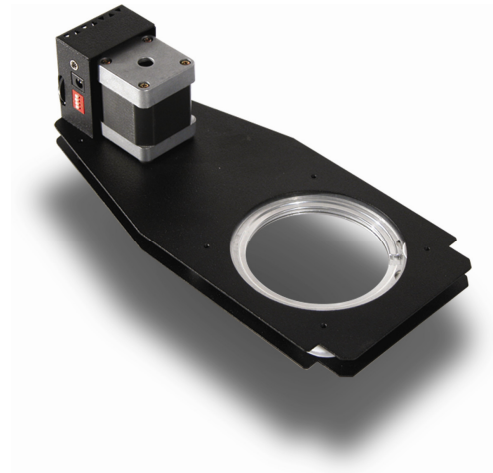


# Chroma-Q™

## Junior FX Gobo Rotators

## Twin FX Gobo Rotators

User Manual



**Chroma-Q™**  
BRILLIANT SOLUTIONS

Version 1.0 September 2012

PN: 146-0500



## Warranty Statement

Chroma-Q warrants to the original purchaser, with proof of purchase, that its delivered products shall be free from defects in material and workmanship under normal use for a period of 12 months from date of shipment.

Chroma-Q will repair, or at its option, provide an equivalent item or replace, the defective product during the stated warranty period. This warranty applies only to the repair or replacement of the product and only when the product is properly handled, installed and maintained according to Chroma-Q instructions. This warranty excludes defects resulting from improper handling, storage, installation, acts of God, fire, vandalism or civil disturbances. Purchaser must notify Chroma-Q in writing within 14 days of noticing the defect. This warranty excludes field labour or service charges related to the repair or replacement of the product.

The warranty contained herein shall not extend to any finished goods or spare parts from which any serial number has been removed or which have been damaged or rendered defective (a) as a result of normal wear and tear, willful or accidental damage, negligence, misuse or abuse; (b) due to water or moisture, lightning, windstorm, abnormal voltage, harmonic distortion, dust, dirt, corrosion or other external causes; (c) by operation outside the specifications contained in the user documentation; (d) by the use of spare parts not manufactured or sold by Chroma-Q or by the connection or integration of other equipment or software not approved by Chroma-Q unless the Customer provides acceptable proof to Chroma-Q that the defect or damage was not caused by the above; (e) by modification, repair or service by anyone other than Chroma-Q, who has not applied for and been approved by Chroma-Q to do such modification, repair or service unless the Customer provides acceptable proof to Chroma-Q that the defect or damage was not caused by the above; (f) due to procedures, deviating from procedures specified by Chroma-Q or (g) due to failure to store, install, test, commission, maintain, operate or use finished goods and spare parts in a safe and reasonable manner and in accordance with Chroma-Q's instructions (h) by repair or replacement of engines without factory training.

The warranty contained herein shall not apply to finished goods or spare parts which are sold "as is", as "second-hand", as used", as "demo" or under similar qualifications or to Consumables ("Consumables" is defined as any part(s) of goods or part(s) for use with goods, which part(s) of goods or part(s) for use with goods are consumed during the operation of the goods and which part(s) of goods or part(s) for use with goods require replacement from time to time by a user such as, but not limited to, light bulbs).

The warranty contained herein shall not apply, unless the total purchase price for the defective finished goods or spare parts has been paid by the due date for payment.

The warranty contained herein applies only to the original purchaser and are not assignable or transferable to any subsequent purchaser or end-user.

This warranty is subject to the shipment of the goods, within the warranty period, to the ChromaQ warranty returns department, by the purchaser, at the purchasers expense. If no fault is found, ChromaQ will charge the purchaser for the subsequent return of the goods.

Chroma-Q reserves the right to change the warranty period without prior notice and without incurring obligation and expressly disclaims all warranties not stated in this limited warranty.

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[www.chroma-q.com](http://www.chroma-q.com)

## Disclaimer

The information contained herein is offered in good faith and is believed to be accurate. However, because conditions and methods of use of our products are beyond our control, this information should not be used in substitution for customer's tests to ensure that Chroma-Q products are safe, effective, and fully satisfactory for the intended end use. Suggestions of use shall not be taken as inducements to infringe any patent. Chroma-Q sole warranty is that the product will meet the sales specifications in effect at the time of shipment. Your exclusive remedy for breach of such warranty is limited to refund of purchase price or replacement of any product shown to be other than as warranted.

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 Junior and Twin Gobo Rotators have 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](mailto: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](mailto:support@chroma-q.com)

**North America:**

Tel: 416-255-9494

Fax: 416-255-3514

[support@chroma-q.com](mailto:support@chroma-q.com)

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

Chroma-Q is a trademark, for more information on this visit [www.chroma-q.com/trademarks](http://www.chroma-q.com/trademarks).

The rights and ownership of all trademarks are recognised.

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## 1. Product overview

The Chroma-Q Junior and Twin are stand-alone gobo rotators, designed to accept standard sized glass or metal gobos. It features an advanced built-in effects system, allowing the user to create stunning kinetic effects. Refer to the specifications for details of gobo sizes.

Rotator type	Gobo Size & Quantity	Fixture
Junior	(× 1) 'M' size* Gobo	ETC Source 4 Junior
Twin	(× 2) 'B' size* Gobos	ETC Source 4, Altman Shakespeare, Strand SL, and Selecon Pacific

The units are supplied with a universal-input power supply to allow for use anywhere in the world.

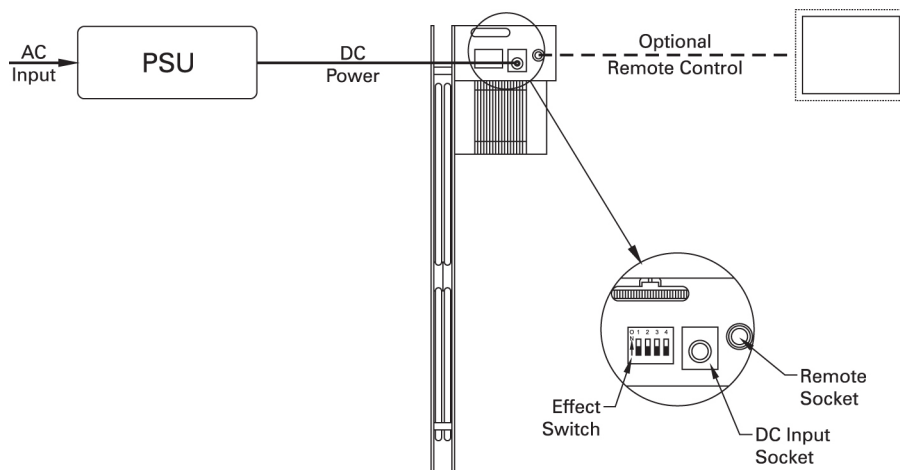
### Accessories

A remote speed control is available from your selling dealer.

## 2. Operation

- 2.1 Connections
- 2.2 Installation of the gobos
- 2.3 Operating the unit
- 2.4 Mounting the unit
- 2.5 Troubleshooting
- 2.6 Technical specifications

### 2.1 Connections



#### Power supply

- The power supply is designed for worldwide use. An IEC power cord (not supplied) should be connected to an appropriate AC electrical outlet rated for 100-240 V, 47-63Hz.
- Do not plug the power supply into a dimmer circuit as this could cause a non-warranty failure of the supply.
- Please ensure that the power supply is located a safe distance away from sources of heat.

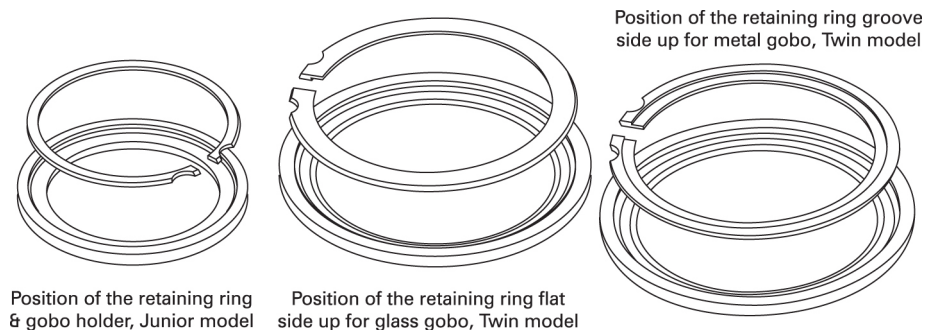
#### Optional remote

A remote speed control that replicates the potentiometer wheel is available from your selling dealer. The remote plugs into the side of the rotator. Ensure the plug for the remote is pushed fully into its socket and the cable is attached securely. Take care that the remote cable does not present a physical danger to personnel or equipment in the near vicinity.

## 2.2 Installation of gobos

The gobos are held firmly in place by sprung retaining rings. The gobo holders and rings are designed to hold both metal and glass patterns.

The retaining rings can be removed by placing a small tool in one of the grooves in the ring and prying the end of the ring out of the holder.



When replacing the retaining rings, start by inserting one end of the ring into the holder and then work around pushing the rest of the ring into its slot in the holder. Check the rings are fully seated in their slots before operating the unit.

### Metal Gobos

When installing metal gobos in the Twin rotator, the circular indentation in the retaining ring should be facing outwards.

### Glass Gobos

When installing glass gobos in the Twin rotator, the circular indentation in the retaining ring is used to accommodate the greater thickness of the glass gobo and therefore should be facing inwards.






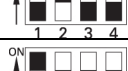




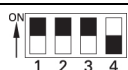


### Notes:

These Notes are intended to help the user, however no responsibility will be accepted for any actions arising from their implementation.

- When they are first used in a fixture, new metal gobos tend to warp, due to the heat generated in the fixture. Although this is normal, it can potentially cause problems when two gobos are contra-rotating closely together. It is suggested that new gobos are pre-heated in the fixture before actual use of the unit. The gobo shape can then be observed and corrected if necessary.
- When using etched glass gobos, the uncoated side of the gobo should always nearest to the fixture light source.

## 2.3 Operating the unit

The Chroma-Q Junior and Twin gobo rotators feature a wide range of effects, these can be selected by the 4 position dip switch. The effects can then be adjusted by the potentiometer wheel.

Effect Selection	Switch	Potentiometer Wheel
Gobo Rotation		Rotation speed (↻ fast-slow-↺ fast) 0.2 - 20rpm (approx.)
▲ (0-full speed) ↻		▲ Rate (↻ fast-slow-↺ fast)
'Clock' ↻		Sweep size (↻ 2°-45°-2°↺ fast)
▲▲ ↻		▲▲ Rate (↻ slow-fast-slow-↺)
'Advancing Two-Step' ↻ 50° - 30°↻		Step Speed (↻ fast-slow-↺ fast)
Random Shimmer/Shake		Shake speed (slow- fast)
'Pendulum' (≈ 45° swing)		Swing speed (slow- fast)
'Pendulum' (≈ 90° swing)		Swing speed (slow- fast)
'Pendulum' (≈ 180° swing)		Swing speed (slow- fast)
Gobo Shimmer/Shake		Shake speed (slow- fast)
Gobo Shimmer/Shake - 3 sec pause		Shake speed (slow- fast)
1 revolution + pause		Rotation speed (↻ fast-slow-↺ fast)
1 rev. ↻ + pause +1 rev. ↻		Rotation speed (↻ fast-slow-↺ fast)

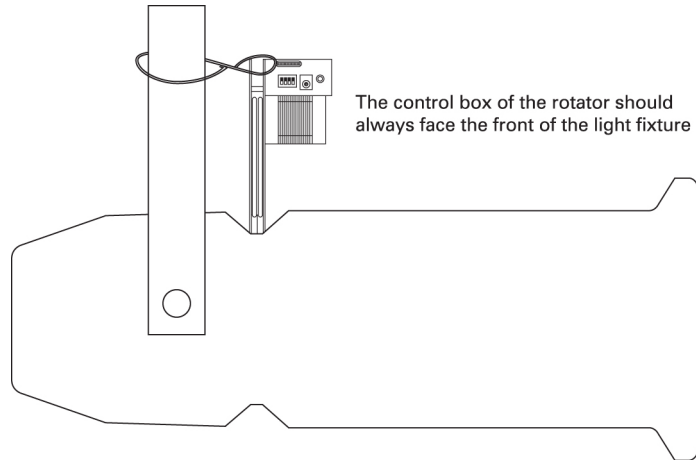
Effects Menu Legend	
↻	CW rotation
↺	CCW rotation
▲	Accelerate
▶	Decelerate



## 2.4 Mounting the unit

The unit should be inserted in the gobo gate or iris slot of the lighting fixture with the control-box housing facing the front of the fixture. Ensure the rotator is correctly seated in the iris slot before powering the lighting fixture. When properly seated, there should be no sideways movement of the gobo unit.

The Chroma-Q rotators are designed for mounting in an upright or side mounted position, with the top control section of the unit above or at the side of the fixture. Do not mount in an inverted position with the control-box of the unit below the fixture.



### Power supply

Please ensure that the power supply is located a safe distance away from any sources of heat, and does not present a physical danger to personnel or equipment in the near vicinity.

### Safety Wire

The Chroma-Q Junior and Twin rotators should always be used with a safety wire. There is a hole provided in the chassis for the attachment of a safety wire.

## 2.5 Troubleshooting

Troubleshooting is a process of elimination. First, rule out the other field factors (i.e. bad connections, faulty cables and power supplies). If an electronics problem is suspected try replacing the electronics card first. For technical advice and/or parts, please contact your selling dealer or the offices listed in this manual.

## 2.6 Technical specifications

### Junior

Dimensions: 252mm (l) × 79mm (w) × 66mm (d)  
9.92" × 3.12" × 2.58"

Weight: 0.80kg/1.75lb

Gobo Dimensions: **Outside dia.** **Thickness**  
'M' size 65.5mm/2.58" 1.1mm/0.043"

Mounting plate: ETC Source 4 Junior

### Twin

Dimensions: 249mm (l) × 119mm (w) × 69mm (d)  
9.79" × 4.68" × 2.72"

Weight: 0.95kg/2.00lb

Gobo Dimensions: **Outside dia.** **Thickness**  
'B' size metal 86mm/3.5" 0.2mm/0.008"  
'B' size glass mono 79.4mm/3.125" 1.1mm/0.043"  
'B' size glass multi 79.4mm/3.125" 2.3mm/0.009"

Mounting plate: ETC Source4, Altman Shakespeare, Strand SL & Selecon Pacific

### General



Gobo Media:	Metal or glass
Cooling:	Convection (natural)
PSU input Volts/Amps:	100-240V, 47-63Hz, @ 0.4 Amp (Max.)
Body material:	Steel
Body color:	Black high temperature paint (other colours available, POA)
Power input connectors:	DC power jack (5.5mm OD/2.0mm ID)
Remote speed connector:	3.5mm mini-jack
Approvals:	EN55103-1 and 2, IEC 60950, 3rd Edition (1999), FCC Part 15 and ICES-003 Class A



### 3. Drawings

#### 3.1 Outside dimensions

