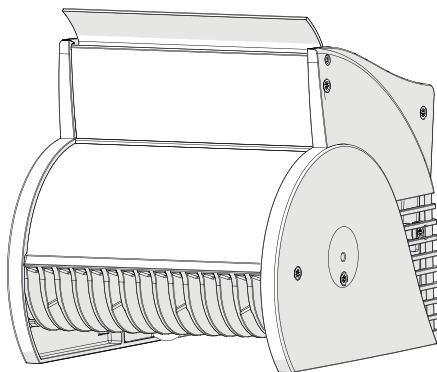# ETC Installation Guide
ColorSource® CYC v1.6

Overview

The ColorSource CYC is an affordable LED fixture that uses the RGBI-L (red, green, blue, indigo, and lime) color system to provide a rich, bright light.

Note: *Features described in this document require the latest version of software. For information on updating fixture software, see Updating the fixture software on page 9.*

Safety

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.

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Environment

The ColorSource CYC operates in ambient temperatures of 0°C–40°C.

Note: *The ColorSource CYC is for indoor use only.*

Note:
- *Maximum recommended ambient operating temperature: Ta = 40°C (104°F)*
- *Maximum anticipated external surface temperature at 40°C ambient: Tmax = 110°C (230°F)*
- *External temperatures after 5 minutes of full-brightness operation at 25°C (77°F) ambient: 49°C (119°F)*
- *External temperature (steady state achieved) at 25°C (77°F): 88°C (190°F)*

Electrical

- Operates between 100V and 240VAC at a frequency of 50/60Hz.
- Maximum power consumption is 160W.
- 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.
- Inrush:
  - 120V: 39A (first half-cycle)
  - 240V: 74A (first half-cycle)

Typical power consumption

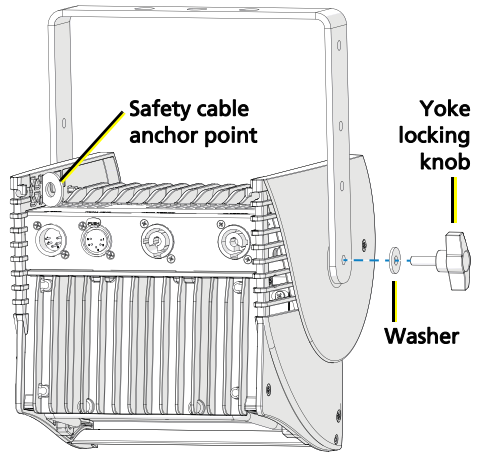|	100V	120V	230V
Idle Power/Current	1.66W/0.0414A	1.38W/0.04A	1.18W/0.0486A
Direct at Full/Current	133.7W/1.34A	132.6W/1.11A	130.4W/0.594A

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Installation

Mounting

The ColorSource CYC is designed for floor mounting. You can also use the yoke accessory (included) for top-hang pipe mounting with a C-clamp. Use the included yoke locking knobs and washers (see image at right) to attach the yoke accessory to the fixture. Tilt the fixture so that the base of the fixture is perpendicular to the cyclorama. See *Adjusting the tilt* on *page 4*.

Safety cable anchor point

Yoke locking knob

Washer

Safety cable

The safety cable (or other approved safety device) must be attached to the fixture when it is mounted using the optional yoke and C-clamp (see image above).

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 CYC 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.

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Setting up the fixture

1: Plug power cord into the powerCON In connector on the rear of the fixture.
2: 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 *page 3*.
4: Position the fixtures appropriately:
   - **Setback:** Minimum recommended distance from the cyclorama is 2 ft (.61 m).
   - **Spacing:** Position the fixtures arrayed with a 1.7-1 spacing for optimal coverage, with a maximum spacing of 2-1. For example, if fixtures are 2 ft (.61 m) from the cyclorama, position them a maximum of 4 ft (1.22 m) apart from each other.
5: Plug power cord into power source.

Powering up

1: Press any button to wake the display. The display shows the DMX address. See *Setting the DMX address* on *page 5*.
2: Press the Mode button to access the Presets/Sequences menu. See *Setting presets and sequences* on *page 7*.

Adjusting the tilt
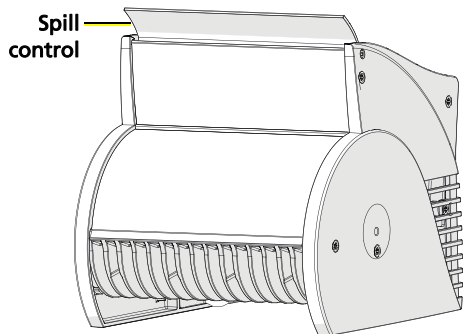
When pipe-mounting the fixture, tilt the fixture so that the base of the fixture is perpendicular to the cyclorama.

1: Loosen, but **do not remove** the yoke locking knobs.
2: Tilt the fixture so that the base of the fixture is perpendicular to the cyclorama.
3: Tighten the yoke locking knobs.

Adjusting the spill control
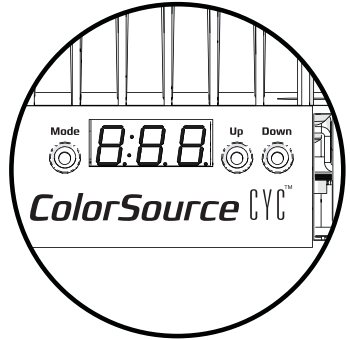
Adjust the angle of the spill control as needed.

Spill control

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User interface

The user interface allows you to set the
start address of the fixture, access the
stand-alone presets and sequences, and
set the DMX control mode.

- The DMX address will blink when
  no DMX is present and a preset or
  sequence is not active. The
  inactivity time-out is disabled
  while in a data loss state.
- After 5 seconds of inactivity when
  DMX is present, the display goes
  dark.

Mode button

Pressing the Mode button activates the Preset/Sequence 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

1:   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 10*.

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Changing the DMX control mode

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

1: Press any button to wake the display. The display shows the DMX address.

2: Press and hold the Mode button for 3 seconds. The display shows the current DMX control mode.

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, indigo, lime, and strobe)
   • **lch**: 1-channel mode controls the intensity of preset 1 (defaults to 3200K 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.

Note: *Direct mode (**d ir**) on the ColorSource CYC is not a calibrated mode. As a result, you may see discrepancies in color between fixtures. ETC recommends operating in one of the calibrated modes.*

DMX control channels

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

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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.

Re-recording a preset

1: Using DMX or RDM, set the desired levels.
2: Press the Mode button to access the Preset/Sequence menu.
3: Using the Up and Down buttons, 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 ir) 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 Changing the DMX control mode on page 6.

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 fixture, the fixture will hold its last look. When DMX is restored, the DMX takes priority.

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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

1: Ensure that DMX data is not present.

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.

3: Press and hold the Mode button for 3 seconds. The display shows L : ## where the number is an intensity level from $0-99$, or FL.

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

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

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

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Locking the user interface

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

1: Press and hold the Up and Down buttons 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 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 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.

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

2: Press and hold the Up and Down buttons simultaneously while restoring power.

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

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

Press and hold the Mode, Up, and Down buttons simultaneously for 5 seconds. The DMX start address will blink once to confirm that defaults have been restored.

Cleaning

If necessary, clean the mirror and diffusion surface with a blast of oil-free air or wipe with a clean, lint-free cloth. Isopropyl alcohol, distilled water, or a 50%-50% mixture of each can be used to clean the surface.

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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

Manufacturer ID: 0x6574 (Electronic Theatre Controls)

Model ID: 0x0215 (ETC ColorSource CYC)

Parameter	RDM PID	Value
DMX Start Address	0x00F0	Range = 1–512
Personality ID	0x00E0	1 = 5 Channel 2 = Direct 3 = 1 Channel 4 = RGB
Output Frequency	0x8123	0 = Standard (1.2 kHz) 1 = High (25 kHz)

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Quick reference

DMX control channels

DMX Channel	5ch (5 Channel)	dir (Direct)	1ch (1 Channel)	rgb (RGB)
1	Intensity	Intensity	Intensity	Red
2	Red	Red		Green
3	Green	Green		Blue
4	Blue	Blue		
5	Strobe	Indigo		
6		Lime		
7		Strobe		

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