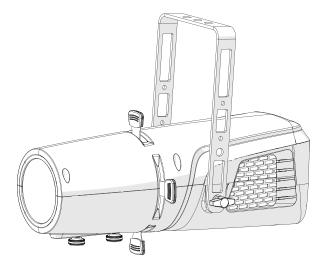
#### Overview

The ColorSourceSpot jr provides built-in zoom capability and uses the RGB-L (red, green, blue, and lime) color system to provide a rich, bright light.

The ColorSource Spot jr 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 etcconnect.com.





**Note:** Features described in this document require the latest version of software. For information on updating fixture software, see *Update* the Fixture Software on page 10.



Contact etcconnect.com/contactE1C @ 2020 Electronic Theatre Controls, Inc. Product information and specifications subject to change. ETC intends this document to be provided in its entirety. Trademark and patent info: etcconnect.com/ip 7416M2100-2.0 Rev B Released 2020-06

#### Safety

For professional use only. Read the entire manual before using this equipment.



#### **CAUTION:**

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



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

#### IMPORTANT SAFFGUARDS

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

### READ AND FOLLOW ALL SAFETY INSTRUCTIONS

- Do not use outdoors.
- Do not let power supply cords touch hot surfaces.
- Do not mount near gas or electric heaters.
- Equipment should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.
- The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
- Do not use this equipment for other than intended use.

#### SAVE THESE INSTRUCTIONS



**Note:** The light source in this luminaire is not user-replaceable, and must be replaced only by a qualified technician. Contact ETC Customer Support for assistance.

#### **Environment**

The ColorSource Spot jr operates in ambient temperatures of 0°C–40°C and comes with a variable-speed fan. The ColorSourceSpot jr is for indoor use only.

- Maximum recommended ambient operating temperature: Ta = 40°C (104°F)
- Maximum anticipated external surface temperature at 40°C ambient: Tmax = 48°C (119°F)
- External temperatures after 5 minutes of full-brightness operation at 25°C (77°F) ambient: 42°C (108°F)
- External Temperature (steady state achieved) at 25°C (77°F): 42°C (108°F)

#### **Electrical**

- Operates between 100 V and 240 VAC at a frequency of 50/60 Hz.
- Maximum power consumption is 200 W.
- Up to 7 luminaires (15 A max) may be linked via power thru connector (8 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.
- Inrush:
  - 120 V: 35 A (first half-cycle)
  - 240 V: 45 A (first half-cycle)

#### **Typical Power Consumption**

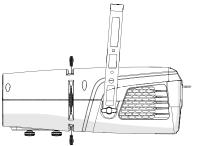
	100 V		120 V		230 V	
	Power	Current	Power	Current	Power	Current
Idle	2.1 W	0.05 A	2.6 W	0.05 A	2 W	0.06 A
Direct at Full	168 W	1.69 A	166 W	1.40 A	162 W	0.73 A

### Installation

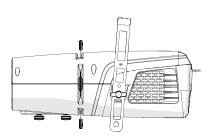
### Mounting

The ColorSource Spot jr ships with a standard yoke for mounting with a clamp. You can adjust the position of the yoke when necessary for low-clearance mounting. Mount the ColorSourceSpot jr in an orientation where the knobs are on the bottom. (This ensures that the accessory slot is oriented correctly, and ensures ease of movement for the Zoom knob and Focus knob.)



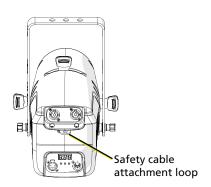


Low-clearance yoke position



#### Safety Cable

A safety cable (or other approved safety device) must be attached to the fixture. The attachment loop is on the rear of the fixture. 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 for data in and thru



**Note:** The ColorSource Spot jr is not self terminating. You must terminate the last fixture in line with a 120 Ohm resistor. To purchase a terminator, please contact ETC customer service and request part number SGE1507 (XLR terminator).

#### Set Up the Fixture

- 1. Plug the power cord into the powerCON In connector on the rear of the fixture.
- Make any power-thru cable connections prior to applying a power source.
- 3. Make any DMX connections, and if the fixture is the last in a DMX line, terminate the fixture. See *Connectors on the previous page*.
- 4. Plug the power cord into the power source.

#### **Power Up**

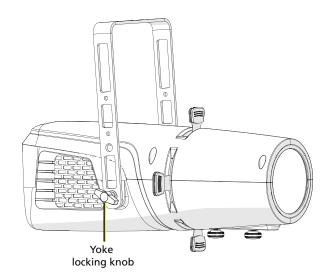
Press any button to wake the display. The display shows the DMX address. See *Set the DMX Address on page 7*.

You can press the **Mode** button to access the Presets/Sequences menu. See *Play Presets and Sequences on page 8*.

#### Adjust the Tilt

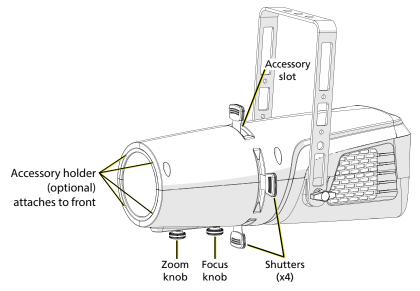
The fixture can be tilted up and down and rotated (panned) as needed.

- 1. Loosen, but do not remove the yoke locking knob.
- 2. Tilt the fixture to the desired angle.
- 3. Tighten the voke locking knob.



#### Adjust the Zoom and Focus the Fixture

Use the Zoom knob to adjust the 25°–50° zoom, and use the Focus knob to adjust the field. Because the Zoom knob and Focus knob are easiest to adjust when on the bottom of the fixture, avoid mounting the ColorSourceSpot jr in an orientation where the knobs are on top.



#### Accessories

You can use standard accessories, such as a gobo, in the accessory slot (see image above). You can also attach an accessory holder to the front of the fixture (order part number 7416K1001). After you attach the accessory holder, you can use it to secure accessories such as a top hat or half hat. See the ColorSource Spot jr datasheet at etcconnect.com for accessory information.

You can attach a ColorSource Relay to the yoke. See etcconnect.com for more information about ColorSource Relay.

#### Set the DMX Address

- Press any button to wake the display. The display shows the DMX address.
- 2. Use the **Up** and **Down** buttons to select the DMX address for the fixture

You can also use RDM for DMX addressing. See RDM Values on page 11.

#### Change the DMX Control Mode

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

- Press any button to wake the display. The display shows the DMX address.
- Press and hold the Mode button for 3 seconds. The display shows the current DMX control mode.
- 3. Press the **Up** button or **Down** button to change the DMX control mode:
  - **5ch**: 5-channel mode (intensity, red, green, blue, and strobe). This is the default mode.
  - **d r**: Direct emitter control (intensity, red, green, blue, indigo, lime, and strobe).
  - *Ich*: 1-channel mode controls the intensity of preset 1 (defaults to 3200 K White).
  - **r9b**: RGB mode (red, green, and blue).
- 4. Press the **Mode** button to confirm your selection.

The display will automatically return to the DMX address after 10 seconds of inactivity, and edits to the DMX control mode will not be saved. This cancels unsaved changes.

#### **DMX Control Channels**

DMX Channel	<b>5ch</b> (5 channel)	ط بر (Direct)	lch (1 Channel)	<b>-96</b> (RGB)
1	Intensity	Intensity	Intensity	Red
2	Red	Red		Green
3	Green	Green		Blue
4	Blue	Blue/Indigo*		
5	Strobe**	Lime		
6		Strobe**		

<sup>\*</sup>Original ColorSource Spot jr fixture uses blue in channel 4; Deep Blue fixture uses indigo in channel 4.

#### **Data Loss Behavior**

When DMX data is lost, the fixture does one of the following actions:

- If you selected a preset or sequence, that preset or sequence automatically plays.
- If no preset or sequence is active in the background, the fixture goes
  dark and the DMX start address flashes on the user interface.

#### Play Presets and Sequences

The fixture has twelve factory-configured presets and five factory-configured sequences. When you play a preset or sequence on a fixture, the same preset number or sequence number plays on any connected fixtures that are not receiving DMX. You can re-record presets and sequences through an RDM device or manually on the fixture. See *Re-record Presets on the facing page*.

- Press the **Mode** button to activate the Presets/Sequences menu. The last active preset or sequence plays automatically. (If DMX data is present, the current preset or sequence plays in the background and DMX data continues to take priority.)
- 2. Press the **Up** button or **Down** button as needed to scroll through the available presets and sequences.
- 3. To stop the selected preset or sequence, press the **Mode** button a second time. The display will revert to show the DMX start address.

<sup>\*\*</sup>Use DMX values of 0 or 255 for no strobe. Use values of 1-254 to increase the strobe rate from 1 per second up to 33 per second.

#### **Pre-configured Presets**

Preset	Name
1	3200 K White
2	5600 K White
3	Red
4	Green
5	Blue
6	Cyan

Preset	Name
7	Magenta
8	Yellow
9	Orange
10	Light Yellow
11	Light Blue
12	Light Pink

#### **Pre-configured Sequences**

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

#### **Re-record Presets**

- 1. Using DMX, set the desired levels for the new preset.
- 2. Press the **Mode** button to access the Presets/Sequences menu.
- 3. Press the **Up** button or **Down** button to navigate to the preset number that you want to re-record.
- 4. Press and hold the **Mode** button for 3 seconds to confirm the preset selection. The user interface will show a 3-second countdown. The preset number blinks once to confirm that the preset has been recorded.



**Note:** When the fixture is in Direct mode (**d r**) or 1-channel mode (**lch**), you cannot re-record presets.

When you re-record presets with the fixture in RGB mode (**r9b**), the intensity is set to full and the strobe is turned off.

See Change the DMX Control Mode on page 7.

#### Adjust the Intensity of Presets

- 1. Ensure that DMX data is not present.
- Press the Mode button to access the Presets/Sequences menu, and then press the Up button or Down button to select the preset that you want to edit.
- 3. Press and hold the **Mode** button for 3 seconds. The display shows **L=** followed by either an intensity level from **D 99** or **FL** for full.
- 4. Press the **Up** button or **Down** button to change the intensity level of the preset in real time.
- 5. Press the **Mode** button to confirm your selection and return to the Presets/Sequences menu.

The display will automatically return to the Presets/Sequences menu after 10 seconds of inactivity, and edits to the preset intensity will not be saved.

#### Lock the User Interface

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

- Press and hold the Up button and Down button simultaneously for 3 seconds. The display will show Loc to indicate that the user interface is locked.
- 2. To unlock the user interface, press and hold the **Up** button and **Down** button simultaneously for 3 seconds.

#### **Update 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 etcconnect.com.

When you add a ColorSource Spot jr fixture running a newer software version or update a ColorSource Spot jr fixture to a newer software version using UpdaterAtor, you can use that fixture to push the newer software version to all connected ColorSource Spot jr fixtures. However, you cannot use a ColorSource Spot jr fixture to update other ColorSource fixture models (and you cannot use other ColorSource fixture models to update ColorSource Spot jr fixtures).

- 1. Remove power and DMX In from the fixture that is running the software version that you want to push to other fixtures.
- 2. Press and hold the **Up** button and **Down** button simultaneously while restoring power.
- 3. The display will show **Udb rd d** to indicate the update mode is selected.

- 4. Press the **Mode** button to start the update process.
  - The display will alternate between UdL and the percentage complete while updating.
  - The fixture will reboot once the update is complete.
- 5. Reconnect DMX In on the fixture.

#### **Restore Factory Defaults**

Press and hold the **Mode** button, **Up** button, and **Down** button simultaneously for 5 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.

- **LAL**: Screen toggles between **LAL** 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.
- **DLP**: Screen toggles between **DLP** 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	Fixture	Value	Description
Manufacturer ID	All	0x6574	Electronic Theatre Controls
	ColorSource Spot jr	0x0219	
Model ID	ColorSource Spot jr Deep Blue	0x021A	
DMX Start Address	All	0x00F0	Range = 1–512
DMX Personality	All	0x00E0	1 = 5 Channel 2 = Direct 3 = 1 Channel 4 = RGB
Output Frequency	All	0x8123	0 = Standard (1.2 kHz) 1 = High (25 kHz)

### Quick Reference 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**		

<sup>\*</sup>Original ColorSource Spot jr fixture uses blue in channel 4; Deep Blue fixture uses indigo in channel 4.

#### **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.
- **DLP**: Screen toggles between **DLP** 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 RPP: Screen toggles between no and RPP to indicate that the upgraded fixtures have a software issue. Reload software to clear the error. If the error persists, contact ETC.

<sup>\*\*</sup>Use DMX values of 0 or 255 for no strobe. Use values of 1–254 to increase the strobe rate from 1 per second up to 33 per second.