

Chroma-Q™ PS08

User Manual



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Chroma-Q reserves the right to change or make alteration to devices and their functionality without notice due to our on going research and development.

The Chroma-Q PS08 has been designed specifically for the professional entertainment lighting industry. Regular maintenance should be performed to ensure that the products perform well in the entertainment environment.

If you experience any difficulties with any Chroma-Q products please contact your selling dealer. If your selling dealer is unable to help please contact support@chroma-q.com. If the selling dealer is unable to satisfy your servicing needs, please contact the following, for full factory service:

Outside North America:

Tel: +44 (0)1494 446000
Fax: +44 (0)1494 461024
support@chroma-q.com

North America:

Tel: 416-255-9494
Fax: 416-255-3514
support@chroma-q.com

For further information please visit the Chroma-Q website at www.chroma-q.com.

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Approvals



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1. Product overview

The Chroma-Q PS08 supplies power and data to the Chroma-Q range of colour changers and compatible products (see below). A maximum capacity of 8PU (Power Units), it can be controlled remotely via ANSI E1.1 USITT DMX 512-A and delivers power and data via 2 XLR-4 outputs.

2. Operation

Power

Connect power through a fused male IEC chassis connector with input power of 100-240V, 50-60 Hz. The standard fuse is a 5x20mm 3A GMA. It provides 2 circuits of combined 24VDC.

Data

Data input ANSI E1.1 USITT DMX 512-A from an external source or lighting control console connects through a male XLR-5. A pass through connection is available on the female XLR-5.

Connect power and data from the female XLR-4 outputs of the PS08 to the colour changer units.

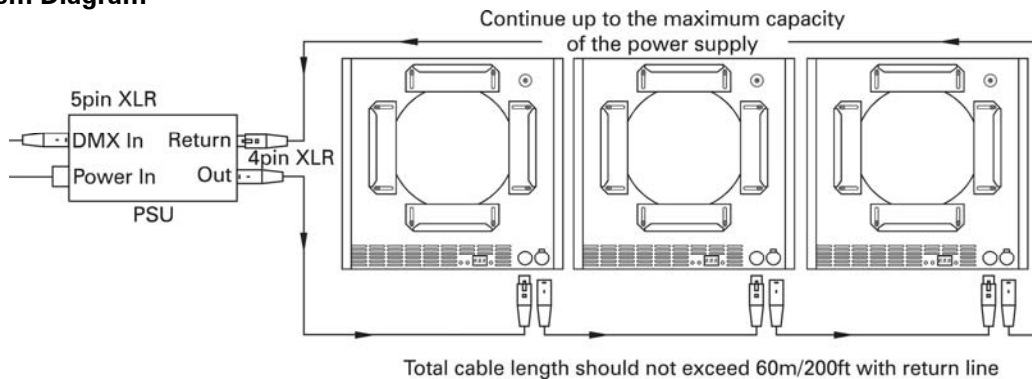
Termination

Data termination is built in at the input.

Indicators

The red LED indicates mains power is present and the green LED indicates a DMX signal is present.

System Diagram



The PS-08 has been designed for cable loops of up to 60m/200ft per output. Closing the loop with a return cable will enhance the stability of the power delivered and connected to your data line.

Load

To simplify the choice of power supply we use the "PU" (Power Unit) to calculate the load requirements of the Chroma-Q system. The PS08 will supply up to 8 PU's, so you can plug-in 8 Chroma-Q Plus (8 x 1PU = 8PU).

Power Units

Chroma-Q Product	Power Unit
Plus	1 PU
Broadway	1 PU
Cascade	1.5 PU
Universal	1.5 PU
M5	1.5 PU
M8	1.5 PU
Moving Mirror	1 PU
DMX Gobo Rotator	0.6 PU

Installation

The Chroma-Q PS08 is designed to be screwed on to set or hung from truss. The L-shaped bracket has multiple fixing slots to accept standard hook clamps or half couplers. Ensure adequate ventilation around the holes on the enclosures. Inadequate ventilation may result to premature failure of the unit.

Compatibility

The Chroma-Q PS08 is compatible with all Chroma-Q Colour Changers - Chroma-Q Plus, Original, Broadway, Universal, Cascade, M5, M8, Moving Mirror, Twin Gobo Rotator, Twin Effects Gobo Rotator, Twin DMX Gobo Rotator.

Control and Power Cables

The Chroma-Q utilises an XLR-4 pin cable system. This is used to supply power and data transfer. Pins 1 and 4 supply 24VDC power and pins 2 and 3 supply ANSI E1.11 USITT DMX512-A control protocol with a ground drain wire to the connector shell.

Only genuine Tourflex Datasafe Cable is recommended for use of the Chroma-Q colour changing system.

Damage will occur if the power connections short circuit to the data or ground/shield connections. When assembling XLR4-pin cables, heat shrink sleeves should be used on each individual data pin and the drain wire to prevent short circuits.

The XLR-4 cable is wired pin to pin, in the following format:

Pin #	Function
1	0V DC
2	Control data minus
3	Control data plus
4	+24V DC
Chassis	Ground bonding

The XLR-5 cable is wired pin to pin, in the following format:

Pin #	Function
1	Ground (screen)
2	Data minus
3	Data plus
4	Spare data minus
5	Spare data plus