



ColorSource Console

User Manual

Version 3.2.0

Part Number: 7225M1200-3.2.0 Rev: A

Released: 2022-09

To view a list of trademarks and patents, go to etconnect.com/ip.

All other trademarks, both marked and not marked, are the property of their respective owners.

ETC intends this document, whether printed or electronic, to be provided in its entirety.

Table of Contents

Introduction	1
ColorSource 20	1
ColorSource 40	1
Shutdown	1
Using This Manual	2
Help from ETC Technical Services	2
Register Your Device	3
Online User Forums	3
ColorSource Overview	4
Touchscreen Performance	4
Stage Map	4
Available Controls	5
Layout Mode	5
Fader Mode	6
Channel Mode	6
Playback Mode	6
Bumps	6
Crossfader	6
Master Faders	7
In Simple Mode	7
Getting Started With Patching	8
Patch	8
Add Dimmer	9
Patching a Dimmer or Single-address Device	9

Duplicate Cell	9
Add Device	10
Patching a Device	10
Loading a Fixture Personality	11
Remove	11
Show Universes / Show Stage Map	11
Invert Pan	12
Invert Tilt	12
Swap Pan and Tilt	12
RDM	13
Identify	13
Controlling Your Lighting System	14
Channels	14
Channel Counts	14
Setting the Operating Mode	14
Fader Pages	14
Working with Dimmers / Intensity	14
Selected Channels	14
Captured Channels	15
Controls	15
Quick Select	15
Wheel	16
In Simple mode	16
Keypad	16
Available Buttons	16
Keypad, Plus	16
Keypad, Minus	16
Keypad, Thru	16
Keypad, Full	17
Keypad, @ (at level)	17
Keypad, <-- (Backspace)	17
Controlling Parameters	17

Parameter	17
Parameter, All	18
Parameter, Beam	18
Parameter, Position	20
Parameter, ColorMix	22
Parameter, Lamp Commands	24
Parameter, Home	24
Nudge	25
Trackball Pan Tilt	26
Recording Your Looks For Playback	27
Record / Edit	27
Record	27
Edit	27
In Simple Mode	27
Lock	27
Playbacks	28
Record Playback Memory	28
Include Options	29
Select Page	29
Erase Playback	29
Button Mode	30
Flash	30
Solo	30
Solo Change	30
Move / GO	30
Record Cue	30
Include Options	31
Store	31
Store And Next	32
Cue List	32
More	33
Flag	33
Next Flag	33
Previous Flag	33
Goto Cue	33
Goto 0	33
Edit Cue List	34
Clear Cues	35
Record Sequence	35

Include Options	36
Store And Exit	36
Store And New	36
Edit Sequence List	37
Sequence Rate	38
Sequence Run / Step Control	39
Tap Tempo	39
GO	40
Pause	40
Back	40
Undo	41
Using Effects	42
Effects	42
How to Apply an Effect	42
Effect, Color	43
How to Apply a Color Effect	43
Effect Settings	43
Running Effect Control	44
Effect, Shape	44
How to Apply a Shape Effect	44
Adjustments	44
Running Effect Control	45
Effect, Intensity	45
How to Apply an Intensity Effect	45
Effect Settings	46
Running Effect Control	46
Effect, Parameter	46
How to Apply a Parameter Effect	46
Effect Settings	47
Running Effect Control	47
Add Effect	47
Remove Effect	47

Turning Fixtures Off	49
Clear	49
In Simple mode	49
Clear All	49
Clear Playbacks	49
Clear Cues	49
Clear Channels	49
Clear Selection	49
Speed Clear	50
Blackout	50
Special Functions	51
Independent	51
Playback Toy	51
Operation	51
Functions	52
Intensity	52
Parameter GO	52
Time/ Rate	53
Playback Page Selection, Minus	54
Playback Page Selection, Plus	54
Playback Page Name / Number	54
Filter, All	54
Filter, Beam	55
Filter, Effect	55
Filter, Position	55
Range	55
System Settings and Setup	56
Setup	56
Settings	56
Settings: General	56
Settings: Times	57
Settings: Independents	57

Settings: Console	58
Settings: Erase	58
Settings: Tags	59
Showfile Management	60
Files	60
All filing operations:	60
Show files:	60
Advanced:	60
File, New	60
File, Open	60
File, Save	60
File, Save As	61
File, Import	61
File, Export	62
File, Delete	62
Files, Show files	63
Save As Default	63
Remove Default Show	63
Files, Advanced	64
Functions	64
Import Settings	64
Update Firmware	64
Install Extras	64
Export Logs	65
EULA	66

Introduction


Welcome to the Console User Manual.

ColorSource 20



ColorSource 40



The topics found in this user manual can also be found on your console by pressing the  button.

Shutdown

Hold the **Stage Map** button (left-most button below the screen) for three seconds to select the Shutdown screen.

Shutdown sends the console into hibernation mode and turns off the screen and indicators.

To awaken the console, press the now blue Stage Map button again.

Note: *When in hibernation mode, the console and its external power supply unit still consume some power. To ensure zero power consumption, the external power supply should be disconnected from the AC mains supply.*

CAUTION: *All data is stored internally in non-volatile memory. Do not switch off the power until any pending **save** operation is completed, or you may lose data. It is strongly advised that you make periodic backups of important data to an external memory stick using the **export** function.*

It is recommended to power the unit on and off on the AC side of the external power supply.

Using This Manual

This manual is for use with ColorSource.

In order to be specific about where features and commands are found, the following naming and text conventions will be used:

- Buttons, Browser menus, and commands are indicated in **bold text**. For example: In the **File** menu, click **Open**.
- Alphanumeric keyboard buttons are indicated in all CAPS. For example, ALT or CTRL.
- References to other parts of the manual are indicated in underlined blue (for example, [Patch](#)). When viewing this manual electronically, click on the reference to jump to that section of the manual.

Note: *Notes are helpful hints and information that is supplemental to the main text.*

CAUTION: *A Caution statement indicates situations where there may be undefined or unwanted consequences of an action, potential for data loss or an equipment problem.*

WARNING: *A Warning statement indicates situations where damage may occur, people may be harmed, or there are serious or dangerous consequences of an action.*

Please email comments about this manual to: TechComm@etconnect.com

Help from ETC Technical Services

If you are having difficulties, your most convenient resources are the references given in this user manual. To search more widely, try the ETC website at etconnect.com. If none of these resources is sufficient, contact ETC Technical Services directly at one of the offices identified below. Emergency service is available from all ETC offices outside of normal business hours.

When calling for assistance, please have the following information handy:

- Model and serial number (located on back panel)
- Facility name
- Other components in your system (other control devices, LED fixture types, etc.)

Americas

ETC, Inc.
Technical Services Department
3031 Pleasant View Road
Middleton, WI 53562
800-775-4382 (USA, toll-free)
+1-608 831-4116
service@etconnect.com

United Kingdom

Electronic Theatre Controls Ltd.
Technical Services Department
26-28 Victoria Industrial Estate
Victoria Road,
London W3 6UU England
+44 (0)20 8896 1000
techservltd@etconnect.com

Asia

Electronic Theatre Controls Asia, Ltd.
Technical Services Department
Room 1801, 18/F
Tower 1, Phase 1 Enterprise Square
9 Sheung Yuet Road
Kowloon Bay, Kowloon, Hong Kong
+852 2799 1220
service@etcasia.com

Germany

Electronic Theatre Controls GmbH
Technical Services Department
Ohmstrasse 3
83607 Holzkirchen, Germany
+49 (80 24) 47 00-0
techserv-hoki@etconnect.com

Register Your Device

Registering your device with ETC ensures that you will be notified of software and library updates, as well as any product advisories.

To register your device, you will need to enroll in “My ETC,” a personalized ETC website that provides a more direct path of communication between you and ETC.

Register now at <http://www.etcconnect.com/product.registration.aspx>.

Online User Forums

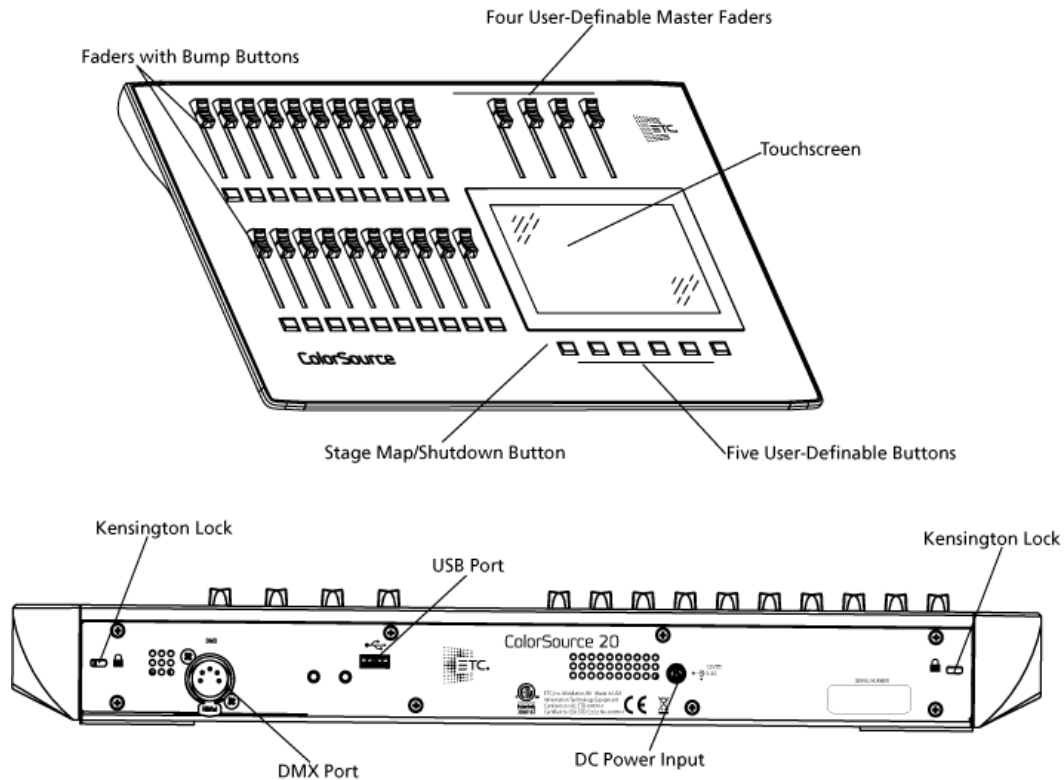
You are encouraged to visit and participate in the ETC User Forum, accessible from the ETC web site (etcconnect.com). This gives you access to an online community of users where you can read about other users’ experiences, suggestions, and questions regarding the product as well as submit your own.

To register for the ETC User Forum:

1. Go to ETC’s community web site (community.etcconnect.com).
2. You may register for the forum by clicking the “**join**” link in the upper right corner of the page.
3. Follow the registration instructions provided by the community page.

ColorSource Overview

The ColorSource console is made up of four different physical areas; the touchscreen (stage map), the faders and bumps, the crossfader, and the master faders. It is important to familiarize yourself with these different areas as you learn to use your console.



Touchscreen Performance

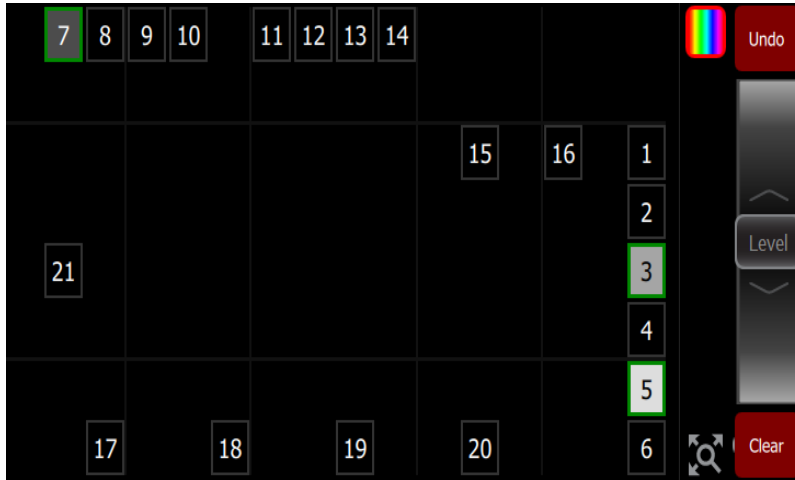
The ColorSource console touchscreen requires that the power supply is grounded (with a three-pin connector) for optimal performance. Lack of a grounded connection can cause the touchscreen to operate erratically or not at all. This might be seen as unwanted operations or inability to precisely select an item.

If no earthed / grounded outlet is available, or if the console is being run from an independent power source, including from a vehicle or battery, it is possible that the touchscreen will not operate correctly. In these situations it is advised to directly connect your body to the console chassis. This may be achieved with a conductive wrist strap, of the kind used in electronics manufacturing or hospitals to eliminate static charge build-up. The cable of the strap should be attached to a metallic part of the console, for example a screw or connector on the rear panel. If this is not practical, then you should at least ensure that you touch the console enclosure, the metallic part of it, with your wrist or your other hand.

Stage Map

The **Stage Map** button (left-most button below the screen) displays a topographical map of [channels](#) fullscreen at maximum size. You may select channels on the topographical stage map for control.

Note: The **Stage Map** button will toggle between displaying the Stage Map or the previously selected display.



Available Controls

- Pinch two fingers to zoom the display in or out, or use the **Zoom** button located by **Clear**. Zoom in to see intensity levels within the channel cells.
- Drag with two fingers to pan the display.
- Single click on a deselected fixture to select it.
- Single click on a selected fixture to deselect it.
- Double click on a fixture to select that fixture alone and de-select all others.
- Use **Layout Mode** for stage map customization.
- Selected fixtures are indicated surrounded by a green box.

The vertical strip to the right of the main area displays special content that is playing:

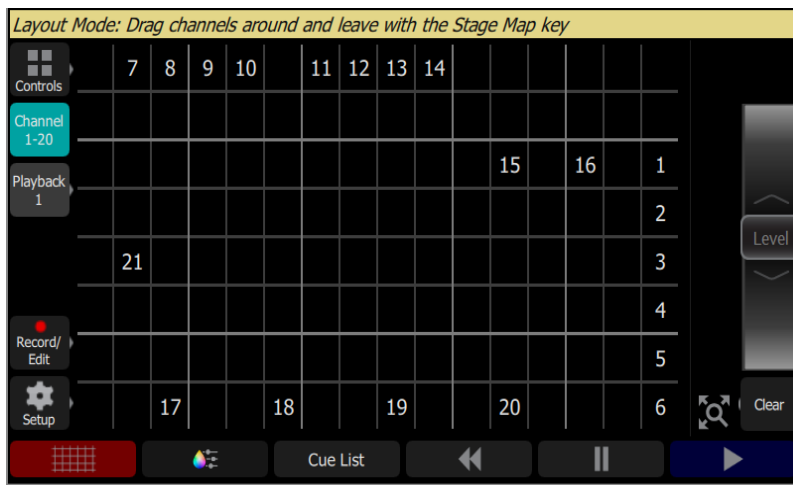
- **Effects:** press an icon to Stop or Edit the **effect** from playback. Press the icon to place the effect on the **wheel** controller to increase or reduce the effect.

Note: The **Effects** icon will only display if that type of content is playing.

Layout Mode

Press and hold a cell on the stage map, or go to **Setup >Layout Mode** to open the layout screen.

When in layout mode, the screen displays as a grid. Press and drag fixtures to move them to another position on the grid.



Press the **Stage Map** button (left-most button below the screen) to exit the layout mode.

Fader Mode

The faders to the left of the display may be set to operate either of two modes.

Channel Mode

This mode assigns the faders to control individual patched channels. Two pages of channels are provided. For more information, please see [Channels](#).

Playback Mode

This mode assigns the faders to control saved playbacks. Ten pages of playbacks are provided. For more information, please see [Playbacks](#).

Bumps

The buttons below the faders are bump buttons.

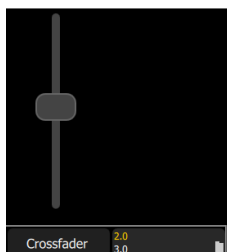
Their operation changes based on the [fader mode](#).

- When the faders are in [channel](#) mode, the bumps can be used to select or deselect channels.
- When the faders are in [playback](#) mode, their behavior is set based on the selected [button mode](#).

Crossfader

The Crossfader can be assigned to one of the four faders above the touchscreen. It is assigned in the [Console tab](#) in Settings.

The Crossfader provides manual control over the fades between [cues](#). You can see the progress of the crossfade and which cues are affected in the cue viewer.



Master Faders

Master faders can be used to control the output of certain functions. Master faders are assigned to the top four faders. They are assigned in the [Console tab](#) in Settings.

Note: *When the Playbacks or Cues faders are fully down no output will be produced by those sections.*

Master faders can be assigned to these functions:

- **Bumps:** controls the output when a [bump](#) button is pressed.
- **Playbacks:** controls the output of the [playbacks](#) and [sequences](#).
- **Cues:** controls the output of the [cue list](#).
- **Crossfader:** [Crossfades](#) the cue list from the **Live** to the **Next** step.
- **Grandmaster:** controls the overall intensity of all patched channels.

In Simple Mode

- **Memory 1- 4:** The playback memories are the four faders above the touchscreen. You may [record](#) the output and store it on one of the four masters to be re-used later.

Getting Started With Patching

To be able to control the lighting fixtures in your system you need to assign each fixture (or a group of dimmers) to a channel fader. The channel fader can then be used to set intensity of a fixture. The channel also becomes a way to select that fixture for other types of control like color changes, or adjustment of other parameters (in the case of a moving fixture, for example). The fixtures in your lighting system are controlled using the DMX, streaming ACN, or Art-Net protocols, and each dimmer or fixture uses a DMX address (or set of addresses) to communicate with the console.

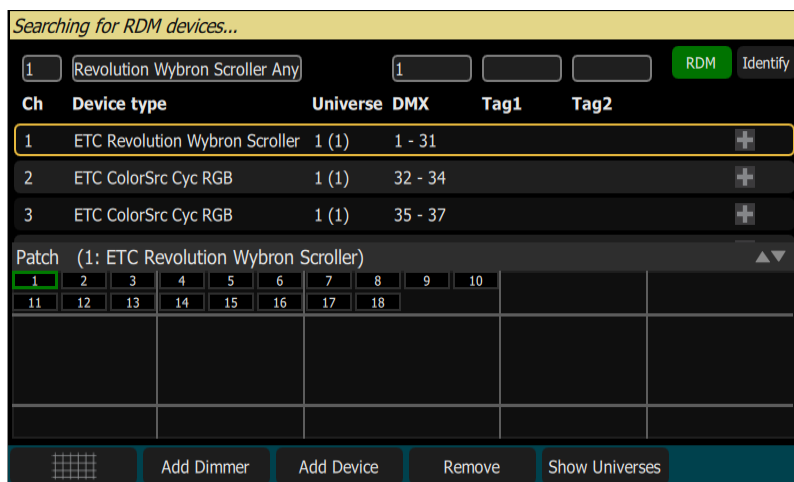
The **Patch** is used to associate a **channel** with DMX addresses and device types. Once a channel is patched to an address or addresses, and the output is connected to a device (for example a dimmer, moving fixture, or accessory), the channel will then control that device.

To access the Patch functions, press **Setup >Patch**.

Note: *If your patch stays the same between shows, you can save time by saving a **default show**, which will load your patch automatically for you.*

Patch

Displays the patching screen and controls.



Patching associates a console **channel** number with an address or block of addresses on the DMX output. You must ensure that the address on the fixture, dimmer, or device matches the address that you setup in Patch. To patch a basic device, press **Add Dimmer**.

Complex devices with several **parameters**, such as position, color, or beam controls, are described by a *personality*. Select the make and type of device to match the actual connected device. Some devices have *modes* that must also match on the device and in the patch list. Lighting devices with **RDM** available and enabled are found automatically and added to the list of devices, but must still be assigned to channel numbers. Use **Add Device** to patch a complex device that is not automatically found by RDM.

Note: *Custom fixture personalities can be loaded. Please see **Loading a Fixture Personality** for instructions.*

During patching you may add tags to each fixture, dimmer, or device to aid in convenient grouping on the **Quick Select** screen.

The **lower section** of the screen may be set to display the channel **stage map** or a view of the DMX universes output.

The settings and patch for the **independents** are on the **Ind. Tab** in **Settings**.

Add Dimmer

Dimmers are single-address devices that control intensity only. For patching multiple-address devices, see **Add Device**.



Patching a Dimmer or Single-address Device

1. Press **Add Dimmer**. This will open the Patch Wizard display.
2. Select **Channel** to enter the **number**.
3. Select **Count** to enter in the number of similar devices you are patching. If the quantity is more than one, each dimmer will occupy one DMX address, starting from the address you specify.
4. Select **DMX** to enter the DMX address (1 through 512).
5. Select **Accept** to patch, or **Cancel** to exit.

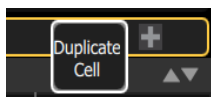
For Example:

If you set the count to 12 and the DMX address to 20, the devices will occupy DMX addresses 20 through 31.

Patching places the items in a list in the upper part of the **patch** screen and on the topographical **stage map** in the lower part of the screen in rising order starting in the top left corner. You may select one channel at a time in the list or on the stage map.

Each channel may be edited in the boxes at the top of the screen for channel number, DMX Universe and DMX address. You may also add **tags** to each item so that they may be conveniently grouped on the **quick select** screen.

Duplicate Cell



Duplicate Cell lets you place two dimmers on the Stage Map in different places patched to the same channel.

Note: *Duplicate cell adds dimmers only and not devices. Devices must be patched and placed individually. See **Add Device**.*

Pick a channel in the patch list, select the **+** button, and tap Duplicate Cell button to make a copy.

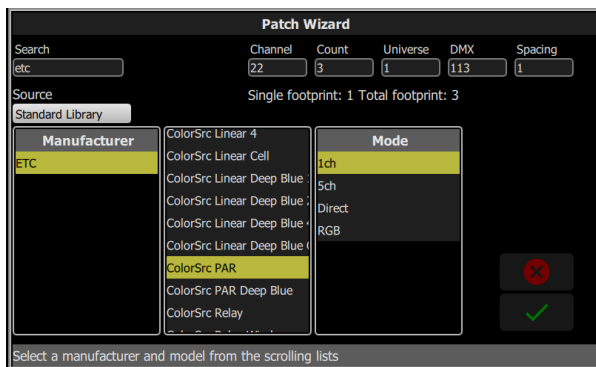
A new cell is added and is patched to the next-highest free DMX address. You may change the address and set tags in [Patch](#).

When a duplicate cell is selected or operated, each of the duplicate cells on the Stage Map will respond together. Each cell of a duplicate channel may be moved separately on the [Stage Map](#).

Note: You can also add dimmers to a channel without showing them as separate cells on the Stage Map. Use [Add Dimmer](#) and then set the channel number to match the existing channel. Dimmers added in this way do not consume space on the Stage Map. For instance, you may need one channel to control a range of dimmers for house fixtures without wishing to place each separately.

Add Device

Devices are multiple-address fixtures with a number of controllable [parameters](#), such as position, color, beam, and intensity. Devices have their own *personality*, which defines what each parameter does and which controls are needed.



Note: Lighting devices with [RDM](#) available and enabled will be found automatically and added to the list of devices in the patch, but must still be assigned a channel number.

Patching a Device

1. Press **Add Device**. This will open the Patch Wizard display.
2. Select the correct personality from the list provided. Select the make and type of device to match the actual connected device. Some devices have modes that must also match on the device and in the patch list.
3. Select **Channel** to enter the [number](#).
4. Select **Count** to enter in the number of similar devices you are patching. If the quantity is more than one, each device will occupy the number of DMX addresses used by its footprint, starting from the address you specify.
5. Select **DMX** to enter the starting DMX address.
6. Enter the desired **Spacing**.
7. Select **Accept** to patch, or **Cancel** to exit.

For Example:

If you patch 12 devices with a footprint of 6 DMX addresses each to address 20, they will occupy DMX addresses 20 through 91.

To patch devices with a gap between them, adjust the Spacing value to a larger number.

Note: Do not adjust this to a smaller number as that will cause overlaps and unexpected behavior from your devices.

For Example:

Your devices use 17 channels, but you would prefer to manually address them at logical starting numbers like 1, 21, 41 and so on. Use the Spacing cell to change the footprint to 20 so that those devices will automatically patch at 1, 21, 41...

Patching places the items in a list in the upper part of the patch screen and on the topographical [stage map](#) in the lower part of the screen in rising order starting in the top left corner. You may select one channel at a time in the list or on the stage map.

Each channel may be edited in the boxes at the top of the screen for channel number, DMX Universe and DMX address. You may also add [tags](#) to each item so that they may be conveniently grouped on the [quick select](#) screen.

Note: *Custom fixture profiles can be loaded. Please see [Loading a Fixture Personality](#) for instructions.*

Loading a Fixture Personality

Some devices may not be included in the onboard library or discoverable via RDM.

To request a fixture personality, please email ColorSourceConsole@etcconnect.com with the fixture manual, the required mode(s) and, if applicable, a deadline for the creation of the personality. Alternatively, download the ColorSource Personality Editor from etcconnect.com to create custom personalities.

To load a personality:

1. Save the file to the root directory of a USB drive. The file must be named `userlib.jlib` in order to be recognized.
2. With the USB drive plugged into the device, go to **Setup > Patch > Add Device**.
3. From the Source dropdown, select User Library. A new library will display with your fixture listed by its manufacturer's name.

Note: *Custom profiles are only saved to your device if they are patched and saved with the show file. Please back up any important files to a separate location.*

Remove

Select a device or dimmer, and press **Remove** to remove from the [patch](#). If you accidentally remove a device or dimmer, you can use the [Undo](#) function to restore it.

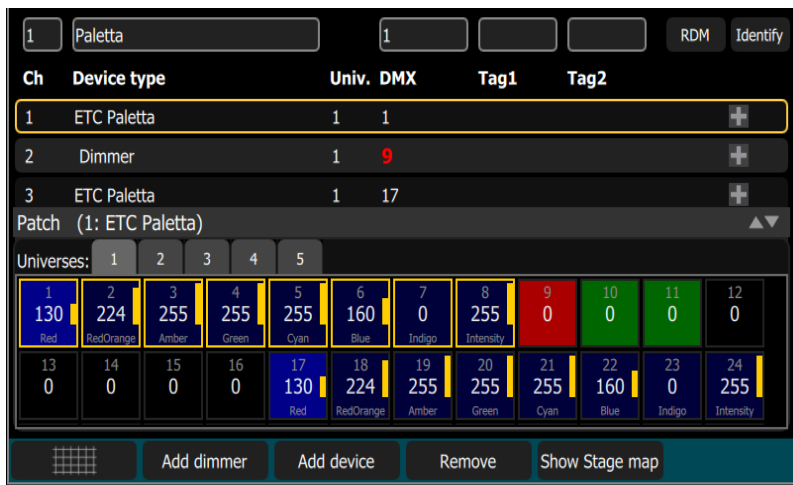
The removed item will no longer display on the stage map.

Note: *If you have recorded a device into [playbacks](#) or [cues](#), and then remove it from the patch, all the recorded values will remain in the playback or cue, but they will no longer be connected to a device.*

Show Universes / Show Stage Map

Press the Show Universes button to toggle between displaying the topographical [Stage Map](#) or a chart of the DMX addresses.

The DMX address chart is view-only and may not be edited. Scroll up and down to view all the addresses in the selected Universe.



- Each cell shows the DMX address, the value in the range 0-255 and the name of the parameter for a device patched with a *personality*. A yellow bar graph indicates the approximate value being output.
- Cells colored light blue indicate the *base address* of the item, which is the address entered in the Patch screen DMX box. The following dark blue cells show the following DMX addresses used by the device according to the size of its *footprint*.
- Cells colored light green indicate single dimmers. Cells colored dark green indicate independents.
- Cells colored red indicate a patching overlap, where more than one dimmer, device, or independent is patched to the same DMX address.
- Black cells are unoccupied and not patched.

Invert Pan

Switches the pan control to run in the opposite direction. Click on the + button in patch for the device you want to invert pan.



Note: Use this if you have rigged a fixture upside-down or back-to-front compared to other similar fixtures so that if they are all selected together their movements will be in similar directions.

Invert Tilt

Switches the tilt control to run in the opposite direction. Click on the + button in patch for the device you want to invert tilt.



Note: Use this if you have rigged a fixture upside-down or back-to-front compared to other similar fixtures so that if they are all selected together their movements will be in similar directions.

Swap Pan and Tilt

Exchanges pan and tilt so that pan on the controls tilt on the device and vice-versa. Click on the + button in patch for the device you want to swap pan and tilt.



Note: An example of when to use this function would be if a fixture is hung sideways or a moving mirror fixture is rotated 90 or 270 degrees from other fixtures.

RDM

RDM is a two-way communications protocol built-into DMX512 for remotely controlling and configuring compatible fixtures. RDM is only active on the [Patch](#) screen. Any RDM-compatible fixtures will automatically appear in the patch list.

The RDM button enables or disables RDM on the local DMX port. When enabled, the RDM button will be green.

Note: You may also choose to turn off RDM when you have patched all the fixtures in a rig that you wish to use. If the patch list contains fixtures that you do not wish to patch, you can remove them by turning off RDM.

Identify

Identify finds the [RDM](#)-capable fixtures during patching so it is easy to know which device is which when assigning them to channels.

When RDM discovers a fixture, the fixture is placed at the top of the patch list with the channel shown as zero. When **Identify** is set to On, each fixture selected in the patch list will identify itself exclusively; usually a fixture will blink on and off. Devices that do not produce light, (for example, a scroller or pan/tilt yoke), may shuffle or move. The action that a device does when told to Identify is determined by its manufacturer.

You will need to choose a channel to patch the device.

Note: *Identify does not work with non-RDM devices or dimmers.*

Turn off **Identify** to stop all RDM Identification. Turn on **Identify** to see the currently selected RDM device.

See Also: [RDM](#)

Controlling Your Lighting System

After you have completed your [patch](#), you are now ready to start controlling your lighting system. Your ColorSource console gives you many options for control of your fixtures.

This section discusses how to control your channels, and how to set the [parameters](#).

Note: Depending on the types of fixtures you have patched, you may have additional parameters that you can control. Those parameters may include [color](#), [position](#) (focus), [beam](#), and [lamp commands](#).

Channels

A channel is the control used by the console to operate a dimmer, a group of dimmers, a dimmer and a device, or a complete moving fixture.

Channels need to be associated with an address in [Patch](#) for there to be output.

Channel Counts

Both the ColorSource 20 and 40 can control up to 80 channels. Please note that additional channels only appear when patched.

Setting the Operating Mode

- Choose **Simple** or **Complete** mode on the [Setup>Settings>General](#) screen.

Fader Pages

- Simple Mode offers one page of faders to control the first 20 or 40 channels, depending on the model.
- Complete Mode offers up to four pages of faders to control all patched channels.

Working with Dimmers / Intensity

Channels can be controlled in several different ways:

- The faders, when in [channel mode](#), can be used to control a channel's intensity. Depending on the chosen operating mode: **Complete** or **Simple**, there are one or two pages of channels that the faders can control. In **Complete** Mode toggle the Channel button to access each of the pages.
- **Note:** Additional pages of channels are only available when channels have been patched on that page (above 21, 41, or 61).
- You can use the touchscreen and select channels directly on the [Stage Map](#). The [wheel](#) can then be used to assign an intensity level.
- In complete mode, you can use the [keypad](#) to select a channel and assign an intensity level.
- In complete mode, channels can also be controlled by the [playbacks](#), [sequences](#), and [cues](#). In simple mode, channels can be controlled by four playbacks.

Selected Channels

To make changes to channel values, a channel must be selected. Selection is indicated by a thick green border around the channel cell on the Stage Map and a lit LED beneath the channel fader. Selection can happen in a number of ways:

- Move a fader to select a channel. If the channel is already on due to playback, move the fader until it matches the channel's current output. Move the fader back to the bottom "zero" position to deselect it (and take its intensity to zero.)
- Touch the channel cell on the Stage Map. Touch the cell again to deselect it.
- Use the Keypad to type in the channel numbers and set levels.
- To deselect all selected channels, use **Clear>Selection**.

Captured Channels

Selected channels that have a manually set intensity level are considered "captured." This means that the selected channels' levels will be held until the channels are deselected or the manual intensity values are cleared.

If **Clear>Channels** is used, cleared manual intensity values will return to the levels coming from active playback sources immediately.

If manually set channels are simply deselected, manually set levels will remain on stage until those channels get a new move instruction from a playback source.

Note: *A channel fader moved back to the bottom (or "zero") position will deselect that channel. You cannot hold a channel at zero intensity using a channel fader. Another selection method must be used.*

Controls

Controls contain all the functions for controlling fixtures and cues, and setting color and other parameters:

- **Stage Map:** The 'home' view of the full topographical stage map.
- **Param:** Parameter control for moving or automated fixtures.
- **Cue List:** The cue display.
- **Playback Toy:** A screen to launch lighting looks and play, or busk, live.
- **Keypad:** Classic level control by typing numbers.
- **Quick Select:** Selection of channels in useful blocks or sets.
- **Effects:** Lighting effects for color, intensity, and movement.

Note: *Param is only available if you have patched fixtures with those capabilities.*

Quick Select

In the quick select display, you can pick groups of channels according to their position on the topographical **stage map** or by choosing the **tags** setup during patching.



Groups display in the upper section, and the lower section of the screen displays the channel stage map. Available groups are displayed in green boxes. Double click on a group to select only the fixtures in that group, click on other groups to add or subtract channels from the selection.

While in the quick select display, the wheel operates the level of the selected channels proportionally. The group buttons are also variable cells that may be wiped up and down to alter the value.

When you exit the quick select display, the channels will remain selected and colors or other parameters may be applied to them.

Wheel

To the right of the [stage map](#) is the wheel. The wheel can be used to control [channel](#) levels by moving the wheel up to increase the level or down to decrease.

The wheel can also be used to control depth of [effects](#) and [sequence rate](#).

In Simple mode

To the right of the [stage map](#) is the wheel. The wheel can be used to control [channel](#) levels by moving the wheel up to increase the level or down to decrease.

Keypad

The keypad is opened by going to **Controls>Keypad**. This provides classic lighting control of channels and levels via a numeric keypad entry.

Note: *[Effects](#) and [Parameter](#) settings must be controlled on their respective screens.*

Available Buttons

- [+ \(Plus\)](#)
- [- \(Minus\)](#)
- [Thru](#)
- [Full](#)
- [@ \(At\)](#)
- [..<<..\(Backspace\)](#)
- Enter

Keypad, Plus

Adds a channel to the selection set.

For Example:

1 Thru 10 + 20 Enter - creates a set of eleven channels: 1-10 plus 20.

Keypad, Minus

Removes a channel from the selection set.

For Example:

1 Thru 10 - 7 Enter - creates a set of nine channels: 1 through 6 plus 8 through 10.

Keypad, Thru

Selects a range of channels.

For Example:

1 Thru 10 Enter - creates a set of ten channels: 1 through 10.

Keypad, Full

Sets the selected channels to full intensity.

To apply the chosen intensity, you must complete the command with the **Enter** key.

For Example:

1 @ Full Enter - sets channel one to full intensity.

Keypad, @ (at level)

Sets the selected channels to a level specified in percent % from 0 to 100.

To apply the chosen intensity, you must complete the command with the **Enter** key.

For Example:

1 + 5 @ 70 Enter - sets channels one and five to 70% intensity.

Keypad, <-- (Backspace)

The <-- key behaves as a backspace button for the command line.

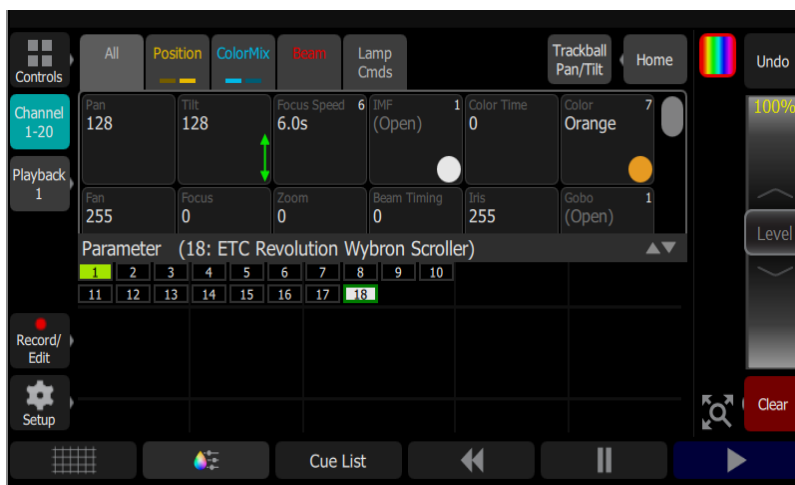
Controlling Parameters

Depending on the types of fixtures you have patched, you may have additional parameters that you can control. Those parameters may include **color**, **position** (focus), **beam**, and **lamp commands**.

Parameter

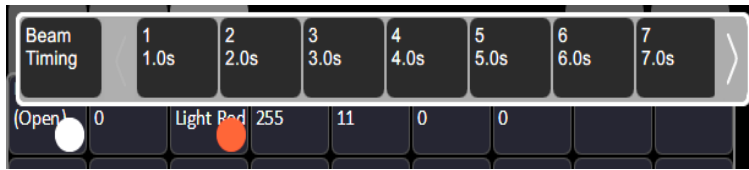
All the controllable features of an automated fixture, with the exception of the intensity, are known as the parameters of the fixture.

Parameters may include position (pan/tilt), color, beam control (iris, focus, et cetera), or lamp controls. The tabs along the top allows viewing of all parameters or only a selected type. Tabs with additional pages display with an indicator under the parameter name. Tap on a tab twice to access page two and three times for page three.



Each cell on the parameter display is a controllable button to alter the value. Press and hold on the cell and you can wipe the value up and down, using the entire screen height for control.

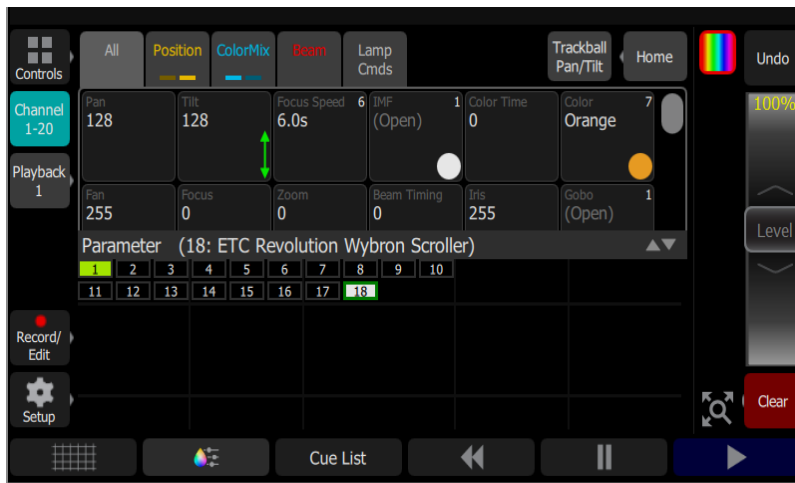
Press once and release on a cell to reveal a filmstrip-style view of the available settings, with diagrams of gobos and samples of fixed colors. The strip may be scrolled left-right until the desired setting is found. Pick the setting to close the filmstrip.



Parameter, All

Shows all the available parameters.

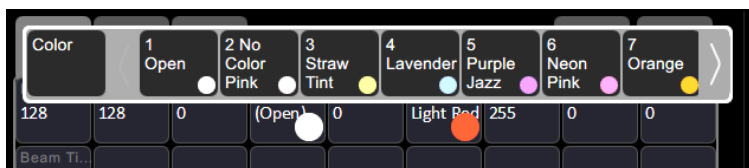
Note: The *Param* button is only present if you have patched fixtures with those capabilities.



Controls the parameters of the selected fixture(s). Only fixtures with parameters may be controlled here.

Pick a parameter and swipe the value box up and down to change values. A green arrow will appear on the value box when you are swiping it.

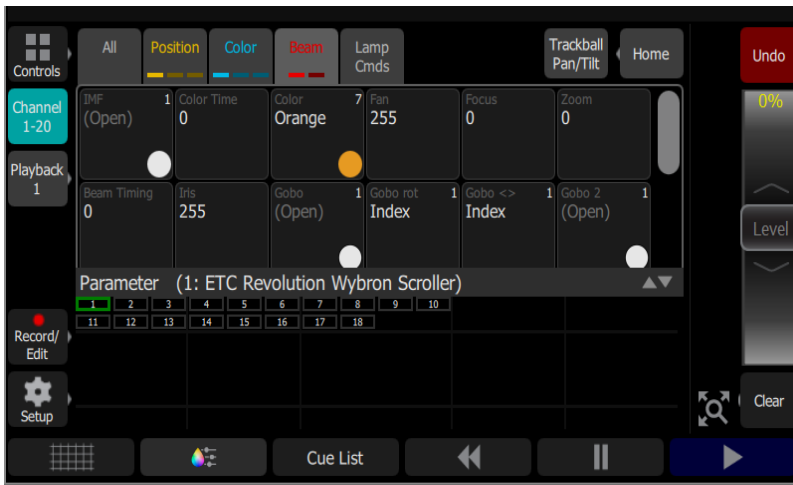
Pick the value box with one press to open a filmstrip view of the available settings.



The filmstrip may be scrolled left or right to see all the choices.

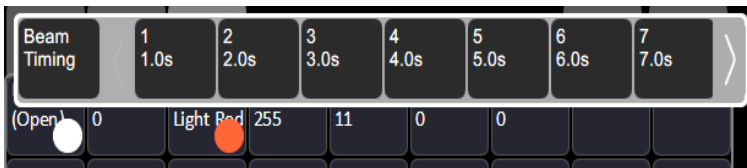
Parameter, Beam

Shows only the beam parameters. All parameters that are not position, intensity or color are included in the beam parameter set.



Controls the parameters of the selected fixture(s). Only fixtures with parameters may be controlled here.

Pick a parameter and swipe the value box up and down to change values.



Pick the value box with one press to open a filmstrip view of the available settings. The filmstrip may be scrolled left or right to see all the choices.

Recording a Beam Palette

Record a beam palette to easily recall beam parameters for one or more fixtures.



1. Set the beam parameters accordingly for the fixture or fixtures you wish to record.
2. Tap the **Beam** tab to open the beam palette page.
3. Press the **Record Palette** button.
4. Press **Include Options** to choose to record for all channels, or only the ones currently selected.
5. Pick a palette chip to record, or press **Cancel** to exit without saving. Light gray chips

contain palette information; those in dark gray are blank.

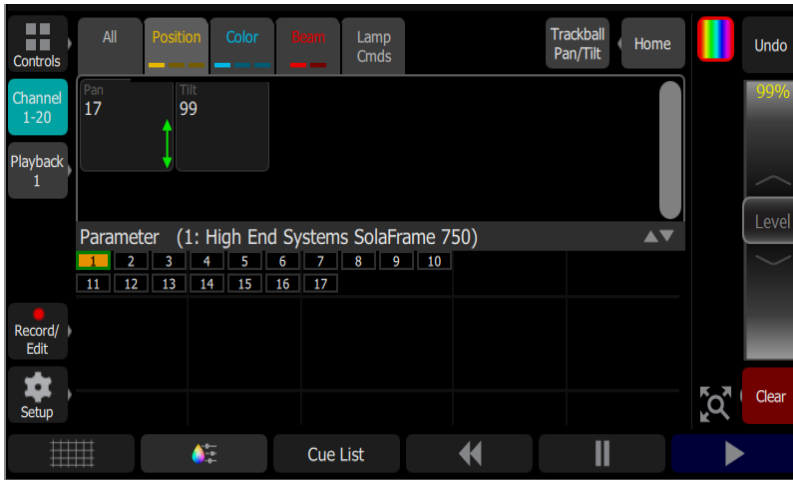
6. Press and hold on the palette chip to add a label in addition to the palette number.

Using Beam Palettes

In order to use a recorded beam palette, select the channel(s) you wish to apply the palette to, navigate to the beam palette page, and tap the palette you wish to apply. To revert to defaults, home the channel(s).

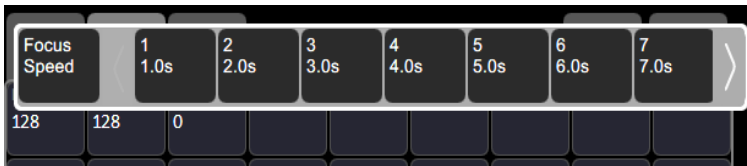
Parameter, Position

Show only the position parameters, pan and tilt. There are two pages of pan and tilt controls. The first page displays value boxes for pan and tilt.



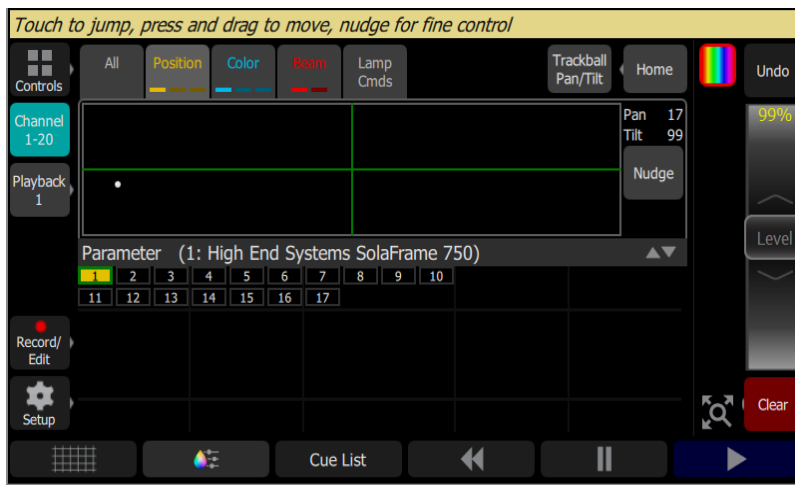
Control the parameters of the selected fixture(s). Only fixtures with parameters may be controlled here.

Pick a parameter and wipe the value box up and down to change values.



Pick the value box with one press to open a filmstrip view of the available settings. The filmstrip may be scrolled left or right to see all the choices.

The second page displays a cross hair pan and tilt control. Tap the tab twice to get to the second page.



A white dot is used to indicate the current location. The actual pan and tilt values will display above the **Nudge** button. Press anywhere within the crosshairs to move your device.

For fine control of pan and tilt, use the **Nudge** button. See [Nudge](#) for more information.

Recording a Position Palette

Record a position palette to easily recall position parameters for one or more fixtures.



1. Set the position parameters accordingly for the fixture or fixtures you wish to record.
2. Tap the **Position** tab to open the position palette page.
3. Press the **Record Palette** button.
4. Press **Include Options** to choose to record for all channels, or only the ones currently selected.
5. Pick a palette chip to record, or press **Cancel** to exit without saving. Light gray chips contain palette information; those in dark gray are blank.
6. Press and hold on the palette chip to add a label in addition to the palette number.

Using Position Palettes

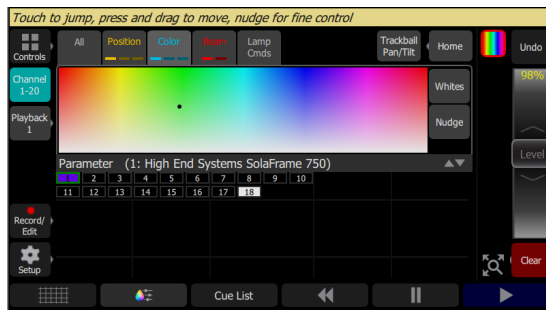
In order to use a recorded position palette, select the channel(s) you wish to apply the palette to, navigate to the position palette page, and tap the palette you wish to apply. To revert to defaults, home the channel(s).

Parameter, ColorMix

fixtures that have a color mixing system may be operated from this tab. There are two pages of color mixing tools and one page for direct emitter control. The first page displays the color picker, and the second page displays the color chips. Tap the tab twice to get to the second page, and three times to get to the direct emitter page.

Note: The *Param* button is only present if you have patched fixtures with those capabilities.

Fixtures must be selected before a color choice can be applied to them. Select some fixtures on the [stage map](#) view, or with the [bump buttons](#) if the [fader mode](#) is set to [channels](#), and then pick a color or try several colors.



The color picker is a diagram of the visible spectrum varying by hue from left to right and by saturation (paleness) from top to bottom. The color picker can be set to colors or whites mode. See [Whites](#) for more information.

A black dot is used to indicate the color selected. Press **Nudge** to put the color picker in fine mode. See [Nudge](#) for more information.

The second page displays the color chips. Color chips are a set of preset color chips. Color chips may be programmed to carry any color. See [Setup Color Chips](#) for more information.

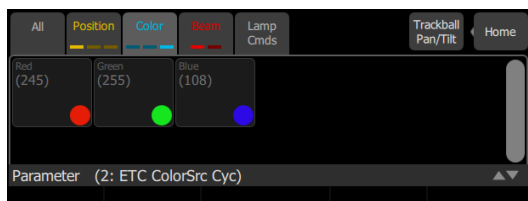


Note: Not all color mixing systems can produce precise color matches and a full range of colors. It is advisable to control color on only one fixture type at a time.

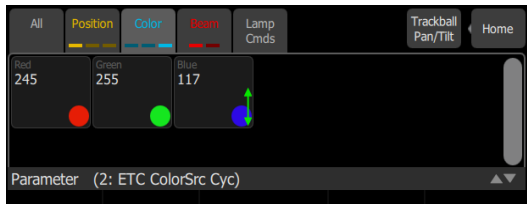
Note: You may find it necessary to pick colors independently for different fixtures in order that they all produce a similar color.

The third page is for direct emitter control. Direct emitter control provides an additional method of color control that allows for the manipulation of each individual LED emitter.

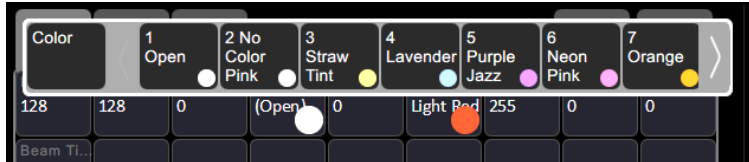
When color values are set via the color picker, their values will display in parentheses when viewed in the direct emitter page.



To change an individual emitter, pick a color and wipe the value box up and down to change values.



For fixtures with fixed ranges of preset colors, such as color wheels or scrollers, use the [parameter all](#) tab.



The filmstrip may be scrolled left or right to see all the choices.

Whites

The color picker can be set to either colors or whites. In whites mode, the picker will attempt to match the shade of white selected. However, the actual shade of white produced will depend on the type of fixture and its capabilities.

Use the [Nudge](#) function to get the desired shade.



See [Parameter, ColorMix](#) for more information.

Record Color Palette

Color palettes may be programmed to carry any color.



Recording a Color Palette

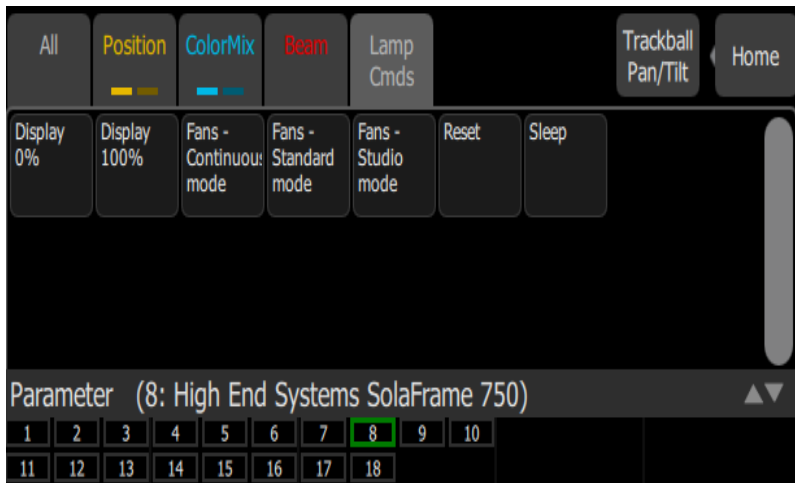
1. Set the color parameters accordingly for the fixture or fixtures you wish to record.
2. Tap the **Color** tab to open the position palette page.
3. Press the **Record Palette** button.
4. Press **Include Options** to choose to record for all channels, or only the ones currently selected.
5. Pick a chip to re-program, or press **Cancel** to exit without saving. The first 32 palettes are preset to specific colors, but can be overwritten. Palettes in gray are blank.
6. Press and hold on the palette chip to add a label in addition to the palette number.

Using Color Palettes

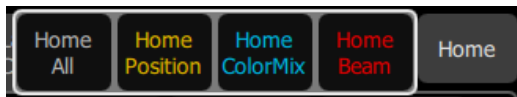
In order to use a recorded color palette, select the channel(s) you wish to apply the palette to, navigate to the color palette page, and tap the palette you wish to apply. To revert to defaults, home the channel(s). See [Home](#) for more information.

Parameter, Lamp Commands

Lamp commands allow you to execute control functions for a selected fixture such as calibrate, douse lamp, strike lamp, and reset. Each fixture type has its own set of lamp commands.



Parameter, Home



When **Home** is pressed, the following options will be available:

- [Home All](#)
- [Home Position](#)
- [Home ColorMix](#)
- [Home Beam](#)

Home All

Sends all or just the selected [parameters](#) of the selected fixtures to their home positions. The home positions are pre-recorded in the patching personality files, and may not be changed by the user.

Generally, parameters home to useful settings. For instance, pan and tilt will be set to mid-way values. Gobos and beam control will be set so that the beam is unobstructed and visible.

Home Position

Sends just the **position parameters** of the selected fixtures to their home positions. The home positions are pre-recorded in the patching personality files, and may not be changed by the user.

Generally, parameters home to useful settings. For instance, pan and tilt will be set to mid-way values.

Home ColorMix

Sends just the **colormix parameters** of the selected fixtures to their home positions. The home positions are pre-recorded in the patching personality files, and may not be changed by the user.

Generally, parameters home to useful settings.

Home Beam

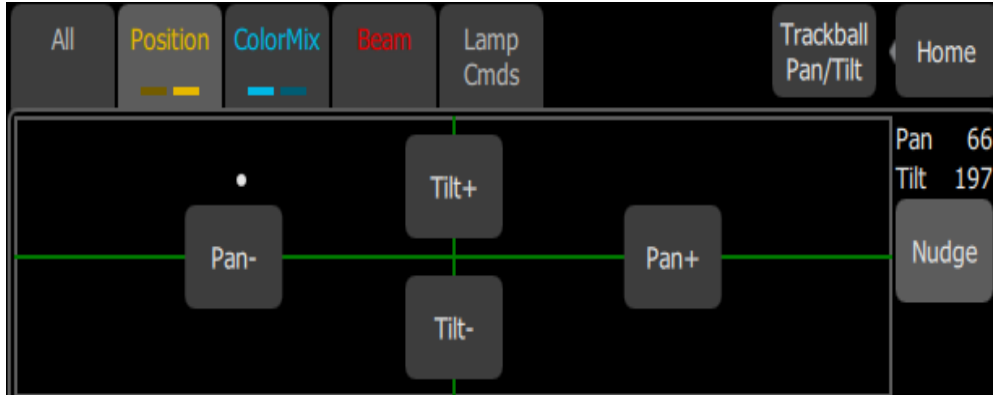
Sends just the **beam parameters** of the selected fixtures to their home positions. The home positions are pre-recorded in the patching personality files, and may not be changed by the user.

Generally, parameters home to useful settings. Gobos and beam control will be set so that the beam is unobstructed and visible.

Nudge

Nudge allows for fine control of **position** and **color** parameters.

The **Nudge** button is available on the second page of position parameter control and on the first page of colormix parameter control.



Press the buttons to add or subtract from the current values. Press and hold the buttons to quickly make a jump in value.

For position, the actual pan and tilt values will display above the **Nudge** button

Trackball Pan Tilt

When selected, this button allows an attached USB mouse or trackball to control pan and tilt. While enabled, the **Trackball Pan/Tilt** button will be highlighted in light gray and the mouse pointer will be hidden. Any movement of the mouse or trackball will change the pan and tilt values.

To disable, click any button on the mouse or trackball.

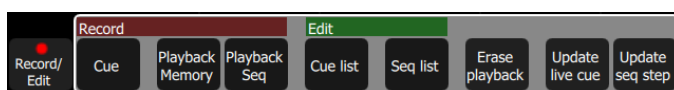
Recording Your Looks For Playback

This section covers the multiple ways that you can record lighting looks for playing back. You can record [cues](#), [playbacks](#), and [sequences](#).

- A playback memory can contain one lighting look.
- A cue is a recorded stage look that can include [channel](#) settings for intensity and other [parameters](#), and [effects](#).
- Sequences play back on the [playback](#) faders. A sequence may contain up to 99 steps with fade and step timing.

Record / Edit

All recording and editing is performed here.



The following options are available:

Record

- [Cue](#)
- [Playback Memory](#)
- [Playback Sequence](#)

Edit

- [Cue List](#)
- [Sequence List](#)
- [Erase Playback](#)
- [Update live cue](#)
- [Update Sequence Step](#) (only displays when a step needs to be updated.)

Recordings are made by capturing the output being sent to the stage. You may choose which parts of the scene to record using [Include Options](#). If you do not specify the Include Options, only fixtures set to an intensity above zero will be recorded.

In Simple Mode

Recordings are made by capturing the output being sent to the stage.

Pick one of the four [memory faders](#) above the screen to record to.

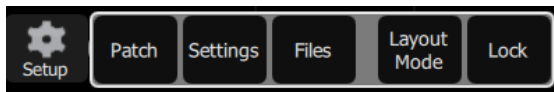
Recorded faders are indicated in Mauve color.

To edit an existing memory raise its master so that it plays on stage then make some changes using the channel faders, parameters, or the keypad, then re-record to the same master position.

Lock

Lock can be used to prevent unwanted permanent changes to your show.

When an unlock code has been assigned in **Setup>Settings>General**, the **Lock** button will display in Setup. To lock or unlock the console, you will need to use the unlock code set in Setup.



When the device is locked, the following operations will not be available:

- Any record actions
- All Setup options
- Color chip setup
- Layout Mode

When unlocked, all options will be available for use.

Playbacks

The faders can operate the levels of the playbacks. Playbacks can contain one lighting look, or they can contain a [sequence](#), which is made up of multiple lighting looks. Playbacks are mixed with Highest-Takes-Precedence (HTP) for both intensity and color. HTP means that the highest level of all sources will be used.

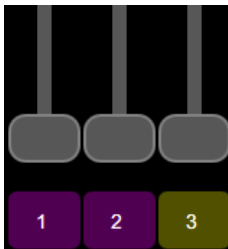
If two playbacks are up and contain the same [channels](#) with differing colors, the resulting color will be the combination of the two. For example, if one playback has a channel set to green and another playback has the same fixture set to red, when they are mixed the fixture will turn yellow.

When playbacks also carry parameter values for automated fixtures, [parameters](#) may be run up or down on a playback fader until another playback or [cue](#) takes control of them.

There are 10 [pages](#) of playbacks. If the page is changed, playbacks that are currently up will not change immediately to the new page and must be brought first to zero. Playback faders may also carry [sequences](#) of up to 99 timed steps.

Page 10 is a special case. It may be used in the same way as other pages, or it can be used as a temporary store for remote recordings. Each time a remote recording is requested, the entire output state is stored as a snapshot to a playback on page ten and the snapshot counter is incremented. If more than 20 (40) recordings are made, the counter rolls round to playback #1.

Simple static playbacks are shown in mauve on the bump button, sequences are shown in yellow on the button.



The playbacks are all controlled by the playbacks [master fader](#). When the playback master is at zero, playbacks containing position data will only play back position data.

The Playback Toy display can be used to only run certain parameters of a playback. See [Playback Toy](#) for more information.

Record Playback Memory

To record a [playback](#), select **Record Playback Memory** and then pick a [bump](#) button. A playback memory can contain one lighting look.

To record on a different page select a new [Playback Page](#) before pressing the bump.

To choose which fixtures are recorded, select **Include Options** and pick Selected, Active or All. The default if you do not choose is Active; only fixtures currently on at a level will be recorded.

When a playback recording is complete, the playback page will revert to its previous setting.

Playbacks may be named and given a time. The names and times may be viewed and edited in the [Playback Toy](#) screen.

To clear a playback, use the [Erase Playback](#) button under [Record/Edit](#).

Include Options

When recording to a [playback](#), [cue](#), or [sequence step](#), you may specify which lighting [channels](#) and sets of are included in the recording by pressing the **Include Options** button.

Channels:

- **Active:** Only channels with an intensity above zero are included.
- **Selected:** Only channels currently selected (surrounded by a green box on the [stage map](#) or brightly lit on the bumps) are included.
- **All:** All channels are included.

Include:

- **Intensity / Color:** Only the intensity and color mixing channels are included.
- **Position:** Only the position (pan/tilt) channels are included.
- **Beam:** Only the beam channels are included (beam includes non-fadable colors such as wheels and scrollers).

Select Page

[Playbacks](#) can be arranged on 10 different pages. In normal use, all the playbacks are on the same page.

You can arrange the content of pages to match songs, scenes, or other blocks of activity in your show by using **Select Page** to record playbacks to a different page. Press the **Playback** button to display the **Select Page** button.



When the page is changed, any playback currently set to a level will remain as it is until it is taken to zero.

When a playback arrives at zero, the page will be updated for that playback. The next time the fader is taken up, it will operate the playback on the newly selected page.

Playbacks may also be operated on the [Playback Toy](#) screen.

Erase Playback

To remove content from a playback, press **Erase Playback** and then pick the [bump](#). You will be asked to confirm your choice. Press **Yes** to clear or **No** to cancel. The content of the playback is not simply cleared from the output, it is completely erased.

If you accidentally delete a playback, you can immediately use [Undo](#) to bring it back.

Button Mode

The buttons below the faders may be used as **bumps** to operate **playbacks**.

Note: *When the faders are in **channel mode**, the bump button below the fader is always used to select the channel.*

Flash

Note: *The button modes; **Flash**, **Solo**, **Solo Change**, and **Move/GO** are only available when the **faders mode** is set to **playbacks**.*

When the button mode is set to **Flash**, pressing the **bump button** for a **playback** will cause the **channels** in that playback to flash on to the level of the **bumps master**. The color on each channel of the selected playback will be mixed onto the output with Highest-Takes-Precedence.

Note: *Operating the **Flash** button is the same as if the playback fader had been taken to the same level as the bumps master.*

Solo

When the button mode is set to **Solo**, pressing the **bump button** for a **playback** will cause the **channels** in that playback to flash on and all the output from other playbacks or the **cue list** will be set to zero. The intensity will be set to the level on the **bumps master** and the color of the selected playback will be sent to the output.

Note: *This is the same as if the playback fader had been taken to the same level as the bumps master and all other playbacks and **clues** set to zero.*

Solo Change

When the button mode is set to **Solo Change**, pressing the **bump button** for a **playback** will cause the **channels** in that playback to flash on depending on the intensity of each channel in the chosen playback.

If the chosen playback's channel is at an intensity above zero all the output from other playbacks or the **cue list**, for that channel, will be overridden. The intensity will be set to the level of the **bumps master**, and the color of the selected playback will be sent to the output, for that channel.

If the chosen playback's channel is at an intensity of zero, all the output from other playbacks or the cue list, for that channel, will be left unaffected.

Solo Change allows parts of the scene to be replaced while other parts are left unaffected.

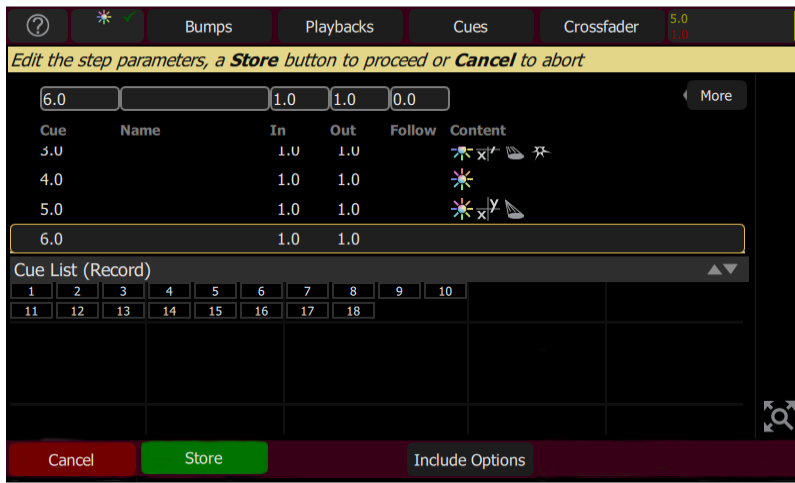
Move / GO

When the button mode is set to **Move/GO**, pressing the **bump button** for a **playback** will cause the **parameters** of the **channels** in the chosen playback to move to their recorded positions and values, while the intensity remains unaffected. The intensity may be operated independently on the playback fader.

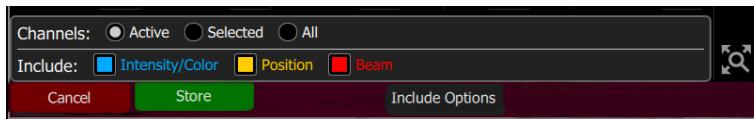
Note: ***Move/GO** does not work with sequences.*

Record Cue

Records the current state into a cue in the **cue list**. A cue is a recorded stage look that can include **channel** settings for intensity and other **parameters**, and **effects**. All recording operations use the output currently live on stage. Blind recording is not permitted.



You may make a simple recording by just choosing **Store**. To specify a recording in more detail, select **Include options** and choose the fixtures and parameters you wish to be included.



Each cue may be named, and its In, Out and Follow times set. In and Out times refer to the transition that is happening when you the Go button is pressed. All intensities increasing in the cue will follow the In time, and all decreasing will follow the Out time. When a follow time is running, both the live cue and the next cue will display in green. A green bar will also display in the **cue list indicator**.

Note: *The follow time commences at the start of the cue. If follow is shorter than either in or out, the in or out will not complete before the next cue starts.*

Follow time = 0 is a special case and causes the cue to wait for a manual press of the **GO** button.

Include Options

When recording to a **playback**, **cue**, or **sequence step**, you may specify which lighting **channels** and sets of are included in the recording by pressing the **Include Options** button.

Channels:

- **Active:** Only channels with an intensity above zero are included.
- **Selected:** Only channels currently selected (surrounded by a green box on the **stage map** or brightly lit on the bumps) are included.
- **All:** All channels are included.

Include:

- **Intensity / Color:** Only the intensity and color mixing channels are included.
- **Position:** Only the position (pan/tilt) channels are included.
- **Beam:** Only the beam channels are included (beam includes non-fadable colors such as wheels and scrollers).

Store

The current lighting levels will be stored in the selected **cue** and recording will be completed. The recording *mode* is then closed, and normal operation resumes.

Note: Once a cue is recorded, it is placed on the live side of the cue [crossfader](#) and sent to the output. To remove the newly made cue take the [cues master](#) down. The cues master allows cues to be made as changes (deltas) by leaving it up and making the necessary adjustments for each cue, or to be made as complete new states for each cue by leaving the cues master down and making a new state for each recording.

Store And Next


The current lighting levels will be stored in the selected [cue](#) and recording will be remain open so additional cues can be recorded. Use [Store](#) to close the recording *mode* and resume normal operation.


Note: Once a cue is recorded, it is placed on the live side of the cue [crossfader](#) and sent to the output. To remove the newly made cue take the [cues master](#) down. The cues master allows cues to be made as changes (deltas) by leaving it up and making the necessary adjustments for each cue, or to be made as complete new states for each cue by leaving the cues master down and making a new state for each recording.

Cue List

A list of timed [cues](#).



The live and next cues are indicated on the main cue list and also in the [cue list indicator](#) () in the upper right corner. The live cue displays in yellow and the next cue is in red.

Cues are played back with the **Cue Transport** () buttons, by moving the [crossfader](#) up and down, or through the [cues fader](#)

The **Cue Transport** buttons are **Back**, **Pause**, and **GO**. These buttons may be assigned to the hard buttons below the screen, and are also always available by pressing on the cue list indicator in the upper right corner.

Note: For the cues to be seen on stage, the cues fader must be up.

Cue List Indicator

The live and next cues are indicated on the main [cue list](#) and also in the cue list indicator in the upper right corner of the touchscreen.



The live cue displays in yellow and the next cue is in red. If a crossfade is underway, both will display in red.

Progress bars indicate the in and out fade position. When a follow time is running, a green status bar will display.

Note: *When a crossfade is paused mid-way, it may be manually resumed by using the crossfader. The remaining progress will be shown in the cue list indicator.*

Tap the cue list indicator to open the cue transport controls. The **Cue Transport** buttons are **Back**, **Pause**, and **GO**. These buttons may be assigned to the hard buttons below the screen, and are also always available by pressing on the cue list indicator in the upper right corner. Touch again to close the controls.

More

Pressing on the **More** button in the **Cue List** or **Edit Cue List** displays will allow access to the following options:



- **Flag**
- **Next flag**
- **Previous flag**
- **Goto 0**
- **Goto Cue**

Flag

Cues may have a flag attached to aid in **cue list** navigation. Typically flags are useful to repeatedly return to the same place in the list, for example during rehearsals.

Press **Flag** to place a flag on the current live cue. Press **Flag** again to remove a flag on the current cue.

Note: *The placing and removal of a flag is a toggle action on the current live cue.*

Next Flag

Advances to the next flagged cue in the **cue list**.

Previous Flag

Returns to the previous flagged cue in the **cue list**.

Goto Cue

Allows you to go to a specified cue in the **cue list**.

In the cue list window, press **More** and then **Goto Cue**, type in the cue number, and press **Enter**.

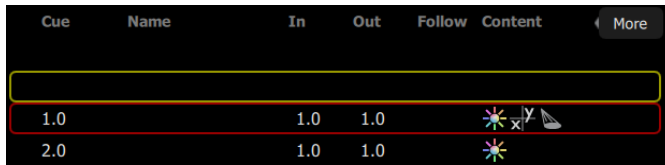


Goto 0

Cue 0 does not exist as a real cue. It is an imaginary cue before the first cue.

Press **Goto 0** to take all levels from the cue list to zero, and prepare the **crossfader** for the first cue.

The cue list will show a blank line as the active cue, and the first cue will be displayed in red to indicate that it is the next cue.



Cue	Name	In	Out	Follow	Content
1.0		1.0	1.0		✱ x y
2.0		1.0	1.0		✱

Edit Cue List

The Edit Cue List option is available by pressing the **Record/Edit** button and then selecting **Cue List**. This opens the cue list editor. Here you may change cue names and the timing of fades. You can insert **new cues**, **copy cues**, **delete cues**, and **edit cues**. To edit the content of an existing cue, press **Edit Cue**. Pick the cue you want to edit in the cue list in the upper part of the display.



*Edit times and names. To edit content, press **Edit cue***

Cue	Name	In	Out	Follow	Content
2.0		1.0	1.0		✱
3.0		1.0	1.0		✱ x y
4.0		1.0	1.0		✱
5.0		1.0	1.0		✱ x y

Grid: 1-18

Buttons: Exit, New Cue, Copy Cue, Delete Cue, Edit Cue

New Cue

Inserts a new **cue**. The new cue is added to the next free whole-numbered cue at the end of the **cue list**. The new cue may then be given another number, including a fractional or 'point' number.

For example, to insert a cue between cues 4 and 5, you would enter 4.5.

Note: *The cue list is not re-numbered when a cue is inserted.*

Copy Cue

Copies the selected cue and creates a new **cue**. The new cue is added to the next free whole-numbered cue at the end of the **cue list**.

The new cue may then be given another number, including a fractional or 'point' number. For example, to insert a cue between cues 4 and 5, you would enter 4.5.

Note: *The cue list is not re-numbered when a cue is inserted.*

Delete Cue

Deletes the selected cue.

The cue list will not be re-numbered, and the missing cue will be skipped the next time the list is played.

Note: A deleted cue may be recovered if **Undo** is pressed immediately after the deletion is performed.

Edit Cue

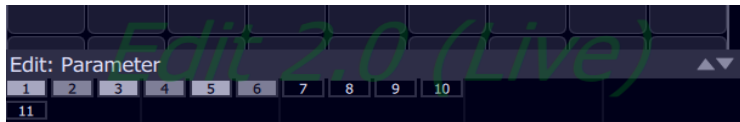
Pressing **Edit Cue** will cause only the content in the selected cue to be live on-stage. Any playbacks, sequences, or manual channel levels that are not part of the selected cue will be suppressed while in Edit Cue mode.

Use the normal channel controls to adjust the contents of the cue live on stage. Blind editing is not permitted.

CAUTION: If the selected cue contains a blackout, the stage will go dark.

Pick the cue you want to edit in the cue list in the upper part of the display. You can also insert a **new cue**, **copy cue**, and **delete cue**.

Edit Cue is a *mode* which takes over the console and screen. While inside the edit screen, you may visit other screens to change colors, parameters, and effects of the cue you are editing. While in those screens, a green watermark will display showing what cue you are editing.



Press **Store** to save the current look to the selected cue and to exit the edit mode, or press **Store & Next** to save your current cue and move directly to the next cue in edit mode.

Update Live Cue

Records the current state of the channels to the live cue in the **cue list**. The cue's previous content will be replaced.

All recording operations use the output currently live on stage. Blind recording is not permitted.

Use **Update Live Cue** to quickly change or edit the cue on stage.

Clear Cues

Clears the output from the **cue list**. The action is the same as taking the **cues fader** to zero.

Note: The cue list position is not affected. Pressing **GO** will fade in the next cue after the one that was cleared.

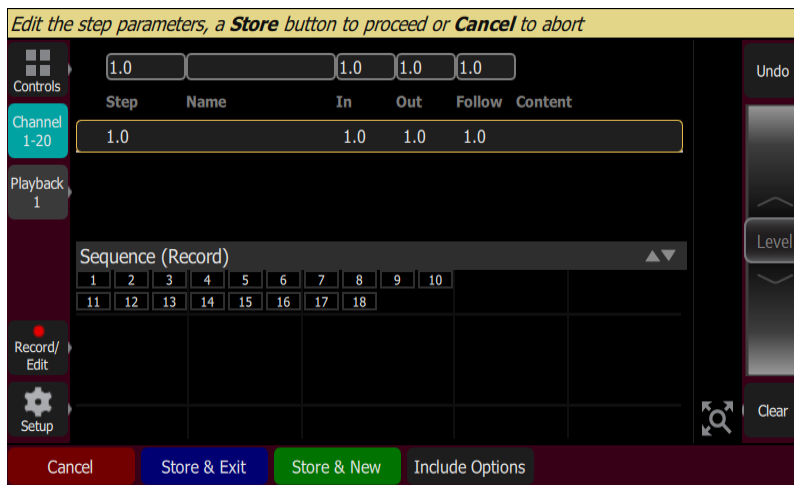
Record Sequence

Sequences play back on the **playback** faders. A sequence may contain up to 99 steps with fade and step timing.

Select the **bump button** of the playback to which you want to record the sequence. If a sequence already exists in that position, you may add steps to it, they will be added to the end of the existing sequence.

Each step of a sequence may contain **channels** and **parameters**. To choose which channels and parameters are recorded for each step, select **Include Options**.

Sequence recording is a *mode* which takes over the screen. The recording mode is shown by a red surround to the screen.



While in the recording mode you may visit other screens to set [parameters](#) and [effects](#). While in those screens, a red watermark will be displayed showing what step you are editing.



To return to the main recording screen press **Record / Edit** again. You may [store](#) the step you have made and exit immediately with **Store & Exit** or you may store the step and remain inside sequence recording to record further steps with **Store & New**. Press **Cancel** to leave the recording screen without saving anything.

Include Options

When recording to a [playback](#), [cue](#), or [sequence step](#), you may specify which lighting [channels](#) and sets of are included in the recording by pressing the **Include Options** button.

Channels:

- **Active:** Only channels with an intensity above zero are included.
- **Selected:** Only channels currently selected (surrounded by a green box on the [stage map](#) or brightly lit on the bumps) are included.
- **All:** All channels are included.

Include:

- **Intensity / Color:** Only the intensity and color mixing channels are included.
- **Position:** Only the position (pan/tilt) channels are included.
- **Beam:** Only the beam channels are included (beam includes non-fadable colors such as wheels and scrollers).

Store And Exit

The current lighting levels will be stored in the selected [sequence step](#) and recording will be completed. The recording *mode* is then closed, and normal operation resumes. Use [Store and New](#) to keep the recording *mode* open to record additional steps.

Store And New

The current lighting levels will be stored in the selected [sequence step](#) and recording will be remain open so additional steps can be recorded. Use [Store And Exit](#) to close the recording *mode* and resume normal operation.

Edit Sequence List

This option opens the Sequence List editor where you can change the content of a [sequence list](#). Press a [bump](#) to select which sequence to edit.

Here you may change the step names and fade times. Using the **Edit Step** button, you may change the content of the steps. Pick the step you want to edit in the sequence list in the upper part of the display. You can also insert [new steps](#), [copy steps](#), [delete steps](#), and [edit steps](#).



Press **Exit** to leave the editing mode. Any changes made will be stored in the selected sequence.

New Step

Inserts a new sequence step. The new step is added to the next free whole-numbered step at the end of the sequence list. The new step may then be given another number, including a fractional or 'point' number.

For example, to insert a step between steps 4 and 5, you would enter 4.5.

Note: The [sequence list](#) is not re-numbered when a step is inserted.

Copy Step

Copies the selected step and creates a new step. The new step is added to the next free whole-numbered step at the end of the sequence list. The new step may then be given another number, including a fractional or 'point' number.

For example, to insert a step between steps 4 and 5, you would enter 4.5.

Note: The [sequence list](#) is not re-numbered when a step is inserted.

Delete Step

Deletes the selected step.

The sequence list will not be re-numbered, and the missing step will be skipped the next time the list is played.

Note: A deleted step may be recovered if [Undo](#) is pressed immediately after the deletion is performed.

Edit Step

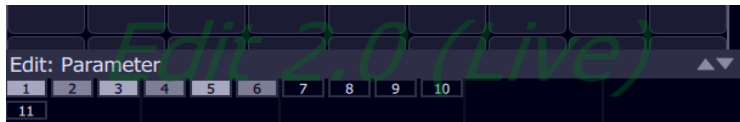
Pressing **Edit Step** will cause only the content in the selected step to be live on-stage. Any playbacks, cues, or manual channel levels that are not part of the selected step will be suppressed while in Edit Step mode.

Use the normal controls to adjust the contents of the step live. Blind editing is not permitted.

CAUTION: *If the selected step contains a blackout, the stage will go dark.*

Pick the step you want to edit in the sequence list in the upper part of the display. You can also insert a [new step](#), [copy step](#), and [delete step](#).

Edit Step is a *mode* which takes over the screen. While inside the edit step screen, you may visit other screens to change colors, parameters, and effects of the step you are editing. While in those screens, a green watermark will display showing what step you are editing.



Press **Store & Exit** to save the current look to the selected step and to exit the edit mode, or press **Store & Next** to save the current look and remain in the edit mode.

Update Sequence Step

[Sequences](#) play back on the [playback](#) faders. A sequence may contain up to 99 steps with fade and step timing. Sequences must be stopped and stepped-on to the correct step for editing in order to update a step.

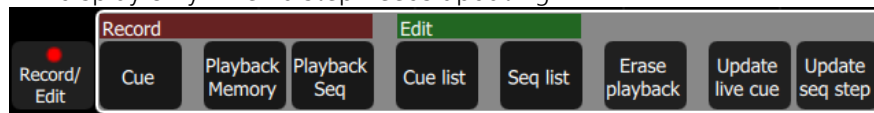
Operation

- Select a [bump](#) for the playback you want to Stop.
- Running sequences are indicated by a yellow bump button.
- Stopped sequences are indicated by a blue bump button.
- Stopped sequences may be advanced by pressing the blue bump button.

Note: *Stopped sequences may be used as additional cue lists if required.*

To Update a Sequence Step

1. Stop the sequence by using the **Seq Run/Step** button, which is accessed by pressing the playback [mode button](#) in the [Playback Toy](#) display.
2. Use the bump button to advance to the step you wish to edit.
3. Then you may alter the lighting and effects as required.
4. When the edit is complete, select **Update Seq Step** to save the changes. **Update Seq Step** will display only when a step needs updating.



5. Pick the bump of the sequence to be updated to complete the update.

Note: *There may be several stopped sequences at any given time.*

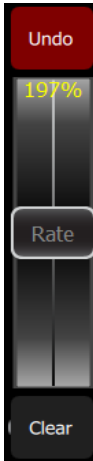
Sequence Rate

[Sequences](#) play back on the [playback](#) faders. A sequence may contain up to 99 steps with fade and step timing.



Press **Seq Rate** and then select a **bump** for the playback you want to rate control.

The wheel will change to indicate rate control and the percentage of the rate will be shown on the wheel.



Sequence rate may also be viewed and altered on the playbacks page.

Sequence Run / Step Control

Sequences play back on the **playback** faders. A sequence may contain up to 99 steps with fade and step timing.

The **Sequence Run/Step** button is located in the **Playback Toy** display. A **Sequence Run/Step** button will display below each sequence and will only control that particular sequence. The button is a toggle that either lets you stop a sequence so you can manually go through the steps by pressing the **bump button**, or it runs through the steps automatically.



Operation

- Select a bump for the playback you want to stop or start.
- Running sequences are indicated by a yellow bump button.
- Stopped sequences are indicated by a blue bump button.
- Stopped sequences may be advanced by pressing the blue bump button.

Note: *Stopped sequences may be used as additional cue lists if required.*

Tap Tempo

Places the **bump** buttons for **playbacks** carrying **sequences** into 'Tap' mode.

Hold **Tap** and press the bump of a playback carrying a sequence (shown in yellow on the bump) in the rhythm you want for the sequence rate.

Press several times until the rate is correct.

Tap can be assigned to a bottom button by going to the [Console tab](#) under [Setup](#).

GO

Advances the [cue list](#) to the next position using the [default cue times](#).

The next position may be the following entry in the cue list, or it may be somewhere else if you are jumping to another [cue](#) or [flag](#).

The live cue is displayed surrounded by a yellow box with the next cue displayed in a red box beneath it and the previous cue above it.



Cue	Name	In	Out	Follow	Content	More
1.0		1.0	1.0			
2.0		1.0	1.0			
3.0		1.0	1.0			

Cue List 

1 2 3 4 5 6 7 8 9 10

Press **GO** twice or more to rapidly advance to further cues.

Pause

Stops the [cue list](#) at its current position. Any fades that are underway will be stopped.

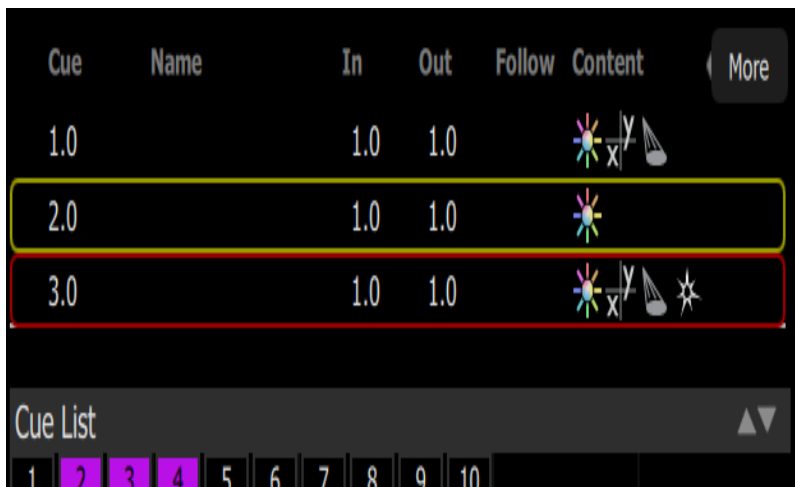
Press [GO](#) to resume crossfading and running times.

Press [Back](#) to return to the previous cue.

Back

Reverses the [cue list](#) to the previous cue using the [default cue times](#).

The live cue is displayed surrounded by a yellow box with the next cue displayed in a red box beneath it and the previous cue above it.



Press **Back** twice or more to rapidly return to previous cues.

Undo

You may **Undo** the most recent function that changed your show data. Undo is one level only, back to the most recent action.

The **Undo** function toggles between Undo and Redo so you may flip back and forth between two recorded items to see which one is correct before moving on.

The following actions are Undo-able:

- **Record Playback:** Undo returns the previous recording for that playback
- **Record Cue** and **Record Sequence:** Undo returns the previous set of cues/steps made prior to the most recent session. If several steps were recorded in one session, using **Store and Next** and not leaving the sequence recording screen, Undo will restore all of them. If only one step was recorded and recording was terminated with **Store and Exit**, then Undo will restore only that one step.
- **Patch:** Undo will remove all changes made since opening the patch display. If several devices were patched or altered in patch, they will all be restored to their former settings and values.
- **Edit Cue List** and **Edit Seq List:** Undo restores the previous cue list contents prior to the editing session.

Note: *Undo does not work inside Edit Cue or Seq List, only once exited can Undo restore the previous list.*

WARNING: Undo cannot recover all the actions you perform that might alter your show. In particular, Undo will not undo **Erase** functions that remove multiple items, for instance Erase Cue List. It is strongly recommended to make frequent backups of important show data.

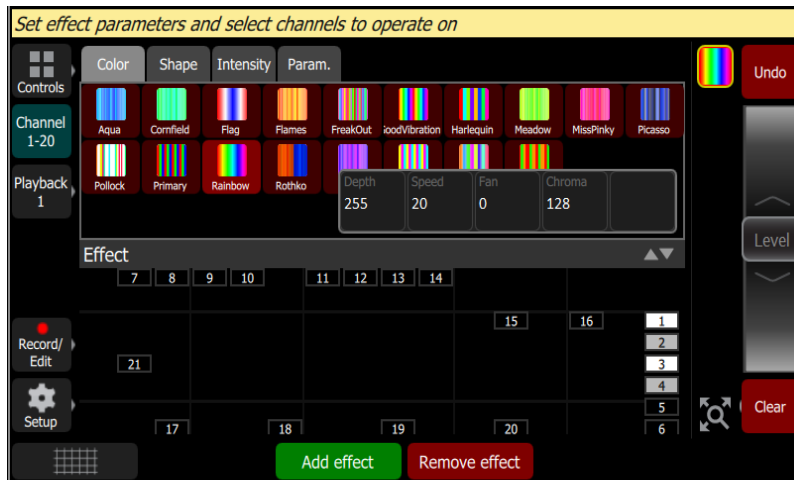
Using Effects

Effects are a method within ColorSource to provide dynamic, repetitive patterns to channels.

Effects

The Effects system is used to apply patterns to selected fixtures.

Patterns are provided for the following effect types: **Color**, **Shape** (motion), **Intensity**, and **Parameter** effects.



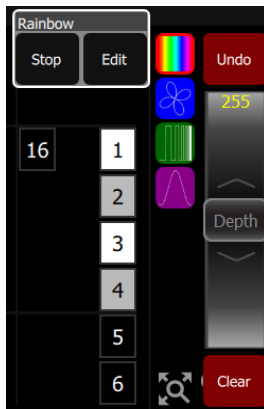
How to Apply an Effect

1. Select some **fixtures**.
2. Go to **Controls>Effects**
3. Press **Add Effect**.
4. Choose an effect type from the tab area.
5. Select a pattern.
6. Adjust the effect settings for the desired result. The available effect settings change based on the effect type selected.

Note: *The order in which fixtures are selected is relevant and will affect the behavior of the fan setting.*

To remove an effect, press the **Remove effect** button.

Effects can be stored to **cues** and **playbacks**. When effects are played back, a symbol is shown to the right of the **stage map** display corresponding to each effect currently in operation. You may pick this symbol and adjust the depth of the effect on the wheel, edit, or stop it.



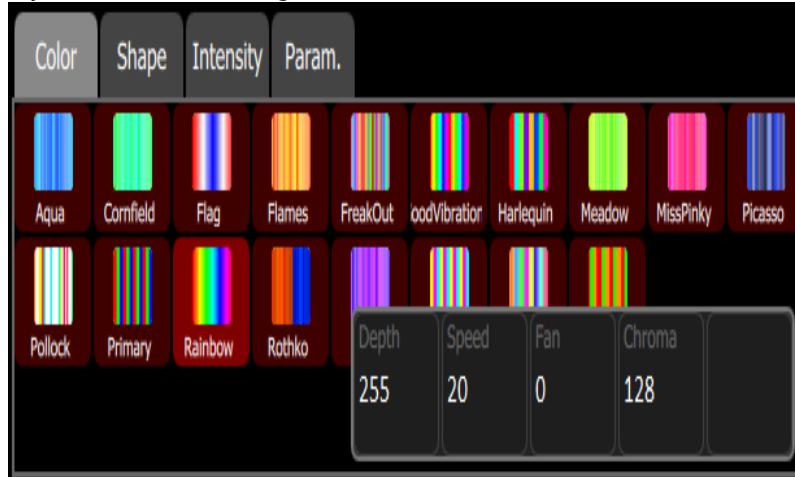
Effect, Color

Applies color **effects** to selected channels.

Note: *The color effect system only works with fixtures capable of performing color mixing. Color effects cannot be applied to fixtures with fixed colors or a choice of single colors on wheels or scrollers.*

How to Apply a Color Effect

1. Select some channels.
2. Go to **Controls>Effects**.
3. Press **Add Effect**.
4. Choose the color tab from the tab area.
5. Select a pattern.
6. Adjust the effect settings for the desired result.



Effect Settings

- **Depth**- The amount that the effect deviates from the static color set on the fixture. When set to full, the fixture follows the effect colors entirely. When set to 50%, the resulting colors will be half way between the fixture's static rest-state color (the color it was before the effect was chosen), and so on.
- **Speed**- The speed or rate that the effect runs.
- **Fan**- The amount the effect is spread out over the selected fixtures. Without fan, all the fixtures change together at the same time. With increasing the value of fan, the fixtures respond to different parts of the effect, offset from each other.

Note: The order in which the fixtures are selected will affect how they are spread-out by the fan setting.

- **Chroma**- The intensity of color. Chroma is currently 0-255. 127 = Normal, 0 = Paler, and 255 = Saturated.

Note: Effects containing fully saturated colors, such as Rainbow, cannot be made 'more' saturated with the Chroma control.

Running Effect Control

When effects run, an icon is displayed in the vertical area to the right of the [stage map](#). This may be selected at any time to manipulate the effects.

Effects may be edited, removed, or reduced via the wheel control when they are playing back from [playbacks](#) or [cues](#).

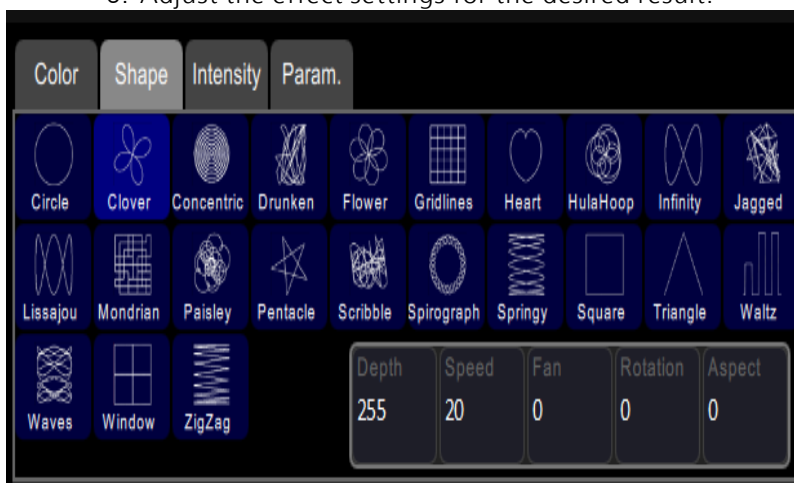
Effect, Shape

Applies shape (motion) effects to chosen channels.

Note: The shape effect system only works with fixtures capable of pan / tilt movement.

How to Apply a Shape Effect

1. Select some channels.
2. Go to **Controls>Effects**.
3. Press [Add Effect](#).
4. Choose the shape tab from the tab area.
5. Select a pattern.
6. Adjust the effect settings for the desired result.



Adjustments

- **Depth**- The amount that the effect deviates from the static position set on the fixture. When set to full the fixture follows the shape entirely, which will be very large. When set to 50% the resulting Shape will be half way between the fixture's static rest-state position (the position it was before the effect was chosen), and so on.
- **Speed**- The speed or rate that the effect runs at.

- **Fan**- The amount the effect is spread-out over the selected fixtures. With no fan all the fixtures change together at the same time. With increasing values of fan the fixtures respond to different parts of the effect, offset from each other.
Note: *The order in which the fixtures are selected will affect how they are spread-out by the fan setting.*
- **Rotation**- The angle of the effect. In the zero setting, 0, the effect is played back normally. As rotation is increased the shape will rotate. The effect of rotation will only be apparent on shapes with distinct edges or asymmetry. For instance, the circle effect looks the same no matter what is the rotation setting whereas the Square effect appears as a diamond if set to 45 degrees rotation.
- **Aspect**- Shape effects may be squashed on one of their axes. This can be used to fit a shape effect to a stage area or scenic element. Positive Aspect progressively squashes the tilt axis while negative Aspect progressively squashes the pan axis.

Running Effect Control

When effects run an icon is displayed in the vertical area to the right of the [stage map](#). This may be selected at any time to manipulate the effects.

Effects may be edited, removed, or reduced via the wheel control when they are playing back from [playbacks](#) or [cues](#).

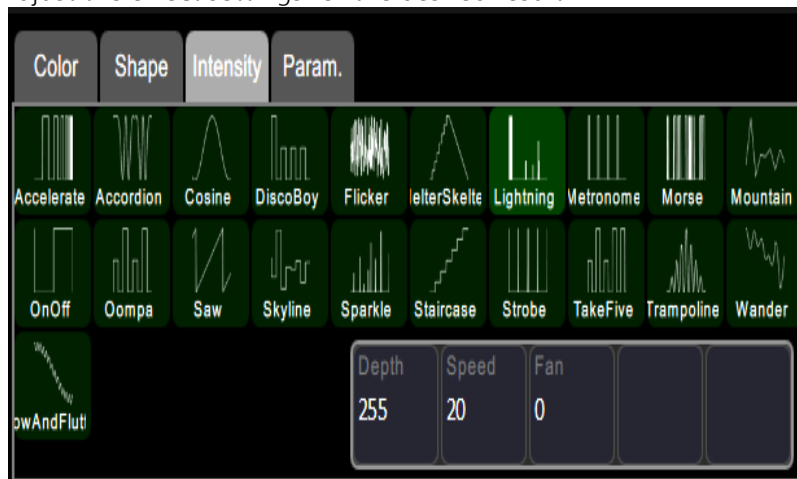
Effect, Intensity

Applies intensity effects to chosen channels.

Note: *Intensity effects may only be applied to devices that produce light and have an intensity control channel.*

How to Apply an Intensity Effect

1. Select some channels.
2. Go to **Controls>Effects**.
3. Press **Add Effect**.
4. Choose the intensity tab from the tab area.
5. Select a pattern.
6. Adjust the effect settings for the desired result.



Effect Settings

- **Depth**- The amount that the effect deviates from the static intensity set on the fixture. When set to full the fixture follows the effect entirely, and will range from zero to full. When set to 50% the resulting effect will be half way between the fixture's static rest-state intensity (the brightness it was before the effect was chosen), and so on.

Note: For the intensity to vary fully between zero and full you should set the rest-state value to 50%, then the effect can both raise and lower the intensity by the full amount possible.

- **Speed**- The speed or rate that the effect runs at.
- **Fan**- The amount the effect is spread-out over the selected fixtures. With no fan all the fixtures change together at the same time. With increasing values of fan the fixtures respond to different parts of the effect, offset from each other.

Note: The order in which the fixtures are selected will affect how they are spread-out by the fan setting.

Running Effect Control

When effects run an icon is displayed in the vertical area to the right of the [stage map](#). This may be selected at any time to manipulate the effects.

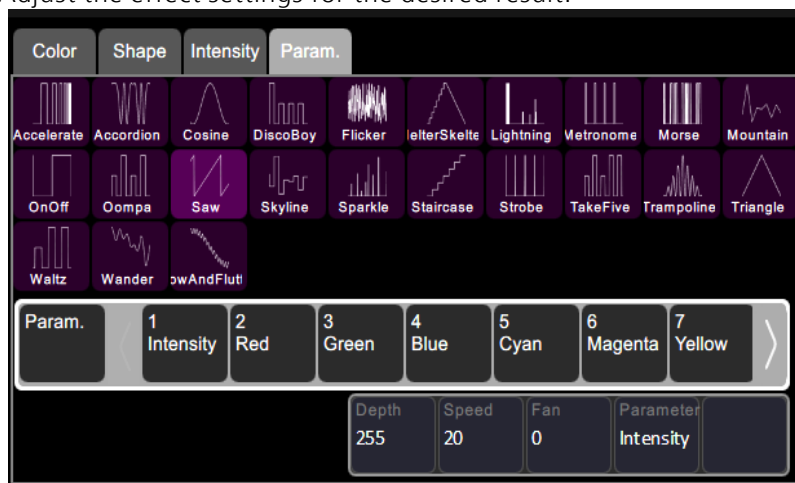
Effects may be edited, removed or reduced via the wheel control when they are playing back from [playbacks](#) or [cues](#).

Effect, Parameter

Applies effects to particular parameters of chosen channels.

How to Apply a Parameter Effect

1. Select some channels.
2. Go to **Controls>Effects**.
3. Press [Add Effect](#).
4. Choose the parameter tab from the tab area.
5. Select a pattern.
6. Choose the parameter to be affected, you will see the effect start.
7. Adjust the effect settings for the desired result.



Effect Settings

- **Depth**- The amount that the effect deviates from the static value set on that parameter of the fixture. When set to full the parameter follows the effect entirely, and will range from zero to full. When set to 50% the resulting effect will be half way between the fixture's static rest-state for that parameter (the value it was before the effect was chosen), and so on.

Note: For the parameter to vary fully between zero and full you should set the rest-state value to 50%, then the effect can both raise and lower the parameter value by the full amount possible.

- **Speed**- The speed or rate that the effect runs at.
- **Fan**- The amount the effect is spread-out over the selected fixtures. With no fan all the fixtures change together at the same time. With increasing values of fan the fixtures respond to different parts of the effect, offset from each other.

Note: The order in which the fixtures are selected will affect how they are spread-out by the fan setting.

Running Effect Control

When effects run an icon is displayed in the vertical area to the right of the [stage map](#). This may be selected at any time to manipulate the effects.

Effects may be edited, removed or reduced via the wheel control when they are playing back from [playbacks](#) or [cues](#).

Add Effect

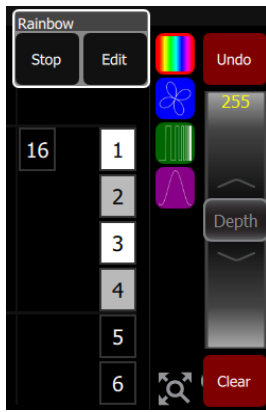
To use [effects](#), select some personality and then press **Add Effect**. Choose an effect type in the tab area, select a pattern, and then adjust the effect settings for the desired result.

The order that fixtures are selected in is relevant and affects the behavior of the **Fan** setting. Fan refers to the amount the effect is spread-out over the selected channels. With no Fan all the fixtures change together at the same time. With increasing values of Fan the fixtures respond to different parts of the effect, offset from each other. Fan is set in the specific effect type tabs.

Several effects may be added to one device or channel and their actions will be combined, for instance a small circle effect may be applied as well as a large circle effect. The chosen device will then move in small circles processing round a larger circle.

Remove Effect

Select the [effect](#) to be removed on the effect symbol shown in the vertical strip to the right of the Effect display, and press **Remove Effect**. From the [Stage Map](#), select the effect to be removed on the effect symbol shown in the vertical strip to the right of the stage map, then press **Edit>Remove effect**.



Note: If the effect is playing from a *playback* or *cue*, you must edit that item to remove the effect permanently.

Turning Fixtures Off

This section covers turning off your fixtures by using the [Blackout](#) or [Clear](#) functions.

Clear

[Clear](#) functions remove levels coming from various sections; [cues](#), [playbacks](#), and [channels](#) under control of the [wheel](#).



When [Clear](#) is pressed, the following options will be available:

- [All](#)
- [Playbacks](#)
- [Cues](#)
- [Channels](#)
- [Selection](#)

Cleared levels fade back using the fade time, which may be set in the [Times Tab](#) of the [Settings](#) screen. The default time is 0.5 seconds.

In Simple mode

[Clear](#) offers these two options:

- [Channels](#) - clears levels set on selected channels
- [Selection](#) - clears the selection set.

Clear All

[Clear All](#) removes all levels coming from these various sections; [cues](#), [playbacks](#), and [channels](#) under control of the [wheel](#), faders, or [keypad](#).

Clear Playbacks

Clears the output from the [playbacks](#). The action is the same as taking each playback to zero or taking the [playbacks fader](#) to zero.

Clear Cues

Clears the output from the [cue list](#). The action is the same as taking the [cues fader](#) to zero.

Note: *The cue list position is not affected. Pressing **GO** will fade in the next cue after the one that was cleared.*

Clear Channels

Removes all levels coming from [channels](#) under control of the [wheel](#), faders, or [keypad](#).

Clear Selection

Deselects any selected [channels](#), but their levels will remain at the current value.

Speed Clear

Speed Clear is a function that can be assigned to one of the configurable buttons under the touchscreen. It is assigned in the [Settings: Console](#) tab.

By pressing the Speed Clear button a certain number of times, you can perform the following clear functions:

1. **Deselect** - pressing the speed clear button once deselects any selected [channels](#), but their levels will remain at the current value.
2. **Clear channels** - pressing the speed clear button twice removes all levels coming from [channels](#) under control of the [wheel](#), faders, or [keypad](#).
3. **Clear playbacks** - pressing the speed clear button three times clears the output from the [playbacks](#). The action is the same as taking each playback to zero or taking the [playbacks fader](#) to zero.
4. **Clear cues** - pressing the speed clear button four times clears the output from the [cue list](#). The action is the same as taking the [cues fader](#) to zero.

Note: *The cue position is not affected. Pressing **GO** will fade in the next cue after the one that was cleared.*

Blackout

Blackout sets all lighting levels to zero. The Blackout function can be assigned to one of the buttons below the touchscreen. See [Settings: Console](#) for more information.

Note: *[Independents](#) can be included or excluded from the effect of Blackout.*

When Blackout is engaged a red **X** appears below the bulb icon in the control box adjacent to the Help button.



Special Functions

This section covers the use of the Playback Toy and Independents.

The Playback Toy is a display where you can control playbacks and sequences.

Independents can be used to control certain devices and can have special settings applied to them.

Independent

Operates the independent outputs, 1 or 2.

Independents may be used to operate on/off devices such as motors, smoke machines, cue fixtures et cetera.

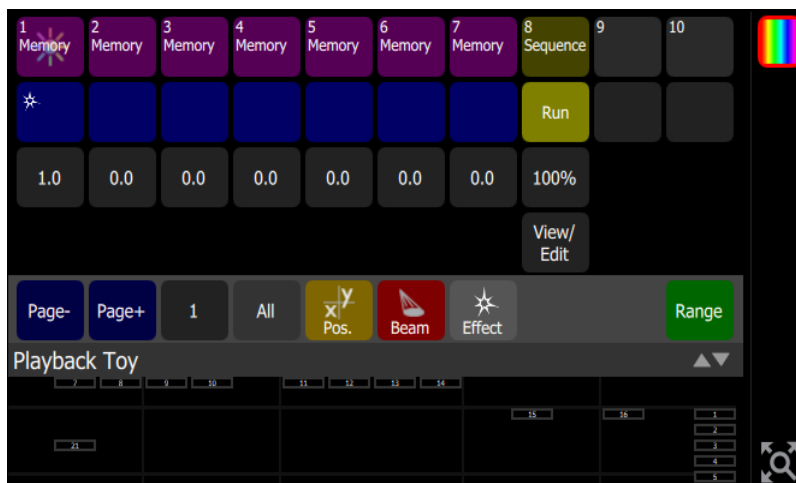
Independents may be set to operate as momentary **bumps** or as push-on / push-off latching switches.

Independents may be set with an on-level and you may choose to include or exclude them from **blackout**.

The independent settings and patch are on the **Ind. Tab** in **settings**.

Playback Toy

This display shows ten **playbacks** from the current playback page. From this display, playbacks can be viewed and operated either in their complete state or filtering what gets played back.



Operation

- Press on a top-row **mauve** cell to select and fade in that lighting scene's intensities only. See **Intensity** for more information.
- Hold on top-row cell to edit its name.
- Press a mid-row **blue** cell to operate only the non-intensity parameters for that playback, turn on and off filters to choose the parts to play-back. See **Parameter GO** for more information.
- Press and hold a bottom-row **grey** cell to change the fade time.

Functions

- Intensity
- Parameter GO
- Time/ Rate
- Page -
- Page +
- All Filter
- Position Filter
- Beam Filter
- Effects Filter
- Range
- Sequence Run/Step
- View/Edit

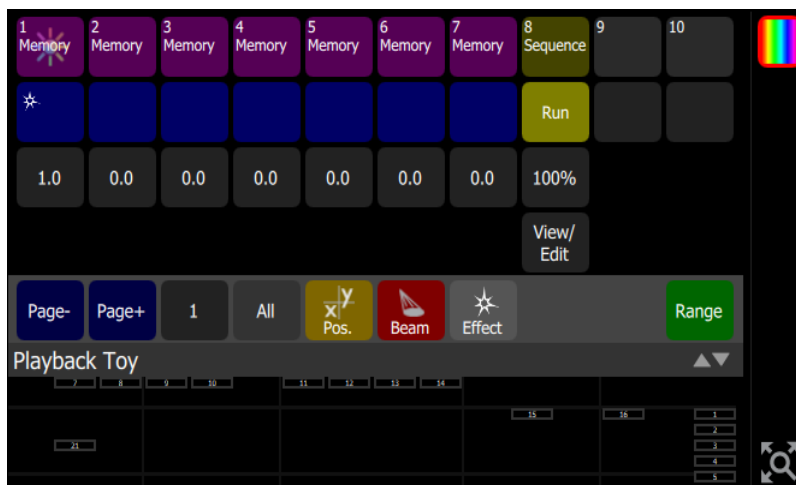
The page number or name is shown to the right of the **Page -** and **Page +** buttons. Hold the button to change the page name.

Intensity

Playback Toy provides a simple way to play one playback or sequence at a time with a single press.

The **Intensity** button, shown in mauve for playbacks and yellow for sequences, plays only the intensity part of a recorded look. The parameter part of a look may be played independently, including from a different look than the one chosen to play the intensity.

When a playback or sequence is chosen, the previous one is faded out and replaced with the newly-chosen one.



You may mix one intensity look with another parameter look to make a new combination look.

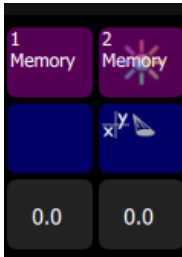
Note: You may enter names for playbacks by holding the **Intensity** button down until a keyboard appears for name entry.

Parameter GO

Playback Toy provides a simple way to play one playback or sequence at a time with a single press. When a playback or sequence is chosen, the previous one is faded out and replaced with the newly-chosen one.

The **Parameter GO** button, shown in blue, plays only the parameter part of the look. The intensity part may be played independently, including from a different playback or sequence than the one chosen to play the parameters.

The blue button indicates the types of parameters contained in the playback.



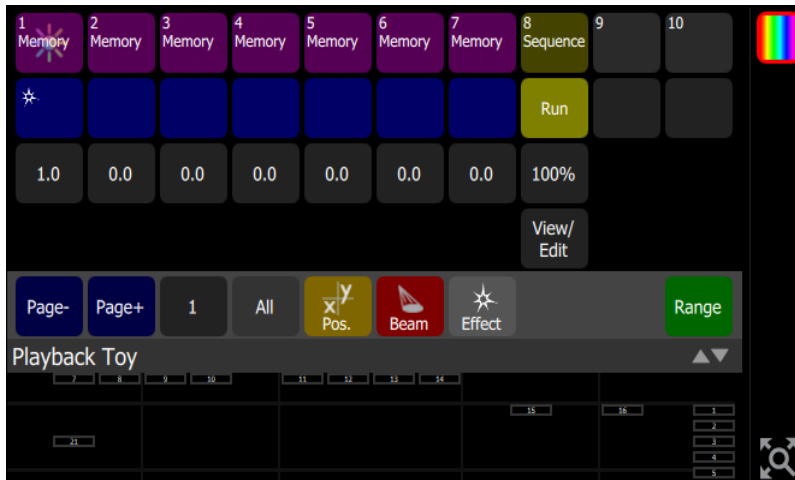
Parameters may be **filtered** so you can choose which types of parameters to play, for example you could choose to only play the position part by turning off (filtering) the other parameters such as beam.

You may mix one intensity look with another parameter look to make a new combination look.

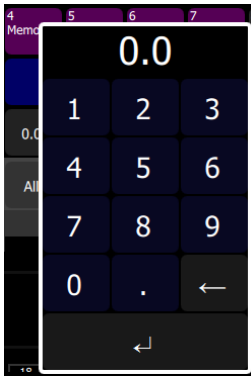
Time/ Rate

Playbacks may be given a fade time. When either a **bump** or Playback Toy **Intensity** button is pressed, the intensity and parameter parts will fade in at the rate set on the Time button, shown in gray.

If the playback contains a sequence, the gray button will indicate the rate.



Holding down the gray button will open a keypad to alter the time (for playbacks) or the Rate (for sequences).



Playback Page Selection, Minus

Picks the playback page to switch to. There are ten pages of [playbacks](#). The page will change for the next time a fader is raised from the zero position or a playback is launched in [Playback Toy](#) on a mauve or blue button.

Note: *Faders that are up at a level will not change immediately and must first be taken to zero.*

The page number or name is shown to the right of the **Page -** and **Page +** buttons. Hold the **name / number** button to change it.

Playback Page Selection, Plus

Picks the playback page to switch to. There are ten pages of [playbacks](#). The page will change for the next time a fader is raised from the zero position or a playback is launched in [Playback Toy](#) on a mauve or blue button.

Note: *Faders that are up at a level will not change immediately and must first be taken to zero.*

The page number or name is shown to the right of the **Page -** and **Page +** buttons. Hold the **name / number** button to change it.

Playback Page Name / Number

There are ten pages of [playbacks](#).

The page number or name is shown to the right of the **Page -** and **Page +** buttons. Hold the **name / number** button to change it.

Filter, All

Filtering is useful to play parts of a playback and leave other parts unaffected. Using this method you can play the pan/tilt part of one playback, the gobo and beam parts of a second playback, and the intensity and color mixing parts of a third playback to make a new composite playback.

The **All** button toggles between all parameters on and all parameters off.

Switch off a parameter to exclude it from playback when operating the blue **GO** buttons.

Note: *If all parameters are off, the blue **GO** button will not do anything. However, the mauve intensity button can still launch the intensity and color mixing parts of the chosen playback.*

Filter, Beam

Filtering is useful to play parts of a playback and leave other parts unaffected. Using this method you can play the pan/tilt part of one playback, the gobo and beam parts of a second playback, and the intensity and color mixing parts of a third playback to make a new composite playback.

The **Beam** button toggles between beam on and beam off.

Switch off beam to exclude it from playback when operating the blue **GO** buttons.

Note: *If all parameters are off, the blue **GO** button will not do anything. However, the mauve intensity button can still launch the intensity and color mixing parts of the chosen playback.*

Filter, Effect

Filtering is useful to play parts of a playback and leave other parts unaffected. Using this method you can play the pan/tilt part of one playback, the gobo and beam parts of a second playback, and the intensity and color mixing parts of a third playback to make a new composite playback.

The **Effect** button toggles between effects on and effects off.

Switch off effect to exclude effects from playback when operating the blue **GO** buttons.

Note: *If all parameters are off, the blue **GO** button will not do anything. However, the mauve intensity button can still launch the intensity and color mixing parts of the chosen playback.*

Filter, Position

Filtering is useful to play parts of a playback and leave other parts unaffected. Using this method you can play the pan/tilt part of one playback, the gobo and beam parts of a second playback, and the intensity and color mixing parts of a third playback to make a new composite playback.

The **Position** button toggles between position on and position off.

Switch off position to exclude it from playback when operating the blue **GO** buttons.

Note: *If all parameters are off, the blue **GO** button will not do anything. However, the mauve intensity button can still launch the intensity and color mixing parts of the chosen playback.*

Range

Playback Toy displays ten **playbacks** at a time. To see further playbacks, press **Range** to switch between them.

System Settings and Setup

This section covers the [system settings](#) and [setup](#) options for your device.

Setup

Contains functions used in the setup of the device:

- [Patch](#)
- [Settings](#)
- [Files](#)
- [Layout Mode](#)

Settings

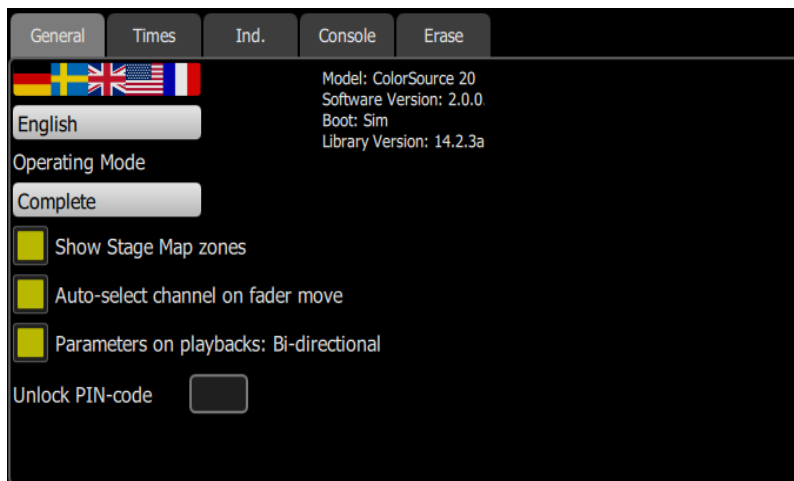
All internal settings and default values are set up here.

Settings are arranged in tabs of related items:

- **General:** Operating modes, language, stage map grid, auto-select channel on fader move, and about console information.
- **Times:** Times for clear, default cue, and default move.
- **Independents:** Independents setup and patching.
- **Console:** Custom setup of console buttons and DMX speed.
- **Erase:** Erase operations.
- **Tags:** Configure user-editable tags.

Settings: General

From this tab you can set the operating mode and language, show the stage map grid, assign an unlock code, and select the fader behavior to auto-select channels.



Choose the operating language. Current options are English, French, German, Japanese, Italian, Russian, and Spanish.

Choose the operating mode:

- **Simple Mode:** Simple mode offers a very basic set of lighting controls. There is no [cue list](#), no fader paging and only four [playbacks](#). Simple mode is ideal for setting up a few static lighting states without needing any training or deep knowledge of lighting control.

- **Complete Mode:** Complete mode offer the whole set of functions and is suited to trained users and experienced lighting professionals.

Show Stage Map Grid, when selected, will show the Stage Map Grid. See [Stage Map](#) for more information.

Behavior of faders to auto-select channels on move can be disabled here.

Enabling Bi-Directional Parameters on playbacks allows for the playbacks to control parameters, including effects, when the playback is brought up and down. When disabled, the playbacks will only control parameters when brought up. Parameters will remain as they are when the playback is brought down.

You can assign an unlock code to be used to lock and unlock the console. See [Lock](#) for more information.

The hardware model, current software version, and personality library version are also displayed on this tab.

Settings: Times

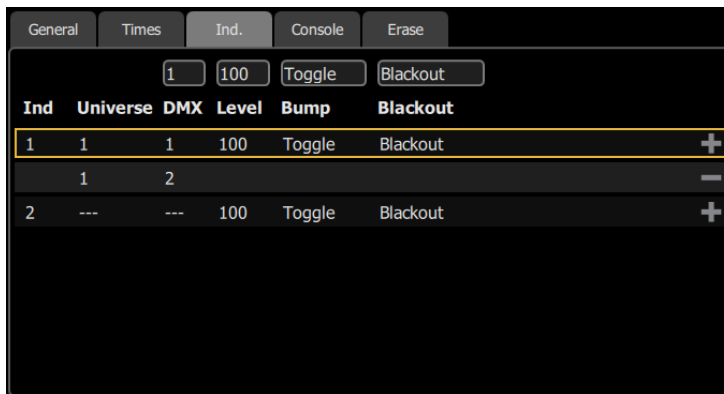
Sets the following times used as default settings for **Clear** and **Cue** programming:

- **Clear Time:** Sets the fade time for clearing channels on the **Clear** button.
- **Default Cue Time:** The default time for In-fade and Out-Fade in Cues and [Sequences](#).
- **Default Move Time:** The time for parameters to move to new values during move dark and when picking preset values on the [Parameter](#) screen.
- **Move Dark Time:** The time used for the fade to dark action between steps or cues.

Note: *Move Dark happens automatically for cue playback and ensures that fixtures will be moved to their correct position before the cue in which they appear is played.*

Settings: Independents

Setup for the two independent control channels.



Independents may be used to control fixtures, for instance the house fixtures, or accessories and small machines such as smoke machines or mirror balls.

In this tab, the following settings for independents can be set:

- **Universe** and **DMX** - an independent can be assigned to a DMX address on a given universe.
- **Level** - sets the on level for the independent.
- **Bump** - sets the **bump button** operation to a momentary bump or an on-off toggle.
- **Blackout** - sets whether the independent is included or excluded from **blackout**.

To assign multiple addresses to an independent, select the + button and enter in the universe and DMX address. To remove an address, select the - button.

Settings: Console

Setup of the console and its buttons and faders can be done on this tab.

You can adjust the DMX speed. You should choose the fastest setting that works correctly with all your equipment, normally with modern devices this should be Max or Fast.

You can adjust the backlight for the touchscreen and the brightness of the buttons. 1 is the dimmest setting and 7 is the brightest.

You can assign the five right-most buttons beneath the screen to the following functions:

- None
- [Back](#)
- [Blackout](#)
- [Cue List](#)
- [Effects](#)
- [GO](#)
- [Ind 1](#)
- [Ind 2](#)
- [Keypad](#)
- Last page
- Next page
- [Pause](#)
- [Parameter](#)
- [Playback Toy](#)
- [Quick Select](#)
- [Speed Clear](#)
- [Stage Map](#)
- [Tap](#)

These buttons default to Color, Cue List, Back, Pause, GO.

Note: *The left-hand button cannot be re-assigned and always selects the Stage Map display.*

You can also assign the four [master faders](#) above the screen to the following functions:

- Bumps
- [Crossfader](#)
- Cues
- Grandmaster
- Playbacks

These buttons default to Bumps, Playbacks, Cues, and Crossfader.

Settings: Erase

The following erase operations are available in this tab:

- **All:** Erases all of the show data.
- **Memories:** Erases all of the [playback](#) memories. To erase just one playback, use [Erase Playback](#).
- **Sequences:** Erases all of the [sequences](#).
- **Cue List:** Erases all of the [cues](#) from the [cue list](#).
- **Patch:** Erases all of the [patch](#).

Note: Erasing an item removes it from the show permanently. Erasure is not the same as clearing a cue or playback. A cleared item can be run again, an erased item cannot be run once removed.

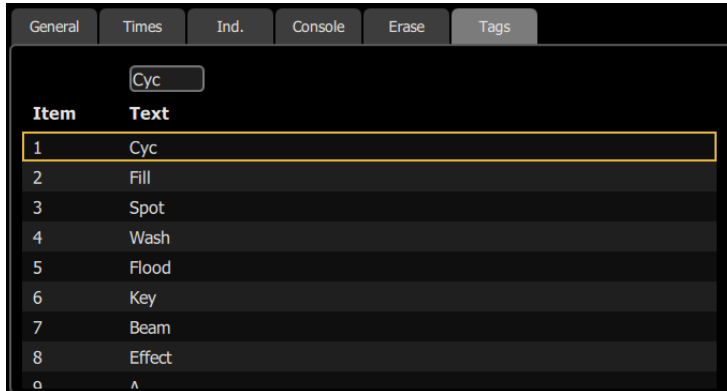
CAUTION: This function cannot be undone using the undo operation. It is strongly advised that you save a copy of your show file onto a USB drive prior to any erase operation.

Note: Other show files stored in the console or on an attached USB drive will not be affected. Only the current show file will be affected.

Note: The library of device personalities is not a part of the show data and cannot be erased.

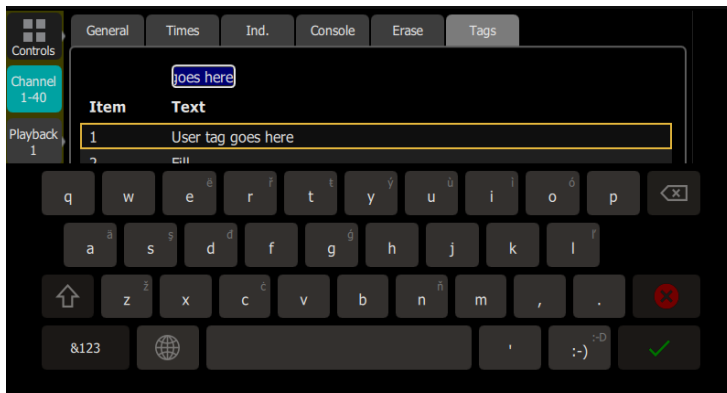
Settings: Tags

This tab allows you to configure the user tags that can be applied to patched items.



There are 12 total tag options, which default to **Cyc, Fill, Spot, Wash, Flood, Key, Beam, Effect, A, B, C, and D.**

Select a tag, and click in the box above "Text" to edit the label.



Up to two tags can be applied to individual dimmers and devices in **Patch** to aid in convenient grouping on the **Quick Select** screen.

Showfile Management

This section explains how to [create](#), [save](#), [open](#), [delete](#), [import](#), and [export](#) show files. [Software upgrades](#) and creating a [default](#) show file are also covered.

Files

All filing operations:

- [New](#)
- [Open](#)
- [Save](#)
- [Save As](#)

Show files:

- [Save as default](#)
- [Remove default](#)
- [Delete](#)
- [Import](#)
- [Export](#)

Advanced:

- [Import Settings](#)
- [Update Firmware](#)
- [Install Extras](#)
- [Export Logs](#)

CAUTION: *All data is stored internally in non-volatile memory. Do not switch off the power until any pending save operation is completed, or you may lose data. It is strongly advised that you make periodic backups of important data to an external memory stick using the [Export](#) function.*

File, New

Start a new show by going to **Setup>Files>New**.

Note: *You will be warned that this action will clear the memory. Select **Yes** to clear memory and start a new show, or **No** to cancel.*

The new show will be based on the template [default show](#), which is customizable.

File, Open

Open an existing show file by going to **Setup>Files>Open**.

Note: *Show files must be in the device's internal storage before they can be opened here. If the file is located on a memory stick, you will need to use [import](#) first.*

File, Save

Save the show by going to **Setup>Files>Save**.

The show will be saved with the name you last gave it. If you have not yet saved the show with a name, you will be prompted to enter a show file name. Use only alphanumeric characters, and avoid symbols.

CAUTION: All data is stored internally in non-volatile memory. Do not switch off the power until any pending save operation is completed, or you may lose data. It is strongly advised that you make periodic backups of important data to an external memory stick using the [export](#) function.

File, Save As

Save the show by going to **Setup>Files>Save As**. The show will be saved with the name you enter. Use only alphanumeric characters, and avoid symbols.

Note: The difference between [Save](#) and *Save As* is you will always be asked to name the show file when you use *Save As*.

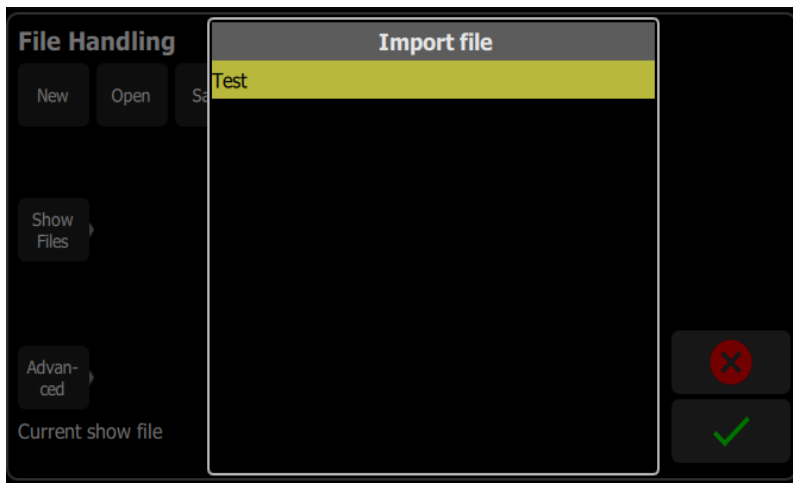
CAUTION: All data is stored internally in non-volatile memory. Do not switch off the power until any pending save operation is completed, or you may lose data. It is strongly advised that you make periodic backups of important data to an external memory stick using the [Export](#) function.

File, Import

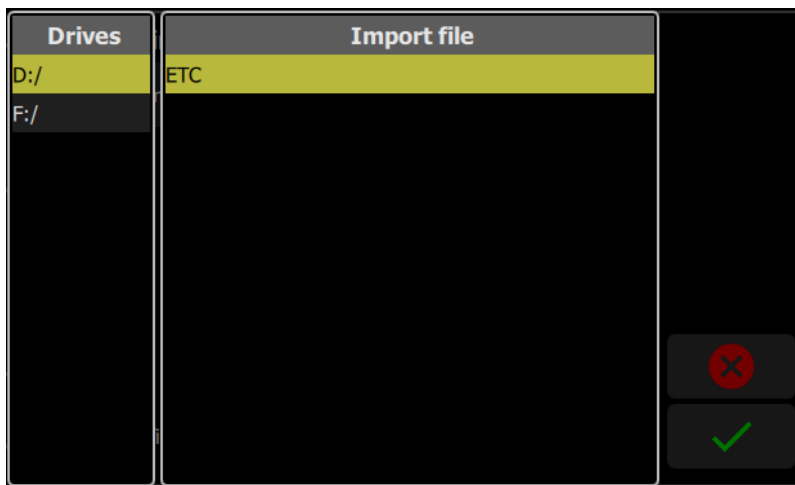
Import an existing [show file](#) by going to **Setup>Files>Shows>Import**.

Note: Show files must be saved on a memory stick, in a folder named "Shows" in the root directory.

When the **Import** button is pressed, the following screen will display showing the available show files. Select the desired file, and then press **Accept**. If you want to leave this display without importing, press **Cancel**.



If multiple USB devices are detected, select the appropriate drive from the list.



File, Export

Export the current [show file](#) by going to **Setup>Files>Shows>Export**.

Note: *Show files will be saved onto a memory stick, in a folder named "Shows" in the root directory.*

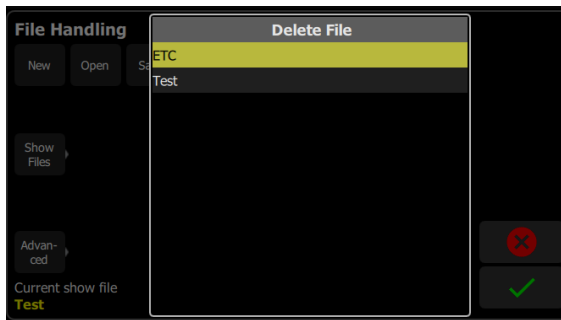
When the **Export** button is pressed, the following screen will display. Press **Yes** to export. If you want to leave this display without exporting, press **No**. If multiple USB devices are detected, select the appropriate drive from the list.



File, Delete

Delete an existing [show file](#) off your device by going to **Setup>Files>Shows>Delete**.

When the **Delete** button is pressed, the following screen will display showing the available show files. Select the desired file, and then press **Accept**. If you want to leave this display without deleting, press **Cancel**.



Files, Show files

You can open and save shows by going to **Setup>Files**

Shows are saved internally with all content, including lighting and effects.

Pressing the **Show Files** button gives you the default show options.

When a **new show** is started, it will be based on the default show template, which you may define to contain a **patch** or part-patch, some show data, including **playbacks** and **cues**, or nothing as required.

If your lighting rig is fixed and usually the same set of equipment set to the same addresses, the default show will help you save patching and setup time. If you prefer to start with a blank state each time, no patch and no data, then you can save an empty default show.

Format

Show files in software version 2.6.0 and older are formatted as **.json**. From v3.0 onwards, archive format **.lsf** is used, which bundles the **.json** show with other settings.

Functions

- [Save As Default](#)
- [Remove Default Show](#)
- [Delete](#)
- [Import](#)
- [Export](#)

CAUTION: *All data is stored internally in non-volatile memory. Do not switch off the power until any pending save operation is completed, or you may lose data. It is strongly advised that you make periodic backups of important data to an external memory stick using the [export](#) function.*

Save As Default

The current show will be saved as the default to be used each time **Setup> File > New** is selected. Typically this will include a standard patch, but may also include any other show elements, for example, playbacks for operating house fixtures or other standard functions.

CAUTION: *All data is stored internally in non-volatile memory. Do not switch off the power until any pending [save](#) operation is completed, or you may lose data. It is strongly advised that you make periodic backups of important data to an external memory stick using the [export](#) function.*

Remove Default Show

The Default show is removed to a complete blank state with no patch or content at all.

Selecting **File > New** will start your device with no programmed content at all.

CAUTION: All data is stored internally in non-volatile memory. Do not switch off the power until any pending [save](#) operation is completed, or you may lose data. It is strongly advised that you make periodic backups of important data to an external memory stick using the [export](#) function.

Files, Advanced

Functions

- [Import Settings](#) - allows you to import a settings file.
- Export All - exports all files to USB
- [Update Firmware](#) - updates the device's main operating software.
- [Install Extras](#) - add or replace data files, such as new device personalities, help texts or languages.
- [Export Logs](#) - exports the device's log files to USB

CAUTION: All data is stored internally in non-volatile memory. Do not switch off the power until any pending [save](#) operation is completed, or you may lose data. It is strongly advised that you make periodic backups of important data to an external memory stick using the [export](#) function.

Import Settings

When a show file is [exported](#), a settings file is also created. This file only contains the settings information selected in the Settings tabs. This file can be imported using the Import Settings option under **Files>Advanced**.

Update Firmware

The main operating software can be updated here. The software must be obtained from ETC and placed in the root of the USB drive. Please make sure the software file is not inside any other folder or subdirectory, as this will hide it from the update function.

The file name will be in this format: ETC_CS_#.##.##.##.##.fw (the software version will replace #.#.#.#.#).

CAUTION: The update process may take a few minutes. Do not shutdown the device until the process has finished. You will be prompted to shutdown and restart after the update.

Install Extras

Data and content supplied by ETC used by your device may be imported here.

This includes new device personality libraries, new help texts, [language revisions](#), additions, and other internal features as they become available.

The files you wish to import must be obtained from ETC and placed in the root of the USB drive. The files will be named with the suffix .cspkg.

Note: You cannot update the main operating software here, only support files. To update the main software version, you will need to use the [Update Firmware](#) button.

Note: Fixture profiles are not loaded from this display. Please see [Loading a Fixture Personality](#) for instructions.

Installing Language Packs

Any available language packs can be downloaded from the ETC website (etcconnect.com) as .zip files.

1. Once downloaded, extract your file.
2. Place it onto the root directory of a USB drive. The file name will end with .cspkg.

3. Plug the USB drive into the USB port of your device.
4. On your console, go to **Setup>Files>Advanced>Install Extras**.
5. A list will appear that shows the files on your USB drive. Select the appropriate language file to install.
6. Press **Accept** to begin the installation process.
7. Follow the on-screen prompts as needed.

Export Logs

Exports the device's log files to a USB drive. Tap **Yes** to export or **No** to cancel.

The file name will be in this format: ColorSource_Logs_#.tar.gz.

EULA

COLORSOURCE / ECHOTOUCH - Copyright © 2019 - Electronic Theatre Controls, Inc.

IMPORTANT – THIS IS A LEGAL AGREEMENT BETWEEN YOU (“USER”) AND ELECTRONIC THEATRE CONTROLS, INC. (“ETC”). PLEASE READ THE FOLLOWING CAREFULLY BEFORE OPERATING AND INSTALLING THE SOFTWARE (the “Software”). ETC PROVIDES THE SOFTWARE SOLELY ON THE TERMS AND CONDITIONS SET FORTH IN THIS END USER LICENSE AGREEMENT (the “Agreement”) AND BY CLICKING THE “ACCEPT” BUTTON AND OPERATING AND INSTALLING THE SOFTWARE, YOU ACCEPT THIS AGREEMENT AND AGREE THAT YOU ARE LEGALLY BOUND BY ITS TERMS. IF YOU DO NOT AGREE TO ALL THE TERMS AND CONDITIONS CONTAINED IN THE AGREEMENT, THEN ETC WILL NOT AND DOES NOT LICENSE THE SOFTWARE TO YOU AND YOU MUST NOT INSTALL THE SOFTWARE OR OTHERWISE USE THE SOFTWARE.

THE SOFTWARE IS LICENSED AND COPYRIGHTED (NOT SOLD). Except for the limited license granted in this Agreement, ETC and its licensors retain all right, title and interest in the Software and all proprietary rights in the Software, including copyrights, patents, trademarks and trade secret rights, excluding any third party software contained therein.

THIS SOFTWARE IS PROVIDED TO USER IN CONNECTION WITH DEVICE(S) FROM ETC (“Device”). USER MAY USE THE SOFTWARE ONLY ON THE DEVICE AND ONLY SUBJECT TO THE TERMS AND CONDITIONS HEREIN. ETC will have no liability for errors, unreliable operation, or other issues resulting from use of the Software on or in connection with devices that are not in conformance with the manufacturer’s original specifications (collectively, “Modified Devices”). Use of the Software on Modified Devices will be at User’s sole and exclusive risk and liability.

1. Grant of License. Subject to User’s strict compliance with the following terms and conditions, ETC hereby grants to User, a worldwide, non-exclusive, limited license to use the Software on the Device during the Term.

2. Limitations on License. The license granted to User in this Agreement is restricted as follows:
 - Limitations on Copying and Distribution. User may not copy or distribute the Software except to the extent that copying is necessary to use the Software within User's organization for purposes set forth herein.
 - Limitations on Reverse Engineering and Modification. User may not reverse engineer, disassemble, decompile, modify or create derivative works of the Software. However, if the relevant software copy is situated in a country that transposed Article 6 of Directive 2009/24/EC into such country's applicable laws, a decompiling is admissible for the reasons and within the restrictions set forth in such country's laws that transpose Article 6 of Directive 2009/24/EC.
 - Back-up copy. If the relevant software copy is situated in a country that transposed Article 5 para. 2 of Directive 2009/24/EC into such country's applicable laws, the making of a back-up copy of the relevant software copy is admissible for the reasons and within the restrictions set forth in such country's laws that transpose Article 5 para. 2 of Directive 2009/24/EC.
 - Proprietary Notices. User may not remove, delete, alter or obscure any product identification or proprietary notices (e.g., copyright and trademark notices) from the Software or its documentation.
 - Use in Accordance with Documentation. All use of the Software must be in accordance with its then current documentation, if any, provided with the Software or made available on ETC's website.
 - Compliance with Applicable Law. User is solely responsible for ensuring its use of the Software is in compliance with all applicable foreign, federal, state and local laws, and rules and regulations.
3. Responsibility for Use of Software. User is responsible and liable for all uses of the Software and documentation through access thereto provided by ETC, directly or indirectly. Specifically, and without limiting the generality of the foregoing, User is responsible and liable for all actions and failures to take required actions with respect to the Software and documentation by its authorized users or by any other person to whom User may provide access to or use of the Software, whether such access or use is permitted by or in violation of this Agreement.
4. Third-Party Software. The Software may include software, content, data or other materials, including related documentation, that are owned by third parties other than ETC and that are provided to ETC on license terms that are in addition to or different from those contained in this Agreement ("Third-Party Licenses"). A list of all materials, if any, included in the Software and provided under Third-Party Licenses is set forth on Schedule A to this Agreement, and the applicable Third-Party Licenses are accessible via links therefrom. User is bound by and shall comply with all Third-Party Licenses. Any breach by User or any of its authorized users of any Third-Party License is also a breach of this Agreement.

5. Software Support; Functionality. All questions and requests relating to Software Support must be directed to ETC. ETC may change or remove functionality and other features of the Software at any time, without notice. Support Services will include the provision of updates, bug fixes, patches and other error corrections (collectively, "Updates") as ETC makes generally available free of charge to all licensees of the Software. ETC may develop and provide Updates in its sole discretion, and User agrees that ETC has no obligation to develop any Updates at all or for particular issues. User further agrees that all Updates will be deemed Software, and related documentation will be deemed documentation, all subject to all terms and conditions of this Agreement. User acknowledges that ETC may provide some or all Updates via download from a website designated by ETC and that User's receipt thereof will require an internet connection, which connection is User's sole responsibility. ETC has no obligation to provide Updates via any other media. Support Services do not include any new version or new release of the Software that ETC may issue as a separate or new product ("Upgrades"), and ETC may determine whether any issuance qualifies as an Upgrade or Update in its sole discretion. ETC has no obligation to provide Support Services, including Updates (i) for any but the most current version or release of the Software, or (ii) for any copy of Software for which all previously issued Updates have not been installed, or (iii) for any Software that has been modified other than by or with the authorization of ETC, or that is being used with any hardware, software, or configuration not specified in the documentation or expressly authorized by ETC in writing.
6. Upgrades. ETC intends to provide, but does not guarantee, Updates or Upgrades of the Software. If the Software is an Upgrade from a previous version of the Software, then it is provided to User on a license exchange basis. User agrees by installing and using the upgraded version of the Software to voluntarily terminate all use of the previous version of the Software. For each Upgrade, User will be prompted to accept a new terms and conditions relating to User's use of the upgraded Software. User agrees any earlier agreement governing the use of the previous version of the Software is hereby void and replaced in its entirety by this Agreement.
7. Feedback. User may provide suggestions, comments or other feedback (collectively, "Feedback") regarding ETC's products and services, including the Device and Software. Feedback is voluntary. ETC may use Feedback for any purpose without obligation of any kind. To the extent a license is required under User's intellectual property rights to make use of the Feedback, User hereby grants to ETC an irrevocable, world-wide, non-exclusive, perpetual, fully-paid-up, royalty-free license to use the Feedback in connection with ETC's business, including the enhancement of the Software and the provision of products and services to its customers.
8. Disclaimer of Warranty. THE SOFTWARE AND DOCUMENTATION ARE PROVIDED TO USER "AS IS" AND WITH ALL FAULTS AND DEFECTS WITHOUT WARRANTY OF ANY KIND. TO THE MAXIMUM EXTENT PERMITTED BY LAW, ETC AND ITS SUPPLIERS AND LICENSORS DISCLAIM ALL WARRANTIES WITH RESPECT TO THE SOFTWARE, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, TITLE, MERCHANTABILITY, QUIET ENJOYMENT, QUALITY OF INFORMATION, AND FITNESS FOR A PARTICULAR PURPOSE. ETC AND ITS SUPPLIERS AND LICENSORS DO NOT WARRANT THAT THE SOFTWARE WILL MEET USER'S REQUIREMENTS, OR THAT THE OPERATION OF THE SOFTWARE WILL BE UNINTERRUPTED OR ERROR-FREE, OR THAT DEFECTS IN THE SOFTWARE WILL BE CORRECTED. The entire risk as to the quality, operation, and performance of the Software is with User. Should any Software prove defective in any respect, User assumes the cost of any necessary servicing, repair or correction. This disclaimer of warranty constitutes an essential part of this license. ETC STRICTLY DISCLAIMS ALL WARRANTIES WITH RESPECT TO ANY THIRD-PARTY LICENSES.

9. U.S. Government Restrictions. The Software is commercial computer software, as such term is defined in 48 C.F.R. §2.101. Accordingly, if the User is the U.S. Government or any contractor therefor, User shall receive only those rights with respect to the Software and documentation as are granted to all other end users under license, in accordance with (a) 48 C.F.R. §227.7201 through 48 C.F.R. §227.7204, with respect to the Department of Defense and their contractors, or (b) 48 C.F.R. §12.212, with respect to all other U.S. Government licensees and their contractors.
10. Limitation of Liability. TO THE MAXIMUM EXTENT PERMITTED BY LAW, IN NO EVENT WILL ETC OR ITS AFFILIATES, OR ANY OF ITS SUPPLIERS AND LICENSORS, BE LIABLE TO USER OR ANY THIRD PARTY FOR ANY DIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL, PUNITIVE, OR INDIRECT DAMAGES (WHETHER IN CONTRACT, TORT (INCLUDING NEGLIGENCE), OR OTHERWISE), WHICH INCLUDE, WITHOUT LIMITATION, DAMAGES FOR PERSONAL INJURY, LOSS OF SERVICES, LOST PROFITS, LOST DATA AND BUSINESS INTERRUPTION, ARISING OUT OF THE USE OR INABILITY TO USE THE SOFTWARE, EVEN IF THEY HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. IN ANY CASE, THE ENTIRE LIABILITY OF ETC AND ITS AFFILIATES, SUPPLIERS AND LICENSORS, UNDER THIS AGREEMENT FOR ALL DAMAGES, LOSSES, AND CAUSES OF ACTION (WHETHER IN CONTRACT, TORT (INCLUDING NEGLIGENCE), OR OTHERWISE) IS LIMITED TO THE AMOUNT PAID BY USER, IF ANY, FOR THE SOFTWARE.

SOME JURISDICTIONS DO NOT ALLOW THE EXCLUSION OR LIMITATION OF
INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THIS EXCLUSION AND
LIMITATION MAY NOT APPLY TO USER.

11. Export Regulations and Trade Compliance. The Software and documentation are subject to U.S. export control laws, including without limitation, the U.S. Export Administration Act and its associated regulations, and may be subject to export or import regulations in other countries. In connection with this Agreement, both ETC and User will comply with all applicable import, re-import, sanctions, anti-boycott, export, and re-export control laws and regulations, including all such laws and regulations that apply to a U.S. company, such as the Export Administration Regulations, the International Traffic in Arms Regulations, and economic sanctions programs implemented by the Office of Foreign Assets Control. User shall not, directly or indirectly, export, re-export or release the Software or documentation to, or make the Software or documentation accessible from, any jurisdiction or country to which export, re-export or release is prohibited by law, rule or regulation. User shall comply with all applicable federal laws, regulations and rules, and complete all required undertakings (including obtaining any necessary export license or other governmental approval), prior to exporting, re-exporting, releasing or otherwise making the Software or documentation available outside the United States. User represents and warrants that it is not subject to sanctions or otherwise designated on any list of prohibited or restricted parties, including but not limited to the lists maintained by the United Nations Security Council, the U.S. Government (e.g., the Specially Designated Nationals List and Foreign Sanctions Evaders List of the U.S. Department of Treasury, and the Entity List of the U.S. Department of Commerce), the European Union or its Member States, or other applicable government authority.
12. Termination. User may terminate this Agreement by ceasing to use and destroying all copies of the Software and documentation. This license will automatically terminate in the event User breaches any of its terms. In the event of a claim of intellectual property infringement by any third party relating to the Software, ETC may immediately terminate this Agreement. In addition, ETC may choose to discontinue support of the Software at any time, without notice. In such case, the Software may cease to function and User's data may become inaccessible. User is solely responsible for backing up any data stored in the Software.

Nothing in this Agreement shall limit User's right to sell the relevant Device together with the Software being on such Device if and to the extent the User purchased and further sells the relevant device within a country that transposed Directive 2009/24/EC into such country's applicable laws. It being clarified that this Agreement terminates and User has to destroy any back-up copy made of the Software as soon as User ceases to be the owner of the relevant Device.

13. Indemnification. User shall indemnify, defend and hold harmless ETC and its suppliers and licensors from and against any and all losses, damages, claims, liabilities, fines, costs and expenses (including reasonable attorney fees) arising out of User's breach of this Agreement.
14. Privacy. User acknowledges that ETC may, directly or indirectly through the services of third parties, collect and store information regarding use of the Software and use of the Device on which the Software is installed through the provision of Support Services. User agrees ETC may use such information for any purpose related to any use of the Software by User or on User's equipment including but not limited to improving the performance of the Software, developing Updates, or providing products and services to its customers. ETC recognizes the importance of respecting User's privacy. The Privacy Policy (linked below) provides a description of how ETC collects, uses, shares and protects personal information, as well as the choices and access rights User has in regards to such personal information. For more information on ETC's privacy practices and to review ETC's Privacy Policy please visit the following link: <https://www.etconnect.com/Privacy-Policy-and-terms-of-use.aspx>.
15. Destruction of the Software. Upon termination of this Agreement, the license granted hereunder shall terminate, and User shall cease using and destroy the Software, the related documents and any and all copies thereof and submit documents evidencing such destruction to ETC, if requested by ETC to do so.

16. Miscellaneous. This Agreement will be construed and interpreted exclusively according to the laws of the State of Wisconsin, United States of America, without giving effect to any principles of conflicts of law. Any action at law or in equity arising out of or directly or indirectly relating to this Agreement may be instituted only in the Federal or state courts located in Dane County, Wisconsin. ETC and User consent and submit to the personal jurisdiction of those courts for the purposes of any action related to this Agreement, and to extra-territorial service of process. This Agreement constitutes the entire understanding and agreement between ETC and User with respect to the transactions contemplated in this Agreement and supersedes all prior or contemporaneous oral or written communications with respect to the subject matter of this Agreement, all of which are merged in this Agreement. This Agreement may not be modified, amended or in any way altered except by an instrument in writing signed by authorized representatives of both parties. In the event any provision of this Agreement is found invalid or unenforceable pursuant to judicial decree, the remainder of this Agreement will remain valid and enforceable according to its terms. Any failure by ETC to strictly enforce any provision of this Agreement will not operate as a waiver of that provision or any subsequent breach of that provision. The disclaimers and limitations of liability and User's indemnity will survive any termination or expiration of this Agreement. All notices, requests, consents, claims, demands, waivers and other communications hereunder shall be in writing and shall be deemed to have been given on the date sent by e-mail or facsimile (with confirmation of transmission) or on the third day after the date mailed, by certified or registered mail, postage prepaid. This Agreement may be accepted in electronic form (e.g., by an electronic or other means of demonstrating assent) and User's acceptance will be deemed binding between User and ETC. Neither ETC nor User will contest the validity or enforceability of this Agreement, including under any applicable statute of frauds, because it was accepted or signed in electronic form. Electronically maintained records when produced in hard copy form shall constitute business records and shall have the same validity as any other generally recognized business records. IT IS EXPRESSLY UNDERSTOOD AND AGREED THAT IN THE EVENT ANY REMEDY HEREUNDER IS DETERMINED TO HAVE FAILED OF ITS ESSENTIAL PURPOSE, ALL LIMITATIONS OF LIABILITY AND EXCLUSIONS OF DAMAGES WILL REMAIN IN EFFECT.

Schedule A

Third-Party Licenses Terms and Conditions. For a complete list of all Third-Party Licenses that are fully incorporated herein to the extent required by each Third-Party License terms and conditions please visit www.etcconnect.com/licenses.



Corporate Headquarters ■ Middleton, WI, USA | +1 608 831 4116
Global Offices ■ London, UK | Rome, IT | Holzkirchen, DE | Paris, FR | Hong Kong | Dubai, UAE | Singapore
New York, NY | Orlando, FL | Los Angeles, CA | Austin, TX
Web etconnect.com | **Support** support.etconnect.com | **Contact** etconnect.com/contactETC
© 2022 ETC Inc. | Trademark and patent info: etconnect.com/ip
Product information and specifications subject to change. ETC intends this document to be provided in its entirety.
7225M1200-3.2.0 Rev A Released 2022-09