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For further information please visit the Chroma-Q website at [www.chroma-q.com](http://www.chroma-q.com).

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# Quick Start Guide

## Magic Box™ PS12



For a full product manual please visit [www.chroma-q.com](http://www.chroma-q.com)

## 1. Product Description

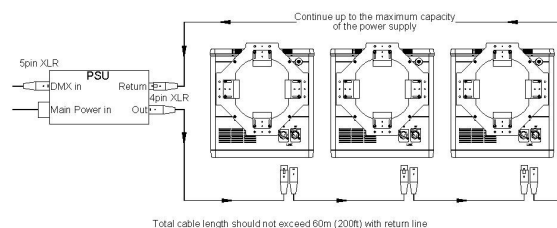
The Chroma-Q Magic Box PS12 supplies power and data to the Chroma-Q range of colour changers and compatible products (see below). A maximum capacity of 12PU (Power Units), it can be controlled remotely via ANSI E1.11 USITT DMX 512-A and delivers power and data via 3 XLR-4 outputs.

## 2. Operation

1. Connect power through a fused male IEC chassis connector with input power of 100-240V, 50 – 60 Hz. The standard fuse is a 5x20mm 6A GMA 125V. It provides 3 circuits of 24VDC.
2. Connect input data ANSI E1.11 USITT DMX 512-A from an external source or lighting control console through a male XLR-5. A pass through connection is available on the female XLR-5. Power and data outputs are from 3 individual female XLR-4 to the colour changer units.
3. The red LED indicates mains power is present and the green LED indicates a DMX signal is present.
4. 'PU' (Power Unit) is used to calculate the load requirements of the Chroma-Q system. The PS12 will supply up to 12 PU's, so you can plug-in 12 Chroma-Q Plus (12 x 1PU = 12PU).

**Note:** Data termination is built in at the input.

## 3. System Diagram



The PS12 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 and data delivered.

## 4. Compatibility

The Chroma-Q PS12 is compatible with all Chroma-Q colour changers – Chroma-Q Plus, Original, Broadway, Universal, Cascade, M5, M8, Mirror, Junior gobo rotator, Twin Effects gobo rotator, Twin DMX gobo rotator.

## 5. Power Units

Product	Power Unit	Product	Power Unit
Plus	1PU	M5	1.5PU
Broadway	1PU	M8	1.5PU
Cascade	1.5PU	Moving Mirror	1.5PU
Universal	1.5PU	DMX Gobo Rotator	.6PU

## 6. Control and Power Cables

The Chroma-Q utilises an XLR-4 pin cable system that 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 DMX 512-A control protocol with 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 XLR-4 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

## 7. Installation

Unique Magic Box interlocking enclosure facilitates easy rack mounting when used in pairs and easy truss mounting via captive nut insert. Rack mounting brackets are available in single unit and dual unit versions.

**Note:** for truss mounting, we recommend the use of a ½"-13UNC x ¾" long bolt to avoid damage.

## 8. Further Information

Please refer to the Chroma-Q Magic Box PS12 manual for more detailed information. A copy of the manual can be found at the Chroma-Q website – [www.chroma-q.com](http://www.chroma-q.com) – under Support.