ETC®

ColorSource Relay

100V 115/120V 230/240V

ColorSource® Series

GENERAL INFORMATION

The ColorSource Relay combines power sequencing and data distribution in a portable plug-and-play format. The ColorSource Relay comes in wireless- and wired-DMX input. By default, upon receiving data from the console its internal sequencing routine automates the process of staggering turn-on times across relays while it provides hardline DMX to connected fixtures.

APPLICATIONS

- Applications requiring distributed dimming and position flexibility:
  - Schools
  - Houses of worship
  - Small theaters
  - Event lighting
  - Automated lighting systems
  - Industrial productions
  - Rentals
  - Conference and exhibition centers
  - Multi-use venues such as schools and meeting rooms

FEATURES

- Input voltage: 90-250V; 47-63Hz
- Portable two-pole air-gap relay
- Auto sequencing: turn-on delay in each relay ensures that no two relays turn on at the same time across a system
- Data input options (choice per model):
  - Wireless- The relay recieves wireless DMX for relay activation on choice of five wireless IDs selected by thumbwheel and transmits DMX output on hardline connection while relaying RDM feedback over wireless and hardline
  - DMX (hardwire)- Recieves hardwire DMX (input) for relay activation with RDM feedback and configuration while passing through DMX/RDM on the five-pin XLR (output) connector
- USB master: Connect USB drive for software upgrades
- Integral Safety Connection
- Three mounting options: ETC LED yoke (included), universal yoke, or for use on desktop wall-mount

ORDERING INFORMATION

ColorSource Relay

MODEL	DESCRIPTION
CSR-D	ColorSource Relay DMX
CSR-W	ColorSource Relay Wireless Receiver
CSR-T	ColorSource Relay Transmitter

Accesories

MODEL	DESCRIPTION
CSR-PMT	Pipe Mount bracket*
CSR-YM	Universal Yoke mount kit
CSR-WM	Wall mount bracket
CST-Feet	Set of four rubber no-skid feet for desktop operation

***NOTE: PIPE CLAMPS SOLD SEPARATELY.**

SPECIFICATIONS

GENERAL

- CE Compliant; FCC approved
- RoHS compliant
- DMX512A and RDM compatible
- Wireless DMX broadcasts on 2.4GHz range using Spread Spectrum Frequency Hopping (SSFH)

MECHANICAL

- Case manufactured of molded black textured plastic
- Multiple yoke-fixing hole combinations for flexible mounting to the fixture
- Convection-cooled; operates without cooling fans
- Molded safety connection point
- Power-input and -output connectors arranged at 45-degree angle to the pipe for ease of tie-off
- Wireless model includes thumbwheel for selection of six wireless IDs or custom
- Wireless model includes 2dBA gain omnidirectional antennae
- Specialized directional and high-gain antennaes are sold separately

ENVIRONMENTAL

- Operating temperatures: 0-40°C; 32-104°F;
- Humidity: 5-95%, non-condensing
- Rated for Indoor use

ELECTRICAL

- Input power:
  - Max breaker sizing: 20A
  - Voltage ranges: 85-250V
  - Frequency range: 47-63Hz
- Consumes .25W during sleep mode (.6W for wireless)
- PowerCon compatible input and output connectors
- Relay cuts both poles for support of two pole 208V and Delta applications
- 2500V isolation between control and power components
- Wired DMX* In and Thru on five-pin XLR
- DMX thru is not self-terminating

*Represents 1/4 unit device load for purpose of calculating DMX daisy-chain device count (max 32 unit devices per DMX chain)

RELAY SPECIFICATIONS

- Switching current: 16A max at 40°C ambient
- Mechanical Endurance: 1,000,000 cycles
- Quiessent load: less than .65 Watts during sleep mode
- Electrical endurance
  - Resistive 100,000 cycles @16A; 250V
  - Inductive 100,000 cycles @6A; 277V
  - Motor 40,000 cycles @1.5HP; 250VAC
  - Ballast 20,000 cycles @1500W; 347V
  - Electronic 20,000 cycles @3300W @277V (12A)

WIRELESS DMX SPECIFICATION

- Range: 100 meters
- Max recievers per transmitter: 32
- RDM devices per transmitter: 32 recommended max
- Band: 2.4GHz Frequency Hopping Spread Spectrum
- Latency: 7mS
- Power: up to 72mW ETSI broadcast power
- Third-party compatibility: City Theatrical Show DMX
- Wireless ID #6 operates outside of the Wifi bands for areas of strong wifi usage

SPECIFICATIONS

CONTROL FEATURES

- DMX512A/RDM In and Thru via five-pin XLR connectors
- Supports up to 32 units on one DMX line
- Choice of relay mode:
  - Automatic
  - DMX level
  - System Power Command
- RDM (Remote Device Management) allows remote configuration of the following properties of the device, you can use any RDM controller such as ETC's Concert or Eos® software to configure these options.
  - **Read-only RDM items:** RDM Device Count; Type Description; Product Details list; Manufacturer; Defaults; Software Version Sensors list and values; Output Power (Instantaneous Voltage and Current w/min/max record)
  - **Editable RDM items:** Name; RDM Enable; DMX Address; Threshold; DMX Loss Time; Max Turn-On Delay; Relay Personality/Mode;
  - Wireless ID; Identify

PHYSICAL

ColorSource Relay Dimensions*

MODEL	HEIGHT		WIDTH		LENGTH	
	inches	mm	inches	mm	inches	mm
CSR DMX	2.00	51	5.00	127	3.31	84
CSR Wireless	4.32	110	5.00	127	4.39	111
CSR Transmitter	4.41	112	5.00	127	4.48	114

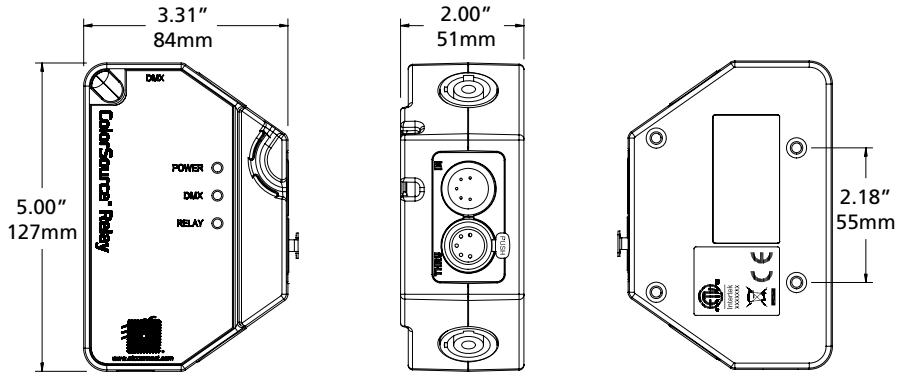
*Weights and dimensions typical

ColorSource Relay Weights*

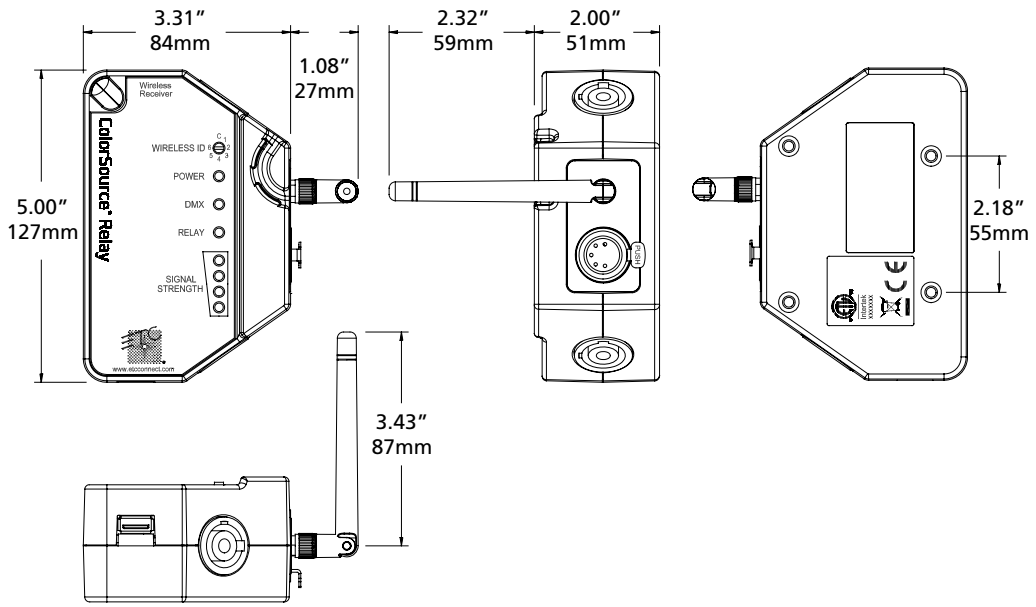
MODEL	WEIGHT		SHIPPING WEIGHT	
	lbs	kg	lbs	kg
CSR DMX	0.7	0.31	0.81	0.37
CSR Wireless	0.7	0.31	0.87	0.37
CSR Transmitter	1.1	0.5	1.2	0.54

*Weights and dimensions typical

COLORSOURCE RELAY WIRED DMX

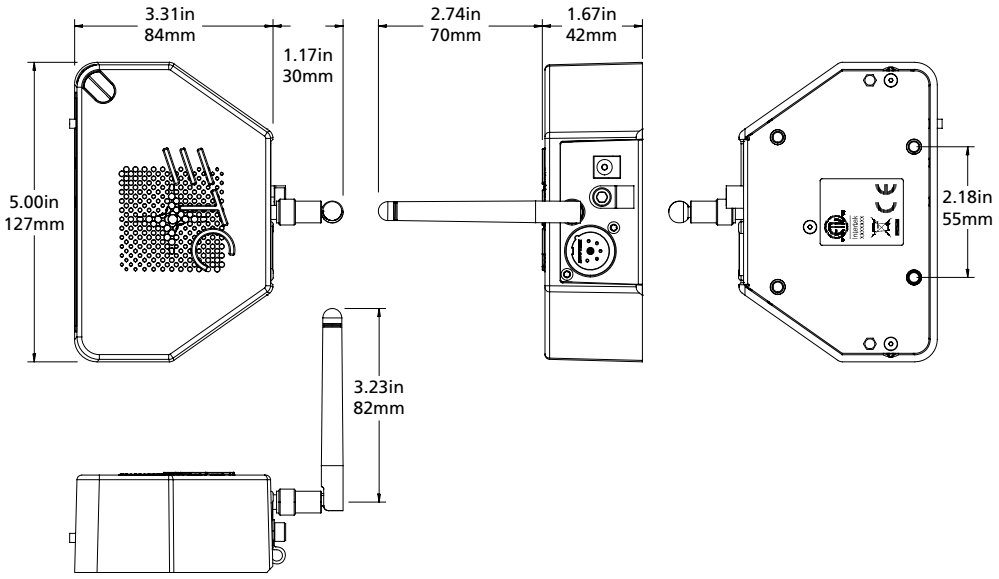


COLORSOURCE RELAY WIRELESS RECEIVER



PHYSICAL

COLORSOURCE RELAY TRANSMITTER



Corporate Headquarters • 3031 Pleasant View Rd, PO Box 620979, Middleton WI 53562 0979 USA • Tel +1 608 831 4116 • Fax +1 608 836 1736
London, UK • Unit 26-28, Victoria Industrial Estate, Victoria Road, London W3 6UU, UK • Tel +44 (0)20 8896 1000 • Fax +44 (0)20 8896 2000
Rome, IT • Via Pieve Torina, 48, 00156 Rome, Italy • Tel +39 (06) 32 111 683 • Fax +44 (0) 20 8752 8486
Holzkirchen, DE • Ohmstrasse 3, 83607 Holzkirchen, Germany • Tel +49 (80 24) 47 00-0 • Fax +49 (80 24) 47 00-3 00
Hong Kong • Room 1801, 18/F, Tower 1 Phase 1, Enterprise Square, 9 Sheung Yuet Road, Kowloon Bay, Kowloon, Hong Kong • Tel +852 2799 1220 • Fax +852 2799 9325
Web • www.etcconnect.com • Copyright©2015 ETC. All Rights Reserved. All product information and specifications subject to change. 4410L1002 Rev. B Printed in USA 10/2015