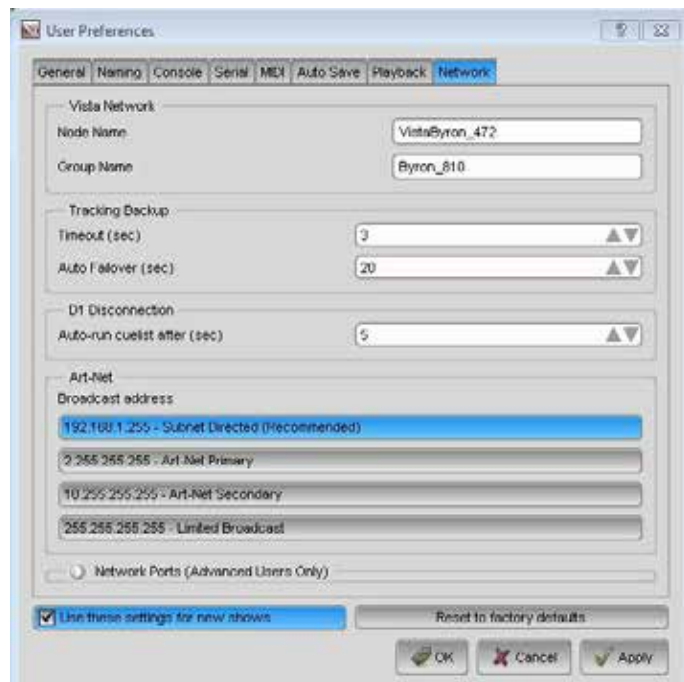
This option…	does this…
Vista Network	
Node Name	Sets the name for this Vista device.
Group Name	Sets the name of the Group the Vista device belongs to. Devices in the same Group can operate together for tracking backup and distributed processing.
Tracking Backup	

This option…	does this…
Timeout (sec)	After not receiving any communication, from the tracking backup console, for the Timeout period an alert window opens. This window provides options for dealing with the communication loss.
Auto Failover (sec)	Sets the time, before the Tracking backup console automatically takes over from a failed Master console.
D1 Disconnection	
Auto run Cuelist after (sec)	Sets the option to run one or more cuelists, from a D1 if the unit loses communication with the Vista console. To set the cuelist(s) to run select the 'Auto-run on failure' option on the Cuelist Properties window. For more information see *Cuelist Properties on page 7-26*
Art-Net	
Broadcast address	Sets the broadcast address for Art-Net outputs. The options are: Subnet Directed – broadcast is on the local LAN subnet Art-Net Primary (IP 2.255.255.255) Art-Net Secondary (IP 10.255.255.255) Limited Broadcast (IP 255.255.255.255)
Network Ports (Advanced users only)	
VistaNet	Sets the TCP port used for VistaNet communications.
Show Control	Sets the TCP port used for Show Control communications. Must not be the same port
D1 Control	Sets the TCP port used for communications with D1 units.
Use these settings for new shows	Makes the current settings the default for all new shows.
Reset to factory defaults	Resets all settings on the current tab to their factory defaults.

Ü The ports used for Vista networking can be changed but none of the three port numbers should be the same as any other

3.   The Console control panel

System settings (L, T & I series only)

There are a number of system settings that configure and determine how the Vista L, T and I series consoles operate. To set these preferences, choose the 'Control Panel' option from the File menu. Vista displays the Settings screen.

Calibrating the Pen tablet

Sometimes you may have to re-calibrate the pen tablet or external touch screens. To begin calibration, choose the Calibration button from the settings window. Vista lists the pen tablets and touchscreens that are connected and configured.

If you don't see a screen, make sure that it has been configured in the 'Display and Input devices' window – see below.
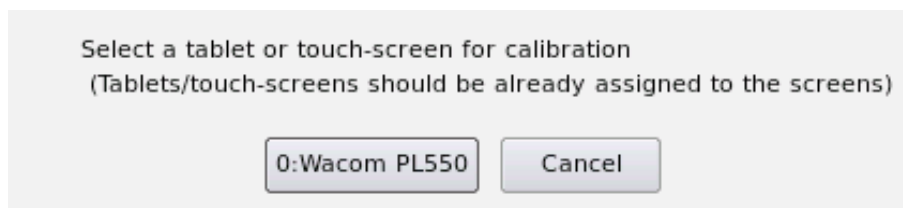
When you click on the button corresponding to the screen you want to calibrate Vista displays the calibration window on the monitor you selected:
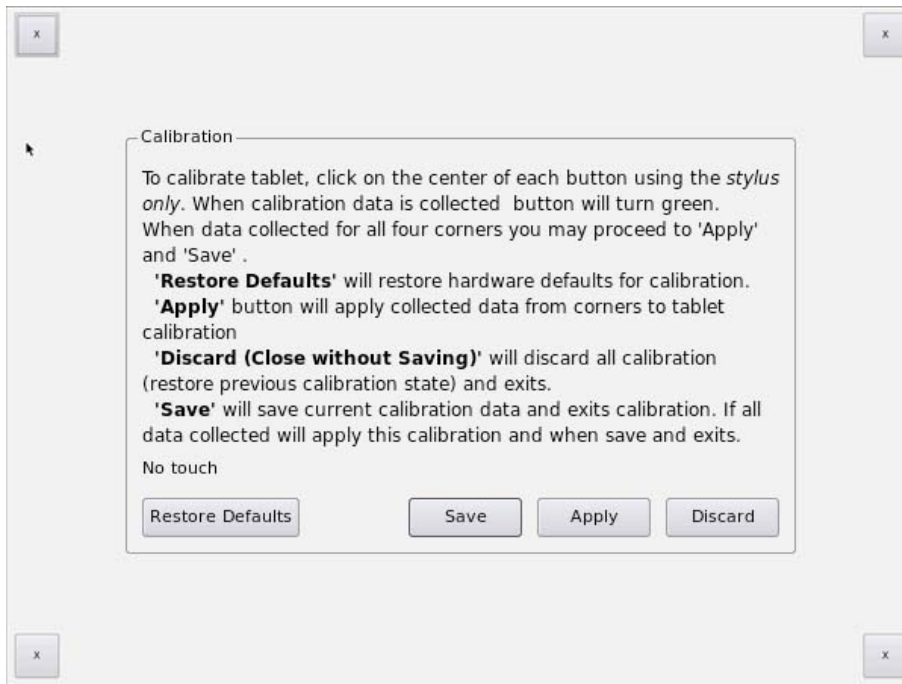
Follow the on screen prompts to complete the calibration process.

Keyboard layout

If you are using a non-QWERTY keyboard, you can use this panel to select an alternate keyboard type (AZERTY etc).

Display and Input Devices

If you are using a S or M series control surface the display and input device (mouse, pen tablet, etc) settings are controlled by the PC operating system.

Ü Vista has been tested with Wacom pen tablet LCDs and ELO 'Intellitouch' model 1715 monitor. ELO make many different touch screen monitors including the 'AccuTouch' type which may not be compatible. Please check for compatibility before purchasing touch screen monitors for use with your Vista system.

To set the Pen tablets and Touchscreens that are connected to your L, T or I series console click the Display and Input Devices button. Vista displays the Display and Input Devices window:

In this window:

- · Screen #0 is the built in Pen tablet on a L or T series console
- · Screen #1 is the monitor you have connected to monitor out 1.
- · Screen #2 is the monitor you have connected to monitor out 2.

To configure the monitors click on the drop down arrow and select the screen type connected to each output. If your monitor does not appear it may not be supported.

Using the screensaver

If you are using a S or M series control surface the display, screensaver, settings are controlled by the PC operating system.

To set a screensaver on a L, T or I series console click the Screen Saver button. Vista displays the screensaver window:

This option…	does this…
On / Off	Turns the screensaver on or off
Standby	Sets the how long the console must be idle before the screensaver starts.

This option…	does this…
Suspend	Not required for LCD type monitors. Sets the how long the console must be idle before CRT type monitors go to suspend mode.
Off	Not required for LCD type monitors. Sets the how long the console must be idle before CRT type monitors turn off.

Network preferences

If you are using a S or M series control surface the local area network (LAN) settings are controlled by the PC operating system.

To set the LAN preferences, on a L, T or I series console click the Network settings button on the Settings screen:
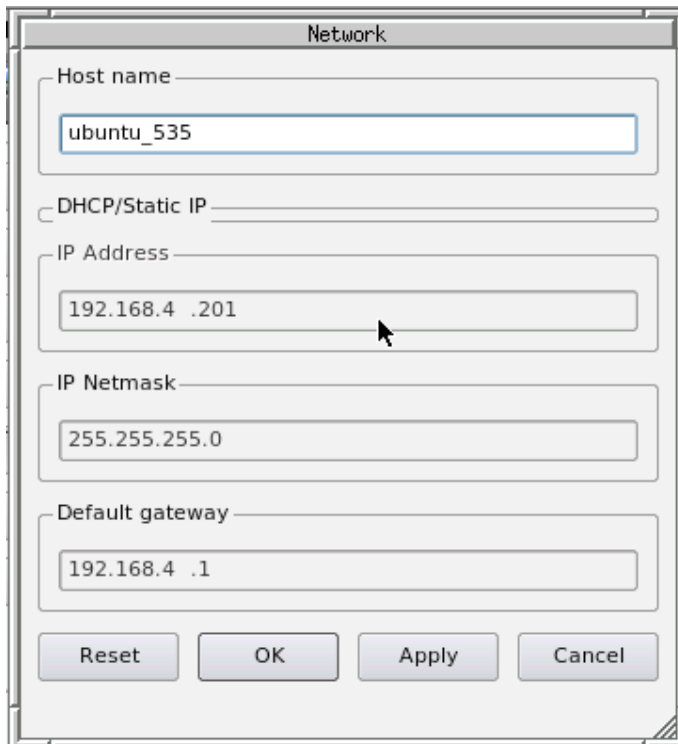
This option…	does this…
Host name	This field is not used but a name is automatically assigned.
DHCP / Static IP	Sets the console to either obtain an IP address from a DHCP server or use a Static IP as set below

This option…	does this…
IP Address	Sets the IP address of the Vista console, e.g. 192.168.0.65
IP Netmask	Sets the subnet mask for the IP address, e.g. 255.255.255.0
Default Gateway	Sets default gateway for the console. Used when the destination address is outside the local subnet.

Date and time

Vista displays the time in the title bar of the main windows. If you are using a S or M series control surface the date and time settings are controlled by the PC operating system.

To set the date and time, on a L, T or I series console click the date and time button on the Settings screen and follow the on screen prompts.

USB disk utility

To completely re-install the Vista software on a L, T or I series console you need a bootable USB thumb drive with the software install package copied onto it. The USB disk utility will prepare a drive and make it bootable. To do this:

1. Choose the Control panel option from the File menu. Vista displays a system settings menu.

2. Select the USB disk utility option to open the disk utility window. You should see a line with the name of your USB drive (i.e. SanDisk Cruzer):
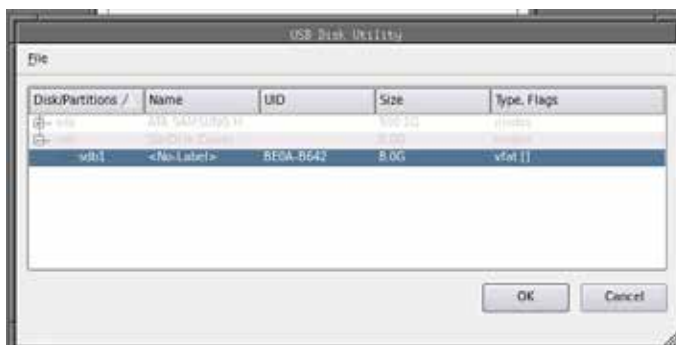
3. Select and highlight the USB drive.

4. Select the 'Prepare for Installer' option from the file menu. Vista displays an alert showing the name of the drive you have selected. If this is correct click 'Confirm' and the drive will be made bootable.

You can now connect the USB drive to your Windows or Mac computer and copy the Vista install files onto it. For more details on this and how to do a clean install on your console see Technote Tbjlt169.pdf available for download from jands.com/support-vista-v2/

4.   Using the interface

The latest version of Vista features a new simpler layout. No matter whether you have worked with Vista before or are seeing it for the first time it's worth taking some time to get familiar with the new window layout and options.

Menu bar

At the top of the window you'll see the main menu bar. Click on any menu heading to access Vista's dialog boxes, submenus and commands.

The main menu bar also shows:

- The show file name.
- The Grand Master level setting.
- The Autosave (disk) icon. *See Autosave on page 2-13*
- The time.

Main toolbar

At the top of the window you'll see the main toolbar which is common to ALL windows. This toolbar contains the most frequently used buttons and is divided into three sections. The centre section contains 12 buttons that map to the Function buttons on Vista consoles and the 'F' keys on your keyboard. They can be customized to suit your style of operation.

Window navigation

You switch between the main windows using the 6 buttons on the top left side of the main toolbar. You can also switch between windows by selecting the Patch, Console, Fixture Chooser, Timeline, Playback or Output option from the View menu.

Ü Hovering over the icons shows the button name.

This button…	does this…
(Alt + 1)	displays the Patch window

This button…	does this…
(Alt + 2)	displays the Console hardware simulation window
(Alt + 3)	displays the Programmer Fixtures window
(Alt + 4)	displays the Programmer Timeline view.
(Alt + 5)	displays the Playback control window
(Alt + 6)	displays the fixture Output window

V1 classic style window navigation

If you prefer to select windows from the bottom of the screen you can open a toolbar that emulates the earlier versions of Vista. To do this select the 'Vista Toolbar' option from the View menu.

Vista places the toolbar at the bottom of the window:

Click on the buttons to select the Patch, Console, Fixture Chooser, Timeline, Playback or Output window.

The Soft buttons

The twelve buttons in the centre of the main toolbar provide quick access to frequently used commands, functions and windows.

- · If you are using a L or T series console these buttons are automatically mapped to the function buttons, above the LCD / tablet.

- · If you are using an I or S series unit the first 6 (5 on the S3) buttons are automatically mapped to the function buttons in the top centre section of the control surface.

- · For all Vista systems you can use your keyboard F1-F12 buttons to activate these buttons.

Ü You can display text labels, for the function buttons, at the top of your tablet or monitor. To do this select the 'Softkey Toolbar' option from the View menu.

Standard buttons

When you first start a new show Vista loads the standard set of buttons but you can customize each and every button, as described below.

This button…	does this…
	Saves the show file to disk
	Opens a new Cuelist in the Editor
	Opens an existing Cuelist in the Editor
 HiLite	Turns on the Editor's 'Highlight' mode. When you are focusing or testing your fixtures you can use Highlight to bring up the intensity of each fixture automatically when you select it in the Fixture Chooser.
 Store Part	Displays the Store Part window where you can save the contents of the editor to any cue in any cuelist. Store part provides many options and must be used for tracking to operate correctly. *See Store Part on page 7-7*
 Store All	Displays the Store Look window where you can save the complete output (the look on stage). Storing this way will ensure that when you play a Cue back it will appear exactly as it did when you saved it.
 Clear	Clear all information coming from the Live tab. If a Cuelist tab is selected this button closes that tab.
 Update	Displays the Update window where information coming from the Editor (the Live tab or any Cuelist tab) can be used to update one or more Cues and Presets.
 Blind	Turns the output from the editor off. In this mode you can still edit cues but there will be no output sent from the editor to your fixtures.
 Live	Displays the Live time window where you can set a fade time that applies to any selections you make from the editor palettes or presets.
 FX	Displays the SmartFX window where you can create and edit effects. The SmartFX window is normally docked in the Chooser / Timeline window Sidebar. If you prefer it to be floating window you can drag it off the sidebar. *See SmartFX on page 8-1*

This button…	does this…
Release All	Clicking this button releases all the fixtures from their current settings as determined by the cuelists that are running and returns them to their default state.

Modified soft buttons

The soft buttons provide different functions when you press the Red (Shift), Green (Alt), Yellow (Control) or Blue (Control+Alt) modifier.

Shift set (Red modifier)

Hold down the Red modifier button or the Shift button, on your keyboard, to access and display the Shift set.

This button…	does this…
Next Fixture	Used to step through fixtures, selects the 1st fixture (or the one after the current selection) and de-selects the others. Each subsequent press selects the next fixture. Useful when focusing fixtures.
Previous Fixture	Used to step through fixtures, selects the last fixture (or the one before the current selection) and de-selects the others. Each subsequent press selects the previous fixture. Useful when focusing fixtures.
Invert	Inverts the fixture selection (i.e. all selected fixtures are de-selected and all de-selected fixtures are selected).
Active	Selects all the active fixtures (i.e. those that have Intensity).
Programmed	Select all the fixtures that are programmed in the current cue.
All	Selects every fixture.

This button…	does this…
De-select all	De-selects all fixtures
Previous selection	Vista remembers the last set of fixtures you selected; you use this button to toggle back to your previous fixture selection.
Next selection	If you have used the previous selection command this button will toggle back to the fixture selection you had before pressing previous selection.
Strike	Ignites the lamps in the selected fixtures
Douse	Switches off the lamps in the selected fixtures off.
Reset	Resets the selected fixtures to their factory default settings. This is useful if a fixture has a control problem and you need to get it 'back to normal'.

Alt set (Green Modifier)

Hold down the Green modifier button or the Alt (Option) button, on your keyboard, to access and display the Atlt (Option) set.

This button…	does this…
Open Cuelist	Opens a new Cuelist in the Editor.
New cuelist	Opens an existing Cuelist in the Editor .

This button…	does this…
⭐ Append cue	Adds a new cue at the end of the cuelist being edited.
⭐ Insert before	Inserts a new cue, before the cue that is being edited.
⭐ Insert after	Adds a new cue after the cue that is being edited.
⭐ Not assigned	Not assigned.
⭐ Clear Fixtures	Clears all features from the selected fixtures.
Clear Intensity	Clears Intensity from the selected fixtures.
Clear Intensity	Clears Position from the selected fixtures.
Clear Colour	Clears Colour from the selected fixtures.
Clear Gobo	Clears Gobo from the selected fixtures.
Clear Beam	Clears Beam from the selected fixtures.

Ctrl set (Yellow Modifier)

Hold down the Yellow modifier button or the Control button, on your keyboard, to access and display the Control set.

This button…	does this…
Live properties	Opens a Live tab properties window.
Cuelist properties	Opens the Cuelist properties window.
Insert Command	Opens the Insert Command window where you can add a command to the cue you are editing (i.e. to play another cue)
Convert to release events	Sets the selected events to release the feature.
Merge Cues	Merges the events in 2 or more selected cues into a single cue. Select the cues in the Cue navigator bar.
Show tracked events	Shows or hides tracked events in the time line. Tracked events are shown in a lighter, transparent colour and cannot be selected.
Clear Fixtures	Clears all features from the selected fixtures so that they return to their previous state.
Home Fixtures	Sends the selected fixtures to their Home settings

This button…	does this…
Block cue	Blocking copies any tracked events into the selected cue and prevents any future changes, to earlier cues from tracking through. This means that no matter what changes are made to other cues in the list, the cue will play back the exact look it had at the time it was blocked. *See Working in Cue* only mode If you want to add a number of cues that do not track through to subsequent cues you can switch to 'Cue only' mode. This means that any settings in the cue you create are automatically undone in the following cue. To do this: **1.** Select the 'Cue Only Editing' option from the Tools menu. This command is normally assigned to F3 on the Blue function key set (or Ctrl + Alt + F3). **2.** When you have finished creating cues this way, deselect the Cue Only Editing option. Blocking a cue *on page 7-18*
Super - Block cue	When a 'Super Block' cue runs, any features for the fixtures in the cue, that aren't already included in the cue are automatically sent to their home value. This means that the cue will look as it would if no other cuelist was playing.
Un-Block cue	Removes redundant events, from the selected cue. This means that if the selected cue includes an event that is the exactly the same as an event that is tracking through from a previous cue, that event will be removed. Unblocking will not change the cue's look.
MIB Move in Black	Opens the Move in Black window where you can Mark a cue and add MIB events that pre-set the selected fixtures so that when they turn on you don't see them moving, changing colour etc.

Ctrl + Alt set (Blue Modifier)

Hold down the Blue modifier button or the Control & Alt buttons, on your keyboard, to access and display the Control-Alt set.

This button…	does this…

This button…	does this…
Show selection order	Shows selection order numbers on the fixture icons.
Show Tracked Events	Shows timeline events for tracked features.
Cue Only Editing	When 'Cue-only' editing is on all new cue events will be automatically undone in the next cue.
Not used	
Not used	
Set Event Timing	Opens the event timing window.
Stop All FX	Stops all running Smart Effects.
Stop Intensity FX	Stops all running Intensity Smart Effects.
Stop Position FX	Stops all running Position Smart Effects.
Stop Colour FX	Stops all running Colour Smart Effects.
Stop Gobo FX	Stops all running Gobo Smart Effects.
Stop Beam FX	Stops all running Beam Smart Effects.

Configuring the soft buttons

To change the function of a soft button, right click on the button and choose a command or function from the popup menu. Any command from any menu can be assigned to the soft button. To change one of the alternate sets hold the Shift, Alt or Ctrl key while right clicking.

Soft key toolbar

The soft buttons correspond to the hardware buttons above the main screen on L and T series consoles. To make it easier to identify the buttons you can add on-screen labels below the buttons. To do this select the 'Softkey Toolbar' option from the View menu.

Vista places the softkey labels toolbar at the top of the window:
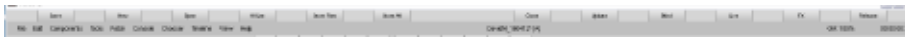
The Sidebar

The sidebar provides access to different features, depending on the window you have open:

- In the Patch window you use the sidebar to select fixtures from the library, and configure them.
- In the Console window you use the sidebar to select components (i.e. Cuelists, Groups, Presets and more) and assign them to the Playback sets. You can also assign fader and button functions to the playback controls.
- In the Fixture Chooser and Timeline the sidebar contains the Palettes (i.e. Intensity, Position, Colour, Gobo, Beam), Component panels (i.e. Groups, Presets, Extracts, Effects and more) and the Smart FX panel
- There is no sidebar in the Playback Control and Output windows.

Undocking and re-docking the sidebar tabs

To undock any of the sidebar tabs, click on the title bar and drag it away from the sidebar or click the 'undock' icon at the end of the title bar.

To re-dock the window double click on the title bar.

You can adjust the width of the sidebar by clicking on the window divider and dragging to the left or right.

Toolbars

Most windows have optional toolbars that provide buttons for sets of menu commands. To show or hide any of the optional toolbars select the 'Toolbars' option from the view menu.

Patch window toolbars

There are three toolbars available on the Patch window

View toolbar

To open or close a toolbar select the 'Toolbars' option from the View menu:
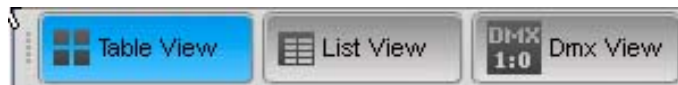
This button…	does this…
Table view	Switches the main panel of the Patch window to the standard Table view.
List view	Switches the main panel of the Patch window to the List view where the patched fixtures are shown as a list.
DMX view	Switches the main panel of the Patch window to the DMX view where the output of each channel of each fixtures is shown, on the patch table.

Fixture Macro toolbar (also available on the Chooser & Timeline window

To open or close a toolbar select the 'Toolbars' option from the View menu:

This button…		does this…
	Strike	Ignites the lamps in the selected fixtures.
	Douse	Switches off the lamps in the selected fixtures off.
	Reset	Resets the selected fixtures to their factory default settings. This is useful if a fixture has a control problem and you need to get it 'back to normal'.

Connections toolbar

To open or close a toolbar select the 'Toolbars' option from the View menu:

This button…	does this…
Connect	Open the DMX Connections window where you can connect your console's DMX outputs and any external Ethernet-DMX interface boxes to the patch universes.

Chooser & Timeline window toolbars

There are nine toolbars available on the Editor windows

Update toolbar

All the buttons, on this toolbar, are available on the standard soft button set. However if you have re-configured the soft buttons this toolbar may be useful:

This button…	does this…
	Opens a new Cuelist in the Editor.
	Opens an existing Cuelist in the Editor.
Store Part	Displays the Store Part window where you can save the contents of the editor to any cue in any cuelist. Store part provides many options and must be used for tracking to operate correctly. *See Store Part on page 7-7*
Store Look	Displays the Store Look window where you can save the complete output (the look on stage). Storing this way will ensure that when you play a Cue back it will appear exactly as it did when you saved it.
Clear	Clear all information coming from the Live tab. If a Cuelist tab is selected this button closes that tab.
Update	Displays the Update window where information coming from the Editor (the Live tab or any Cuelist tab) can be used to update one or more Cues and Presets.

This button…	does this…
Blind	Turns the output from the editor off. In this mode you can still edit cues but there will be no output sent from the editor to your fixtures.
Live	Displays the Live time window where you can set a fade time that applies to any selections you make from the editor palettes or presets.

Edit toolbar

To open or close a toolbar select the 'Toolbars' option from the View menu:

This icon…	does this…
Ctrl X	Cuts the selected item.
Ctrl C	Copies the selected item.
Ctrl V	Pastes the selected item.

Undo toolbar

To open or close a toolbar select the 'Toolbars' option from the View menu:

This icon…	does this…
Ctrl+Z	Undo the last action.
Ctrl+Y	Redo the last action.

Fixture selection toolbar

To open or close a toolbar select the 'Toolbars' option from the View menu:
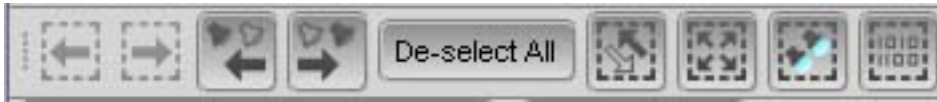
This icon…	does this…
Previous selection	Vista remembers the last set of fixtures you selected; you use this button to toggle back to your previous fixture selection.
Next selection	If you have used the previous selection command this button will toggle back to the fixture selection you had before pressing previous selection.
Previous Fixture	Used to step through fixtures, selects the last fixture (or the one before the current selection) and de-selects the others. Each subsequent press selects the previous fixture. Useful when focusing fixtures.
Next Fixture	Used to step through fixtures, selects the 1st fixture (or the one after the current selection) and de-selects the others. Each subsequent press selects the next fixture. Useful when focusing fixtures.
De-select all	De-selects all fixtures.
Invert	Inverts the fixture selection (i.e. all selected fixtures are de-selected and all de-selected fixtures are selected).
All	Selects every fixture.
Active	Selects all the active fixtures (i.e. those that have Intensity).
Programmed	Select all the fixtures that are programmed in the current cue.

Command Line toolbar

See Using a keypad in the programmer window on Page 6-56

Fan toolbar

The fan toolbar is used to set how Feature values and Event times are spread.

This option…	does this…
Linear Fan Diverged from centre.	Fanned values radiate in both positive and negative directions from the base value, starting from the centre of the fixture selection.
Fan from end Linear from Start	The fanned feature values radiate in one direction from the base value, starting from the first selected fixture.
Fan from start Linear from End	The fanned feature values radiate in one direction from the base value, starting from the last selected fixture.
Fan from centre. Linear from Extremities	The fanned feature values radiate in one direction from the base value, starting from the first and last selected fixtures.
Inverted fan Diverged from extremities	The fanned values radiate in both positive and negative directions from the base value, starting from the first and last selected fixture.
Fan from both ends Linear from Centre	The fanned feature values radiate in one direction from the base value, starting from the centre of the fixture selection.

Ü To fan a feature or events, select the fan mode and hold the Yellow modifier or Control key while setting the feature value or dragging the event bars.

Components toolbar

The components toolbar includes buttons to create new Presets, Groups and Extracts

This option…	does this…
✚ Preset	Opens the create New Preset window.
✚ Group	Opens the create New Group window.
✚ Extract	Opens the create New Extract window.

5.   Patching your rig

Once you've got your Vista system connected and powered up you can patch
your fixtures the way you want them using the Patch window.

If it's not already open click on the Patch icon or select the 'Patch' option from the
Window menu, Vista displays the Patch screen:
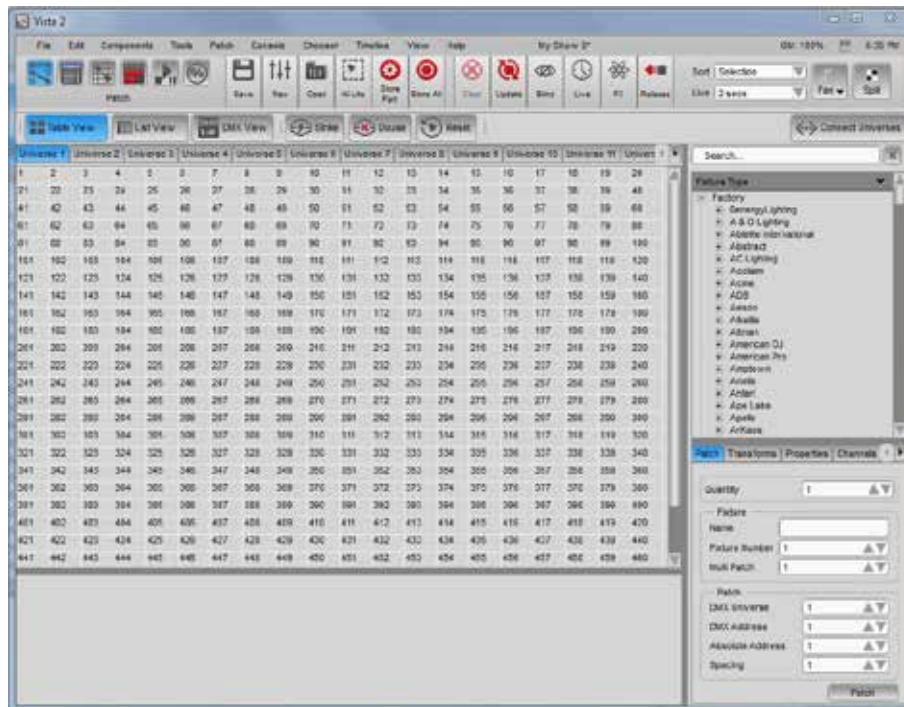
This is where you set up all the fixtures in your rig. You tell the Vista which DMX
channels each fixture is assigned to, and in which universe, and can set a range of
parameters to customise how each fixture operates.

Adding fixtures to the patch

The Fixture Type box in the sidebar gives you a few ways to add fixtures to the
patch. You can:

-   choose a fixture from the 'Factory' folder, which lists the most up to date
    fixtures in the Vista library by manufacturer and then in alphabetical
    order.

-   choose a fixture from the 'Generic' list, which includes files that match
    many common fixtures.

-   choose a fixture from the 'User' list, which includes all fixtures that you
    have created.

-   choose a fixture by first typing in the 'Search' box to filter the list down
    to just those fixtures that match what you've typed.

Choosing a fixture from the Factory list

To add a fixture from the Factory list:

1.   Click the '+' symbol beside 'Factory' in the Fixture Type box. Vista displays a list of manufacturer's folders.

2. Click the '+' symbol beside the name of the manufacturer you want, to display the list of fixtures in that folder.

3. Scroll down the list until you find the fixture you want.

Adding the fixture to the patch panel

Once you've selected the fixture you want, there are two ways to add it to the patch panel:

·   you can drag and drop one or more fixtures onto a specific DMX location on the panel, or

·   you can use the Patch tab to place multiple copes of the fixture onto the patch panel.

Dragging and dropping individual fixtures

To patch fixtures this way, just click on the name of the fixture in the Fixture type box, type a number in the 'Quantity' box and drag the fixture(s) over to the spot on the patch panel where you want it.

When you 'drop' the fixture, Vista fills the required number of DMX channels with that fixture's details. This example shows 8 Vari*lite VL2500 spot fixtures that use 22 DMX channels each, dropped onto channel 1:

Once you've dropped a fixture onto the patch panel you can move it around to any channel by clicking on it and dragging it to a new location.

Vista represents the fixture as a solid coloured bar with an ID number before the name. The bar covers as many DMX channels as the fixture needs, and some fixtures will take up more channels than others.

A solid colour shows that this fixture is currently selected. If you click anywhere else in the patch panel, Vista de-selects the fixture and makes the colour transparent to show that it's no longer selected.

In our example above the selected fixture is called '2 VL2500Sp'. This title consists of two components:

· a unique ID number [2], that Vista assigns automatically. This number identifies the fixture uniquely within the whole system, across all the universes (i.e. no two fixtures will ever have the same unique ID number).

· a **name** (*VL2500Sp)*), which you can change if you want in the Name field on the Properties tab.

Patching multiple fixtures with the Patch box

If you prefer using the keyboard to patch your fixtures you can use the Patch tab in the sidebar.

You use this feature to add multiple instances of a fixture at once. To do this:

1. Select the fixture you want from the 'Factory' or 'User' lists in the Fixture Type box.

2. In the Quantity field, enter how many of this type of fixture you want to add.

3. If not already selected, click the Patch tab to display the Patch box:
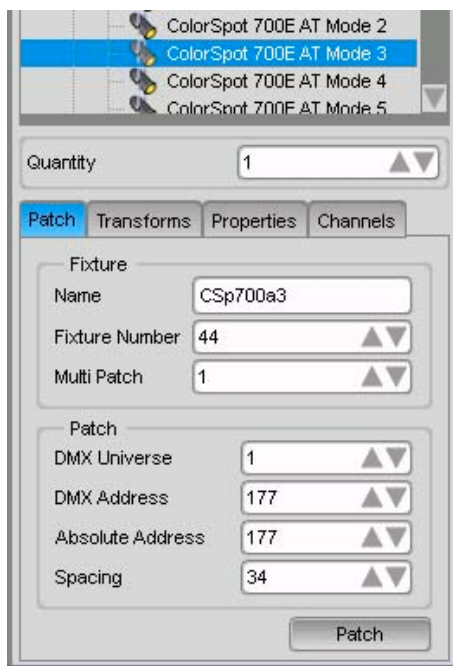
4. If you want to give the fixture a different name, type it in the Name field.

5. If you want to assign a specific set of unique ID numbers to this group of fixtures, click in the Fixture Number from field and set the unique ID number (e.g. *<44>*) you want for the first fixture in the group. If you don't set this, Vista assigns the next valid number.

6. Type a number in the 'Multi Patch' box if you want multiple copies to be patched as one fixture. Use this option, for example, when patching multiple dimmers as a single fixture.

7. In the DMX Universe field, Vista automatically displays the number of the currently selected universe. If you want to add these fixtures to another universe, enter the universe number.

8. In the DMX address field, set the number of the DMX channel where you want this group of fixtures to start. If you've already added any fixtures to this universe, Vista displays the next channel number in sequence.

9. If you prefer, you can patch fixtures to an 'absolute address' For example typing 513 in the Absolute address field, automatically sets the Universe to 2 and the DMX number to 1. If you've already added any fixtures to this universe, Vista displays the next channel number in sequence.

10. In the Spacing field, Vista displays the number of channels each instance of the fixture you've selected will take up. If you want to leave empty channels between each fixture you can increase this number. For example, if a fixture normally uses twelve channels and you increase this number to 14, Vista leaves a gap of two channels between each fixture in the group.

11. When you've set all the fields the way you want them, click the Patch button. Vista adds the group of fixtures to the patch panel.

Ü If you've already added a bunch of fixtures between say, channel 10 and channel 50, and you add another batch starting at channel 1, Vista fits as many of them as it can into channels 1 to 9, then 'flows' the rest over to channel 51.

Ü After you type in the search box you can use the 'Down Arrow' button on your keyboard to move the cursor into the list of fixtures and then tab through the Quantity and other fields.

Patching with a keyboard

You can patch dimmer channels using the Command Line Interface. To do this open the command line by clicking View -> Command Line.
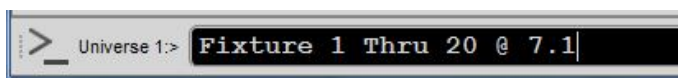
The syntax for patching is:
{Fixture ID(s)} @ {Universe}.{Start Address}

Ü If you are patching in the selected Universe tab you do not need to specify the Universe.

Examples:

- 1/10 @ 1 Enter – patches 10 dimmers in the selected universe starting at address 1.

- 31/40 @ 8.10 Enter – patches 10 dimmers in universe 8 starting at address 10

- 10 / 15 – 13 @ 9.101 Enter – patches fixtures 10, 11, 12, 14, 15 in universe 9 starting at address 101

Hardware Keypad

You can use the keyboard number keys or a separate keypad when the CLI window is showing. In addition to the number keys the following special keys are used while patching:

This button…	does this…
/ (Through)	Indicates a range of fixtures IDs
- (Minus)	Minus – exclude following fixture number or range
+ (Plus)	Plus – include the following fixture numbers
* or @ (At)	Precedes the patch address
. (Period / Dot)	Divides the Universe and Start Address numbers

Changing universes

Each universe can only handle a certain number of fixtures, depending on the number of DMX channels each fixture needs. To add fixtures to another universe, click another Universe tab at the top of the patch panel to display the next set of DMX channels.

Re-arranging fixtures on the patch panel

Moving fixtures around the patch panel

Once you've added fixtures to the panel you can re-arrange them however you want. Just select the fixtures you want and drag them to a new channel; when you drop them on the screen, Vista re-arranges them all from that channel.

Note that you can't place them in such a way that any of the channels will 'fall off' the end of the universe.

Renaming fixtures

To rename one or more fixtures select them in the universe panel and choose the Properties tab in the sidebar:
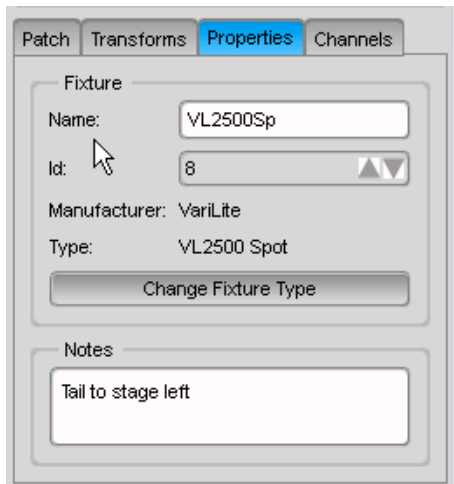
Enter the name you want to give the selected fixtures in the 'Name' field and hit Enter. Vista renames all the fixtures you had selected.

Renumbering fixtures

To change the unique system-wide ID number (e.g. *<12>*) of a fixture (it is not possible to renumber more than one fixture using this method):

1. Select the fixture in the universe panel.

2. Choose the Properties tab in the sidebar.

3. In the ID field, enter the new ID number and hit Enter on your keyboard.

Renumbering multiple fixtures

To renumber more than one fixture:

1. Select a range of fixtures in the universe panel

2. Right-click and select the 'renumber' option from the popup window. Vista displays the Renumer window:
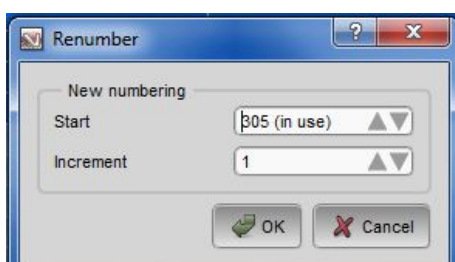
3. Set a start number for range of fixtures.

4. Set the increment between the new fixture numbers.

5. Click OK to complete the renumbering.

Deleting fixtures

You can delete fixtures from the patch panel at any time. To do this:

1. Select the fixture in the universe panel.

2. Select the 'Delete fixtures' option from the Patch menu or right click on the fixture(s) you want to delete and select 'delete' from the popup menu.

Customising Gobo and Colour Wheels

If you have changed the gobos or colours in fixture's wheels you can customise the fixture so that the correct images show in the chooser window.   To do this:

1. Select the fixture(s) in the universe panel.

2. Select the 'Customise Gobo and Colour wheels option from 'Properties' tab. Vista opens the 'Customise Gobos window':
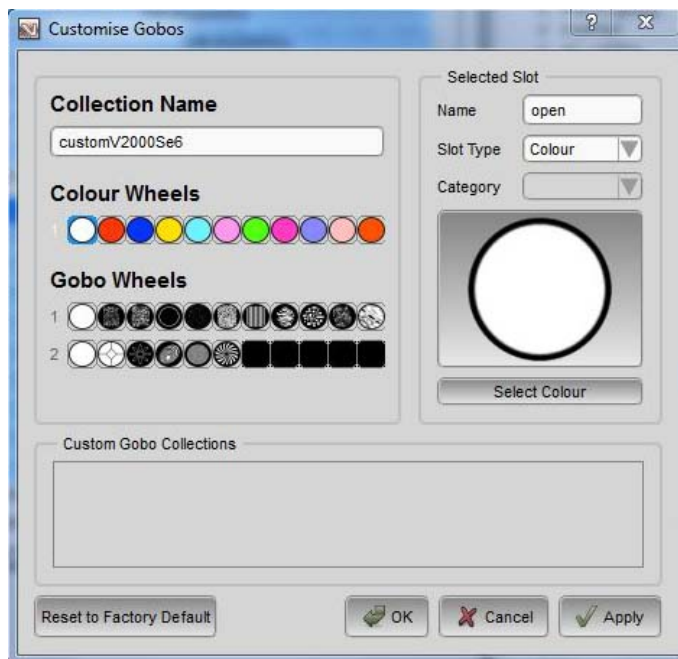
This field…	does this…
Collection Name	When you customise colours or gobos for one fixture, a collection is automatically created and you can apply it to other fixtures.

This field…	does this…
Colour Wheels	Displays the colours in the fixture's colour wheel. To change a colour click on the existing colour and select a new colour in the 'Selected Slot' section.
Gobo Wheels	Displays the gobos in the fixture's gobo wheel(s). To change a gobo click on the existing gobo and select a new colour in the 'Selected Slot' section. To use a gobo from the existing image library navigate to the FixtureTypeLibrary\Images\gobos folder. To use a custom pattern save a 128x128px jpeg or png file in the ..\Vista Data\FixtureTypeLibrary\Images.
Selected Slot Name	Allows a descriptive name to be added to the colour or gobo.
Slot Type	Sets the slot type to a colour or gobo. You can add colours to gobo wheels and vice versa .
Category	Allows you to group a gobo into a category. This is used to match similar gobos when swapping fixtures or copying programming to fixtures that do not have the same gobos.
Select image	Click this button to select a colour or gobo.
Custom Gobo collections	Allows you to select a colour or gobo collection and apply it to a new fixture.
Reset to Factory defaults	Resets the colour or gobo wheels in the selected fixture to it's default configuration.

Setting fixture properties

Once you've added the fixtures to the patch panel and placed them where you want them, you can set a number of properties for each fixture using the Properties and Transforms tabs in the sidebar.

To view and set the properties for one or more fixtures, use the pen to select the fixtures you want on the patch panel. Vista displays the details of those fixtures in the Properties and Transforms tabs:
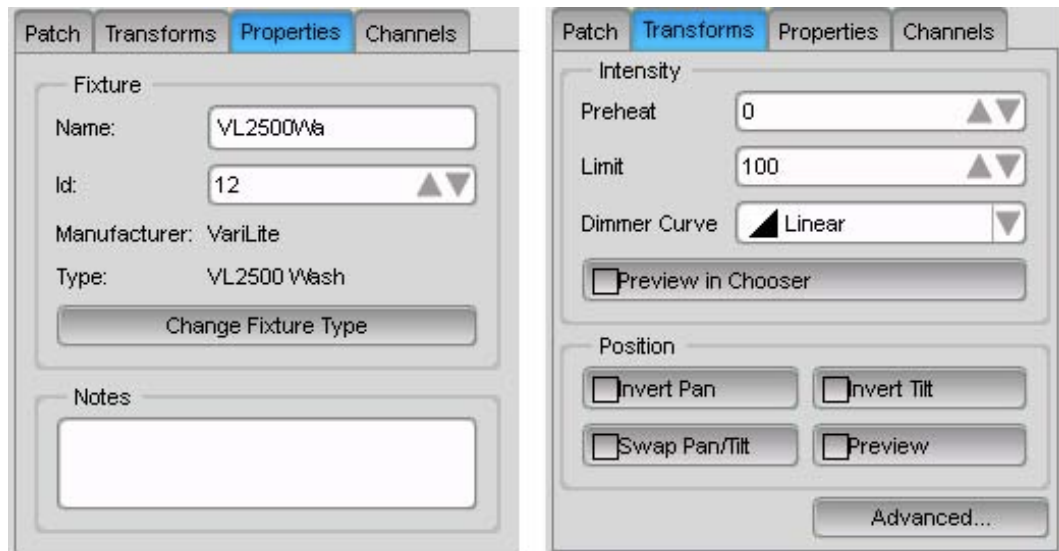
Ü If you select multiple types of fixture, Vista displays the details of the first type you selected. If the Patch box is currently displayed, press the Properties tab to display the Properties box.

Properties tab

Name	The name you entered or Vista assigned to this fixture when you dropped it onto to the patch panel. You can edit this here if you want to.
ID	The unique system-wide ID number assigned to this fixture when you dropped it onto the patch panel. You can change this number here if you want to, but note that Vista won't allow you to use a number that's already assigned to another fixture.
Type	This field displays the fixture model type and is not editable. To change the type of fixture without having to remove it click on the 'Change Fixture Type' button (see *Swapping a fixture type*).
Customise wheels	Click this button to open the 'Customise Gobo and Colour wheels' window. You can change the colour and gobo wheel settings for the selected fixture in this window. These changes are saved with the show file – not to the fixture file.
Change Fixture type	Click this button to change the type of fixture without having to remove it from the patch. (see *Swapping a fixture type*).
Notes	This field is used to display notes about the fixture. You can add whatever you like in this field.

Transforms tab

Preheat	A percentage value that sets the voltage the fixture lamp will sit at until you switch it on. This is useful for lamps such as Par 64s

	that take time to switch on from a cold start.
Limit	A percentage value that determines the maximum intensity the fixture will ever reach. This is useful if you want to prolong lamp life or prevent fixtures from ever reaching full intensity.
Dimmer Curve	This popup lets you select a dimmer fade curve. The default option is Linear but you can select one of the available options; Linear, Damp, Snap Start, Snap end, Square Law, Inverse Square, Switch, Hot power, Flourescent and Sinus
Preview in Chooser	Check this box if you'd like the fixture icons, in the chooser, to display the effects of the Intensity transforms.
Invert pan	Selecting this checkbox reverses the sweep of the pan for this fixture. This is useful when you're coordinating the sweep directions of fixtures hung in different directions.
Invert tilt	Selecting this checkbox reverses the sweep of the tilt for this fixture. This is useful when you're coordinating the sweep directions of fixtures hung in different directions.
Swap pan/tilt	Selecting this checkbox swaps the pan and tilt controls, so the fixture will pan when given a tilt command and vice-versa. This is useful for coordinating the movements of fixtures hung on vertical trusses or pipes.
Preview	Check this box if you'd like the fixture icons, in the chooser, to display the effects of the Position transforms.

Advanced transforms

The advanced button provides access to more Fixture 'Transformers' that allow you to further customize fixtures. For example the Pan and Tilt Offset parameters allow you to correct the home position for fixtures that are hung at an angle.

To add a transform click the Advanced button to open the transform window then click the Add button to choose a transformer.
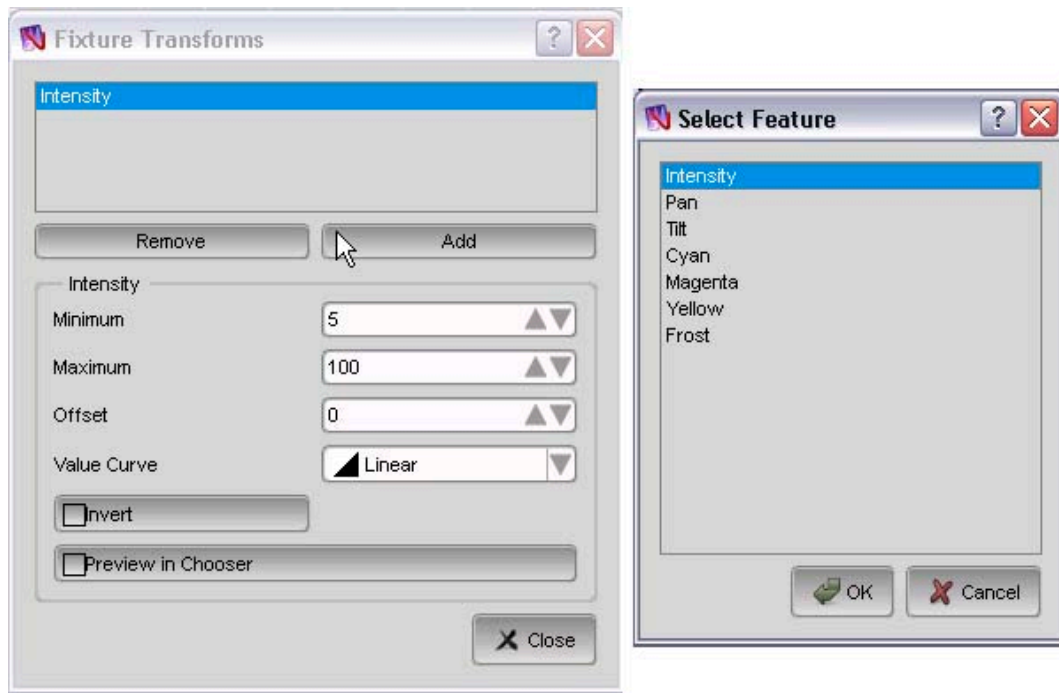
Some of the transformers are also available from the Properties tab as described above. To choose one of the advanced transformers click on Pan offset or Tilt Offset.

This option…	does this…
Minimum	Sets the minimum (percentage) value for this feature. For example setting a value of -25 on Pan means the fixtures will only pan left ¾ of their normal range
Maximum	Sets the maximum (percentage) value for this feature. For example setting a value of -25 on Pan means the fixtures will only pan left ¾ of their normal range
Offset	Sets the offset angle. For example setting a Pan offset of 45 would move the fixtures Home position by 45 degrees
Value Curve	This popup lets you select a fade curve. The default option is Linear but you can select one of the available options; Linear, Damp, Snap Start, Snap end, Square Law, Inverse Square, Switch, Hot power, Flourescent and Sinus
Invert	Tick this box to invert the ouput value.
Preview in Chooser	Check this option to see the effect of the transform shown on the fixture chooser icons.

Channels tab

This is a list of the features and channel numbers of the fixture and which DMX channel is controlling each feature.

Macros tab

This tab displays and allows you to edit the Strike, Douse and Reset macros for the selected fixture(s).
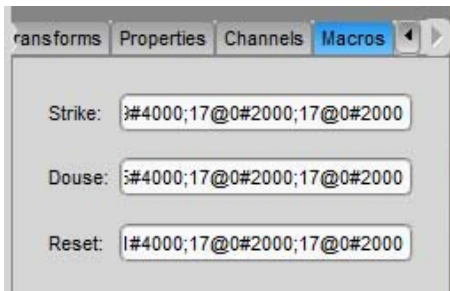
The syntax is:

[channel] @ [value] # [wait time in milliseconds] ; [next command]

i.e. 15@249#4000;15@0#2000

Some fixtures require more complex macros. For example a fixture might require; ch1 to 255, ch4 to 17,ch 6 to 1, ch 8 to 0, ch 11 to 0 and ch 15 to 84 and for these channels to be held for 6 seconds, and sent back to default

In this case each command must state a wait time. For the example above the macro would be:

1@255#0;4@17#0;6@17#0;8@0#0;11@0#0;15@84#6000

That will send the specified values to all channels simultaneously and hold them for 6 seconds.

Ü If you add or modify a fixture macro the new setting is automatically applied to all fixtures of the same type.

Viewing the patch in different ways

Vista gives you three different views of your patch so you can get different types of information about the patch. To change the view, select the table, List or DMX option from the View menu or click one of the three corresponding buttons in the toolbar.

Table view

The Patch screen defaults to the Table view, as shown earlier in this section. This is the view you will use most of the time, here you can drag and drop fixtures into the patch panel for each universe and arrange them the way you want them.

List view

If you choose the List option Vista displays the fixtures as a list with columns for the fixture:

You can choose the columns you want to show or hide by right-clicking in the header row and choosing the fields you want from the popup menu. You can also re-arrange the columns by clicking on the column name and dragging it to the left or right. The default column arrangement is:

Fixture Label (as shown in the chooser window),
ID number
Name
Fixture type
Patch part – for fixtures which re patched in 2 or more parts. For example some fixtures have a Intensity (Dimmer) part that is patched separately
DMX Universe
DMX Address

If you click on any of the column headings the list will sort by that column. Click again to change the sort from ascending to descending or vice versa.

DMX view

If you choose the DMX option Vista displays a table view where each cell shows the DMX channel and its output level:

You use this screen to display the output values of each and every DMX channel. Each cell displays the channel number and it's DMX output value. The cells are clear if there is no output and change to a highlighted box if the output is adjusted. To display another output simply click on one of the other Universe tabs at the top of the display.

Controlling the fixtures

The Patch menu includes commands to control whatever fixtures are currently selected on the Patch panel. There are also buttons for three of these commands:

Note that only some fixture types support these functions; refer to the user guide for your fixture types.

This command…	does this…
Strike	Ignites the lamps in the selected fixtures.
Douse	Switches off the lamps in the selected fixtures off.
Reset	Resets the selected fixtures to their factory default settings. This is useful if a fixture has a control problem and you need to get it 'back to normal'.
Park	Holds the fixture in it's current settings. For example to provide fixed lighting for backstage.. Once you've parked a fixture it will ignore all instructions until it is un-parked.
Unpark	Sets a parked fixture to operate normally.

Ü These five commands are available through the Fixture menu and by right-clicking on the fixture icons in the Programmer or Patch window.

Cloning fixtures

Cloning is a special way to add fixtures to your patch. This method is useful if you've already programmed your show and want to include some new fixtures automatically in any Cuelists, Groups and Presets that you've created.

To clone one or more fixtures:

1.   Select the fixture(s) you want to clone from the Patch table or list view.

2. Select the 'Clone Fixtures' option from the Patch menu or right-click on the patched fixture and select Clone from the popup menu. Vista creates a clone of the selected fixture(s) in the fixture pool at the bottom of the Patch window

3. Drag the cloned fixture(s) into the patch table.

Ü You can change the fixture type of the cloned fixture(s) by selecting the 'Change Fixture Type' option from the Patch menu.

Exporting and importing patch information

To save time, you can import and export patch information from comma-separated value (.csv) files.

Exporting the patch

You can export a .csv file containing your current show's patch information. To do this:

1. Select the 'Export Patch file…' option from the Patch menu. Vista opens the Export Patch window.

2. Give the file a name. The .csv extension is automatically appended.

3. Navigate to the directory or folder where you want to save the file.

4. Click the Save button to confirm and the new fixtures are added to the patch.

Importing the patch

You can also import a .csv file containing your patch information. You can import a file that you have exported from another show or you can create a file in a text editor or spreadsheet program. The easiest way to do this is to create a spreadsheet laid out as follows and save it as a .csv file using the Save as function.

ID	Univ:Adrs	Fixture Type	Fixture Name
1	3:2	Dimmer	Dimmer
36	3:24	Dimmer	Dimmer
41	3:75+3:34	copy_of_Scroller Dimmer	Scrl Dim
42	3:76+3:35	copy_of_Scroller Dimmer	Scrl Dim
101	1:1	Mac 2000 Wash (Colour Wheel) 16 bit	Mc2000Wc
102	1:22	Mac 2000 Wash (Colour Wheel) 16 bit	Mc2000Wc
201	2:1	ColorSpot 700E AT Mode 1	CSp700a1
202	2:37	ColorSpot 700E AT Mode 1	CSp700a1
301	1:221	VL2000 Spot Enhanced 16 bit	V2000Se6

302	1:241	VL2000 Spot Enhanced 16 bit	V2000Se6
316	5:1	Color Block 2 Mode 3	ColBk2m3
317	5:17	Color Block 2 Mode 3	ColBk2m3
432	9:1	MediaMaster Layer Full 1.0	MeMaLF10
433	9:44	MediaMaster Layer Full 1.0	MeMaLF10
437	12:22	VL3000 Spot	VL3000Sp
438	12:50	VL3000 Spot	VL3000Sp

In this example the spreadsheet has a header row, which is optional, but shown here for explanation. The columns are laid out like this:

- an ID (1), which determines the fixture's unique ID

- a Universe : DMX address number (1:1), that sets the Universe and DMX start address for this fixture

- a Fixture Type (<VL3000 Spot>), that sets the type of fixture that will be patched

- a Fixture Name (<VL3000Sp >), that sets the fixture name.

For two-part fixtures (i.e. fixtures with an external dimmer that is patched separately) you need to include both parts of the patch included in the Universe/Address column. The format for the two parts is Control+Intensity.

In the example above, Fixture ID 41 is a Scroller Dimmer with the scroller part patched to Universe 3 Channel 75 and the Intensity part patched to Universe 3 channel 34.

The ID, Universe:DMX Address information and Fixture Type must be in the .csv file. If you don't specify a valid Vista Fixture Type, Vista prompts you to choose the correct fixture from a list when you import the file. The fixture Name does not need to match the name used in the Vista library.

Configuring the DMX & Ethernet Outputs

Vista v2.3 automatically connects Universes to the DMX outputs on your console but not to devices connected via Ethernet. To add or change connections you click the Connect Universes button on the toolbar to open the DMX Connections screen:
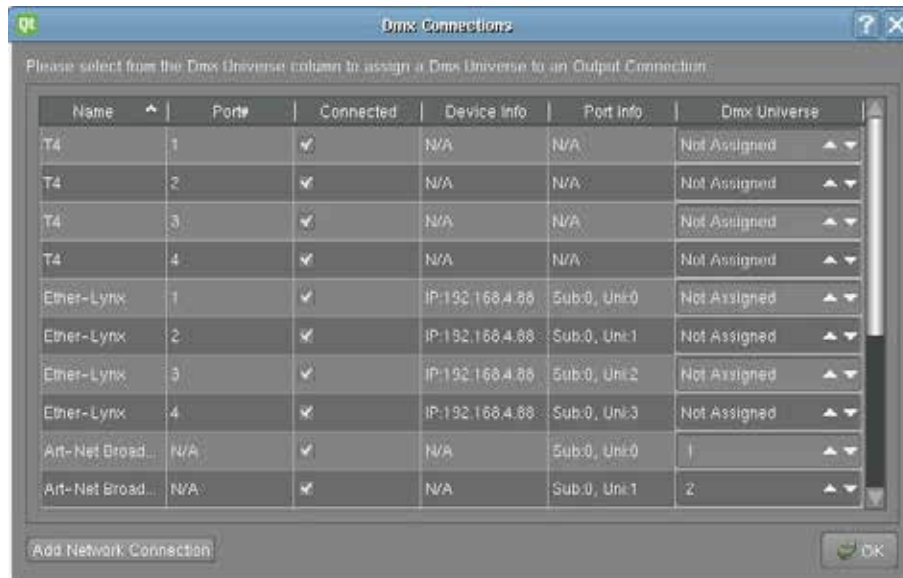
You use this screen to connect to Vista's DMX outputs, to external Ethernet-DMX interface boxes and to broadcast Art-net and streaming ACN.

Vista consoles provide up to four 512-channel DMX outputs. Depending on your dongle licence you can add more outputs by connecting your own external sACN, Art-Net or PathPort devices to the Ethernet port. You can also add DMX outputs to a console or computer using the Vista UD512 USB to DMX cable.

To configure these connections, click the 'Connect Universes' button on the Patch screen toolbar or select the 'Connect universes' option from the Patch menu.

This window shows any devices connected via Ethernet or USB to the console or PC and the connection details of the universe. You use it to set up the DMX connections for each of your universes and to check that they are working correctly.

Ü You can also connect more than one output to the same Universe. For instance you can connect Universe 1 to DMX output 1 and to an Art-Net broadcast device.

Connecting Universes to the Console DMX & Ethernet Outputs

The DMX connections window lists all the internal DMX connections, USB-DMX, Ethernet-DMX connection boxes and Art-Net compatible devices attached and *visible* to the Vista:
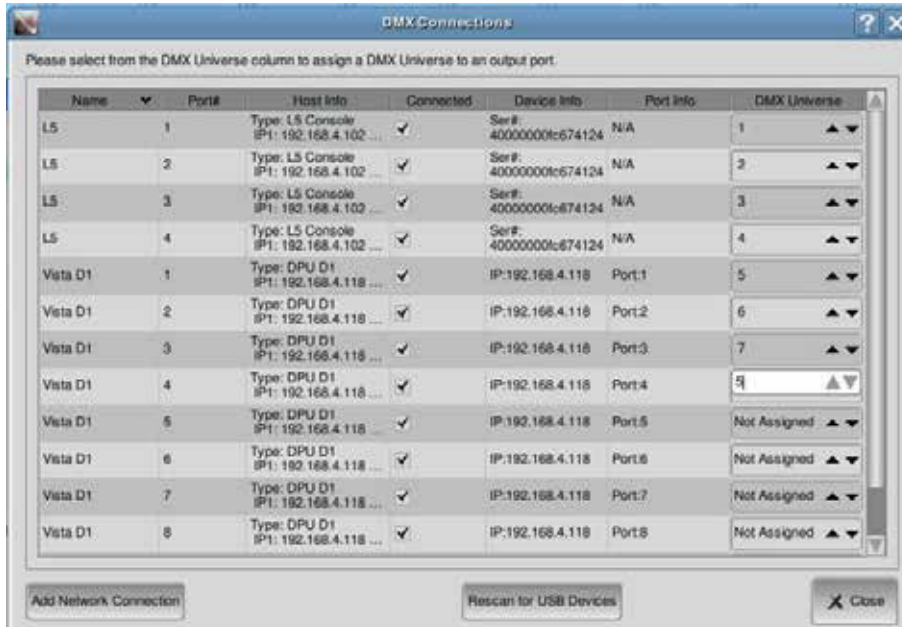
In this example above you can see several entries: four are the L5 console's inbuilt DMX connections; the others are the DMX outputs which are on a Vista D1 unit connected via Ethernet. You may also have other entries including Art-Net, sACN, Pathport , a UD-512 and other compatible devices.

Ü If you can't see a device that you've attached to the Vista it is generally still possible to connect to it by using the 'Art-Net Broadcasting' mode or by using streaming ACN (sACN).

To connect a console or control surface DMX output:

1. Find the row that corresponds to the DMX output .

2. Click on the box in the 'DMX Universe' column and either type a Universe number or use the up and down arrow buttons to select the Universe you want.

To connect an external interface box:

1. Find the row that corresponds to the Interface box output. Some boxes will have multiple outputs.

2. Click on the box in the 'DMX Universe' column and either type a Universe number or use the up and down arrow buttons to select the Universe you want.

Disconnecting an output

To disconnect a DMX output or interface box:

3. Find the row that corresponds to the DMX output or interface box output.

4. Click on the box in the 'DMX Universe' column and either type '0' or use the down arrow buttons to select the 'Not Assigned' option.

Ü To change the settings of an interface box you may have to disconnect it and re-connect it with the new settings.

Art-Net Broadcast Mode

Some Art-Net compatible devices may not appear in the DMX Connections window. In this case you can set Vista to broadcast Art-Net information without first establishing communication with the device. You can broadcast to up to 256 universes. To add an Art-Net Broadcast output do this:

1. In the 'Connect Universes' window click on the 'Add Network Connection' button. Vista opens the 'Add Broadcast port' window:
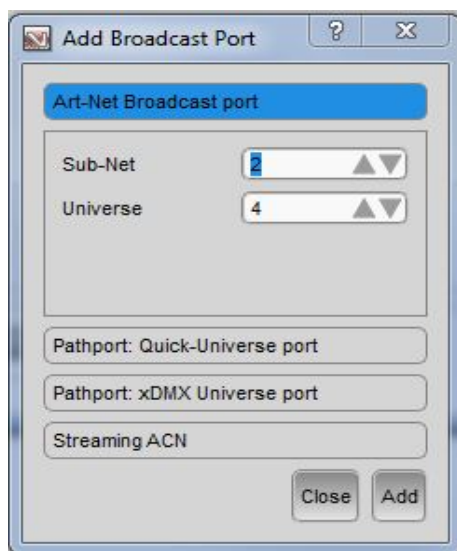
2. Enter the Sub-net and port ID then click 'OK'

3. Click on the box in the 'DMX Universe' column and either type a DMX Universe number or use the up and down arrow buttons to select the Universe you want to associate wth the Art-Net broadcast port.

Ü Within any Art-Net subnet, the maximum number of universes is 16. But you can patch more than 16 universes by using any of the 16 different subnets.

Streaming ACN

sACN is another method used to carry DMX packets over Ethernet and operates in much the same way as Art-Net. To add a sACN multicast output you do this:

1. In the 'Connect Universes' window click on the 'Add Network Connection' button. Vista opens the 'Add Broadcast port' window:
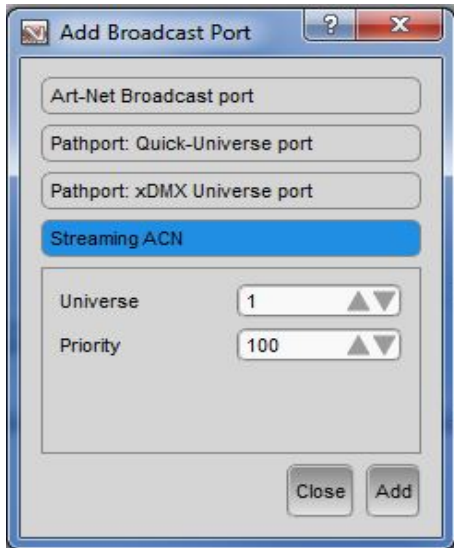
2. Enter the streaming ACN universe number and priority then click 'OK'

3. Click on the box in the 'Universe' column and either type a DMX Universe number or use the up and down arrow buttons to select the Universe you want to associate wth the sACN port.

Ü If sACN devices are receiving information from more than one console (or other controller) they will respond to the one with the highest priority.

Pathport xDMX

Vista can output to Pathport Output Nodes via the Ethernet port on your console or computer. To connect to Pathport output nodes you do this:

1. In the 'Connect Universes' window click on the 'Add Network Connection' button. Vista opens the 'Add Broadcast port' window:
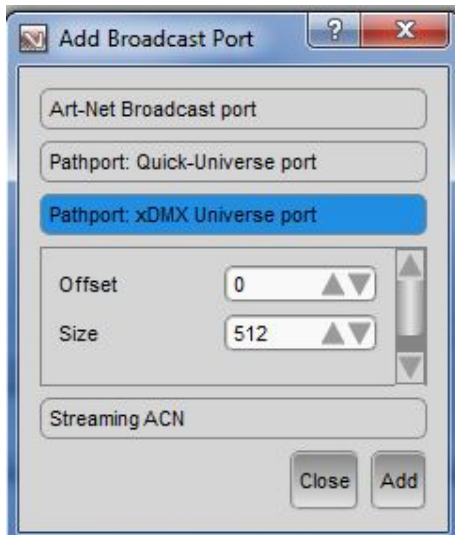
2.   If it's not already selected click on the 'Pathport xDMX Port' button.

3.   Use the Up and Down arrow buttons to select the 'DMX Offset' The xDMX universe will start at the next address after the offset number.

4.   Click 'OK'

6.   The Chooser window

The Chooser screen

To get all your fixtures up and running you click the Chooser button on the toolbar at the top of the screen. If this is the first time you've opened this window you should be in the Live tab, otherwise click on the Live tab to make it active.

Vista displays the Fixtures screen:

This screen consists of four main elements:

1. The Editor control section where you can select to work with the Live editor tab or any Cuelist you have open. If you have a Cuelist open this section expands to include the Cue navigation controls.

2. The Fixture layout panel, where you can display and arrange the fixture icons to suit your requirements.

3. The sidebar where you can use the palette and component panels to adjust Intensity, Position, Colour, Gobo, Beam and other settings for each fixture.

4. The Quickpicker panel where you can select Presets, Groups and other components. This panel is optional and can be placed at the bottom or side of the fixture layout panel.

Arranging fixtures in a layout

Vista displays all of the fixtures you added on the Patch screen as icons on the Fixture layout panel. When you first view this screen, the fixtures are arranged in numerical order, by unique ID, as a bank of icons.

To re-arrange the fixtures:

1. Click on the 'Locked' button at the bottom of the Chooser window so that it changes to 'Unlocked'.

2. Drag and drop the fixture icons around to new locations on the screen so that they suit you.

3. To undo a move press Ctrl + Z or select the undo option from the Edit menu.

4. When you are finished Click on the 'Unlocked' button so that it changes back to 'Locked'.

Ü If you are moving a Group icon, click and hold on it while moving to avoid selecting and moving the individual fixtures in the group.

Zooming in and out

You can adjust the magnification of the fixture layout panel or the size of individual fixture and group icons.

To zoom the fixture layout panel in or out click on the magnify icons in the bottom left corner of the fixture chooser window:

To zoom an individual fixture and group icon, hold down the yellow modifier button or Control key while clicking the icons.

This icon…	does this…
	zooms in or increases the size of the fixture icons.
	zooms out or decreases the size of the fixture icons.
	zooms to the icons to the normal scale.

Ü You can use the 'Wheel' on a suitable mouse to zoom the layout or icons.

Using different layout views

You can create as many different views of your fixtures as you like, each arranged in its own away. To create a new layout view:

1. Right-click in the fixture chooser window and select the 'New Layout' option from the popup menu. Vista opens the New Layout window.

2. Type a name for the layout and click OK. Vista creates a new layout and adds a corresponding 'tab' at the bottom of the layout panel:
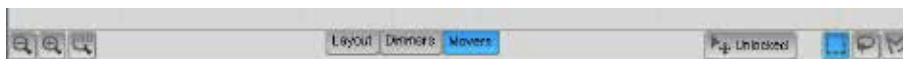
3. Arrange the fixtures as described above.

4. When you are finished Click on the 'Unlocked' button so that it changes back to 'Locked'.

To switch between layouts click on the tab you want to use. You can select fixtures on one tab, switch to another tab and add more fixtures to the selection.

Managing layout views

You can add, rename, duplicate or modify a layout view. To do this select the 'Manage Layouts' option from the Chooser menu. Vista opens the Layouts window:
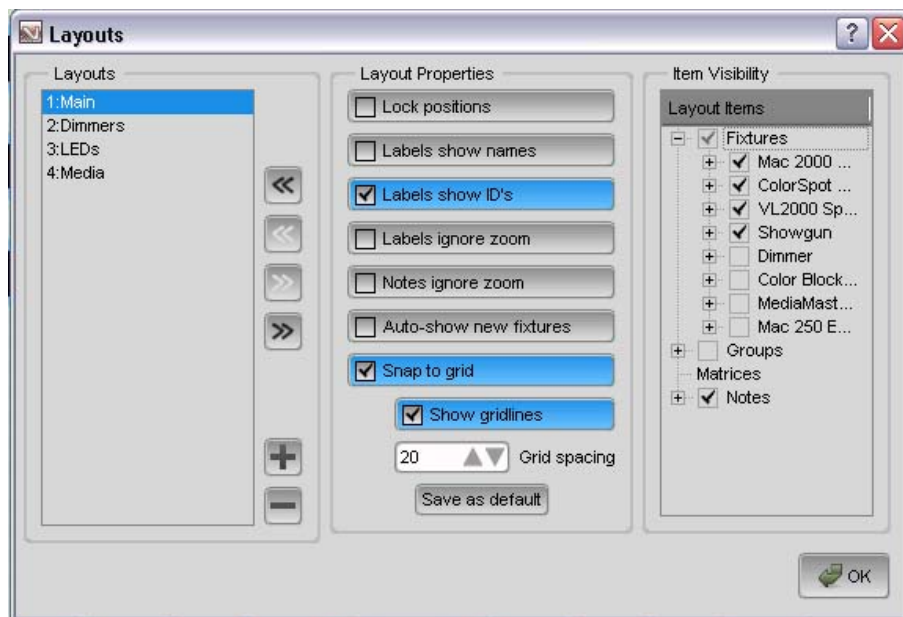
The layout window is divided into three panels:

Layouts

The Layouts panel shows all the layouts you have created. You can:

·   Rename a layout by double-clicking on the name and typing a new one.

·   Change the order of the layout tabs by selecting a layout and moving it up or down the list using the Move Up, Move Down, Move to Top and Move to Bottom buttons.

·   Add a new Layout by clicking on the Add Layout button.

·   Delete a layout by selecting it and clicking on the Delete Layout button.

This icon…	does this…
<<	Moves the selected layout to the top.
<<	Moves the selected layout up.

This icon…	does this…
>>	Moves the selected layout down.
>>	Moves the selected layout to the bottom.
+	Adds a new Layout.
-	Deletes the selected layout.

Layout properties

The Layout properties panel lets you configure how a layout displays names, IDs and other properties. To do this:

1. Select the Layout you want to adjust in the Layouts panel:

This option…	does this…
Lock positions	Locks the layout so the fixtures cannot be moved. You can also lock and unlock a layout using the Locked/Unlocked button beside the layout tabs in the Fixture Chooser window.
Labels show Names	Sets the fixture icon text labels to show.
Labels show IDs	Sets the fixture icon ID numbers to show.
Labels ignore zoom	The label size remains fixed when the fixture icons are zoomed in or out.
Notes ignore zoom	The size of the notes remains fixed when the fixture icons are zoomed in or out.
Auto-show new fixtures	Sets the layout to automatically include any new fixtures added in the Patch window.
Snap to Grid	Locks or Unlocks the current layout. Fixture and Group icons can not be moved when a layout is locked. But they can be scaled.
Show Gridlines	Display a grid on the Fixture Chooser layout pane.
Grid Spacing	Sets the space between the grid lines. The higher the number, the larger the grid spacing.
Save as Default	Saves all options set in the current layout as the default for any new layout.

Ü You can also adjust some of these settings on the 'Layouts options' menu.

Hiding and 'un-hiding' fixtures and groups

You can use the Item Visibility panel to hide any fixtures, fixture types or groups in a layout. This removes them from the display, but not from the patch.

To hide Fixture or Group icons or Notes:

1. Select the Layout you want to work with from the list in the Layouts panel.

2. Click the + symbol beside the Fixtures or Groups or Notes heading in the Item Visibility section to show all the Fixtures types that you've patched, the Groups that have been created and any Notes.

3. To hide all Fixture icons of a type, un-tick the checkbox beside that fixture type, or click the + symbol beside a fixture type to show all the individual Fixtures of that type.

4. To hide all Groups, un-tick the checkbox beside 'Groups', or click the + symbol to show all the Groups that have been created.

5. To hide all Notes, un-tick the checkbox beside 'Notes', or click the + symbol to show all the Notes that have been created.

6. To hide individual Fixtures, Groups or Notes of a type un-tick the checkbox beside the items(s) you want to hide.

To reveal (unhide) hidden fixtures, tick the checkbox beside the items you want to reveal.

Ü You can also hide fixture and group icons and notes by right-clicking on the icon(s) or note(s) and selecting Hide from the popup menu.

Layout options

The Layout options submenu lets you quickly configure some commonly used layout properties. To do this:

1. Select the Layout you want to adjust by clicking on its tab at the bottom of the Fixture Chooser panel.

2. Select 'Layout options' from the Chooser menu. Vista displays the submenu:

This option…	does this…
False Intensity	Gives the fixture icon intensity without sending any level to the fixture(s)
Show selection order	Sets the icons to show a selection order number whenever they are selected.
Show grid	Display a grid on the layout pane.

This option…	does this…
Snap to grid	When on, fixture icons snap to the grid cells.
Show names	Sets the fixture icon text labels to show.
Show IDs	Sets the fixture icon ID numbers to show.
Auto-add new fixtures	Sets the layout to automatically include any new fixtures added in the Patch window.
Preview refresh rate	Sets the refresh rate for the icons. Higher refresh rates and / or large numbers of icons use more processing power.
Detail Level	Set the amount of detail shown as the chooser window is zoomed out. High can be more demanding on the system, but provides the most detailed view.

Activating layout views

To activate a layout view, click on the tab for the layout you want to display:

Duplicating a layout

To duplicate a layout view, click on the tab for the layout you want to duplicate then select the Duplicate Layout option from the Chooser menu. Vista displays the Duplicate Layout window.

Type a name for the layout and click OK. Vista creates a copy layout and adds a corresponding 'tab' at the bottom of the layout panel.

Layout organisation

There are a number of ways to customise layouts and the way the fixture icons are displayed. To make a change select an option from the Chooser menu.

This option…	does this…
Colours and Background	Opens a submenu.
- Background colour	Opens a colour picker to set the background colour of the layout panel.
- Background image	Opens a window to select an image to use as a background of the layout panel. An image size of about 700 x 560px will fill the layout pane.

This option…	does this…
- Erase Background image	Removes the background image, if you've added one.
- Resize Background	Selects the background image which can be moved or resized by dragging on the bottom right hand corner. Click outside the background when finished.
- Icon Colour	Opens a window to set the outline colour of the selected icon(s).
- Gel Colour	Opens a window to set the intensity colour of the selected icon(s). Useful for simulating the colour filter on a conventional fixture.
- Set note colour	Opens a window to set the colour of the selected note(s). Changes the leader and fill colour.
Shrink to fit	Zooms the layout panel to fit all fixtures.
Label position	Moves the icon label to the right, left, top or bottom of the icon.
Manage Layouts	Opens the Manage Layouts window.
Duplicate Layout	Creates a copy of the current layout and opens a window where it can be named.
Layouts options	Opens the Layouts options window.

Layout organisation popup menu

Ü You can also adjust the layout and icon appearance by right-clicking on the layout or icon(s) or note(s) and selecting an option from the popup menu.

This option…	does this…
Manage Layouts	Opens the Layouts window where you can add, delete, organise and customise your layouts.
New Layout	Opens the New layout window.
Duplicate Layout	Duplicates the current layout and opens a window to name it.
Delete Layout	Immediately deletes the current layout.
Rename Layout	Opens the Rename Layout window where you can edit the name of the current layout.

This option…	does this…
Rename	Opens the Rename window where you can type a new name for the selected fixture(s).
Renumber	Opens the Renumber window where you can type a new name for the selected fixture(s).
Delete item	Deletes the selected item immediately.
Hide items	Hides the selected fixture or group icon or note.
Unhide all items	Reveals all hidden items, on the current layout.
Resize items(s)	Allows you to resize the selected matrix.
Rotate items	Lets you rotate the fixture icon(s), using an onscreen handle, to any angle.
Icon Colour	Opens a window to set the outline colour of the selected icon(s).
Gel Colour	Opens a window to set the intensity colour of the selected icon(s). Useful for simulating the colour filter on a conventional fixture.
Label Position	Moves the icon label to the right, left, top or bottom of the icon.
New Fixture Group	Creates a new fixture group containing all the currently selected fixtures.
Update Fixture Group	Updates the current group to contain whatever fixtures are selected.
Create Matrix	Creates a new matrix grid that you can resize by dragging on the bottom right hand corner. Tip: Deselect all fixtures to enable this option.
Resize Matrix	Allow you to resize the selected matrix.
Add note	Adds a text box to the layout panel. If a fixture icon is selected a leader line will be drawn between the icon and the text box.
Set note colour	Opens a window to set the colour of the selected note(s). Changes the leader and fill colour.
Delete Matrix	Deletes the selected Matrix

This option…	does this…
Align	Lets you align a group of fixture icons to the right, left, top or bottom of the group.
Distribute	Lets you distribute a group of fixture icons vertically between the top and bottom fixtures or horizontally between the furthest left and furthest right fixture in the selection.
Flip	Swaps the vertical or horizontal position of a group of fixture icons. The left most fixture will move the right most and so on.
Arrange in Grid	Opens the Grid window to arrange the selected items in a grid. Items can be arranged into rows and columns and sorted by ID or selection order.
Background Colour	Opens a colour picker to set the background colour of the layout panel.
Background Image	Opens a window to select an image to use as a background of the layout panel. An image size of about 700 x 560px will fill the layout pane.
Erase Background Image	Removes the background image, if you've added one.
Resize Background	Selects the background image which can be moved or resized by dragging on the bottom right hand corner. Click outside the background when finished.

Adding notes to the layout window

You can add text boxes to the fixture window to help identify different fixture types or areas. Notes can be either attached to an object on the layout, such as a fixture, or can be independent.
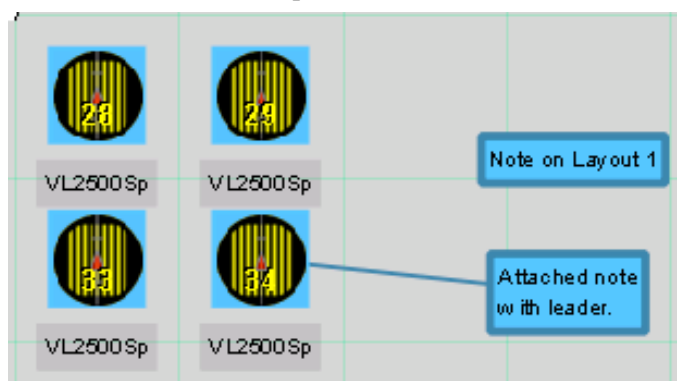
To add a note you do this:

1. To attach a note to a fixture or group, first select the item. For an independent note make sure no fixtures or groups are selected.

2. Right-click in the fixture window and select 'Add Note' from the popup menu. Vista creates a note on the layout.

3. Type a note and then click on the layout background to finish.

To move a note, first unlock the layout then click on the text and drag it to a new location. To edit a note double click on the text and replace or change the text. To delete a note select it then press the delete key.

Arranging fixtures in a grid

You can arrange fixtures in rows and columns. To do this:

1. Select the fixtures you want to arrange into a grid.

2. Right-click in the fixture window and select 'Arrange in grid…' from the popup menu. Vista opens the Arrange in Grid window:
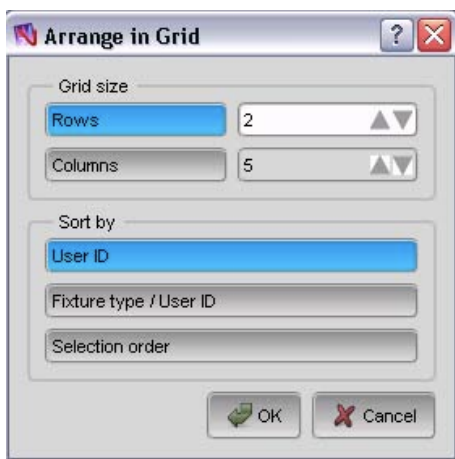
This option…	does this…
Rows	Specify the number of rows you want in the grid. If you enter a value here the number of columns is calculated automatically.
Columns	Specify the number of columns you want in the grid. If you enter a value here the number of rows is calculated automatically.
User ID	Sort the fixtures by ID number.
Type / User ID	Sort the fixtures by type, name then ID number.
Selection Order	Sort the fixtures into the order they have been selected.

3. Click the OK button to arrange the fixtures.

Placing fixtures in a Matrix

You can put fixtures in a special 'Matrix' container so that they can be controlled individually or as a whole. When fixtures are placed on a matrix you can:

· Select the matrix and apply settings to all fixtures within it.

· Select fixtures, in the matrix and apply individual settings to just the ones you have selected.

· Apply matrix effects that run on the X and Y axis of the matrix. For example you can have an intensity effect that runs across the matrix like a sliding door or a colour effect that runs around the matrix like a clock hand.

· Apply an animated gif Video effect.

To create a matrix container and place fixtures in it:

1. Right-click on the fixture layout panel and select the Matrix, then Create Matrix option from the popup menu. Vista creates a matrix container on the current layout:
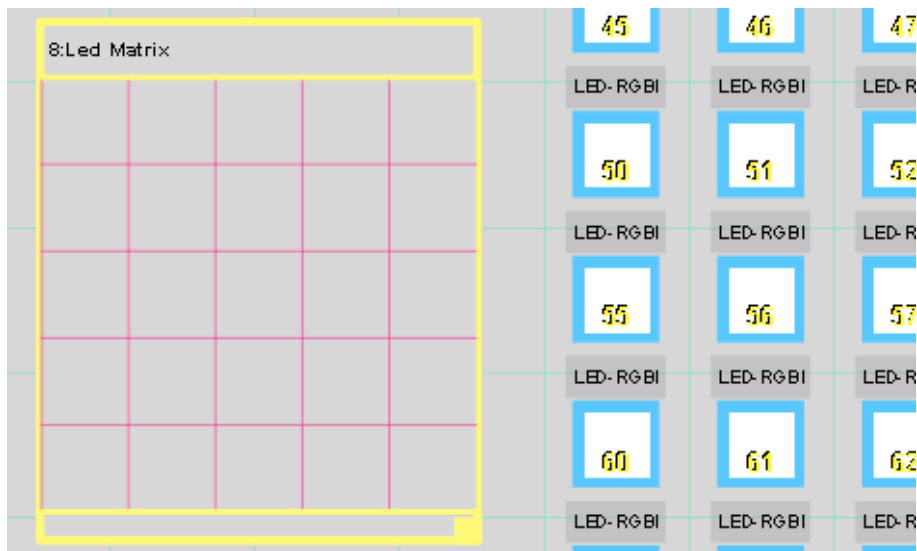
2. Adjust the size of the matrix by clicking on the handle on the bottom right hand corner and dragging to the size you want.

3. Drag your fixtures into the matrix. You can either drag them one by one or as a group. If you drag a group of fixtures onto the matrix Vista places them across and then down the matrix in ID order.
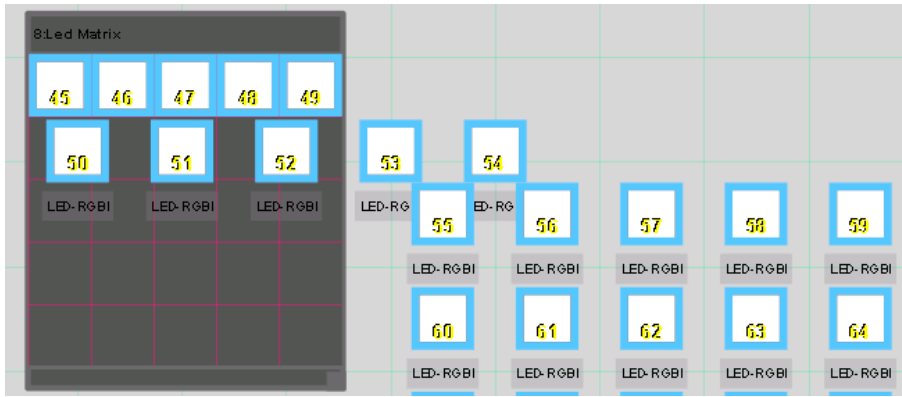
Selecting fixtures

The simplest way to select fixtures is to click on the fixture or group icons one by one but Vista provides three selection tools and several options to make more complex selections.

Selection tools

To select a number of fixtures you can draw a 'marquee' around (or over) the fixtures you want. Vista provides three marquee tools.

To select the tool you want, click on one of the icons in the lower right corner of the fixture layout panel or choose one of the 'Selection tool' options from the Layouts menu:
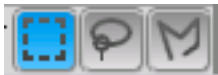
This icon…	does this…
	Draws a rectangular marquee as you click and drag across a group of fixtures.
	Lets you select fixtures by drawing a freehand shape around the ones you want.
	Lets you select fixtures by drawing a line through the ones you want.

Sorting fixtures

It's often important to sort fixtures in a certain order. For example when you are storing groups, applying effects, fanning parameters or copying and pasting information from one set of fixtures to another.

Vista lets you show the selection order and quickly sort fixtures based on their ID, selection order, layout position and more.

Displaying the selection order.

To display the selection order, choose the 'Show selection order' option from the Options sub-menu on the Layout menu.

Vista displays the selection order number in a small circle on the top left side of the fixture icon:
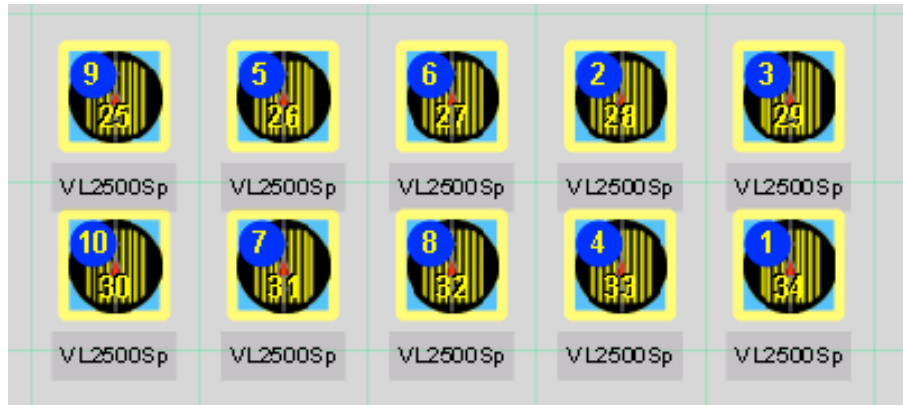
Sorting fixtures

You can sort fixtures in a number of ways. To do this, select the fixtures then click the Sort order dropdown on the main toolbar. Vista displays the Sort popup window:

This option…	sorts the fixtures in…
Custom Sort	an order you create in the Custom sort window. Custom sort includes several advanced options as described below.
Selection	the order in which you selected them on the Fixtures chooser layout.
ID	ID number order.
Random	random order. Each time you de-select and re-select fixtures they are sorted into another random order.
Position	by columns and rows, from top left to bottom right, based on their position in the layout window.

Manage Sorts	This option opens the Manage Sorts window where you can customise and save sorts.

Creating custom sort orders

When you select the 'Custom Sort' option Vista displays the Custom Sort window:
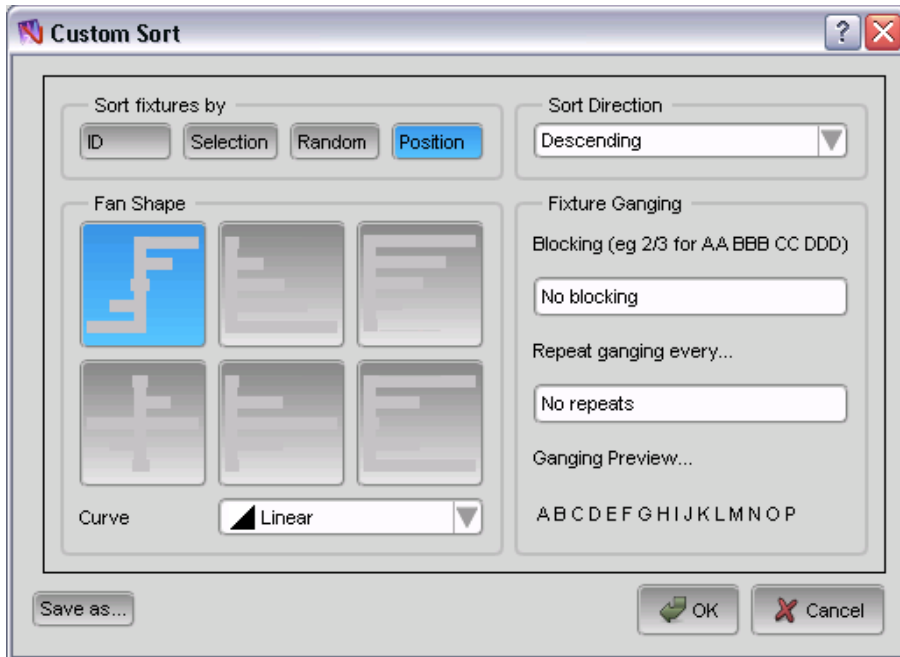
You can use this window to create a new sort that includes advanced options for grouping fixtures together, repeating applied settings and setting the type of fan shape that will be used when fanning a value across the selected fixtures.

This option…	does this…
Sort Fixtures by..	Sets the basic sort type. The options are as described above – ID, Selection Random or Position.
Fan Shape	Lets you store a fan shape that will be recalled when a saved sort order is selected. *See 'Fan shapes' on page 6-16.*
Curve	Sets the distribution of fixtures, along the fan shape. The normal setting is 'Linear' and in this case the fixtures are evenly distributed. Other curves, such as square and inverse square will bunch some of the fixtures together and spread others out.
Sort Direction	Sets the sort order to ascending or descending.

Fixture Ganging	Allows fixtures to be grouped together, so that if you spread or fan a feature setting across some fixtures, the settings can be in blocks and / or repeated throughout the selection. See the examples below.
Blocking	Lets you group fixtures in "blocks" of consecutive fixtures. You can set just one block size, for example 2 or set several different block sizes (e.g. first block has 4 fixtures, second block has 6 fixtures and so on).
	To set complex blocking separate the block sizes with a / (forward slash). For example 4/6 creates a group of 4 fixtures and then a group of 6 fixtures.
	You can use more than one slash. Enter 2/4/5/3 to create a grouping of two fixtures, then four, then five, then three, repeated until all fixtures are used.
Repeat Ganging	Lets you repeat feature settings on every 2nd, 3rd, 4th or any increment of fixtures. To set complex repeats separate the increments with a / (forward slash).
Save as…	Opens the Custom Sort 'Save as' window where you can name and save your custom sort.

Selecting Odd and Even numbered fixtures

You can select just the odd or even numbered fixtures from the fixtures you have selected by setting "Sort fixtures by" to ID and "repeat ganging" to 2 in the sort dialogue. Then, using the next and previous fixture buttons, you can toggle between controlling the odd and even fixtures.

Custom Ganging examples

In these examples, there are 10 colour mixing fixtures selected and colour is fanned across the fixtures using a Custom sort with the following Ganging (Blocking and Repeat) settings:

1. Blocking set to 3, Repeats set to '0' (No repeats)

2. Blocking set to 3, Repeats set to '2'

3. Blocking set to 1/2/3, Repeats set to '0' (No repeats)

4. Blocking set to 2/3, Repeats set to 2.

Custom Fan shapes

In these examples, there are 10 fixtures selected and intensity is fanned across the fixtures using the following Fan shapes:

1. Fan from Centre:

2. Fan from both ends:

Fan shapes

The are several fan shapes that can be set and saved in a Custom sort.

This option…	does this…
Linear Fan Diverged from centre.	Fanned values radiate in both positive and negative directions from the base value, starting from the centre of the fixture selection.
Fan from end Linear from Start	The fanned feature values radiate in one direction from the base value, starting from the first selected fixture.
Fan from start Linear from End	The fanned feature values radiate in one direction from the base value, starting from the last selected fixture.
Fan from centre. Linear from Extremities	The fanned feature values radiate in one direction from the base value, starting from the first and last selected fixtures.

This option…	does this…
Inverted fan Diverged from extremities	The fanned values radiate in both positive and negative directions from the base value, starting from the first and last selected fixture.
Fan from both ends Linear from Centre	The fanned feature values radiate in one direction from the base value, starting from the centre of the fixture selection.

Ü To fan a feature or events, select the fan mode and hold the Yellow modifier or Control key while setting the feature value or dragging the event bars.

Ü The Vista V1 "Mirror" option is replaced by the 'Fan from Centre' and 'Inverted Fan' shapes.

Managing your saved Sorts

You can rename, duplicate or modify a saved sort. To do this select the 'Manage Sorts' option from the Sort order drop down list. Vista opens the Manage Sorts window:
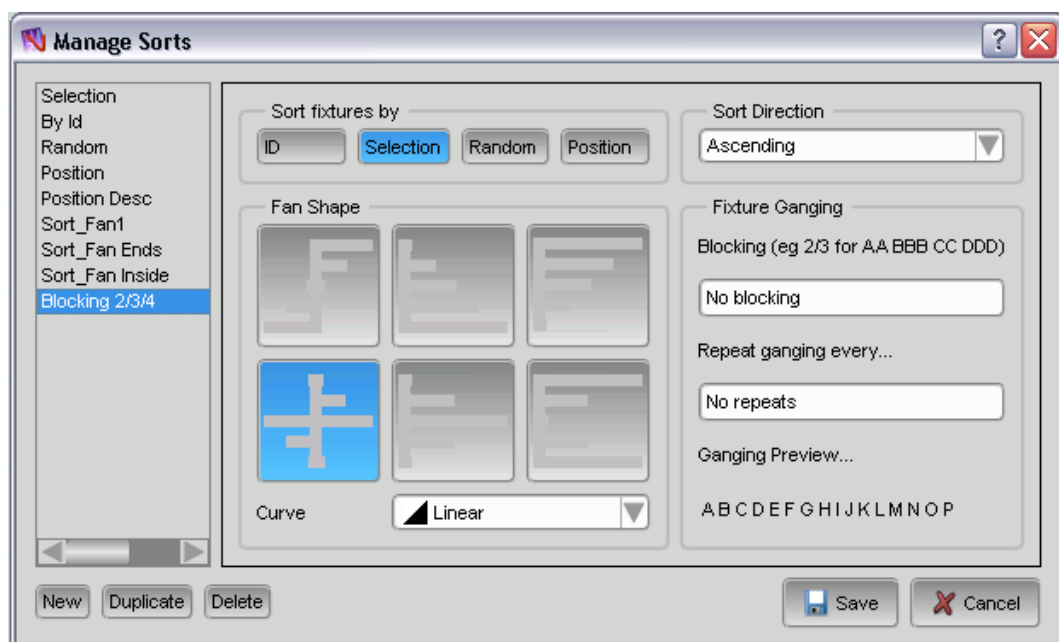
To modify one of the built in sorts or a custom sort you've saved, do this:

1. Select the Sort name in the left hand panel.

2. Modify the Fixture sort, Fan options and other settings.

3. Click the 'Save' button.

Renaming a Sort

You can rename a sort by double clicking on the name, in the left column, and typing a new name.

Duplicating a Sort

To make a copy of a sort, select it and click on the 'Duplicate' button.

Deleting a Sort

To delete a sort, select it and click on the 'Delete' button.

Using the Programmer Sidebar

The Programmer Sidebar has three tabs:
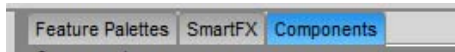
The Palette tab includes panels to control all the main aspects of your lighting fixtures: intensity, position, colour gobo and beam.

The SmartFX tab includes panels to create and edit effects.

The Components tab includes the items you store such as Groups, Presets, Extracts and Snapshots along with the in-built effects.

The Palette tab

If it's not already selected, click on the Palette tab in the sidebar

Summary or detailed view

You switch between the 'All' (or summary) view and the detailed views of the different control panels using the 7 buttons below the Palette tab.

This button…	does this…
All	displays a combined view of the most commonly used controls for Intensity, Position, Colour, Gobo and Beam.
	displays a detailed view of the Intensity controls.
	displays a detailed view of the Position controls.
	displays a detailed view of the Colour controls.

This button…	does this…
(gobo icon)	displays a detailed view of the Gobo controls.
(beam icon)	displays a detailed view of the Beam controls.
Custom	displays controls for every feature of the selected fixture(s). These controls are mainly used to control features that do not appear on the other panels or to set chanels to values that are normally not used.

Common features of the palettes

All palettes have a popup menu that you open by clicking the palette type button:

Click on the drop down arrow ▼ on any of the palette type button to open a popup menu

This option…	does this…
Clear	This option lets you clear all events *for that parameter type* or just some of those events. For example the Colour popup lets you clear the Colour wheel or Colour Mix or just the individual CMY events.
Home	This option lets you reset all events *for that parameter type* to their default or a user defined setting. For example no intensity, 50% pan and tilt, colour white etc.
Create Preset	This option opens the Preset window so you can create a new preset.
New Effect	Clicking on this option opens the Create effect window where you can select an effect type, the features to include and enter a name for the effect.
Stop effect	This option lets you stop effects that are running *for that parameter type*

Many of the palettes have slider bars that provide a quick and easy way to set a value:

To adjust a slider setting, either:

- · click the arrows at the left or right hand end to go to 0% and 100% respectively;

- · click and drag in the slider bar to set the value you want;

- · click in the value box and type a value using the keyboard.

To set attributes for one or more fixtures, select the fixtures you want in the Fixture Chooser panel, then click on the Palette you want to use.

Checking that everything is working

One of the first things you'll probably want to do after setting up your rig and patching it all in on the Patch screen, is check that everything's working. The quickest way to do this is to select the fixtures, one-by-one or in groups on the Fixture panel, and crank the intensity and colour up a bit.

To do this:

1.   Select the 'All' view of the palettes.

2.   Select one or more fixtures in the Fixture panel.

3.   Click the right-arrow icon at the end of the Intensity slider on the intensity palette.

4.   Click anywhere in the colour palette.

5.   The selected fixtures show that colour at full intensity.

Ü You can also use the encoder wheels to set Intensity, Position, Colour and any other parameter.

Ü If you can't see any output from your fixtures check that the Grand Master is turned fully clockwise and that the faders on the Superplayback panel are up.

Highlight and Lowlight

When you are focusing or testing your fixtures you can use Highlight feature to bring up the intensity of each fixture automatically when you select it.

To do this, either:

- · Click the Highlight button – normally softbutton #4 (F4 on your keyboard or,

- · Select the Highlight option from the Tools menu (Ctrl+H).

You can alter how highlight works by updating the highlight and lowlight presets. See *The Highlight and Lowlight presets* on page 6-50.

Ü When Highlight is on you can use the Next and Previous buttons, located above the 3 encoder wheels, to step between the selected fixtures. Press both buttons together to reselect all fixtures.

Using the All panel

The All panel has controls for all the most commonly used features of your fixtures. It provides a quick easy way to set Intensity, Position, Colour, Gobo and Beam without swapping panels. The same controls plus any advanced ones are available on the individual feature panels. *See Using the detailed panels on page 6-26*

Intensity

In this view the Intensity panel shows the most used intensity features :
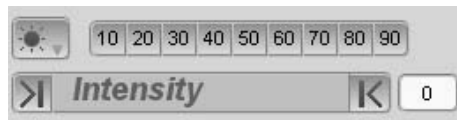
In this view:

· the 10 to 90 buttons sets the intensity of the selected fixtures to the corresponding percentage value.

· the Intensity slider controls the intensity of the selected fixtures in a percentile range.

You'll notice that as you change the intensity settings, the icons on the Fixture panel change to reflect this.

Position

The Position panel gives you control of the direction in which the selected fixtures are aimed:
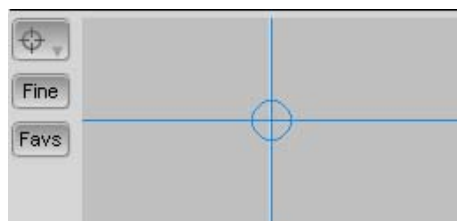
To adjust the position, click on the round target symbol and drag it to the spot you want .

You'll notice that as you change the position 'compass' the icons on the Fixture panel change to reflect this.

Fine Mode

Some parameters, such as position, can be difficult to control when the palette is in normal mode. To switch to fine click on the 'Fine' button. Repeat this to turn fine mode off.

Setting colour

The Colour palette provides four buttons so you can choose the way you want to set your colours:

- · HSV – hue and saturation values,
- · Sliders – Cyan, Magenta, Yellow or Red, Green, Blue or Hue, Saturation Value sliders,
- · Swatch – colours by Lee name and number,
- · Colour wheel – for fixtures that have colour wheels.

Hue and Saturation values

The HSV tab provides a colour spectrum and a value slider:
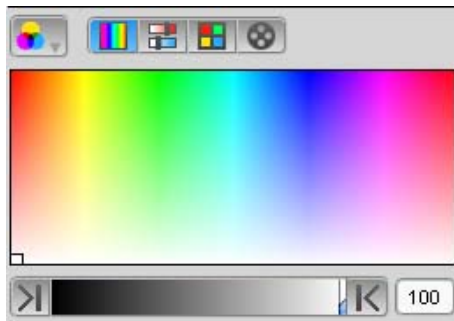
To pick a hue and its value, just click on the shade you want in the spectrum area, and drag the slider bar below the colour panel to set the value level.

Cyan, Magenta and Yellow/Red, Green Blue

This tab gives you the option of setting your colour using either CMY or RGB or HSV values:
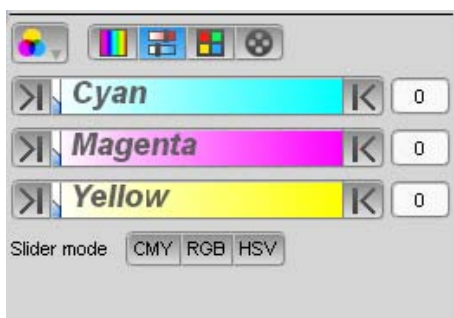
Click the relevant 'slider mode' button to choose the method you want, then adjust the sliders to set the colour.

Swatch

This tab provides the actual gel colours, numbers and names from the Lee swatchbook so you can pick the exact colour you want:
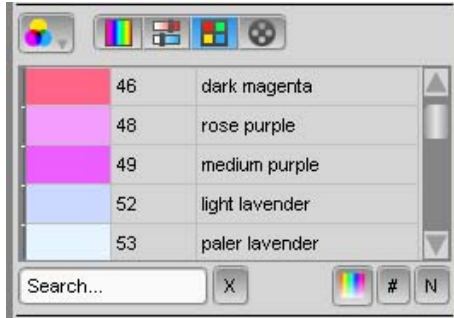
Click in the Colour, Number (#) or Name (N) button to sort the list by name number or colour. You can also search for a name or number by typing in the search box.

Colour wheel

When using fixtures with colour wheels, you can use this tab to select the colour slot (or position) you want this fixture to use:
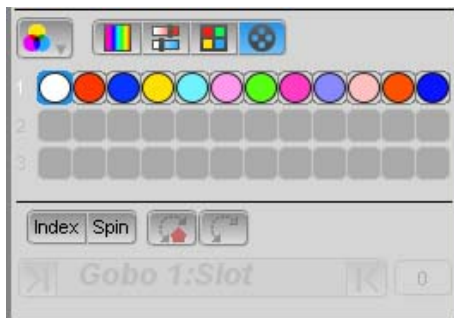
Fixtures that have more than one colour wheel will show a line of available colours for each wheel. The colours are displayed in the same order as they are on the wheel. Just click on the colour swatch to select it.

You can move the colour wheel by small increments, to create slit colours, by clicking on the Index button and adjusting the slider to rotate the wheel forwards or backwards.

You can also rotate or spin the by clicking on the Rotate button and slider to spin the wheel forwards or backwards:

If the colour wheel is spinning you can reverse the spin direction by clicking on the ⌐ Reverse icon or stop it by clicking on the ⌐ Stop icon.

Setting gobo

The Gobo summary panel displays icons of the gobos available on the selected fixtures:

If you have only one type of fixture selected, the icons Vista displays represent all the gobo types of that fixture. Fixtures that have more than one gobo wheel will show a line of available gobos for each wheel. The gobos are displayed in the same order as they are on the wheel. You can select a gobo from one wheel and leave the other set to open or a gobo from each wheel to combine the patterns.

To choose a gobo, click on the icon representing the gobo shape you want. If you have more than one type of fixture selected there will be a tab for each type. Clicking on a tab will display the gobos available for that fixture type.

Rotation

You can move the gobo wheel by small increments, to create split patterns, by clicking on the Wheel and Index buttons and adjusting the slider to rotate the wheel forwards or backwards.

You can also rotate or spin the Gobo wheel by clicking on the Wheel and Rotate buttons and adjusting the slider to spin the wheel forwards or backwards. If the gobo wheel is spinning you can reverse the spin direction by clicking on the Reverse icon or stop it by clicking on the Stop icon.

On some fixtures you can rotate the individual gobos. For these fixtures:

·   You can move the selected gobo by small increments, to align the image, by clicking on the Gobo and Index buttons and adjusting the slider to rotate the gobo clockwise or anti-clockwise.

·   You can also spin the selected gobo by clicking on the Gobo and Rotate buttons and adjusting the slider to spin the gobo clockwise or anti-clockwise.

·   If the gobo slot is spinning you can reverse the spin direction by clicking on clicking on the Reverse icon or stop it by clicking on the Stop icon.

Setting beam size and focus

The summary Beam panel has two tabs for controlling the most used beam attributes:

Focus

The Focus tab controls the focus and zoom of the selected fixtures:
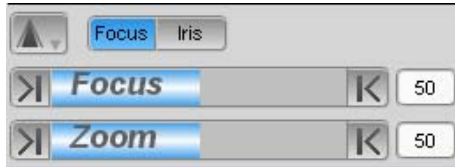
Use the focus slider to soften or sharpen the beam shape. Use the Zoom slider to make the beam spread softer or sharper.

Iris

The Iris tab controls the beam size (or diameter) of the selected fixtures, if they have an iris.

Use the iris slider to make the beam size. Use the Zoom slider to make the beam size smaller or larger.

Using the detailed panels

Intensity

Click on the Intensity button to select the detailed settings panel for all fixture channels in the Intensity group:
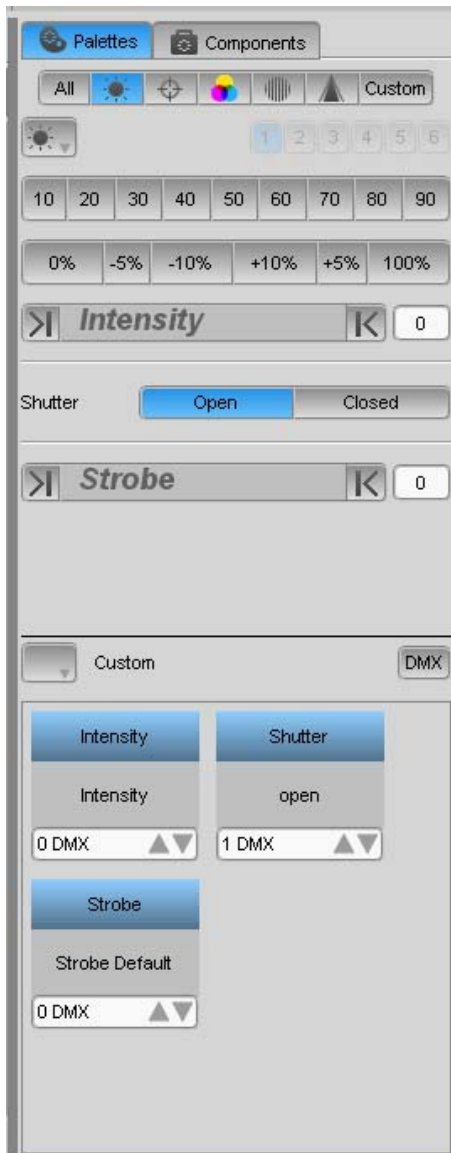
In this view:

· the 10 to 90 buttons set the intensity of the selected fixtures to the corresponding percentage value.

· the end most percentage buttons set the level to 0% or 100% while the others increase or decrease it in 5% or 10% increments.

· the Intensity slider controls the intensity of the selected fixtures in a percentile range.

· if the selected fixtures have a strobe capability, the Strobe slider controls the speed of the strobe.

· if the selected fixtures have blackout shutters, the Opened and Closed buttons set the shutter position.

Custom values

Some fixtures have effects and other special features that can be used by setting a channel to a particular value. These features vary from fixture to fixture so they aren't included in Vista's 'generic' controls.

See *About Custom values* on *page 6-35* for more details on using the custom control panels.

Position

The detailed Position panel provides a larger version of the position target panel.

You'll notice that on this panel you can also adjust just the pan or just the tilt by using the Pan and Tilt sliders located on the bottom and left side of the target panel.
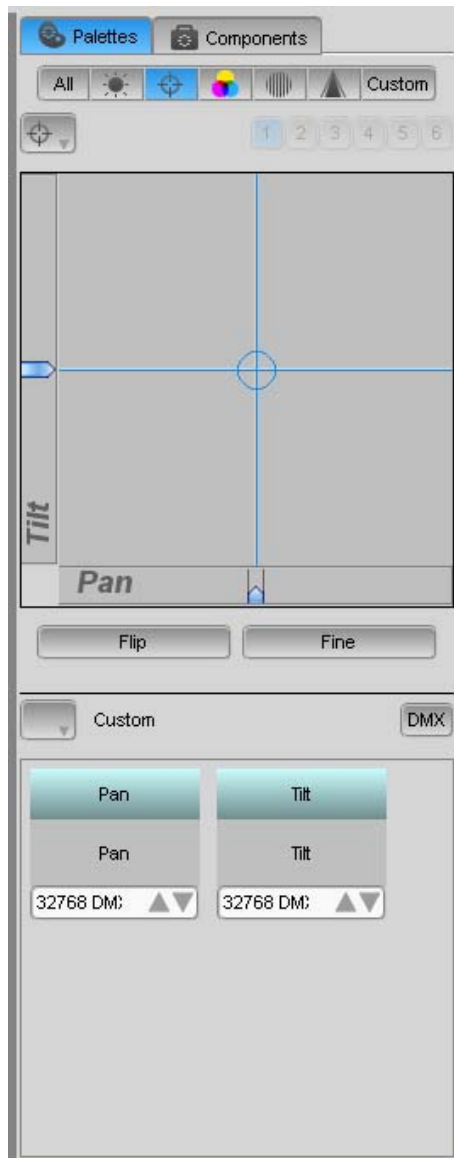
Fine mode

Position, can be difficult to control when the palette is in normal mode. To switch to fine mode click the 'Fine button'.

Flip

Click this button to rotate and invert the fixture(s) so that it is pointing at the same position.

Custom values

Some fixtures have effects and other special features that can be used by setting a channel to a particular value. These features vary from fixture to fixture so they aren't included in Vista's 'generic' controls.

See *About Custom values* on *page 6-35* for more details on using the custom control panels.

Colour

The detailed Colour palette lets you choose how to control the colour mixing mechanism and the colour wheel(s) in your fixtures:

The buttons, in the middle of the colour panel select the colour mechanism. There are three options.

- · HSV – hue and saturation values.

- · Lee – Lee colour swatch.

- · Wheel – pick a colour from the fixture's colour wheel

If a fixture only has a colour mixing mechanism (CMY / RGB) you can choose a colour from the HSV or Lee swatch section and it will be applied to the mixer mechanism. The colour wheel section will not be available.

If a fixture has a colour mixing mechanism (CMY / RGB) and a Colour wheel you can choose a colour from the HSV or Lee swatch section and it will be applied to the mixer mechanism. You can also choose a colour from the Wheel section of the colour panel it will be applied to the colour wheel. This means you can set different colours for the mix mechanism and the wheel.

If a fixture only has a Colour wheel(s) you can choose a colour from the HSV, Lee or Wheel section of the colour panel it will be applied to the colour wheel. If you choose colours from the HSV or Lee section the nearest colour on the wheel is selected.

Hue and Saturation values

When you select the HSV colour option the colour panel provides a colour picker panel and a set of sliders:
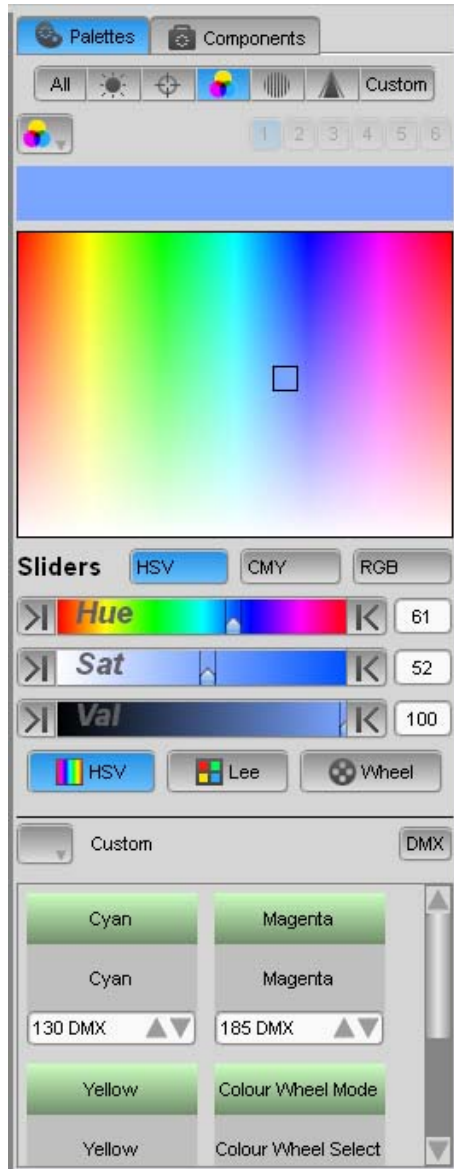
To pick a hue and its saturation, just click on the shade you want in the spectrum area, and drag around to select a colour and set the saturation level.

You can also adjust the colour using the three sliders. Click the HSV, CMY or RGB 'slider mode' button to choose the method you want, then adjust the sliders to set the colour.

Lee Swatch

This option provides a list of Lee filters so you can pick a colour by it's name, number or swatch.
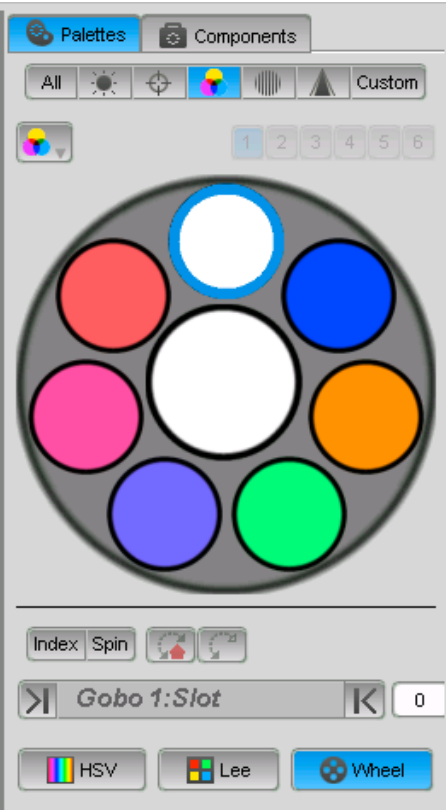
	Click in the Colour, Number (#) or Name (N) button to sort the list by name number or colour swatch. You can also search for a name or number by typing in the search box.

Wheel

When using fixtures with a colour wheel(s), this option provides a graphic representation of the colour wheel so you can see exactly what colours are available and where they are on the wheel.

|	
	If a fixture has more than one colour wheel the buttons above the colour wheel will be available. To choose the colour wheel you want to work with click on the corresponding button.
	You can move the colour wheel by small increments, to create split colours, by clicking on the Index button and adjusting the slider to turn the wheel forwards or backwards.
	You can also rotate or spin the colour wheel by clicking on the Rotate buttons and adjusting the slider to spin the wheel forwards or backwards.
	If the colour wheel is spinning you can reverse the spin direction by clicking on the Reverse icon or stop it by clicking on the Stop icon.
	If you have more than one type of fixture selected, Vista displays a tab for each fixture type at the top of the panel. To choose the fixture type you want to work with click on the corresponding tab.

Custom values

Some fixtures have effects and other special features that can be used by setting a channel to a particular value. These features vary from fixture to fixture so they aren't included in Vista's 'generic' controls.

See *About Custom values* on *page 6-35* for more details on using the custom control panels.

Gobo

The detailed Gobo panel provides a graphic representation of the gobo wheel so you can see exactly what patterns are available and where they are on the wheel.

If a fixture has more than one gobo wheel the buttons above the gobo wheel will be available. To choose the wheel you want to work with click on the corresponding button.

Rotation

You can move the gobo wheel by small increments, to create split patterns, by clicking on the Wheel and Index button and adjusting the slider to turn the wheel forwards or backwards.

You can also rotate or spin the wheel by clicking on the Wheel and Rotate buttons and adjusting the slider to spin the wheel forwards or backwards. If the colour wheel is spinning you can reverse the spin direction by clicking on the Reverse icon or stop it by clicking on the Home icon.

On some fixtures you can rotate the individual gobos. For these fixtures:

- You can move the selected gobo by small increments, to align the image, by clicking on the Gobo and Index buttons and adjusting the slider to rotate the gobo clockwise or anti-clockwise.

- You can also spin the selected gobo by clicking on the Gobo and Rotate buttons and adjusting the slider to spin the gobo clockwise or anti-clockwise.

- If the gobo slot is spinning you can reverse the spin direction by clicking on the Reverse icon or stop it by clicking on the Stop icon.

If you have more than one type of fixture selected, Vista displays a tab for each fixture type at the top of the panel. To choose the fixture type you want to work with click on the corresponding tab.

Custom DMX

Some fixtures have effects and other special features that can be used by setting a channel to a particular value. These features vary from fixture to fixture so they aren't included in Vista's 'generic' controls.

Beam

The detailed Beam panel provides sliders for all the beam features and a graphic representation of frame (shaping shutters) , if the fixtures have this feature:
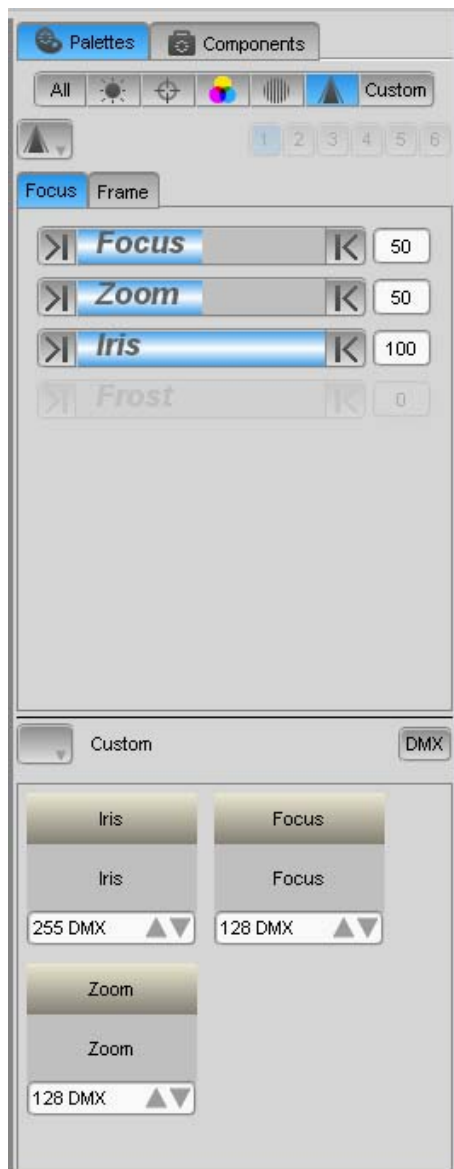
Focus

Use the focus slider to soften or sharpen the beam shape.

Zoom

Use the Zoom slider to make the beam angle narrower or wider.

Iris

The Iris tab controls the beam size (or diameter) of the selected fixtures.

Framing

The Frame tab is specifically for fixtures that have beam shaping frames, so you can shutter-off parts of the beam.
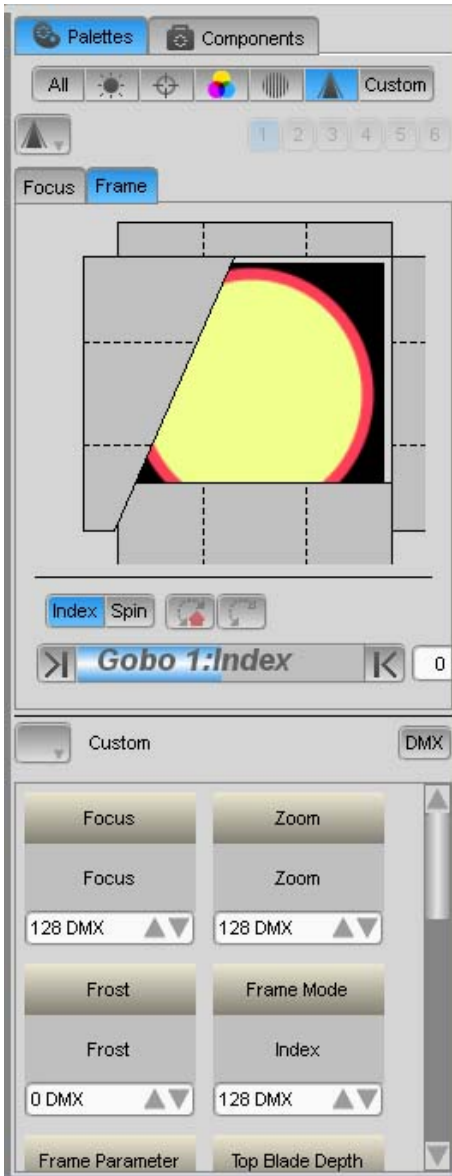
To set the positions you want the frames to be in on the selected fixtures, click and drag each frame to the position you want, as shown in this example:

You can also set the rotation angle of the shape or continuously rotate the whole shape using the slider:

·   Index – to turn the framing shutters to the preferred angle click the Index button and move the slider to set the position.

·   Rotate – to continuously rotate the whole shutter assembly click the Rotate button and move the slider to set the speed and direction.

Custom values

Some fixtures have effects and other special features that can be used by setting a channel to a particular value. These features vary from fixture to fixture so they aren't included in Vista's 'generic' controls.

See *About Custom values* on *page 6-35* for more details on using the custom control panels.

Custom

The detailed Custom panel provides a separate mini setting panel for every channel of the selected fixture. The mini panels are arranged in sections according to their feature type – Intensity, Position, Colour, Gobo, Beam and Miscellaneous. The 'Misc' section contains all the mini control panels for all channels that don't belong in the IPCGB feature groups.

Click on any of the Feature type headings to open that section.

About Custom values

Some fixtures have effects and other special features that can only be used by setting a channel to a particular value. These features vary from fixture to fixture so they aren't included in Vista's 'generic' controls.

For example some fixtures have special settings for the Strobe channel that provide a random strobe effect. Moving the Vista strobe slider to the left or right will never set the effect running because the slider only operates in the (generic) range that sets the strobe to fast or slow.

To access the special channel features you use the small Custom control panels.

Custom panels

The small custom panels are divided into 3 sections:
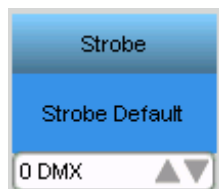
- · the top section shows the name of the channel in a colour coded bar.

- · the centre section shows the channel range. This will normally be the same as the channel name but will change if a special range is selected – see below.

- · the bottom section shows the channel value. Normally this is shown as a DMX value (0-255) but can be changed to a % value by de-selecting the DMX button.

You can set a custom channel value in three ways:

- · click on the up and down buttons, in the bottom section, to adjust the value by + or – 1 each time you click a button.

- · click in on the value display to highlight it and type a new value with the keyboard.

- · click in on the value display to highlight it and while holding the pen or mouse button down, not that the cursor changes to an up/down arrow. Now move the pen or cursor up or down as though you were adjusting a slider.

For many fixtures the Vista library includes information about the value channels need to be set to for a particular effect. In this case you can click on the custom panel's title bar or double-click anywhere on the panel to open the Custom feature window.

Custom feature window

The custom feature window lets you select any special values or a value within a range that is in the Vista library for the selected fixture.
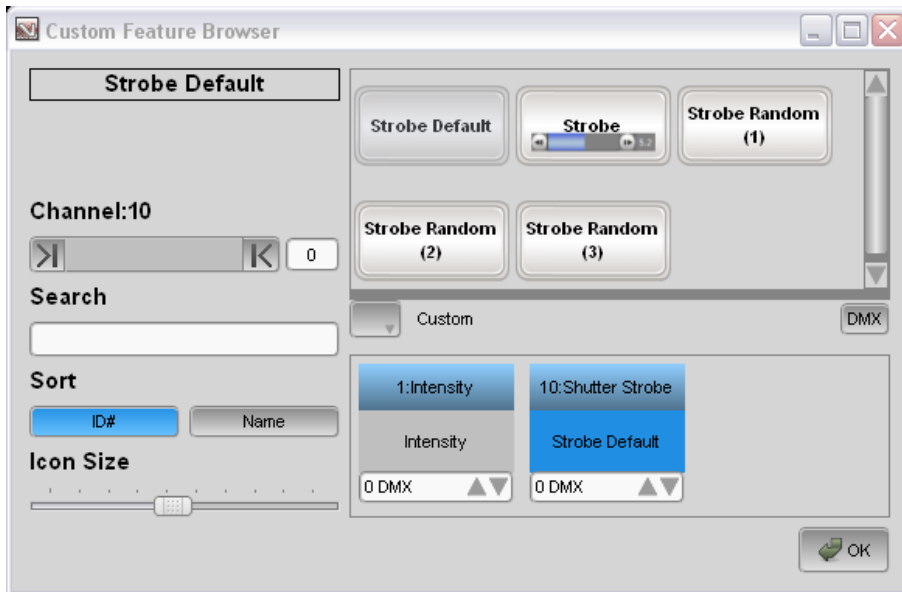
This field…	does this…
Name	Shows the name of the channel or selected channel range.
Range Fader (top)	Adjusts the channel value *within the selected range* if such a range exists.
Channel Fader (lower)	Adjusts the channel value to any value in the DMX range – 0-255.
Search	For fixtures with large numbers of custom values (for example media servers) you can type in this field to locate a special value or range by name.
Sort	For fixtures with large numbers of custom channels (for example media servers) you can sort the values by ID# (usually as the values appear in the fixtures DMX channel chart) or by Name.
Icon Size	Adjusts the size of the custom value/range selector buttons in the right hand column.

This field…	does this…
Range buttons	In this column there will always be one button that selects the entire channel range (i.e. 0-255). If the Vista library includes information about the fixtures custom values there will be a button for each of the special values or value ranges. Clicking on the button will set the channel to that value or range. If it's a range you can adjust the value, within that range, using the top slider.
DMX / Units	This button selects between DMX values (0-255) and units (normally 0-100)
Associated feature panels	If there are other features that are associated with the selected feature,they can be selected and adjusted from within the window.

The SmartFX tab

If it's not already selected, click on the SmartFXs tab at the top of the sidebar:

This is where you can modify the settings for any of Vista's inbuilt effects or build one from scratch.

For more details on using the SmartFX window see *SmartFX on page 8-1*

The Components tab

If it's not already selected, click on the Components tab at the top of the sidebar:

This is where you store, select and organize your Groups, presets, Extracts, Effects, Cuelists and Snapshots. The window is divided into different areas that allow you to:

·   choose how you want to view the components.

·   choose the type of component you want to work with – Groups, Presets, Effects, Extracts and Snapshots.

·   choose a component and either activate it or modify it in some way.

·   create new pages that let you group components into custom sets.

This screen provides quick access to all the elements used for programming and playback of a show. To choose the component type you use the buttons at the top of the left column:

This button…	does this…

This button…	does this…
QP1	displays a multi-panel 'Quick picker'. The Quick pickers provide an easy way to arrange and select Presets, Groups, Extracts SmartFX and more.
QP2	displays a second multi-panel 'Quick picker'.
Groups	displays and lets you select or modify the groups you've saved.
Presets	displays and lets you select or modify the presets you've saved.
FX	displays and lets you select any of Vista's built in effects
Extracts	displays and lets you select or modify the Extracts. you've saved.

The parameter Filter bar

If you are working with Presets, Effects or Extracts the Parameter Filter bar can be used to filter the items that are displayed or the features that are stored.

If you are recording a Preset the filter bar shows which parameters are being recorded and which are not. You can click on any of the icons to either include it or exclude it. Included parameters are highlighted.

For more information about presets and filters see *Presets* on page 6-46.

If you are applying an item that includes more than one parameter type you can use the filter bar to filter out any parameters you don't want to use. For example you might have a Preset that includes Intensity, Position and Colour but you only want to use the Colour part. In this case you would click on all the filter bar icons except Colour before selecting the preset.

When you are applying presets from the Components panel the Preset will fade in over the 'Live Time'. For example you might be working in the Live programmer tab and want to fade some lights into a colour or position over several seconds. To do you use the Live Time window:

Components window tools

If you are working with Groups, Presets, Effects or Extracts there is a toolbar at the bottom of the panel that acts on the list of items.

This button…	does this…

This button…	does this…
[+]	Creates a new component of the selected type.
[-]	Allows you to delete a component.
Search	Typing in the 'Search' box filters the list down to just the items that match what you've typed.
X	Clears the search box.

Quicker Picker panels

The Quick Picker panels provide an easy way to select any of the following items you've created:

- Groups
- Presets
- SmartFX (FX templates)
- Cuelists
- Extracts
- Favourites
- Snapshots.

The Sidebar has two panels (QP1 and QP2) that normally display three quickpicker panels. To adjust size of a Quick picker click on the divider bar and drag up or down. To hide one or two of the Quickpickers drag the divider(s) to the bottom of the panel.

You can set what a Quick picker displays by choosing an option from the drop-down menu at the top left side of each column. Once you've chosen the type of information you want the column to display, you can also select what page you want to display within that column using the second drop-down menu.

To add a page to a quickpicker right click on the panel you want and select 'add new page' from the popup menu.

To delete a page from a quickpicker right click on the panel you want and select 'remove page' from the popup menu. Deleting a page does not delete the items on that page.

To copy an item hold the 'Alt' key (or Green modifier) while dragging the item from one page to another.

Ü You can also have Quickpickers at the bottom of the main programmer window and on external touchscreen monitors.

The Multi Quickpicker

The multi-quickpicker contains 4 quickpicker panels and normally appears at the bottom off the Fixture Chooser and Timeline window. If it's not already open select the 'Multi Quick Picker' option from the View > Add Dockable Window menu, Vista displays the Multi Quickpicker.

The Multi Quickpicker is a dockable window, it can either be docked inside the main window or it can float on top of or beside the main window.

To un-dock a dockable window, click on the header bar and drag it off the main window. To dock a floating window drag it inside the fixture layout or timeline panel and drop it on the left, right, top or bottom of the panel.

The Multi Quickpicker normally displays four quickpicker panels. To adjust the width of a Quick picker click on the divider bar and drag left or right. To hide one or two of the Quickpickers drag the divider(s) to the right of the panel.

Ü You can also have Quickpickers on external touchscreen monitors.

Ü To re-dock a floating window double click on the window's title bar.

Quickpicker popup menu

Depending on the component there are various options available on the Quickpicker context menu. To open this menu right-click on the label area of any component. Vista displays the context menu:
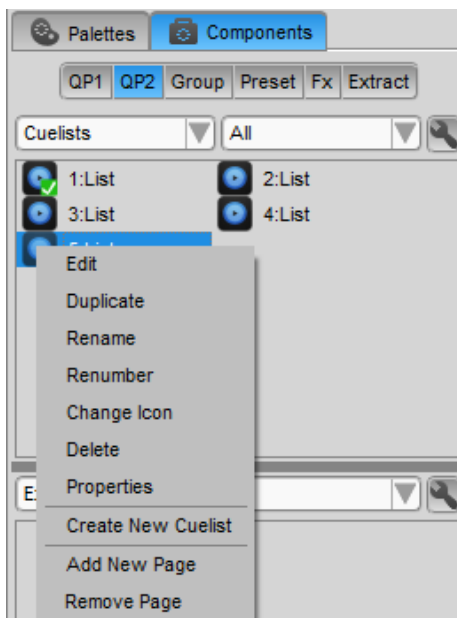
This option…	does this…
Edit	Opens the selected item in the editor.

This option…	does this…
Duplicate	Makes a copy of the selected item.
Rename	Opens a window where you can rename the selected item.
Renumber	Opens a window where you can renumber the selected item.
Change Icon	Opens a window where you change the icon for the selected item.
Delete	Opens a window where you can delete the selected item.
Properties	Opens the Properties window if a Cuelist is selected.
Add new page	Adds a new empty page to the selected quickpicker panel.
Remove page	Removes the selected page.
Rename page	Opens a window where you can rename the selected page.

Ü You can also play and release cuelists by selecting them (Alt + select to release) in a Quickpicker that has been configured this way – see below.

Ü You can open the Update Preset window by pressing the Yellow modifier (or Ctrl key) and selecting the preset.

Arranging the Quicker Picker panels

When you first display a Quick picker panel you'll see the items are laid out as buttons in a grid. You can re-arrange the items into a single or multi-column list and change the how each item is displayed.

To do this click on the ⚒ settings icon to open the Quickpicker settings window:
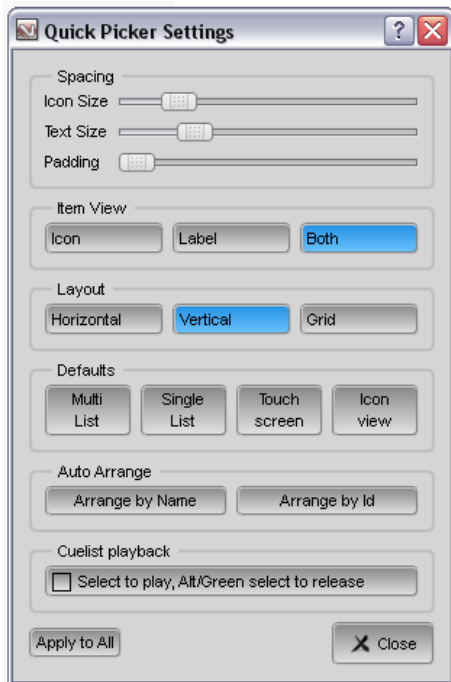
This button…	does this…
Icon size	Adjusts the size of the icons displayed in the Quickpicker.
Text size	Adjusts the amount of space available for the label.
Padding	Adjusts the amount of space between the icons.
Icon	Click this button to display just an icon for each item.
Label	Click this button to display just a text label for each item.
Both	Click this button to display both an icon and a text label for each item.
Multi-list	Click this button to arrange the items in a multi column list. The items are laid out across and then down.
Single list	Click this button to arrange the items in a single column list.
Touch screen	Click this button to arrange the items in a grid suitable for use on an external touchscreen.
Icon view	Click this button to arrange the items in a compact grid of icons without labels.

This button…	does this…
Auto-arrange	Arrange the icons by Name (alphabetically) or by ID (number)
Cuelist Playback	When the selection box is ticked, selecting a cuelist will play it. To release a cuelist hold the green modifier (or press Alt) and select the cuelist.
Apply to all	Click this button to apply these settings to all Quickpicker windows.

Presets labels

When you select some fixtures, the preset labels change to indicate which are available:

This label…	indicates…
Greyed	This preset does not have any settings stored for the selected fixtures.
Normal	This preset has settings for some or all of the selected fixtures.
Ticked	This preset is being used on the selected fixtures.

Groups

If you have a big rig, the last thing you want to do is manipulate dozens of individual fixtures. To make it easy to control all the fixtures in your rig Vista automatically creates groups for each fixture type that you patch. You can also create your own groups.

A group can consist of any number of any type of fixtures; it's entirely up to you what you put in a group. Some typical groups might be all the even or odd fixtures of one type, all the fixtures on the back truss, or all the fixtures you're using on one particular part of the stage.

When you save a group, the fixture selection order is also stored. This can be useful if you are fanning colour or another feature, applying effects across a group and want a particular result

Creating groups

When you are first creating groups it's easier to be in a layout that shows the Groups panel in the sidebar. If you're seeing something else, click on the Components tab and select the 'Groups' button:
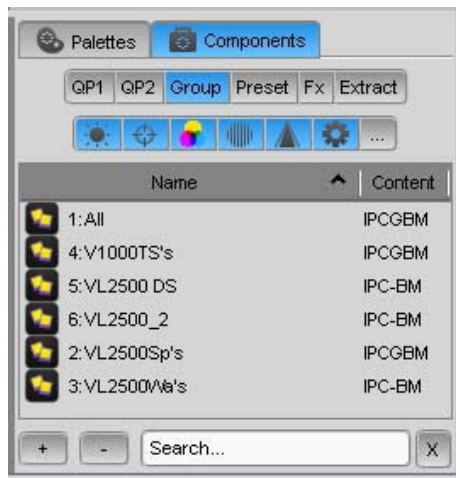
To create a group:

1. Select the fixtures you want in the group.

2. Click the [+] Add Group button at the bottom of the Group panel. Vista opens the Create New Group window.

3. Type a name for the Group and click OK or press Enter. If you don't want to name the Group right away you can accept the suggested name and rename it later.

You can create as many groups as you want, and you can also create any number of 'groups of groups'.

Updating Groups

You can use the Programmer to update the information stored in a group. To do this:

1. Either in the Live tab or a cuelist tab, select the fixture group you want to change. Vista selects all fixtures in the group.

2. Select additional fixtures or deselect any already in the group.

3. Select the 'Update Fixture Group' option from the Components menu. You can also update a group by right-clicking on the group icon and selecting Update from the popup menu.

Presets

Presets are the 'building blocks' that you use to create cuelists. They represent common sets of attributes that you know you're going to want to use over and over again, such as a particular colour (e.g. Red) or position (e.g. on the drummer).

Presets are useful for two reasons. First, with presets you can quickly assign Intensity, Position, Colour, Gobo, Beam and other values to any number of fixtures without having to adjust the settings individually for each one. Second if you store your cues using presets you can quickly update all your programming without having to edit every cue.

Creating presets

To create a preset:

1. Select one or more fixtures.

2. Set any of the Intensity, Position, Colour, Gobo, Beam values on the palette the way you want them.

3. Then either:

   · Click on any of the palette type button and select the the 'Preset' > 'Create Preset' option from the popup menu or,

   · Select the 'New > +Preset' option from the Components menu, or

   · Click on the '+ Preset' button in the Components toolbar. (To open the Components toolbar choose the Toolbar > Components toolbar from the View menu, or

   · Right-click in a Presets Quickpicker and select the Create preset option.

   Vista displays the Create New Preset window:
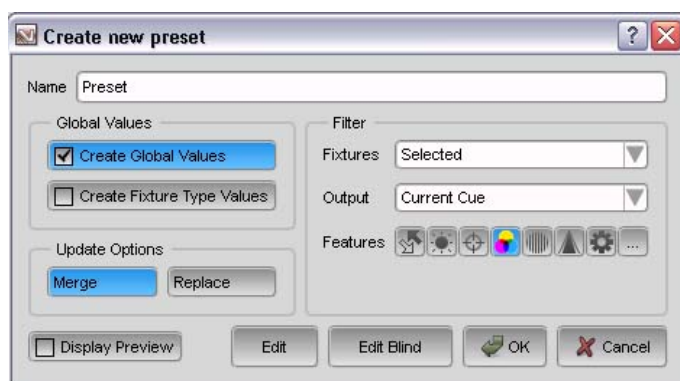
4. Enter a name for the preset in the name box (beside the icon).

5. Click on the icon and select and different image if required.

6. Set the Preset store options:

This option…	does this…
Name	Allows you to name the new preset.
Global Values	Tick 'Create Global Values' if you want to be able to use this preset on any fixture, of any type, even if it is not selected when you store the preset. Tick 'Create Fixture Type Values' if you want to be able to use this preset on any fixture, of the same type, even if it is not selected when you store the preset.
Filter Fixtures	Normally only the selected fixtures are included in the Preset. If you want to include all fixtures, in the preset, click on the drop down box and select the 'All' option.
Filter Output	Normally presets store the values that the fixture(s) are outputting, no matter whether they are coming the Live tab of the Programmer or from any Cue that is playing. To only store values coming from the active Cue (in the Programmer) click on the drop down box and select the 'Current Cue' option.
Filter Features	Presets are normally *per-palette*, i.e. you create separate presets for intensity, colour, gobo, beam and miscellaneous features. However the filter bar lets you include or exclude any features. To include a feature click on it's icon so that it is highlighted. To exclude a feature click on it's icon so that it is not highlighted.
Display Preview panel	Tick this checkbox to shows a preview of the fixtures you have selected and the features that will be stored in the preset.

7. Click the OK button. Vista creates a new Preset that appears in the Presets panel of the Component Sidebar and in Quickpickers set to show All presets or ones of the feature type you've created.

Editing presets

You can use the Programmer to add, remove or change information stored in a preset. There are two ways to open a preset for editing:

- in the Sidebar Components tab you can right-click on the the Preset and select the 'Edit' option from the popup menu.

- in the Multi Quickpicker you can right-click on the the Preset and select the 'Edit' option from the popup menu.

Once the Preset is open in the Programmer you can make changes in the same way as you do when editing a Cue:

- select fixtures in the Fixture Chooser window and add, remove or change settings using the palettes or encoders, or

- select fixtures or Event bars in the Timeline window add, remove or change settings using the palettes or encoders.
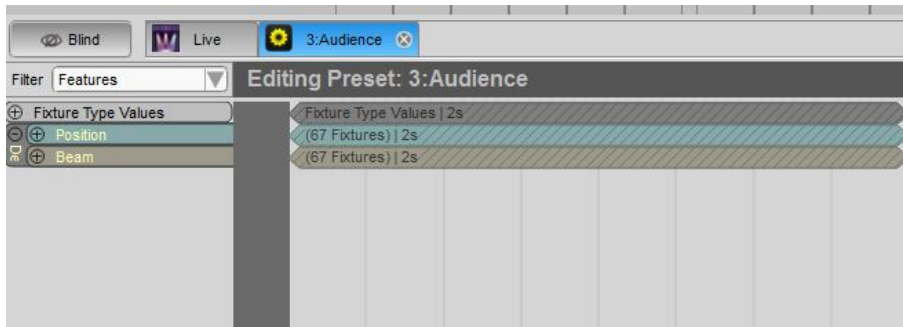
To save changes to a Preset, choose the Save changes to Preset option from the Components menu (Alt / Option + S). Or click the red close icon on the Preset tab and you will be prompted to save or discard the Preset changes.

Updating presets

You can use the Programmer to update the information stored in a preset. To do this:

1. Either in the Live tab or a cuelist tab, select the fixtures you want to change or add to the preset.

2. Make the adjustments you want using the palettes.

3. Either right-click on the preset and select Update from the popup menu or hold the yellow modifier (Ctrl key) and tap the preset..

4. Vista displays the Update Preset window:
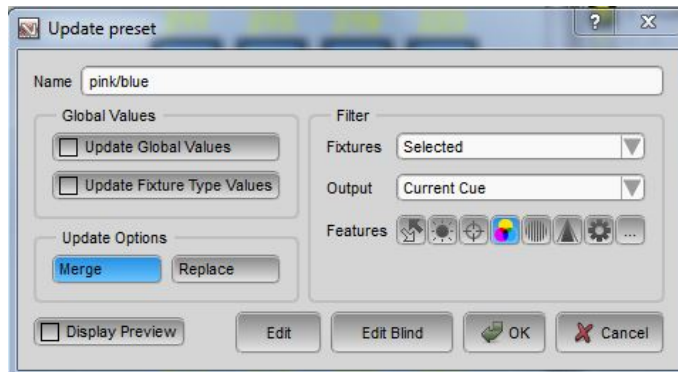
5.   Set the Preset update options:

This option…	does this…
Name	Allows you to change the preset name.
Global Values	Tick 'Create Global Values' if you want to all fixtures, of any type, even if it is not selected when you store the preset. Tick 'Update Fixture Type Values' if you want to be able to use this preset on any fixture, of the same type, even if it is not selected when you store the preset. Don't tick either box if you only want the change to apply to the selected fixture(s).
Update Options	Select 'Merge' if you want add new information to the preset. Select 'Replace' if you want to discard the old preset information and save the new settings.
Filter Fixtures	Normally only the selected fixtures are included in the Preset. If you want to include all fixtures, in the preset, click on the drop down box and select the 'All' option.
Filter Output	Normally a preset update only saves settings coming from the selected Programmer tab (i.e. Live or a Cuelist). To store the values that the fixture(s) are outputting, no matter whether they are coming the Live tab of the Programmer or from any Cue that is playing click on the drop down box and select 'All'.
Filter Features	Presets are normally *per palette*, i.e. you create separate presets for intensity, colour, gobo, beam and miscellaneous features. However the filter bar lets you include or exclude

	any features.
	To include a feature click on it's icon so that it is highlighted.
	To exclude a feature click on it's icon so that it is not highlighted.
Display Preview panel	Tick this checkbox to show a preview of the fixtures you have selected and the features that will be updated.
Edit	Opens the preset in the programmer Chooser / Timeline window.
Edit Blind	Opens the preset in the programmer Chooser / Timeline window and allows you to make changes without them being visible on stage.

6. Select 'OK' to keep the changes or 'Cancel' to discard them.

Ü You can also update Presets when you Update a cuelist that's being played back.

The Highlight and Lowlight presets

The Highlight and Lowlight presets set the behaviour of fixtures when Highlight mode is on.

·   When you select a fixture it goes to the Highlight preset.

·   When you deselect a fixture it goes to the Lowlight preset.

Editing the Highlight and Lowlight presets

You can use the Programmer to add, remove or change information stored in these presets. To do this:

1. Select the Highlight or Lowlight option from the Edit menu. Then select the 'Edit' option from the popup menu. Vista opens the preset, as a tab in the Timeline window.

2. Once the Preset is open in the Programmer you can make changes in the same way as you do when editing other presets (see previous section).

·   select fixtures in the Fixture Chooser window and add, remove or change settings using the palettes or encoders, or

·   select fixtures or Event bars in the Timeline window add, remove or change settings using the palettes or encoders.

3. Tap on the red 'Close' icon on the Highlight or Lowlight Preset tab. Vista opens the Save Preset changes window.

4. Select Save to keep the changes.

Updating the Highlight and Lowlight presets

You can update the Highlight and Lowlight presets in the same way as you update other presets. To do this:

1. Set the fixture(s) Intensity and any other features, such as colour and beam, that you want included in the Highlight setting.

2. Select the Highlight or Lowlight option from the Edit menu . Then select the 'Update' option from the popup menu. You can also right-click in the Sidebar, Components, Presets panel and select this option from the popup menu. Vista opens the 'Update Highlight (or Lowlight) preset window.

You cannot change the name of the Highlight or Lowlight preset but otherwise updating the High/Lowlight presets works the same way as for standard presets. *For more information see Updating presets on page 6-48*

The Home preset

The Home preset is used to set the behaviour of fixtures when some or all of their features are sent to their 'Home' value. For example most fixtures with pan and tilt features will go to their default values of 50% pan and 50% tilt when they are sent to the Home position.

Ü If a fixture is not going to the position you want when you clear the editor (or the focus setting or any other feature is incorrect) you can edit the Home preset to fix the problem.

Editing the Home preset

You can use the Programmer to add, remove or change information stored in the Home preset. To do this:

1. Select the Home option from the Edit menu . Then select the 'Edit' option from the popup menu. Vista opens the Home preset in the Programmer.

2. Set any features (Intensity, Position, Colour, Gobo Beam etc) of the fixture(s) you want to go to non-default values.

3. Tap on the red 'Close' icon on the Home Preset tab. Vista opens the Save Preset changes window.

4. Select Save to keep the changes.

Updating the Home preset

You can update the Home preset in the same way as you update other presets. To do this:

1. Set the fixture(s) Position and any other features, such as colour and beam, that you want included in the Home setting.

2. Select the Home option from the Edit menu . Then select the 'Update' option from the popup menu. You can also right-click in the Sidebar, Components, Presets panel and select this option from the popup menu. Vista opens the 'Update Home' preset window:
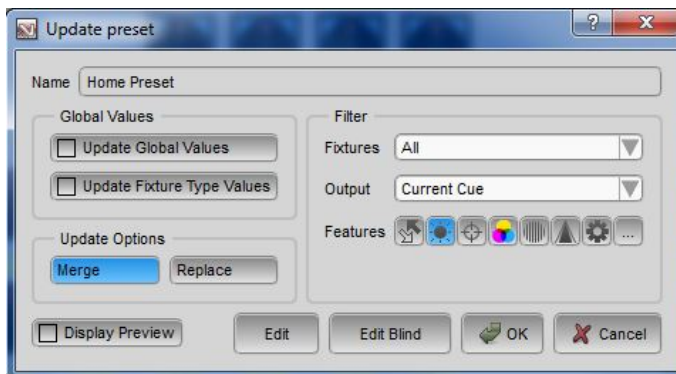
You cannot change the name of the Home preset but otherwise updating the Home presets works the same way as for standard presets. *For more information see Updating presets on page 6-48*

Live Time

If you are working live with Presets, Palettes or any of the Sidebar panels the 'Live Time' window can be used to control crossfade time.

When you are applying a preset or simply selecting a (non-linear) value in the sidebar palettes you can set a time for the Preset or selected value to fade in. For example you might be working in the Live programmer tab and want to fade some lights into a colour or position over several seconds.

To set the Live Time:

1. Click the 'Live' button on the main toolbar. This button is normally mapped to Function Key F10 on the keyboard. You can also select the 'Live Time option from the Tools menu.

2. Enter a time in seconds or click on the drop down box and select one of the live time presets.

Ü When you are working in the Live tab of the editor and the Superplayback section is set to IPCG mode the right hand fader of the SPB can be used to scale the live timing.

Live time presets

Vista comes with 2 Live time presets: 2s and 5s. But if you regularly use other time settings you can save these as presets that appear on the drop down list. To do this:

1.   Click the 'Live' button or select the 'Live Time option from the Tools menu.

2.   When the Live Time window opens, select the 'Custom Timing' option from the drop down box. Vista opens the Custom Timing window.

3.   Set the Fade Time, Delay time and Fade curve for each of the features: Intensity (Up and Down) Position, Colour, Gobo, Beam and Miscellaneous.

This field…	Does this…
Time	Sets the fade time in seconds. You can also set the fade time by clicking on the timing bar and dragging the right handle forwards or backwards.
Delay	Sets the delay time in seconds. You can also set the delay time by clicking on the timing bar and when the cursor turns into a hand dragging the bar to the right.
Fade Curve	Sets the fade curve. To set the fade curve click on the icon and select an option from the popup list. For more information about fade curves *see fade curve on page 7-32.*

4.   Click on the 'Save as' button and give this Timing preset a name.

5.   Click OK to save. The new Timing preset will now be available on the Live Timing drop down box.

SmartFX templates

Vista comes with a number of built in effects that you can use to quickly create dynamic looks including intensity pulses, position shapes, colour chases and more.

To see the built in effects, click on the Components tab and select the 'FX' button. This lets you apply one of the built in effects with just one click but you can also use the SmartFX window to modify the built in effect or create your own effects from scratch.

See the *SmartFX* window on *page 8-1*

Applying a built in effect

To apply an effect:

1. In the Fixture chooser window, select the fixtures you want.

2. Click the FX button on the Components tab. Vista displays a list of the built in effects:
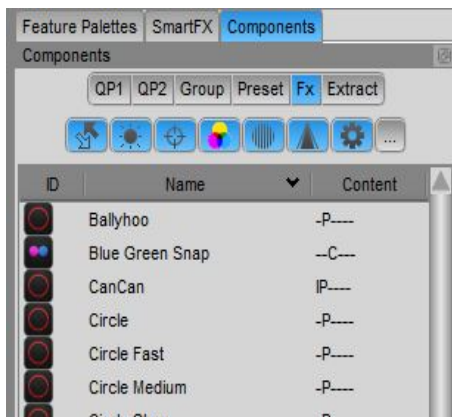
3. You can click on the filter bar icons to either include or exclude effects that include the corresponding parameter types.

4. Click the Stored (Canned) FX tab. Vista displays the list of available stored (canned) effects. The letters in the 'content' column each effect tell you which parameters are in this effect (e.g. I-Intensity, P-Position, C-Colour, etc).

5. To apply an effect, click on the effect you want.

6. To adjust the parameters of an effect, open the SmartFX window and use the controls to adjust it (see *Effect controls* on page 8-4).

Effects that modulate or swing

The built in effects are pre-set to either swing or modulate. Swinging means the fixtures move between two or more sets of attributes determined by the effect (e.g. moving from to left to right). Effects that are preset to modulate will apply their own varying attributes about a particular setting (e.g. creating a circle around a position).

Extracts

Extracts are like programming templates and can contain any of the attributes you define on the palettes: intensity, colour, beam, position, and so on. They also store the timing associated with the events.

An extract is a section of a cuelist (or range of events) that you can save and re-apply in other cuelists. By re-using existing material to build new cuelists you can save yourself a lot of time re-creating your favourite lighting effects.

Creating extracts

To create an extract:

1. Select the part of the cuelist or events on the timeline that you want to use as an extract.

2. To store an extract, either:

    ·   Select the Extracts button on the Components tab, in the sidebar. Then click on the + button, or

    ·   Click on the 'New Extract button – normally Alt-F8, or

    ·   Right-click in a Extracts panel and select the Create extract option.

3. Type a name for the extract and click the OK button.

4. Vista adds the new item to the extract list.

Applying extracts

To apply an extract:

1. Select one or more fixtures in the Fixture chooser window.

2. Click the Extracts button on the Components tab of the sidebar.

3. Find the extract you want and click on it to select it.

Set the mask buttons so that the attributes you want are applied. Any attribute that is masked, even if it is part of the extract, will not be applied.

Editing Extracts

You can use the Programmer to add, remove or change information stored in a extract. There are two ways to open a preset for editing:

- In the Sidebar Components tab you can right-click on the the Extract and select the 'Edit' option from the popup menu.

- In the Multi Quickpicker you can right-click on the the Extract and select the 'Edit' option from the popup menu.

Once the Extract is open in the Programmer you can make changes in the same way as you do when editing a Cue:

- Select fixtures in the Fixture Chooser window and add, remove or change settings using the palettes or encoders, or

- Select fixtures or Event bars in the Timeline window add, remove or change settings using the palettes or encoders.

To save changes to a Extract, choose the Save changes to Extract option from the Components menu (Alt / Option + S).

Using a keypad in the programmer window

Vista includes a CLI (Command Line Interface) window that provides familiar keypad syntax for selecting fixtures, setting intensities and storing cues. The CLI appears at the bottom of the main editor window and is completely synchronized with the interface so that when you type a command you see the equivalent action happen on the fixture icons and control palettes

The CLI accepts input from your keyboard or from a suitable USB keypad. The CLI window can be left open at all time and will only accept input when the keyboard or keypad is not being used by another window.

Using the CLI

- You can open and close the command line by clicking View -> Command Line.
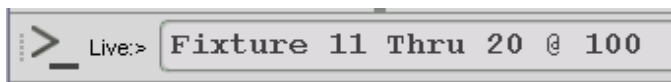
Hardware Keypad

You can use the keyboard number keys or a separate keypad when the CLI window is showing. The 'Num lock' key should be on and in addition to the number keys the following special keys are available:

This button…	does this…
/	Through (also used in storing cues – see below)

This button…	does this…
* or @	At
** or @@	At +Full
Backspace	<- Backspace (Clear)
F	Fixture
G	Group
A	Store All (Look)
S	Store Part
T	Time

Selecting fixtures in the CLI.

For simple fixture selections you can just type the fixtures numbers. However you can also select Groups and Fixtures by prefacing the ID numbers with a 'G' for Group or 'F' for fixture.

For example:

- · 1 + 5 + 10 Enter selects fixtures 1, 5 and 10
- · G1 + F20 Enter selects all the fixtures in group 1 plus fixture 20.
- · 1 ∕ 10 – 4 ∕ 6 Enter selects fixtures 1, 2, 3, 7, 8, 9 and 10

Selecting fixtures and setting levels in the CLI

You can also set levels with the keyboard. To simplify operation Vista automatically completes some entries.

For fixture 'through' selections leaving off the second number means all higher numbered fixtures will be selected.

For intensities single digits are interpreted as tens (@5 is the same as @ 50). Number.

Setting 'through' levels can also fan intensities.

For example:

- · 1 / 10 @ 50 Enter selects fixtures 1 through 10 and sets them to 50%.

- · 1 / 10 @ @ selects fixtures 1 through 10 and sets them to 100%.

- · 1 / 3 @ 20 / 100 Enter selects fixtures 1 through 3 and fans their intensities between 20 and 100% (fixture 1=20%, fixture 2=60%, and fixture 3=100%).

- · 10 > @ 9 Enter selects all fixtures 10 and above and sets them to 90%.

- · 1 @ 05 Enter selects fixture 1 and sets it to 5%.

- · 1 @ 5 Enter selects fixture 1 and sets it to 50%.

Storing with the CLI

The Command Line can also be used to store cues and set timing. For example:

- · A 100 Enter
  Store Look Cue 100 to the open or the most recently used Cuelist.

- · A 2 / 10 Enter
  Store Look Cuelist 2 Cue 10.

- · A 5 / 8 T 2/3 Enter
  Store Look Cuelist 5 Cue 8 with a 2 second Infade and 3 second outfade time.

- · S 9 / 1 T 2/3 Enter
  Store Part Cuelist 9 Cue 1 with a 2 second Infade and 3 second outfade time.

The Programmer hardware controls

With the encoder wheels and associated LCD and buttons on the Vista consoles you can make more exact adjustments than the on-screen palettes. During programming you can use them to adjust setting for Intensity, Position, Colour, Gobo and Miscellaneous parameters.

Programmer intensity

The overall intensity from the Programmer is controlled by the fader located on the left side, below the encoder wheels.

Programmer mode

If the controls are not already in Programming mode press the button labelled 'Menu' and then select the 'IPCGB' button:
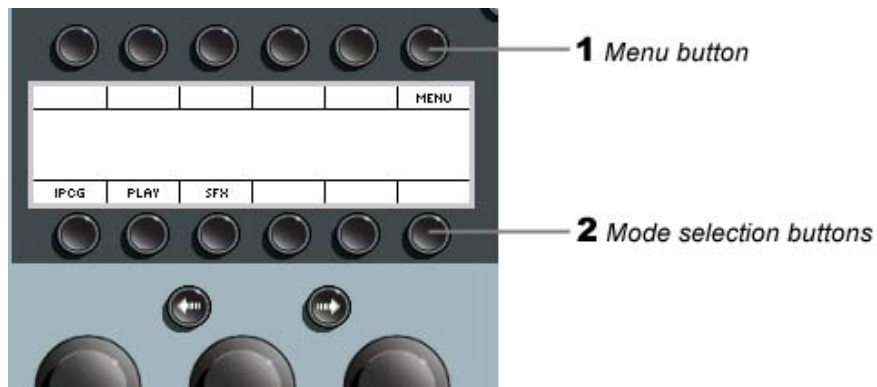
Vista switches the controls to programming mode:

This button…	does this…
I / Pos	Press this button to put the encoders and lower 6 buttons in Intensity plus Position mode. Pressing it again cycles the controls through any available parameters or alternate modes (Angular position and Strobe & Shutter). Hold the red modifier (or the shift key) and click to cycle the controls in reverse.
Colour	Press this button to put the encoders and lower 6 buttons in Colour mode (HSV). Pressing it again cycles the controls through any available parameters or alternate modes (CMY, RGB, Frame / Index and Colour swatch). Hold the red modifier (or the shift key) and click to cycle the controls in reverse.

This button…	does this…
Gobo	Press this button to put the encoders and lower 6 buttons in Gobo mode. Pressing it again cycles the controls through any available parameters or alternate modes. Hold the red modifier (or the shift key) and click to cycle the controls in reverse.
Beam	Press this button to put the encoders and lower 6 buttons in Beam mode. Pressing it again cycles the controls through any available parameters or alternate modes. Hold the red modifier (or the shift key) and click to cycle the controls in reverse.
Custom	Press this button to put the encoders and lower 6 buttons in Custom parameter control mode. Pressing it again cycles the controls through six pages of custom parameters. Hold the red modifier (or the shift key) and click to cycle the controls in reverse. To assign parameters to the custom pages *see Creating Custom encoder pages on page 6-60*
Home	Sets the associated parameter to it's default values. I.E. would set Intensity to 0. **Ü** Holding the Yellow modifier (or Ctrl key) changes this button to Clear.
Full	Sets the associated parameter to it's maximum values. I.E. would set Intensity to 100. **Ü** Press Home and Full together to set the parameter to it's mid value. **Ü** Holding the Yellow modifier (or Ctrl key) changes this button to Zero.
Encoders	Rotate to set the associated parameter to the required value.
<- Left arrow	Selects the previous fixture.
-> Right arrow	Selects the next fixture.

Creating Custom encoder pages

The Intensity + Position, Colour, Gobo and Beam encoder pages are predefined by Vista but you can also create your own 'Custom' encoder pages. These can be useful for:

· Quick access to 3 commonly used features that don't normally appear together (i.e., gobo, gobo index and focus)

· Controlling custom parameters that are not normally available on encoders (i.e. media server file and folder selection).

Up to 6 pages of features can be assigned for each fixture type. To create custom encoder sets, you do this:

1. Select the 'Assign custom encoders …' option from the Console menu. Vista opens the Superplayback customisation window:
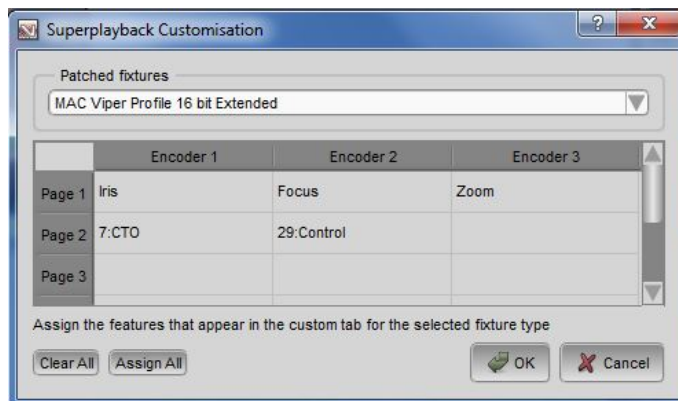
2. Select the fixture type that this set will be used with. If you have a single fixture type selected it will appear in the 'Patched fixture box'. To choose a different fixture type click on the drop down list.

3. Click in the Page 1, Encoder 1 cell and select a parameter from the drop down list.

4. Repeat steps 2 and 3 to assign parameters to the other encoders and make additional pages.

Ü You can use the 'Assign All' button to automatically assign up to 18 custom features to the available encoder pages.

Ü Click the 'Clear all' button to clear all encoders and pages for the selected fixture type.

Using Custom Encoder pages.

To switch between the custom encoder pages, press the custom softkey again.

7.   Working with cuelists

Once you've set up your patch, arranged your fixtures, assigned them to groups, and created the presets you want, you're ready to create a *Cuelist*.

This is where the Vista differs in a big way from traditional keypad-controlled lighting consoles, because instead of telling it what you want by entering strings of numbers, you do it all visually, on a large screen using the pen or mouse and the hardware controls.

Vista offers three ways to start a new Cuelist, you can either:

- Store a cue directly to one of the playback controls with as few as three button presses. With this method the cuelist is automatically given a name and number and the cue you've stored is ready to play. Later you can add more cues to the same cuelist, change fade times and modify other settings by opening it in the editor.
- Use either of the two Store buttons in the main toolbar to store directly to a playback or to an existing cuelist. Store Look is easy to use and automatically sets the most popular options. Store Part provides access to more advanced options.
- Open a new, empty, cuelist in the editor and store one or more cues to it. With this method you can store and edit as you go refining the cue fade times and every other aspect of the cuelist. After you save the cuelist you can switch to the Console window and drag it onto one of the playback controls.

Vista is a Tracking Console

When you store a cue this way only the settings that are changing are saved in a cue. For example, if a fixture is set to 50% Intensity in cue 1 and is not changed until cue 5, there won't be any Intensity events stored in cues 2-4 for that fixture. That means if you change the intensity for that fixture in cue 1 will affect the look of cues 2-4.

The important difference in a tracking system is that if no level is stored no change will happen.

Store All

There are several important features of 'Store All':

· All the settings that the console is sending to your fixtures are saved. The settings could be coming from the Live tab or any other Cuelist being edited, a playback or any other control on the console.

· Store All does **not** save settings for fixture features that are at their default. For example if a fixture has 100% intensity, and in colour blue, Store All saves those settings but doesn't save anything for Gobo, Position or any other feature of the light. This means that if you play the cue back it's possible that another cue will influence what you see.

· When you Store All the default operation is to append a new cue at the end of the last cuelist you saved to.

· If you choose to store to an existing cue it will be replaced. For example if a have a Cuelist with 10 Cues, Store Look will default to saving to Cue 11. If you choose to save to Cue 4 whatever was in that cue will be replaced when you store.

· If you insert a cue before an existing one it's settings will not change the look you've have saved in the existing cue. This is called '*Cue only*' and means that any settings in the inserted cue are automatically undone in the following cue.

· When you Store All directly to a Playback it will immediately take control of the cue and any setting coming from the Live tab will be cleared. Because Store All includes all output of the console, this won't change anything the fixtures are doing – just where the control is coming from.

Storing a look in 3 clicks

If you have the Fixture Chooser window open and you are working in the Live tab you've probably already selected some lights, given them Intensity, Colour and so on. To create a new Cuelist fast, you do this:

1. Click on the 'Store All' button or select the Store All option on the Tools menu. Vista displays the Store All window with all the store options preset but just leave everything as is for now.

2. Double-tap on the select button of an empty playback on your console. If you are using the PC version, switch to the Console window and double click one the select button there.
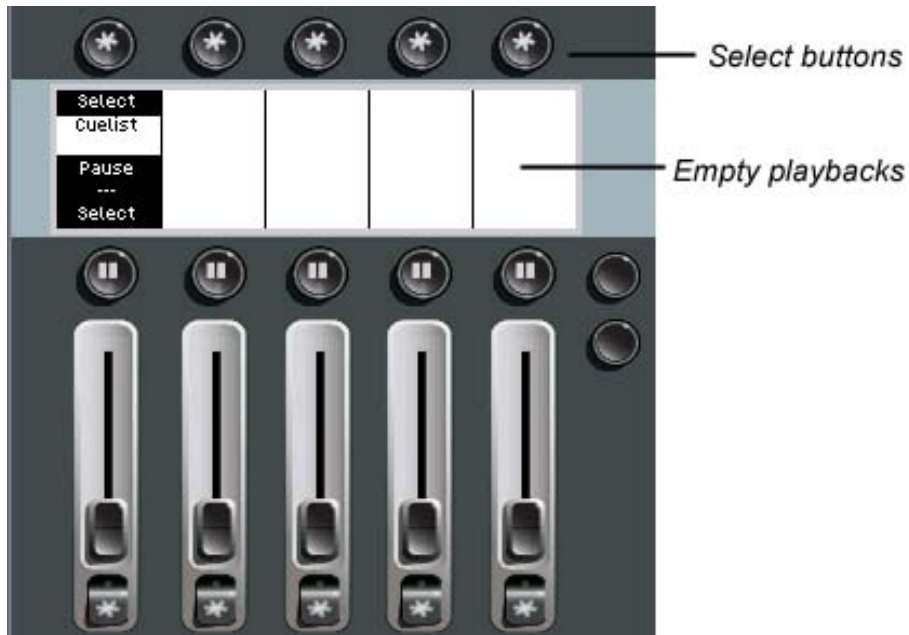
3. The new Cuelist is ready to use and you can move the fader to bring the level down and back up.

Ü When you Store All this way the console fader is automatically set to be a Submaster.

Storing a look with options

When you want to adjust the timing of a cue or give it a new name or number before storing you use the Store All window. To do this:

1. Click on the 'Store All' button or select the Store All option on the Tools menu. Vista displays the Store All window:
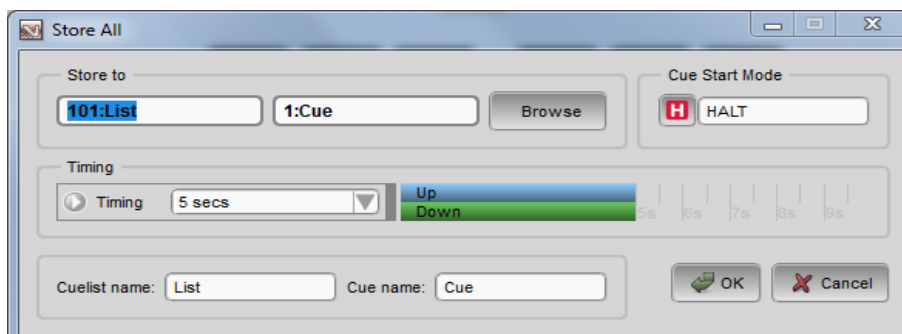
2. Vista sets the 'Store to' cuelist to the cuelist you last saved. If you want to store to a new cuelist or another cuelist you've already started you can either:

    ·   Type a new number, or

    ·   Type a few numbers or letters from the name and select the cuelist you want from the popup window. Vista displays all the cuelists that include the letters or numbers you type:
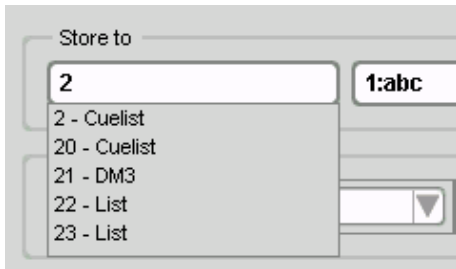
3. Vista sets the 'Store to' cue to a new cue number at the end of the cuelist you last saved. If you want to a different cue number or store over an existing cue number can either:

    ·   Type a new number or,

    ·   Type a few numbers or letters from the name and select the cue you want from the popup window. Vista displays all the cues that include the letters or numbers you type:

4. If you want to store to an existing cuelist but aren't sure of it's name or number click the 'Browse' button. Vista displays the Cuelist and Cues window where you can select from all your saved cuelists:
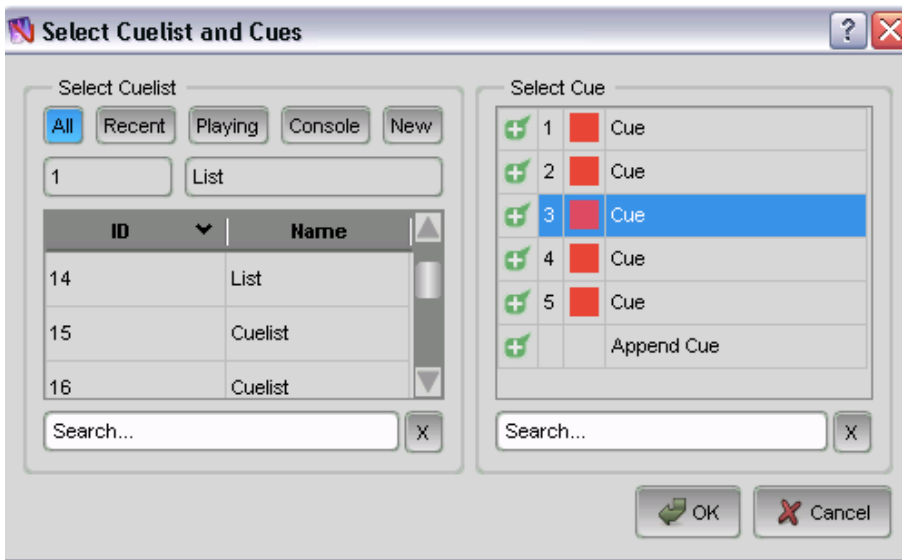
This option…	does this…
All	Filters the browser to show all the cuelists you've stored.

This option…	does this…
Recent	Filters the browser to show just the last few cuelists you've stored.
Playing	Filters the browser to show just the cuelists that you are playing back.
Console	Filters the browser to show just the cuelists that you are visible on the console – i.e. cuelists that are on the playback pages you can see.
New	Creates a New cuelist with the next available number.
Cuelist number field	Displays the cuelist number to save. You can enter a new number in this field.
Search (cuelists)	Typing a few letters or numbers in the search box filters the browser to show just the cuelists that match what you type.
Select Cue	Displays all the cues already stored in the selected cuelist. Normally the 'New Cue' line will be highlighted indicating that you will be storing to a new cue at the end of the cuelist. To store over an existing cue highlight the one you want.
	Inserts a new cue before the line the icon is on.
Search (cues)	Typing a few letters or numbers in the search box filters the browser to show just the cues that match what you type.

5. Click on the icon in the 'Cue Start Mode' section to set how the cue will start, the options are:

   · Halt - Press the Go button to play the cue.

   · Follow - Play 'n' seconds after the previous cue has ended.

   · Start - Play 'n' seconds after the previous cue has started.

   · Timecode – Play at the specified Timecode (i.e. 01:02:03:04 would start the cue when timecode 1 Hour, 2 Minutes, 3 Seconds and 4 Frames is received).

6. If you've made the cue start mode 'Follow' or 'Start' enter the time, in seconds, after the previous cue has ended or started to start this cue.

7. Set the fade times for the cue. To do this you can either:

· Set the in and out fade time by typing in the time box. For example typing 2/3 sets the Infade time, for all features to 2 seconds and the outfade time, for Intensity to 3 seconds or,

· Click on the timing drop down and select from the list of preset times. For more information on *Timing* see page xxx or,

· Click on the timing bars and drag them to the fade times you want or,

· Cick on the ▶ expand icon to reveal the detailed timing panel:

In the detailed view you can set a fade time, delay time and fade curve for each of the six feature types – Intensity (in and out), Position, Colour, Gobo, Beam and Miscellaneous channels. To set times either type in the boxes or click on the timing bars and adjust them. To change the fade curve click on the icon and select from the popup list.

1. If you're are storing to a New Cuelist, you can give it a title, in the Cuelist Name box.

2. If you're are storing to a New Cue, you can give it a title, in the Cue Name box.

3. Click OK to complete the Store Look operation or double-tap on a playback 'Select' button to Store the cuelist to that playback.

4. Check the buttons for the classes or types of events you want Vista to display.

5. Type a name for the filter.

6. Click the 'Close' button. Vista adds this filter to the drop-down filter list.

Ü Hold down the Yellow modifier (Ctrl on a keyboard) on the console and press the Select button on an empty playback to Store your look and open the cuelist in the Editor window.

Store Part

Store Part is Vista's advanced recording method. It provides several options, not available with Store Look.

If you've created information in the Live tab of the Editor (or another cuelist), you can add it or merge it into an existing cuelist, or use it to replace a cue altogether. You can also start a new cuelist using the Store Part method.

To store this way you do this click on the 'Store Part' button or select the Store Part option on the Tools menu. Vista displays the Store Part window:
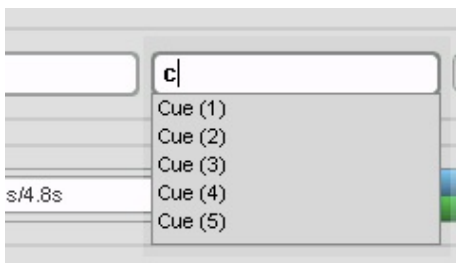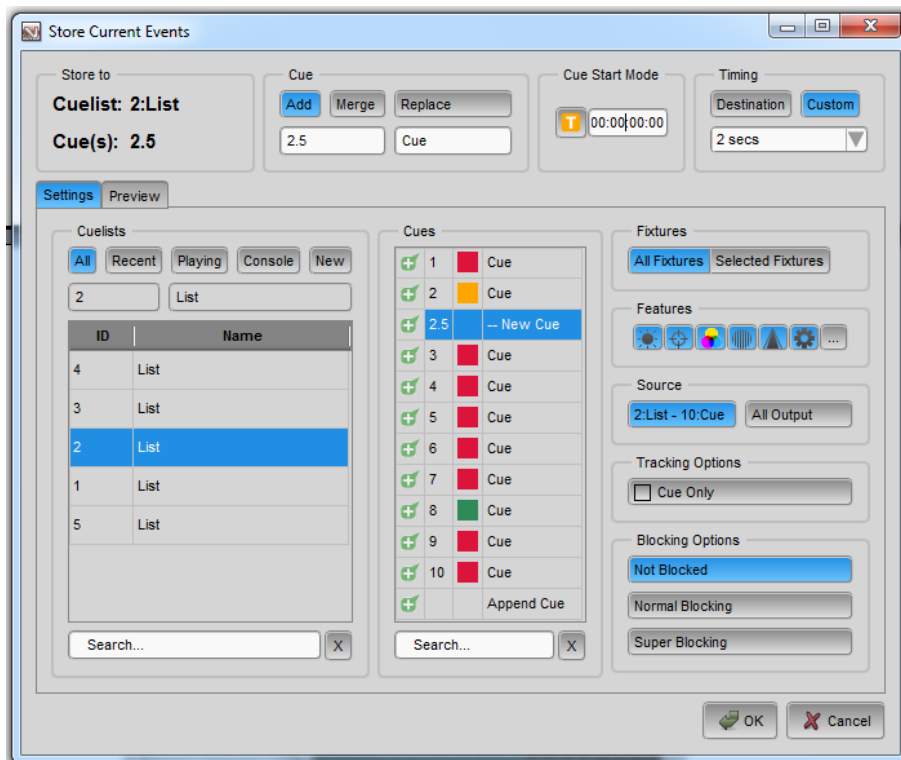
Selecting the Cuelist to Store to

Vista automatically sets the 'Store to' cuelist to the last cuelist you saved. If you want to store to a new cuelist or another cuelist you've already started you can either:

- · Click on the 'New' button in the cuelist panel to start a new cuelist.
- · Tap on a console playback 'Select' button to select the Cuelist on that playback or,
- · Click on the Cuelist you want in cuelist panel, which displays all your saved items.

To help find a particular cuelist you can filter using the source and search options:

This option…	does this…
All	Filters the browser to show all the cuelists you've stored.
Recent	Filters the browser to show just the last few cuelists you've stored.
Playing	Filters the browser to show just the cuelists that you are playing back.
Console	Filters the browser to show just the cuelists that you are visible on the console – i.e. cuelists that are on the playback pages you can see.
New	Creates a New cuelist with the next available number.
Search (cuelists)	Typing a few letters or numbers in the search box filters the browser to show just the cuelists that match what you type.

Selecting the Cue and store options

You can add a new cue, or merge to or replace the contents of an existing cue. When you first open the Store Part window the Cue 'Add' button will be selected automatically. The Merge and Replace options will not be available unless you select an existing cue first.

1. If you are adding a new cue you can either accept the cue number Vista suggests or type a number in the Cue Number box or click on one of the insert icons in the list of cues to set the insert location.

     - insert cue icon

2. If you are Merging or Replacing you can either type a number in the Cue Number box or click on any cue in the cue list panel.

3. For a new cue enter the cue number and name.

4. Click on the icon in the 'Cue Start Mode' section to set how the cue will start, the options are:

    ·   Halt - Press the Go button to play the cue

    ·   Follow - Play 'n' seconds after the previous cue has ended.

    ·   Start - Play 'n' seconds after the previous cue has started.

    ·   Timecode – Play at the specified Timecode (i.e. 01:02:03:04 would start the cue when timecode 1 Hour, 2 Minutes, 3 Seconds and 4 Frames is received)

5. If you've made the cue start mode 'Follow' or 'Start' enter the time, in seconds, after the previous cue has ended or started to start this cue.

6. Select the timing option to apply to the cue, the options are:

    ·   Destination - use the timing of the cue you are saving to.

    ·   Custom - use the timing from the Editor or set it manually.

7. Select the fixtures to include when storing:

This option…	does this…
All Fixtures	Includes settings for all fixtures with output coming from the Live tab, or any other cue that's open in the editor.
Selected Fixtures	Only includes fixtures that are selected in the Live tab or cue being edited.

8. Select the parameters to store using the filter bar. Click on any of the Intensity, Position, Colour, Gobo, Beam or Miscellaneous icons to mask or un-mask that parameter.

9. Select the Store Source options.

This option…	does this…
Current Editor tab	Automatically set to 'Live' or the Cuelist being edited.
All Output	Select this button to store all information, from both the editor and any active playbacks.

10. Select the tracking options

This option…	does this…
Cue only	Click this checkbox to undo any changes in the following cue. This option will not have any effect unless there is at least one cue after the one you are editing.

11. Select the Blocking options.

This option…	does this…
No Blocking	The cue is stored normally.
Normal Blocking	Ensures that events that are tracking through to the cue being stored will not be changed even if they are modified in the earlier cue(s).
Super Blocking	When a 'Super Block' cue runs, any features for the fixtures in the cue, that aren't already included in the cue are automatically sent to their home value. This means that the cue will look as it would if no other cuelist was playing

Opening a Cuelist in the Editor

The 'Store Look' and 'Store Part' methods let you store cues to an existing (or new) cuelist, without first opening the cuelist in the editor.

You can also start a new cuelist from scratch or open an existing one in the editor. To do this click on the New Cuelist button (normally F2) or select the 'New Cuelist option from the Components menu.

Whichever method you choose, Vista creates a new Cuelist tab and displays the Editor window.

The Timeline window

When you select fixtures in the Chooser window and apply intensity, position, colour and other features 'events' are created in the Timeline window.

This screen consists of three main elements:

·   The Editor control section where you can select to work with the Live editor tab or any Cuelist you have open. If you have a Cuelist open this section expands to include the Cue navigation controls.

·   The Cue navigation section, where you can see all the cues in your cuelist, make selections, add and delete cues, and manage how your edits affect output when you are editing a cue that's playing back.

·   The Timeline section where you can view and manipulate the fade times for all the features that are being applied to your fixtures.

Cuelist tabs

When you first open the Editor's Chooser or Timeline windows you'll see the Live tab – this is the equivalent of what other consoles call the 'Programmer' or 'Editor'. If you open a cuelist or start a new one from scratch, Vista adds a new tab labelled with the cuelist name.

You can have several cuelists open at once and switch between them by clicking on the tab you want to work on.

To close and save a Cuelist tab, choose 'Close Cuelist' from the Cuelist menu or click the close icon on the cuelist tab.

Ü To save a cuelist at any time select the 'Save Changes to Cuelist' option (Alt + S) from the Components menu.
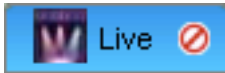
Ü When there is information in the Live tab that is affecting the output, a red clear icon is added to the tab. Click on it to clear the Live tab output.

Playing and moving around a cuelist

At the top of the editor timeline and chooser screens there is a set of player controls:

The buttons work in a similar way to the controls on a CD or DVD player:

This button…	does this...
	Jumps to the first cue in a cuelist.
	Steps backwards to the previous Cue in a cuelist.
	Pauses playback.
	Starts playback of the next cue in the cuelist.
	Steps forwards to the next Cue in a cuelist.
	Jumps to the end of last Cue in a cuelist.

Cuelist Navigator

The cuelist navigation section shows you an overview of all the cues in a cuelist.

Each cue is represented by a mini cue icon in a scrollbar so you can see all the cues you've stored. As you add more cues more icons are added to the scrollbar. If there are more cues than can fit in the cue tile (or table or layout) view the scroll bar becomes shaded. You can drag the shaded area to show different parts of the cuelist in the list, table and layout views.

The cue scrollbar includes buttons to switch the navigator view and to add or delete cues.

This icon…	does this…

This icon…	does this…
▦▦ Tiles view	Shows the cues as a series of tiles. If there are more cues than can fit in this area the scrollbar highlights the area you are viewing and you can drag it to show other cues.
▦ Table view	Shows the cues as a table with columns for the cue's name, number, fade time, follow time, blocking status, included features, fixture count and SmartFX.
▤ Layout view	Shows the cues on a timeline. This view is useful if have cues with follow times that mean they overlap other cues. You can move cues and set follow times by dragging cues on the timeline.
🔍	Zooms the layout view to fit all the cues in available space.

Tiles View

In the 'Tiles' view:

- · Each cue tile shows the number, name, duration and start of cue action.
- · The cue or cues that are visible in the timeline are shown with a green underline.
- · Cues that have played show with a blue fill colour.
- · The selected cue shows with a yellow

- · outline and with white text. Click on a tab to select it, shift-click or ctrl-click to select a range or group of cues.

You can click on a tile's start action, cue number, name or duration label and enter a new value. The cue number **cannot** be changed to a value that would mean changing the order of the cue tiles.

You can right-click on a selected cue or in the blank area to the right of the cue list to open a popup menu:
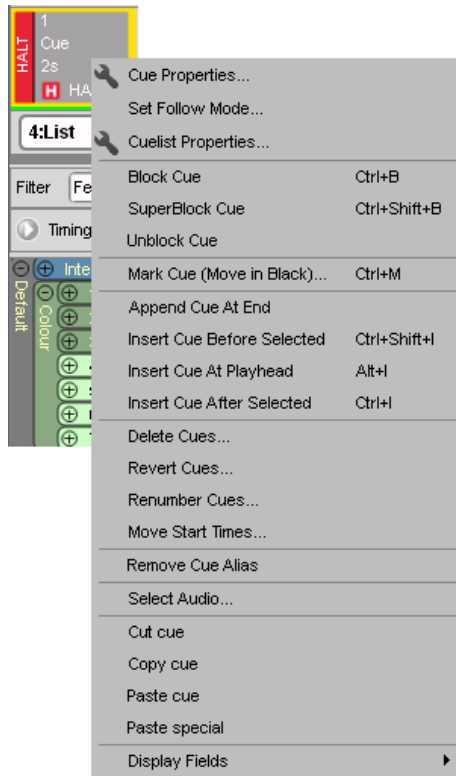
With these options you can:

- Open the cue or cuelist properties window.

- Set the Cue Follow mode (aka Cue start action) for the selected cue(s).

- Block, superblock or unblock the selected cue.

- Set the cue to be a Mark (Move in Black) cue.

- Append a cue at the end of the cuelist or insert a new cue before or after the selected cue or at the playhead position.

- Delete or renumber the selected cue(s).

- Revert (or undo) changes to the selected cue(s).

- Change the start time of the selected cue(s).

- Remove any alias cue links (without deleting any cues or events).

- Add an audio file.

- Cut or copy and paste or paste special (paste with options) the selected cues.

- Change the appearance of the cue tiles by adding or removing fields.

Table View

In the 'Table' view:

- · Each cue shows as a row in a spreadsheet style view.
- · The selected cue shows with a blue fill and white text. Click on a row to select a cue, shift-click or ctrl-click to select a range or group of cues.

You can double-click on a cue number, name or duration label and enter a new value. The cue number cannot be changed to a value that would mean changing the order of the cues.

Layout View

In the 'Layout' view:

- · The cues are laid out end to end, in timeline view. Cues that are set to start before the previous cue finishes overlap and appear on a separate line.
- · The selected cue shows with an outline and white text. Click on a row to select a cue, shift-click or ctrl-click to select a range or group of cues.

You can double-click on a cue's name and enter a new value. To move a cue click and hold while dragging the cue to the left or right.

Adding and deleting cues

A cuelist can contain as many cues as you like. To add a new cue after the one that's currently selected:

- · Click on the ⊕ 'New cue' icon at the end of the cuelist scrollbar, or
- · Choose the 'Tools > Cues > Insert cue after selected' option from the Cuelist menu.

You can also insert cues before or after an existing cue by first selecting a cue then clicking and holding the ⊕ 'New cue' icon until the insert popup appears.

The popup provides option to:

- · Insert a new cue before the selected cue.
- · Insert a new cue after the selected cue.
- · Append a new cue at the end of the cuelist.

These options are also available on the 'Tools > Cues submenu on the Cuelist menu.

Deleting cues

To delete a cue, first select it then:

- Click on the ⊖ 'Delete cue' icon at the end of the cuelist scrollbar, or
- Choose the 'Delete Cue' option Tools > Cues submenu on the Cuelist menu.

Merging cues

Sometimes it's useful to merge the contents of two or more cues. To do this:

1. Select the cues with the pen or mouse. Shift-click or ctrl-click to extend the selection.

2. Choose the 'Merge cues' option from the Tools > Cues submenu on the Cuelist menu.

Ü Cues always merge to the lowest cue number.

Moving and copying cues

Often you'll have an effect in one of more cues of a cuelist that you'd like to use in another place or another cuelist. You can do this using the cuelist navigator panel.

To do this:

1. Select one or more cues by clicking on the cue tiles.

2. Choose the Copy or Cut option from the Edit menu or right-click on the cue(s) and select Copy cue or Cut cue from the popup menu.

3. Click on the cue before the location you want to move or copy to.

4. Choose the Paste option from the Edit menu or right-click on the cue(s) and select Paste from the popup menu. The default paste action will restore the look of the copied cue by inserting release events for any features added in the intervening cues. To paste just the events or an alias of the cue, use the 'paste special' option.

Ü You can also copy cues by dragging and dropping cue tiles in the cuelist navigator.

Paste options

If you want to move or copy just the events in the original cue, without releasing any other events that occur in previous cues you can use the 'paste special' option on the edit menu.

The cue scrollbar includes buttons to switch the navigator view and to add or delete cues.

This option…	does this…
Paste the entire look.	Restores the look of the original cue by inserting release events for any features added in the intervening cues.
Paste only the events	Pastes the events in the original cue, without adding and release events.
Alias cue	Pastes an alias of the original cue.

Alias cues

If you want to use the same cue, in a cuelist, several times you can make an 'Alias'. This way if you update any one of the associated alias cues they will all update.

To create an alias cue:

1. Copy the cue by selecting it and choosing the copy option from the edit menu.

2. Navigate to the cue before the position you want the new cue to appear.

3. Choose the Paste special option from the edit menu. Vista opens the Paste Special window.

4. Select the Alias cue option and click OK. Vista pastes an Alias cue after the selected cue.

Alias cue tiles are marked with a small 'Alias' icon and you can view the cues that are aliased to each other in the 'Aliased cues' section of the Cue properties window.

Ü When two or more cues are aliased to each other any one can be changed and all the others will also change. There is no 'master' cue in an alias set.

Removing the link to an Alias Cue

An Alias cue can be changed to normal cue. To do this:

1. Select the Cue tile to be changed.

2. Select the 'Remove Cue Alias' option from the edit menu, or, right-click' on the cue tile 'Remove Cue Alias' option from the popup menu.

Making changes to a cue without affecting the next cue

It's often useful to make changes to a cue without those changes tracking through to the following cue. For example, you might have a cuelist where the lights change to colour blue in cue 1 and stay that way until they change to red in cue 10. If you then decide you want them to be yellow in just cue 5 you could make that change but since there are no colour events in cues 6-9 the lights will stay yellow when you really want them to revert back to blue in cue 6.

For this situation Vista provides a method to make changes to a cue only. To do this:

1. Edit a cuelist and make the changes.

2. In the timeline select the events – they will normally be highlighted already.

3. Click on the 'Untrack' button on the toolbar or select the 'Un-track events (cue only)' option from the Tools menu. Vista inserts events in the following cue to set the lights back to the state they were in before the change. If there were no events of that type originally, Vista inserts release events instead.

Working in Cue only mode

If you want to add a number of cues that do not track through to subsequent cues you can switch to 'Cue only' mode. This means that any settings in the cue you create are automatically undone in the following cue.

To do this:

4. Select the 'Cue Only Editing' option from the Tools menu. This command is normally assigned to F3 on the Blue function key set (or Ctrl + Alt + F3).

5. When you have finished creating cues this way, deselect the Cue Only Editing option.

Blocking a cue

Vista is a tracking console, which means that only changed information is stored in any cue and that any information in a cue tracks forward until it is replaced by a new event or cleared. Sometimes it's useful to 'block' a cue so that any changes that are subsequently made to previous cues will not affect the final look of the chosen cue.

To do this:

6. Select the cue with the events you want to keep exactly as they are. You can select the cue by clicking on the cue tile or playing the cuelist until you reach it.

7. Choose the 'Block' button on the toolbar (normally Ctrl F9) or select the 'Block cue ' option from the Cuelist menu or right-click on the cue tile and select Block from the popup menu. Vista duplicates all tracked information into the selected cue.

Creating a Move in Black cue

Sometimes you will want fixtures to move to a position, change to a colour, add a gobo or get set up in some other way while their intensities are at zero. You could do this by programming the necessary events, but you can also do it quickly using the 'Mark Cue' option on the Tools menu.

When you create a Mark cue your original programming is preserved and will be restored if you delete the Move in Black (MIB) later.

To Mark a cue and add 'Move in Black' events:

1.   Select the cue you want to work with.

2.   Choose the 'Mark Cue' option on the Tools menu. Vista opens the Move in Black window:
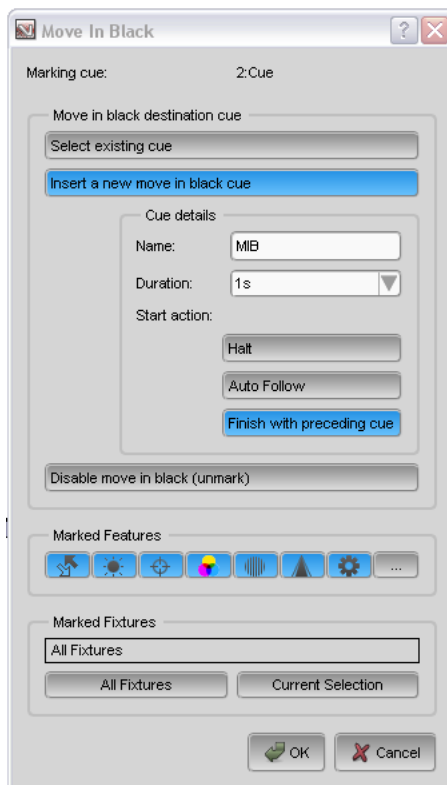
This screen shows the options available; you use it to set the way Vista stores the Move in Black event:

This option…	does this…
Move in Black destination cue	If the 'Select existing cue' button is not greyed out you can click it to select any cue, earlier in the Cuelist, for the Move in Black events. If you prefer to create a new cue for the MIB events select the 'Insert a new move in black cue' option.

This option…	does this…
Cue Details – Name	Sets the name for the new cue that will be created. The default name is MIB.
Cue Details – Duration	Sets the duration for the new cue.
Start action	Sets how the MIB cue is started, the options are: Halt - Press the Go button to play this cue. Auto Follow - the cue plays automatically after the previous cue. Finish with preceding – the cue plays automatically and is set to finish at the same time as the previous cue.
Disable Move in Black	Removes the Move in Black events from the MIB cue but does not delete it.
Marked Features - Feature filter	Only the selected features will be marked for move in black.
Marked Fixtures - All Fixtures - Current selection	Lets you choose to mark all fixtures or just the ones currently selected.

3.   Click OK to create the Move in Black cue:

The move in black events are shown as 'ghosted' events and display the "MIB" icon. Move In Black cues show 'MIB' in the tiled cue display and '[M]' in other views.

Ü Individual events in a marked cue can also be excluded from move in black. To do this, select the events in the timeline view and select the 'Ignore Move In Black' option from the from the Timeline' menu or right-click menu. Ignored events show a MIB icon with a red cross running through it.

Ü Intensity cannot be marked.

Cue Properties

Each cue has a number, name and fade time that you can set by clicking on the cue tiles and editing the fields. You can also set these properties and other advanced options more in the Cue Properties window.

To do this:

1. Select the cue you want in the Cuelist navigator.

2. Choose the Cue Properties option from the edit menu or right-click on the cue tile and select the Cue properties option from the popup menu.

Modifying cue name, duration, and end of cue action

The cue's name, number and how it starts are set in the properties section of the window:
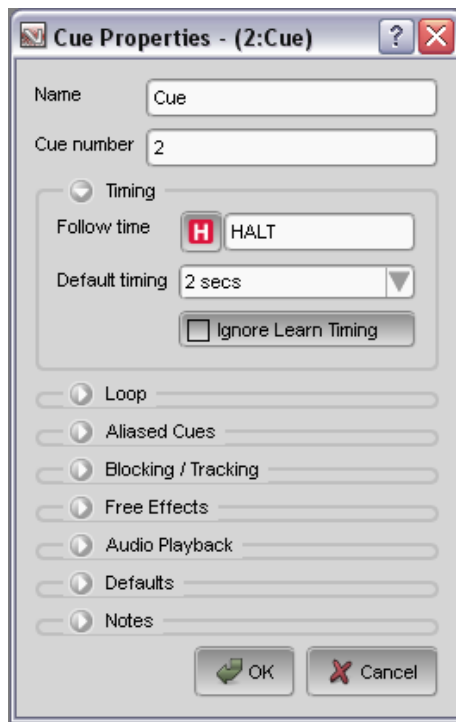
This option…	does this…
Cue name	Sets the name that appears in all windows for this cue.
Cue number	Sets the number that appears in all windows for this cue The cue number cannot be changed to a value that would mean changing the order of the cue tiles.

This option…	does this…
Follow Time (Cue Start Mode)	Sets how the cue will start, the options are: **H** (Halt) Press the Go button to play this cue. **F** (Follow) Play 'n' seconds after the previous cue ends. **S** (Start) Play 'n' seconds after the start of the previous cue. **T** (Timecode) Play when the timecode is received.
Default timing	Sets the timing for all events that have not been manually adjusted. The popup window lets you select from the saved timing sets or customise a new one.
Ignore Learn Timing	Tick this checkbox to ignore this cue when using the 'Learn Timing' feature.

Making a cue loop back and repeat previous cues

A cue can be set to loop back to a previous cue and to repeat the loop any number of times. 'Looping' is set in the loop section of the window:
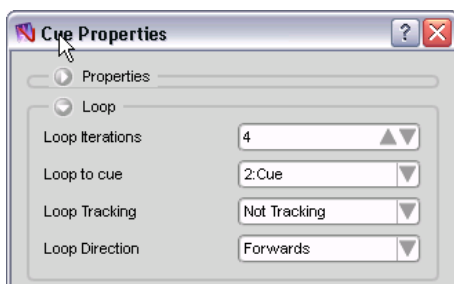
This option…	does this…
Loop iterations	Sets how many times the loop will repeat before the cuelist proceeds normally.
Loop to cue	Sets the cue that will play next.
Loop tracking	Sets whether the events stored in the cues after the 'Loop to cue' will track through to the loop cue.

This option…	does this…
Loop direction	Sets the direction of the loop. The options are:
	· Forwards - loops from last to first.
	· Backwards - loops from last to previous.
	· Bounce - loops backwards then forwards.
	· Random - loops to a random cue between the first and last cue in the loops.

Ü Cues that are set to loop don't play automatically, like a chase. If you want any of the cues in a loop to play without pressing Go you have to set the cue start mode.

Alias cues

Alias cue tiles are marked with a small 'Alias' icon and you can view the cues that are aliased to each other in the 'Aliased cues' section of the Cue properties window:
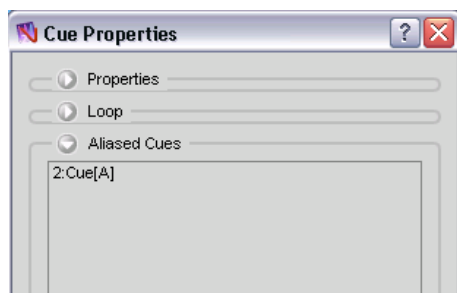
Tracking

Normally features that are stored in any cue track forward until they are replaced by a new event or cleared. If you only want some events to play in one cue and not track forward you can turn tracking off for one or more cues. To do this open the Blocking / Tracking section of the Cue properties window and tick the 'Non-Tracking' checkbox:
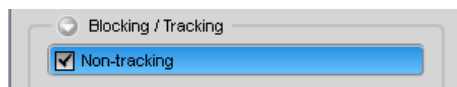
Blocking

Normally only changed features are stored in any cue and information tracks forward until it is replaced by a new event or cleared. Sometimes it's useful to 'block' a cue so that any changes that are subsequently made to previous cues will not affect the final look of the chosen cue.

To view or modify the blocking for a cue open the 'Blocking' section of the Cue properties window:
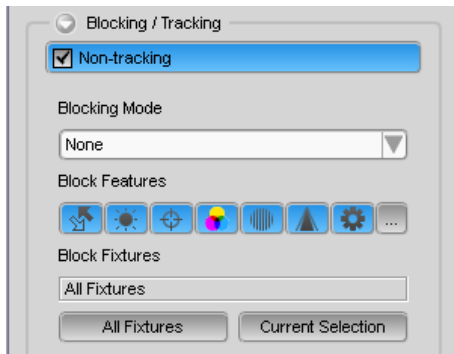
This option…	does this…
None	The cue is stored normally.
Blocking	Ensures that events that are tracking through to the cue being stored will not be changed even if they are modified in the earlier cue(s).
Super Blocking	Ensures that events that are tracking through to the cue being stored will not be changed even if other cuelists, that include the same feature types are played prior to this cue being played.
Block Features	Sets which feature types are blocked. Click on the Intensity, Position, Colour, Gobo, Beam and Miscellaneous icons to turn that feature on or off.
Block Fixtures	Sets which fixtures are blocked. You can choose either 'All Fixtures' or the ones you have selected in the editor.

Free Effects mode

In Vista effects can either have a 'basepoint' or be 'free'. A Free effect is designed to run on top of a feature setting. For example a free circle effect will cause fixtures to move in a circle around whatever position has been set by another cue or setting from the console.

To view or modify the Event mode for a cue open the 'Free effects' section of the Cue properties window:
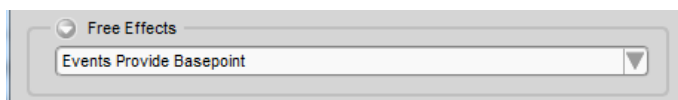
This option…	does this…
Events provide Basepoint	Events in the cue will be used as a base point for any baseless effects that are running.

This option…	does this…
Events stop Free effects	If the cue includes an event that a baseless effect would act on the effect will be stopped.

Audio Playback

To add and play an audio file, when the selected cue plays click on the 'Audio Playback' heading to open that section.

This property…	does this…
Browse	Opens the 'Select Audio' window where you can choose an audio file.
Clear	Removes the audio file from the cue.

Ü To add an audio file that plays through all cues use the Cuelist Properties window.

Cue Defaults

If you have a set of Cue properties that you use frequently you can save them as your 'Show' default and they will be used for all future cues. You can also quickly reset a Cue's properties to the factory defaults or to your show defaults.
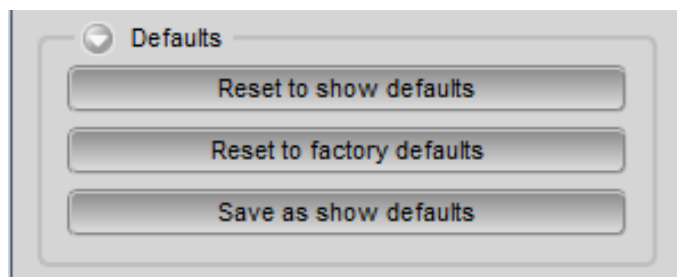
This option…	does this…
Reset to show defaults	Reset all cue properties to the settings you have saved as the show defaults (see below).
Reset to factory defaults	Reset all cue properties to their standard (factory) settings.
Save as show defaults	Saves the current cue settings as a default for all new cues.

Cuelist Properties

Each cuelist has a set of properties that control how it plays back and interacts with other cuelists. You can also set these properties in the Cuelist Properties window.

To do this:

1. Open the cuelist in the editor.

2. Select the Cue Properties option on the Edit menu.
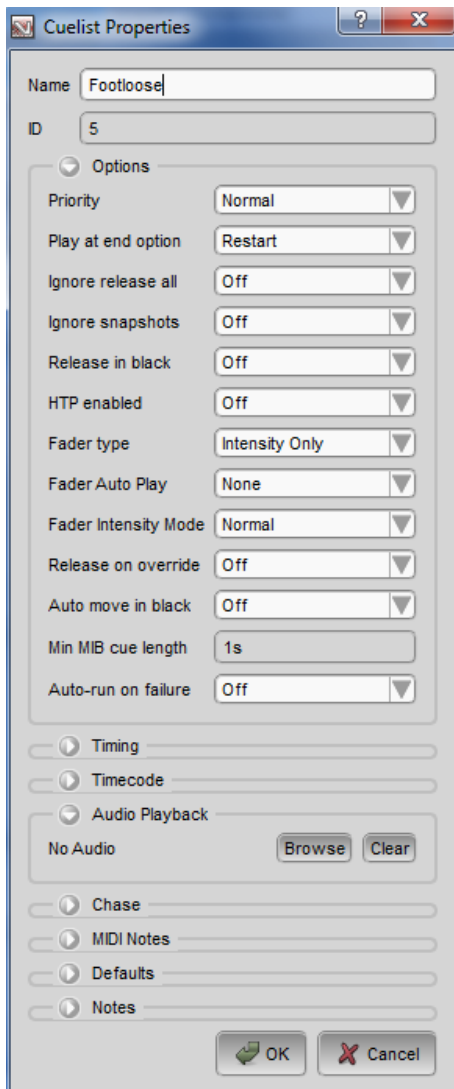
This property…	does this…
Name	Sets the name for this cuelist.
ID	Sets the number for this cuelist. This field is not editable.

This property…	does this…
Priority	Sets the priority for the cuelist. A cuelist set to High priority can't be overridden by normal or low priority cuelists. Only a cuelist set to Programmer priority can override the Editor (aka Programmer)
Play at end option	Determines what happens after the last cue is played and fully over-ridden. The options are: Restart – the Cuelist starts again at the first cue. Release – the Cuelist is released. Ignore – do nothing.
Ignore Release All	The cuelist will ignore the release all command.
Ignore Snapshots	The cuelist will not be affected by a snapshot being loaded.
Release in Black	Releases cuelists when they are no longer contributing **intensity** to the output.
HTP Enabled	Causes the intensities of a cuelist to activate as soon as you move the playback fader from 0.
Fader Type	Normally the fader on a playback set will adjust the Intensity of a cue list. To fade all features (Intensity, Position, Colour, Gobo, Beam and Custom) in or out with the slider set this property to "All Features".
Fader Auto Play	Sets the fader play and release actions. The options are: None – the fader only controls intensity. Auto Play – raising the fader above 0% also plays the cue (aka 'Go on fader up'). Auto Play & Release – raising the fader above 0% also plays the cue (aka 'Go on fader up'). Lowering the fader to 0% releases the cue (aka 'Release on fader down'). Auto Release – lowering the fader to 0% releases the cue (aka 'Release on fader down').
Fader Intensity mode	Sets the fader precedence and actions. Normal – the fader is in normal LTP mode. Submaster – the fader is HTP and will go on fader up and release on down if there is only one cue.

This property…	does this…
Release on Override	Releases a cuelist that is completely over-ridden. (i.e. is not contributing to the console output.)
Auto Move in Black	Sets the cue to automatically MIB if Intensity is off in the previous cue.
Minimum MIB cue length	Sets the minimum required time for MIB events. If the duration of the preceding cue is less than this time, the move in black won't occur.
Auto-run on failure	When a Vista D1 unit is being used for distributed processing this Cuelist will run on the D1 if the main console fails.

Cuelist Timing

To set timing properties click on the 'Timing' heading to open that section.

This property…	does this…
Release Timing	Sets the fade time when the cuelist is released.
Playback rate %	Playback rate for the cuelist. Normally 100%

Cuelist Timecode

To set timecode properties click on the 'Timecode' heading to open that section.

This property…	does this…
Mode	Sets how the cuelist responds to timecode input. Disabled – timecode is ignored. Enabled – timecode will be followed if the cuelist is 'Armed' (see the next property). Locked – timecode will always be followed.
Armed	If the cuelist is set to timecode 'Enabled' it will not respond to timecode until it is armed. To arm the cuelist either set this property to 'Armed' or press the play button on the cuelist.

Cuelist Audio Playback

To add and play an audio file click on the 'Audio Playback' heading to open that section.

This property…	does this…
Browse	Opens the 'Select Audio' window where you can choose an audio file.
Clear	Removes the audio file from the cuelist.

Chase properties

To set a cuelist to chase and adjust the chase properties click on the 'Chase' heading to open that section.

This property…	does this…
Chase Enabled	Turns chase mode on or off.
Chase direction	Sets the step order for chases. Can be set to forward, backward, bounce or random.
Chase Tracking	Turns tracking, within the cuelist on or off. For a chase tracking is normally set to 'Not Tracking'.
Chase rate	Chase rate when in chase mode, expressed as steps-per-minute.
Chase crossfade %	Proportion of time spent fading vs. time spent at each step of a chase.
Playback rate BPM	Playback rate for the cuelist.

Midi Notes

You can set a set a cuelist to be controlled by Midi Note messages sent from an external source. To do this:

1. Open the cuelist in the editor.

2. Select the Cue Properties option on the Edit menu.

3. Select the 'Midi Notes' section of the Cuelist Properties window.

This property…	does this…
Play	Sets the Midi Note that will Play the next Cue in the Cuelist.
Release	Sets the Midi Note that will Release the Cuelist.

This property…	does this…
Play / Release	Sets the Midi Note that will Play the next Cue in the Cuelist or Release the Cuelist if it is already playing.
Flash	Sets the Midi Note that will Flash the current Cue in the Cuelist. Note that Flash will not play a cuelist unless it set to 'autoplay'.

Setting the Midi note.

To set the Midi note you can either:

- · Click in the 'Note' field and select from the popup list, or
- · Click the 'Learn' button to open the Midi Learn window. You can then play a note on your Midi device and the note will be automatically entered.

To clear the Note field click the [X] icon.

Ü The Midi port and Channel number may need to be configured before you use Midi notes with your console or control surface. *To do this see Midi input on page 2-12*

Cuelist property defaults

The properties you set for a cuelist can be used as the default settings for all new cuelists. You can also reset a cuelist to the (factory) standard properties or your own show defaults. To do this click on the 'Defaults' heading to open that section.

This property…	does this…
Reset to show defaults	Reset all properties to the settings you have saved as the show defaults (see below).
Reset to factory defaults	Reset all properties to their standard (factory) settings.
Save as show defaults	Saves the current settings as a default for all new cuelists.

Cuelist Notes

You can add notes about a cuelist and these will display in the Playback window. To do this click on the 'Notes' heading to open that section.

The Timeline panel

The main section of the timeline is used to control the crossfade times for all the features that you apply to your fixtures. Unlike other consoles where you can only see these times as numbers, in Vista you can see everything laid out on a timelines so you know exactly how when changes will occur in relation to each other.

This panel includes:

1. The default timing section where you set 'master' fade times for all feature types (Intensity, Position, Colour, Gobo, Beam, Misc).

2. The detailed timing section where you can set individual fade times for every feature being used on your fixtures.

3. The Filter bar that you use to limit the timeline display to just the fixtures or features or events that you want to work with.

Default times

At the top of the timing section there's a timeline ruler that controls the over all fade times for all events in a cue – except the ones you explicitly set elsewhere as explained below. When you first open the Timeline (or Chooser) window the ruler will be in it's collapsed form, as shown here:

The 'up' time determines how long it will take for all feature types to fade from their previous value to the value in this cue.

The 'down' time is only used for Intensity events where fixtures are fading out (i.e. getting darker or turning off). It determines how long it will take for Intensity to fade from their previous value to the value in this cue.

To adjust the up or down fade time click on the on the end point of the bar and when the cursor changes to a double arrow drag to increase or decrease the time:

To set a delay time click on the bar and when the cursor changes to a hand drag to move the bar so that it starts after the 0s mark of the cue:

Ü You can also set the up and down fade time by typing in the Timing box. For example typing 3 / 4 sets the Up (or infade) time to 3 seconds and the Down (or outfade) time to 4 seconds.

To expand the default times ruler, click on the arrow icon.

Expanded Default time view

You can set individual default fade times, delay times and fade curves for the
different feature types (Intensity, Position, Colour, Gobo, Beam, Misc) in the
expanded default time view.

To do this:

1. Click on the expand arrow at the left end of the ruler bar. Vista displays the
    expanded view:

2. To adjust a feature type fade time click on the on the end point of the bar and
    when the cursor changes to a double arrow drag to increase or decrease the
    time. Or type a value in the corresponding 'Time' box.

3. To adjust a feature type delay time click on the bar and when the cursor
    changes to a hand drag to move the bar so that it starts after the 0s mark. Or
    type a value in the corresponding 'Delay' box.

4. To adjust a feature type fade curve click on the fade icon and select from the
    drop down list

This icon…	does this…
 Linear	Sets the curve to a normal linear fade. The feature fades evenly from the old setting to the new setting over time.
 Damp	The fade is slower at the start.
 Snap start	The feature goes to the end state very quickly.
 Snap end	The feature doesn't change until the very end of the fade time.
 Square law	The feature starts with a delay, then slides up to the end state.

This icon…	does this…
◣ Inverse square law	The feature starts quickly and the finishes slowly.
◪ Switch	The feature goes to the end state very quickly.
◼ Hot power	The feature goes to the end state very quickly.
◿ Flourescent	Similar to linear, slower at end of fade.
◣ Sinus	Similar to linear, faster at end of fade.

Ü If you make any adjustment the default time for Position, Colour, Gobo, Beam or Miscellaneous that feature type will no longer be changed when you adjust the 'Up' fade time in the condensed timeline ruler.

Saving and re-applying timing configurations

When you've set up a set of default fade times that you like, you can save it so you can apply it to other cues.

Saving timing sets

To save a default timing set:

1. Click on the arrow in the timing drop down box:

Timing	3s/4s ▼
	Custom Timing
	2 secs
	5 secs
	T 3/4s
	Manage Timings…
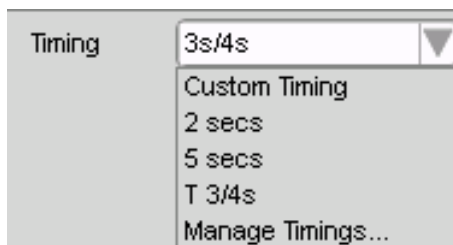
2. Click on the 'Custom Timing' option. Vista opens the Custom timing window:

3. Adjust the feature type fade times using the timing bars or by entering values in the time and delay boxes.

4. Click on the 'Save as' button.

5. Enter a name for the timing set in the popup box and click OK.

6. Click OK to close the Custom Timing window.

Applying saved timing configurations

To apply a timing set to a cue:

1. Select the cue.

2. Select the timing set you want from the Timing drop-down list.

3. Vista applies the timing set to the cue. This will not change the timing of any event in the cue that has already adjusted in some way.

Modifying the cue number, name and duration

To change cue name, duration, and end of cue action of a cue, in the tiles or layout view:

1. Select the cue with the pen or mouse. Shift-click or ctrl-click to extend the selection.

2. Double click on number, name or duration field. The field switches to edit mode:
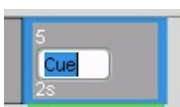
3. Enter a new value and press Enter on the keyboard.

About the timeline

The Vista uses a 'timeline' concept that will be familiar to you if you've used any modern sound or video editing software on a personal computer. When you store into a cue Vista creates an 'event' for each feature of each fixture that you use in the cue. The events are placed, on the timeline, in the cue you working on and when you add more cues they strung together in a *cuelist.*

The idea is simple: you create a series of lighting 'events' that occur in sequence when you hit the 'Play' button. With the Vista you can move back and forth through this piece of time and edit any aspect of the events that occur, in much the same way as you could drag a tape back and forth across the play head of an analogue tape deck.

Events on the Timeline

The default timing section lets you set the timing for all the fixtures in a cue but when you want to make timing changes for individual fixtures or events you work in the timeline panel. When you select a fixture, in the editor and set Intensity, Colour or any other feature Vista creates a horizontal 'event' bar on the timeline. These are the commands Vista is sending to your fixtures.

The event bars represent the activities of those fixtures over time. As you can see in this example, the bars go from the '0s' point on the timeline scale to the '2s' point. This means that these fixtures are moving to a new setting over two seconds:

The settings you've applied to these fixtures on the palettes (e.g. intensity, colour and position) control the fixtures themselves. The timeline simply tells those fixtures to accept those commands, *and the event bar represents the length of time it will take those fixtures to get to the desired state.*

Once the fixtures get to that state they will stay like that until they receive another command telling them to do something else (e.g. change to another colour or fade out).

By placing the event bars where you want them on the timeline you're giving commands to those fixtures that tell them how long a parameter will take to fade in. *The parameter is determined by the palettes; the timeline only controls when the fade starts and ends.*

Using the summary views

You can view the events on the timeline in several ways:

- · Summarised by feature, i.e. intensity, position and colour.
- · Summarised by fixture type.
- · Filtered by feature type (Intensity, Position, Colour etc) or Fixture type.
- · Filtered by fixture selection.
- · Filtered by fade path, event type and event timing.

You choose these views from the Filter view drop-down menu at the left hand end of the ruler bar. You can also switch between the minimised/maximized setting of each summary view using the + and – buttons beside the feature or fixture names in the left column.

Summary by feature

This view shows a set of fixtures by their attributes:
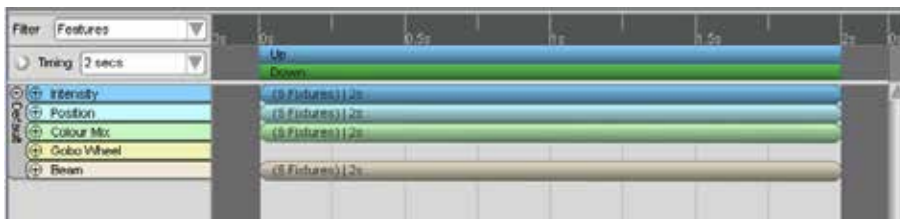
By default, the view shows each bar minimised. To expand each attribute and see the details, click the '+' symbol beside the attribute name (e.g. 'colour'). Vista displays the details of that attribute:
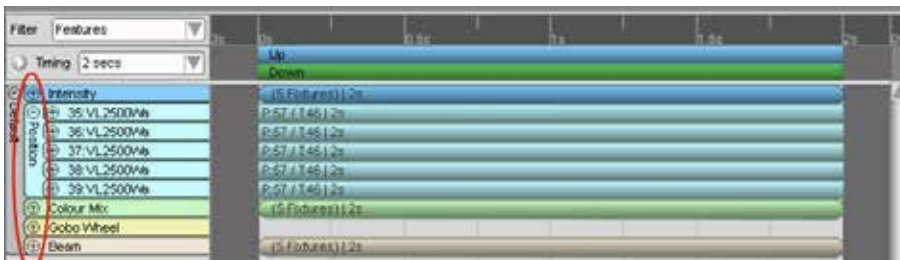
Summary by fixtures

The fixture type view shows the same information but sorted by fixture rather than attribute:

The default fixture view has all the features minimised. To expand each fixture bar and see the details, click the '+' symbol beside the fixture you want to see. Vista displays the details of that attribute:

To quickly expand all items right click in the left hand column and select 'Expand all default items' from the poup menu.

Filtering the All Events view

As well as displaying the Feature and Fixture views, you can also choose to filter out different classes of information on the timeline. To do this, choose an option from the list below the line in the View drop-down menu:
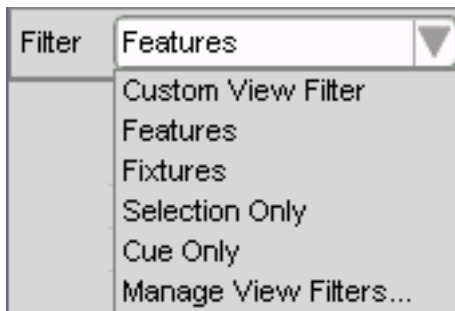
When you choose a filter, Vista displays only those types of events.

You can create your own filters to show only those combinations of events you want to see. To create a filter:

1. Choose the 'Custom View Filter' option from the menu. Vista displays the Custom Filter window:
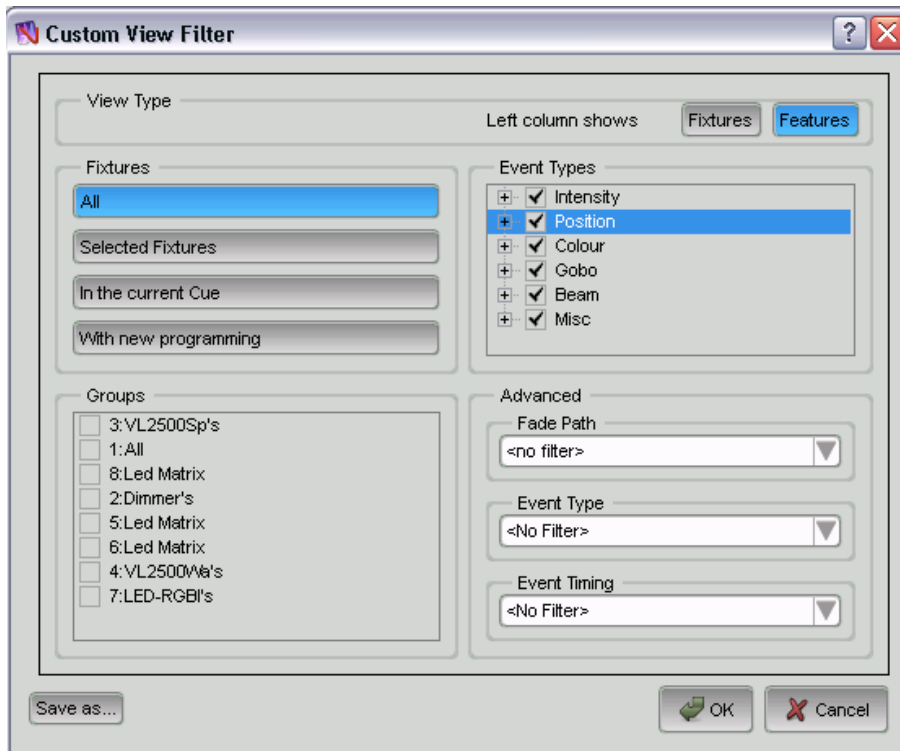
With this window you can filter by fixtures, event features and advanced options:

This option…	does this…
View Type Fixtures	Shows fixtures in the left column.
View Type Features	Shows feature types in the left column.
All	Filters the timeline to show All fixtures.
Selected Fixtures	Filters the timeline to show only the fixtures that are selected in the Chooser window.
In the Current cue	Filters the timeline to show only the fixtures that have programming in the current cue.
With New Programming	Filters the timeline to show only fixtures that have new have been edited since the cue was last saved.
Groups	Shows just the fixtures, in the groups that are ticked. This filter is applied after the other Fixture filters.
Event Types	Filters the timeline to show only the feature types that are ticked. Click on the '+' sign beside a feature type to select just a subset of that feature.

This option…	does this…
Fade Path	Filters the timeline to show only events that are (or are not) set to a particlular fade path (i.e. Linear, Snap, etc).
Event type	Filters the timeline to show only events that are (or are not) a particlular type (i.e. Preset, Release, Move in Black, etc).
Event Timing	Filters the timeline to show only events that are (or are not) set to: • Follow the default times. • A Zero fade time.

2.   Click on the 'Save As' button. Vista shows the 'Save As' window.

3.   Type a name for the filter.

4.   Click the 'OK' button. Vista adds this filter to the drop-down filter list.

Managing your saved Filters

You can rename, duplicate or modify a saved filter. To do this select the 'Manage View Filters' option from the Filter drop down list. Vista opens the Manage View Filters window:
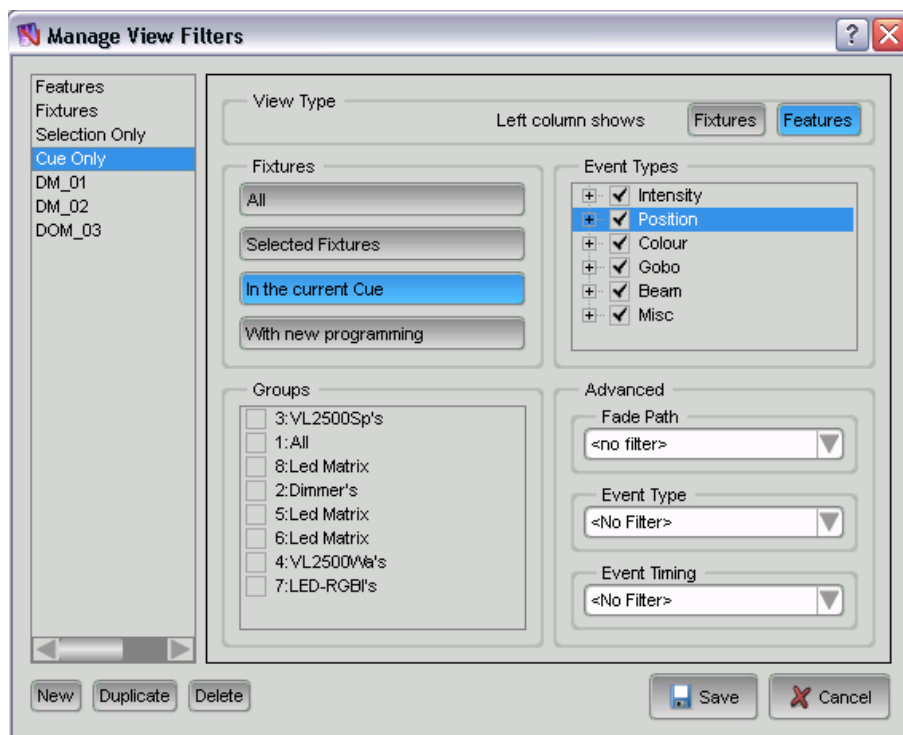
To modify one of the built in filters or a custom sort you've saved:

1.   Select the Filter name in the left-hand panel.

2. Modify the View type, Fixture selection, Event types and advanced event options.

3. Click the 'Save' button.

Renaming a Filter

You can rename a sort by double clicking on the name, in the left column, and typing a new name.

Duplicating a Filter

To make a copy of a filter, select it and click on the 'Duplicate' button.

Deleting a Filter

To delete a filter, select it and click on the 'Delete' button.

One click filters

At the bottom of the timeline screen there is a set of filter buttons that provide quick access to four popular filters.

This icon…	does this…
All	Shows all fixtures in the cuelist.
Selected	Shows just the selected fixtures.
Cue	Shows the fixtures in the current cue. Useful for removing 'white space' in the timeline.
New	Shows just the fixtures with new programming.

Zooming in and out

At the bottom of the timeline screen there is a set of zoom buttons that let you control the size of the events in the timeline.

This icon…	does this…
All	Zoom out to show more of the cuelist.

This icon…	does this…
Selected	Zooms in to show more detail.
Cue	Zooms to show a single cue.
	Zooms out to show all cues in the cuelist.
New	Zoom to show the selected cue(s).
Auto	Toggles auto zoom on or off. This means that whatever cue is elected is automatically zoomed to fit the window.

Ü The zoom options are also available on the View menu.

The Editor Status bar

Below the cuelist navigator there's a status bar that shows details about the cuelist you are working on and the cue(s) that's being edited and played. If you are editing a cue that is not the one that is playing an alert field also shows:
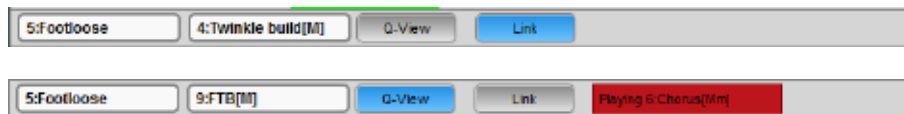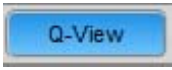
In the status bar the fields show:

- · The Cuelist that is open in the editor, this field will correspond to the selected tab.
- · The Cue that is being edited, this field will correspond to the cue that is selected (highlighted) in the Cue navigator bar.
- · The cue that is playing and contributing to the console's output. This field only appears if you are editing a different cue to the one that is playing.

Ü The cuelist and cue fields to the left of the Q-View button can be used to navigate between cuelists and cues or open a cuelist. To do this select either field and type a name or number. As you type Vista will show a list of matching cuelists or cue names. Press enter or tab to open or jump to the selected item.

The buttons on the status bar control how the editor interacts with the console's output and playback:

This button…	does this...

This button…	does this...
Link	Link joins the editor and any playback (of the cue being edited) to the cue you're editing. This means that when you click on a cue, in the editor it will play. Likewise if you play a cue from the cuelist being edited it will change the cue selection in the editor. If you want to edit a cue without seeing it on stage 'Link' should be de-selected (selecting Q-View automatically turns Link off). If you turn Link off and select a different cue a red alert field appears in the status bar to show you the cue that is actually playing.
Q-View	Allows you to edit a cue that is not being played. When Q-View is selected the Chooser window is outlined with a yellow border. In Q-View selecting a different cue does not effect playback and Link will automatically turn off. This means you can make a change to an upcoming cue without changing the look on stage then click Link again to bring the editor back in line with the playback.

Ü If Q-View is on, clicking on the cue tile that is playing will automatically turn Q-View off.

The progress indicator

When you hit Play, the blue line starts moving from left to right across the event bars in the timeline panel. This line shows where you are up to in this cue. If you hit Pause, the line stops wherever it is on the timeline; if you hit Play it starts from the same spot.

Timeline events

You can create any number of cuelists, each of which can consist of any number of individual lighting events. You can then combine these cuelists and 'play' them interactively to produce your overall lightshow.

Adding events to the timeline

Whenever you store a cue, using 'Store Look' or 'Store Part' you create events on the Cuelist's timeline. To work with those events and make timing adjustments you open the cuelist in the editor and select the 'Timeline' window.

You can also create a new Cuelist, from scratch, in the editor and work with the events straight away. To do this:

1. Click the 'New' cuelist ⌢⌢⌢ icon or select the 'New' option on the Cuelist menu.

2. Select the ⊞ icon on the main toolbar to display the Fixture Chooser window.

3. Choose the fixtures you want (or select a group of fixtures by clicking on one of the Group icons).

4. On the Intensity palette, turn up their intensity to a level above zero. You can also set any of the other features, such as position and colour on the other palettes if you like.

5. Select the Timeline ▦ icon on the main toolbar at the top of the screen. Vista displays the timeline window with the features you used shown in the left column and the timing events for those features to the right.

About the Event bars

The timeline event bars are labelled and include graphics to identify their function and edit status.

Feature summary event

Feature events are coloured to indicate their type (Intensity, Position, Colour, Gobo, Beam or Miscellaneous).

The event label shows:

·   The number of fixtures the event applies to.

·   The fade time.

Feature detail event

You can open a feature summary event by clicking on the '+' button, beside the feature name in the left column.

The event label shows:

- The event setting. In the example above the event shows the CMY settings and an icon of the colour. Not all event types include icons.

- The fade time.

Snap events

Events that are set to a zero second (0s) fade time are shaped like a banner with an arrow at the left end:

When you select a snap event there is only one selection handle (the aqua coloured square). When you click on the handle you can drag in either direction and once the event has a length a second handle will appear.

Changed events

Events that you've edited, since the cue was last saved, show with a hatched pattern:
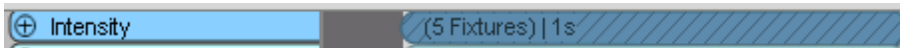
Moving events around

Each event has three attributes: a start point, duration and a finish point. The event bars on the timeline show you where each event starts and finishes and how long it will take to reach its end point:

To adjust the start or end point of an event, select the event and drag it along the timeline to the left or right. Note that the grid has an automatic 'snap-to' feature that makes it easy to align start and end points. To make fine adjustments hold Red modifier (Shift key) while moving the start and end points.

To change the duration of an event, click on it and select the 'handle' (aqua square) on the right-hand end and drag it left to shorten the event, or right to lengthen it.

Note that in the example shown above three separate attributes of the event have different timings:

- · the Intensity event starts at 0s and is complete at 2s
- · the Position event starts at 0s and is complete by 1s
- · the Colour event starts at 0s and is complete at 1.5s
- · the Beam event starts at 0s and is complete at 1.75s.

Working with selection handles

A quick and easy way to create dynamic lighting effects is to 'skew' the events on the timeline. When you select a group of events, Vista displays a selection box around them with aqua /black squares on the corners and sides known as 'handles':
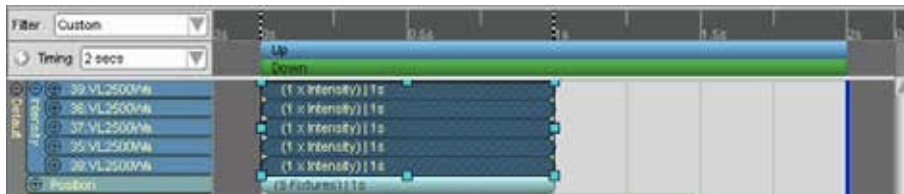
You use these handles to change the duration of the selected events. In this example, the Intensity events of a set of fixtures are selected. By selecting a handle and dragging it you can change the start or finish point of the selected events. In the example above the fixtures will fade in over 1s.

In the next example, we've selected the middle handle on the lower edge of the selection and dragged it right to fade the events over 2 seconds, offsetting the start and end fade times while retaining the 1 second fade time for the individual fixtures:
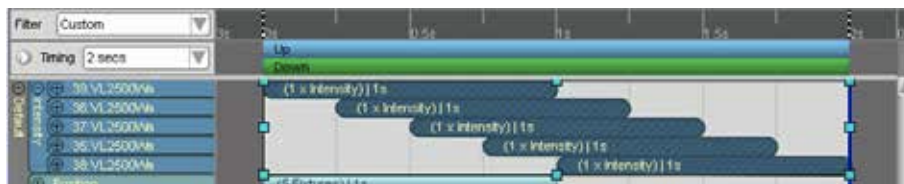
Using the selection handles in this way you can utterly transform the attributes of the selected events with just a few quick clicks. You can also adjust any of the intensity, colour and beam attributes at any time while adjusting the timeline events.

Making precise timing adjustments

If you want to set the start and end times and durations of events to a precise point on the timeline you can either zoom right in and line them up visually, or enter the actual time values.

Using the set timing window

You can set event timing and optionally scale events using the 'Event timing' window. To do this you can either:

- Select the event(s) and select 'Set Event Timing' option from the Timeline menu, or

- Double click on an event, or

- Right-click on the event(s) and select 'Set Event Timing' option from the popup menu.

Vista displays this screen:

This option…	does this…
Start	Select to set the start time of an event.
Middle	Select to set the mid point of an event.
End	Select to set the end time of an event.
Time Start / Mid / End	Enter a time to set the start mid or end of an event to that position on the timeline. If you enter a number with no units Vista assumes seconds. Use h for hours, m for minutes, e.g. 1h2m3.5s.
Duration	Enter a time to set the duration (or length) of an event(s). If you enter a number with no units Vista assumes seconds. Use h for hours, m for minutes, e.g. 1m2s.
Scale Events	Select this option if you want all selected events to be scaled when the duration is increased or decreased. Scaling is based on the longest event. If this box is not ticked all events will be set to the same duration.

Aligning start and end points

You can also align the start and end times of selected events. To do this, select the events and then select the 'Align Start' or 'Align End' option from the Timeline menu.

You can also right-click on select the event(s) and select these options from the popup menu.

Resetting events to follow the default times

When you adjust the time of an individual event it no longer follows the cue's 'default times'. To reset an event so that it follows the default, select the event and choose the 'Reset to default timing' option from the Timeline menu.

You can also right-click on select the event(s) and select these options from the popup menu.

Setting the event fade curve

Vista automatically selects the most suitable fade curve for each feature type but you can choose from a set of pre-defined fade path shapes to set how an event will progress.

Select the 'Fade Curves' option from the Timeline menu or right-click on the event(s) and choose the Fade Curves option to display the fade path options:
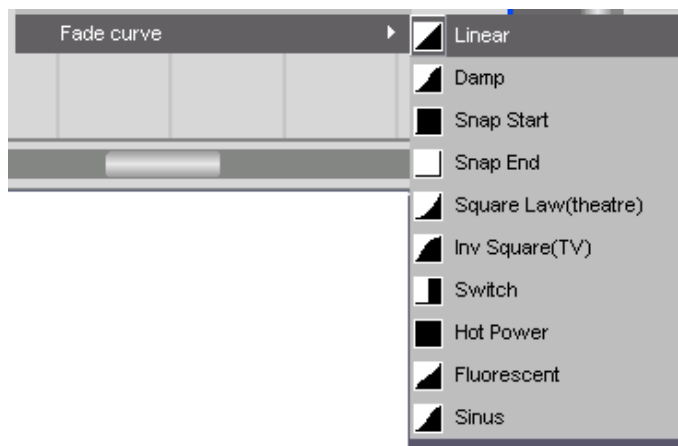
For more information on the available fade curves *see fade curve on page 7-32.*

Ü Instead of making an event very short, you can just set it to Snap at Start.

Creating Release events

Sometimes it's useful to have a cue release control of a feature. For example a cuelist might set some lights to point downstage in the first cue but in the second cue you want the lights to revert to whatever position they were in previously. To do this you need to store a 'Release' event(s) for the fixtures and features you want the cue to relinquish control of.

You can also right-click on the event(s) and select these options from the popup menu.

Muting events

If you want to temporarily prevent an event from being played back you can 'mute' it. To do this select the event(s) and choose the 'Mute event' option from the Events menu. The event bar will be greyed and when the cue is played the event will be ignored.

To un-mute an event choose the 'Unmute' event option from the Events menu.

You can also right-click on the event(s) and select these options from the popup menu.

Stopping effects overriding an event

'Baseless' effects are designed to run on top of a feature setting. For example a baseless circle effect will cause fixtures to move in a circle around whatever position has been set in a cue. If you want to stop a baseless effect running on an event, right click on the event and select the 'Stop free effects' option.

Using commands within cuelists

Commands let you use a Cuelist to control the playback of one or more other cuelists.

To insert commands within a cuelist:

1. Open a cuelist in the programmer and choose the 'Insert Commands...' option from the Tools menu. Vista opens the Insert Command window:

2. Select the command to insert from the Action column:

This option…	does this…

This option…	does this…
Play, Back, Pause, Assert, Skip Fwd, Skip Back, Release,	Acts on the cuelist as if you had pressed the corresponding button on the playback controls for that cuelist.
Flash	Equivalent to pressing the flash button on a cuelist's playback controls. You must also enter either 'on' to flash or ''off' to flash in the Parameter box.
Inhibit	Inhibits (blinds) or un-inhibits the cuelist. You must enter either 'on' or 'off' in the Parameter box.
Rate	This field is a text field and only allows valid input (e.g. numerical BPM value).
Release All	Releases All active cuelists. No other options are available when this command is selected.
Timecode reset	Resets the timecode to 00:00:00:00.
Timecode enable	Sets a cuelist to be activated by Timecode.
Jump	Allows you to Jump to a specific cue within a cuelist.
Snapshot	Activates the snapshot selected in the parameter field.
Release all except	Releases all active cuelists except the one containing this command.

3. Select the Cuelist to be triggered from the Target column.

4. Enter an on or off command or cue number, if applicable, in the Parameter field..

5. The command will be placed at the beginning of the selected cue. If you want to put it at a different position you can drag the event to a different position..

6. Click 'Insert' to insert the command and close the window.

Updating Presets and Cuelists during playback

When you make changes in the Programmer Live tab while a cuelist is being played back, you can make those changes apply to the presets from which you constructed the cuelist, or just make the changes to the cuelist itself.

Ü Update is designed to change settings that are already in a Cuelist and does **not** automatically add new events or fixtures to a Cuelist, but you can open a Cuelist and add new information in the programmer window on the Update window.

Existing information

To update **existing** information:

1. While a cuelist is playing, go to the Live tab in the Programmer window and select the fixtures you want to change.

2. Make the adjustments you want using the palettes or hardware controls.

3. Click the Update icon [icon], or choose the Update option from the Tools menu.

4. Vista displays the Update window:
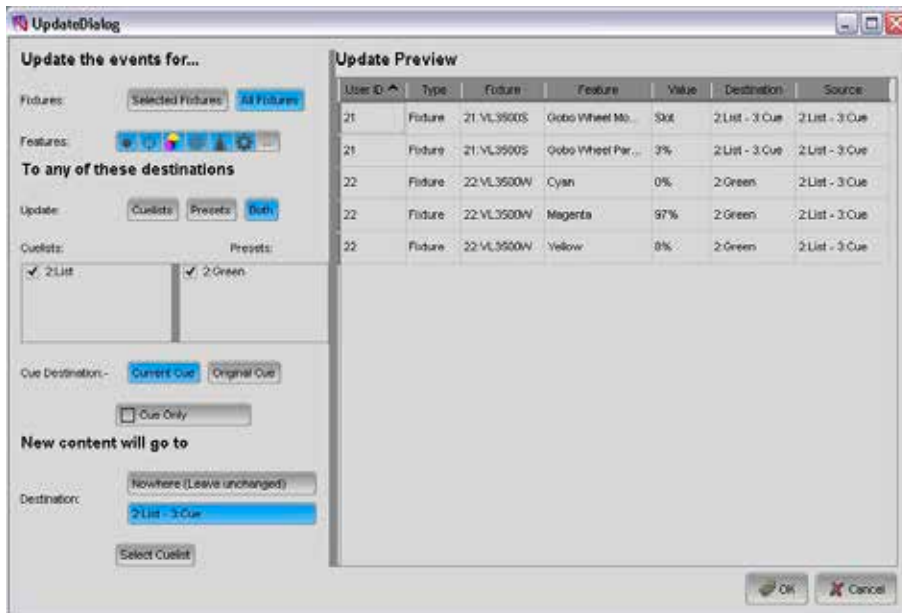
Here you can choose whether to apply the changes to Cuelists or Presets if they are in use. You can also filter the changes by fixtures and parameter. By default, Vista selects both presets and cuelists.

5. To make the changes to all Fixtures in the Cuelist or Preset, click the 'All fixtures' button. To make the changes to just the selected fixtures click 'Selected fixtures' button.

6. You can use the parameter filter icons to select or de-select the features you want to include in the preset - Intensity, Position, Colour, Gobo, Beam and Misc. For more information about the parameter filter bar refer to *Presets* on page **6-46**.

7. To apply the changes to presets, click the checkboxes beside the preset names in the Presets pane or, click the checkboxes beside the cuelist names in the Cuelists pane to apply the changes to one or more cuelist rather than to the presets.

8. When you've defined how you want to apply your changes, click the OK button to return to the Programmer screen.

8. SmartFX

Effect types

Vista provides several effect types:

- · Wave effects where Intensity or Colour or Position or any other feature of your lights follows a waveform. With this sort of effect you can create Intensity chases, Position shapes such as a circle and Colour mix effects including rainbows and more.

- · Swing effects where Intensity or Colour or Position or any other feature of your lights crossfade between presets or other IPCGBM settings.

- · Video effects that use an animated gif to control the Intensity and Colour of a group of fixtures – usually arranged in a matrix.

Using effects

To run an effect on your fixtures you can either:

- · apply one of Vista's built in template effects, or

- · modify a template effect, or

- · create your own effects from scratch, using the SmartFX window.

Applying a stored template effect

To apply an effect:

1. In the Fixture Chooser window, select the fixtures you want to use.

2. Click the Components tab in the sidebar and select the FX button. Vista displays the list of available template effects:
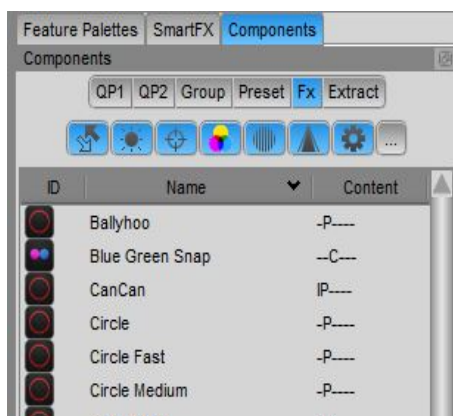
The icon indicates the effect type and letters in the 'Content' column show which features are in this effect:

This icon / letter…	indicates this…
![intensity icon] I	An Intensity effect.
![position icon] P	A Position effect.
![colour icon] C	A Colour effect.
![matrix icon] Matrix / Multi-element	An effect designed to run on a matrix (*See Placing fixtures in a Matrix on page 6-11*) or multi-element fixture (a fixture with more than one light source – for example a 4 cell ColourBlock).
Multi-feature (i.e. IPC---)	An effect that includes more than one feature. For example the 'BallyColour' effect.

Ü If a template effect is greyed out it means that the template cannot be applied to the fixture type(s) you have selected.

3. To apply an effect, click on the one you want. The effect you've chosen starts running on the selected fixtures.

4. To adjust the speed and other settings of an effect, open the SmartFX window and use the controls to adjust it. See the following section.

Using the SmartFX window to modify an effect

To adjust the speed and other parameters of an effect, open the SmartFX tab in the sidebar by either:

·   Clicking on the SmartFX tab at the top of the sidebar, or

·   Clicking the SmartFX button on the main toolbar – usually F11, or

·   Selecting the SmartFX Editor option from the Tools menu (Ctrl + K).

The SmartFX has two panes: the effects list, at the top and effect controls below:

The Effects list

The top pane normally shows 'All effects'. You can filter the list by clicking on the 'Show…' field and selecting from the following options:

- · Selected Cuelist.
- · Editor.
- · Selected Cue.

You can filter the list further by:

- · Whether they are active.
- · The fixtures they are being applied to.

This option…	does this…
Source Popup selector	The source popup filters the effects list by source: · Show All.. includes all effects · Selected Cuelist includes just the effects running on the Selected Playback · Editor includes effects running in the Live tab and any Cuelists (tabs) that are open in the Editor · Selected Cue includes effects running in the selected cue in the Cuelist being edited.
Active only	Filters the effects list to only show effects that are being played – that is the ones you can see on stage.

This option…	does this…
Selected Fixtures	Filters the effects list to only show effects that are being run on the selected fixtures.
New Effect	Creates a new effect with your own settings. *See Creating an effect from scratch on page 8-12*
Save as template	Click this button to save the effect as a template that will appear in the Components list and Quickpickers.

When you click on an effect in this list, Vista displays the settings and controls for this effect in the right hand pane.

Effect controls

The SmartFX Control Panel contains:

- · Rate controls that apply to all feature types in your effect.
- · Feature type tab(s) (IPCGBM) with controls for the effect waveform, size, rate multiplier, and direction.
- · A Sequence tab with controls for fixture overlap, sorting, spread and ganging.
- · An Advanced tab, where you can add additional effects and synchronise or offset the effect waveforms. This tab is also used to set how the effect interacts with other cues and effects during playback.

Rate control

Effects can include one or more feature types (IPCGBG). The rate controls apply and are common to all features in the effect.

This option…	does this…
Rate (BPM)	Sets the base rate at which the effect runs, expressed in beats-per-minute (BPM).

This option…	does this…
Rate popup: · per cycle · per fixture	This control affects whether the Rate is based on cycles-per-minute or fixtures-per-minute: Per-cycle - if the effect is an intensity chase at a Rate of 20 BPM Per-cycle, then the whole sequence will repeat 20 times each minute. Per-item - if the chase is at a Rate of 80BPM per-item, then the chase will cover 80 fixtures each minute. The loop time of a per-fixture effect varies with the quantity of fixtures used, and is slower with more fixtures. This means the fixture-to-fixture rate will be constant no matter how many fixtures are used.
Enabled	This checkbox disables or enables the selected effect.

The Feature tab(s) for 'Wave' effects

Effects can include one or more feature types (IPCGBG). Vista creates a feature tab for each type with controls for the effect waveform, size, rate multiplier, and direction.
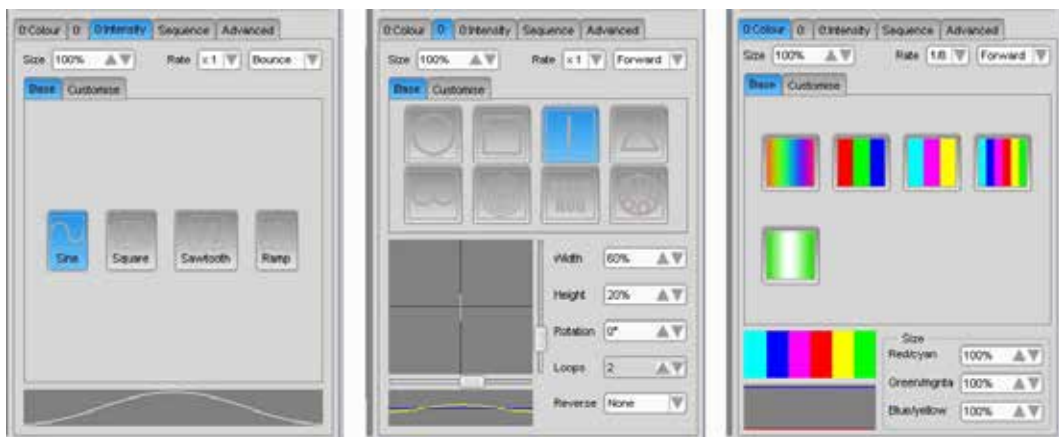
Click on the feature tab (i.e. Intensity) to see the controls:

Ü The feature tab(s) will not appear unless the effect is selected in the left pane.

This option…	does this…

This option…	does this…
Size (was Amplitude)	Size affects how much of the effect waveform is added to the feature. For example if you run an Intensity wave effect, set to size 50%, on a set of fixtures they will modulate between 0 and 50% intensity. For effects that run on more than one channel (i.e. Position and Colour mix) there is a separate size control for each channel. For swing effects there are no size controls since only a value of 100% will reach the endpoints.
Rate (was Rate Multiplier)	To maintain synchronization between the features of an effect you can scale the rate for each feature as a multiple of the base rate. To make a feature run slower than the base rate set the feature rate to lower value (e.g. x½ or x¼).To make a feature run faster than the base rate set the feature rate to a higher value (e.g. x2 or x4)
Direction	Mainly useful for chasing effects, this controls whether fixtures are sequenced in ascending (forward), descending (backward) or both directions (bounce).
Base Customise Base tab Waveform buttons	This tab shows the available effect waveforms, in graphical form. To select a waveform click on one of the buttons. When multiple waveforms are being used the buttons show the effect that will be created. For example: · Position – shows buttons for creating shapes including a Circle, Square, Can-can, Triangle, Figure 8, Spiral, Bally Hoo and Spread circle. · Colour Mix – shows buttons for a Rainbow wave, RGB, CMY and more.
Base tab Visual editor	Below the waveform buttons, Vista displays a preview of the waveform(s) in the effect. For position and colour effects this section also provides size controls for each of the feature waveforms. For example a position effect has one waveform operating on Pan and another on Tilt. You can change the offset of the waveform(s) by clicking in the preview window and dragging the waveform to the left or right.

This option…	does this…
\n\nCustomise tab	On this tab you can select the waveform type and the phase offset of the waveform. For position and colour effects, that operate on more than one channel there is also a waveform, rate multiplier and phase offset control for each channel.

The Feature tab(s) for 'Swing' effects

For swing effects there are no size controls since only a value of 100% will reach the endpoints. Likewise there is no direction control because 'swing' effects are designed to bounce between endpoints.
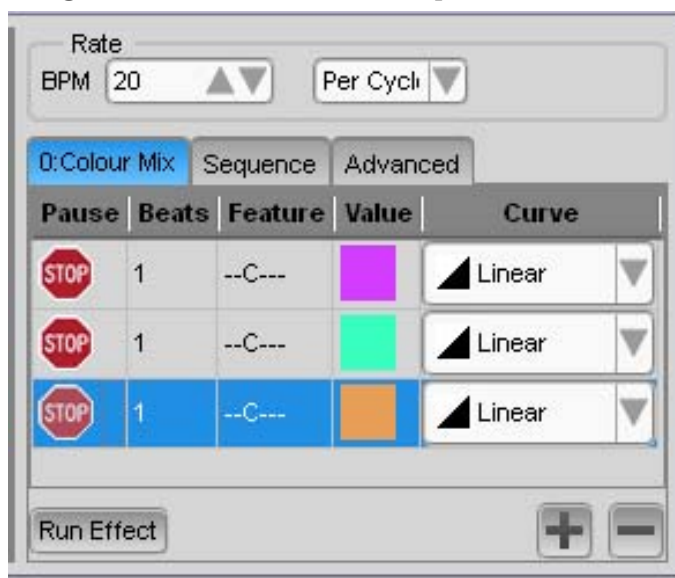
Ü The feature tab(s) will not appear unless the effect is selected in the list pane.

This option…	does this…
Stop	Clicking on a 'Stop' icon pauses the swing effect so that you can set a value for the feature. To set a value choose a preset or set a value in the sidebar palette windows.
Beats	Sets the number of beats the effect will remain on each point before fading to the next point.
Feature	Shows the type of features included in the swing points.
Value	Shows a value or graphical representation of the setting for the swing point.

This option…	does this…
Curve	Sets the fade curve to the swing point.
Run effect	Click the 'Run effect' button to start the swing effect running if it has been stopped.
✚	Click the + (Plus) button to add a swing point.
▬	Click the - (Minus) button to delete the selected swing point.

The Sequence tab

When you apply an effect to a number of fixtures you can use the controls on the sequence tab to set how the effect is applied to those fixtures.

This option…	does this…
Overlap	Affects how much each fixture overlaps the next when the effect is running: · At 0% each fixture runs the effect sequentially – there is no overlap · At 100% each fixture executes the effect simultaneously. This control works in conjunction with Spread to achieve synchronized chases & wave effects.

This option…	does this…
Stagger	Vista dynamically calculates a waveform offset value for each fixture depending upon this control: · Stagger = 0% - all fixtures have a uniform offset · Stagger = 100% each fixture has a unique offset ranging from 0% to 100%. Normally this control will be left at 100% unless the Overlap control is at 100%, otherwise there will be periods when all fixtures will appear to be at rest.
Order	When an effect runs you can sort the fixtures in a number of ways: · ID sorts the fixtures by number order. · Selection sorts based on the order in which you selected them in the Chooser. · Random sorts the fixtures in a random order. · Position sorts the fixtures by their position on the Fixture Chooser layout. Fixtures are sorted from top left to bottom right. To reverse the sort order click on the drop down box and choose either 'Ascending' or 'Descending'.
Fan Curve	Sets the distribution of fixtures, along the effect waveform. The normal setting is 'Linear' and in this case the fixtures are evenly distributed. Other curves, such as square and inverse square will bunch some of the fixtures together and spread others out.
Spread Shape 	The spread shape buttons control how the effect runs across the fixtures. There are 4 spread shapes available: · First to last. The effect starts on the first fixture and runs to the last. · Pairs, outside to inside. The effect starts on the 2 end fixtures and into the centre. · Last to first.. · Pairs, inside to outside. The opposite of 3.

This option…	does this…
Multi-element fixture options	When an effect runs on multi-element fixtures you can either: · Group all elements together and treat the fixture as a single unit or, · Run the effect across the individual elements of the fixture.
Fixture Ganging Blocking	Sets how the set of fixtures are grouped together. 'No Blocking' indicates that the effect runs across the fixtures one at a time. Fixtures can be ganged so that two or more fixtures are doing the same thing. For example: · When set to 2, adjacent pairs of fixtures are ganged together in the effect. · When set to 2/1/3 for a set of 12 fixtures they'd be ganged in a pair, then a single, then threes.
Fixture Ganging Repeats	Allows non-adjacent fixtures to be ganged together. · a repeat of 2 sets every third fixture to be doing the same thing. · a repeat of 3 sets every fourth fixture to be doing the same thing. The 'Preview' panel shows how the fixtures will be ganged together.
Preview Current Selection	Click this button to show the fixture selection for this effect in the Chooser window. Red order numbers appear on the fixture icons.
Change Fixture Selection	Click this button to update the effect fixture selection to match the order you set in the chooser window.

The Advanced tab

This tab is used to:

· Synchronise or offset the effect waveforms when there is more than one feature in an effect – for example an effect that includes both Intensity and Colour features.

· Set how the effect interacts with other cues and effects during playback

· Save an effect you've modified or created to the list of template effects.

This option…	does this…
Offset (Phase offset)	Adjusting the Offset value, rolls the waveshape within its own window. For example a 0% Phase offset for a sine waveform would start and end at the midpoint while a 25% Phase offset would have the sinusoid start & end at the high point. You can adjust the offset of a feature by either dragging in the waveform window or entering a value between 0 and 360 in the offset field.
+ Add	Click the + icon to add a new effect type that is synchronised with the other features(s) in this effect.
- Delete	Click the - icon to delete the selected effect feature.

This option…	does this…

Basepoint
  - Bound
  - Free
	Sets what happens when fixtures that are running an effect receive a new setting for the same feature type. For example if a circle position effect is running on a set of fixture and a cue runs that sets those fixtures to a different position.
	
	If the basepoint is set to **Bound** the effect stops running.
	
	If the basepoint is set to **Free** the effect continues to run but will take it's basepoint from the new event.
	
	If the 'Don't use own basepoint' box is ticked, the effect will only run on a basepoint from a different event.

Sync at Start	Sets what happens as this effect starts when another effect is already running. **Auto-sync** the effect starts on the same phase as the already running effect **Restart** the effect always starts at it's 0 point and so will always look the same when it starts. **No-sync** . The effect runs does not synchronize.

Creating an effect from scratch

To create your own effect:

1. In the Programmer Fixture window, select the fixtures you want.

2. Click the SmartFX button on the main toolbar or choose the 'SmartFX Editor' option from the Windows menu. Vista displays the Smart Effects window.

3. Click the New button, at the bottom of the left pane, to display the Create Effect window.

4. Click on one of the effect type buttons. Vista provides several effect types:
   - Wave effects where the setting for Intensity or Colour or Position or any other feature follows a waveform.
   - Swing effects that that move between two or more presets or IPCGBM settings.
   - Video effects that use an animated gif to control the Intensity and Colour of a group of fixtures – usually arranged in a matrix.

5. Choose the Feature type you want to use in the effect (e.g. intensity, or position or colour).

6. 'Type a name for your effect in the 'Name' box.

7.   Click OK display your effect in the SmartFX window.

8.   Adjust the controls in the right hand panel of the window to apply the effects
     you want.

Making your effect swing

If you chose the 'Swing' button in the Create effect window, you have to define
the end points of the effect (i.e. where it starts and where it finishes).

In this case, when you click OK, Vista adds two swing points in the feature tab of
the SmartFX window.

To set values for the two points:

1.   Click the first 'Stop' button.

2.   Use either presets, the palettes or the controls to set a value for the feature
     type you are using.

3.   Click the second 'Stop' button and define its settings in the same way.

4.   Click the 'Run Effect' button to start the effect swinging.

Swing effects always have two end points but you can add more, intermediate,
points to build more complex effects. Click on the + button to add another point.

Saving your effect

To save an effect you've created:

1.   Click on the 'Save Template' button. Vista displays a window asking for a
     name and location for the effect.

2.   Type a name for the effect and choose where to save the effect. You can save
     the effect in either the Factory or User or Show folder. Saving the effect in the
     Show folder makes it easier to transfer the effect between different consoles.

3.   Click on the OK button. Vista adds your effect to the list of effects. Next time
     you click the FX button on the Sidebar Components tab, your effect will be in
     the list.

Stopping an effect

There are two ways to stop an effect and have the fixtures revert to their original or default values for the feature(s) that were running in the effect:

- · you can stop all effects that are running, or
- · you can stop just a particular effect, or
- · you can stop just particular effect type.

Stopping all effects

To stop all the effects that are running on your fixtures.

1. Select the fixtures that you want to stop the effect running on.

2. Choose the 'Stop SmartFX' option from the Tools menu.

Stopping a particular effect(s)

To stop one or more of the the effects that are running on your fixtures.

1. Select the fixtures that you want to stop the effect running on.

2. Click the SmartFX button on the main toolbar – usually F11, or select the SmartFX Editor option from the Tools menu (Ctrl + K).

3. Select the effect you want to stop from the list of effects.

4. Click on the Disable button.

Stopping effect running on a feature

To stop effects that are running on a feature type – i.e. Intensity, Postion, Colour etc.

1. Select the fixtures that you want to stop the effect running on.

2. Click on the Palettes tab, in the sidebar, if it's not already selected.

3. Click on the feature type icon for the effect type you want to stop – Intensity, Position, Colour, Gobo or Beam. Vista opens a popup menu:

4. From the popup menu select the 'Stop Effect' option.

9.   Assigning Audio to a Cuelist

You can assign an audio track to a cuelist or cue and play it in Vista. This can be useful if you want to programme for a particular piece of music or dialogue.

To assign an audio file to a Cuelist

1.   With the cuelist open in the editor select the 'Cuelist properties' option from the Edit menu or, right click on the Cuelist icon in a Quick picker and select the 'Properties' option from the popup menu. Vista displays the Cuelist properties window:
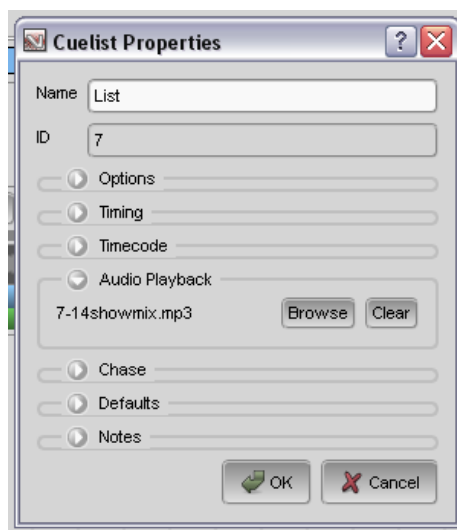
2.   If it's not already open click the arrow to open the 'Audio Playback' section.

3.   Click the browse button and navigate to the folder containing your audio files, select a track and click the Open button. Vista copies the audio file to the 'Audio' folder inside your Vista Data showfile folder.

4.   Click OK to close the Cuelist properties window.

When you play this cuelist Vista plays the selected audio track with it but will only continue playing for the overall time of the Cuelist. To be able to hear the entire track you may need to add or lengthen cues.

To assign an audio file to a specific Cue

You can also assign audio to a single cue in Vista. This can be useful to play sound effects or short pieces of audio. To do this:

1.   With the cuelist open in the editor select the Cue then select 'Cue properties' option from the Edit menu or, right click on the Cue tile and select the 'Cue Properties' option from the popup menu.

2.   Follow steps 2 – 4 as above.

Using Learn Timing to adjust cue timing

You can programme a Cuelist then use the 'Learn timing' window to adjust the Cue start times based on your actions. This can be useful if you want to fine-tune Cue timing to an audio or video track.

Using Learn Timing

1.   Open the Cuelist you want to use.

2.   Select the 'Learn timing…' option from the Tools menu. Vista opens the Learn Timing window:

3.   To keep the existing timing for cues tick the 'Preserve Cue Duration' checkbox. If this box is not ticked all cues (and their events) will be compressed to match the time between cue start times. However cue times are never lengthened. If the time between cues is longer than the existing time a delay time is added to the start of the cue.

Adjusting cues to timecode

4. If you want to learn timing based on a Timecode source tick the 'Enable Timecode' checkbox. Vista will then display the Timecode viewer (and controls if you are using internal timecode). If you are not using timecode leave this box unchecked.

Adjusting cues based on audio or video

You can adjust cue timing to match the audio in a cuelist or while you are listing to or watching a recording. To do this:

1. Click the skip to start button ⏮, in the Learn Timing window, twice to ensure you are at the start of your first cue

2. When you are ready, click the play button ▶, in the Learn Timing window or the Super Playback Play button, to set the start time of the first cue. If you have enabled timecode the timing field of the first cue will be automatically changed to a timecode type. If you are not using timecode the start of the first cue will be set to Halt.

3. Continue to press the play button whenever you want the next cue to start. All subsequent cues are automatically set to 'Follow' mode with their start time adjusted in relation to the previous cue.

4. When you are finished click the Done button to close the learn timing window.

Vista automatically changes the cues start action to 'Follow' and adjusts the start time in relation to the previous cue. To see how your cues will playback in relation to the timeline and each other, click the 'View cues in layout mode' button.

Ü Tip: When you use 'Learn timing' with Timecode, Vista sets the first cue to start at a Timecode and then uses Vista's internal clock to start the following cues. If you want every cue to be set to timecode mode you can change all the Follow cues convert their start times to Timecode. To do this:

1. Select all the 'follow' cues by shift clicking in the cue tile view.

2. Select the 'cue properties' option from the Edit menu.

3. If it's not already open click the triangle button beside the Timing option.

4. Click on the green Follow [F] icon and change it to Timecode [T]

10. Automating Playback

Using Timecode to control Cuelists

You can use Linear Time Code (LTC) or Midi Time Code (MTC) to trigger cues. If you are going to be running Vista in conjunction with a device that generates LTC (aka SMTPE) or MIDI timecode, you can also simulate the timecode so you can get your show running without needing the actual timecode from the other device.

To set up Vista to receive timecode:
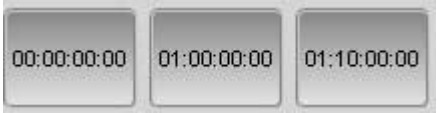
1. Choose the Timecode option from the File menu. Vista displays the timecode properties window:
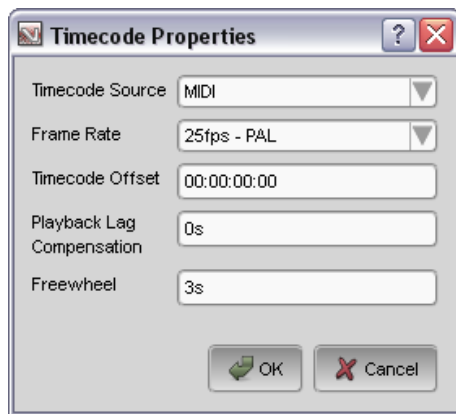
2. Set the Timecode source. The options are Linear Time Code (LTC), MIDI Time Code (MTC) or Vista's Internal clock

3. Set the Frame rate from the drop down menu.

4. Set the Timecode Offset if required. The offset time is added to the incoming timecode. For example if the offset is 01:00:00:00 (1hr) and the incoming timecode is 00:00:10:00 (10 secs) Vista will treat it as though 01:00:10:00 (1hr 10secs) is received.

5. The Playback Lag compensation field is used to compensate for slow data transmission. If your cues are not running at the expected time you may need to enter a value in this field. For example entering 0.5s will mean that all your cues run half a second earlier than programmed.

6. The Freewheeling time field is used to cope with dropouts or errors in the timecode coming from an external device. This field sets the number of seconds Vista will allow to pass while it simulates timecode and until it relinquishes control.

7. Hit the OK button to open the timecode window. If you are using an external timecode source this window will display the timecode being received. If you have set the source to 'Internal' the window will also show the internal timecode control buttons:
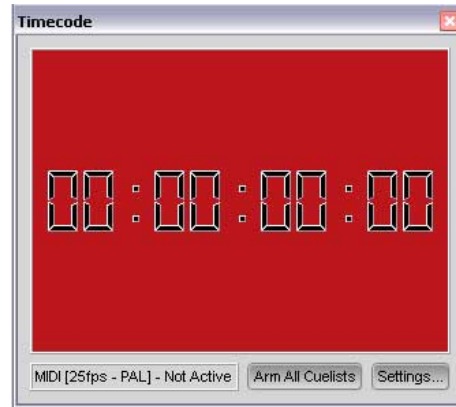
This button…	does this…
Arm all Cuelists	Sets the Timecode 'Armed' preference on all cuelists to 'On'.
Settings	Opens the Timecode Properties window (see the previous section).
	Controls the internal timecode playback. Rewind to start , Play, Pause and Skip to end buttons.
	Moves the timecode to the time shown on the button. To change the setting, right click on the button and enter a new time in the popup window.
	Opens the 'Locate to Time' window where you can enter a time in Hours Minutes, Seconds & Frames.

8. To close the window, click the 'X' symbol in the top right corner.

Ü To disable timecode for all cues, choose the Disable option from the Timecode source drop down. This can be useful is you want temporarily to stop timecode from triggering your cuelists.

Adjusting the Timecode on multiple cues

You can adjust the timecode settings for an entire cuelist by either setting an explicit timecode to start, or an amount of time to move all the cues by. To do this either:

·   Select the 'Set Cuelist Timecode' option from the Tools menu, or

·   Right-click on a cuelist in the playback window and choose 'Set Timecode Start'.

Vista opens the Cuelist Start Timecode window:
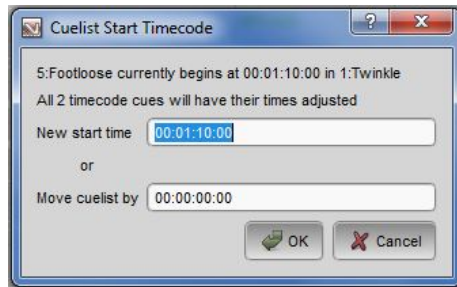
This field…	does this…
New Start Time	Sets the timecode start time for the cuelist .
Move Cuelist by	Adjusts the timecode for each cue by the time entered. Negative values cannot be used.

Using Date and Time to control cuelists

You can set Vista to automatically play cuelists, trigger snapshots and more based on the date and time.

Managing date and time events

You can add, delete, edit, duplicate or test date and time events. To do this select the 'Date and Time events…' option from the Tools menu. Vista opens the Date and Time Events window:
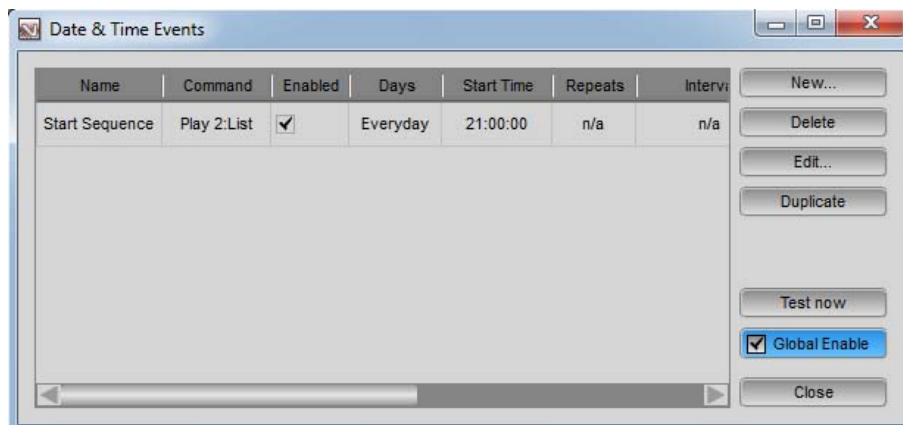
This window displays a list of all your Date and Time events.

This option…	does this…
New	Opens the 'New Date and Time Event' window where you can set up an event to be triggered based on the date and time.
Delete	Deletes the selected event.
Edit	Opens the selected event so that you can modify it's settings.
Duplicate	Duplicates the selected event.
Test Now	Click this button to test the event, no matter what the current time is.
Global Enable	You can disable all date and time events by un-checking this box.
Close	Closes the window.

Setting up a new date and time event

To set up events that will be triggered based on the date and time, choose the 'Date and Time events …' option from the Tools menu. Vista opens the Date and Time Events window

This option…	does this…
New	Opens the 'New Event' window where you can set up an event to be triggered based on the date and time.
+ Add	Click the + icon to add a new effect type that is synchronised with the other features(s) in this effect.
Delete	Deletes the selected event.
Modify	Opens the selected event so that you can modify it's settings.
Duplicate	Duplicates the selected event.
Checkbox	If the checkbox beside an event is NOT ticked the event will not be activated.

This option…	does this…
Global Enable	You can disable all date and time events by un-checking this box.

Disabling all date and time events

You can also disable all date and time events by choosing the Disable All Time/Date Events option from the Vista menu. This can be useful is you want temporarily to stop events being triggered.

Creating a New Event

Date / Time events can automatically control playback and other actions. To create a new event:

1. Choose the New Event... option from the Date/Time Events window. Vista opens the New Event window:

2. Select the command to insert from the Action column:

This option…	does this…
Play, Back, Pause, Assert, Skip Fwd, Skip Back, Release,	Acts on the Cuelist as if you had pressed the corresponding button on the playback controls for that clip. Select the Cuelist from the Target column.
Flash	Equivalent to pressing the flash button on a Cuelist's playback controls. You must also enter either 'on' 'off' or 'toggle' in the Flash enabled box to set the flash button action.
Inhibit	Inhibits (blinds) or un-inhibits the clip. You must also enter either 'on' 'off' or 'toggle' in the Inhibit enabled box to set the flash button action.
Rate	The Rate field is a percentage field and only allows valid input (e.g. numerical % value).
Release All	Releases All active Cuelists. No other options are available when this command is selected.
Timecode reset	Resets the timecode to 00:00:00:00.
Timecode enable	Sets a Cuelist to be activated by Timecode.
Jump	Allows you to Jump to a specific Cue within a Cuelist. You can select a cue from the popup menu in the Cue field.
Snapshot	Loads the snapshot selected in the Target box.

3. Select the Cuelist to be triggered from the target column.

4. Enter an on or off command or rate setting or cue number, if applicable, in the option field.

5. Type a label for the Event in Name box.

6. Set the time of day, to trigger the event, in the Time box. The time is displayed as a 12 hour AM/PM clock.

7. If you want an event to repeat periodically, check the Repeat box and specify the number of times to repeat and the Interval (in minutes), between repetitions.

8. Select the days of the week you want the event to run on by ticking the check boxes.

9. If you want an event to only be activated after a certain date tick the Start Date box and specify the date when the event should first be triggered.

10. If you want an event to stop running after a certain date tick the End Date box and specify the date when the event should last be triggered.

11. Tick the Enabled checkbox to activate the event. If this box is not ticked the event will not run.

12. Click the OK button to save the event.

11. The Playback Control Window

Controlling and monitoring playback

When you've got a full show going it's likely that you'll have multiple Cuelists on the console and being played back.

To see what's going on at any time, click the Playback Control button on the main toolbar at the top of the screen. Vista displays the Playback Control window:

This screen lists all the cuelists that are playing and gives you a handy point from which to control and edit them. The window is made up of two panes that can be resized by clicking on the vertical dividing line and dragging the divider to the left or right.

Cuelist pane

The left side of the screen displays a list of all Cuelists and can display up to twelve columns that show playback status and some Cuelist properties.

This column…	indicates…
Cuelist Name	The name of the Cuelist.

This column…	indicates…
Current Cue	Shows the current Cue name and number. Cuelists that have not been run show the first Cue name.
Status	The Playback State of the cuelist, including: - HTP set on - On Playback. The Cuelist is on a playback control. - SMPTE timecode locked. - Audio. - Inhibited.
Active	Shows if the Cuelist is playing or has been played.
Priority	Shows the priority of the Cuelist.
Programming	Shows the features (Intensity, Position, Colour, Gobo, Beam) programmed in this cuelist.
HTP	Shows the 'HTP Intensity' property setting.
Release Time	Shows the Cuelist's release time.
Inhibited	Shows if a Cuelist has been inhibited (made blind).
Notes	This column is for notes and comments. To add a note click, double click on the notes cell.

You can change the setting of a cell by double clicking on the cell and either selecting from a list of options or entering a new value. You can also right-click on the cell to open an editing window for that cell. Not all cells are editable.

You can sort the Cuelist list by clicking on any of the column headings. For example to show all the Cuelists that are on playback controls, at the top of the list, click on 'On Playback'. Click the column heading again to reverse the order.

You can resize columns by clicking between the headings and dragging the column to suit. To show or hide columns right-click in the Cuelist pane and select 'Show/Hide fields' from the popup menu.

Cue pane

The right column shows the Cues in the Cuelist selected in the left column and is divided into six columns that show Cue detail and progress:

This column…	indicates…
ID	Shows the Cue number.

This column…	indicates…
Cue	Shows the Cue name.
Programming	Shows the features types programmed in this cue.
▶	Click this button to play the cue.
Progress	Provides a visual display of the Cue's progress and Shows the progress of the Cue as a percentage.
▶▶❘	Click this button to skip to the end of the cue.
Time	While playing shows the elapsed time and time remaining I.E. 1/5 - Elapsed time is 1 second. Time remaining is 5 seconds While not playing shows the total fade time.
Follow Action	Shows how the cue starts. Start – the Cuelist starts 'n' seconds after the start of the previous cue End – the Cuelist starts 'n' seconds after the end of the previous cue Wait – the next Cue will play when Go is pressed
Follow delay	Shows the delay time for the 'follow action' described above.
Notes	This column is for notes and comments. To add a note click, double click on the notes cell.

Control and Playback buttons

You can use playback button toolbar to control one or more Cuelists. To show or hide the playback buttons choose the 'Playback Control' option from the Toolbars submenu on the View menu :

This button…	does this…
❘◀◀	Jumps to the start of the Cuelist.
◀◀	Cues backwards to the previous Cue marker of the selected Cuelist.
❘❘	Pauses playback of the selected Cuelist(s).
▶	Commences (Go) Playback the selected Cuelist(s).

This button…	does this…
▶▶	Cues forwards to the next Cue of the Cuelist.
▶▶▌	Jumps to the end of the selected Cuelist.
◀▌■	Releases the selected Cuelist – fixtures return to their previous settings.

Filtering the cuelists

If the 'Only show active cuelists' button is highlighted only cuelists that are being played will be shown in the left pane. You can also set the this option on or off from the View menu.

Auto Scroll

If the 'Auto Scroll' option is highlighted you the cue panel will scroll to keep the current cue visible. You can also set the this option on or off from the View menu.

Dragable playhead

If the 'Dragable Playhead' option is ticked, in the View menu, you can control a Cuelist's playback by clicking on the overall progress bars. You can also set the this option on or off from the View menu.

Position: 00:01:20:00 of 00:13:49:05 (00:12:29:05 remaining)   [cue 18 of 209]

Click or drag anywhere in the bar to jump to that point.

If the 'Dragable Playhead' button is highlighted click on it (so it is de-selected) to prevent accidental triggering of Cue .

Search

You can search for a cuelist or cue by clicking on the corresponding search button. You can also do this by choosing the 'Search' option from the View menu.

Editing in the Playback control window

There are two ways you change Cue names, times and end-of-Cue actions from within the Playback control window. You can:

- Double-click on the Cue Name, Time, At End setting or Notes field and edit the field directly.
- Right-click on the Cue Name, Time, At End setting or Notes field and select the 'Edit field of selected Cue(s)' option from the popup window.

To edit a field directly

1. Double-click on the Cue Name, Time, At End setting or Notes field.

2. Choose from the list of options or enter a new name, time etc.

3. Press the Enter key or click away from the field.

To use the Edit field window

1. Select one or more Cues. You can select a range of Cues by using the shift or control key.

2. Right-click in the field that you want to change and select the edit option. Vista opens the Edit field window.

3. Enter a new name, time etc.

4. Click the OK button.

12. Using the console hardware

Console layout

Vista consoles and control surfaces provide the faders, encoders, switches and displays you'll need to control your lighting rig. The layout of each product is slightly different and the quantity of playback controls varies.

L5 Console
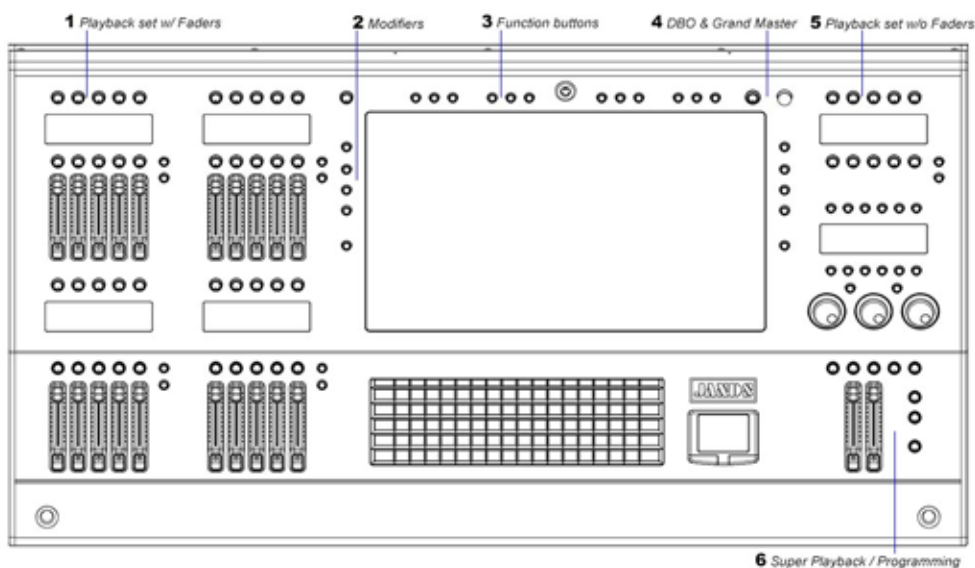
The L5 console features:

·   LCD Pen/Tablet module that includes, the Grand Master & DBO, 12 Function buttons, 2 sets of modifier buttons, a keyboard & trackpad

·   2 Playback modules with faders

·   2 Playback modules without faders

·   1 Superplayback/Programming module.

T4 Console

The T4 (discontinued) console features:

·   LCD Pen/Tablet module that includes, the Grand Master & DBO, 12 Function buttons, 2 sets of modifier buttons, a keyboard & trackpad

·   4 Playback modules with faders

·   2 Playback modules without faders

·   2 Superplayback/Programming modules.

T2 Console

The T2 (discontinued) console features:

- LCD Pen/Tablet module that includes, the Grand Master & DBO, 12 Function buttons, 2 sets of modifier buttons, a keyboard & trackpad
- 2 Playback modules with faders.
- 1 Playback module without faders.
- 1 Superplayback/Programming module.

I3 Console

The I3 console features:

- 2 Playback modules with faders.
- 2 Playback modules without faders.
- 1 Superplayback/Programming module.

S3 Control Surface

The S3 control surface features:

- 2 Playback modules with faders.
- 2 Playback modules without faders.
- 1 Superplayback/Programming module.

S1 Control Surface

The S1 control surface features:

- 1 Playback module with faders.
- 1 Superplayback/Programming module.

M1 Control surface

The M1 control surface features:

- 1 Playback module with faders.

Grand Master and DBO

The rotary Grand Master control scales the intensity of all output from the Vista system.

The Dead Black Out (DBO) button takes all intensity to 0%, while it is held down.

Function keys

The function buttons provide quick access to many commands and functions. The buttons are user configurable so you can assign functions you use frequently and have access to function at the press of a button rather than having to choose the option from a menu or icon.

The number and location of the function buttons varies from console to console:

- L5, T4 and T2 consoles have 12 buttons located above the main display
- I3 consoles have 6 buttons located at the top centre of the console
- S3 control surfaces have 5 buttons located at the top centre of the console
- S1 control surfaces have 6 buttons located below the GM & DBO controls
- M1 control surfaces do not have function buttons.

Your keyboard Function keys 'F1 – F12' can be used in place of these buttons. On the Vista PC version, the Function keys 'F1 – F5 or F1 – F12' can be used in place of these buttons.

To assign a function to one of the buttons:

1. Click the Console button to display the Console screen. The function keys are at the top of the Console screen.

2. Right-click on a button and select a command from the popup menu.

The modifier keys

The LR key (L and T series consoles only)

The **LR** button changes a pen tablet tap to a right tap. To 'right-click' hold this button down then tap the pen.

The coloured modifier keys

The coloured (Red, Yellow, Green, Blue) modifier buttons provide alternate functions when you press a button on the console while programming and during playback.

You can also use keyboard equivalents in place of the modifiers:

- · *Shift* is equivalent to the Red buttton
- · *Control (Command)* is equivalent to the Yellow button
- · *Alt (Option)* is the equivalent of the Green button
- · *Control + Alt* is the equivalent of the Blue button.

The Super Playback / Programmer controls

These controls are used during programming and playback. To switch functions press the 'Menu' button and then select from the three options:

- · IPCG – stands for Intensity, Position, Colour, Gobo, Beam and puts the controls into editing (aka programming) mode. In this mode the buttons and encoder wheels can be used to set Intensity levels, Pan Tilt and all the other features of your fixtures
- · Play – puts the controls into playback mode . In this mode the controls and buttons provide quick access to the regular and advanced cuelist playback options.
- · SFX – stands for Smart Effects. This mode lets you use the buttons and encoders control the most frequently used effects settings.
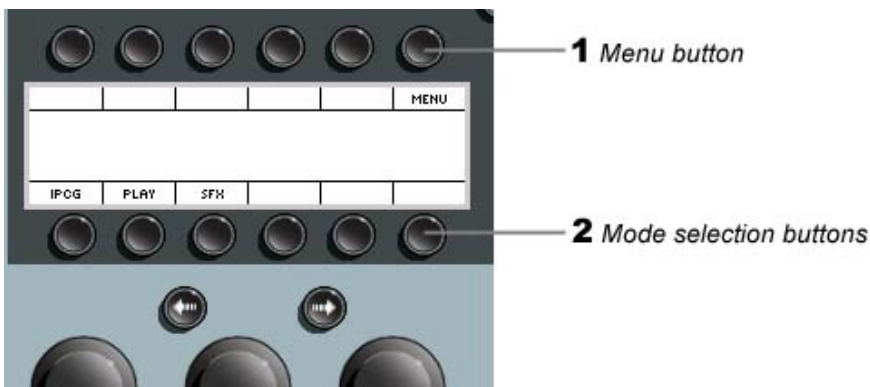
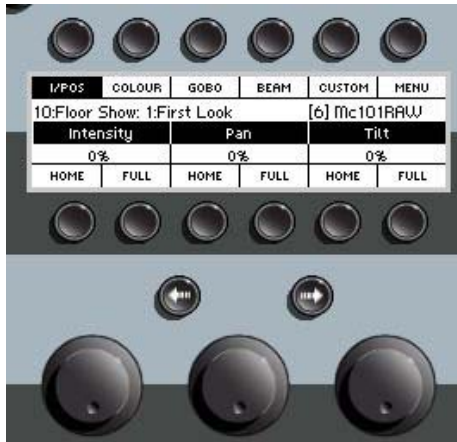

Editor (aka Programmer) mode

When you select fixtures in the Chooser or Timeline window the hardware controls can be used instead or the on screen palettes to adjust setting for Intensity, Position, Colour, Gobo and Miscellaneous parameters.

Programmer mode

If the controls are not already in Programming mode press the menu button then the button labelled 'IPCG' to switch into to programmer mode:

This button…	does this…
I /POS	Press this button to put the encoders and lower 6 buttons in Intensity plus Position mode. Pressing it again cycles the controls through any available parameters or alternate modes (Angular position and Strobe & Shutter).
Col	Press this button to put the encoders and lower 6 buttons in Colour mode (HSV). Pressing it again cycles the controls through any available parameters or alternate modes (CMY, RGB, Colour Wheel Colour)
Gobo	Press this button to put the encoders and lower 6 buttons in Gobo mode. Pressing it again cycles the controls through any available parameters or alternate modes.
Beam	Press this button to put the encoders and lower 6 buttons in Beam mode. Pressing it again cycles the controls through any available parameters or alternate modes.
Custom	Press this button to put the encoders and lower 6 buttons in custom feature mode. For more information on creating custom encoder pages see *Creating Custom encoder pages on page 6-60*
Menu	Opens the Super Playback top level menu screen. Double tap the menu button to switch between Playback and Programming mode.
Home (Clear)	Sets the associated feature to its default (or home) value.
	Hold the yellow modifier (or Ctrl key) to clear the feature settings.

This button…	does this…
Full (Zero)	Sets the associated feature to its maximum values. I.E. this would set Intensity to 100. Hold the yellow modifier (or Ctrl key) to set the feature to its minimum value.
>>	For Gobo (or Colour) wheel features this button toggles between the fixtures wheels – i.e. Gobo wheel 1, Gobo wheel 2, etc
Mode	For Gobo wheels that have rotating gobos this button toggles the rotation encoder between Index and Spin mode.
< >	This button reverses the direction of a spinning colour or gobo wheel or individual gobo.
Encoders	Rotate to set the associated parameter to the required value.
<- Left arrow	Selects the previous fixture.
-> Right arrow	Selects the next fixture.

Super Fine Mode

Hold down the Green modifier button or the Alt (Option) button, on your keyboard, to put the encoders into super-fine mode.

Fixture Selection buttons

The left and right arrow buttons located just above the encoder wheels can be used to select the previous or next fixture in a selection.

If there's no fixtures selected pressing the buttons will cycle through all the patched fixtures.

After using the next and previous buttons you can reselect all fixtures by pressing both buttons together.

Editor intensity

The overall intensity from the Editor is controlled by the fader located on the left side, below the encoder wheels.

Editor 'Live' time

The fader located, on the right side, below the encoder wheels can be used to adjust the Live time. At the top (100%) position the Intensity, Position, Colour and other feature settings fade in over the 'Live time' set in the Editor window. At the bottom (0%) position the feature settings fade in over 0 seconds – i.e they snap to the new value.

Super Playback mode

In playback mode the Super Playback section controls and buttons automatically link to the selected playback. This means that when you press the 'Select' (*) button on any cuelist playback you can control that cuelist with the faders, buttons and encoders in this section.

Play controls

The faders and buttons below the encoders provide quick access to all the cuelist play function.

This button…	does this…
⏮	Jumps to the start of the Cuelist.
⏪	Cues backwards to the previous Cue marker of the selected Cuelist.
⏩	Cues forwards to the next Cue of the Cuelist.
⏭	Jumps to the end of the selected Cuelist.
⬤	Not used
▶ upper	Not used
⏸	Pauses playback of the selected Cuelist(s).
▶ lower	Commences (Go) Playback the selected Cuelist(s).
▭ (Left flash)	Flashes intensity of the super playback Cuelist to the maximum value.
▭ (Right) Crossfade	Not used

Ü You can configure these buttons in the Console window. *See Assigning a component to the playback controls on page 12-13*

Super Playback mode extended controls

If the controls are not already in Playback mode press the menu button then the button labelled 'Play' to switch into to Playback mode. The top row of buttons let you select from the playback control pages:

This button…	does this…
Control	Selects the normal cuelist play mode controls.
Chase	Selects the cuelist Chase controls.
SmartFX	Selects the cuelist SmartFX controls.
Load / Clear	Press Load then any key on a normal playback to load that cuelist into the Superplayback. Press Yellow + Load (Ctrl + Load) to Clear the Superplayback.
Lock	Locks the current cuelist onto the Superplayback. When lock is selected pressing Select (*) on another playback will not change the Superplayback cuelist.
Menu	Opens the Superplayback top level menu screen. Double tap the menu button to switch between Playback and Programming mode.

Cuelist Control (normal) mode

In the Cuelist 'Control' mode you can control the playback rate and select from several play options using the bottom row of buttons:

This button…	does this…
Rate	Enables the left encoder for rate control of playback. Turn the encoder to the left to slow the playback rate and to the right to speed it up.
100%	Resets the playback rate to normal. At 100% the cuelist plays back using the fade times set in the cues.
Jump	Opens the cuelist jump window on the main screen. Used to jump from one cue to another cue out of sequence. Select the Cue you want to jump to in the Jump window. See *Using the Jump window on page 12-10* Press Go to fade to that cue.
Shuttle	Enables the middle encoder for manual control of playback. Move the encoder clockwise to advance and anti-clockwise to go backwards.

This button…	does this…
Release	Releases the cuelist. Fixtures return to the previous settings or to their defaults.
Select	Selects the cuelist on the SuperPlayback.

Cuelist Chase mode

In the Cuelist 'Chase' mode you can start a cuelist chasing, change the chase rate and select the chase direction:

This button…	does this…
Rate	Enables the left encoder for rate control of playback. Turn the encoder to the left to slow the playback rate and to the right to speed it up.
Sync	Synchronises the chase.
Forward	Turns the chase mode on and runs forwards. If the cuelist is already chasing forward pressing the button will turn chase mode off.
Reverse	Turns the chase mode on and runs backwards. If the cuelist is already chasing backward pressing the button will turn chase mode off.
Bounce	Turns the chase mode on in bounce mode (i.e. run from first to last cue then last to first cue). If the cuelist is already bouncing pressing the button will turn chase mode off.
Random	Turns the chase mode on and runs in a random order. If the cuelist is already in random pressing the button will turn chase mode off.

Cuelist FX (effects) mode

In the Cuelist 'FX' mode you can control the size, rate and phase of effects that are running on the console:

This button…	does this…
Encoders	Enables the encoders. To avoid accidentally changing FX settings turn the encoders off.
Reset	Resets the effect(s) Size to it's programmed settings.
Reset	Resets the effect(s) Rate to it's programmed settings.

This button…	does this…
All / Cuelist / Active. (press to toggle)	All - selects all running effects for adjustment Cuelist - selects the effects in the selected cuelist for adjustment Active - selects the active effects for adjustment
Forward / Backward (press to toggle)	Changes the direction of the selected effect(s).
Sync	Re-synchronises the selected effects.

Using the Jump window

During playback you can use the jump window to quickly select a cue, out of the normal sequence, and fade it in.

To open the Jump window:

· press a Select button on any playback to bring that cuelist onto the super playback.

· press the Jump button in the super playback

Vista displays the Jump to Cue window:
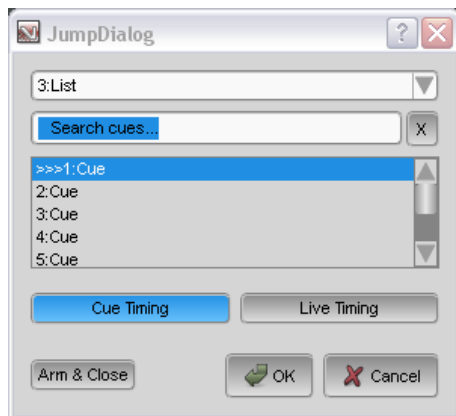
This option…	does this…
Cuelist	Selects the cuelist to jump to. This field is automatically set to the cuelist on the superplayback.
Cue	Selects the cue to jump to. To find the cue you want to jump to type the cue number or a part of the cue name in the search box, or select the cue from the list.
Cue Timing	Crossfades using the new cues fade time.

This option…	does this…
Live Timing	Crossfades using the Live time.
Arm & Close	Closes the Jump window with the selected cue ready to play. Press the Play button to complete the jump.

To complete the Jump and fade in the selected cue, without using the Arm and Close option;

·   press the keyboard Enter key, or

·   use the Cuelist's Go button, or

·   click the OK button.

Playbacks with faders

Depending on your console type you will have one of more 'Playback with fader' sets consisting of 5 playbacks. On the M1 console the playback set does not include a display.
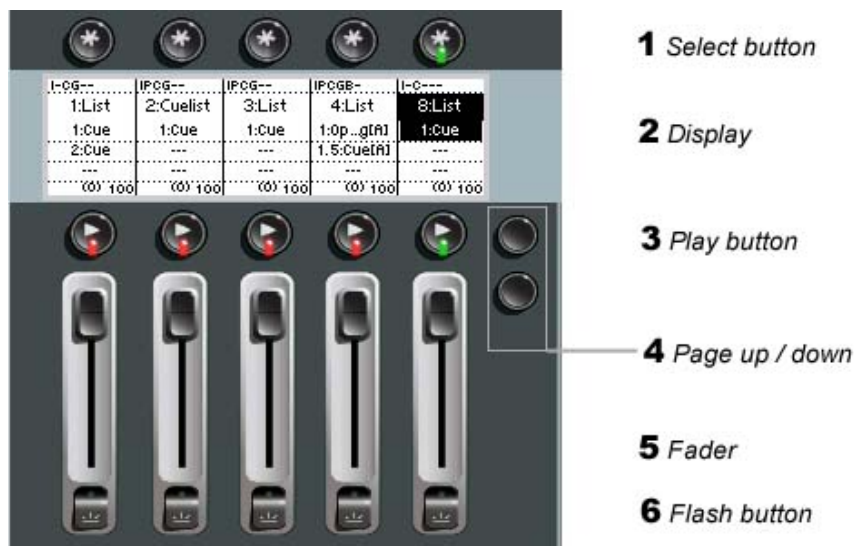
These playbacks consist of:

·   a Select button – normally used to select the playback

·   a display – used to display the name of the cuelist or other component that's being controlled

·   a Go button – normally used to play the the cuelist or other component

·   a fader – used to control the intensity of a cuelist

·   a flash button – normally used to momentarily flash the intensity of a cuelist to full.

Playbacks without faders

These button-only playback sets are available of the L5, T4, T2, I3, and S3 consoles.
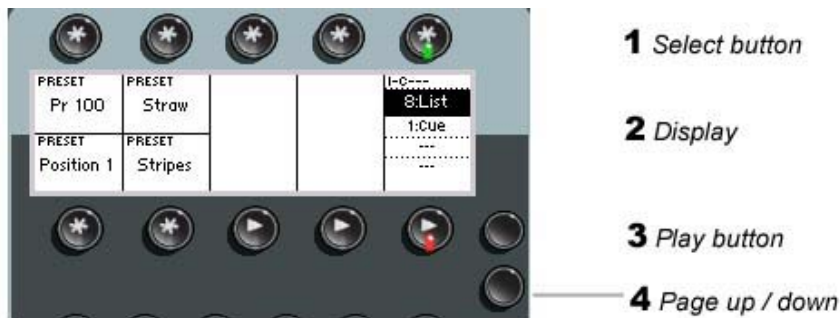

These playbacks consist of:

· a Select button – normally used to select the playback

· a display – used to display the name of the cuelist or other component that's being controlled

· a Go button – normally used to play the cuelist or other component.

Page controls

Each playback module consists of 5 playbacks. Cuelists and other components can be assigned to these controls as pages. To change pages:

· press the Page Up button to advance to the next page number

· press the Page Down button to go back to the previous page number.

Configuring the console for Playback

Once you've stored a number of Cuelists, Groups, Presets, Extracts, etc, you can assign those components to the playback controls the way you want them, using Console screen.

When you click the Console button on the toolbar Vista displays the Console screen:
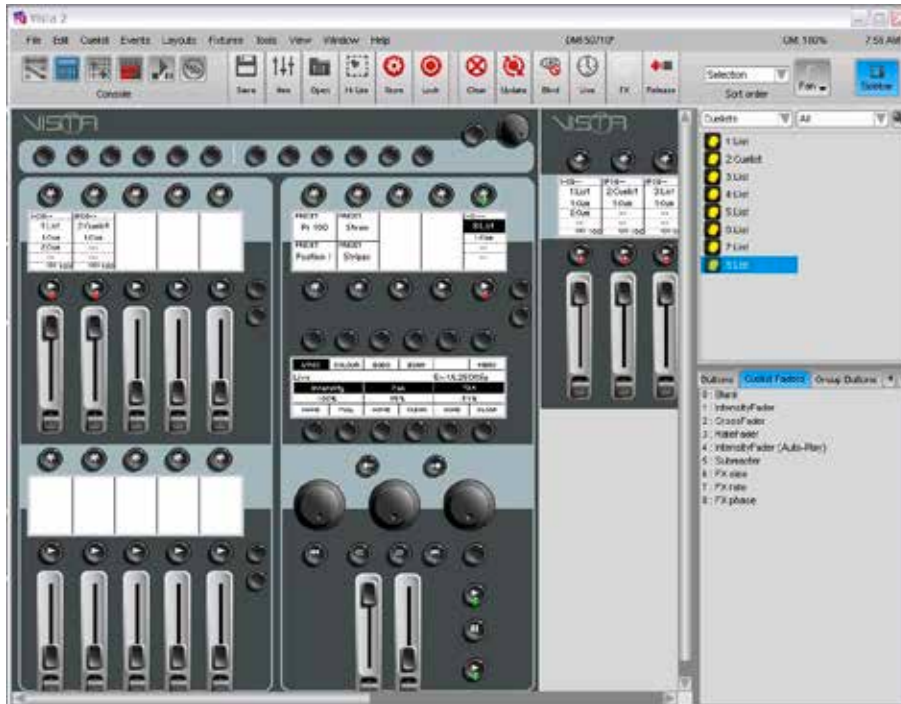
On this window the Sidebar shows a quickpicker where you can display and filter the components you want to assign to the console. You can:

- · choose a component type (Cuelists, Groups, Presets, Extracts, Smart FX, Snapshots) from the top dropdown.

- · filter the list by selecting a set from dropdown. For example you can filter the list to show just Presets that include Colour.

Assigning a component to the playback controls

Once you've selected the component type you want you can drag and drop it onto the label area corresponding to the console's LCD windows:

Ü Tip: You can assign any combination of components to the playback controls – Cuelists, Groups, Presets, Extract, Effects, Favourites and Snapshots.

Splitting playback controls

When a component is assigned to a playback it uses all the controls that are available – the Go and Choose button plus the fader and flash button if available, but you can split a playback set to increase the number of components that can be placed on a page.

To do this, move the cursor to the top of the white label area. When the pointer changes to a split bar [=], click and drag down:
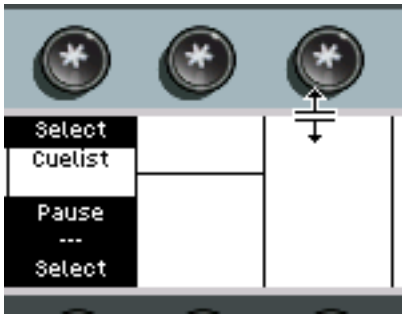

Playbacks with faders can be split three ways. To do this move the cursor to the middle of the label area. When the pointer changes to a split bar [=] click and drag down.

Ü **Tip:** You don't have to split all the playbacks on a page the same way, you can split on two ways, another three ways and so on.

Expanding playbacks

Playbacks can also be extended to provide more physical button controls for playback of a cuelist. Up to five playbacks in the group can control a cuelist:
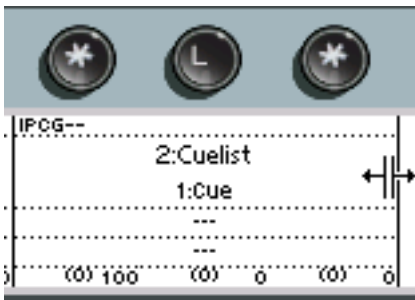
To expand a Playback move the cursor to the right side of the label area. When the pointer changes to a split bar [| |] click and drag to the right.

Ü **Tip:** You can expand a Playback before or after a Cuelist has been assigned, but you can only expand into an area that is not occupied by another component.

Configuring the playback buttons and faders

Normal, split and expanded playbacks have their buttons and faders set up with the default configuration. To see how the buttons and faders are configured press the Help key [!] on L or T series consoles. On a Mac or Windows system hover cursor over an item to show a tooltip.

Vista displays the button and fader functions on the LCDs and in the Console window:

You can assign different actions to these buttons and faders to suit your requirements or playback style.

To assign an action:

1. Click the Console button to display the Console screen.

2. Click on the 'Cuelist Buttons' or 'Cuelist Faders' tab in sidebar.

3. Click on the required button or fader action and drag it on top of the button or fader you want to use for that function.

Some buttons and faders must be used together. For example if you make a fader a 'Cross fader' you should also assign a 'Toggle Xfader' button to the button below the fader. Likewise if you make a fader a 'Rate fader' you should also assign a 'Toggle rate fader' button to the button below the fader.

Cuelist buttons

The following button actions are available:

This button action …	does this…
Unassigned	The button has no action.
Play	Plays (starts playback of) a cuelist.
Jump	Opens the Jump window. See *Using the Jump window on page 12-10*
Inhibit	Stops the cuelist playback, Intensity is reduced to 0 and all other parameters revert to their previous setting. Press the button again to enable or re-assert the cuelist.
Flash	Sets the button to momentarily flash Intensity to full. This is the default assignment for the square buttons below the faders.
Flash Submaster	Sets the button to momentarily flash Intensity to full on a Submaster.
Pause	Pauses playback of a cuelist.
Edit	Opens a Cuelist, for editing, in the Editor window.
Skip Forward	Steps forwards to the next Cue of the cuelist.
Release	Releases a cuelist.
Skip Back	Steps backwards to the previous Cue marker of the selected cuelist.
Skip to End	Jumps to the end of the cuelist.

This button action …	does this…
Select	Selects the cuelist. This is the default assignment for all * buttons.
Flash Latch	Toggles the cuelist intensity between full and off.
Solo	Flashes the cuelist intensity to full and blackouts all other output.
Re-assert	Re-asserts a cuelist that has been overridden.
Chase Toggle	Toggles between Chase on and Chase off.
Chase Direction	Cycles between the available chase directions in this order: Forward, Backward, Bounce, Random.
Chase Forward	Sets the Chase direction to forwards (the normal setting). N.B. if the chase is already running forwards the button will toggle between chase off and chase forwards.
Chase Backward	Sets the Chase direction to backwards (or reverse). N.B. if the chase is already running backwards the button will toggle between chase off and chase backwards.
Chase Bounce	Sets the Chase direction to bounce. N.B. if the chase is already bouncing the button will toggle between chase off and chase bounce.
Chase Random	Sets the Chase direction to random. N.B. if the chase is already set to random the button will toggle between chase off and chase random.
Skip to Start	Jumps to the start of the cuelist.
Exit Loop	Stops a loop and goes to the next cue.
Sync FX	Re-synchronises running effects.
Sync Chase	Re-synchronises running chasess.
Play Toggle	Plays the next cue or releases the Cuelist if it is already playing.

Cuelist faders

The following fader actions are available:

This fader action …	does this…
Blank	Fader has no action.
Intensity Fader	Sets the fader to control the Intensity of a cuelist. This is the default assignment for all faders.
Cross Fader	Sets the fader to manually crossfade between cues. Must be used in conjunction with a 'Toggle Xfader' button.
Rate Fader	Adjusts the playback rate.
FX Size	Controls the size of any effect in the cuelist.
FX rate	Controls the rate of any effect in the cuelist
FX phase	Controls the phase offset of any effect in the cuelist
Live Timing	Controls the 'Live' fade time – used for crossfades from the Editor etc.

Ü **Tip:** You can save the button / fader configuration as a default to be used whenever a cuelist is assigned to a playback. To do this right-click on a cuelist and choose the 'Save as default cuelist configuration' option.

Playback status indication

For Cuelists the LCD and LEDs inside the playback buttons indicate the current status of each playback as follows:

	Normal (2 Button Playback)			Split (1 Button)
	Lower Button	Upper Button	LCD	Button
Current			Inverted	
Active		Green		
Paused	Green Flashing			Green Flashing
Running	Green			Green
Completed	Red			Red
Overridden		Red Flashing		Red Flashing

Playback popup menu

You can make changes to Cuelists Pages and other components using the Playback context menu. To open this menu right-click on the label area of any playback control. Vista displays the context menu:
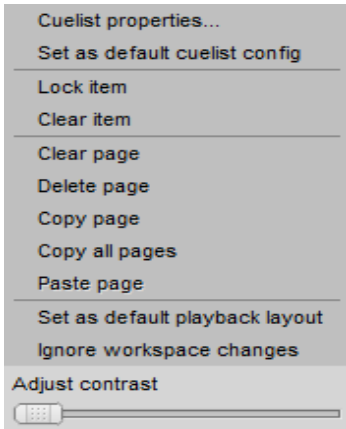
This option…	does this…
Cuelist Properties	Opens the Cuelist properties window – see below.
Set as default cuelist configuration.	Sets the selected cuelist's buttons and faders as the defaults for all new cuelists.
Lock item	Locks the selected component. Components that have been locked will not be altered or replaced when a new Page or Snapshot is loaded.
Clear item	Clears the selected playback – the assigned component is removed from the control.
Clear page	Clears all playbacks on the current page – the assigned components are removed and a blank page is left.
Delete page	Deletes the current page.
Copy page	Copies the current page
Copy all pages	Copies all pages on the playback set
Paste page(s)	Paste the pages or pages
Set as default playback layout.	Sets the selected cuelist's buttons and faders as the defaults for all new cuelists.
Snapshot enabled	Allows the selected playback to be included in a snapshot.

This option…	does this…
Set as default cuelist configuration	Sets the selected cuelist's properties as the defaults for all new cuelists.
Adjust contrast	Adjusts the contrast of the selected LCD window

Setting cuelist properties

To set the cuelist properties, right click on the Cuelist name and the Properties option from the popup menu. For more information see *Cuelist Properties* on *page 7-26*

Group Masters

You can assign any Group to a playback. To do this:

To assign an action:

1. Click the Console button to display the Console screen.

2. Select 'Groups' from the drop down menu at the top of the sidebar.

3. Drag and drop the Group onto a playback position. A Group can be controlled by a single button, on a split playback, or by a playback with a fader and / or multiple buttons.

Once you have assigned a Group to a playback you can select actions for the buttons and fader associated with the Group.

To assign an action:

1. Click the Console button to display the Console screen.

2. Click on the 'Group Faders' or 'Group Buttons' tab in the sidebar.

3. Click on the required fader or button action and drag it on top of the button or fader you want to use for that function.

Group Fader

The following fader actions are available:

This Group fader type	does this…
Scale (-) also known as an Inhibitive or Subtractive group master	Reduces the intensity of fixtures in the group. When a Scale(-) fader is pulled down, while a cuelist is being played, the intensity of fixtures in that group will be reduced.
Scale (+) also known as an Additive group master	Increase the intensity of fixtures in the group. When a Scale(+) fader is pushed up, while a cuelist is being played, the intensity of fixtures in that group will be increased.
HTP Highest takes precedence	Control the the intensity of fixtures in the group on an HTP basis. If there's no cuelist, containing the fixtures in the group being played the fader will set the level of the fixtures between 0 and 100%. This is the default fader setting for groups.

Group Buttons

The following button actions are available:

This button action …	does this…
Blank	The button has no action.
Select	Selects the group. This is the default button setting for groups on playbacks with a single button .
Flash (-)	When a Flash(-) flash button is pressed the intensity of fixtures in that group will go to 0%.
Flash (+)	When a Flash(+) flash button is pressed the intensity of fixtures in that group will go to 100%.
Flash HTP Highest takes precedence	Control the the intensity of fixtures in the group on an HTP basis. If there's no cuelist, containing the fixtures in the group, being played the button will set the level of the fixtures between to 100%. This is the default flash button setting for groups.
Solo	Brings the intensity of fixtures in the group to 100% and blacks out all other fixtures. Releasing the button restores the previous fixture levels.

Pages

Each Playback Group can be paged independently of the others, allowing for a wide variety of console configurations. To change pages, press the Up or Down arrow buttons located to the right of each playback group. On the console screen you can also select a page from the popup page selector.

Locking a playback to prevent changing

Playbacks can be Locked to prevent whatever is assigned to that location being changed when a new page or snapshot is selected.

Components can be locked, so that they are not affected by Page changes or Snapshots being loaded. To do this right-click on LCD, in the Console window, and choose the 'Lock item' option from the popup menu.

Page Holdover

If a cuelist is playing when you change pages it is held and that playback does not load the contents of the new page. The playback that is held will join the new page when:

- · The cuelist is released or fully over-ridden or
- · You press the page up and down buttons simultaneously.

Snapshots

Snapshots allow you to store and recall the exact state of the console's output, buttons, faders and other controls. They can be used to quickly re-configure the controls for playback, programming or a mixture of both. For example, you may have a snapshot set up for each song or part of a show. You might also have a snapshot for programming with the playback buttons assigned to provide quick access to Groups, Presets Extracts and Effects.

Snapshots can not only recall Page and Cuelist settings but also the state of the Cuelist. For example if a Cuelist is active and in Cue 3 when the snapshot is recorded then the same state can be recalled.

To record a snapshot

1. Use the console window to assign components and configure the controls and pages the way you want them to be.

2. Click the Create Snapshot button (normally Green + F9 or Alt+F9) on the main toolbar. Or select the 'New Snapshot option from the Components menu. Vista displays the Create Snapshot window:

This option…	does this…
Name	Sets the name for the snapshot
Record	Sets the options for the snapshot:
Playback State	The state of cuelists on the current pages will be included in the snapshot. For example if a Cuelist is active in Cue 2 when the snapshot is recorded it will also be active in Cue 2 when recalled.
Fader Levels	Includes the current fader levels in the snapshot.
Workspace state	Saves the contents (cuelists, groups and other components) of all playbacks.

Ü Locked components are protected from any changes by snapshots. If a cuelist is part of a snapshot and it is also running on a module that will not be affected by the snapshot there can be a conflict.

In this situation:

- · If the cuelist is active on the unaffected module, it is not changed.
- · If the cuelist is inactive on the unaffected module, it is restored to the state stored in the incoming snapshot (i.e. activated or released).

Assigning a Snapshot to a Playback

You assign Snapshot to a playback button in the Console window.

Recalling a Snapshot

To recall a Snapshot, you can:

- · Use a playback button that has been set up as a snapshot, or
- · Right-click on a snapshot icon and select the 'Apply' option from the popup menu, or
- · Click on the snapshot in one of the Quick picker windows.

Updating a Snapshot

To update a Snapshot:

1. Make sure the snapshot is active.

2. Change the assignment and state of components and pages as required.

Right-Click on the snapshot icon, in the Console sidebar or any QuickPicker and select the Update option from the popup menu. Vista displays the 'Update snapshot' window.

13. The Output window

To open the Output window click on the icon on the main toolbar or select the 'Output' option from the Window menu. Vista displays the Output window in icon view:
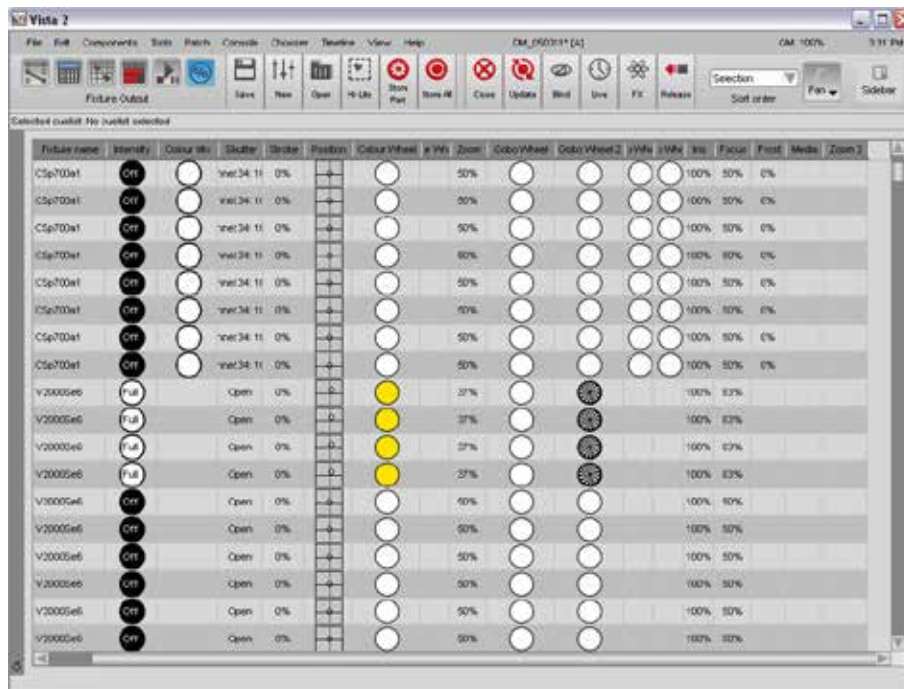
You use this screen to display the state of fixtures that are active – that is fixtures that have one or more parameters that are being controlled by the playbacks. The window is split vertically with multi-parameter fixtures displayed in the top pane and conventional fixtures (i.e. dimmers only) being shown in the lower pane.

If you have a large main screen or external monitors attached, you can add a new Output window and drag it so that it is always in view. To do this select the 'Add Dockable window > Output' option from the View menu.

Adding output view tabs

You can create as many different views of the output as you like, each arranged in its own away. To create a new output view:

1. Select the 'Add view' option from the View menu. Vista creates a new view tab at the bottom of the window.

2. Type a name for the layout and click OK. Vista creates a new layout and adds a corresponding 'tab' at the bottom of the layout panel.

To switch between layouts click on the tab you want to use.

Configuring the Output window

The Output window has a popup menu that lets you configure how the Output information is displayed. Right-click on the screen to show the configuration options:

```
Text Mode

Source Mode

Follow Fixture Selection

Add Selected Fixtures

Remove Selected Fixtures

Show Only Selected Fixtures.

Clear View

Less detail

Resize All Columns

Rename View

Remove View
```
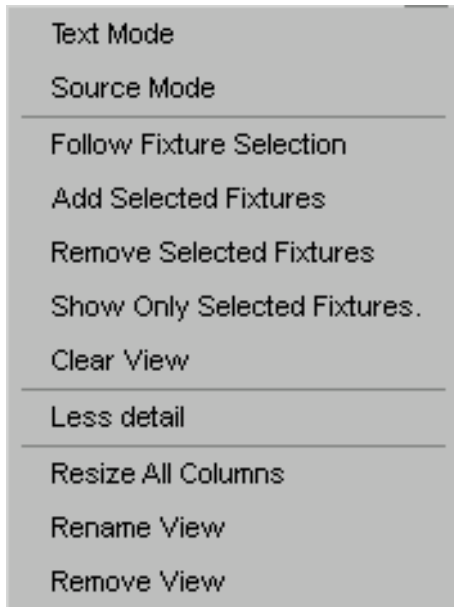
This option…	does this…
Text Mode	Shows the actual values of the features. If a parameter is set to a preset value, the name of the preset will be displayed rather than the value.
Graphic mode	Shows a graphic representation of the features.
Source mode	Shows where each feature is coming from. For example a fixture might have Intensity and Position coming from a Cuelist and Colour from the Editor Live tab.
Follow Fixture selection	Shows the selected fixtures at the top of the view.
Show all fixtures	Shows all fixtures.
Add selected fixtures	Adds the fixtures, selected in the Fixture Chooser, to the output window.
Remove selected fixtures	Removes the selected fixtures from the output window.
Show only selected fixtures	Filters the window to only show the selected fixtures.

This option…	does this…
Clear view	Clears all fixtures from the output window.
Resize all columns	Resizes all columns to their default size.
Rename view	Opens the Rename View window where you can type a new name for the selected layout view.
Remove view	Deletes the selected layout view.

The Source view shows the source of control for each of the parameters. For example if a fixture's colour settings have come from a cuelist named 'Rainbow', that name will be displayed in the Colour column for that fixture.

Selecting fixtures

If you click in the ID or name cell of a fixture in the tracking view window, Vista selects that fixture or adds it to the existing selection.

14. Appendix 1 – menu & toolbar reference

Menus

File menu

This option…	does this…
New Show	Creates a new show file, opening the Patch window.
Open Show	Opens an existing Show file.
Save Show	Saves the current show.
Save Show As	Saves the current show with a new name.
Networking	Opens the Vista Network window where you can setup connections with other Vista consoles for tracking backup and with D1 units for distributed processing.
Export	Opens the Export window where you can export a Show Archive File, the user added Fixture Library, the user created effects, or all show information.
Import - Show - Effects - User data	 Open a window to import a Vista show Archive (*.jvz) Opens a window to import a Vista effects file (*.jvfx) Opens a window to import a User Data archive (*.jvud)
User Preferences	Opens the system User Preferences window where you can configure preferences for naming formats, patching, console hardware characteristics, serial and Midi inputs and playback.
Timecode	Opens the Timecode properties window where you can enable or disable timecode and set the timecode source, frame rate and offset.

This option…	does this…
Lock	
- Entire console	Prevents any operation of the console.
- Disable editing	Only allows playback.
- Lock current show	Prevents any changes being made to the show file.
Control panel (consoles only)	Opens the system properties window where you can calibrate the screens, configure displays, local area network and date settings on a L, T or I series console.
Quit Application	Close the Vista application and exit.

Edit menu

This option…	does this…
Select All (Ctrl+A)	Selects every fixture, in the chooser or patch window and every event in the timeline window .
Undo (Ctrl+Z)	Cancels your last action.
Redo (Ctrl+Y)	Repeats your last action.
Cut (Ctrl+X)	Cuts the selected objects.
Copy (Ctrl+C)	Copies the selected objects.
Paste (Ctrl+V)	Pastes the selected objects.
Paste Special (Ctrl+Shift+V)	Opens the Paste Special window so you can choose which attributes of the objects you copied to paste.
Remove Cue Alias	Removes the alias link from the selected cue.
Delete (Del)	Removes the selected event(s) from the timeline.
Live Properties	Displays the Properties window so you can make adjustments to the Priority and Stop Effects mode of the Live tab.
Cuelist Properties	Displays the Properties window so you can make adjustments to the selected cuelist.

This option…	does this…
Cue Properties	Displays the Properties window so you can make adjustments to the selected cue.
Highlight	Opens a submenu where you can select options to edit, update or reset the Highlight settings.
Lowlight	Opens a submenu where you can select options to edit, update or reset the Lowlight settings
Home	Opens a submenu where you can select options to edit, update or reset the Home preset.

Components menu

This option…	does this…
New Cuelist	Opens a new empty cuelist. Switches to the Chooser window if the Chooser or Timeline is not the top window.
Open Cuelist	Opens the Select Cuelist window where you can open an existing cuelist.
Close Cuelist (Ctrl+W)	Closes the selected cuelist.
Save changes to Cuelist. (Alt+S)	Saves all changes made to the selected cuelist.
Discard changes to Cuelist	Removes all changes made since the cuelist was opened or 'Save changes' was selected.
Duplicate Cuelist	Opens the Copy Cuelist As window where you can save a copy of the selected cuelist with a new name and number (ID)
New Preset	Opens the Create New Preset window where you can save a preset.
New Extract	Opens the Create Extract window where you can save a extract.
New Snapshot	Opens the Create Snapshot window where you can save a snapshot.

This option…	does this…
New SmartFX	Opens the Create Effect window where you can save an effect.
New Fixture Group	Opens the Create Group window where you can save a group of fixtures.
Update Fixture Group	Opens the Update Group window where you can save changes to a group.

Tools menu

This option…	does this…
Cue only editing	Sets the programmer to undo any changes made in the cue being edited, in the following cue.
Mark Cue (Move in Black)	Opens the Move in Black window. This enables you to move fixtures (and / or set other features such as colour, gobo and beam) when their intensity is at zero so that the changes cannot be seen.
Insert Commands	Opens the Macro Properties window. This lets you add commands, in the cuelist's timeline to activate other cuelists or actions.
Edit Command	Opens the Macro Properties window for the selected command.
Select Audio	Opens the select audio window for the selected cuelist.
Date & Time events	Opens the Date and Time Events window where you can configure actions (for example to play a cuelist) based on the date and time.
Block cue (Ctrl + B)	Copies all tracked information to the current cue and adds release events for other feature types in this cuelist.
Unblock cue	Removes all events added when a cue is blocked.
Superblock cue (Ctrl + Shift + B)	Copies all tracked information to the current cue and adds release events for other feature types. When a super-blocked cue is run any other cues being playing, that would affect the look of this cue are released.
Store All	Opens the Store Look window where the contents of the editor can be saved as a cue.

This option…	does this…
Store Part (Shift + Return)	Opens the Store Current Events window where the contents of the editor can be saved as a cue with options for tracking, blocking and more.
Update (Ctrl + U)	Opens the Update Dialog window where the contents of the editor can be used to update a cue or preset.
Clear All	Opens a submenu with options to Clears all events or events by feature type from the selected cue or the editor's Live tab.
Clear / Close	Clears the Live tab or closes the selected Cuelist. If the cuelist has unsaved changes opens the CloseCuelist window where any changes can be committed or discarded.
Clear selected	Clears all events from the selected fixtures.
Home selected	Inserts events to send all features of the selected fixtures to their home values. i.e. Intensity to 0%, position to 50/50, colour to clear, etc.
Remove selected	Opens the Remove Programming window where you can remove events from the selected fixtures.
Cues - (Ctrl + Shift + I) - (Alt + I) - (Ctrl + I) - (Ctrl + Left arrow) - (Ctrl + Right arrow)	Opens the cues submenu with commands to: - Append a new cue at the end of the cuelist. - Insert a new cue before the selected cue. - Insert a new cue at the playhead position. - Insert a new cue after the selected cue. - Delete the selected cue(s) - Merge the selected cues - Renumber the selected cue(s) - Select the Previous cue - Select the Next cue - Set the cue follow mode to Auto, From Start (of previous), From End (of previous) or Halt (the default) - Move Start times of the selected cues. - Select Audio
Live timing	Opens the Live Timing window where you can set the fade time for the Live tab of the editor.
Fan mode	Opens a submenu where you can set the fan mode for fixture selections.
Jump (Ctrl+ J)	Opens the cue JumpDialog window.

This option…	does this…
Highlight (Ctrl + H)	Turns highlight on or off. When on the selected fixture(s) are set to the values stored in the highlight preset (normally 100% intensity, open white)
Stop SmartFX	Opens a submenu where you can All effects or effects by feature type that are running on the selected fixtures
Smart FX editor (Ctrl + K)	Opens the SmartFX panel in the sidebar where you can create a new effect or edit a running effect
Blind	Turns off all output from the editor
Release All	Releases all active cuelists
Arm Timecode Cuelists	Sets all cuelists, that include timecode cues, to listen for incoming timecode.
Remove redundant cuelist events	Removes events that don't make any changes to the tracked state of the cuelist
Learn timing	Opens the Learn Timing window where you can set cue timecode values by playing the cuelist, in the editor, and hitting the Go button at the time you want the cue to start.
Set Cuelist Timecode	Opens the Cuelist Start Timecode window where you can edit the Start Timecode or a set an offset.
Clean up show	Removes orphaned programming.
Midi Show Control	Enables or disables Midi Show Control (MSC)

Patch menu

This option…	does this…
Show Patch	Switches to the Patch window, if it is not already open.
Delete fixtures	Removes the selected fixtures from the patch.
Rename fixtures	Opens the Rename window where you can enter a custom name for the selected fixture(s).
Renumber fixtures	Opens the Renumber window where you can change the ID number for the selected fixture(s). The number must not be in use already.

This option…	does this…
Multi-patch fixtures	Creates a copy of the selected fixture, with the same ID and places it in the dock. The new fixture can then be dragged to an available address on one of the universe tabs. Multi patching lets you treat 2 or more fixtures as one.
Change Fixture type	Opens the Change Fixture type window where you can change a fixture to a different type.
Change Fixture type (All of selected type)	Opens the Change Fixture type window where you can change all fixtures of the selected type to a different type.
Clone Fixtures	Makes a copy of the selected fixture(s) and places it in the Fixture pool at the bottom of the Patch window.
Import Fixture Library	Opens a file browser where you can import a Vista 2 fixture type library archive (.jvft).
Extract selected fixtures to user library	Creates a copy of the selected fixture(s) in the User library.
Fixture Editor	Opens the Fixture Editor where you can create a new fixture file or edit an existing one.
Import Patch file	Opens the Import Patch file window where you can select a suitably formatted (.csv) patch file to import.
Export Patch file	Export a CSV file of the Patch information.
Import Media Server thumbnails.	Open the CITP window where you can select a media server with compatible support for CITP and import copies of the fixtures media thumbnails.
Check for updated fixture profiles	Checks the fixture library for newer versions of all patched fixtures.
Use default media	Used to reset fixtures to use their default colours, gobos and media.
Connect Universes	Opens the Connect Universes window where you can connect the Vista universes to DMX outputs, sACN, Artnet, and Pathport devices and the Jands UD512 USB to DMX cable.
Strike	Sends a strike command to the selected fixture(s).
Douse	Sends a douse command to the selected fixture(s).

This option…	does this…
Reset	Sends a reset command to the selected fixture(s).
Park Fixtures	Holds the fixture in it's current settings. For example to provide fixed lighting for backstage. Once you've parked a fixture it will ignore all instructions until it is un-parked.
UnPark Fixtures	Sets a parked fixture to operate normally.
Show Parked Fixtures	Opens the Parked Fixtures window to display a list of parked fixtures and their settings.

Console menu

This option…	does this…
Show Console	Switches to the Console window, if it is not already open.
Desklights	Opens the desklights window where you can adjust the brightness of the desklights connected to your console.
Assign Custom Encoders	Opens a window where you can assign features to the encoders and save custom pages.
Rescan for USB devices	Scans the USB bus for Vista USB devices – S3, S1, M1, E2 or UD512
Add …. Console	Adds the selected console or control surface type to the Console window. These windows can be dragged outside the main window.
Add Virtual Super-Playback	Adds a Superplayback module to the console window. This window can be dragged outside the main window.

Chooser menu

This option…	does this…
Show Fixture Chooser	Switches to the Fixture Chooser window, if it is not already open.
Select All Fixtures	Selects all fixtures on the current fixture chooser tab.

This option…	does this…
Deselect All Fixtures	Deselects all fixtures across fixture chooser tabs.
Invert selection	Deselects all selected fixtures and selects all other fixtures on the current layout.
Select Active	Selects all fixtures whose intensity is above 0%.
Select Programmed	Selects all fixtures that have active programming.
Undo selection	Deselects the selected fixtures and selects the fixtures that were previously selected.
Redo selection	Reselects the fixtures that were selected before an undo selection action.
Previous Fixture	Selects the previous fixture.
Next Fixture	Selects the next fixture.
Selection Tool	Displays a submenu to select the Rubberband, Lasso or Dragover selection tool.
Colours and Background	Displays a submenu to customise the appearance of the fixture chooser window and icons. See *Layout organisation on Page 6-6*
Shrink to fit	Zooms the layout to fit the available window space.
Label Position	Displays a submenu where you can set the label position, for the selected fixture(s) to the top, bottom, left or right.
Manage Layouts	Opens the Layouts window where you can customise the current layout. See *Layouts on Page 6-3*
Duplicate Layout	Create a copy of the current layout with a new name.
Layout options	Displays a submenu where you can choose display options that apply to all layouts: - False Intensity - Show selection order - Show grid - Snap to grid - Show names - Show IDs - Auto add new fixtures - Preview refresh rate - Detail level

Timeline menu

This option…	does this…
Show Timeline	Switches to the Timeline window, if it is not already open.
Show tracked events	Shows or hides features that are tracking through from previous cues. Tracked events are shown as lighter bars that cannot be selected.
Align start	Aligns the start points of the selected events.
Align end	Aligns the end points of the selected events.
Set Event Timing	Opens the Event Timing window where you can edit the timing information for the selected event.
Reset to default timing	Resets the selected event(s) so that it follows the default timing for its feature type.
Fade Curve	Sets the fade type for the selected event(s).
Convert to Release Event	Converts the selected event so that it releases the control of the feature.
UnTrack events (Cue only)	Undo the effect of the selected events in the following Cue.
Stop Free Effects	Sets the selected event(s) to stop any free effects for the same feature type.
Mute Events	Prevents the selected event(s) from being played back. The event bar will be greyed and when the cue is played the event will be ignored.
Unmute Events	Removes the muting from the selected event(s).
Ignore Move in Black	Sets the selected fixtures / events(s) to ignore Move in Black.
Don't Ignore Move in Black	Removes the ignore Move in Black setting.
Snap to Grid	Sets events to snap to the timeline gridlines.
Grid Size	Sets the gridline increments. The default is 0.25s.

This option…	does this…
Grid Origin	Sets how the timeline ruler shows timing: - Start of cue, shows 0s at the start of each cue - Start of Cuelist, shows a single continuous timeline - Current Position, sets the 0s position to the current position of the playhead. - Timecode, shows timecode values. (HH:MM:SS:Fs)

View menu

This option…	does this…
Show Patch	Switches to the Patch window.
Show Console	Switches to the Console window.
Show Fixture Chooser	Switches to the Fixture Chooser window.
Show Timeline	Switches to the Timeline window.
Show Playback	Switches to the Playback window.
Show Output	Switches to the Output window.
Window Themes	Opens the Vista ThemeDialog window where you can customise the colour of window elements or load one of the alternate themes.
Vista Toolbar	Shows or hides the window selection toolbar, at the bottom of the screen.
Softkey Toolbar	Shows the F1 – F12 softkey labels at the top of the screen.
External window 1 - 2	Opens a touch screen friendly window with options to display Quickpickers and / or other windows
Sidebar - (Ctrl + 1) - (Ctrl + 2)	Displays a submenu with options to show the sidebar on either the left or right side of the screen and to set which tab is active: - Palettes - Components
Command Line	Shows or hides the Command Line window at the bottom of the Fixture Chooser & Timeline windows

This option…	does this…
Add Dockable window	Displays a submenu where you can select a window to open on the desktop or an external monitor. The available windows include the Patch, Chooser, Playback, Output and DMX windows as well as: - Multi Quick Picker – to display presets ,groups, etc - Quick Picker 1-4 – a single quickpicker. Dockable windows can be dragged into the Chooser and Timeline windows and docked beside or between the other window sections.
Toolbars *	Displays a submenu to show or hide optional toolbars including, Update, Edit, Undo and more. The available toolbars depend on the current window.
	Playback window only
Only show Active cuelists	Only show cuelists that are being played back.
Follow on Go	Automatically select the last played cuelist.
Follow on Select	Automatically select the cuelist on the selected playback.
Search cuelists	Opens a search box so you can find a cuelist by name.
Auto Scroll	Automatically scrolls the list of cues so that the cue being played is always visible.
Dragable Playhead	Allows the 'position' bar to be dragged to play the cuelist.
Search Cues	Opens a search box so you can find a cue by name.
Toolbars	Shows or Hides optional toolbars
	Output window only
Add View	Creates a new output window and adds a selection tab at the bottom of the window.
Add Intensity View	Creates a new output window, that only shows Intensity and adds a selection tab at the bottom of the window.
Load window layout	Opens the Load Output Window to show a saved window layout.
Save window layout	Saves the current output window layout.

This option…	does this…
	Patch Window Only
Table view	Switches the Patch window to the (default) table view.
List view	Switches the Patch window to the list view.
DMX view	Switches the Patch window to the DMX view.
Absolute Channel numbers	Displays channel numbers consecutively irrespective of the universe. For example Universe 2, Channel 1 displays as channel 513.
Toolbars	Shows or Hides optional toolbars.

Help menu

This option…	does this…
About Vista	Displays information about your system including: · The Vista version and build number. · The Fixture Library version number. · The path to your User Data directory. · The channel count of your licence dongle(s).
Export logs…	Opens a window where you can save diagnostic and error log files. Always save and attach this file when opening a support request.

15. Appendix 2 – installing new software

Software updates

For the most up to date information on installing software updates or doing a clean installation on your console visit the Vista support page:

http://jands.com/support-vista-v2/

Ü A full re-install on a L, T or I console **will erase all saved shows and other data**. You must manually backup or archive all your existing show data (the contents of the /data/ directory) to an external storage device.

Creating a bootable USB drive

Major upgrades, that require the console's hard drive to be erased, can be installed from a suitably formatted USB device. For instructions on how to create a bootable USB FlashDrive on either a Windows or Mac computer see the 'Technical Bulletins' section on the Vista support page:

http://jands.com/support-vista-v2/

Connecting to the console via FTP

You can take advantage of the Vista's built-in FTP server to move files from a Mac or PC to the Vista or vice versa using FTP (File Transfer Protocol, a common method of file transfer).

Hardware setup

Connect the console and computer to an Ethernet hub or switch using a standard Ethernet cable, or connect the two devices to each other using a crossover Ethernet cable.

Vista software setup

Open the Network window from the Control panel option on the File menu, and check the 'IP Address' setting. If the IP address is already set, make note of the address and close the Control panel. If there's no IP address or it's set to 0.0.0.0, you'll need to assign one. The address is four groups of numbers from 0 to 255, all connected by periods. Typically, you'll use an IP addresses starting with 192.168 (e.g., 192.168.0.65).

Computer software setup

Check that the computer's TCP/IP properties are set to a different IP address in the same subnet (192.168.0.100, for example). The subnet mask should be, 255.255.255.0.

If necessary refer to your computer's documentation for how to set the IP address.

Using FTP

On the computer start an FTP client such as Filezilla, FTP Commander or CuteFTP and open a connection to the console's IP address (192.168.0.65). The connection requires a username and password as follows:

Username: byron
Password   byron

If you use a graphical FTP client such as those mentioned above the contents of the consoles Show Data directory and sub folders will be displayed in a window such as this:

Files can now be transferred to and from the Vista by dragging them between the Vista ('remote site' window) and the PC ('local site' window).

Ü If the console is not booting properly it may be possible to copy files using this method.

16. Appendix 3 – Tracking Backup

With Vista's new tracking backup feature you can connect a computer, running the Vista application, or a second console that synchronises it's show file and settings with your main console. If the main console fails for any reason, the backup system will automatically take control.

The backup system automatically copies the show programming from the main console and you can start or stop them in any order and at any time.

Setting up

To set up a backup system the console(s) and computer(s) have to be physically connected via their Ethernet ports and their network settings must be configured correctly.

Connecting the backup or D1 distributed processing unit

To connect the main console or computer and the backup console or computer you can either:

- Connect from the Ethernet port of the Console(s) and computer(s) to the Local Area Network (LAN) in your building, or
- Connect from the Ethernet port of the Console(s) and computer(s) to a stand alone Router, or
- Connect from the Ethernet port of the Console(s) and computer(s) to a stand alone Switch or Hub, or
- Connect the Ethernet port of the Console(s) and computer(s) using a Crossover cable.

Configuring the network settings

All consoles or computers being used in a tracking backup system need an IP address on the same subnet as the others. If you are using a LAN or stand-alone Router a DHCP server will automatically assign Router IP addresses, provided your console's or computer's network interface is set to use DHCP. If you are using a Switch, Hub or Crossover cable you'll need to set static IPs on all the devices in your backup system:

Vista L, T & I series network settings

To configure the network on a L, T or I series console:

1. Select the Settings option from the File menu. Vista opens the Settings window.

2. Click the Network button. Vista opens the Network window:

This field…	does this…
Hostname	This field is not used but a name is automatically assigned.
IP Address	Set this field to DHCP if you are connecting to a LAN or stand alone router that has a DHCP server.
	If there is no DHCP server set this field to a unique Private IP address. For example: '192.168.0.10'
	If your backup device is a second console it's IP must be set to a different address, in the same range. For example: '192.168.0.11'
IP Netmask	Normally this field should be set to 255.255.255.0. If connecting to a LAN consult your IT department.
Default gateway	If you are connecting to a LAN consult your IT department.
	If you are using a Router with a DHCP server this field should be set to the IP of the router itself.
	If you are connecting with a Switch or Crossover cable or there is no DHCP server set this field to the same address as the console.

3. Click OK to close the network window.

Computer network settings

Configuration of the network settings on your PC will vary depending on the OS you are using but what you'll need to enter is similar to the information detailed above.

The most important thing is that each console or computer should have a unique IP and be on the same subnet. If you are using DHCP this will be taken care of automatically. If you are using static IPs make sure each one is different. For example if the console or main computer's IP is 192.168.0.10, your backup device should be 192.168.0.11 (or any number between 1-254 but not 10).

If you have changed your network settings restart the console or computer and confirm that the new settings have taken effect.

Starting Tracking Backup

To start Tracking Backup do this:

1. On the main console or computer select the 'Networking' option on the File menu. Vista opens the Vista Network window:

This field…	does this…
Name	Shows the name of Vista consoles, computer systems and D1 devices that are detected on the local network. The console or computer you are working on is indicated by a * next to its name.
Group	Indicates the Group each device belongs to. Only devices that are in the same group can connect to each other.
	Devices that are not in the same group or are running a different software version are shown in red.
	To change the name or group of any device select the item in the list and press 'Edit configuration'.
Type	Shows the console model or device type.
Licensed Channels	Shows the number of channels each device is licensed for. In a tracking backup system the number of available channels is the sum of all connected devices.

This field…	does this…
Address	Shows the IP of each device.
Network Role	Shows the role of each device.
Sync / Re-Sync	Syncs or re-syncs the show file to all devices in the group.
Manual Connections	Opens a window where you can enter an IP address for a known device that doesn't appear in the Network window.
Add to … Group	Sets the selected device to the same group as the local console and opens a window where you can sync the show.
Edit Configuration	Open a window where you can set the name or group of any device on the network.
Disconnect	Disconnect the selected device from the current group.
Failover now	Press this button to have the slave console take over the show and all output.
Connect to … Nodes	Connects to compatible devices. Vista systems are connected as tracking backup slaves. D1 units are connected for distributed processing. Show sync across devices may take a few minutes and when complete will be indicated in the ' Show Sync' column.

Ü The console or computer you are working on is marked with an asterisk **(*)**.

2. Configure each device that you want to use for tracking backup or distributed processing. When a device is added to an existing group Vista opens the Tracking Backup window on the Master and Slave device:
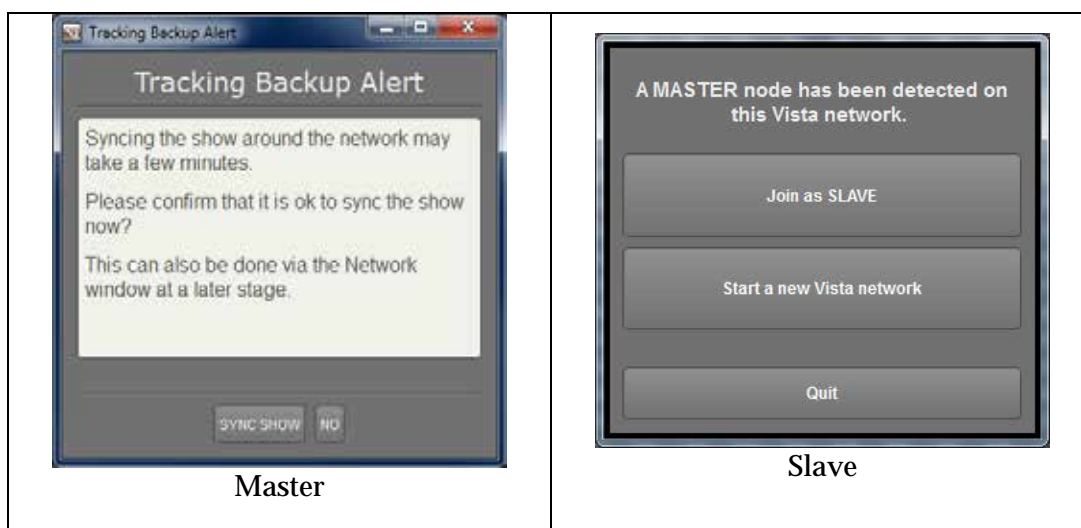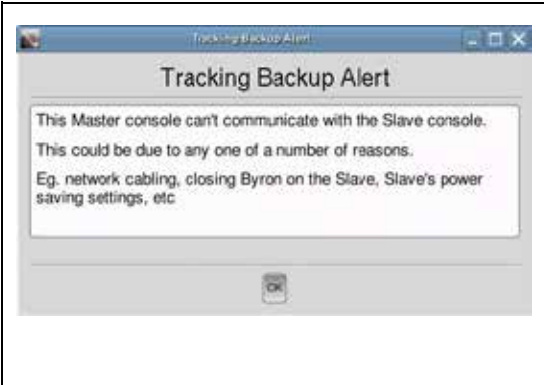
Master

Slave

3. On the Master click the 'Sync Now' button to copy the show to the slave device or 'No' to cancel and sync later. Alternatively click the 'Join as Slave' button on the slave device to copy the show from the Master. If you don't want the slave to join the detected group click the 'Start a new Vista Network' button or 'Quit'.

4. If you didn't sync the show file to all group devices at Step 3, use the 'Connect to Nodes' button to start the process.

5. Once all devices are configured click the 'Close' button.

What happens if the Master fails

If the Master or slave fails an alert window appears on the other console.

Master	Slave

On the slave console there are two options:

1. Click on the 'Abort' button to prevent the slave console from taking over the show and beginning to output.

2. Click on the Failover now button to have the slave console take over the show immediately and begin to output.

If neither button is clicked the slave will take over when the countdown is finished.

Ü If you are using networked DMX (i.e. sACN or Art-Net devices) output will automatically be transferred to the backup system. However if you are using the DMX outputs on your Vista console or control surface you must swap your DMX cables from the master to the backup console in the event of a failure.

Manually switching to the backup console

To manually switch to the slave device click on the 'Failover Now' button on the Failover tab.

Troubleshooting

If you cannot see your slave console in the Vista Network window:

1. Check all your Ethernet cables and connections.

2. If you are using a computer turn off any firewall or port blocking.

3. Check that the Group name is exactly the same on all devices in your backup system.

4. Check that both the master and slave have IP addresses that are on the same subnet.

5. Try adding the slave console's IP address in the manual connections window.

6. On your Vista L, T or I series you can check the IP by opening the Control Panel > Network window from the File menu.

7. On a Windows system you can find the IP address in Control panel > Network. On a Mac it's in System Preferences > Network.

8. Check the broadcast address (on the network tab of user preferences) is suitable for the network and the same on both the master and slave.

9. On a Mac or Windows PC make sure that only one Network Interface is active. Having both the wired and wireless interfaces active may cause tracking backup to fail.

10. Check that you can 'Ping' from the Master to the Slave and vice versa.

11. Power down and re-start the console(s) and computer(s) you are using.

17. Appendix 4 –Distributed Processing

The Jands Vista D1 expands the DMX processing capabilities of the entire Vista range. The rack mount D1 connects via Ethernet to a Vista console, Windows or Mac system and provides an additional 8192 channels (16 DMX universes).

Setting up

To connect a D1 to a console or computer running Vista all devices have to be physically connected via their Ethernet ports and their network settings must be configured correctly. To do this:

1.   Connect from Ethernet Port A to your network using a Cat5 cable.

2.   Connect power using the supplied IEC power cable.

3.   Connect one or more of the 8 DMX outputs to your lighting fixtures if required.

When all cables are connected press the power button, on the front panel to turn on the unit.

Once it finishes loading the program, the D1 displays the Home screen. On this screen you can see the D1 name and network address (if configured) and 3 buttons to select the Monitor, Network and Setup windows.

Configuring the network settings

All D1s being used in a distributed processing system need an IP address on the same subnet as the console(s). If you are using a LAN or stand-alone Router a DHCP server will automatically assign Router IP addresses, provided the D1's network interface is set to use DHCP. If you are using a Switch, Hub or Crossover cable you'll need to set static IPs on all the devices in your backup system:

Network settings

To configure the network on a D1:

1. Tap the Network button on the Home screen. Vista opens the 'Configure IP Address' window.

2. Click the Network button. Vista opens the Network window:
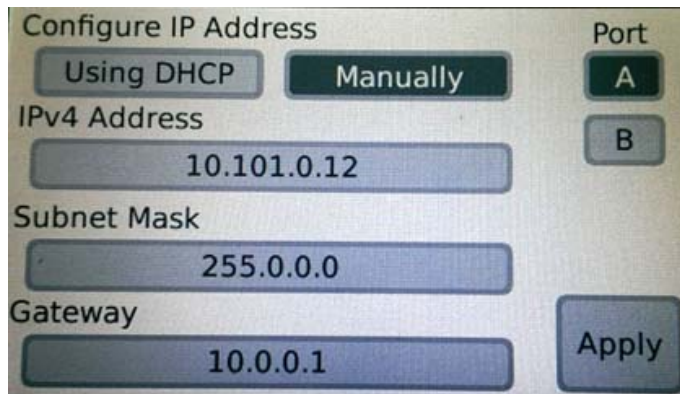
This field…	does this…
Using DHCP	Select this option if your network has a DHCP server.
Manually	Select this option if you need to manually assign an IP address to the D1 unit.
IPv4 Address	Tap this field to set or change the IP address.
	The D1 must be set to a different address to all other devices on the network but be in the same range. For example if the console's address is 10.101.0.10 and a backup computer is 10.101.0.11 make the D1 address : '10.101.0.12'
Port A / B	Always select Port A. Port B is not enabled in the current software.
IP Netmask	Normally this field should be set to 255.255.255.0. If connecting to a LAN consult your IT department.

This field…	does this…
Default gateway	If you are connecting to a LAN consult your IT department. If you are using a Router with a DHCP server this field should be set to the IP of the router itself. If you are connecting with a Switch or Crossover cable or there is no DHCP server set this field to the same address as used in the IPv4 Address field.

3.   Tap the Apply button to close the window.

Setup

Press the setup button to configure additional D1 settings. Vista opens the Network window:

This field…	does this…
Name	Sets the name of the D1 and is used to identify the unit from a console.
Group	Sets the Group name for the D1. Only devices that are in the same group can connect to each other.
Network Ports Advanced	Opens a window wher you can configure the TCP ports used for Vista networking . See below for more information.
Update Apply Update	Opens the update window where you can install a software update from a USB memory stick.

Ü You can also set the D1's name and group from the File > Networking window on your console.

Advanced Setup

Press the Advanced button to configure the TCP ports used for Vista networking . **Normally there is no need to change these settings**. Vista opens the Network window:
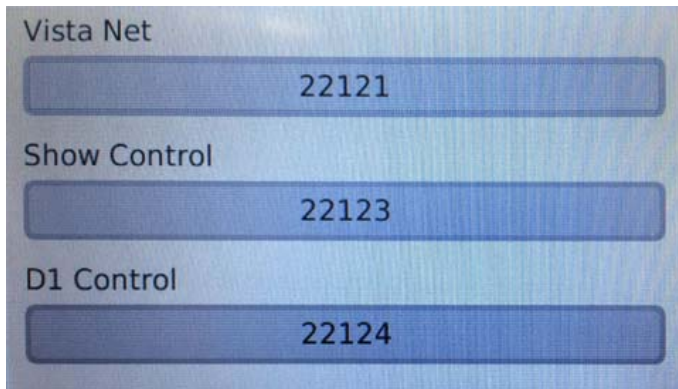
This field…	does this…
Vista Net	Sets the TCP port used for Vista Net communications.
Show Control	Sets the TCP port used for Show Control communications.
D1 Control	Sets the TCP port used for communications with D1 units.

Ü The ports used for Vista networking can be changed if they conflict with another service running on your network but none of the three port numbers should be the same as any other

Monitor

This window is not implemented in v2.3.

Front panel LEDs

The D1 front panel has indicator LEDs for power, disk activity, DMX activity and network activity.

This LED…	indicates this…
PWR	D1 is powered on.
HDD	The hard disk is being written to or read from.

This LED…	indicates this…
DMX 1 - **8**	The physical DMX ports are in use.
Network	The Ethernet port is sending and receiving data.

Shutting down the D1

Press the power button once and tap shutdown on the LCD to powered down

18. Appendix 5 – Vista statistics

Checking system performance

You can check the performance and status of all devices in a Vista network group. To do this select 'Byron Statistics' from the 'Add Dockable Window' option on the View menu :
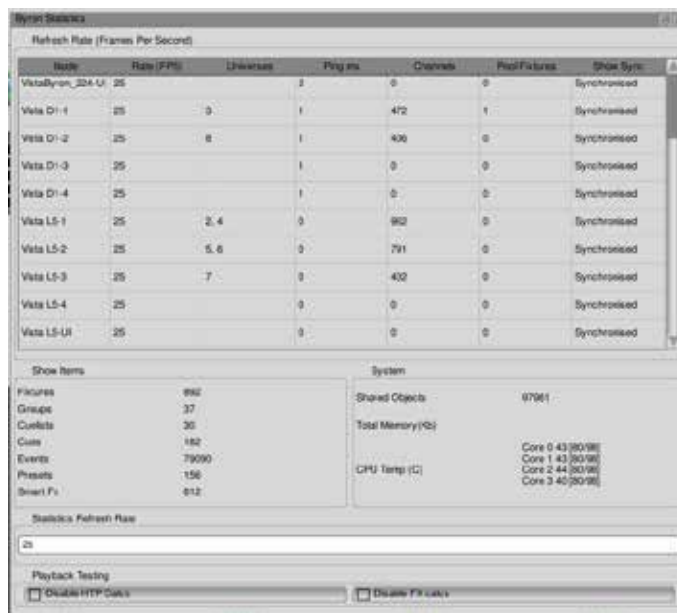
This field…	indicates…
Node	Each processor (core) in each device is a Node. For example an L5 console has 4 cores so there are 4 rows that represent the 4 nodes on the console.
Rate	The processor refresh rate in Frames Per Second. 25fps is the normal rate.
Ping (ms)	The ping time between this node and the master in milliseconds.
Channels	The number of output channels this node is handling.
Pool fixtures	The number of fixtures, in the patch window pool, associated with this node.
Show Sync	The Sync status of this node.
Show items	The number of Fixtures, Groups, Cuelists, Cues, Events, Presets and Smart FX in the show file..

This field…	indicates…
System	The number of shared objects, the amount of memory and the CPU temperature for each node..
Statistics Refresh rate	The refresh time interval for the statistics window. Normally set to 2 seconds.
Disable HTP calcs	For diagnostics.
Disable FX calcs	For diagnostics.

19. Appendix 6 – using VNC on L, T & I- series consoles

VNC password

The default password for VNC connections is 'password'.

Starting VNC

To start the VNC server on a Vista L, T series or I series console:

1. Restart the console. When the red Boot Menu screen appears press any key to stop at this window. Then use keyboard arrow keys to select a startup option. Select 'VNC' to start VNC normally or select 'VNC 1024x768' to start VNC and set the screen resolution to 1024x768 pixels.

2. Vista will automatically start the VNC server.

3. Vista is now running the VNC server.

Connecting to Vista using a Windows PC

The following procedure is for the VNC Viewer application from Real VNC (http://www.realvnc.com/download.html). Other VNC clients for windows work in a similar way:

1. Check that the Vista and your PC are on the same subnet. I.E. if the Vista's IP is 192.168.0.68, your PC should be 192.168.0.xxx (where xxx is 1-254 but not 68).

2. Start the VNC client.

3.   In the 'Connections Details' window click the Options button, then the Misc tab:
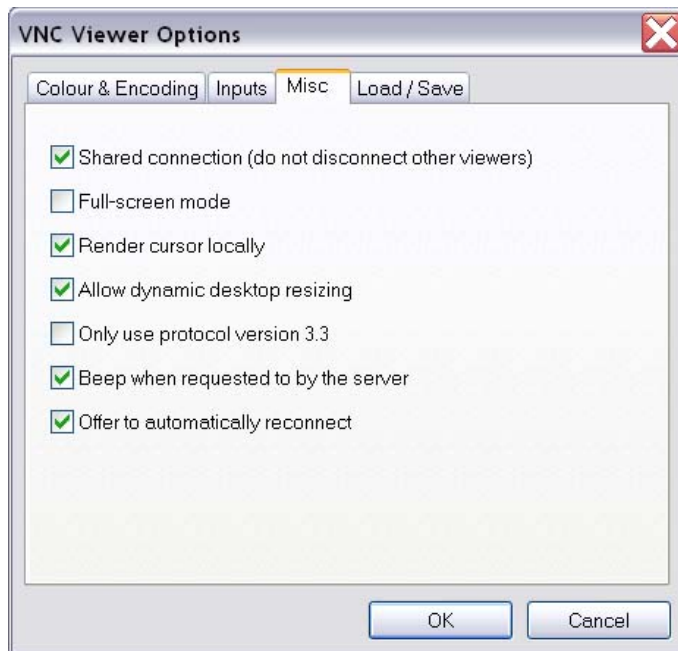
4.   Tick the box marked 'Shared Connection (do not disconnect other viewers)'. Click OK to close the options window.

5.   In the 'Connections Details' window enter the Vista IP (i.e. 192.168.0.65).

6.   Click OK to open the login window.

7.   Enter your password and click OK (leave the username blank).

You should now be able to control the Vista.

Connecting to Vista using a Mac

The following procedure is for the Mac VNCViewer v2.01. (http://homepage.mac.com/kedoin/VNC/VNCViewer/index.html).

Other VNC clients work in a similar way:

1.   Check that the Vista and your Mac are on the same subnet. I.E. if the Vista's IP is 192.168.0.68, your PC should be 192.168.0.xxx (where xxx is 1-254 but not 68).

2.   Start the VNC client.

3. In the 'Open Display' window tick the box marked 'Allow shared desktop':
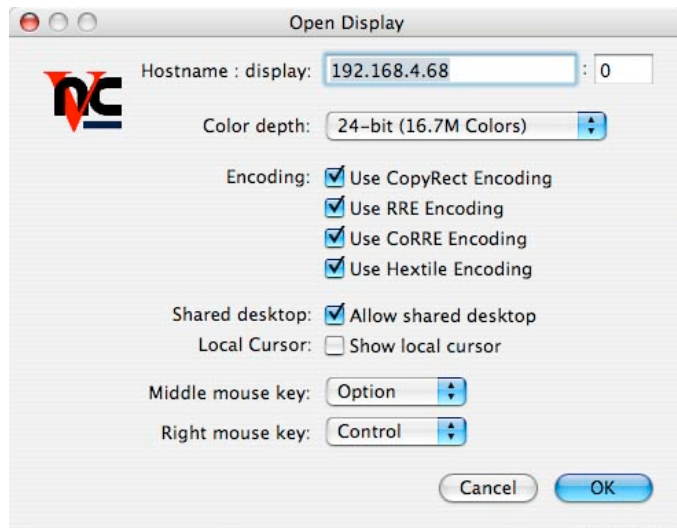
4. In the 'Hostname: display' window enter the Vista IP (i.e. 192.168.0.68).

5. Clear the entry in the box to the right of the IP (or enter 0).

6. Click OK. VNC will open the login window.

7. Enter your password and click OK (leave the username blank).

You should now be able to control the Vista.

20. Appendix 7, Using Midi show control (MSC) with Vista

You can activate and control cues by sending Midi Show Control (MSC) messages via:

· the Midi in port on the Vista L, T, I and S series.

· a USB to MIDI cable connected to a Mac or Windows system

· a Mac or Windows network Midi port

Configuring the Midi port

Before you use Midi you have to set a 'device ID' that Vista will listen on. This should correspond to the ID the Midi controller is sending on. To set the device ID select 'User preferences' from the File menu and click on the 'MIDI' tab.
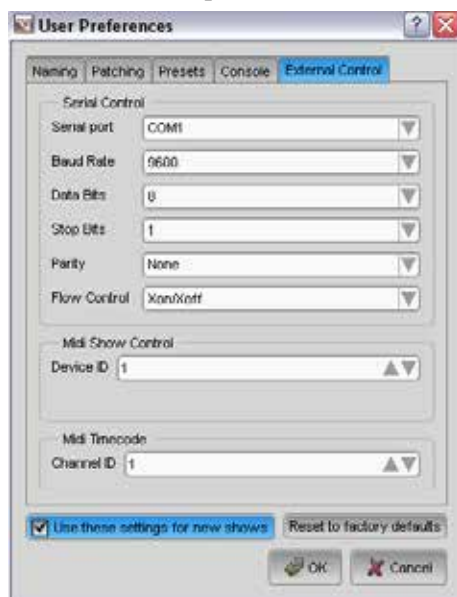
Set the Midi Show Control Device ID to correspond with your controller or the Midi software package you are using .

Ü Tick the 'Use these settings for new shows' checkbox to save these settings as defaults for new shows.

MSC lighting messages

Midi controllers use standard terminolgy for lighting cues and cuelists

This MSC term	is equivalent to this Vista component…
Q_number	Cue Number
<Q_list>	Cuelist Number
<Q_path>	Not used

Vista supports all the most commonly used MSC lighting messages.

This message…	does this…
Go	If a Q_number is specified, that cue plays. If no Q_number is specified, the next cues in numerical order and numbered identically and which are in Open Cue Lists GO. If a Q_number is sent without a Q_list, all cues with a number identical to Q_number and which are in Open Cue Lists GO.
Go_Jam	Starts a transition or fade to a cue simultaneous with forcing the Vista's internal timecode clock to the 'Go Time' if the cue is a 'Timecode' cue. If no Cue Number is specified, the next cue in numerical sequence GOes and the clock of the appropriate Cue List Jams to that cue's time. If the next cue in numerical sequence is a 'Manual' cue (i.e. if it has not been stored with a particular 'Go Time,' the Go/Jam_Clock command is ignored.
Go_Off	Starts a transition or fade of a cue to the off state. The fade time is determined by cuelist's release time. If no Cue Number is specified, the current cue GOes Off. If a Cue Number is specified, that cue GOes Off.
Timed_Go	Starts a timed transition or fade to a cue. If no Cue Number is specified, the next cue in numerical sequence GOes. Time is a standard time specification with subframes (type {ff}), providing anything from "instant" to 24 hour transitions.
Stop	Halts currently running transition(s). If no Cue Number is specified, all running transitions STOP. If a Cue Number is specified, only that single, specific transition STOPs, leaving all others unchanged.

This message…	does this…
Resume	Causes Stopped transition(s) to continue running. If no Cue Number is specified, all Stopped transitions Resume. If a Cue Number is specified, only that transition Resumes, leaving all others unchanged.
All_Off	Turns all cuelist intensity output to 0% without changing any other features. Equivalent to fading the Grand Master to 0%. The console status prior to All_Off can be re-established by using the Restore command. Equivalent to fading the Grand Master to 0%
Restore	Re-establishes operating status to exactly as it was prior to ALL_OFF.
Reset	Releases all running cues..

Midi control options

You can send a message (for example Go) to several cuelists at once. To do this you first send an Open message to each of the cuelists. Vista supports the MSC messages to open and close cuelists.

This message…	does this…
Open_cuelist	Makes a Cue List available to all other commands and includes any cues it may contain in the current show. When OPEN_CUE_LIST is received, the specified Cue List becomes active and cues in it can be accessed by normal show requirements. Q_list in Standard Form must be sent. If the specified Cue List is already Open or if it does not exist, no change occurs.
Close_cuelist	Makes a Cue List unavailable to all other commands and excludes any cues it may contain from the current show. When CLOSE_CUE_LIST is received, the specified Cue List becomes inactive and cues in it cannot be accessed by normal show requirements, but the status of the cues in the list does not change. If the specified Cue List is already Closed or if it does not exist, no change occurs.

Midi Timecode options

You can also control Vista's internal timecode clock with Midi commands.

This message…	does this…
Start_Clock	Starts Vista's internal timecode clock. If the clock is already running, no change occurs. If the clock is paused it continues counting from the time value which it contained while it was paused.
	If Q_list is not sent, the clocks in all Open Cue Lists Start simultaneously.
	If Q_list is sent in Standard Form, only the clock in that Cue List Starts.
Stop_Clock	Stops Vista's internal timecode clock. If the clock is already stopped, no change occurs. While the clock is stopped, it retains the time value which it contained at the instant it received the STOP command.
	If Q_list is not sent, the clocks in all Open Cue Lists Stop simultaneously.
	If Q_list is sent in Standard Form, only the clock in that Cue List Stops..

Activating Snapshots with Midi

Vista Snapshots can be activated with the MSC 'Fire' command .

This message…	does this…
Fire	Activates the specified Snapshot.
	The Fire command 'Macro' number activates the corresponding Snapshot ID number

Ü Vista does not support these commands:
Load, Set, Standby_Plus, Standby_Minus, Sequence_Plus, Sequence_Minus, Open_Q_Path, Close_Q_Path

21. Appendix 8, Using serial communication to control cuelists

You can activate and control cues by sending text commands via the serial port on a Vista console or PC running the Vista application. Mac users will need a Keyspan 19H USB to serial converter to receive serial commands.

Connecting to the serial port

The cable that connects from the triggering device to the Vista should be a standard serial cable (also called a null-modem cable, or serial printer cable), not a serial cable extension. The important feature is that that pin2 at one end needs to be connected to pin 3 at the other end and vice-versa).

Enabling the serial port

The computer or other device sending the commands and the Vista must have their serial ports set to match each other. To set the Vista serial port select 'User preferences' from the File menu and click on the 'Serial' tab. Vista displays the Serial settings:
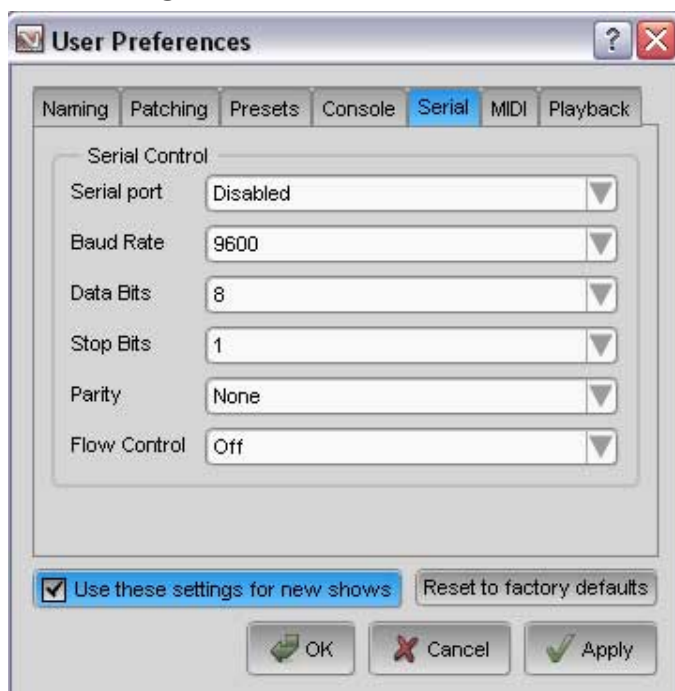
Vista L, T and I consoles should be set to Serial Port 1, Baud Rate 9600, Data Bits 8, Stop Bits 1, Parity None and Flow Control Xon/Xoff.

PC (Windows) systems should be set the same way but the Com port can be changed to suit your computer's configuration.

On Mac systems the Keyspan 19HS device will appear in the Serial Port dropdown menu.

Playback commands

All commands should be sent to the Vista as single lines of text followed by Return or Enter.

With serial commands you can only play the next cue in a cuelist. It is not possible to play a play a cue out of order.

The syntax for sending commands is:
Command {Cuelist ID} or {Name} or {Cuelist ID:Name}

The supported commands to playback and load shows:

This command…	does this…
Go	Plays the next cue in the cuelist. Examples: Go 1, or Go Dimmers, or Go 1:Dimmers
Pause {ID or Name or ID:Name}	Halts playback of the specified Cuelist. Example: Pause 5
Rego {ID or Name or ID:Name}	Resumes play of a paused Cuelist. Example: Rego 5
Release	Releases playback of the specified Cuelist. Example: Release 1
Load {show filename}	Loads a show file. The full path to show showfile must be specified. Example: Load C:\

Setting fixture levels

You can also send commands to set Fixture levels in the Programmer . The Syntax is:

·   {fixture id(s)} @ {level}

Where the fixture id is any combination of number, +, > and minus and level is a value between 0 and 100 or just f (or F) for full.

Examples:

·   1@F - fixture 1 to full

·   1>10-5@ 75 - fixture's 1,2,3,4,6,7,8,9 & 10 to 75%

·   1>10-3>7@f – fixtures 1,2,8,9&10 to 100%

Serial command acknowledgements

Vista does not echo characters sent to the serial port but does send acknowledgements to confirm that commands have been received and either been accepted or have failed. There are three response types:

Commands that are understood and could be executed.

Successful commands return the complete command appended with "OK". For example

 "go 1:List" it would return "go List:1 OK".

Commands that are understood but could not be executed.

If the command is good but the object of that command is not known an error message will be returned. For example, if there was no Cuelist 100

"go 100" would return "100 Unknown".

Invalid Commands

If the command is not understood, the message " ILLEGAL COMMAND" is returned.

Ü Make sure that there is an end of line character (return or enter) at the end of each command.

Ü Commands and cuelist names are *not* case sensitive.

Ü Spaces before or after commands and cuelist names do not affect the behaviour.

22. Appendix 9 – The Fixture Editor

The Fixture Type Library Editor

The new Fixture Type Library Editor is a separate application to the console software. On a Windows installation it can be found as an alias on the desktop and can be launched like any other Windows program. On a L, Tor I series console it is launched from the Patch window menu 'Patch' by selecting 'Fixture Editor'.

When launched a window is presented with an expanded directory of all fixtures, listed in manufacturer sub-directories, this is the factory default directory. Once this directory is collapsed, another directory is visible, this is the User Fixture Library and will initially be empty.

Fixtures in the Factory directory cannot be modified, however, copies can be made and these will be placed in the User Fixture Library and are fully editable.

It is recommended that the latest software library be installed and an exhaustive search of the fixture library be carried out to determine if the fixture required is not already in the library before writing your own fixture profiles.

Creating a Fixture Profile

This section will detail, step by step, the process of creating a sample fixture profile. The fixture being a VL1100D Iris (I) Model.

When the Fixture Type Editor is opened, the inbuilt library is automatically expanded, presenting a Manufacturers list containing all JANDS supplied fixtures. The fixture library is updated regularly and the latest revision should be installed to see if the fixture profile you require is in the list before writing your own fixture.

For this tutorial, collapse the 'Factory' directory and select the 'User Fixture Library'
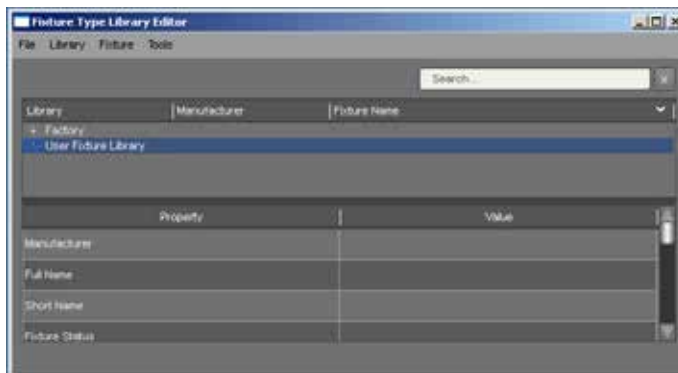
From the Fixture menu select 'New Fixture…'
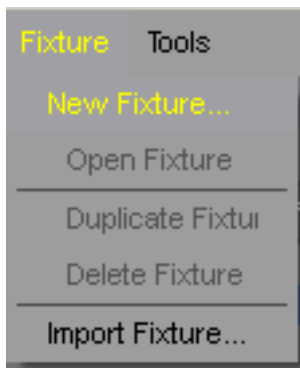
A new, blank fixture window will open with five tabs across the top:

This tab…	is for…

This tab…	is for…
Main	entering general fixture data.
DMX Chart	All DMX channel assignments and channel range values are entered in this tab
DMX Macros	Control macros, including strike, douse and reset are entered here.
Notes	Personal notes relating to the fixture can be entered here.
History	A chronological history of the fixture can be kept here.

Main tab:

This window is used to enter general information values for your fixture. To add or edit a value double click in the field and either type directly in the field or select from the field's popup menu.

This field…	is for…
Manufacturer	The name of the company that makes the fixture.

This field…	is for…
Full Name	The complete, unabbreviated name as supplied by the manufacturer.
Short Name	An abbreviated name, of your choice, for the Fixture. This name will be used in the Chooser window when 'show Short Name' is selected.
Fixture Status	Choose from the popup menu to select the appropriate status of the fixture file.
Beam Type	Choose from the popup menu to select the appropriate beam type of the fixture.
Frame Type	Choose from the popup menu to select the appropriate frame type, choose No Frame if the fixture has no framing mechanism.
Movement Type	Choose from the popup menu to select the appropriate movement type.
Physical Type	Choose from the popup menu to select the appropriate physical type.
Light Generation	Choose from the popup menu to select the appropriate light source.
Maximum Pan Degrees	Enter the maximum pan degrees as supplied by the manufacturer. This value is required in order for the flip function to work correctly. This information is generally not found in the DMX charts for a fixture, but, is usually found in the manufacturers specification sheet.
Maximum Tilt Degrees	Enter the maximum tilt degrees as supplied by the manufacturer. This value is required in order for the flip function to work correctly. This information is generally not found in the DMX charts for a fixture, but, is usually found in the manufacturers specification sheet.
Element Count Horizontally	Enter the number of horizontal, individually controllable elements within the fixture. Used for single fixtures with multiple elements such as LED fixtures.
Element Count Vertically	Enter the number of vertical, individually controllable elements within the fixture. Used for single fixtures with multiple elements such as LED fixtures.

This field…	is for…
Is a Scroller	Defines whether the fixture is a scroller mechanism.
Patch Part Count	Determines how many patchable parts there are for the fixture. i.e. a par with a colour scoller will have two parts. One for the par and another for the scroller.
Uuid	This is a unique identifying number assigned to the fixture by the fixture editor and cannot be changed.
Compatability Id	This number is for advanced use. When an existing Factory fixture is duplicated and modified it will retain programmed attributes of the original (such as Preset information etc.) so long as this number is not altered. Once altered the fixture will become an independent fixture and lose those programmed attributes.
Revision	A revision number can be added here to keep track of multiple versions of the same fixture.
Factory Version	This is a factory library version tracking number.
Carallon Version	This version number is supplied by the Carallon database and is not relevant when writing fixture profiles.

DMX Chart tab:

This icon…	does this…
	Opens the Add DMX Channel window

This icon…	does this…
	Adds a DMX range to an existing channel. Inactive until a channel is created.
	Adds a Custom Mode to a channel, used when a feature range is not mappable to a generic control. i.e. Iris Pulse or Gobo Shake
	Adds a slot to a colour or gobo wheel channel. . Inactive until a channel is created.
	Use this button to delete selected DMX channels, Ranges, Modes or Slots.

Add DMX Channel window:
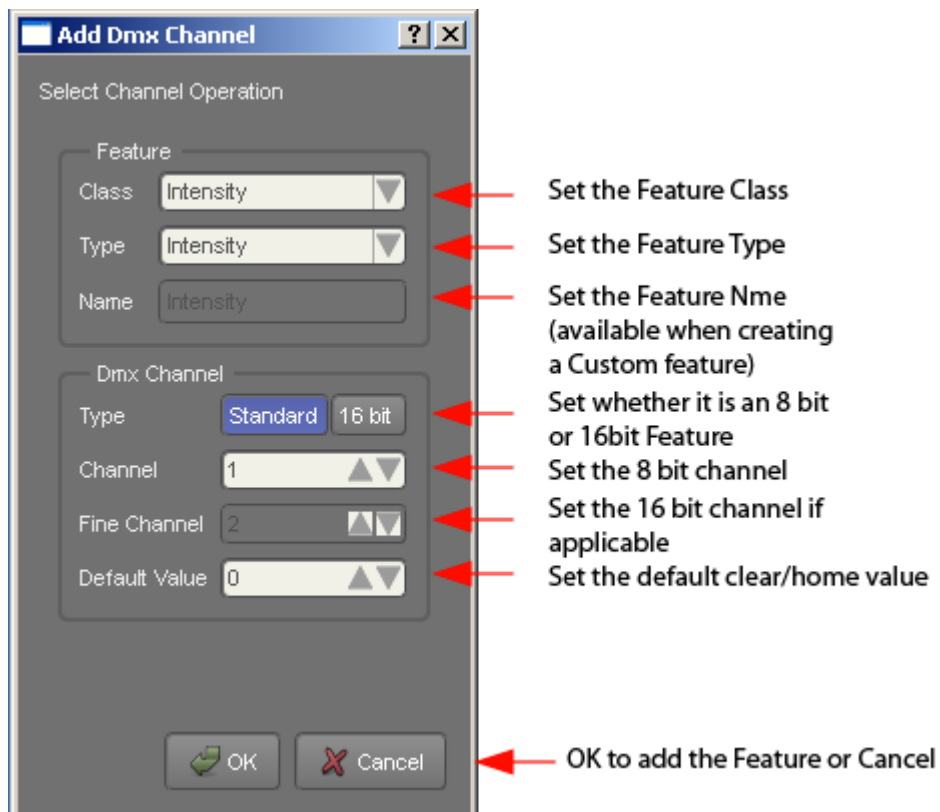
This field…	is for…

This field…	is for…
Feature Class	This determines which control palette the feature will reside in. Intensity Class reside in the Intensity palette, Beam in the Beam palette etc.
Feature Type	This determines which controls on the palette control which feature. For example one Beam Type may be Iris and another Zoom. Both features appear on the Beam contol palette, mapped to their respective controls.
Feature Name	This value is automatically set by the software unless a custom feature is created in which case a user assigned name must be applied.
DMX Channel Type	This will determine if the feature is 8 bit or 16 bit. The Fine channel field becomes active if 16 bit is selected here.
DMX Channel Channel	Is the Hi byte channel for the feature.
DMX Channel Fine Channel	Is the Lo byte channel for the feature (if applicable)
DMX Channel Default Value	This is the default DMX value for home and clear, ranging from 0-255.

The DMX Chart window is used to enter all channel information for your fixture. Using the manufacturers DMX specification sheets, a channel list will be built in here, the channels can then have various attributes set. Addition of range mapping, slots for colours and gobos, mode settings for channels and any other information required to operate the fixture.

Using the sample DMX specification for a VL1100D (I) Iris Model fixture this section will document how to enter data in the DMX tab for it.

DMX channel specification for a VL1100D (I) Iris Model

DMX Channel	Parameter	Range
1	Dimmer *	0-255
2	Hi Byte Pan	0-65535
3	Lo Byte Pan	0-65535
4	Hi Byte Tilt	0-65535
5	Lo Byte Tilt	0-65535
6	Edge	0-255
7	Zoom	0 (small) - 255 (big)
8	Diffusion	0 (open) - 255 (diffused)
9	Blue	0 (open) - 255 (full saturation)
10	Amber	0 (open) - 255 (full saturation)
11	Magenta	0 (open) - 255 (full saturation)
12	Rotating Gobo	0-127 index 128-255 rotate
13-14	Gobo Index	Index: 0-65535 Rotate: 0 (cw max) - 32535 (cw min) 32536-33031 (stop) 33032 (ccw min) - 65535 (ccw max)
15	Beam	0 (small) - 255 (open)
16	Focus Time	0-255
17	Color Time	0-255
18	Beam Time	0-255
19	Control	0-255

Channel 1: Intensity

Click the DMX button to open the Add DMX Channel dialog. By default the dialog opens for the first time as below, it will open in the last opened state from now on. Notice the values are correct for this feature. Click OK to create.
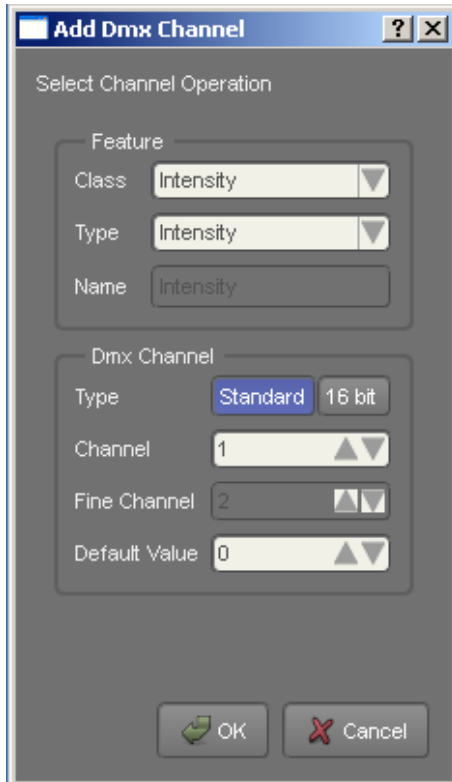
The Intensity 8 bit channel 1 has been created in the DMX Chart window.

Channel 2 and 3: Pan Hi and Pan Lo: 16b

Click the DMX button to open the Add DMX Channel dialog. Select Position in Class and Pan in Type. In the DMX channel section select 16 bit and assign the correct channel numbers. The Default value should be set to 127 as it is a midpoint default feature and the Hi Byte value only need be set. Click OK to create.
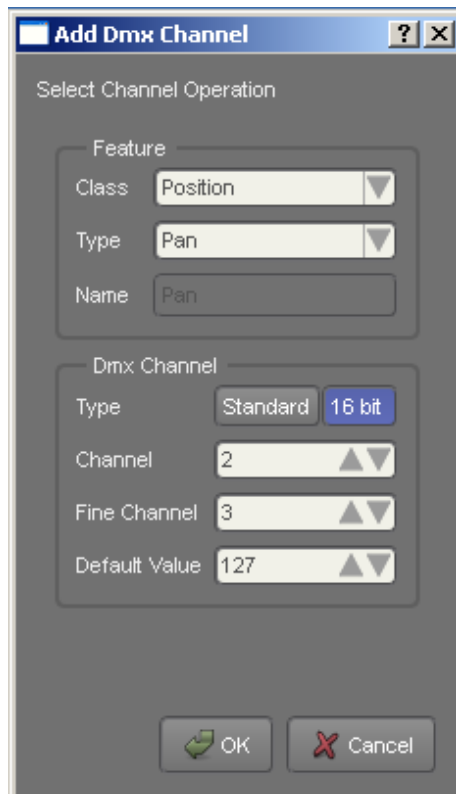
The Pan 16 bit channels 2 and 3 have been created in the DMX Chart window.
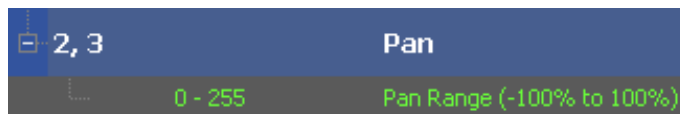
Channel 4 and 5: Tilt Hi and Tilt Lo: 16b

Click the DMX button to open the Add DMX Channel dialog. Select Position in Class and Tilt in Type. In the DMX channel section select 16 bit and assign the correct channel numbers. The Default value should be set to 127 as it is a midpoint default feature and the Hi Byte value only need be set. Click OK to create.
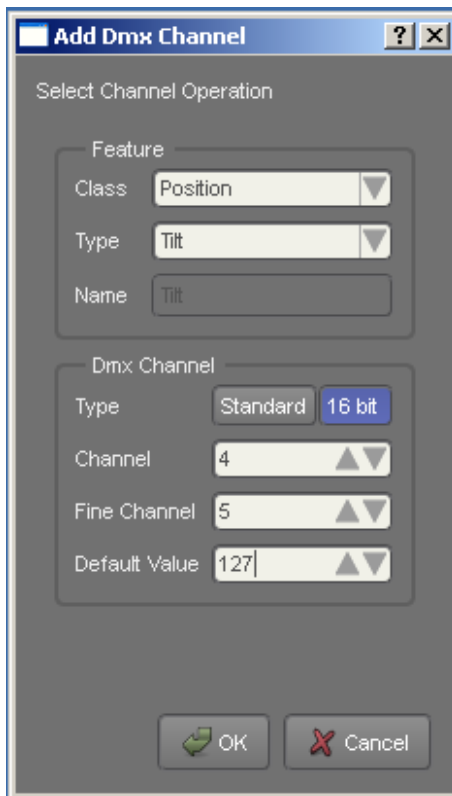
The Tilt 16 bit channels 4 and 5 have been created in the DMX Chart window.

Channel 6: Edge

Click the DMX button to open the Add DMX Channel dialog. Select Beam in Class and Focus in Type. In the DMX channel section select Standard and assign the correct channel number. The Default value should be set to 127 as it is a midpoint default feature. Click OK to create.
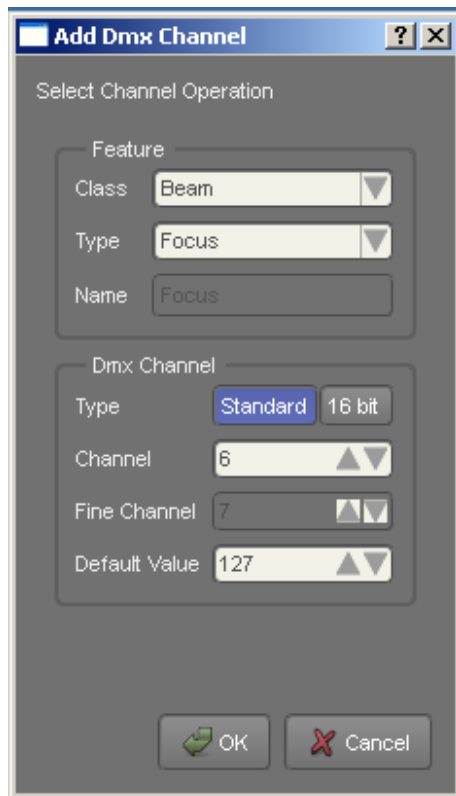
The Intensity 8 bit channel 6 has been created in the DMX Chart window.

Channel 7: Zoom

Click the DMX button to open the Add DMX Channel dialog. Select Beam in Class and Zoom in Type. In the DMX channel section select Standard and assign the correct channel number. The Default value should be set to 127 as it is a midpoint default feature. Click OK to create.
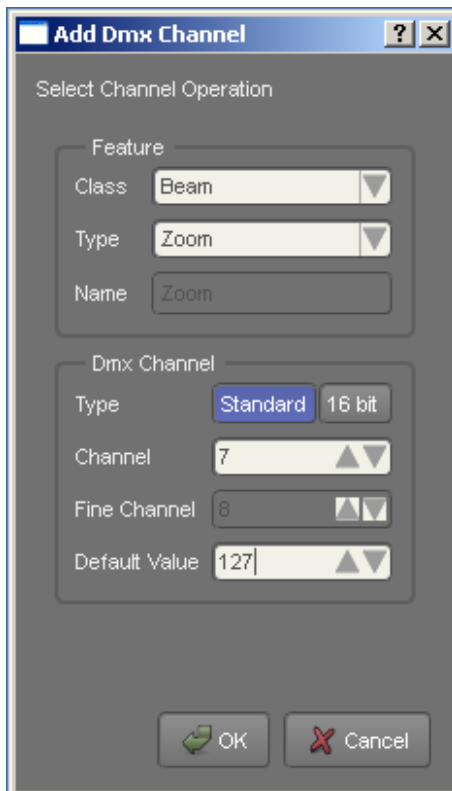
The Zoom 8 bit channel 7 has been created in the DMX Chart window.

Channel 8: Frost

Click the DMX button to open the Add DMX Channel dialog. Select Beam in Class and Zoom in Type. In the DMX channel section select Standard and assign the correct channel number. The Default value should be set to 0 as it is a 0 default value feature. Click OK to create.
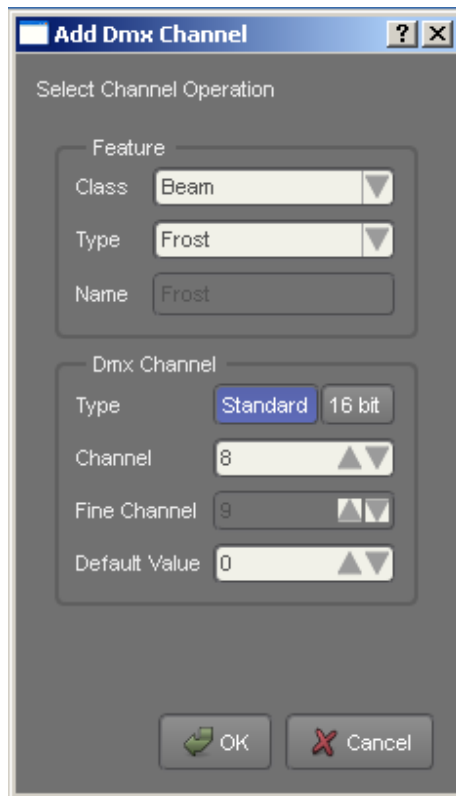
The Frost 8 bit channel 8 has been created in the DMX Chart window.

Channel 9, 10 and 11: CMY Colour mix

Click the DMX button to open the Add DMX Channel dialog. Select Colour Mix in Class and Cyan in Type. In the DMX channel section select Standard and assign the correct channel number. The Default value should be set to 0 as it is a 0 default value feature, the Hi Byte default value only need be set. Click OK to create and repeat the process for Yellow and Magenta.
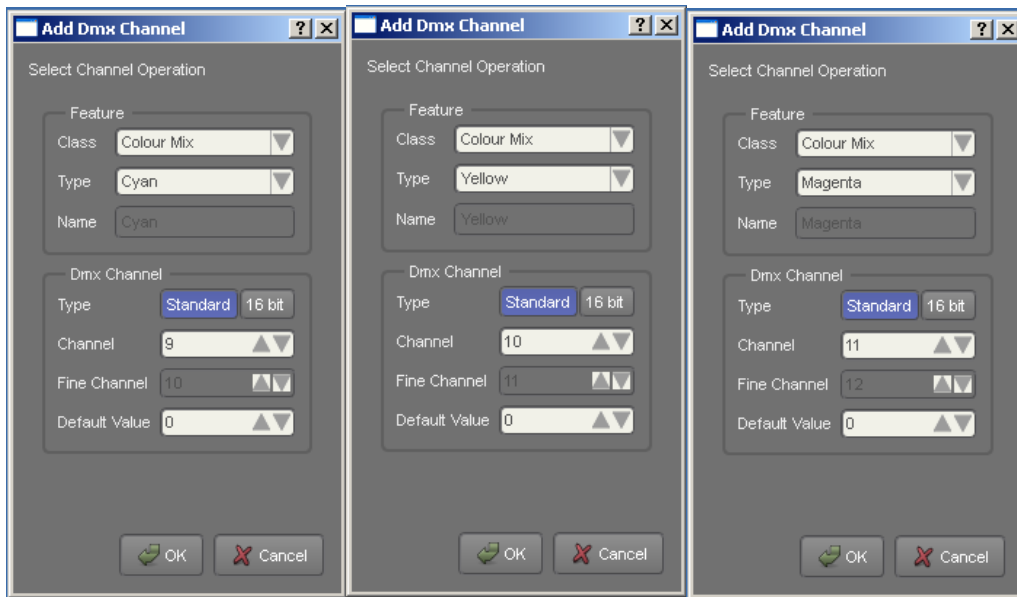
The three Colour Mix 8 bit channels 9,10 and 11 have been created in the DMX Chart window.

Channel 12: Gobo Wheel

Click the DMX button to open the Add DMX Channel dialog. Select Gobo Wheel in Class and Gobo Wheel in Type. In the DMX channel section select Standard and assign the correct channel number. The Default value should be set to 0 as it is a 0 default value feature. Click OK to create.
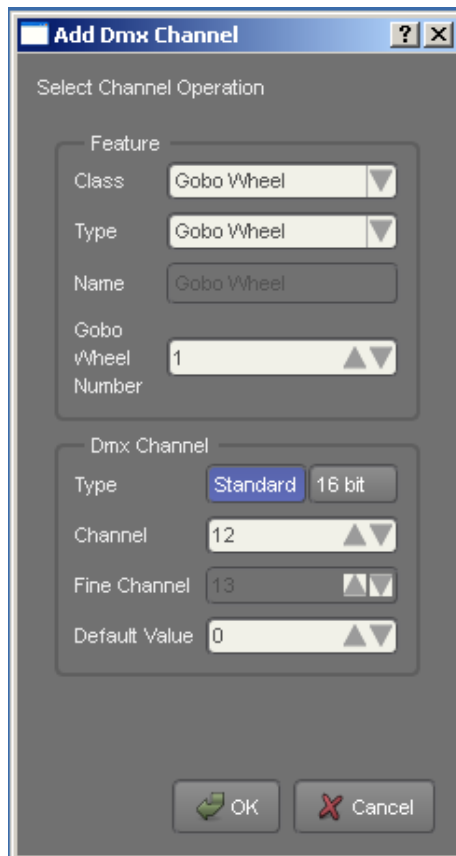
The Gobo Wheel **8** bit channel **8** has been created in the DMX Chart window.
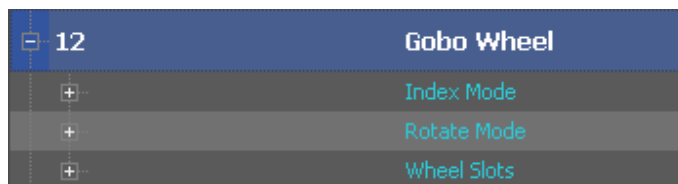
Channel 12: Gobo Wheel (cont.)

Note there are three items added for this feature unlike previous features that have one simple range value assigned.

Index Mode: Expand this section and select the range value section as below.

As the specification requires the range for Gobo Wheel Indexing to be 0-127, the values need changing. On the right hand side of the DMX Chart window in the DMX range section. Apply the change as seen below and click apply.
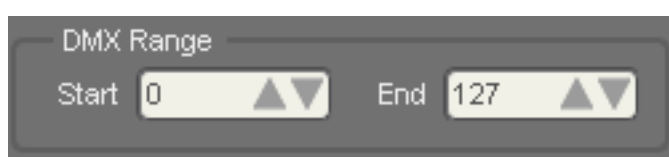
The change to the channel range is reflected in the DMX Range column.
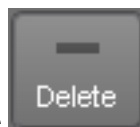
Rotation Mode: Expand this section and select the range value section as below.
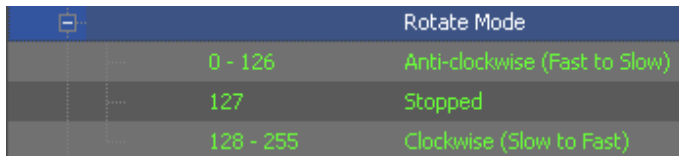
As the specification requires the range for Gobo Wheel Rotation is to be 128-255, only one range of values is required. By default most fixtures have clockwise and counter clockwise values as well as a stop value. The editor places ranges for these by default. The mechanism in our fixture only rotates in one direction so the first thing that is required is to delete the Anti-clockwise range, the Stopped range can remain and set to 127 if desired. This will make zero rotation on the controls stop the wheel spinning at the last indexing value.

Select the Anti-clockwise range:
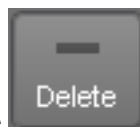
Now click the button to remove the range.
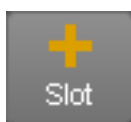
Channel 12: Gobo Wheel (cont.)

As the ranges for Stopped and Clockwise rotation are the same as the manufacturers specification no other changes are required. The ranges for gobo wheel rotation are now set.
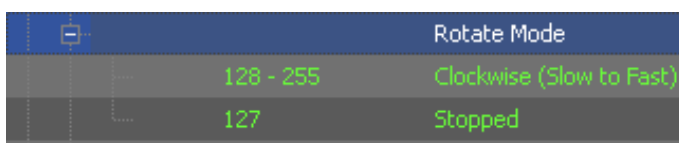
Wheel Slots: Expand this section and Select it. Notice a single Open slot is loaded with a range of 0,0.
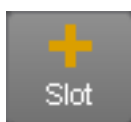
Use the button to create as many slots as is required. In this case add five slots to make a total of six.
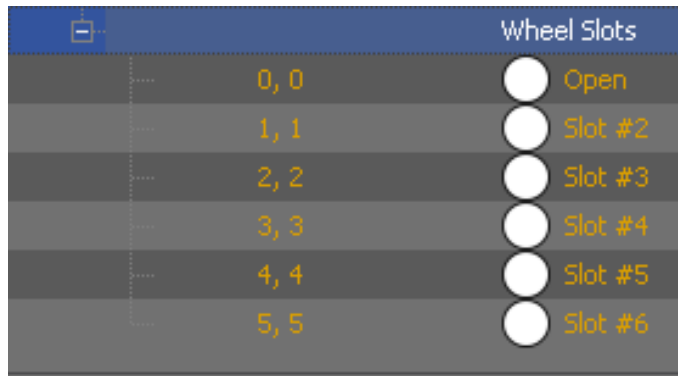
As the Open slot values are already correct, select Slot #2.
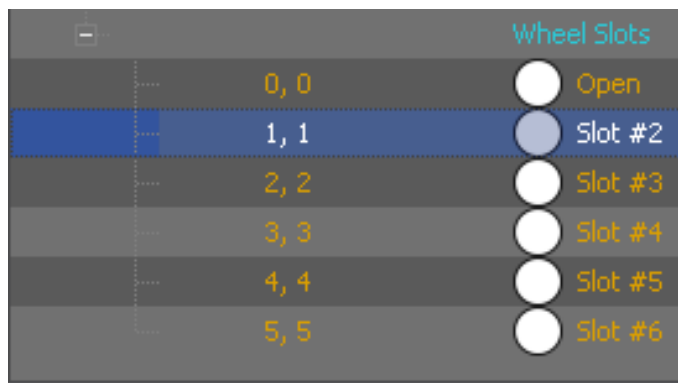
Channel 12: Gobo Wheel (cont.)

On the right hand side of the DMX Chart window the controls are now available to add appropriate data with the selected slot.

A Name may be applied, a Slot Type can be set (Gobo or Colour) a Category can be assigned, Category is useful in remodelling gobo patterns when changing fixture types, and an image can be set for preview on the console.

As with other features the DMX Range section is used to set the appropriate values for the slot, as the specification below indicates, different values are required to operate the slot in either Indexing or Rotating modes.

Position	Indexing	Rotating	Function
1	0	128	Open
2	18	146	Gobo 1
3	41	169	Gobo 2
4	63	191	Gobo 3
5	86	214	Gobo 4
6	108	236	Gobo 5

Channel 12: Gobo Wheel (cont.)

Set the DMX Range values for Slot #2 as shown below, follow the same procedure for the remaining slots. The correct value for Slot #2 (18 or 146) will automatically switch between the two values depending on which control is currently being used on the console, i.e. indexing or rotating.
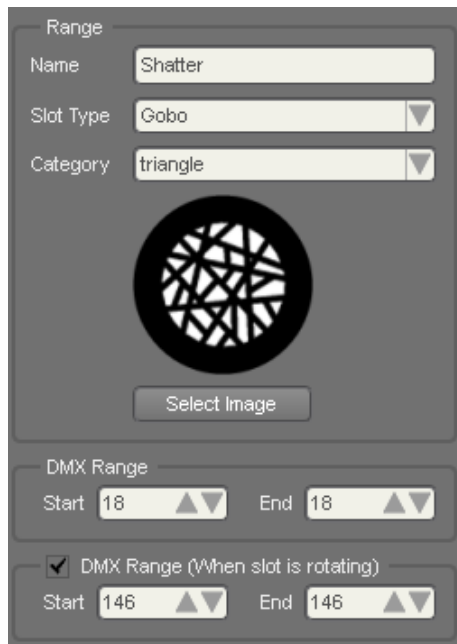
Click the Select Image button to open up the Images window, navigate to the gobos directory and search for the image required, select and open it then name it in the Name field.
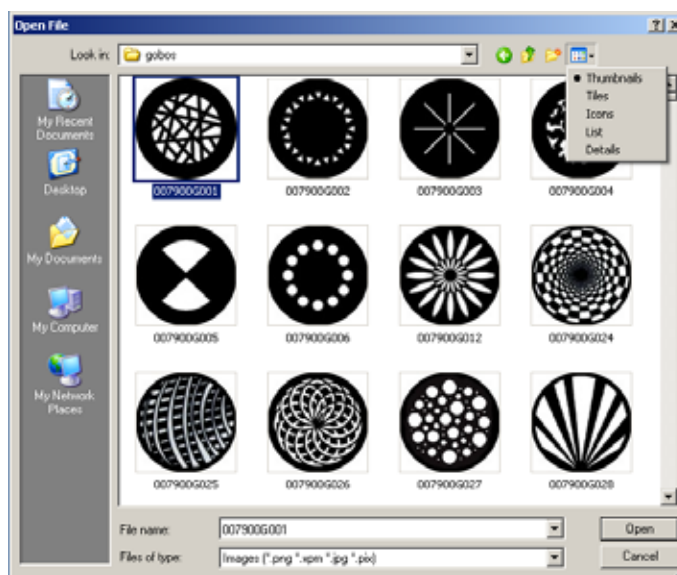
Tip: Switch the window view to Thumbnails for image previews.

Channel 13 and 14: Gobo Rotation

Click the DMX button to open the Add DMX Channel dialog. Select Beam in Class and Gobo Slot Rotation in Type. In the DMX channel section select 16 bit and assign the correct channel numbers. The Default value should be set to 127 as it is a midpoint default feature, the Hi Byte default value only need be set. Click OK to create.
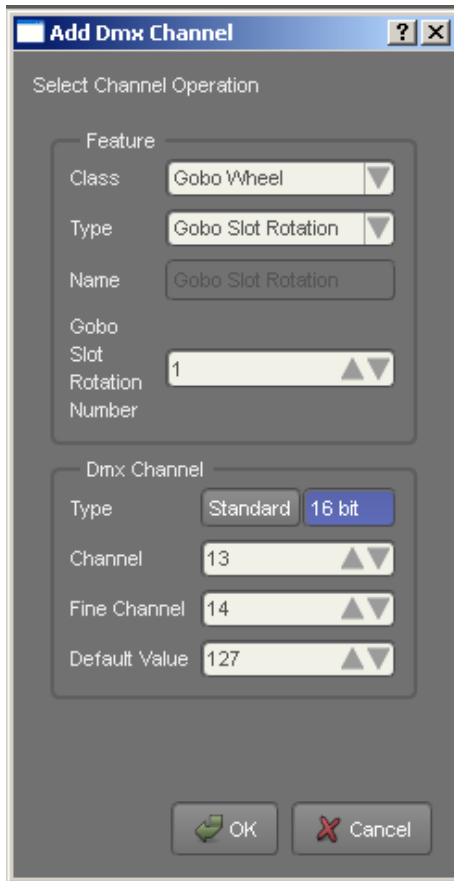
The Gobo Wheel Slot 16 bit channels 13 and 14 have been created in the DMX Chart window.

Channel 13 and 14: Gobo Rotation (cont.)

Expand the Index Mode and Rotate ranges.
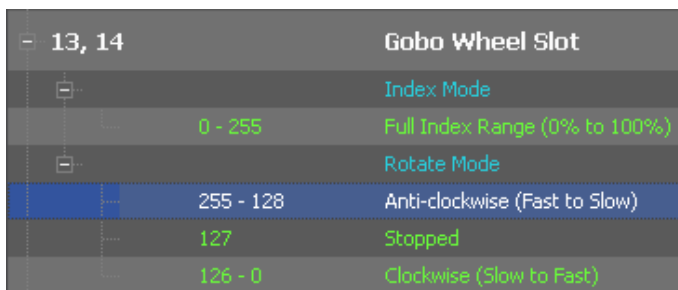
Select the range to edit and adjust the values on the right hand side of the DMX Chart window in the DMX range section. As this fixtures rotation Clockwise and Ant-clockwise are reverse to the default values inserted the ranges need to be edited. Apply the change as seen below to the Anti-clockwise range and click apply. Repeat this procedure for the Clockwise range, inserting the correct values.

Anti-clockwise range values:

DMX Range
Start 255 ▲▼   End 128 ▲▼

Clockwise range values:

DMX Range
Start 126 ▲▼   End 0 ▲▼
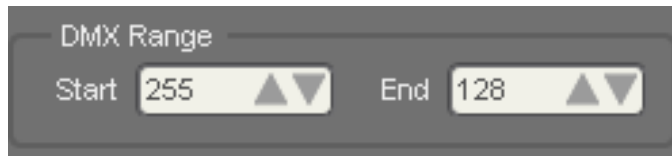
As the default value for Stopped is already 127, this need not be adjusted. The Index Mode values supplied by default are the same as the fixture specification, so, it too, requires no adjustment.

Channel 15: Iris

Click the DMX button to open the Add DMX Channel dialog. Select Beam in Class and Iris in Type. In the DMX channel section select Standard and assign the correct channel number. The Default value should be set to 255 as it is a 255 default value feature. Click OK to create.
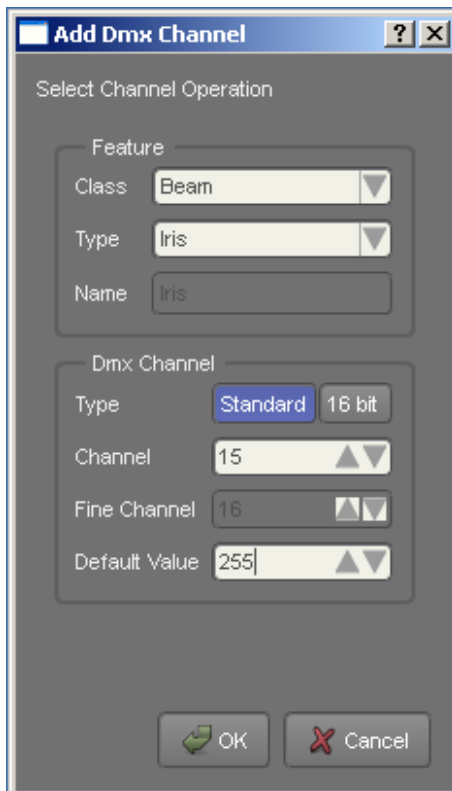
The Iris 8 bit channel 15 has been created in the DMX Chart window.

Channel 16,17 and 18: Timing channels

These three channels differ from the previous channels created in that they do not map to generic controls. They will be Custom Feature channels that are associated with the Class of feature.

For the Focus Time channel 17 (Varilite terminology states Focus is Position) click the DMX button to open the Add DMX Channel dialog. Select Custom Position in Class, Custom Position will automatically be assigned to Type and as we are creating a Custom Feature a feature name needs to be assigned, type in Focus Time. In the DMX channel section select Standard and assign the correct channel number. The Default value should be set to 0 as it is a 0 default value feature. Click OK to create.
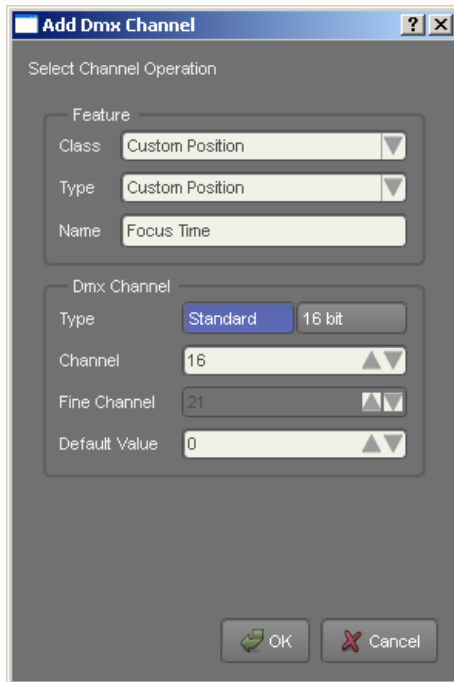
Repeat this process for the remaining channels 17 and 18. Channel 17 will need Class and Type set to Custom Colour and named Colour Time, channel 18 will need Class and Type set to Custom Beam and named Beam Time.

Channel 19: Control

The Control channel is also created as a Custom feature, The Class needs to be set as Custom Misc and Name to Control. This will create the channel, values for the control macros will be set in the DMX Macros tab.
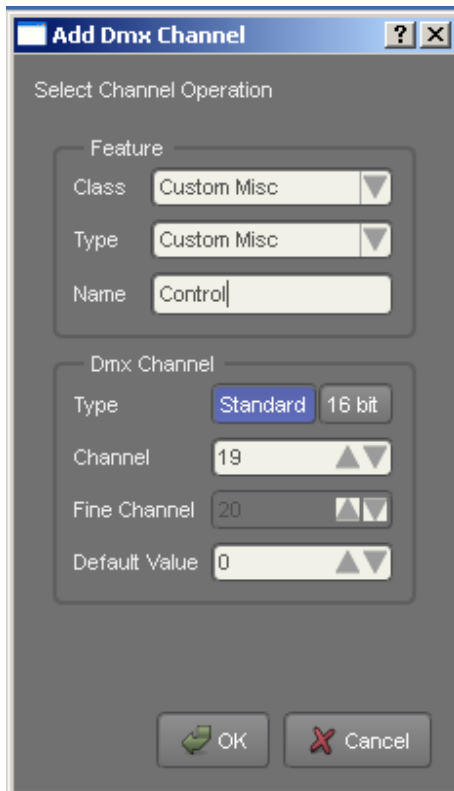
The Control 8 bit channel 19 has been created in the DMX Chart window.

19	Control
0 - 255	Custom Range
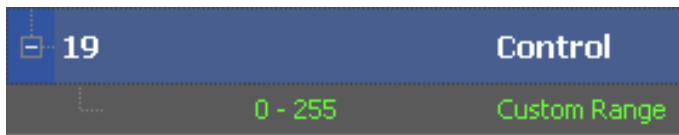
Channel 19: Control (cont.)

To assign control macros, open the DMX Macros tab and enter the relevant information using the specification from the manufacturer.

Control Channel Function	Control Channel Value		
	% Value	DMX Value	
		For 3 Secs or Greater	After 3 Secs
Luminaire Reset	32-33	81-87	0
Lamp Off	65-67	165-171	0
Lamp On	98-100	249-255	0

Main	Dmx Chart	Dmx Macros	Notes	History

	Macro
Strike	19@249#4000;19@0#1000
Douse	19@165#4000;19@0#1000
Reset	19@81#4000;19@0#1000
Home	
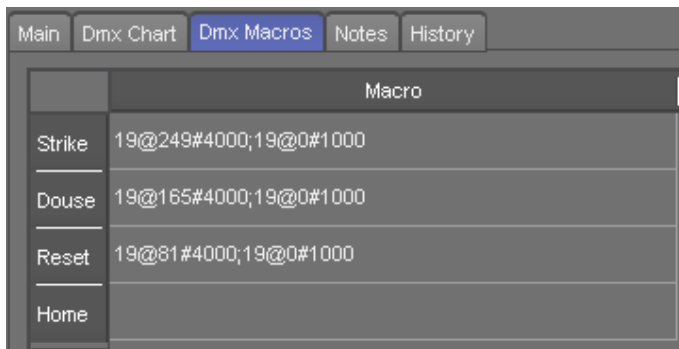
Syntax: channel @ value wait milliseconds, next command.

Complex macros

Some fixtures require more complex macros for strike/reset/douse. For example a fixture might require; ch1 to 255, ch4 to 17,ch 6 to 1, ch 8 to 0, ch 11 to 0 and ch 15 to 84 and for these channels to be held for 6 seconds, and sent back to default

In this case each command must state a wait time. The syntax is as follows:

[channel] @ [value] # [wait time in milliseconds]

So for the example above the macro would read as follows:

1@255#0;4@17#0;6@17#0;8@0#0;11@0#0;15@84#6000

That will send the specified values to all channels simultaneously and hold them for 6 seconds.

Saving the Fixture:

Once all channel ranges have been created, spend a few minutes checking them against the manufacturers specification. Click the OK button then choose OK from the resulting Save Fixture And Exit dialog.

To use the fixture you will first need to exit the Fixture Library Editor, close the editor window and a confirmation dilaog will be presented. Click OK, the library will regenerate the library catalogues to incorporate your new fixture. Please be patient as this takes some time. Start Vista and the new fixture will be available for patching in the User Fixture Library.
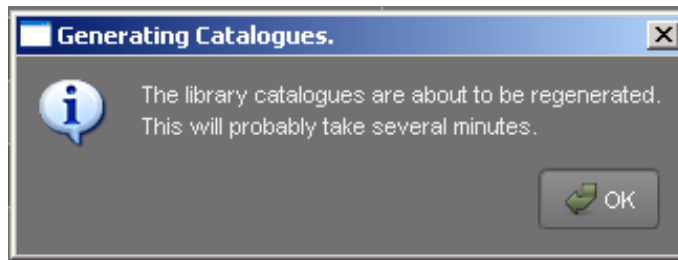
Channels with Custom Ranges

While all the main features of fixtures are represented by generic controls on the console, the ranges that do not fit the generic model are controlled by Custom Modes and Custom Ranges. A simple example of this is an Iris channel with pulse ranges.

Iris: Example ranges:

Iris closed to open: range: 0 – 128

Iris Pulse-1 slow to fast: 129 – 190

Iris Pulse-2 slow to fast: 191 - 255

Create the custom ranges as below:

The Iris Pulse controls will be found inside the Custom Iris widget in Vista:
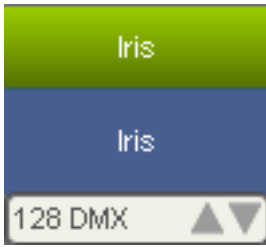
Double click the widget to open the Custom Feature Browser, in order to access the custom Pulse range controls:

23. Appendix 10 – Crash Logs

Retrieving Software Crash Files from a Console

Although unusual software crashes can occur. If they do it is important that as much detail as possible is returned to Jands to enable the cause to be determined and eliminated. In order to simplify this process the console software includes a means to package all of the necessary files for return to Jands support.

To generate a crash report package:

1. Select the 'Export logs…' option from the Help menu. Vista opens the Export log files window.

2. Select the file save location and change the filename if necessary.

3. Click the Save button.

Submitting a support request

To submit a support request complete our online form at:

http://jands.com/support-vista-v2/support-request-form/

Ü Be sure to complete all fields including your Vista the software version and build number, your console type and operating system.

Ü Attach a copy the 'Export logs' file and include a description of what you were doing when the problem occurred.

24. Appendix 11 – the touchpad and the pen tablet

Using the touchpad

Like all pointing devices, the touchpad may take a short time to get used to. However you will soon find that using this device is natural and intuitive. Simply glide your finger across the surface of the pad to move the cursor and tap your finger to 'click'.

Click

To click, lightly and quickly tap the surface of the pad once. Or, press the left button once.

To double-click, double tap on the pad or click the left button twice.

Right Click

To right-click for submenus, tap the tap zone in the upper right corner of the touchpad or click the right button once.

Drag

To drag, draw, or highlight, double-tap rapidly and hold your finger down on the second tap, then glide to move. You may also hold the left button as you glide your finger.

Glide Extend

To drag further than the pad surface, lift and reposition your finger after reaching the textured edge. GlideExtend will virtually eliminate the edge of the pad while you drag. In other words, if you are dragging an item and you hit the textured edge, GlideExtend will hold the drag for three seconds while you reposition to complete the drag. To shut off GlideExtend earlier than three seconds, simply tap or click a button.

Scroll

To scroll, place your finger down the right edge of the touchpad and glide up or down. This feature requires third party software on Macintosh systems (see Macintosh advanced features section for USB version of Easy Cat).

Working with the grip pen

This information is kindly provided by Wacom, the pen tablet manufacturer.

As you work with the pen-tablet, you can rest your hand lightly on the display screen, just as if it were a drawing board or sheet of paper. Hold the Grip Pen as you would a pencil. Make sure the side switch is in a convenient location where you can press it with your thumb or forefinger, but won't accidentally press it while drawing.
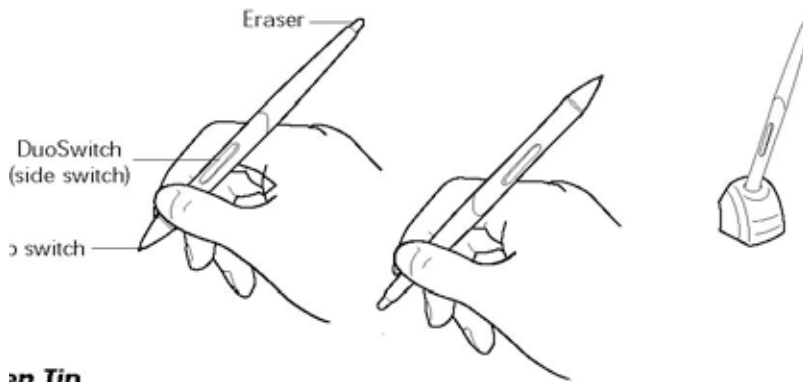
Ü The Grip Pen should never be stored in a container where it will rest on its tip or eraser. When the pen is not in use, place your pen in the pen holder or lay it flat on your desk.

Tip switch / Pen Tip

The pen is activated as soon as it enters proximity, about 5 mm (0.2 in), above the Interactive Pen Display screen. This allows you to position the screen cursor or use the DuoSwitch without touching the pen tip to the display screen.

When pressure is applied to the pen tip, the tip switch is turned *on* and the pen simulates a mouse button click.

Eraser

The eraser is not implemented in the Vista software.

DuoSwitch (if available)

The DuoSwitch can be used to perform a right click.

Using a pen

Pointing and Selecting

Move the Grip Pen above the pen tablet display screen to position the screen cursor. The cursor jumps to the location where you place the pen (absolute positioning). Press the pen tip on the display screen to make a selection.

Clicking

Tap the display screen once with the pen tip, or touch the pen to the display screen with enough pressure to generate a mouse click.

Double-Clicking

Quickly tap the display screen twice in the same place with the pen tip. Double-clicking is easier when the pen is perpendicular to the tablet screen.

Dragging

Select an object, then slide the pen tip across the display screen to move the object.

Erasing

Erasing is not currently supported in the Vista system.

Working with On Screen Display Settings

The pen tablet display is equipped with an On Screen Display function. The OSD function enables you to adjust and optimize a variety of display settings at the touch of a button. The OSD controls are located above the tablet on the T series consoles and in the armrest of the L series.

Menu button   Select buttons   Enter button
Opens or closes   Opens or closes   Activates or de-activates
the OSD menu   the OSD menu   the selected option

Selection buttons

Use these buttons to select an option that can then be activated when you press the **Enter** button.

After activating a selected option, press the + button to increase a selected item value, and press the button to decrease it.

The basic process for working with the OSD is as follows:

1. Press the Menu button to open the OSD main menu.

2. Use the + or - buttons to select an option. When the option you want to adjust is highlighted, press the Enter button. The current settings and adjustment sub-menu for that option will appear.

3. Use the + or - buttons to adjust the option settings.

4. When you have made your changes, press the Enter button to save. To exit, press the Menu button.

Ü All settings are automatically saved when the OSD menu closes. If you make changes to the display appearance and cannot return to the original settings, use the **Reset Recall** option to return The pen tablet to its original factory defaults.

Caring for the Cintiq pen tablet

Keep the Grip Pen and the Cintiq LCD screen surface clean. Dust and dirt particles can stick to the pen and cause wear to the display screen surface. Regular cleaning will help prolong the life of your LCD screen surface and pen. Keep Cintiq and the Grip Pen in a clean, dry place and avoid extremes in temperature.

Caution - If the pen tip becomes sharp or angular, it may damage the coating on the display screen. Please replace the pen tip if necessary.

Cleaning the Pen-Tablet

To clean the Grip Pen, use a soft cloth and mild detergent (such as dishwashing liquid) diluted with water. Do not use paint thinner, benzine, alcohol, or other solvents.

To clean the display screen, use an anti-static cloth or a slightly damp cloth. When cleaning, apply only a fixture amount of pressure to the display screen and do not make the surface wet. Do not use detergent to clean the display screen; this may damage the coating on the screen. Please note that damage of this kind is not covered by the manufacturer's warranty.

Replacing the Pen Tip

The pen tip will wear with normal use. When the pen tip gets too short, you can replace it with one of the extra tips that came with the pen.
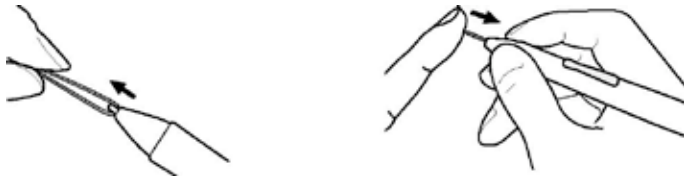
To remove the old tip:

Clasp it with a pair of tweezers, needle-nosed pliers, or similar instrument and pull the old tip straight out of the pen.

To insert a new tip:

Slide it straight into the barrel of the pen. Firmly push the tip until it stops. The new tip will slide into the correct position.

If the pen tip wears and becomes angular, it may damage the coating on the Pen tablet display screen. To avoid this, periodic tip replacement is recommended.

WARNING Prevent children from swallowing the pen tip or side switch. The pen tip or side switch may accidentally be pulled out if children are biting on them.

Precautions on using and handling the Pen-Tablet

Temperature and Humidity

Operating temperature and humidity 5˚ to 35˚C, 20 to 80% RH

Storage temperature and humidity -10˚ to 60˚C, 20 to 90% RH

CAUTION. Do not use or store the pen tablet where:

- · Temperature changes are severe or exceed specifications (e.g., outdoors or inside a vehicle).
- · The pen tablet and the Grip Pen are exposed to direct sunlight or heat from an appliance.
- · The pen tablet and the Grip Pen are exposed to water or any other kind of liquid.

CAUTION. Do not use The pen tablet in a dusty environment; this may damage the unit

Handling

WARNING: If the LCD screen has been damaged, DO NOT touch any liquid that may be leaking from it; this liquid is an irritant. In case of contact with skin, eyes, or mouth, rinse immediately with running water for at least 15 minutes or more. If contact is made with the eyes or mouth, also consult a physician.

WARNING: **Prevent children from swallowing the pen tip or side switch.** The pen tip or side switch may accidentally be pulled out if children are biting on them.

CAUTION: **Do not disassemble the Grip Pen.** This may cause the device to malfunction. In this case, Wacom shall have no responsibility to repair or replace the product.

CAUTION: Do not scratch the display screen. Avoid placing sharp objects on the display screen surface.

CAUTION: **Avoid intensive shock or vibration to the pen tablet or the Grip Pen.** Hitting or dropping the pen tablet display may damage the display screen or other components.

CAUTION: Do not put heavy articles on the Interactive Pen Display or push against it with a strong force; this may damage the display screen or bend the stand.

CAUTION: If the pen tip becomes sharp or angular, it may damage the coating on the display screen. Please replace the pen tip if necessary.

CAUTION: **Do not use any organic solvent (e.g., alcohol) or even mild detergent to clean the display screen**. Use of these cleaners can damage the coating on the screen. Please note that damage of this kind is not covered by the manufacturer's warranty.

To clean the display screen, use an anti-static cloth or a slightly damp cloth. When cleaning, apply only a fixture amount of pressure to the display screen and do not make the surface wet.

To clean the pen tablet casing or Grip Pen, use a soft cloth with mild detergent (such as dish washing liquid) diluted with water.

25. Appendix 12 – technical details

Power

	T4 / T2 / I3 / L5	E2 / S3	S1	M1
Power Requirements:	100VAC to 240VAC +/- 10%, 50-60 Hz			USB powered
Power Consumption:	400 Watts max	40 Watts max	20 Watts max	2.5 Watts max
Power Connector:	IEC 3-pin			USB

Service & Maintenance

With care Vista products will require little or no maintenance. However, the internal battery (in the T and I series only)will need to be replaced on a regular basis (see the following section).

If the front panel requires cleaning, wipe with a mild detergent on a damp soft cloth.

The CD drive mechanism battery (in the T4 / T2 console only) is mechanical and should always be treated with care. Never allow the entry of fluids into the slot.

DO NOT spray liquids onto the front panel.

DO NOT use solvents for cleaning the front panel.

Warning: Do not allow the entry of liquids of any sort into the console chassis.

The T4 / T2 CPU tray should be periodically cleaned to ensure dust does not build up near the fans.

Battery replacement

The Vista T and I series consoles have an internal battery that is used to maintain system BIOS settings. The battery should last approximately 5 years from the date the battery was made. If the console reports BIOS check errors, please return the console to an authorised agent for battery replacement.

Installation

Vista consoles and control surfaces must be installed in a location that allows adequate ventilation around the rear of the product. There must be at least 150mm of free space around the rear and sides of the console when in use. Failure to allow adequate ventilation may result in premature shutdown of the console.

An external UPS may be connected if mains blackouts are anticipated.

L5 / I3 / T4 / T2 Shut down

Always use the correct procedure to shut the console down. Select 'Shutdown' from the File menu.

General Specifications

Inputs & Outputs

Description	Type	Pin Outs	Function
DMX 512 (1-4)	5 pin Female AXR	1	Shield
		2	Data –
		3	Data +
		4	Data – (DMX 4 only)
		5	Data + (DMX 4 only)
Ethernet (100BaseT)	RJ-45	1	Transmit +
		2	Transmit –
		3	Receive +
		4	Unused
		5	Unused
		6	Receive –
		7	Unused
		8	Unused
SMPTE (Audio)	3 pin Female AXR	1	Shield
		2	LTC –
		3	LTC +
MIDI In	5 pin Female DIN	1	NC
		2	Shield
		3	NC
		4	RX+
		5	RXD

Description	Type	Pin Outs	Function
MIDI Thru/Out	5 pin Female DIN	1	NC
		2	Shield
		3	NC
		4	TX+
		5	TXD
COM (RS232)	9 pin D	1	DCD
		2	RXD
		3	TXD
		4	DTR
		5	Gnd
		6	DSR
		7	RTS
		8	CTS
		9	RI
Trigger In	6.5mm Jack Socket	Tip	Trigger In
		Sleeve	Ground
Trigger Out	6.5mm Jack Socket	Tip	Trigger Out
		Sleeve	Ground
Video 1 Video 2	15 pin High Density D	1	Red
		2	Green
		3	Blue
		4	NC
		5	Ground
		6	Red Ground
		7	Green Ground
		8	Blue Ground
		9	Vcc
		10	Sync Ground
		11	NC
		12	VD Data
		13	Horizontal sync
		14	Vertical sync
		15	VD Clock
USB	Type A	1	Vcc
		2	Data –
		3	Data +
		4	Ground
Audio Mic	3.5mm Jack socket	Tip	Signal
		Sleeve	Shield
Audio Out	3.5mm Jack socket	Tip	Left
		Ring	Right
		Sleeve	Shield
Audio Line In	3.5mm Jack socket	Tip	Left
		Ring	Right
		Sleeve	Shield

Description	Type	Pin Outs	Function
Desk Lamp 1		1	Chassis
Desk Lamp 2		2	Lamp –
		3	12V

26. Index