GENESIS

Powered by **LSC**

Lighting Control Console

Operator Manual

VERSION 1.0

PREFACE

ABOUT THESE INSTRUCTIONS

The document provides basic information on installation and operational instructions for a qualified, trained installer. These instructions provide information for the following product:

- Genesis Lighting Control Console
- Genesis Lighting Control Wing
- Genesis Dust Cover

Note: Additional product information can be found on our web site at www.altmanlighting.com or by scanning the QR code to the right.

Please read all instructions before installing or using this product. Retain these instructions for future reference.

Scan QR code to go to the Genesis Lighting Controller web page.

HAVE A QUESTION ABOUT THESE INSTRUCTIONS?

The material in this document is for information purposes only and is subject to change without notice. Altman Lighting assumes no responsibility for any errors or omissions which may appear in this manual.

Should you find an error, have a suggestion or question regarding your Altman Lighting product, we would love to hear from you.

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Yonkers, New York 10701

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OUR COMMITMENT

Altman Lighting continually engages in research related to product improvement. New materials, production methods and design refinements are introduced into existing products without notice as a routine expression of the philosophy. For this reason any current Altman Lighting product may differ in some respect from its published description, but will always equal or exceed the original design specifications unless otherwise noted.

Version as of: 1 February 2020

Genesis Lighting Controller INSTALLATION INSTRUCTIONS / INSTRUCTIONS D'INSTALLATION

CLEANING AND CARE

WARNING! All cleaning should be performed with power completely removed from the Console. Never remove protective covers when the Console is powered. Wear appropriate protective eye wear and gloves when cleaning the unit. All service and maintenance, other than described herein, should be performed by a qualified technician or Authorized Service Center.

Do not allow any liquids or foreign objects to enter the console. If any liquids are spilt on the console, the inside should be cleaned and dried as soon as possible. Only suitably qualified personnel should remove the covers and perform any such maintenance.

WARNING! Under no circumstances should ammonia-based cleaners, acetone, or other harsh solvents be used on or near the Genesis Control Console. Cleaning should be with a damp cloth. Do not use any powerful solvents.

For all other service and maintenance issues, please contact your local Altman Lighting office or an Authorized Service Center.

WARNING! Disassembly (other than as described herein), alterations, unauthorized service, etc. will void the product warranty. Contact your local Altman Lighting office or an Authorized Service Center for technical support and service.

When connecting any devices to the console, make sure that all connections are correct before switching on the power. If any doubt exists, obtain the assistance of qualified personnel.

IMPORTANT INFORMATION

PRODUCT SAFETY NOTICES

When using electrical equipment, basic safety precautions should always be followed including the following:

a. *READ AND FOLLOW ALL SAFETY INSTRUCTIONS.*
b. *Do not use outdoors unless the product is specified to operate in outdoor environments.*
c. *Do not mount near gas or electric heaters.*
d. *Equipment should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.*
e. *The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.*
f. *Do not use this equipment for other than intended use.*
g. *Refer service to qualified personnel.*

WARNINGS
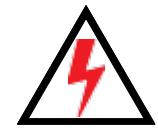
WARNING: RISK OF ELECTRICAL SHOCK! You must have access to a main circuit breaker or other power disconnect device before installing any wiring. Be sure that power is disconnected by turning the main circuit breaker off before installation. Installing the device with power on may expose you to dangerous voltages and damage the device. It is always recommended that a "lock out tag" device is installed on the appropriate circuit disconnect prior to beginning electrical work of any kind. A qualified electrician must perform this installation.

WARNING: Insulation between low-voltage supply and control conductors is provided by basic insulation.

WARNING: Refer to National Electrical Code® and local codes for cable specifications. Failure to use proper cable can result in damage to equipment or danger to personnel.

WARNING: This equipment is intended for installation in accordance with the National Electric Code® and local regulations. It is also intended for installation in indoor applications only. Before any electrical work is performed, disconnect power at the circuit breaker or remove the fuse to avoid shock or damage to the control. It is recommended that a qualified electrician perform this installation.

WARNING: This Control Console is NOT for residential installation or use.

THIS PRODUCT MUST BE INSTALLED IN ACCORDANCE WITH THE APPLICABLE INSTALLATION CODE BY:

A PERSON FAMILIAR WITH THE CONSTRUCTION AND OPERATION OF THE PRODUCT AND THE HAZARDS INVOLVED.

CE PRODUIT DOIT ÊTRE INSTALLÉ SELON LE CODE D'INSTALLATION PERTINENT, PAR UNE PERSONNE.

CONSULT A QUALIFIED ELECTRICIAN TO ENSURE CORRECT BRANCH CIRCUIT CONDUCTOR.

CONSULTER UN ÉLECTRICIEN QUALIFIÉ POUR VOUS ASSURER QUE LES CONDUCTEURS DE LA DÉRIVATION SONT ADÉQUATS.

FCC NOTICE

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.

Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

ALTMAN LIGHTING PRODUCT WARRANTY

WARRANTY TERM

Altman Lighting, Inc., a subsidiary of Altman Stage Lighting Company, Inc., herein referred to as Altman, warrants each new product (except for spare parts or products Altman does not manufacture) for a period of TWO (2) years from date of shipment to correct by repair or replacement any part defect due to faulty material or workmanship. Under these same terms products with an LED light source shall be warranted for a period of THREE (3) years.

Altman warrants for NINETY (90) days any spare part it manufactures. On spare parts or products Altman does not manufacture, including, but not limited to, lamps, sockets, lenses, roundels, electronics, ignitors, ballasts, etc.; Altman will grant the same warranty given Altman by its vendors.

Altman assumes no responsibility for damage or faulty performance caused by misuse, improper installation, careless handling or where repairs have been attempted by others.

This warranty is in lieu of all warranties or guarantees expressed or implied and no representative or person is authorized to assume Altman any other liability with the sale of Altman's products.

For complete warranty terms and conditions, please refer to our web site at www.altmanlighting.com.

WARRANTY SERVICE

In order to request warranty service, a Return Material Authorization (RMA) number must be issued prior to return.

Return shipments must be visibly marked with the RMA number; the product must be returned (shipping prepaid) to the factory at:

Altman Lighting Inc.
Attention: RMA #
57 Alexander Street
Yonkers, NY 10701

Returns must be within THIRTY (30) days of receipt of RMA

Conventions Used in this Manual
Throughout this manual, certain conventions have been used to make the meaning clearer.

- A word in Bold text represents a virtual button on the touch screen.
- A word in [Bold] text with square brackets represents a physical button.
- Emphasis is indicated by underlining.

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Every care is taken in the preparation of this manual, ALTMAN takes no responsibility for any errors or omissions.

The Genesis operating software and the contents of this manual are copyrighted.

1 INTRODUCTION

1.1 OVERVIEW

Genesis combines the ease of use of a fader-based console, with the power of a touch screen graphical user interface to make control of LED fixtures easy and intuitive while still allowing control of moving lights and conventional dimmers. The software shows what to do next, ensuring a very easy learning curve for even the novice user.
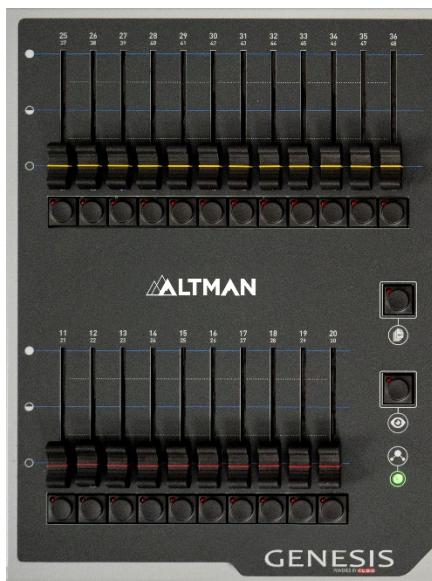
Genesis Wing #GEN-WG-12   *Genesis Console #GEN-24*

Genesis can control 24 lighting fixtures of any type, dimmer, LED, moving LED and moving lights. Expansion Wings allow 12 additional fixtures to be controlled per wing. Faders are used to control intensity and the large touch screen has "Apps" that allow you to easily program color, position or other attributes. The "Home" screen "rig view" has fixture icons showing intensity, color and position of each fixture. The fixture icons can be positioned on the screen to emulate their actual position in a rig.

Genesis makes controlling multi-color LED fixtures easy. The different types of attributes (RGB, RGBA, RGBAW or CMY) are all controlled via a simple touch screen color picker. Position (Pan and Tilt) is also controlled via the

9

touchscreen and other attributes by virtual faders. This allows Genesis to control not just color, but all the attributes of modern moving lights.

Where Genesis really shines is in its effects. The unique Animate Apps provides a simple and intuitive way to quickly create chases and patterns in a single cue, usually within just a few seconds. This feature alone makes the Genesis the most powerful in its class. The Shapes App provides a quick and simple way of creating continuously moving positions on fixtures that have Pan and Tilt attributes by constantly varying those attributes.

An Undo command system and context sensitive Help ensures that Genesis is easy to use.

By adjusting the intensity and color of fixtures and creating animations or shapes, the current output can then be recorded onto any Red Playback fader. Genesis has the capacity to record up to 1,000 cues, across 100 cue-lists or chases.

Fixture library updates and new software features are easily installed via a USB drive. Show files (that are stored in the console) can be backed up to a USB drive for off-site storage.

1.2   QUICK START GUIDE

A summary of the information in this "User Manual" can be found in the Genesis "Quick Start Guide" supplied with your Genesis for download at www.altmanlighting.com

1.3   LATEST FEATURES / FIXTURES

ALTMAN has a corporate policy of continuous improvement covering areas such as product design and documentation. To achieve this goal, we undertake to release software updates for all products on a regular basis. Every software release includes the latest version of the Fixture Library.

1.4   EXPANSION WINGS

The Genesis Wing is an accessory for the Genesis lighting console.

Up to 2 wings can be connected to a Genesis console.

Connecting a Genesis Wing provides control of an additional 12 lighting fixtures (25-36) and an extra 10 playbacks (11-20) (with 10 pages of memory) as well as a second DMX512 universe (U2) output.

Connecting a second Genesis Wing provides control of a further 12 fixtures (37-48) and a further 10 playbacks (21-30) (with 10 pages of memory) as well as a third DMX512 universe (U3) output.

1.5   SAMPLE SHOW

Genesis comes with a "Sample" show to load so the controls can become familiar before patching a show. To load the sample show from the "Home" screen touch:

> Tools/Load/SampleShow.

To skip the sample show and patch fixtures now, go straight to section: 4.1.

The sample show is patched with the following fixtures:

- 4 SGM Moving lights patched to yellow faders 1 -4
- 8 x Spectra Cyc RGBA LED cyclorama fixtures patched to yellow faders 6-13
- 6 x Dimmers patched to yellow faders 14-19
- 6 x AP150 RGBW LED par fixtures patched to yellow faders 20-25
- Chalice LED Downlight patched to yellow fader 26
- 2 PHX2 RGBA LED Profile fixtures patched to yellow faders 27-28

Sample memories are recorded on Page 10 for experimentation. The other 9 pages of memory are blank.
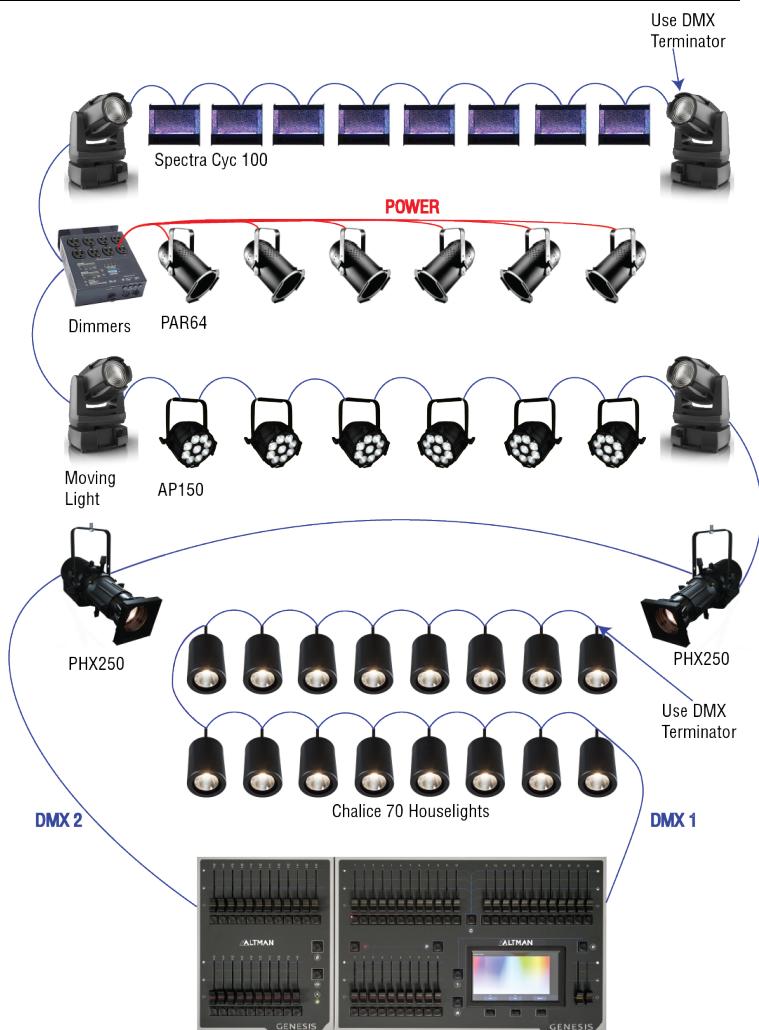
1.6   VISUALIZER

A simulation of the fixtures is available in the sample show. Working on a virtual stage, a 3D visualizer lighting program called "Genesis Visualization show" can be downloaded. See section 19 for details.

1.7   MODELS AND ACCESSORIES WITH PART NUMBERS

Model Order Code	Description
GEN-24	Genesis control console and external power supply
GENESIS/LTDC	Dust cover for Genesis control console.
GEN-WG-12	Expansion wing for Genesis console.

2 GETTING CONNECTED

2.1 REAR PANEL LAYOUT

External Power Supply Input	2 x USB connectors	Ethernet	DMX 512-A output	Kensington Lock
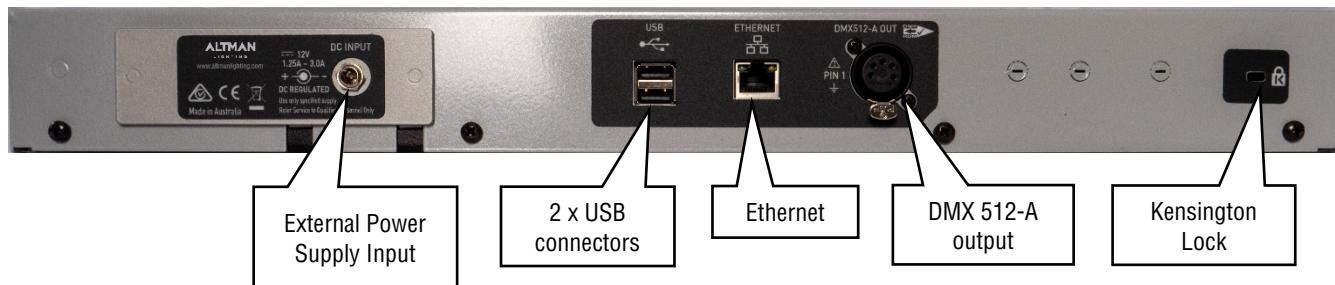
2.2 POWER INPUT

Genesis has a DC power input. Connect the DC plug to the back of the console. Then plug the AC power cord into a standard NEMA 5-15 or 5-20 outlet. The console will then boot up.

After briefly displaying the opening message, Genesis will commence operating in the same state that it was in with all the cues, animations and patches etc. as they were when Genesis was last switched off.

2.3 POWERING OFF

Switching off the console is inverse to the power input section. The Genesis has an inbuilt back up power supply. When the power is removed. the Genesis will operate on its own power supply for 5 seconds to allow it to automatically save the current show.

⚠️ After resetting the system by removing the power, allow 15 seconds before re-starting to ensure that the system has fully shut down.

2.4 DMX 512 OUTPUT CONNECTOR

The console has a 5 pin DMX512-A output connector. Connect a DMX data cable from the DMX512-A output of the console to the DMX512 input of your equipment (LED fixtures, dimmers, etc.) and set the required DMX addresses on your equipment.

⚠️ Only use specific DMX cable (available from your lighting supply company). Never use audio cable. The end of the DMX line must be terminated (with a 120 Ω resistor) to prevent the signal reflecting up the line and causing possible errors.

See section 4.2 "Patching a Fixture" for more details.

See section 22.11 for more information on DMX cables.

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2.5   USB CONNECTORS

Two USB connectors are provided. They can be used to connect:

- A memory stick for show backup and software upgrades.
- A LED USB desk light (up to 250mA).
- Expansion wing. Up to two wings can be connected.
  Note: Use of a USB Splitter is not recommend for use with the Genesis Console

2.6   ETHERNET NETWORK CONNECTOR

An RJ45 Ethernet network connector is provided. It can be used to output Streaming ACN (sACN) and ArtNet. These are lighting control protocols that send DMX lighting data over a network.

See section 17.3 "Network" for more details.

2.7   KENSINGTON LOCK SLOT

The Kensington Lock slot allows you to secure your Genesis using a commercially available tethering device.

3   HELP AND UNDO

3.1   HELP

Context sensitive help is available on the touch screen for most functions. Press the ⑦ button to open the help screen. Press ⑦ or 🏠[Back] to close.

3.1.1   Languages

Help pages are available in several languages. To select a language, from the "Home" screen touch Tools/Setup/Language then touch the language of your choice.

3.2   UNDO

To quickly undo your last action <u>double tap</u> ↺ .

Genesis remembers most of your actions in a list. Press ↺ once to see the list.

Touch Undo to undo an action and step down the list.
Touch Redo to redo an action and step up the list
Actions that have been undone turn grey.

Undo/Redo History
Record Memory P2-M6
Record Memory P1-M4
Record Memory P1-M2
Record Memory P1-M1
Position change: channel 24
Colour change: channel 24
Position change: channel 24
Colour change: channels 9, 8, 11,
Colour change: channels 9, 8, 11,
Colour change: channels 9, 8, 11,
Colour change: channels 9, 8, 11,
Colour change: channels 2, 4, 6, 8, 10, 12, 20, 22, 24,
Colour change: channels 1, 3, 5, 7, 9, 11, 19, 21, 23,
Position change: channels 22, 23, 24,
Position change: channels 22, 23, 24,
Position change: channels 19, 20, 21,
Position change: channels 19, 20, 21,
Patch: 19 20 21 22 23 24

Undo — Undo
Redo — Redo

Press 🏠 [Back] or press ↺ when finished.

⚠ Note: The undo list is automatically <u>cleared</u> whenever you save your show, start a new show, load an existing show or switch off the power.

⚠ Note: The "Undo" function is not available when editing "Rig View" (section 7), when using the "Fixture Editor" (section 18) or when deleting a memory (section 15.1.8).

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4 PATCHING FIXTURES

4.1 OVERVIEW

The output control signal from the Genesis is DMX512-A. DMX is an international standard for controlling lighting equipment. Your lighting fixtures and dimmers have a DMX input and usually a DMX output so that you can connect multiple devices in a daisy chain fashion. By setting an address on each fixture and using Genesis to control each fixture based on its address, each fixture will use a quantity of DMX channels to control its different functions as listed in its specifications. The address chosen for each fixture must allow for the addresses used by other fixtures so that no overlaps exist. For example, fixture 1 is set to address 001 and the fixture uses 4 DMX channels. Fixture 2 must be set to address 5 (or higher).

The DMX signal is output on the 5 pin XLR connector on the rear of Genesis. Each optional wing also has a DMX output. Fixtures can also be controlled via the network connector using either "ArtNet" or "sACN" protocols.

See section 17.3 for details.

Genesis includes a fully integrated fixture library of over 5500 fixtures (most with multiple operating modes) supplied by Carallon, an independent supplier of fixture libraries.

If you do encounter a fixture that is not in the library, there are two choices:

1. A fixture request service is available via support@altmanlighting.com Please send all fixture details including the fixtures DMX map and manual. This process takes at least one month from the date of request.
2. The inbuilt Fixture Editor allows for quick creation of templates for new fixtures. See section

Input of manufacturer/model and DMX address of each of fixture is done in the patch menu of Genesis. By choosing a fixture number (1 to 24) (yellow fader and button) then patching the fixture to that number, Genesis will load a "template" for that manufacturer/model of fixture. The template tells Genesis how to control that fixture.

The yellow fader of the fixture number selected now controls the intensity and the touch screen provides the correct controls for that fixture. For example, if the fixture is a multi-colored LED, Genesis provides a color picker App to control the color and the yellow fader will control its intensity. If the fixture has pan and tilt capabilities, Genesis provides a position control App to control the position.

4.2   PATCHING A FIXTURE

Set the DMX address on the fixture to be patched.

On Genesis, from the "Home" screen, touch Tools/Setup/Patch.
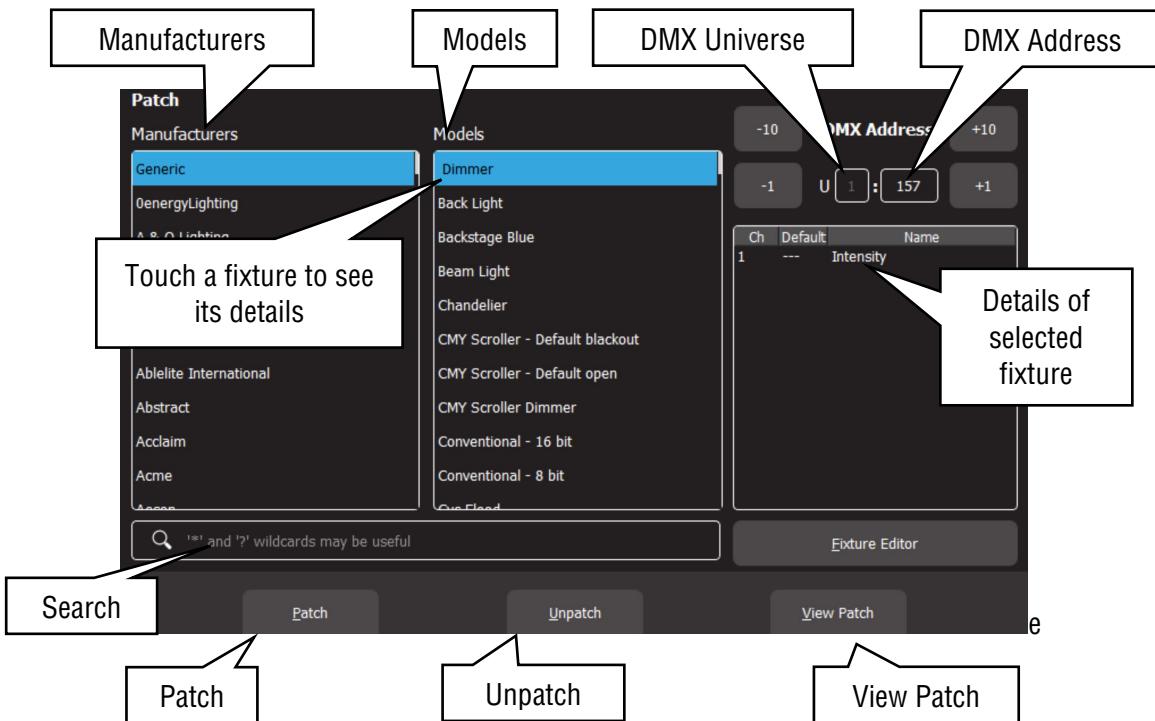
Select the fixture Manufacturer and Model of the fixture to be patched from the lists. Swipe the screen to scroll the list. Dimmers and many LED fixtures can be found in the "Generic" manufacturers listing.

You can touch the "Search" icon and type in a manufacturer or model name using the pop-up keyboard. The symbol (*) can be used as a substitute (wild card) for any string of characters in your search term. You can also use the symbol (?) as a substitute for one character.

When you select a fixture file, the details of the DMX channels for that fixture are shown on the right.

NOTE: Optional control wings or using ArtNet or sACN will provide access to multiple universes.

Set the universe to which the fixture is connected by touching the "U" box and using the +10, +1, -10 and -1 buttons. The assigned universes are remembered if the wings or nodes are still plugged in when Genesis is switched on. To change the assigned universes, unplug the wings or nodes and plug them in in the order that you require. The first plugged in wing or node will be assigned to universe 2, the next to universe 3 etcetera.

Next, set the DMX address (to match the DMX address on the fixture) using the +10, +1, -10 and -1 buttons.

Select a fixture number for the fixture by tapping one of the flashing buttons below the yellow faders. The button/fader that you choose will be used to control this fixture.

Touch Patch to make the connection.

Repeat the above steps for each different fixture. Fixture numbers that have already been patched are lit.

To see all the patched fixtures, touch View Patch.

View Patch
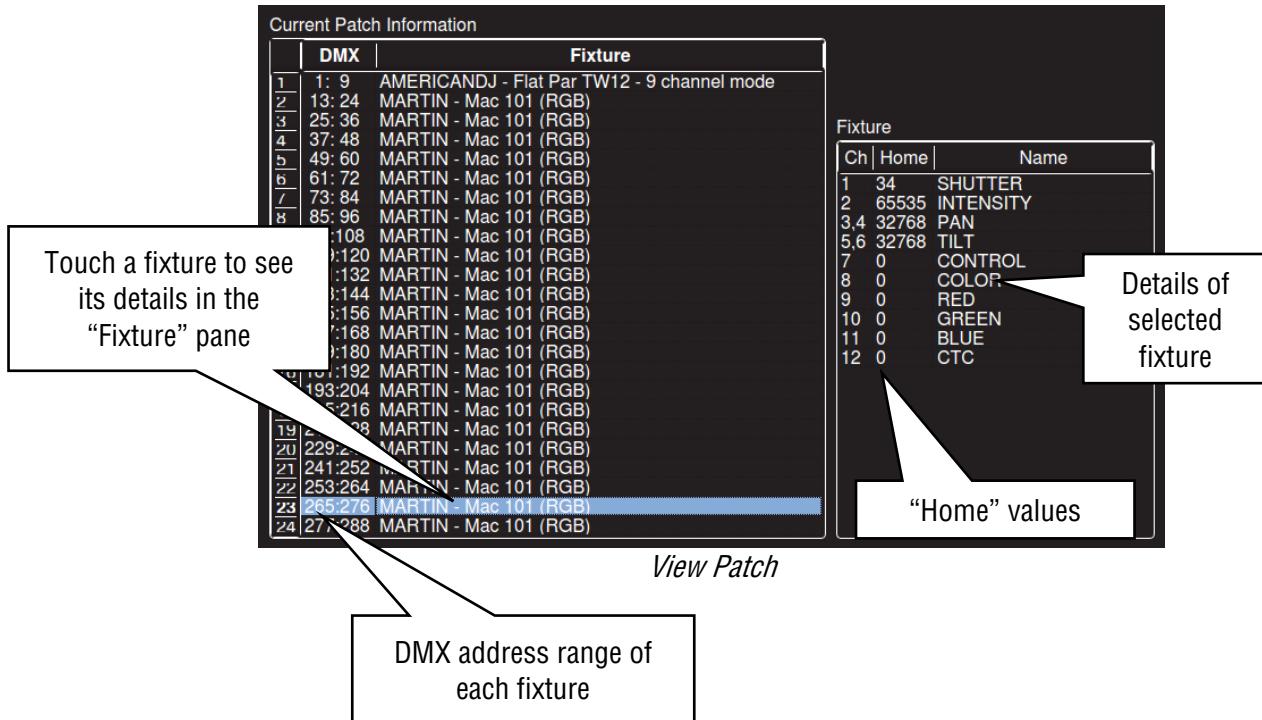
Touching a fixture name will show the details of the channels for that fixture on the right in the "Fixture" pane.

To return, tap 🏠 [Back].

When finished patching double tap 🏠 [Back].

4.3   PATCHING MULTIPLE FIXTURES IN ONE OPERATION

If multiple fixtures of the same type exist that are set to contiguous DMX addresses, they can all be patched in one operation. Select the starting address of the first fixture then select each of the fixture numbers by tapping the yellow buttons or to select a range of fixture numbers, hold the first number and tap the last number in the range. Touch Patch, Genesis will patch all the fixtures to their faders and automatically increment the starting DMX address for each fixture.

4.4   PATCHING MULTIPLE FIXTURES TO THE SAME FADER

Multiple fixtures of the <u>same type and mode</u> but with different DMX addresses can be patched to the same yellow fader. This frees up yellow faders for other fixtures.

NOTE: these fixtures will be operated together as a group as they are patched together under the same control fader.

Multi-patching is often done when multiple fixtures have a common purpose (such as a color wash on the stage) and control them all from the same fader is required. Each fixture could be set to the same DMX address and only

make one patch would be needed, but if access the fixtures to change their addresses is not available or permission to change their addresses is not granted, using their existing addresses will be required.

Therefore, each fixture has a different DMX address but is patched to the same yellow fader.

⚠	Remember that each fixture must be the same type and be set to the same mode of operation.

4.5 PATCHING COMPOUND FIXTURES

A "compound" fixture is a fixture that contains multiple fixtures within the one fixture. Compound fixtures are also known as "Multi-Cell" fixtures.

For example, many RGB LED strips are compound fixtures because they have multiple RGB cells within the one fixture. The fixture has a menu that allows you to select different "modes" of operation. A simple mode might provide 3 control channels (RGB) that control the entire fixture. Other modes might allow you to divide the fixture into 3 sections and use 9 channels to control the RGB of each section. The most complex mode might allow you to individually control every pixel. Complex modes use a lot of DMX channels and can be difficult to program. Compound fixtures usually also have modes that allow you to control effects that are built into the fixture such as pixel mapping effects, color pulsing or chase effects. These modes use some DMX channels to control those effects.

ALTMAN recommends that when patching compound fixtures you select a mode that uses the least amount of channels but includes channels that control the built in effects, preset colors, zoom modes, or similar.

4.6 UN-PATCHING A FIXTURE

From the "Home" screen touch Tools/Setup/Patch.

To un-patch a fixture, press its fixture number (1 to 24) then touch Unpatch.

When finished patching double tap 🏠 [Back].

4.7 SAVE PATCH

When saving a show, the patch is saved as part of that show. See section 16.

If the patch is to be used on a regular basis such as in a permanent installation or in a touring show that always uses the same lighting rig, it can be saved as the "default show". See section 17.6.

4.8 HOME VALUES

When using the "Clear" a fixture function (see section 8.8), if the fixture has a color mixing function (RGB or CMY) Genesis will set its color to white and if it has a movement function it will center the pan and tilt. These values are hard coded in the Genesis software. All other attributes of the fixture will be set to their "home" values that are listed in their fixture template. These values can be seen in the "View Patch" screen (above). Typically, these values will set a color wheel to clear, gobo wheel to open, shutter to open etcetera so that the fixture outputs an open white beam.

4.9 FIXTURE EDITOR

It is possible to create a template for a new fixture if it is not listed in the Genesis fixture library. The Fixture editor can also be used to edit an existing fixture template.

See section 18.3 for details.

5 FRONT PANEL

5.1 OVERVIEW

24 Fixture Faders and Buttons (Yellow)

Select ⊕

Record Output

Help ?

Playback Page select

10 Playback Faders and Buttons (Red)

Undo ↺

Back 🏠

Touchscreen

Fixture Master (Yellow)

Playback Master (Red)
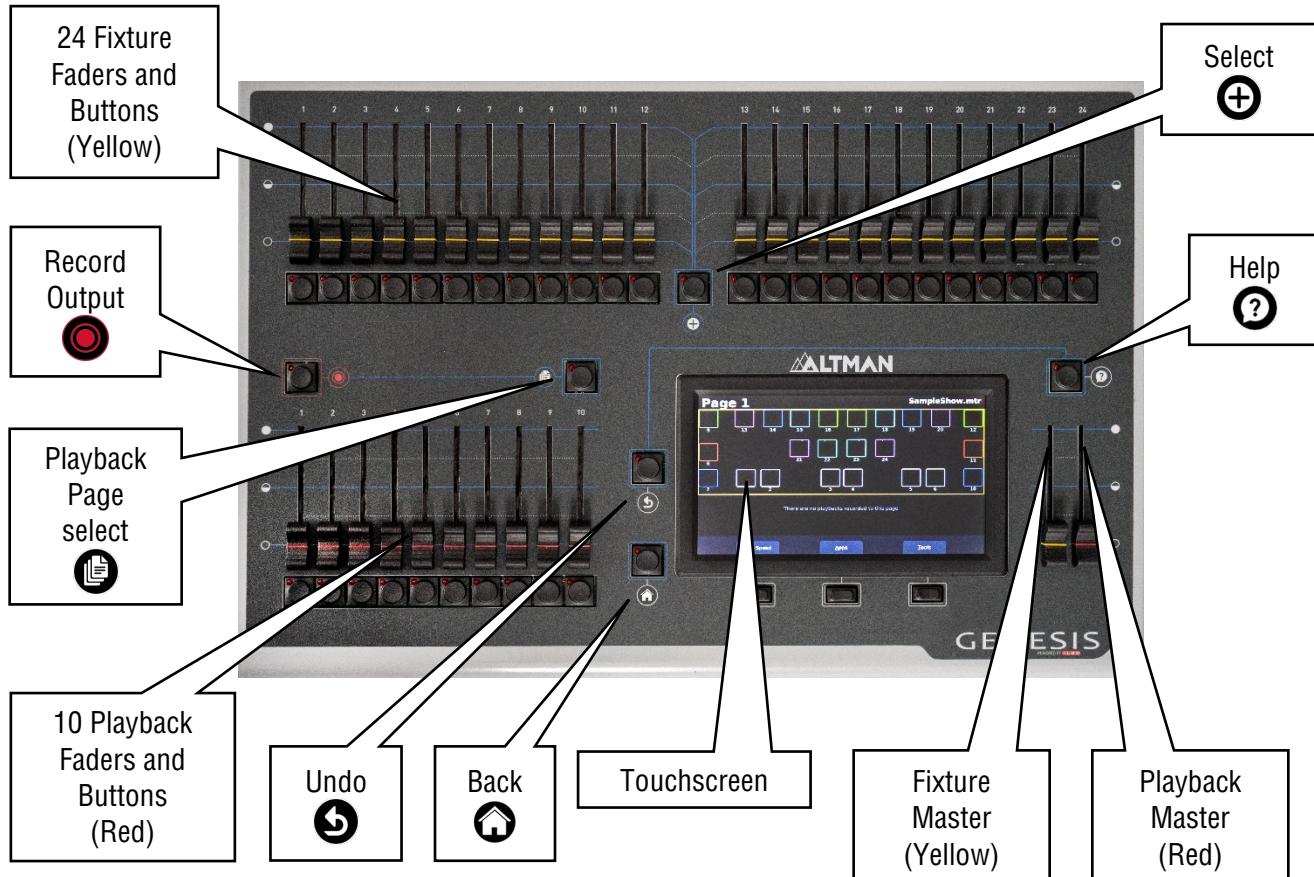
5.2 BASIC OPERATION

Genesis can control up to 24 lighting fixtures (up to 48 fixtures with optional wings). The 24 Yellow fixture faders control fixture intensity. Moving a fixture fader automatically selects that fixture allowing its other attributes such as color or position to be controlled by Apps on the touch screen (see section 9). Moving a fader to zero deselects the fixture.

The ⊕ [Select] button provides more fixture selection options.

The Yellow "Fixture Master" has overall intensity control of the yellow fixture faders.

The current output can be recorded into any of the Red playbacks by tapping ⏺ [Record] then tapping a Red playback button of your choice [1-10]. Different looks can be recorded on different Red Playback faders or into a "Cue-list" on a single Red Playback fader so that you can easily change the entire look on stage by using the Red Playbacks. There are 10 red playback faders and 10 pages of memory giving a total of 100 memories.

Repeated taps of the 📄 [Page] button will step through the 10 pages of memory.

To switch directly to a page number HOLD 📄 [Page] and tap a Red playback button [1-10]. The Red "Playback Master" fader has overall intensity control of the Red playbacks.

6   TOUCH SCREEN

6.1   OVERVIEW
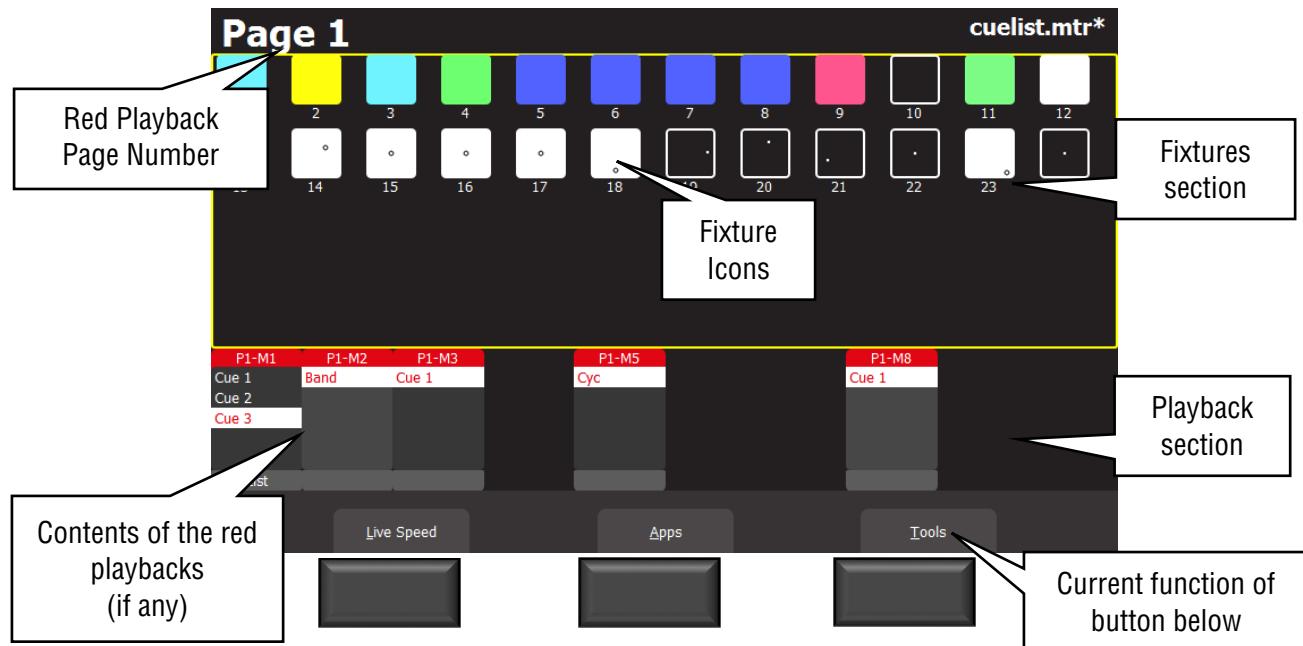
The 3 buttons below the touch screen have different functions for different screens. Their current function (if any) is shown on the screen above each button. Either tap the button or touch the virtual button on the screen to operate them.

If the touch screen is not on the "Home" screen (as shown above), tapping the 🏠 [Back] button steps back through the screens to the "Home" screen. Double tapping 🏠 [Back] quickly returns to the "Home" screen from any screen.

The "Home" screen is divided into two sections:

1.   The Fixtures section at the top (yellow border) has Fixture icons.
2.   The Playback section at the bottom has Playback icons (when a recording has been made).

⚠️ Note: All touchscreen events are triggered upon finger lift-off from the screen. This allows you to slide to a different button or no button if you select the wrong item.

An underlined letter on a touch screen button label indicates that the button can also be operated by pressing that letter on a USB keyboard plugged into Genesis.

Some screens have sliders to adjust values. When touching a slider, you can drag the slider and even let your finger drift off the slider as long as you keep your finger on the screen. If you touch the background, the slider will snap to where you touch.

Touch the background to snap the slider to that position

Touch the slider then drag it

6.2 FIXTURE ICONS

The top section of the "Home" screen has an icon for each of the fixtures that have been patched.
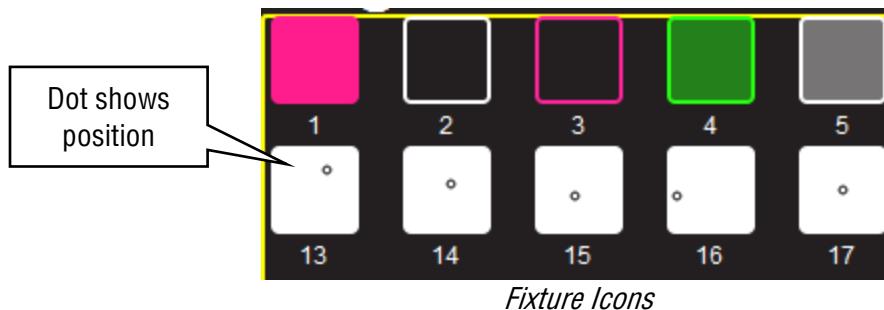
Dot shows position

Fixture Icons

- The body of each icon shows the intensity, dark to bright.
- The body and border shows the color mixing (if the fixture has this capability).
- A dot shows the position (if the fixture has a pan/tilt function).

Note: The color of the icon represents colors created by RGB (Red, Green, Blue) or CMY (Cyan, Magenta, Yellow) color mixing in the fixture. Colors created by color wheels or filters are not shown.

Touching anywhere in the "fixtures section" (or touching Apps) opens the "Apps" screen. Apps are used to control the attributes of selected fixtures. Move a yellow fader to automatically select that fixture. Use an App to adjust the attribute.

Touching and holding any fixture icon for 2 seconds opens "Rig View". See section 7.

6.3 PLAYBACK ICONS

The bottom section of the "Home" screen has playback icons that show the contents of the 10 Red Playbacks. Playback icons appear when a memory is recorded into a Page/Playback and show the contents of the Playback.

Page/Memory Number

P1-M1 contains a "Cue-List" containing 3 cues

Touch a Playback icon to modify the memory

Cue Name

Black background indicates a "Page Freeze". See Below.

22
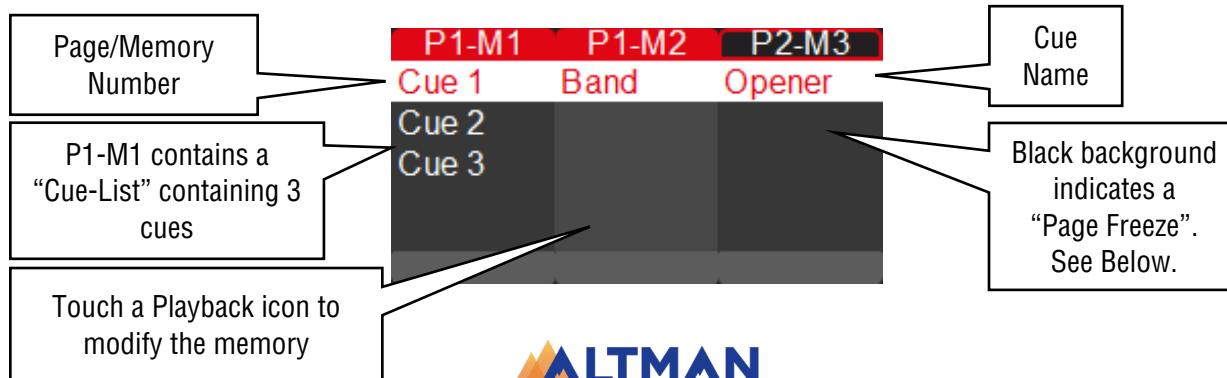
The top part of the icon shows the memory number in the form of "P#" (Page number) and "M#" (Memory number). The 10 memory numbers relate to the 10 playback faders.

There are 10 Pages of memory available. A black background on the page/memory number indicates that a "Page Freeze" has occurred. This means that this playback was active (faded up above zero) when the page number was changed and hence its memory is not from the "current" page. See section 11.2 for more information on "Memories" and section 12.4 for "Page Freeze".

Touching any playback icon opens the "Edit Memory" screen….
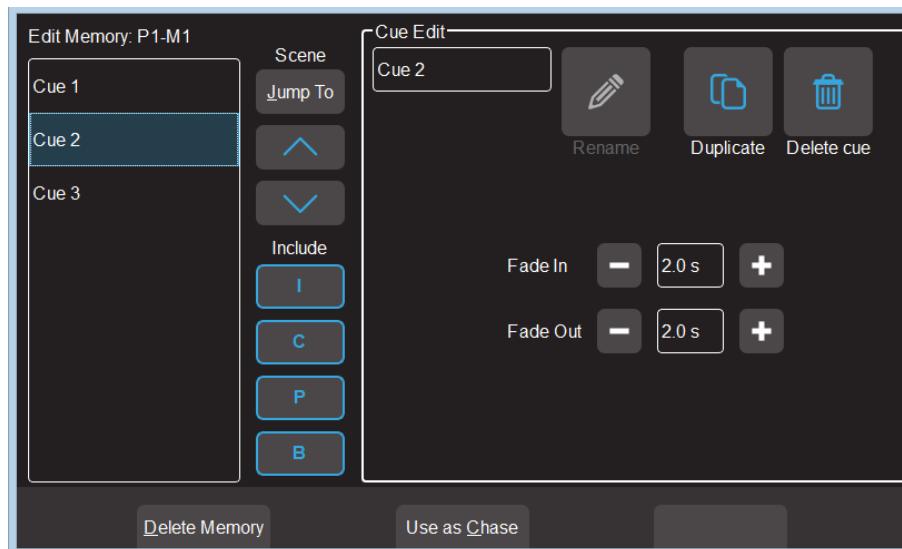
Touch a cue to select/de-select it. Multiple cues can be selected. Using this screen you can:

- Select a Cue then directly Jump To that cue. Useful if you have a long cue-list and you want to quickly playback a cue without stepping through all the intermediate cues.
- Re-order the selected cues using the ∧ or ∨ buttons.
- "Include ICPB". When a memory is recorded it includes all the Intensity, Color, Position and Beam (I C P B) attribute groups. Touching an attribute group (I C P B) excludes that group from the playback. The selection applies to all cues in the cue-list.
- Change "Fade In" time and a "Fade Out" times of the selected cues.
- Re-name the selected cue.
- Duplicate the selected cue.
- Delete the selected cues.
- Delete Memory (all cues in the list).
- Use the list as a chase or a cue-list.

To edit the contents of a cue, see section 15.2.

7		**RIG VIEW**	

7.1   OVERVIEW

The fixture icons on the "Home" screen can be arranged geographically so that they are positioned on the screen in a similar fashion to their position in your rig or stage. This can assist in quickly identifying fixtures.

7.2   ARRANGING ICONS

To arrange the icons, tap and HOLD any of the fixture icons for 2 seconds. A yellow flashing dotted box appears around the icons. When the yellow box is flashing you can drag and drop individual fixture icons to position them on screen. You can also change the size of the icons or reset to the default positions.
Touch 🔲 to save your layout.

Reset to default size & positions   Change Icon size   Save changes   Cancel changes
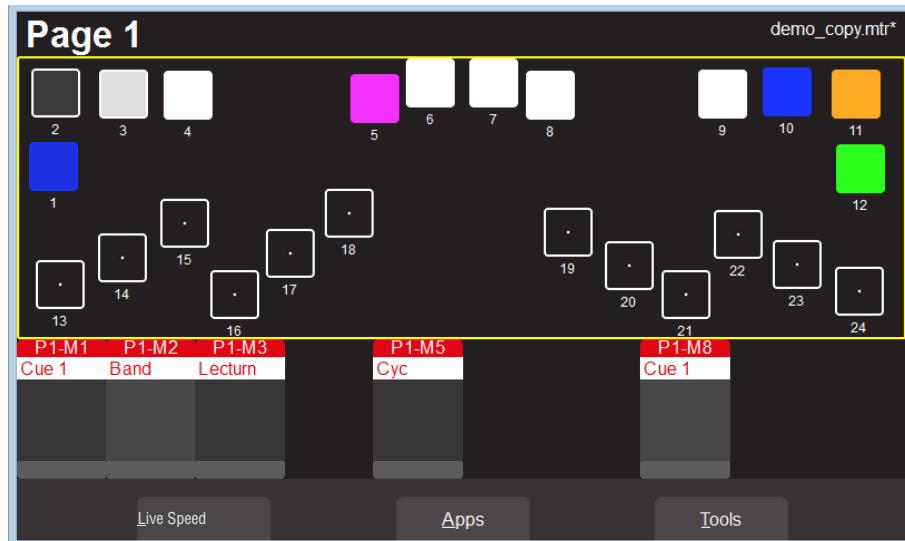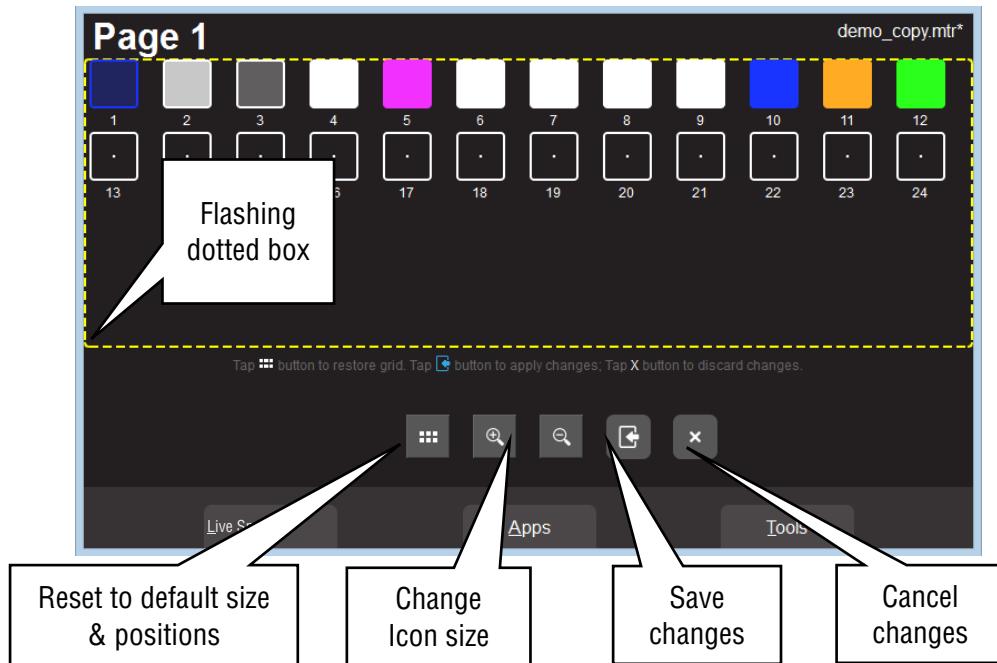
Example of Icons re-positioned to match rig

8   CONTROLLING FIXTURES

8.1   INTENSITY

The 24 (yellow) fixture faders (under the overall control of the yellow fixture master) control the intensity of the fixtures that are patched to them. To see the output of a fixture:

- Fade up the Yellow Master
- Fade up a fixture fader to set its Intensity

See also "Flash", section 14.

8.2   FIXTURE ATTRIBUTES

Genesis uses "Apps" on the touch screen to control the attributes (color, pan/tilt, shutter etcetera) of selected fixtures.

From the "Home" screen, open the "Apps" screen by touching anywhere in the top half of the "Home" screen (within the yellow box) or touching Apps.

"Home" Screen
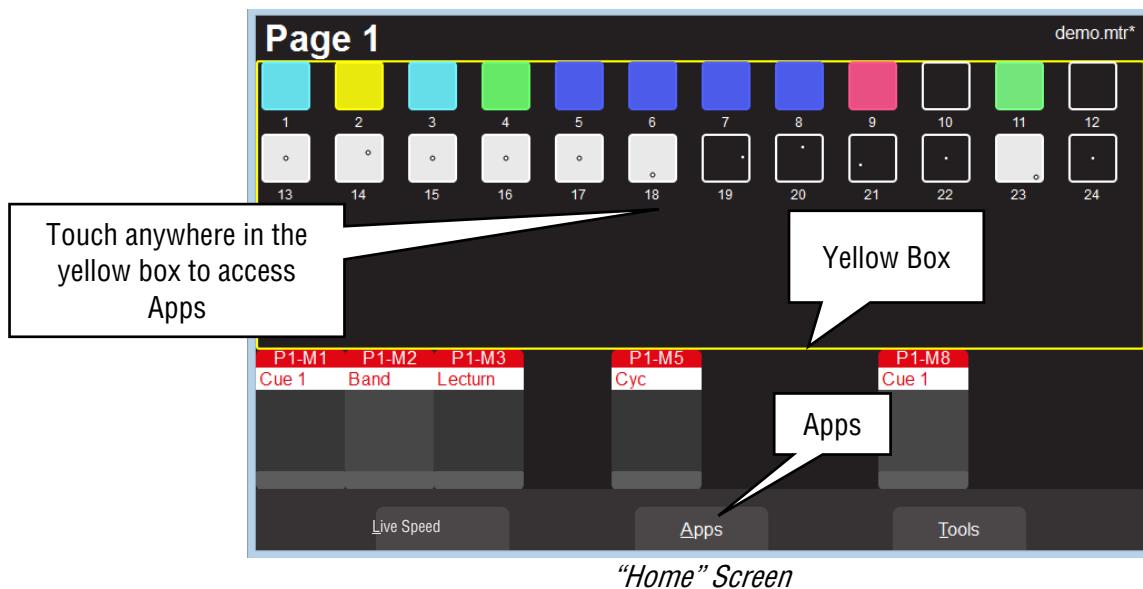
The Apps screen opens:

Apps Screen
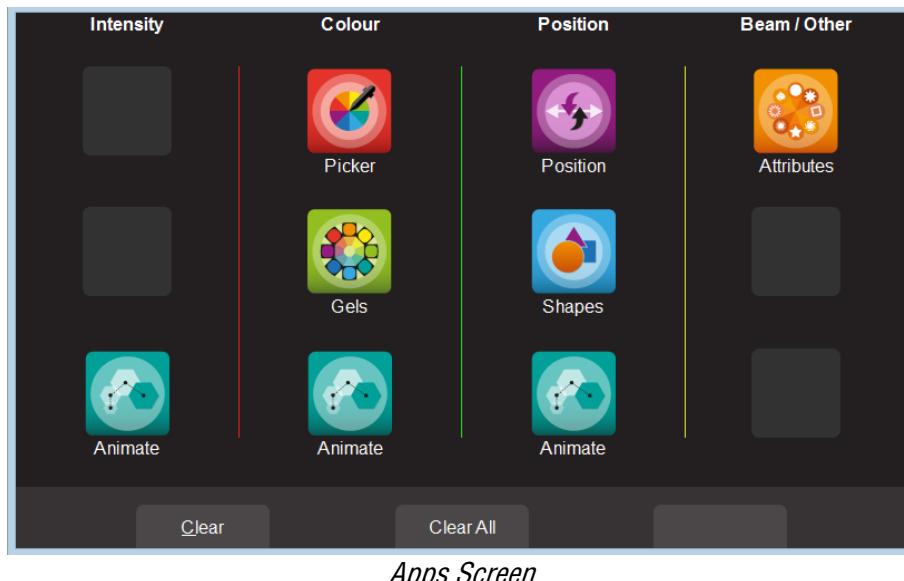
First, select the App icon for the type of attribute that you want to control then select the fixture(s) to be controlled. Apps are arranged in 4 attribute columns. Each column has Apps for their type of attribute. All Animate Apps are described in section 9.

8.2.1   Intensity Column

The Intensity "Animate" app allows creation of intensity chases and patterns.

8.2.2   Color Column

The "Picker" apps allows control of the color of selected fixtures and to "fan" colors across multiple fixtures.
The "Gels" apps allows picking from pre-set colors for selected fixtures
The "Animate" app allows creation of color chases and patterns.

8.2.3   Position Column

The "Position" app allows control of the pan and tilt position of selected fixtures and to "fan" positions across multiple fixtures.
The "Shapes" app provides a quick and simple way of creating continuously moving positions.
The "Animate" app allows creation of moving beam effects.

8.2.4   Beam / Other Column

The "Attributes" app provides control of all beam attributes such as "Gobo", "Color Wheel", "Shutter" etc. plus any other attributes of the selected fixture.

8.3   SELECTING FIXTURES

When you use an App, you need to select the fixtures that you want to control with that App. Fixtures that have attributes that can be controlled by the selected App will flash their buttons indicating that they are available for selection.

For example, if selecting a "Pan/Tilt" App, only fixtures with Pan/Tilt attributes will flash.

There are several methods of selecting fixtures:

- Move a yellow fader to automatically select that fixture. Move the fader to <u>zero</u> to <u>de-select</u> it. Move multiple yellow faders to select a multiple fixtures.
- Tap the button below a yellow fader to select that fixture. Tap again to deselect it. Multiple fixtures can be selected.
- To quickly select a range of fixtures, <u>hold</u> the first button and tap the last button in the range. This works in either direction, low number to high number or high number to low number.

When a fixture is selected its button is lit.

Note: When selecting multiple fixtures, the order in which the fixtures are selected is used by Genesis when <u>fan-ing</u> colors or positions and in <u>animations and shapes</u>. Changing the selection order will change the look of a fan, animation or shape by.

To use any previous selections, press the ⊕ button (located between the yellow faders). The "Selection" screen opens:
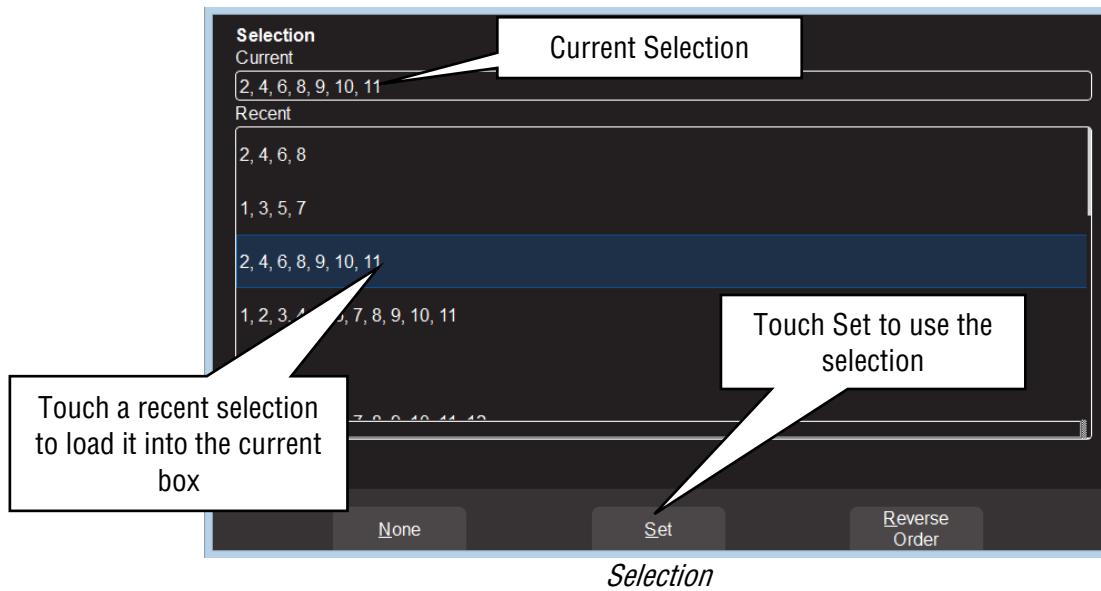
Selection

The "Current" fixture selection is shown at the top.
All "Recent" selections can be viewed. Swipe to see more (if available).

To use a recent selection, touch it then touch Set.
To reverse the current selection order touch Reverse Order.
To clear the current selection touch None.

Once a previous selection is set, faders or buttons can still be used to modify the selection as described above.

Note: Selecting multiple fixtures by pushing up their faders, might get a random selection order. You can always check the current order by tapping ⊕ [Select] and then re order the selection using the selection methods described above.

8.4 AUTOMATIC FIXTURE DE-SELECT

When opening an App, fixtures that have attributes that can be controlled by that App flash their buttons indicating that they are available for selection. Selecting fixtures will light their buttons. When using the App to change any attribute of the selected fixtures, the buttons of the un-selected fixtures stop flashing. This means that selecting another fixture will cancel the previous selection and start a new selection process. This speeds up operations because there is no need to de-select fixtures once their attributes are set.

For example: Open the Color Picker App and fade up fixtures 1 and 2. They are automatically selected. Pick a color. Fade up fixture 3 and 4. This de-selects 1 and 2 and selects 3 and 4. Pick a color for 3 and 4.

Automatic fixture de-select can be overridden by holding the ⊕ [Select] button while selecting additional fixtures. This allows easy addition of fixtures to those which have already been adjusted.

8.5 CONTROLLING COLOR

8.5.1 Picker App

From the "Home" screen, open the "Apps" page (described above) then touch the color Picker app icon. Fixtures that have color attributes will flash their buttons. Select the fixtures (described above) then drag your finger to change the color. The final color is selected when you lift your finger from the screen. The side of the color picker app shows the recently selected colors (latest at the top). Touch any of the recent colors to re-use them.
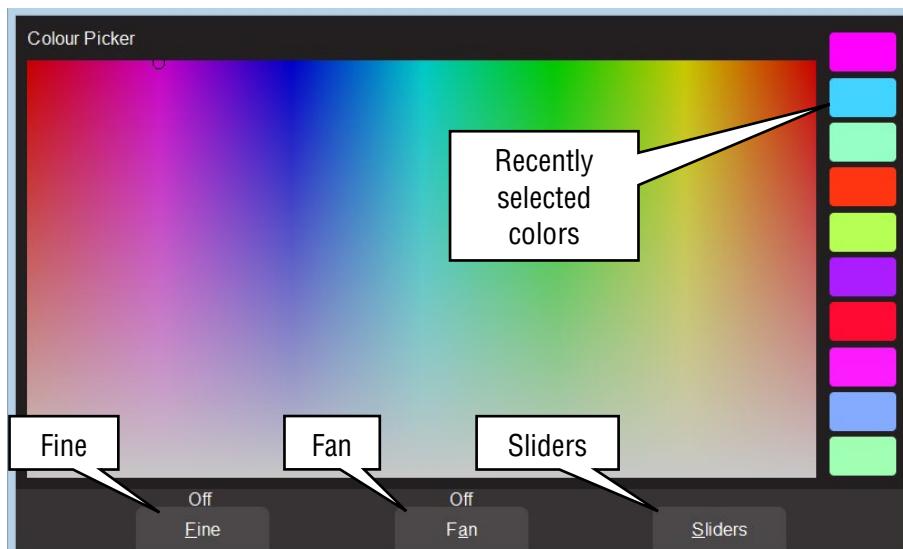
Color Picker

8.5.2 Fine

Touching Fine provides finer control of color. Touch again for normal control.

8.5.3   Fan

When multiple fixtures are selected you can fan their colors to create rainbow effects.:

- Touching Fan selects "Directional" fanning. Drag to fan the colors across the selected fixtures. The first fixture in a selection has the color where the screen is touched first and the last fixture in a selection has the color where you stopped dragging.
- Touching Fan again selects "Symmetrical" fanning. Drag to fan the colors. The first and last fixtures in your selection have the color where you first touched the screen and your finish color is in the center of you fixture selection.
- Touching Fan again turns fanning off.

Directional Fanning
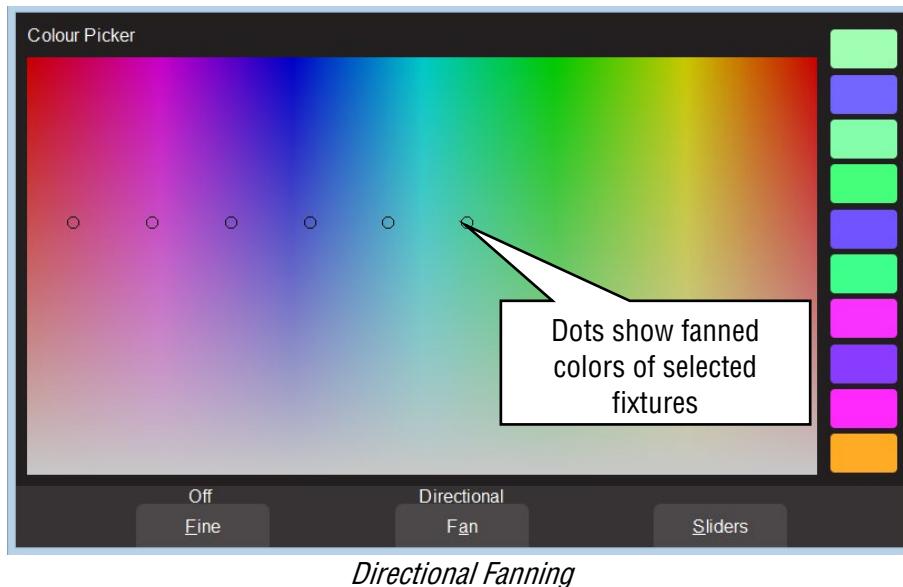
The fixture selection order is used by the Fan App. Experimenting with different orders of selection to will lead to different color effects. Previous selections can be re-used by tapping the ⊕ [Select] button.

8.5.4   Sliders

Touching Sliders opens the "Color Sliders" screen that provides individual sliders for all colors. Red, Green and Blue are in a fixed section at the top of the window. Other colors, White, Amber, UV and Lime, as well as Color wheels are in the scrolling bottom half of the screen. Sliding a finger vertically in the bottom half will scroll the sliders up/down allowing access to more sliders if the selected fixture has additional attributes.
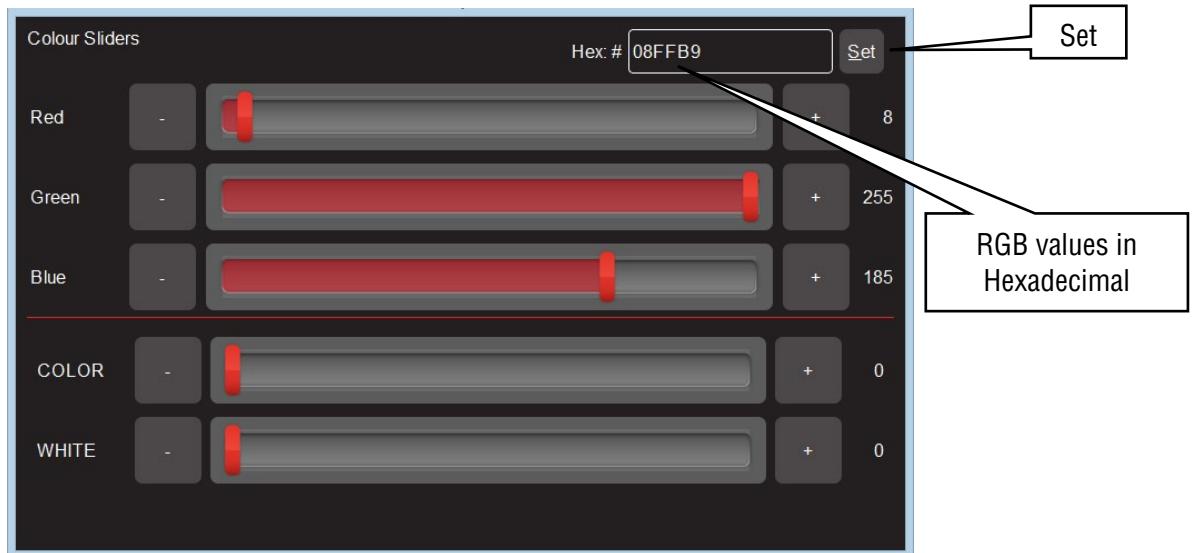
Color Sliders

- + and – buttons are provided for small increments.
- The decimal values of each slider is shown on the right.
- The Hexadecimal value of the last selected Red, Green, or Blue slider is shown at the top. Inside the Hex:# box, exact values can be entered using the keyboard that appears once selected. Enter values (in Hex) then touch Set.

8.5.5   Gels App

The color Gels app is similar to the "Picker" app but has 100 commonly used color gels to choose from.
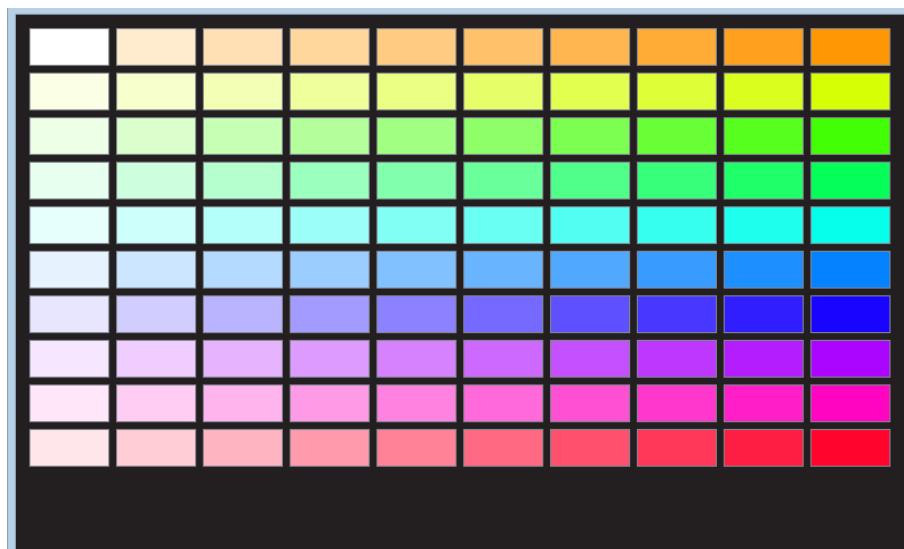
Color Gels

Touch a color to apply it to your selected fixtures.

8.6 CONTROLLING POSITION

From the "Home" screen, open the "Apps" page (described above) then touch the "position" app. Fixtures that have Position (pan and tilt) attributes will flash their buttons. Select the fixtures (described above) then drag on the position pad to move the position. There is no need to touch the current position icon to move a fixture, touch and drag anywhere on the screen and the selected fixture(s) will follow your movements. It is also possible to make fixtures move continuously in a shape or pattern. See section 10.
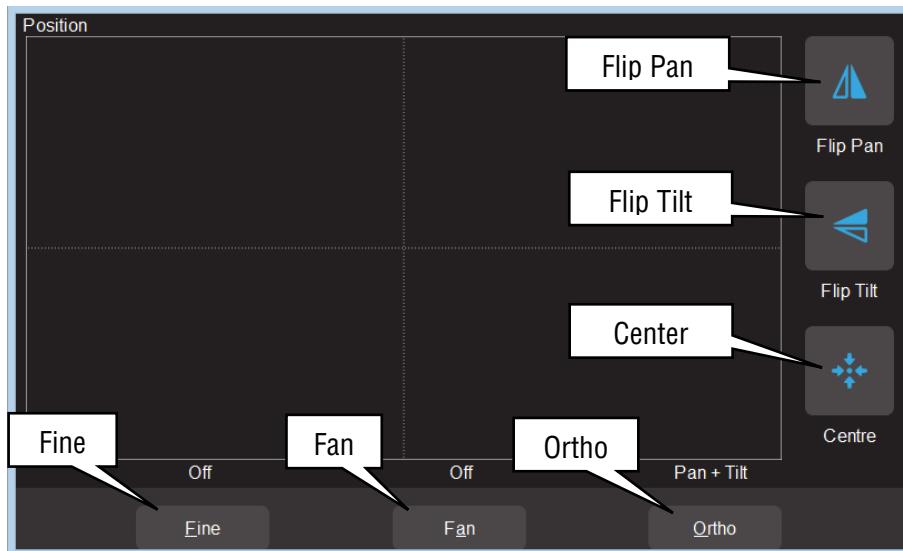
Pan /Tilt Position

8.6.1 Flip Pan/Flip Tilt

Touching Flip Pan inverts the pan as you drag.
Touching Flip Tilt inverts the tilt as you drag.

A blue border on the icon indicates "Flipped". These settings are useful if the fixture movement is opposite to the movement on the touch screen.

8.6.2 Center

Touching Center moves the selected fixtures to their center position.

8.6.3 Fine Control

For finer control touch the Fine button. Touch again for normal control.

8.6.4 Ortho Control

Touches of Ortho cycles through, "Pan Only", "Tilt Only" and "Pan + Tilt". These settings are useful when making fine adjustments.

8.6.5 Fan

When multiple fixtures are selected, it is possible to fan their positions to achieve symmetrical patterns on stage.

- Touching Fan selects "Centered" fanning. Drag to fan the positions around the center fixture.
- Touching Fan again selects "Directional" fanning. Drag to fan the positions around the first fixture in a selection.

- Touching Fan again selects "V–Shape" fanning. This pan works best when fixtures are already fanned into a line. Drag to pull the line of fixtures into a V shape.
- Touching Fan again turns fanning off.

8 fixtures with V-Shape fanning
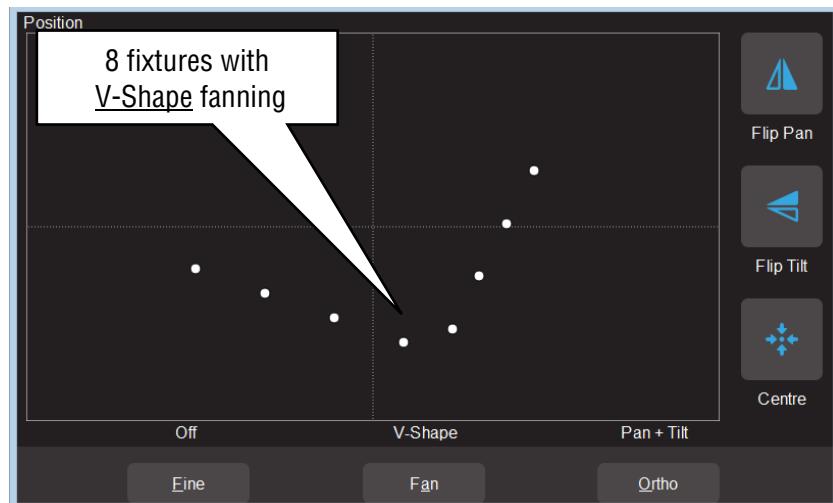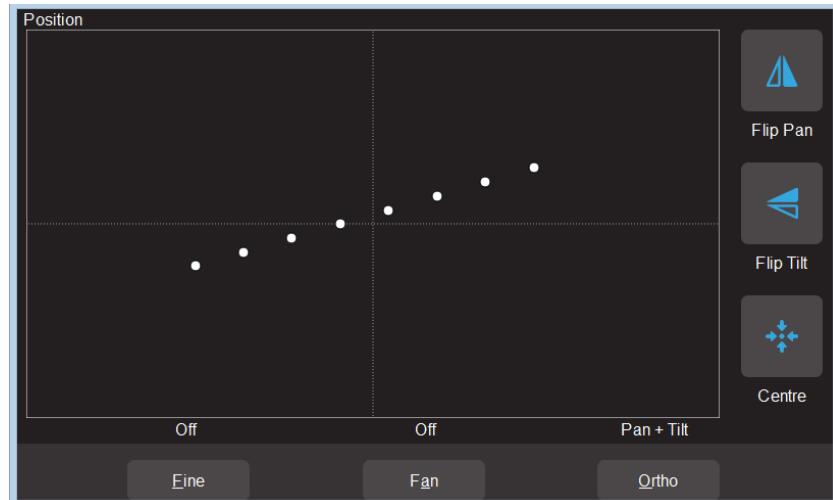
The fixture selection order is used by the Fan App. Experiment with different orders of selection to get different shapes. Previous selections can be re-used by tapping the ⊕ [Select] button.

8.7   CONTROLLING BEAM AND OTHER ATTRIBUTES

From the "Home" screen, open the "Apps" page (described above) then touch the "Attributes" app then select the fixture(s) to be controlled. This app provides slider controls for all attributes not controlled by the Intensity, Color or Position Apps. The controls will vary depending upon the selected fixture. Typical attributes are color wheels, gobo wheels, shutter and prisms. Up to 5 other attributes are displayed on a page. Touch Next to see more attributes (if available).
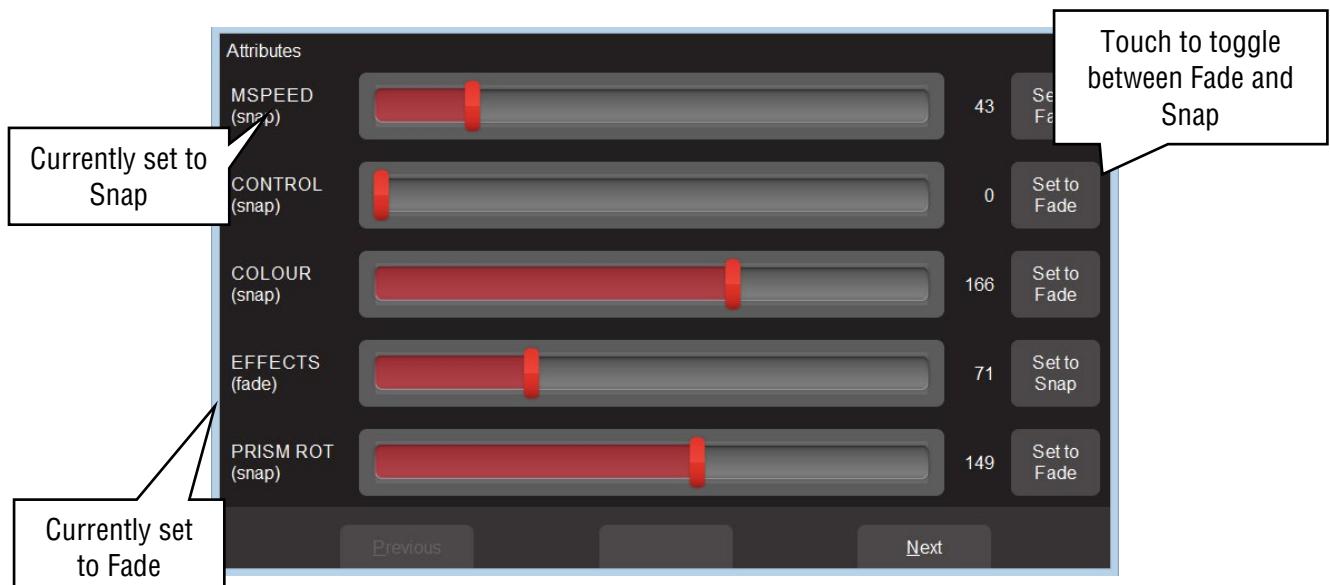
Typical "Other Attribute App"

All "Beam/Other" attributes can be set to either "Fade" or "Snap". When recording a cue that includes the selected fixture(s), this setting will be included. When the cue is played back, attributes set to "Fade" will follow the movement of the red playback fader. Attributes set to "Snap" will go to their recorded value as soon as the red playback fader is raised above zero.

8.8 CLEARING FIXTURES

If any Apps have been used to control fixture attributes such as selecting a color or position or created an animation(s), these settings can be cleared and fixture(s) restored to its default settings (open, white, centered beam) as well as delete any animations.

From the "Apps" screen, touch Clear. The "Clear Fixture Faders" screen appears:
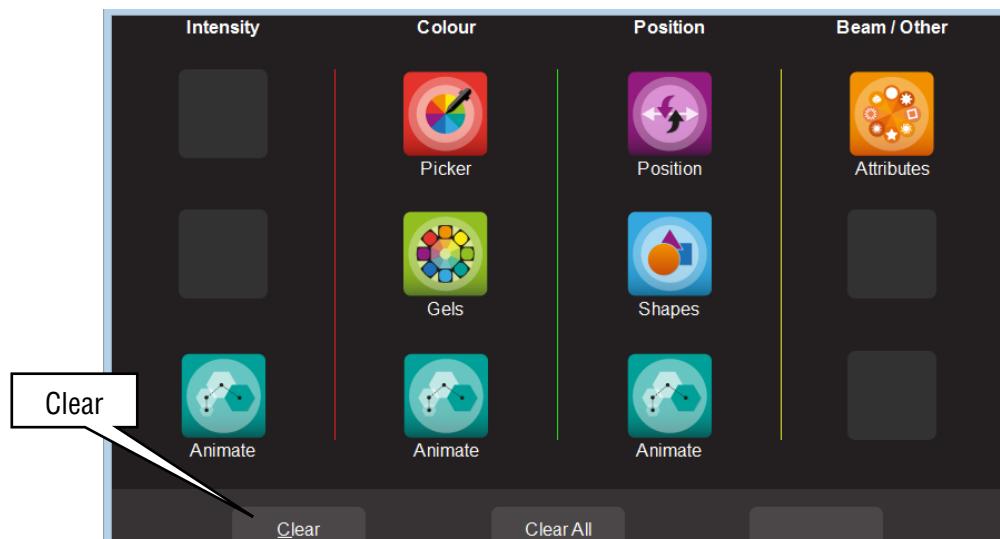
Apps Screen
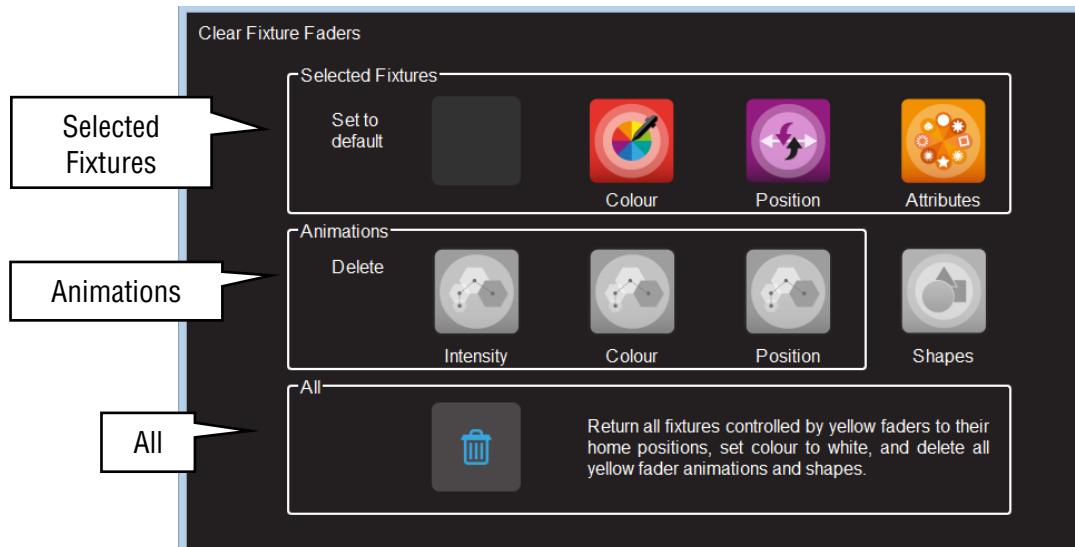
Clear Fixture Faders

The "Clear Fixture Faders" screen has 3 panes: "Selected Fixtures", "Animations" and "All".

8.8.1   Selected Fixtures

Selected fixtures can be set to their "Default" values. The default values are:
- Color = White.
- Position = Center.
- Attributes = The "Home" value from the fixtures template.

To clear a fixture(s), select the fixture(s) then touch the required Icon (Color, Position or Attributes).

8.8.2   Animations

Intensity, color and position animations can be selectively deleted by touching the required Icon (Intensity, Color or Position)

8.8.3   All

Touching the 🗑 (trash can) icon will set all fixtures to their default values (listed above) whether they are selected or not. It will also delete all animations running on the yellow faders. Recorded animations are not affected.

⚠ Note: It is good practice to Clear/All before starting to program your fixtures or whenever you have any unexplained output from the Genesis.

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9   ANIMATE APPS

9.1   OVERVIEW

Animate Apps take the static output of Genesis and bring it to life by providing a simple and intuitive way of creating moving patterns and color or intensity chases.

Animations work with 2 or more selected fixtures and they shift the attributes (such as intensity or color or position) from one fixture to the next and loop the settings of the last selected fixture back to the first. The shifting runs continuously forming a pattern or chase. There must be at least one different setting amongst all the selected fixtures so that you can see the different setting being shifted from one fixture to the next.
There are Animate Apps for:

- Intensity
- Color
- Pan/Tilt

Multiple animations can be recorded in a single cue.

9.2   CREATING AN ANIMATION

The basic steps to creating an animation are:
1. Program the output of Genesis for the static look of the animation. Remember that there must be at least one different attribute setting amongst all of the fixtures. For example, in a 4-fixture color animation, 3 fixtures might be red and one blue.
2. Open an Animation App (Intensity, Color or Pan/Tilt), select all of the fixtures for the animation then touch Create and the animation runs.
3. You can adjust the animation controls if necessary. See section 9.3.
4. To keep the animation for later playback, record it as a cue. See section 11.

Examples of intensity, color and pan/tilt animations are described in section 9.4.

Multiple animations can be running simultaneously and all the animations that are running when a cue is recorded will be included in the cue.

Note: The order in which fixtures are selected is used by the animation app. Different animation patterns can be made by experimenting with different selection orders. The selection order is shown in the animation app when you "create" the animation (see "Animation Controls" below). To change the selection order of an animation, touch Delete, select the new fixture order then touch Create.

Selecting fixtures by moving multiple faders at the same time might produce a random selection order, however Genesis will automatically attempt to arrange the fixtures in numerical order for you.

Note: Recording a cue that contains an animation automatically clears that animation from the yellow faders. Therefore, if you want to keep the animation continuously running on the output you should fade up the red playback fader before tapping its button to make the recording. Fixture attributes such as color or position are not cleared by recording a cue.

9.3 ANIMATION CONTROLS
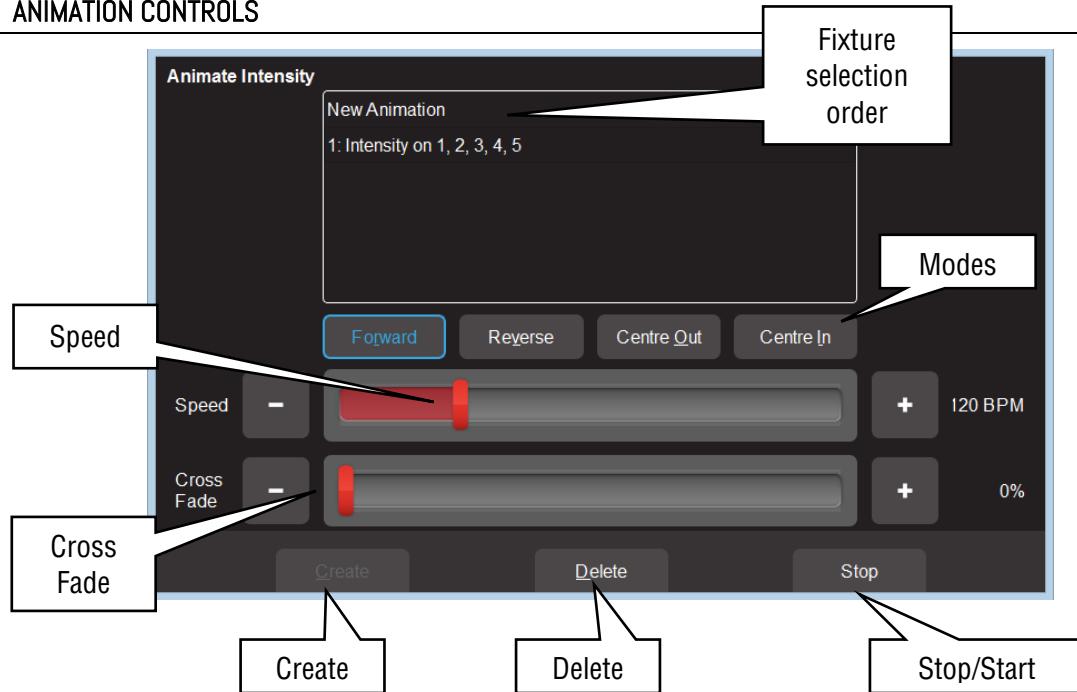
All animation Apps have Slider controls for:

- Speed in BPM (Beats Per Minute)
- Crossfade between steps (as a percentage of the speed).

For example, if the speed is set at 60 BPM (which is one step per second), then with crossfade set at 0% (that is, no fade), the animation will wait for one second, then snap to the next step. None (0%) of the available speed time will be used for crossfading.

If the crossfade is set to 50%, then the animation will perform a 0.5 second crossfade to the next step, wait for 0.5 seconds and then perform the next crossfade. That is, 50% of the time is used to perform a crossfade and 50% of the time is spent waiting before starting the next crossfade.

If the crossfade is set to 100%, then the animation will use 100% of the time performing a crossfade to the next step. When the crossfade is complete, the next crossfade will commence immediately.

Animations can be run in the following modes. These choices will only be noticeable when 3 or more fixtures are in the animation.

- Forward or Reverse.
- Center Out or Center In.

These choices work best with an odd quantity of fixtures so that the pattern is symmetrical around the center fixture. If you have an even number of fixtures there is no center fixture because the center is the gap between fixtures. You must therefore program a symmetrical static look with at least one different setting on both sides of center.

You can also Stop and Start the animation.

> ⚠ Note: Changing modes between Forward (or Reverse) and Center In (or Center Out) on a running animation can cause unexpected (and sometimes interesting) results depending upon the position of the animation pattern at the instant modes are changed. For consistent results, Stop the animation, change modes then Start the animation again.

9.4   ANIMATION EXAMPLES

The following sections have examples of how to create intensity, color and Pan/Tilt animations. All animations have the same controls available to vary the animation.

> ⚠ Note: It is a good idea to clear all fixtures before you start to create your first animation. From the "Home" screen touch Apps/Clear/All.

If there is an animation running that needs to be retained, then only clear the type of attribute in the new animation. For example, if a color animation is running and creating a Pan/Tilt animation is needed. From the "Home" screen touch Apps/Clear/"Animations" Position.

9.4.1   Intensity Animation

Example 1:
To create a 4-fixture intensity animation with only one fixture on at a time (a chase) using fixtures 1 to 4:

- Use the fixture faders to create the static look of the animation on the output by fading up fixture 1 and fading down all other output.
- Open the "Intensity" Animate app.
- Select fixtures 1 through 4 by holding fixture [1] button and tapping fixture [4] button (or tap them individually in the order that you want them to animate).
- Touch Create and the animation runs as an intensity chase on fixtures 1 to 4.
- Use the controls described above to set the rate, crossfade, direction etcetera.

	Fixture 1	Fixture 2	Fixture 3	Fixture 4
Step 1		■	■	■
Step 2	■		■	■
Step 3	■	■		■
Step 4	■	■	■	
Step 1		■	■	■

Example 2:

To create a 6 fixture intensity animation with 5 fixtures on at a time using fixtures 1 to 6:

- Use the fixture faders to create the static look of the animation on the output by fading up fixtures 1, 2, 3, 4 and 5 and fading down all other output.
- Open the "Intensity" Animate app.
- Select fixtures 1 through 6 by holding fixture [1] button and tapping fixture [6] button (or tap them individually in the order that you want them to animate).
- Touch Create and the animation runs as an intensity chase on fixtures 1 to 6.
- Use the controls described above to set the rate, crossfade, direction etcetera.

	Fixture 1	Fixture 2	Fixture 3	Fixture 4	Fixture 5	Fixture 6
Step 1						■
Step 2	■					
Step 3		■				
Step 4			■			
Step 5				■		
Step 6					■	
Step 1						■

9.4.2   Color Animations

Example 1:

To create a red/blue color animation across fixtures 7 to 10:

1. Fade down all output.
2. Fade up fixtures 7, 8 and 9 then use the "Color" Picker App (section 8.5) to set the fixtures to red.
3. Fade up fixture 10 then use the "Color Picker" App to set the fixture to blue.
4. You have now created the static look of the animation.
5. Open the "Color" Animate App.
6. Select fixtures 7 through 10 by holding fixture [7] button and tapping fixture [10] button (or tap them individually in the order that you want them to animate).
7. Touch Create and the color animation runs.
8. Use the controls described above to set the rate, crossfade, direction etcetera.

	Fixture 7	Fixture 8	Fixture 9	Fixture 10
Step 1	Red	Red	Red	Blue
Step 2	Blue	Red	Red	Red
Step 3	Red	Blue	Red	Red
Step 4	Red	Red	Blue	Red
Step 1	Red	Red	Red	Blue

Example 2:

To create a fanned color animation across fixtures 13 to 20:

1. Fade down all output.
2. Fade up fixtures 13 to 20.
3. Open the "Color" Picker App and select "Symmetrical Fan" by touching Fan twice then drag to fan the colors across the selected fixtures.

ALTMAN
LIGHTING

4. You have now created the static look of the animation.

Choosing "Symmetrical" fans the colors around the center fixture(s) so that the first and last fixtures have similar colors. This gives the animation a smooth color transition from last fixture to the first fixture.

5. Open the "Color" Animate App.
6. Select fixtures 13 through 20 by holding fixture [13] button and tapping fixture [20] button.
7. Touch Create and the fanned colors animate through the selected fixtures.
8. Use the controls described above to set the rate, crossfade, direction etcetera.

9.4.3   Pan/Tilt Animations

Example 1:
To create a Pan/Tilt animation across fixtures 21 to 24:

1. Fade down all output.
2. Open the "Pan/Tilt" Position App.
3. Fade up fixture 21 and position it to the front of the stage.
4. Fade up fixtures 22, 23 and 24 and position them to the back of the stage.
5. You have now created the static look of the animation.
6. Open the "Pan/Tilt" Animate App.
7. Select fixtures 21 through 24 by holding fixture [21] button and tapping fixture [24] button (or tap them individually in the order that you want them to animate).
8. Touch Create and the Pan/Tilt animation runs.
9. Use the controls described above to set the rate, crossfade, direction etcetera.

Example 2:
To create a fanned Pan/Tilt animation across fixtures 21 to 24:
1. Fade down all output.
2. Clear any previous Pan/Tilt animations. From the Apps screen touch Clear, All (or only clear "Position" animations).
3. Open the "Pan/Tilt" Position App.
4. Fade up fixture 21, 22, 23 and 24.
5. Touch Fan then drag to fan the fixture positions.
6. You have now created the static look of the animation.
7. Open the "Pan/Tilt" Animate App.
8. Select fixtures 21 through 24 by holding fixture [21] button and tapping fixture [24] button.
9. Touch Create and the Pan/Tilt animation runs.
10. Use the controls described above to set the rate, crossfade, direction etcetera.
11. You can return to the Position app if needed and reposition the animation.

9.5   MULTIPLE ANIMATIONS

If there are animation(s) running, another of the same type (Intensity, Color or Position) can be created by touching New Animation. Select the fixtures to be included then touch Create. All the animations of the selected type are listed in the box.

When multiple animations are running you can switch the controls to any of them by touching their name.
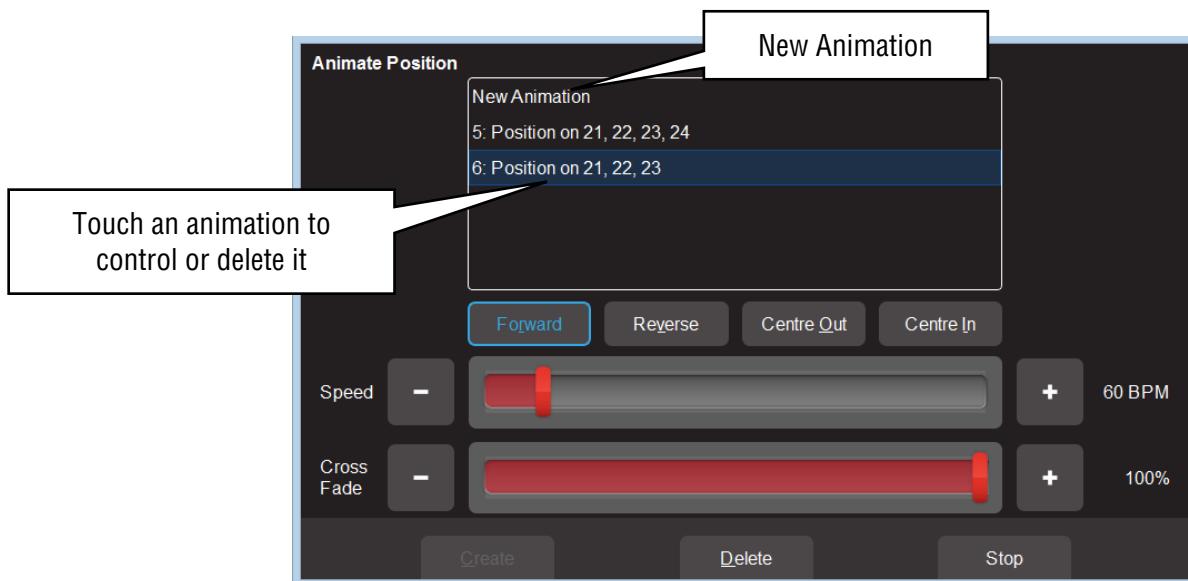
9.6   RECORDING ANIMATIONS

Recording the output of the Genesis as a cue will include any animations that are running. Recording an animation will automatically clear that animation from the yellow faders where it was created. If you want to keep the animation running on the output, fade up the red playback fader on which you make the recording and ensure that the Red Master is also up before you record the cue. See section 11 for details on how to record cues.

9.7   DELETING ANIMATIONS

To delete a single animation, open the Animation app in which it is running (Intensity, Color or Pan/Tilt), touch the animation number then touch Delete.

To delete all animations of one type (Intensity, Color or Pan/Tilt), from the "Apps" screen, touch Clear then from the "Animations" pane choose to delete either Intensity, Color or Position animations.

To delete all animations and restore all fixture(s) to default settings (open, white, centered beam), from the "Apps" screen, touch Clear then All (trash can icon).

9.8   ANIMATIONS IN CHASES

A chase is cue-list that automatically steps from cue to cue. Any cue in a chase can contain animations so complex effects can be easily created by including animations in a chase.

9.9   ANIMATE SPEED

"Live Speed" allows you to override the speed of animations. The changes are only a temporary offset applied to the settings saved in the cue or on the yellow faders. See section 13 for details.

10   SHAPES APP

10.1   OVERVIEW

The Shapes App provides a quick and simple way of creating continuously moving positions on fixtures that have Pan and Tilt attributes by constantly varying those attributes.

10.2   CREATING A SHAPE

Note: You might find it easier to position your fixture(s) before you apply a shape movement to them, however you can still position them after applying the shape.

To create a shape, from the "Home" screen, open the "Apps" page (by touching any fixture icon) then touch the "Position" Shapes icon.

Fade up the fixture(s) to which the shape is to be applied. This automatically selects the fixture(s).

The following shapes are available:

- Ellipse (clockwise or anti-clockwise).
- Rectangle (clockwise or anti-clockwise).
- Triangle (clockwise or anti-clockwise).
- Random.
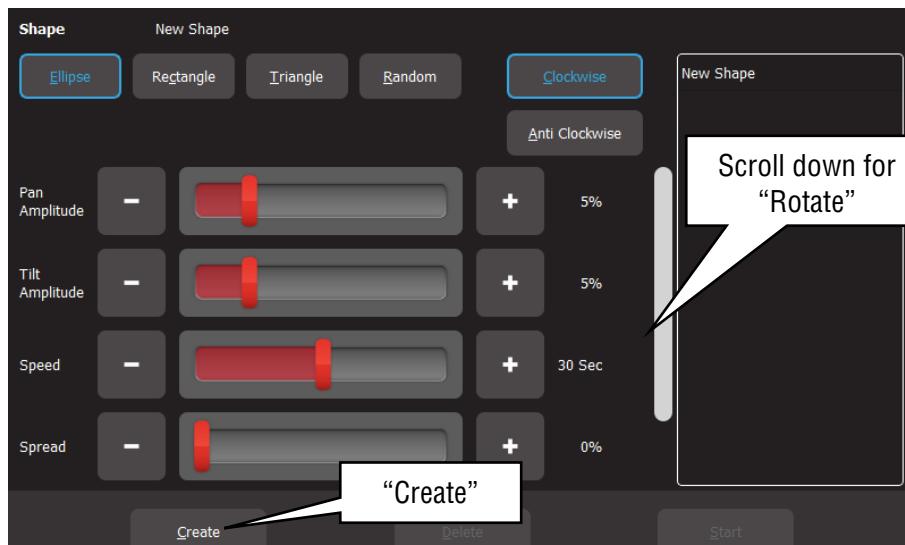
Touch Create and the shape runs.

There are controls for:

- Pan Amplitude

- Tilt Amplitude (Set pan and tilt to the same amplitude to create a circle when using Ellipse)
- Speed (in seconds)
- Spread (in percentage) Applies when 2 or more fixtures are selected and spreads them around the movement shape. When set to 0%, all fixtures are focused on the same point as they move around the shape. When set to 100% the fixtures are evenly spaced apart as they move around the shape. In between values vary the spread. Does not apply to the "Random" shape.

Scroll down for:

- Rotate (in degrees). Rotates the shape about its axis. Does not apply to the "Random" shape.
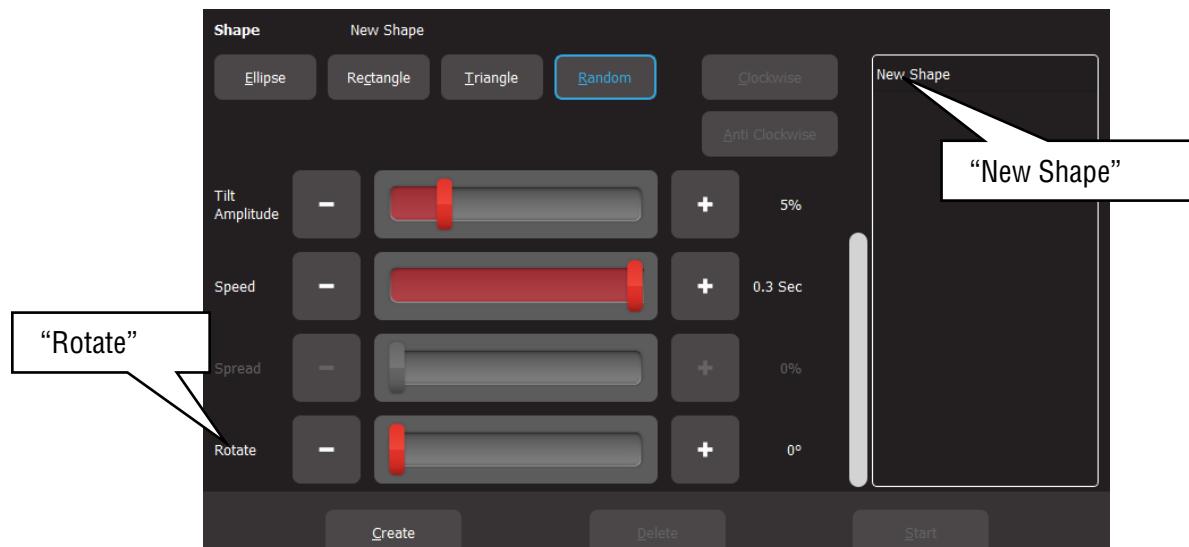
Shapes can be created on other fixtures by selecting New Shape, selecting the fixtures and repeating the procedure above.

10.3   RECORDING SHAPES

Recording the output of the Genesis as a cue will include any shapes that are running. Recording a shape will automatically clear that shape from the yellow faders. If the recorded Red fader to is at zero, this will stop the shape on the output. To keep the shape running on the output when it is recorded, fade up the red playback fader before recording the cue.

See section 11 . for details on how to record cues.

10.4   SHAPE SPEED

"Live Speed" overrides the speed of shapes. The changes are only a temporary offset applied to the settings saved in the cue or on the yellow faders. See section 13 for details.

11   RECORDING CUES

11.1   OVERVIEW

After adjusting the intensity and color of the fixtures and possibly animation(s) or shapes, the current output of the Genesis can be recorded into a red fader for later playback. This recording is known as a "Cue" and it contains the intensity and all other attributes such as color, position etcetera plus any animations that are currently running. It has a "fade in" time and a "fade out" time.

Recording a cue to a Red Playback that already contains a single cue and choosing "Add", will automatically create a "Cue-list".

11.2   MEMORIES / PAGES

There are 10 red playback faders and 10 pages of memory giving a total of 100 memories. Each memory can contain a single cue or a "Cue-list" that contains up to 250 cues. A maximum of 1000 cues can be recorded.

- Repeated taps of the 📑 [Page] button will step through the 10 pages of memory.
- To switch *directly* to a page number; HOLD 📑 [Page] and TAP a red fader button [1 to 10].

The current page number is shown in the top left corner of the "Home" screen and the contents of the red playback faders (for the current page) are shown along the bottom of the screen.

"Home" Screen
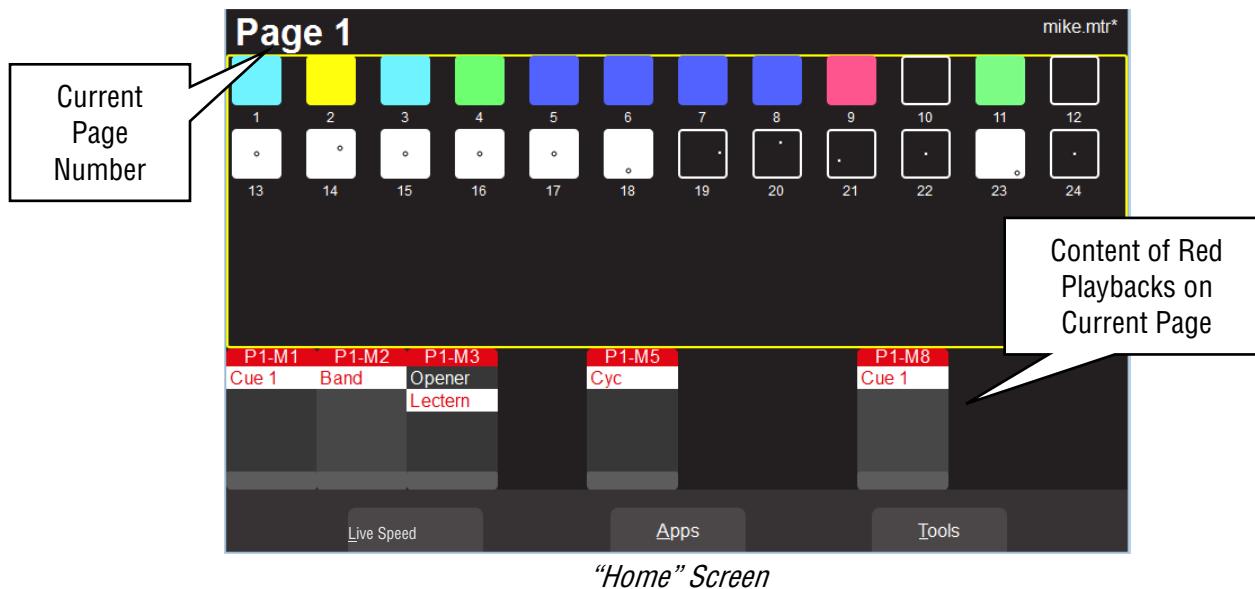
11.3   RECORD A CUE

To record the current output onto a Red Playback fader, tap 🔴 [Record] then tap the button below the Red Playback fader of your choice [1-10]. The recording is made into the current page. The default fade time is applied to both the "Fade In" and "Fade Out" times. To change the default fade time see section 17.1.3. To set individual "Fade In" and "Fade Out" times see section 15.1.

All the attributes of any fixture with an intensity level greater than 0% will be included in the cue. See section 11.5 for details on how to include fixtures with no intensity.

The look on stage can now be played back from the recorded cue. See section 12.2. This frees up the yellow faders to create another lighting look and to record it into another cue.

11.4   RECORD A CUE-LIST (OR CHASE)

After a cue is recorded in a Red Playback fader, more cues can be recorded to it to create a cue-list. A cue-list can be played back by tapping the button below the fader that contains the list. Each time the button is tapped, Genesis will perform a crossfade to the next cue in the list. Each cue has its own "fade in" and "fade out" time settings.

To record a cue-list, record the first cue as described in section 11.3. Create the next lighting look on the output of Genesis then record to the same Red Playback fader. Genesis allows you to choose to either:

- Overwrite. This deletes the existing cue and replaces it with your new recording. (A cue-list is not created).
- Add. This creates a cue-list and adds the new recording to the list. Subsequent recordings to this memory location will automatically be added to the cue-list after the current cue.

If a cue-list has been recorded it can also be run as chase that automatically steps from cue to cue. See section 15.1

11.5   RECORD FIXTURES WITH NO INTENSITY

It is possible to include selected fixtures that have an intensity of 0% when recording a cue. (Normally only fixtures with an intensity level greater than 0% will be recorded in a cue).

To include fixtures with no intensity, tap ⦿ [Record], then tap ⊕ [Select]. The buttons of all fixtures with intensity greater than 0% are lit. Tap (and light) the buttons of any fixtures with no intensity that are needed in the cue. Complete the recording in the usual manner by tapping the button below the Red Playback fader of your choice [1-10].

Playing back fixtures that have no intensity can be used for a "Move in Black" or for "Solo Cues" described below.

11.5.1   Move In Black

Playing back a cue that includes fixtures with no intensity is often used with pan and tilt fixtures to position the fixtures without seeing the move on stage. This is commonly called a "move in black".

A move in black requires two cues:

1. To program the first cue, fade up the fixtures and position them on stage. Fade them down then record the cue ensuring that you include these fixtures (with no intensity) as described in section 11.5.
2. To program the second cue that reveals the fixtures in position, fade them up and record the cue to the same cue-list.

When the first cue is played, the fixtures move into position but are not seen as they have no intensity. When the second cue (which has intensity and the same position) is played, it reveals the fixtures already in position.

11.5.2   Solo Cue

When a normal cue is faded up, it reveals the fixtures in that cue. Output from other fixtures that are not in the cue will not be affected.

If you want the cue you faded up to be the only output, you usually need to fade down all other faders. This can be difficult if you have multiple faders active.

It is possible to simplify this process by recording a "Solo" cue. A Solo cue has the fixture(s) that are needed but it also includes all of the fixtures that are not needed. These fixtures are recorded in the cue with 0% intensity. See section 11.5.

When a solo cue is faded up it will take control of all the fixtures that are recorded in the cue. Therefore, any fixtures will intensities of zero will fade out.

You can create some interesting effects by recording a "solo" cue that has an animation across several fixtures (with intensity) but also includes all other fixtures at zero intensity. Flashing (or fading up) this cue will reveal the animation and black out any other output. For example - highlighting a drummer during a drum solo.

12   PLAYBACK

12.1   OVERVIEW

Different looks can be recorded on different Red Playback faders so that you can easily change the entire look on stage by using the Red Playback faders. There are 10 red playback faders and 10 pages of memory giving a total of 100 memories. A memory can contain a single cue or a cue-list of up to 250 cues. (A maximum of 1000 cues can be recorded).
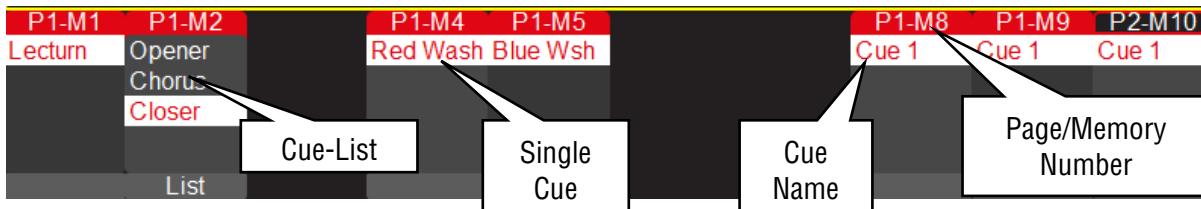
12.2   PLAYBACK A CUE

To playback a recorded cue, ensure that the Red Playback Master is at full and fade up the Red Playback fader where you recorded the cue (remember to select the correct page).

Select "clear all" (see section 8.8) or fade down the Yellow master (or all of the yellow fixture faders) before bringing up the Red playback, so that only the recorded look on the output is seen.

Unlike the Yellow Fixture faders that only control intensity, the Red Playback faders control all the attributes of the fixture that have been recorded in the cue. This allows for smooth crossfades from one Playback to another with a smooth transition of intensity, color and position. See Latest Takes Precedence below.

12.2.1   Cue Fade Times

Every cue has a separate "Fade In" time and a "Fade Out" time. When a playback fader is moved, the output level of that master will always progress towards the current physical position of that fader at a rate set by the fade times for that cue.

- On upwards movements of a fader the "Fade In" time is used.
- On downwards movements of a fader the "Fade Out" time is used.

When a cue is recorded it uses the default in and out fade times (2 seconds). To change the default fade time see section 17.1.3. To change the individual fade times for a recorded cue, see section 15.1.

For example, if a "Fade In" time of 3 seconds has been set, then to execute the fade in exactly 3 seconds, the fader must be moved from bottom to top in less than 3 seconds. If the fader is quickly faded to the half way position, the fade will take 1.5 seconds to reach this position and then stop. If the fader is then moved to the top of its travel, the fade will take another 1.5 seconds to complete. If you take longer than 3 seconds to move the master then the fade will keep pace with the fader movement.

A double headed arrow beside the cue name indicates when a timed fade is in progress.

12.3   PLAYBACK A CUE-LIST

If a Red Playback contains a cue-list you can crossfade to the next cue in the list by tapping its playback button (below its fader).

To crossfade in the <u>reverse</u> direction HOLD the ⌂ [Back] button while tapping the playback button.
The current cue has a white background. A pointer indicates when a fade is in progress.
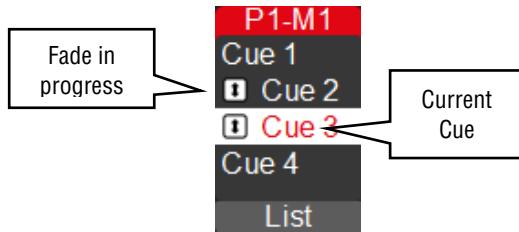

12.3.1   Cue-List Fade Times

Every cue in the cue-list has a separate "Fade In" time and a "Fade Out" time that are used when the playback button is pressed. These fade times are also used if the playback fader is moved. Therefore, the playback fader must be at the top position for the entire fade time to be used. Fade times can be overridden. See section 13.4.

12.4   PAGE FREEZE

When you change pages, the Cues in the selected page are copied, in order, to their respective red playbacks. A "PAGE FREEZE" feature prevents the contents of a "live" red fader from being changed if its level is above 5% when a page is changed. The current contents are held until such time as that fader is faded down below 5% when it will be automatically updated with its pending assignment for the new page. This prevents Cues, "crashing in" on stage if their fader is contributing to the output when a different page is selected.

The bottom section of the "Home" screen shows the contents of the 10 Red Playbacks. A "live" playback containing a cue from another page is indicated by a black background.
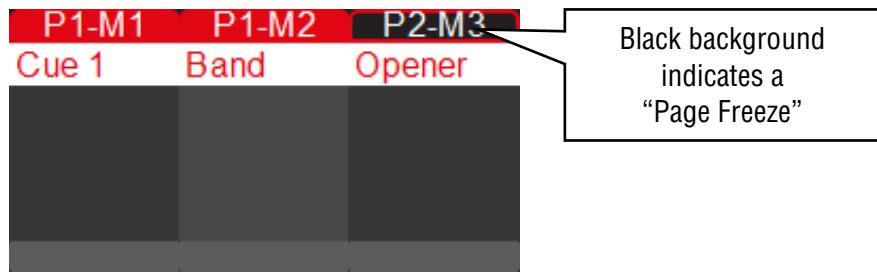
12.5   LATEST TAKES PRECIDENCE

The value for each attribute of a fixture (intensity, color, position, etc.) could come from multiple places within the console. It might be from a yellow fixture control or it might be from any faded up red playback containing a cue that includes that fixture. The value for each attribute that appears on the output is determined by a method known as LTP (Latest Takes Precedence) <u>and</u> by fader position.

An LTP action occurs when a *<u>red fader is raised above zero</u>*. When this occurs, the fader will take control of its attributes and they will <u>fade to</u> their levels in that fader <u>following the fader movement</u>. When that fader reaches

100%, it fully overrides all other active faders containing attribute values for the same fixtures. While this fader remains at full no previously active faders have any influence over its fixture attributes.

If another red fader is raised above zero it becomes the latest action and it will take control of the attributes. As this fader is moved, the existing attributes will fade to the new values provided by the incoming cue. When the fader reaches full it fully overrides previously active faders.

Genesis keeps a LTP list and remembers the order in which faders have been raised above zero. The latest fader (at the top of the list) will have total control while it is at full level. When a fader is faded down to zero it drops off the LTP list and has no influence on the output. If several faders are in the LTP list (faded up from zero but not yet faded down to zero) and the top of the list fader is faded back down to zero, the next LTP fader in the list will take back control.

The LTP rules apply to all attributes of a fixture: intensity, color, position, etc.
For example:

3 cues are recorded on the red playback faders 1 to 3 with a single LED fixture in each cue. In the first fader the fixture is red, in the second it is blue and in the third it is yellow.

- Fade up fader 1 to full and the fixture fades to red.
- Fade up fader 2 to full and the fixture fades to blue.
- Fade down fader 1 and nothing happens because fader 2 is the latest (LTP) and it is at full.
- Fade up fader 3 and the fixture fades to yellow because fader 3 is the latest.
- Fade down fader 3 and the fixture fades back to blue (the previous latest).

When the latest red fader to be raised from zero is at full, other faders controlling the same fixtures can be faded down without having an effect.

Yellow fixture faders operate slightly differently to red playback faders. Firstly, they only control the intensity of the fixture. Secondly, if the fixture that the yellow fader controls already has intensity on the output from a cue on a red playback, then when its yellow fixture fader is raised above zero it has no effect on the intensity of its fixture until its yellow level matches the current level of that fixture. It then takes total (LTP) control of the fixture's intensity. See section 15.2 "Edit Cues".

12.6   ICPB ATTRIBUTES (FILTERS)

When a memory is recorded it includes all the Intensity, Color, Position and Beam (I C P B) attribute groups. It is possible to exclude (filter) attribute groups when a memory is played back. See section 15.1.5

13   LIVE SPEED

"Live Speed" allows for overriding the fade times and speeds of cues, chases, animations and shapes. The changes are only a temporary offset applied to the settings saved in the cue or on the yellow faders. The settings in recorded cues are not altered. Live Speed overrides are not saved when you save your show.

From the "Home" screen press Live Speed.

"Home" Screen
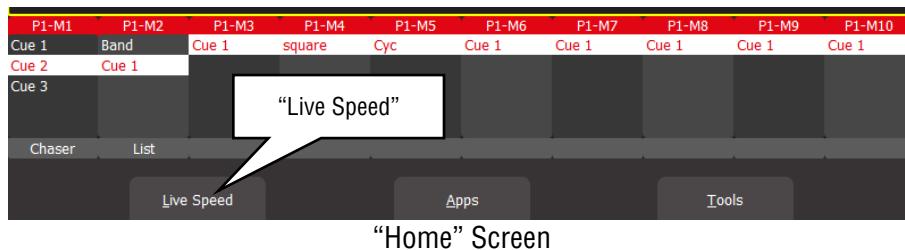
The "Live Speed" screen opens:
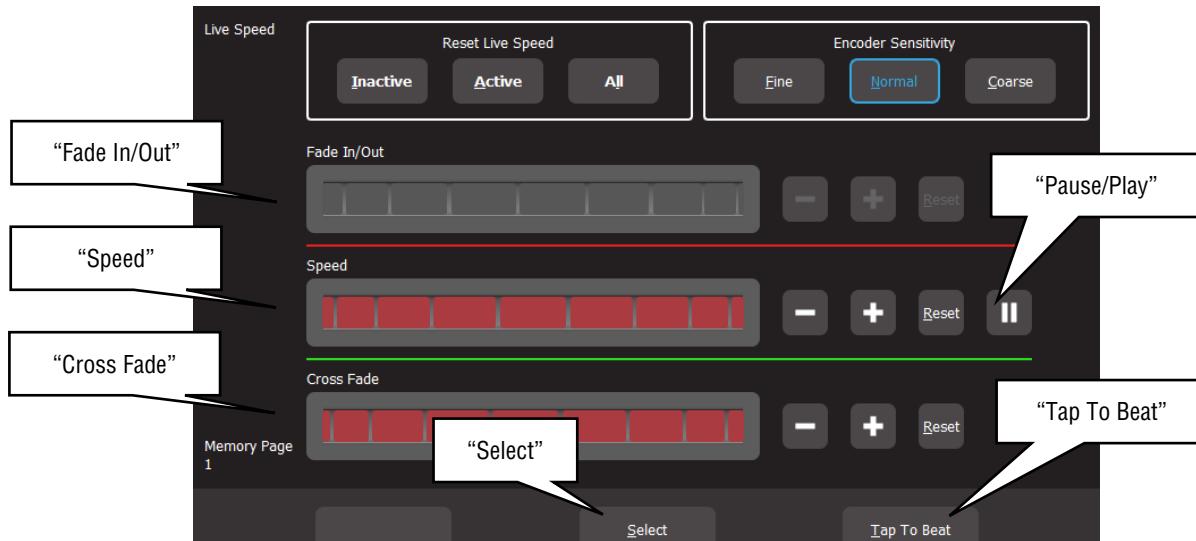
The "Live Speed" screen has controls to override the following parameters:

- "Fade In/Out" times of a cue.
- "Speed" "Pause/Play" of a chase, animation or shape.
- "Crossfade" of a chase or animation.
- "Tap To Beat" to set the speed of a chase, animation or shape.

Each set of controls only becomes active when one of the above parameters is either active on the output or "selected" as described below.

For example, if a chase is running on the output, then only the "Speed", "Crossfade" and "Tap To Beat" controls are active.

The + or – buttons can override fade, speed or crossfade. Touching + increases the value by multiplying the recorded value. Moving it to the left or touching - decreases the value by dividing the recorded value. Therefore, if

the recorded value is small it will take a large variation to see the change. If the recorded value is 0 then it cannot be changed.

13.1 SELECT

When the Select button is grey, the controls will override all live output.

If you touch Select, it turns blue and you can now choose which playback to override by tapping the buttons below the playbacks. Multiple playbacks can be selected and or deselected. The LED in the playback button lights to show it is selected. A playback does not have to be active on the output when you use "Select" allowing you to make blind changes.

Touch Select again to return to live output control.

13.2 TAP TO BEAT

Setting the speed of a chase, animation or shape is possible by tapping the beat.

Play the chase, animation or shape on the output then from the "Home" screen press Live Speed.

Tap the Tap to Beat button at least 4 times at the desired rate. Genesis averages all taps to set the speed. If you have tapped a speed and then want to change it, pause for 2 seconds then start tapping again (at least 4 taps).

If you have multiple chases, animations or shapes running, you can use Select as described above to choose which ones you will affect when you Tap To Beat. This also allows you to set the rate if the red fader is down (not playing on the output).

13.3 PAUSE/PLAY

You can "Pause/Play" a chase, animation or shape.

Play the chase, animation or shape on the output then from the "Home" screen press Live Speed.

Touch ‖ to pause. Touch again to play.

If there are multiple chases, animations or shapes running, use Select as described above to choose which ones you will affect when you Pause/Play.

13.4   OVERRIDE INDICATORS

The playback section of the home screen shows the following symbols when a playback has been overridden by the "Live Speed" controls:

- ">" indicates that the fade, speed and or crossfade has been overridden.
- "‖" indicates that the chase is paused.

| "Live Speed" is overriding the cuelist. | P1-M1
Cue 1
Cue 2
Cue 3

List > | P1-M1
Cue 1
Cue 2

Chaser > ‖ | "Live Speed" has also paused the chase. .the chase |

13.5   RESET LIVE SPEED

Any changes made by "Live Speed" can be reset to normal.

To reset "individual" parameters:

"Fade In/Out", "Speed" and "Crossfade" controls each have a Reset button.

You can reset all (Fade In/Out", "Speed" and "Crossfade) parameters:
- When the Select button is grey you can choose to reset "Inactive", "Active" or "All".

Live Speed — Reset Live Speed — Inactive Active All — Encoder Sensitivity — Fine Normal Coarse
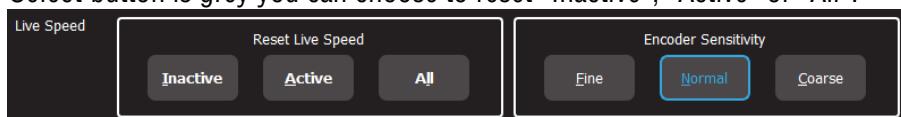
- When the Select button is blue you can choose to reset "Inactive", "Selected" or "All".

Live Speed — Reset Live Speed — Inactive Selected All — Encoder Sensitivity — Fine Normal Coarse

14   FLASH

It is possible to Flash any fixture or multiple fixtures, any Playbacks or any multiple combination of the above at the one time. The only limit is ability to hold down multiple buttons. The FLASH function is a momentary action and all actions are instantaneous.

- The buttons below the "Yellow" fixture faders act as intensity [Flash] buttons ONLY when the "Home" screen is displayed. At other times they act as fixture select buttons.

- The buttons below the "Red" playback faders act as playback [Flash] buttons ONLY when a single cue is recorded in them. If a red fader contains a cue-list, its button acts as a "go" button to fade to the next cue in the list.

14.1   FLASH LEVEL

To set the flash level, from the "Home" screen press Tools/Setup. Drag the virtual "Flash Level" slider to set the level.

- For fixtures (yellow) it sets the intensity level of a fixture when it is flashed.

- For Playback (red) it sets the *percentage* of the intensity levels recorded in the cue. Fixture attributes (color, position etcetera) are always flashed to their recorded level.

Setup
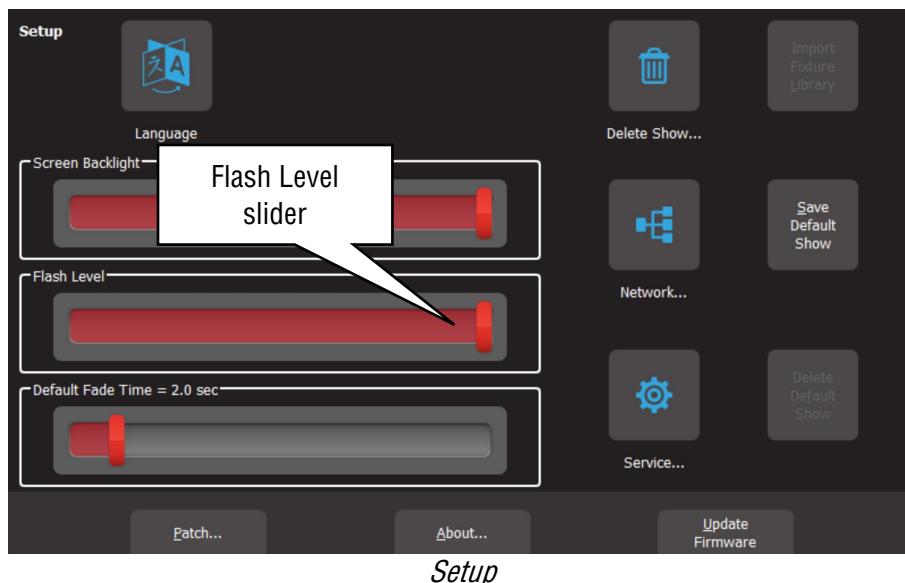
15 EDIT

15.1 EDIT MEMORY

Touch a playback icon to edit the memory.

Touching any playback icon opens the "Edit Memory" screen.

Touch to edit the cue name

Touch a cue to select or de-select it

Touch + or – to set the fade times

Touch to use the cue-list as a chase
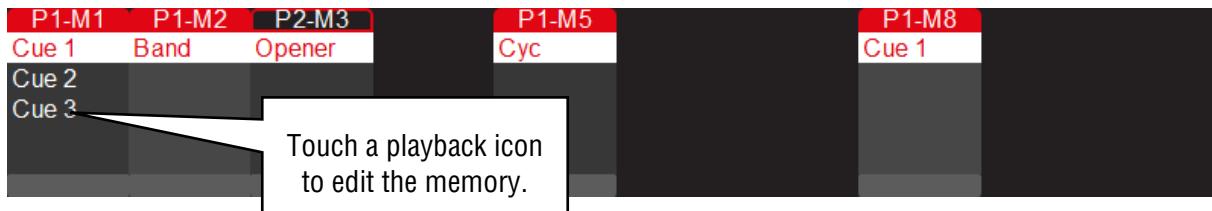
Edit Memory Screen
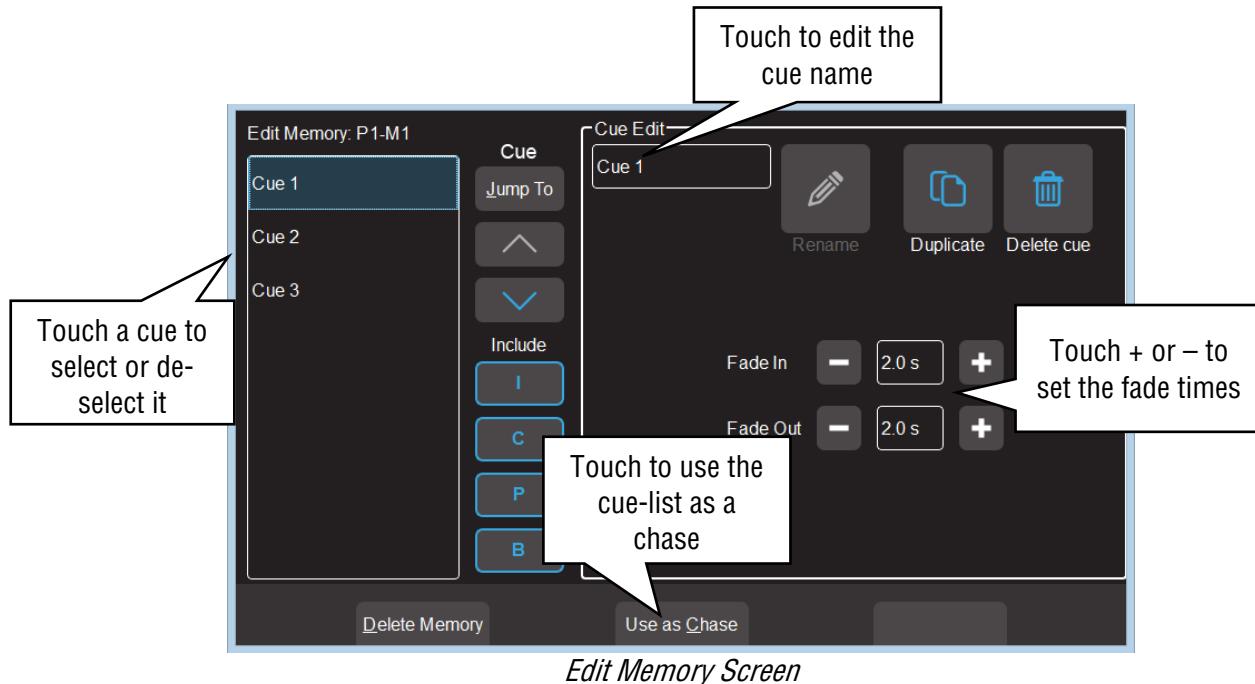
The pane on the left shows the contents of the selected memory. This might be a single cue or a cue-list, depending upon what you have recorded in that memory.

If the memory contains a cue-list you can touch a cue to select/de-select it. Multiple cues can be selected. This is useful when setting the same fade times to multiple cues.

Tapping the play button of the playback will advance to the next cue in the list and automatically select the currently active cue.

When a cue has been selected, the following functions are available:

15.1.1 Change Fade Times

Touch the + or – buttons to set the "Fade In" and "Fade Out" times. If you hold a button it will auto-repeat. See section 12.3.1 for more details on fade times.

15.1.2   Change Cue Name

To change the name of a cue, select that cue then in the "Cue Edit" pane touch the cue name. A pop up keyboard appears to change the name of the cue. Touch Rename (or Enter on the pop up keyboard) to finish.

15.1.3   Jump To Cue

Tapping a playback's button will fade to the next cue in the cue-list. To bypass cues and fade directly to any cue in the list, select the cue required in the "Edit Memory" screen (see above) then touch Jump To. This function is useful for quickly playing back a cue in a long cue-list without stepping through all the intermediate cues.

15.1.4   Change Cue Order

To change the order of the cues in a cue-list select the cue(s) to be moved in the "Edit Memory" screen (see above) then move the selected cue(s) by touching the ∧ (move up) or ∨ (move down) buttons.

15.1.5   Include ICPB Attributes (Filters)

When a memory is recorded it includes all the Intensity, Color, Position and Beam (I C P B) attribute groups. It is possible to exclude attribute groups when a memory is played back. In the "Edit Memory" screen (see above), touching an attribute group (I C P B) excludes that group from the playback.

All attribute groups included (Default)

Only Color included

The selection applies to all cues in the cue-list.

For example, you have some fixtures that have intensity, color and position attributes.

- Record a cue-list that has 5 different color cues. Don't worry about the position of the fixtures in each cue. Edit the cue-list and touch I, P and B leaving only C (color) included. This is now a color only playback.
- Record a cue-list that has 5 different position cues. Don't worry about the color of the fixtures in each cue. Edit the cue-list and touch I, C and B leaving only P (position) included. This is now a position only playback.
- Record a cue-list that has 5 different position cues. Don't worry about
- Record a cue-list that has the intensity of the fixtures. Don't worry about the position or color of the fixtures in each cue. Edit the cue-list and touch C, P and B leaving only I (intensity) included. This is now a Intensity only playback.
- Fade down the Yellow master and fade up the Red master.
- Fade up the 3 cue-lists that you recorded.
- Tapping the button of the Color playback steps the fixtures through the 5 colors.
- Tapping the button of the Position playback steps the fixtures through the 5 positions.
- The I (Intensity) playback controls the intensity.

This provides 25 possible combinations of color and position from 10 cues.

⚠️ Note: Instead of making the I playback a single cue you could add a cue that includes an intensity animation. That makes 50 possible combinations from 12 cues.

15.1.6   Duplicate Cue

To duplicate a cue in a cue-list select the cue in the "Edit Memory" screen (see above) then touch Duplicate. A copy of the selected cue is added to the end of the cue-list.

15.1.7   Delete Cue

To delete a cue(s) in a cue-list select the cue(s) in the "Edit Memory" screen (see above) then touch Delete Cue.

15.1.8   Delete Memory

To delete a memory, in the "Edit Memory" screen (see above) touch Delete Memory. If the memory contains a single cue or a cue-list the entire memory will be deleted.

15.1.9   Chase

If a memory contains a cue-list you can choose to use it as either a "List" where you manually playback the cues or use it as a "Chase" where it automatically steps through the list at a rate that you set.
To change a cue-list into an automatically stepping "Chase", in the "Edit Memory" screen (see above) select "Use as Chase". The list will automatically increment through the steps using the speed and crossfade settings that you set on the touch screen.
Traditionally chases will snap (instantly switch) from step to step but you may also set a "Cross Fade" value so that it will <u>fade</u> from step to step.
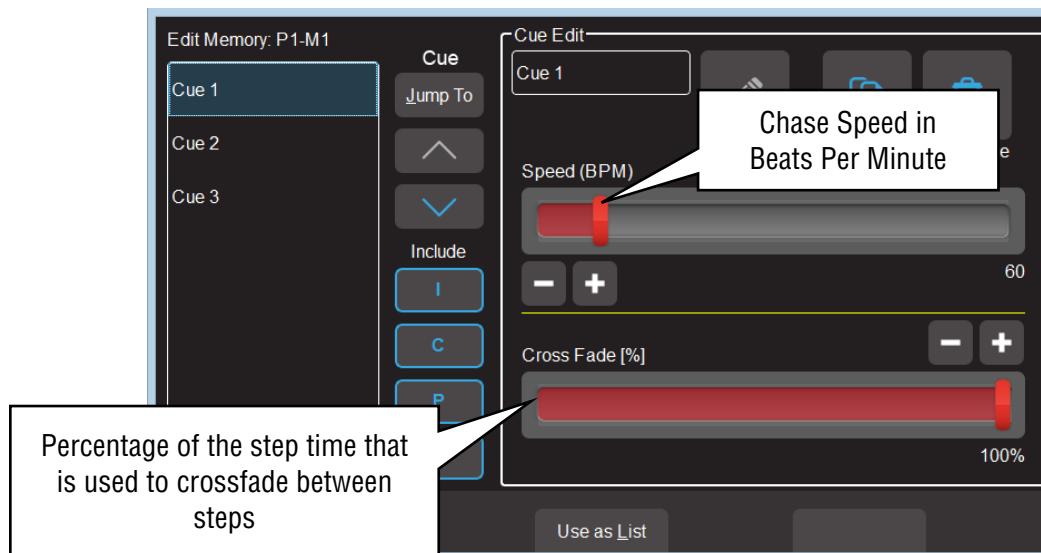
For example, if the chase speed is set at 60 BPM (which is one step per second), then with crossfade set at 0% (that is, no fade), the chase will wait for one second, then snap to the next step. None (0%) of the available speed time will be used for crossfading.

If the crossfade is set to 50%, then the chase will perform a 0.5 second crossfade to the next step, wait for 0.5 seconds and then perform the next crossfade. That is, 50% of the time is used to perform a crossfade and 50% of the time is spent waiting before starting the next crossfade. If the crossfade is set to 100%,

then the Chase will use all the time performing a crossfade to the next step. When the crossfade is complete, the next crossfade will commence immediately.

Manually step a chase by tapping its playback button (below its red fader).
To manually step in the <u>reverse</u> direction HOLD the ⌂ [Back] button while tapping the playback button.

⚠ <u>Note:</u> Set a low speed if you want to manually step the chase.

Chases automatically stop when their red fader is at zero.

To change a chase back to a cue-list touch Use as List.

15.2   EDIT CUES

To edit the intensity or attributes of a fixture in a cue, first bring down all yellow and red faders, then push up the red playback fader that contains the cue/cuelist and <u>play the cue that you wish to edit</u>. Fade up the Yellow master.

- To edit the intensity of a fixture, fade the fixtures yellow fader up from zero. When the fader matches the current level in the cue, the yellow fader will take control of the intensity. Set the intensity to the required level.
- To edit the other attributes of a fixture select the appropriate App (Color, Position, Beam / Other). Select the fixture(s) to be edited then use the App to make the change.

To update the cue press ◉ [Record] then press and HOLD (for 1 second) the button below the Red Playback fader which contains the cue. The cue will be overwritten with the edited values.

15.3   EDIT ANIMATIONS AND SHAPES

Recorded animations and shapes cannot currently be edited (future feature).

If you need to change an animation or shape recorded in a cue, create a new animation or shape then overwrite the existing cue by pressing [Record] then press and HOLD (for 1 second) the button below the Red Playback fader which contains the cue.

16   SHOW FILES

16.1   NEW

To open a new show, from the "Home" screen tap Tools, New.

- If a "Default" show exists it will be automatically loaded whenever a "New" show is selected. The Default show includes the patch.
- If a "Default" show does not exist, selecting a "New" show will clear all memories and clear the patch.

See also section 17.6, "Save Default Show".

16.2   SAVE

To save a show, from the "Home" screen tap Tools, Save.

- If you are saving a "New" show, touch in the "File Name" box then enter a name for the show.
- If you are saving an already saved show, the existing show will be updated.

16.3   SAVE AS

To save an existing show with a new name, from the "Home" screen tap Tools, Save As.

By default, the existing show name will be automatically entered with "_copy" added to it. You can accept the name or touch in the "File Name" box then enter a new name for the show.

16.4   LOAD

To load an existing show, from the "Home" screen tap Tools, Load. Touch the show name then touch Load.

"Load"-ing a show replaces the entire contents of the Genesis memory with the show data that you load. This includes all Cues and the Patch.

16.5   EXPORT TO USB

A saved show can be exported to a USB stick. The USB stick must be formatted as FAT32. Insert a USB stick in one of the USB sockets on the rear panel. From the "Home" screen tap Tools, Export. The screen offers the current show name, but a different show can be chosen if you desire. Touch Save to complete the export.

16.6   IMPORT FROM USB

To import a previously exported show from a USB stick, insert a USB stick containing the show file in one of the USB sockets on the rear panel. From the "Home" screen tap Tools, Import. Select the show file by touching it. Tap Load.

17   SETUP

17.1   OVERVIEW

To select the "Setup" screen, from the "Home" screen touch Tools/Setup.
The Setup screen offers the following functions:

17.1.1   Flash Level

See section 13.

17.1.2   Touch Screen Backlight

To adjust the brightness of the touch screen, from the "Home" screen touch, Tools/Setup then use the "Screen Backlight" slider.

17.1.3   Default Fade Time

When a cue is recorded, the "Fade In" and "Fade Out" times will be the time value in the "Default Fade Time" setting. To change the default fade time setting, from the "Home" screen touch, Tools/Setup then use the "Default Fade Time" slider.

17.2   DELETE SHOW

To delete a show file, from the "Home" screen touch, Tools/Setup. All saved shows are displayed. Touch the icon of the show to be deleted than touch Delete. To confirm the action touch Yes.

Deleting a show cannot be un-done.

17.3   NETWORK

Genesis can transmit ArtNet and sACN protocols from the network connector on the rear panel. These protocols support multiple DMX universes over Ethernet LAN (Local Area Network) or WAN (Wide Area Network).

17.3.1   Network Setup

Network address are automatically assigned by the network or addresses can be entered manually.

- To have a network address automatically assigned select Setup, Network, then touch DHCP. Use this setting when <u>connecting to the internet</u>.
- To manually enter a network select Setup, Network, then touch Static IP and enter the Address and NetMask. Use this setting when <u>streaming ArtNet or sACN over a dedicated lighting network</u>. See below.
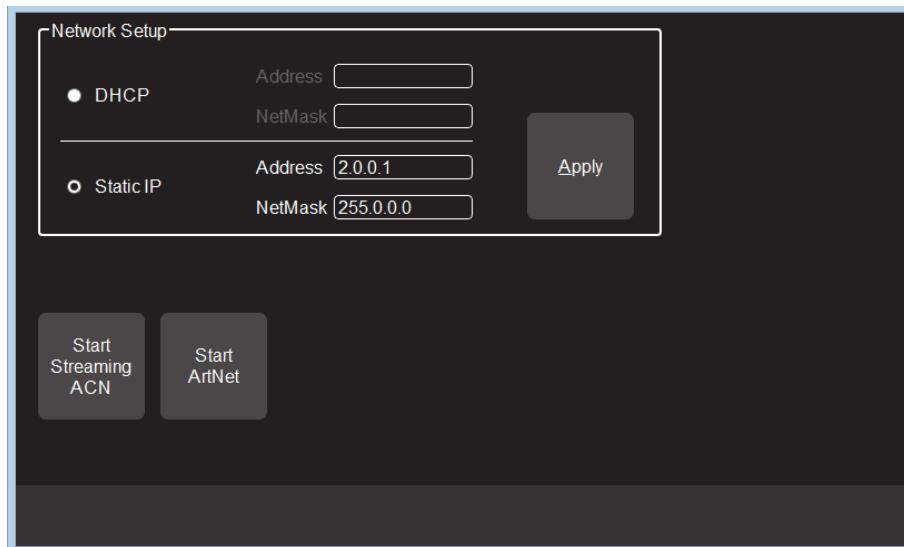
Network Setup

When Genesis is only connected to your lighting rig network, ALTMAN suggests that you use the following "Static IP" settings in Genesis:

Address: 2.0.0.1
NetMask: 255.0.0.0

Set every other device on the lighting network to a different address. For example: 2.0.0.2, 2.0.0.3, etc.

17.3.2   ArtNet

ArtNet is a streaming protocol to transport multiple DMX universes over a single cat 5 Ethernet cable/network. These are arranged in 16 sub-nets each containing 16 universes. To enable ArtNet output on the Genesis Ethernet connector, ensure that a static IP address is set (described above) then touch: Setup/Network/Start ArtNet.

17.3.3   sACN

Streaming ACN (sACN) is an informal name for the E1.31 streaming protocol to transport multiple DMX universes over a single cat 5 Ethernet cable/network. To enable sACN output the Genesis Ethernet connector, ensure that a static IP address is set (described above) then touch: Setup/Network/Start Streaming ACN.

17.4   SERVICE

No user functions are in this menu. It is for factory use and is PIN protected.

17.5   IMPORT FIXTURE LIBRARY

The Genesis uses the Carallon fixture library. This provides over 5,500 fixtures, most with multiple operating modes, all included as standard with the console. Updates for this library are released from time to time by ALTMAN and can be downloaded and imported into Genesis.

To update the fixture library, perform the following steps:

1. Download the latest Genesis fixture library from www.altmanlighting.com.
2. Create a folder named "ALTMAN" on a blank USB memory stick.
3. Copy the library file into the "ALTMAN" folder on the USB stick.

4. Insert the USB Stick into the Genesis.
5. From the "Home" screen touch Tools/Setup/Import Fixture Library.

Note: Genesis software updates also include the latest version of the fixture library.

17.6 SAVE DEFAULT SHOW

If Genesis is to be used in a permanent installation or in a touring setup where the same patch is regularly used, then ALTMAN recommends creating and saving a "default show". The "Default" show includes the patch, your rig view arrangement and any cues that you choose to include. If a "Default show" has been saved it will be automatically loaded whenever a "New" show is selected so that re-patch fixtures is not needed.

If a default show does not exist then selecting a "New" show will delete the patch and all memories.

When saving a default show, a "PIN Protect" feature can be chosen so that it cannot be easily changed or deleted.

To save a "Default" show, ensure the patch is correct then from the "Home" screen touch Tools/Setup/Save Default Show. You will be asked if you want to PIN protect the default show. If you answer "Yes" you must enter a 4 digit PIN.

17.7 DEFAULT SHOW EMERGENCY PIN

If you have forgotten your PIN for the default show you can always access it with the emergency PIN 3175.

17.8 DELETE DEFAULT SHOW

To delete the "Default" show, from the "Home" screen touch Tools/Setup/Delete Default Show. If the default show is PIN protected you must enter your PIN to delete the show.

17.9 ABOUT

ALTMAN has a policy of continuous improvement of its products. As the Genesis is a computerized lighting desk, its software is subject to this policy as new features are added and existing features improved.

To display the software version in Genesis, from the "Home" screen touch Tools/Setup/About.

See below for details to upgrade the firmware in the Genesis.

17.10 UPDATE FIRMWARE (SOFTWARE)

To install a software update, perform the following steps:

- Download the latest Genesis software from Altmanlighting.com.
- Create a folder named "ALTMAN" on a USB memory stick.
- Copy the software file (file named Genesis_v1.nn.img where 'nn' is the software version number) into the "ALTMAN" folder on the USB stick.
- Insert the USB Stick into the Genesis.
- From the "Home" screen touch Tools/Setup/Update Firmware.
- If your current show has unsaved changes you will be prompted to save.
- The update process takes about 20 seconds.
- Once complete you will be prompted to restart Genesis.
- Switch off, wait for 15 seconds then switch on.

18   FIXTURE EDITOR

18.1   OVERVIEW

If a fixture is not listed in the Genesis fixture library, a template can be created for it, even if functions of its DMX channels are unknown. The Genesis Fixture Editor allows use of the yellow faders to directly control the DMX channels of the fixture and thus <u>discover the function of each channel</u>. Then, select an attribute name for each channel, then name and save the new template.

The Fixture editor can also edit an existing fixture template.

18.2   CREATING A FIXTURE TEMPLATE

In normal operation (not in the "Fixture Editor"), the yellow faders control the intensity of the fixtures that are patched to them. When "Fixture Editor" is opened, they change and become individual DMX channel control faders starting from the DMX address that you specify in the editor. For example, if you enter a DMX address of 1 in the fixture editor, yellow fader 1 controls the level of DMX channel 1, yellow fader 2 controls DMX channel 2, yellow fader 3 controls DMX channel 3 etcetera. If you now connect your new fixture to the DMX output of Genesis and set the fixtures DMX address to 1, yellow fader 1 controls its first channel, yellow fader 2 controls its second channel, yellow fader 3 controls its third channel etcetera. You can now use the yellow faders to discover the function of each channel of the new fixture.

To open the Fixture Editor, from the "Home" screen press: Setup/Patch/Fixture Editor:

Custom Fixture Editor (Attributes Tab)
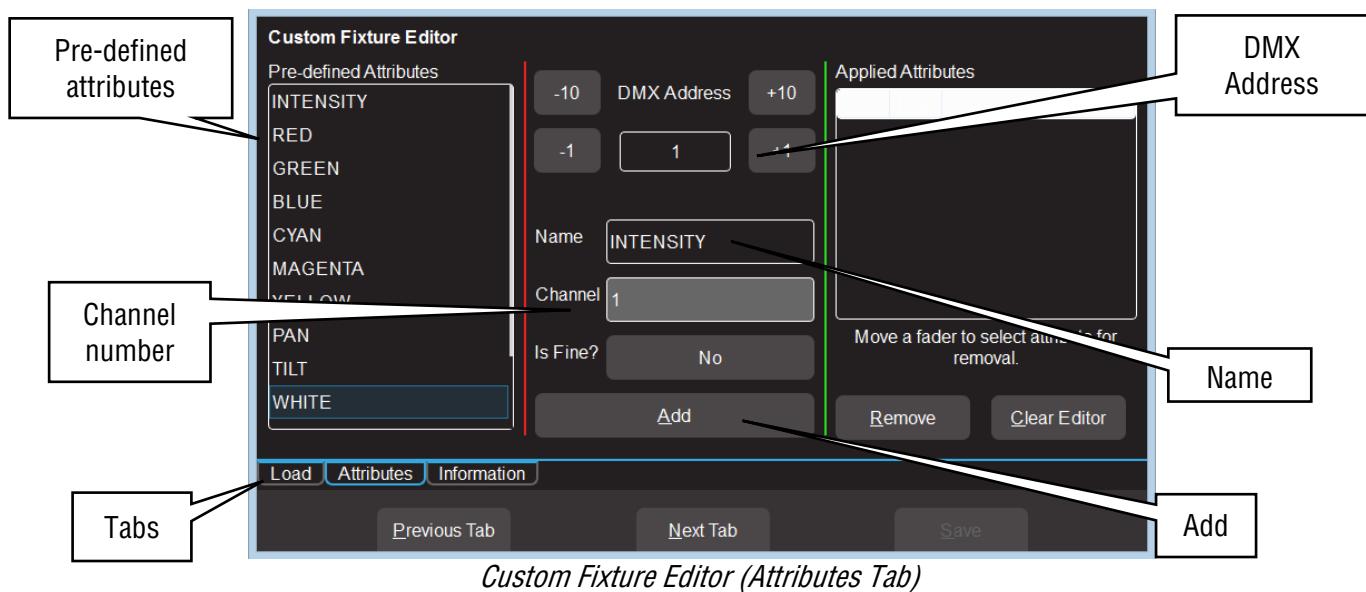
There are 3 pages that are selected by the "Tabs":

- Load.
- Attributes
- Information

The editor opens on the "Attributes" Tab. Connect the new fixture to the Genesis DMX output. Ensure that the Fixture editor and the new fixture are set to the same DMX address.

Fade up channel 1 fader. When a fader is moved, its number is automatically entered in the Channel number box. Observe the operation of the fixture. Select the appropriate Attribute name for this channel from the list in the "Pre-defined Attributes" box. Swipe to scroll the list of names. If no suitable name exists either choose "Unknown" or touch the "Name" box and enter a descriptive name. To create the attribute for this channel tap Add.

Fade up channel fader 2. Notice that whenever you move a fader, that number is automatically entered into the Channel Number box. Observe the operation of the fixture when you move fader 2 and repeat the above procedure to add the attribute. If an attribute is used for fine control of a function, tap the Is Fine? field. It will toggle to "Yes". Typically this will be where 2 channels are used for movement. One channel will be the course control and the other will be for fine.

If a mistake is made on a channel, move the fader to automatically select it then touch Remove.

When all attributes have been identified and added touch Next Tab (Information).
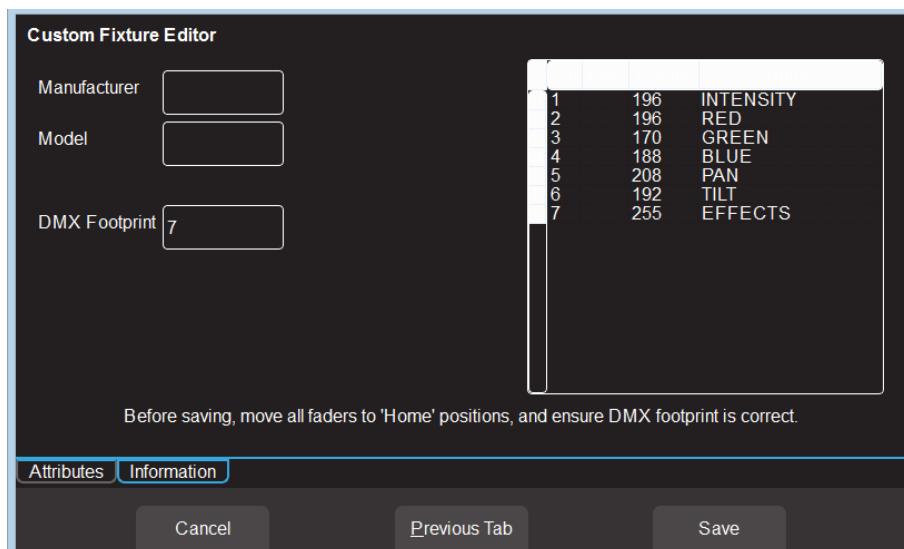
Custom Fixture Editor (Information Tab)

Enter a Manufacturer and Model name. If you don't know the manufacturers name, enter "Unknown" or you can use any name that helps you organize your fixtures.

Check the specifications of the fixture and determine the quantity of DMX channels that it needs. This is known as the fixtures "DMX Footprint". Every time you "Add" an attribute in the fixture editor it automatically increments the count in the "DMX Footprint" field. Some fixtures provide DMX channels for functions that you do not require and hence you might not have added Attributes for these channels. If this is the case you must manually enter the correct number of DMX channels actually used by the fixture in the "DMX Footprint" field. This ensures that Genesis will not overlap DMX addresses when patching multiple fixtures.

18.2.1 Home Positions

Home positions for Gobos, Zoom/Focus, color and shutter/strobe attributes are saved in the template.
Set all the faders to the values required for the fixtures "Home" position. The recommended "Home" attribute settings are:

- All Gobos set to open.
- Zoom/Focus at 50%.
- No color.
- Shutter/Strobe fully open.

⚠   Note: The Intensity, RGB/CMY colors and Pan/Tilt attribute faders are ignored when setting the Home position. These attributes are always set to the same Home values:

- Intensity = zero. This is because intensity is always controlled by the yellow fader.
- RGB/CMY Color = white. RGB are at 100% and CMY are at 0%.
- Position = center.

So despite what the fixture information shows for both factory and user created templates, the "default" values for intensity, RGB/CMY and Position (Pan/Tilt) will not be what is shown in the fixture information window nor what is set in the fixture editor.

These Home values are applied to the fixture when the fixture is "cleared". See section 8.8.

Press Save to create the new template.

18.3   EDIT A FIXTURE TEMPLATE

If you want to edit an existing fixture, from the "Home" screen press: Setup/Patch/Fixture Editor then select the "Load" tab.
Select the fixture template that you want to edit then touch Load.

Edit the fixture settings in the "Attributes" and "Information" tabs as described in section 18.2 and then save the edited template.

19 VISUALIZER

Genesis comes with a "Sample" show that you can load so that you can familiarize yourself with the controls before patching your own fixtures. It is perfect for training and demonstration of the console.

If you would like to see a simulation of the fixtures in the Genesis sample show working on a virtual stage on your computer, you can download a 3D visualizer lighting program called "Genesis Visualisation show" from www.altmanlighting.com

There are versions for PC and Mac.

Note: The visualizer programme requires a 3D graphics card with OpenGL support to run. If your computer does not have a compatible graphics card the software will report an error when you run it and it will close.

If you have changed or deleted the sample show that shipped with the console it can also be downloaded from the above site. Save it to a USB drive then insert the drive into the Genesis console and touch Tools/Import.

To setup the visualizer, connect a network cable from the Ethernet connector of the Genesis to the Ethernet connector of your computer. See section 2 "Getting Connected".

Setup the network as follows:

From the "Home" screen touch Tools/Setup/Network. The network setting of Genesis need to be set to:
Static IP
Address 2.0.0.1
NetMask 255.0.0.0
Touch Apply.

Set the IP address of your computer to:
Address 2.0.0.2
NetMask 255.0.0.0

Note: If you are unsure how to set the IP address of your computer ALTMAN suggests performing an internet search.

On the Genesis, from the "Home" screen touch Tools/Setup/Network/Start ArtNet.

Run the visualisation program on your computer. The computer now shows the fixtures in the sample show working on a virtual stage on your screen under the control of your Genesis.

20   TROUBLESHOOTING

20.1   FREQUENTLY ASKED QUESTIONS

Q. Some of my fixtures still have colors selected.
A. Clear the fixtures. From the "Home" screen touch Apps/Clear. Select the fixtures to be cleared by tapping their buttons then touch Color.
You can also clear all animations and all attributes of all fixtures. From the "Home" screen touch Apps/Clear/All (trash can icon).

Q. Some of my moving fixtures are still moving, even when their yellow the faders are down.
A. Clear the animations on those fixtures. From the "Home" screen touch Apps/Clear. Select the fixtures to be cleared by tapping their buttons then in the "Animations/Delete" pane touch Position.
You can also clear all animations and all attributes of all fixtures. From the "Home" screen touch Apps/Clear/All (trash can icon).

Q. I can't see some of my channels animating on the output.
A. Fade down all red playbacks. One of them might contain some of the channels you are animating and the red playback has precedence.

Q. I can't get any intensity output from some of the yellow faders.
A. There might be an intensity animation still running and it has priority. Delete the animation. From the "Home" screen touch Apps/Clear. In the "Animations/Delete" pane, touch Intensity.
You can also clear all animations and all attributes of all fixtures. From the "Home" screen touch Apps/Clear/All (trash can icon).

Q. My animation is running strangely.
A. Animations respect you fixture selection order. Make sure you have selected your fixtures in the desired order. You can see the selection order in the animation App.

Q. I created an animation set to "center in" but only half the fixtures are animating.
A. Center in and center out animations work best with an odd number of fixtures so that the pattern is symmetrical around the center fixture. If you have an even number of fixtures there is no center fixture because the center is the gap between fixtures. You must therefore program a symmetrical static look with at least one different setting on both sides of center.

Q. I tried to record a cue but the screen said "There is nothing to record".
A. Recording a cue only includes fixtures that have intensity greater than zero. Fade up the fixtures to be recorded. Also see section 11.5

Q. I have broken the touch screen.
A. If the touchscreen still displays images correctly you can plug in a USB mouse and use it to make your selections.

20.2 RESCUE FILE

In the unlikely event that you have saved a default show and the default show gets corrupted, the console will not be able to load the show at power up, resulting in it failing to start operating. You can restore normal operation by following these instructions:

On a computer with internet access navigate to www.altmanlighting.com

- Download the file called "Genesis-rescue".
- Save the file onto a USB memory stick.
- Turn off the Genesis console.
- Plug the memory stick into the Genesis then turn the console back on.
- The default show will be deleted, allowing the console to start normally.
- Ensure that the USB stick is then removed.
- If you were previously using a "Default Show" you should create and save a new one.

21 TECHNICAL SPECIFICATIONS

Note: Information contained herein subject to change without notice. For latest product specifications, features, and accessories, refer to the product specification sheet or visit the Altman Lighting web site at www.altmanlighting.com.

	Genesis	Genesis + 1 Wing	Genesis + 2 Wings
Number of Fixtures	24	36	48
Control LEDs, moving lights & generic fixtures	✔		
Number of Playback Faders	10	20	30
Masters	1 x Playback (Red) and 1 x Fixture (Yellow)		
Number of Cues/Animations	1,000 cues/animations across 100 cuelists/chases	1,000 cues/animations across 200 cuelists/chases	1,000 cues/animations across 300 cuelists/chases
DMX outputs on XLR connector	1 x DMX512-A (E1-11)	2 x DMX512-A (E1-11)	3 x DMX512-A (E1-11)
DMX output on sACN or Art-Net	1	2	3
RDM ready	✔		
Color Touchscreen with simple and intuitive navigation	✔		
Touchscreen	18cm capacitive with 5-point multi-touch		
Internal storage	4GB flash memory		
Data Backup	via USB memory stick		
Power brownout protection	Internal UPS providing 5 seconds of power for Auto show save		
External Power Supply	Nominal 100-240 Volts, 50-60Hz Operating range typically 90-260V, 45-65Hz.		
	External UL certified power supply with IEC to Edison input connector		
Power Input Connection	MAX 1.5A @ 12v DC - 2.5mm jack.		
Construction	Corrosion resistant steel finished in powder coating with hard-wearing polycarbonate front panel Lexan		
Product Dimensions - W x D x H	19.56 x 13 x 3.2 inches 490 x 330 x 80 mm		
Product Dimensions - W x D x H Shipping Dimensions - W x D x H	19.3 x 13 x 3.2 inches	245 x 330 x 80 mm (Wing Only)	
	530 x 380 x 130 mm	9.65 x 13 x 3.2 inches (Wing Only)	
Shipping Dimensions - W x D x H	20.9 x 14.75 x 5.0 inches	290 x 380 x 130 mm (Wing Only)	
Product Weight:	4.9 kg / 10.8 lb	11.42 x 14.96 x 5.0 inches (Wing Only)	
Product Weight (Packed): Internal PSU External PSU	6.1 kg / 13.4 lb	2.5 kg / 5.5 lb(Wing Only)	
Product Weight (Packed): Internal PSU	6.3 kg / 13.67 lb	3.5 kg / 7.7 lb(Wing Only)	
External PSU Shipping Weight (Australia)	8 kg	N/A	
Shipping Weight	7 kg / 15.5 lb	7.0 kg / 15.5 lb (Wing Only)	

ALTMAN
L I G H T I N G

22.1 OVERVIEW

The following Terms are commonly used in this Genesis Operator Manual. These Terms have been adopted by ALTMAN as the best descriptions for functions and operations performed on the Genesis and may not be terms universally adopted on similar equipment.

22.2 FIXTURE

A multi-color LED light, moving light, dimmer or any other DMX controlled device is known as a fixture. As you patch each Fixture you give it a unique Fixture Number. A yellow fixture fader (number) controls its intensity and the touchscreen controls its attributes.

22.3 DMX ADDRESS

Every Fixture has a selectable DMX starting address and this is patched to that same DMX address number on the Genesis. The Genesis will then automatically patch all the remaining DMX addresses for that Fixture according to the information in that Fixture's Template.

22.4 TEMPLATE

A Fixture Template is a file that tells the Genesis the function of each DMX address for that fixture and it defines the touchscreen Apps controls and labels for that Fixture. Every different type of Fixture that you control requires a Template.

22.5 FIXTURE LIBRARY

The Genesis stores its fixture templates in a library. The templates are organised in the library by manufacturer and model. When you want to use a particular model of Fixture, you select its Template from the library.

22.6 ATTRIBUTE

Each brand and model of Fixture has a specified number and order of control channels. An attribute is one or two DMX control channels (two channels used for higher resolution) that uniquely controls one of the physical motions of the Fixture. The manufacturer's specification of a Fixture lists each attribute and its control channel number(s). Attributes are sometimes referred to as "Parameters".

22.7 LTP. (LATEST TAKES PRECEDENCE)

See section 12.5

22.8 LOOK

A lighting "look" is the current output of the Genesis. A "look" may be made up of a collection of fixtures or one or many cues or a combination of cues plus fixtures. It may even be a single fixture.

22.9 CUE

A Cue is a memorized look of fixtures (at their respective levels, colors and positions) plus any animations that were running when the cue was recorded. The cue can be given a name. It can be played back on a red playback.

22.10 DMX512A

DMX512A is the industry standard for the transmission of digital control signals between lighting equipment. It utilises just a single pair of wires on which is transmitted the level information for the control of up to 512 DMX slots.

As the DMX512 signal contains the level information for all slots, each piece of equipment needs to be able to read the level(s) of the slots(s) that apply only to that piece of equipment. To enable this, each piece of DMX512 receiving equipment is fitted with an address switch or menu. This address is set to the slot number to which the equipment is to respond.

22.11 DMX CABLES

Only use specific DMX cable (available from your lighting supply company). Never use audio cable. If you want to make your own cables ALTMAN recommends using Belden 9842 (or equivalent).

DMX 5 pin XLR Pinouts

Pin Number	Function
1	Ground
2	- Data
3	+ Data
4	Not Used
5	Not Used

The end of the DMX line must be terminated (120 Ω) to prevent the signal reflecting up the line and causing possible errors.

22.12 DMX UNIVERSES

If more than 512 DMX slots are required, then more DMX outputs are required. The slot numbers on each DMX output are always 1 to 512. To differentiate between each DMX output, they are called Universe1, Universe 2 etc. Genesis provides one DMX universe.

The optional wings provide additional DMX universes.

22.13 ARTNET

ArtNet is a streaming protocol to transport multiple DMX universes over a single cat 5 Ethernet cable/network.

22.14 SACN

Streaming ACN (sACN) is an informal name for the E1.31 streaming protocol to transport multiple DMX universes over a single cat 5 Ethernet cable/network.

-END-