# ColorSource Series



Type(s)
Project
Date
Notes

#### GENERAL INFORMATION

ColorSource Relay combines power sequencing and data distribution in a portable plug-and-play format. Available with either City Theatrical Multiverse® wireless DMX technology or a hardwired DMX input, ColorSource Relay is ready to go with no programming required. If you want to personalize your setup, both models support RDM configuration and feedback.

ColorSource Relay is designed to conveniently mount to pipes, fixture yokes, or walls. As soon as the Relay begins receiving DMX signal, it switches on up to 16 A of supported fixtures. Auto-sequencing and zero-cross switching mitigate inrush nuisances automatically. When you are ready to call it a day, simply turn off your console and ColorSource Relay will automatically switch off after a user-changeable delay.

#### **APPLICATIONS**

- Anywhere you need to quickly and conveniently get power control and DMX to fixtures, hazers, or moving lights:
  - School theatres, cafetoriums, and gymnatoriums
  - Houses of worship
  - Theatres retrofitting to LED stage luminaires
  - Night clubs
  - Event lighting
  - Conference and exhibition centers
  - Hotel ballrooms

#### **FEATURES**

- CSR-M is compatible with the Multiverse SHoW Baby<sup>®</sup> right out of the box, just pair them and go!
- CSR-D provides DMX/RDM in-and-thru on 5-pin XLR
- Input voltage: 90–250 V; 47–63 Hz
- Two-pole air-gap relay supports 208 V and Delta power applications
- Auto sequencing: randomized turn-on delay in each relay ensures that no two turn on at the same time across a system
- Zero-cross switching minimizes inrush draw
- Choice of relay mode:
  - Auto Mode (default) switches on when DMX/RDM signal is detected; switches off after signal is no longer detected
  - DMX Mode switches on when DMX address is at or above 50%; switches off below 50%
  - RDM Mode switches on via RDM command; switches off via RDM command or power cycle
- RDM configuration via software such as ETC Concert or Eos
- Three mounting options: pipe, fixture yoke, and wall mount

#### ORDERING INFORMATION

#### **ColorSource Relay**

MODEL	PART NUMBER	DESCRIPTION
CSR-D	4410A1030	ColorSource Relay DMX
CSR-M	4410A1110	ColorSource Relay Multiverse Receiver

Note: Customers outside of North America should add "-EU" to the part number when ordering.

## Required Accessories (CSR-M only)

MODEL	PART NUMBER	DESCRIPTION
CT-5900	4360A1091	Multiverse SHoW Baby

Note: ColorSource Relay Multiverse Receivers are also compatible with the full range of City Theatrical Multiverse products.

## **Optional Accessories\***

MODEL	PART NUMBER	DESCRIPTION
CSR-PMT	4410K1001	Pipe mount bracket**
CSR-YM	4410K1002	Universal yoke mount kit
CSR-WM	4410K1003	Wall mount bracket
DPA-X	7410B7037-X	powerCON® to bare end
DPA-A	7410B7037-A	powerCON to Edison
DPA-B	7410B7037-B	powerCON to stage pin
DPA-C	7410B7037-C	powerCON to TwistLock
DPJ-5	7410B7020	powerCON male to powerCON female jumper - 1.5 m (5')
DPJ-10	7410B7010	powerCON male to powerCON female jumper - 3 m (10')

<sup>\*</sup>ColorSource Relay ships with a power cable. Please contact your local ETC representative for information on power cable options in your region.



<sup>\*\*</sup>Pipe clamps and safeties sold separately.

# **ColorSource Series**

## PRODUCT SPECIFICATIONS

#### **Electrical**

Voltage range	90–250 VAC; 47–63 Hz; supports 120/208 V and Delta power
Input / output method	Neutrik powerCON at 45 degrees
Max current	16 A
Isolation	2,500 V RMS
Quiescent power consumption	CSR-D: 0.25 W CSR-M: 0.65 W

## Relay

Switching	2-pole air gap, 16 A max
Mechanical endurance	1,000,000 cycles
Electrical endurance:	
Resistive	100,000 cycles @ 16 A, 250 V
Inductive	100,00 cycles @ 6 A, 250 V
Ballast	20,000 cycles @ 6 A, 250 V
Electronic	20,000 cycles @ 13 A, 250 V

## **Environmental**

Ambient operating temp	0°–40° C (32°–104° F)
Humidity	5–95%, non-condensing (not rated for outdoor use)

# **Physical**

Materials	Molded textured black plastic with integral safety connection point
Mounting options	Pipe, yoke, or wall; accessories required (not included)
Cooling	Convection cooled
IP rating	IP20
Included accessories	Power cable, 2 dBi gain omnidirectional antenna (CSR-M only)

## Warranty

2 years
---------

## **Regulatory and Compliance**

standards C	Conforms to UL 508 Certified to CSA C22.2 No. 14 ETLus Listed CE Compliant
-------------	---

## Control

Input method  5-Pin XLR In or Multiverse wireless  Output method  5-Pin XLR Out (not self-terminating)  Protocols  DMX512A, RDM, City Theatrical SHO'DMX Neo® and Multiverse  RDM configuration  RDM Enable  DMX Address (default: 512)
Protocols  DMX512A, RDM, City Theatrical SHO'DMX Neo® and Multiverse  RDM configuration  RDM Enable  DMX Address (default:512)
RDM configuration RDM Enable DMX Address (default:512)
DMX Address (default:512)
Threshold (default: 50%) Auto-Off/Sleep Timer (default: 5 min) Max Turn On Delay (default: 2 s) Relay Mode (default: Auto) Wireless SHoW ID (default: 1=201) Identify
Local control Wireless ID selection (CSR-M only)
Software update Local USB port

## Wired (DMX512A)

Range	500 m
Max receivers	DMX: 32
	RDM: 32

# Wireless (Multiverse, SHoW DMX Neo)

Band	2.400–2.480 GHz
Range	100 m indoors, 500 m line of sight (subject to conditions)
Broadcast power	100 mW EIRP
DMX latency	SHoW DMX Neo: 7 ms Multiverse: 4 ms
RDM performance	SHoW DMX Neo: DMX pause 100 ms Multiverse: non-interfering

## **Wireless Transmitter Feature Matrix**

Transmitter	Setup	Max CSR-M (DMX out only)	Max CSR-M (DMX/RDM)	
SHoW DMX SHoW Neo*	Firmware update**	No Limit	32	
Multiverse SHoW Baby***	Plug and play or RDM	No limit	585	
Multiverse Node***	RDM	No limit	585	
Multiverse Transmitter	RDM	No limit	5,000	

<sup>\*</sup>SHoW Neo devices include the legacy ColorSource Relay models CST-W (4410A1000) and CSR-w (4410A1010).

<sup>\*\*</sup>SHoW Neo setups with multiple transmitters may require additional changes. See the  $\underline{\text{ColorSource Relay Ouick Guide}}$  for more details.

<sup>\*\*\*</sup>The maximum device counts shown apply when all devices are in Multiverse mode. When using SHoW DMX Neo mode, all maximum device counts revert to those shown on the top row.

# **ColorSource Series**

## **ColorSource Relay Dimensions**

MODEL	HEIGHT		WIDTH		DEPTH	
	in	mm	in	mm	in	mm
CSR DMX	5.00	127	3.31	84	2.00	51
CSR Multiverse	5.00	127	4.39	111	4.32	110

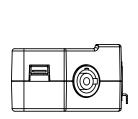
#### Weights and dimensions typical.

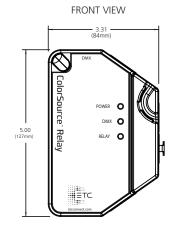
TOP VIEW

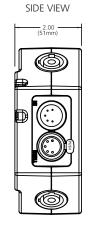
# **ColorSource Relay Weights**

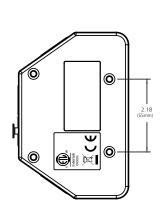
MODEL	WEIGHT		SHIPPING WEIGHT		
	lb	kg	lb	kg	
CSR DMX	0.75	0.34	0.85	0.4	
CSR Multiverse	0.75	0.34	0.85	0.4	

#### **COLORSOURCE RELAY DMX**



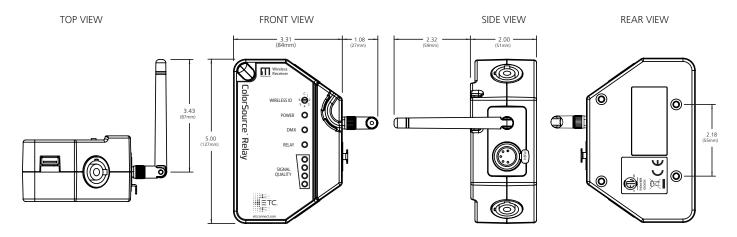






**REAR VIEW** 

#### **COLORSOURCE RELAY MULTIVERSE RECEIVER**





Corporate Headquarters • Middleton, WI USA

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

©2023 ETC. All Rights Reserved. All product information and specifications subject to change. Rev K 2023-07

\*Trademark and patent info: etcconnect.com/IP.• Third-party license agreement info: etcconnect.com/Iicenses