ETC Installation Manual

ColorSource® Spot

Overview

The ColorSource Spot is an affordable profile fixture that offers the quality and support of an ETC LED fixture. Utilizing an RGB-L color mixing system, the ColorSource Spot produces amazing color and output for a four-color fixture.

This fixture is available in both original and Deep Blue variants. The Deep Blue uses an array that offers richer, more saturated blues and stronger magentas in exchange for the more jewel-toned blues like sky or turquoise. For more information, see the ETC website at *www.etcconnect.com*.

This light engine can be used with standard ETC shutter barrels, lens tubes, Fresnel and Cyc Adapters, and accessories.

> **CAUTION:**
> - Risk of eye injury. Do not stare directly into the light.
> - Do not operate in proximity to flammable materials.

Environment

The ColorSource Spot operates in ambient temperatures of 0°–40°C and comes with a variable-speed, quiet operation fan.

> **Note:** *The ColorSource Spot is for use in dry locations only.*

> **Note:**
> - Maximum recommended ambient operating temperature: $T_a = 40°C$ (104°F)
> - Maximum anticipated external surface temperature at 40°C ambient: $T_{max} = 80°C$ (176°F)
> - External temperatures after 5 minutes of full-brightness operation at 25°C (77°F) ambient: 30°C (86°F)
> - External Temperature (steady state achieved) at 25°C (77°F): 36°C (97°F)

ETC Installation Manual

Electrical

⚠️ **WARNING:** **Disconnect the fixture from power and DMX and allow it to cool before performing any cleaning and maintenance.**

- Operates between 100V and 240VAC at a frequency of 50/60Hz.
- Maximum power consumption is 185W.
- Up to 9 luminaires (15A max) may be linked via power thru connector (10 luminaires total per circuit) when used with an R20 relay module or Unison Echo® Relay Panel. Consult breaker trip curves when used with other equipment. Requires power from a non-dimmable source.
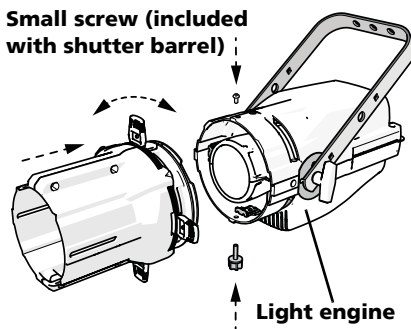
Typical power consumption

	100V	120V	240V
Idle Power / Current	1.19W / 0.0465A	2.07W / 0.0479A	1.5W / 0.0531A
Direct at Full / Current	168W / 1.69A	166W / 1.39A	166W / 0.72A

Installation

Installing a shutter barrel

The ColorSouce Spot can be purchased with or without a shutter barrel. To install a shutter barrel you will need a #2 Phillips screwdriver (not provided).

The ColorSource light engine includes a barrel screw. The small screw used to secure the top of the shutter barrel is included with the shutter barrel.

Small screw (included with shutter barrel)

Light engine

Step 1: Align the barrel to the front of the ColorSource Spot and rotate it one quarter turn counter-clockwise.

Step 2: Insert the shutter barrel into the front of the light engine and rotate clockwise until it is fully threaded onto the light engine.

Step 3: Insert the barrel screw at the bottom of the light engine and tighten.

Step 4: Insert the small screw into the top of the light engine and tighten using the Phillips screwdriver.

ETC Installation Manual

Mounting hardware

- The ColorSource Spot ships with a standard yoke for mounting with a c-clamp.
- The provided safety cable (or other approved safety device) must be attached to the fixture. Two attachment loops are provided on the rear of the fixture body. Take care to leave as little slack as possible in the safety cable to avoid catching the yoke of the fixture.

Connectors

- **Power**: Two powerCON® connectors for power in and thru
- **Data (DMX512/RDM)**: Two five-pin XLR connectors *OR* two RJ45 connectors for data in and thru

Conversion cables are available from ETC. Please contact your ETC customer service representative and request part number W6538 for RJ45 to female XLR or part number W6539 for RJ45 to male XLR.

> **Note:** *This fixture is not Ethernet/data network compatible.*

> **Note:** *The ColorSource Spot is not self terminating. You must terminate the last fixture in line with a 120 ohm resistor. XLR terminators are not available from ETC.*
>
> *To purchase an RJ45 terminator, please contact your ETC customer service representative and request part number N4086.*

Setting up the fixture

Step 1: Plug power cord into the powerCON In connector on the rear of the fixture.

Step 2: Make any power-thru cable connections prior to applying a power source.

Step 3: Plug power cord into power source.

Powering up

Step 1: Press the Mode button once to wake the display. The display shows the DMX address.

Step 2: Press the Mode button a second time to access the Presets/Sequences menu.

Adjusting the tilt

The fixture can be tilted up and down and rotated (panned) as needed.

Step 1:   Loosen, but **do not remove** the yoke locking knobs.

Step 2:   Tilt the fixture to the desired angle.

Step 3:   Tighten the yoke locking knobs.

User interface

The user interface allows you to set the start address of the fixture, and access the stand-alone presets and sequences. After five seconds of inactivity, the display goes dark.

Mode button

Pressing the Mode button activates the Preset/Sequence selection menu; the last active preset or sequence plays automatically. Pressing the Mode button a second time deactivates the selected preset or sequence. The display will revert to show the DMX start address.

- If DMX data is present, the current preset or sequence plays in the background and DMX data continues to take priority.
- If DMX data is lost and a preset is active in the background, the last selected preset or sequence automatically plays.
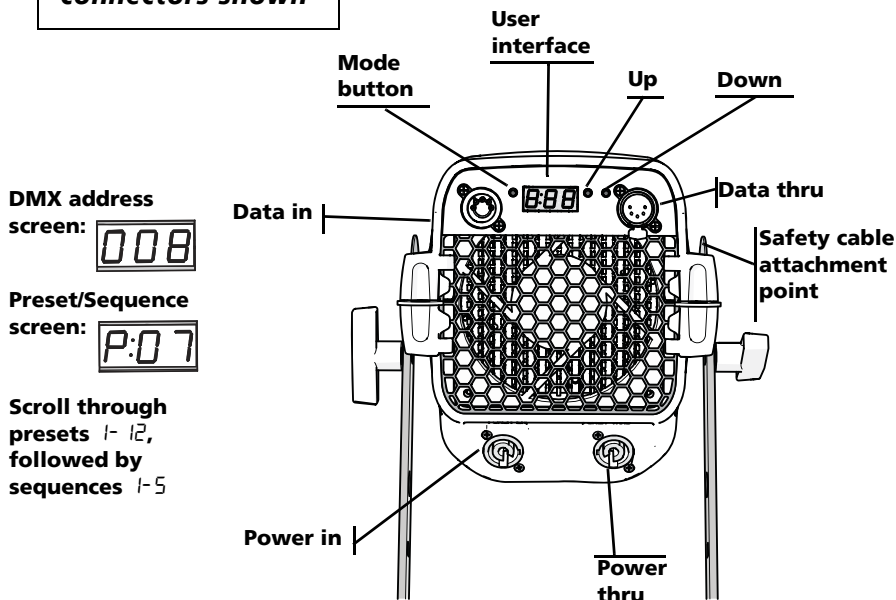
Setting the DMX address

Step 1:   Press the Mode button until the DMX address is displayed.

Step 2:   Use the Up and Down buttons to select the DMX address for the fixture.

ETC Installation Manual

ColorSource Spot

Spot with XLR connectors shown

User interface

Mode button

Up

Down

DMX address screen: `008`

Data in

Data thru

Safety cable attachment point

Preset/Sequence screen: `P:07`

Scroll through presets `1- 12`, **followed by sequences** `1-5`

Power in

Power thru

Setting presets and sequences

There are twelve factory-configured presets followed by five factory-configured sequences built into the fixture. From the Preset/Sequence menu, press the Up and Down buttons to scroll through the list. The sequence or preset plays immediately upon selection. All presets and sequences can be re-recorded through an RDM device.

To re-record presets:

Step 1:   Using DMX or RDM, set the desired RGB levels.

Step 2:   Press the Mode button to access the Preset/Sequence menu.

Step 3:   Using the Up and Down buttons, navigate to the preset number you want to re-record.

Step 4:   Hold the Mode button for three seconds to confirm the preset selection. The user interface will show a three second count-down. The preset number will then blink once to confirm the preset has been recorded.

ETC Installation Manual

It is possible to activate a known preset or sequence from a connected fixture when DMX is not present. If a connected fixture activates a preset or sequence that is not recognized by the Spot fixture, the Spot fixture will hold its last look. When DMX is restored, the DMX takes priority.

Pre-configured presets

Preset	Name	Preset	Name
1	3200K White	7	Magenta
2	5600K White	8	Yellow
3	Red	9	Orange
4	Green	10	Light Yellow
5	Blue	11	Light Blue
6	Cyan	12	Light Pink

Pre-configured sequences

Sequence	Name
1	Rainbow Fast
2	Rainbow Slow
3	Warm Colors Fast
4	Cool Colors Fast
5	Random

Adjusting the intensity of presets

Step 1: Ensure that DMX data is not present.

Step 2: Press the Mode button to access the Preset/Sequence menu, and then press the Up and Down buttons to select the preset that you want to edit.

Step 3: Hold the Mode button for 3 seconds. The display shows **L** : ## where the number is an intensity level from **0-99**, or **FL**.

Step 4: Press the Up and Down buttons to change the intensity level of the preset in real time.

Step 5: Press the Mode button to confirm your selection and return to the Preset/Sequence menu.

The fixture will automatically return to the Preset/Sequence menu after 5 seconds of inactivity without saving edits to the preset intensity. This cancels unsaved changes.

ETC Installation Manual

Changing the DMX control mode

You can set the DMX control mode for the fixture to one of four available mode options.

Step 1:   Press the Mode button until the DMX address is displayed.

Step 2:   Hold the Mode button for 3 seconds. The display shows the current DMX control mode.

Step 3:   Press the Up and Down buttons to change the DMX control mode.

- **5ch**: 5-channel mode (intensity, red, green, blue, and strobe)
- **d ir**: Direct emitter control (intensity, red, green, blue, lime, and s"trobe)
- **Ich**: Single-channel mode controls the intensity of preset 1 (defaults to 3200K White)
- **r9b**: RGB mode (red, green, and blue)

Step 4:   Press the Mode button to confirm your selection.

The fixture will automatically return to the DMX address after 5 seconds of inactivity without saving edits to the DMX control mode. This cancels unsaved changes.

DMX control channels

DMX Channel	5ch (5 Channel)	d ir (Direct)	Ich (1 Channel)	r9b (RGB)
1	Intensity	Intensity	Intensity	Red
2	Red	Red		Green
3	Green	Green		Blue
4	Blue	Blue/Indigo*		
5	Strobe	Lime		
6		Strobe		

*Original ColorSource Spot fixture uses blue in channel 4; Deep Blue ColorSource Spot fixture uses indigo in channel 4.

ETC Installation Manual

Locking the user interface

After you have set up the fixture, you can lock the user interface to prevent additional changes.

Step 1:   Hold the Up and Down buttons simultaneously for 3 seconds. The display will show **Loc** to indicate that the user interface is locked.

Step 2:   To unlock the user interface, hold the Up and Down buttons simultaneously for 3 seconds.

Updating the fixture software

ETC recommends using UpdaterAtor software to manage software updates. For more information on UpdaterAtor, see the *UpdaterAtor Software Quick Guide*, which you can download for free from *www.etcconnect.com*.

When you add a ColorSource fixture running a newer software version or update a ColorSource fixture to a newer software version using UpdaterAtor, you can use that fixture to push the newer software version to all connected ColorSource fixtures.

You can push newer software versions from a connected fixture only on ColorSource fixtures running software v1.3.0 or newer. Use UpdaterAtor to update individual fixtures running versions older than v1.3.0.

Step 1:   Remove power and DMX from the master fixture that is running the software version that you want to push to other fixtures.

Step 2:   Hold the Up and Down buttons simultaneously while restoring power.

Step 3:   The display will show **Udt rdY** to indicate the update mode is selected.

Step 4:   Press the Mode button to start the update process.
- The display will alternate between **Udt** and the percentage complete while updating.
- The master fixture will reboot once the update is complete.

Restoring factory defaults

Hold all three buttons (Mode, Up, and Down) simultaneously for five seconds. The DMX start address will blink once to confirm that defaults have been restored.

Error codes

There are three error codes that may be shown on the user interface.

- **CAL** : Screen toggles between **CAL** and **Err** to indicate a problem with the color calibration. The fixture will need to be returned to the ETC factory; contact your local dealer to set up a repair.
- **OtP**: Screen toggles between **OtP** and **Err** to indicate that the fixture has gone into over-temperature protection mode to avoid damaging the fixture. Once the fixture has self-cooled, the error will automatically clear.
- **no APP**: Screen toggles between **no** and **APP** to indicate that the upgraded fixtures have a software issue. Reload software to clear the error. If the error persists, contact ETC.

RDM values

Parameter	Value	Description
Manufacturer ID	0x6574	Electronic Theatre Controls
Model ID	0x0205	ETC ColorSource Spot
	0x0206	ETC ColorSource Spot Deep Blue
Personality ID	1	5 Channel
	2	Direct
	3	1 Channel
	4	RGB

ETC Installation Manual

ColorSource Spot