Source Four MultiPAR[™] CE ^{User Manual}



CE

DECLARATION OF CONFORMITY

We, Electronic Theatre Controls, Europe Limited Unit 5, Victoria Industrial Estate, London W3 6UU United Kingdom declare under sole responsibility that the product:

Product name:	Source Four MultiPAR
Product type/model:	MultiPAR 1x12 & MultiPAR 1x3
Lot:	n/a
Batch / Serial number:	n/a
Item numbers:	one of each type
To which this declaration relate	es is in conformity with the following Standards:
EN60598-1:2000	Luminaires, General requirements and tests
EN60598-17:1990	Luminaires, Particular requirements, Specification for luminares for stage lighting, television, film and photographic studios (outside and indoor) - equiv. BS 4533-102.17:1990
Following the provisions of EU	LV Directive(s) 73/23/EEC
EMC: None	Unit is EMC benign
London, United Kingdom	Adam Bennette
(Place of issue)	(Name of authorised person)
25th Feb 2003	Adam Bennette
(date of issue)	(signature of authorized person)
Electronic Theatre Controls Europe Ltd.	Registered office:

Electronic Theatre Controls Europe Ltd. Unit 5, Victoria Industrial Estate, Victoria Road, London W3 6UU U.K. Telephone (+44) 181 896 1000 Fax (+44) 181 896 2000 Registered office: Grant Thornton House Melton St., London, NW1 2BW, England Registered in England No.3057796 VAT No. 662 9487 90

Source Four MultiPAR CE guidelines

The Source Four MultiPAR CE is intended for professional use only. **Read the entire User Guide before using equipment.**

Please note the following safety precautions:

- Do not mount the Source Four MultiPAR CE on or near a flammable surface.
- Use the Source Four MultiPAR CE in dry locations only, where humidity does not exceed 90 percent.
- The fixture is for indoor use only and is not intended for outdoor use.
- For temporary installations, mount and support the Source Four MultiPAR CE only by the primary suspension yoke holes. Suspend the fixture from a hook clamp or a stand mount, using a securely tightened steel bolt (up to Ø 12 mm), flat washer and locking washer.
- In addition to primary suspension, attach a safety cable (Model 400SC) or chain to the secondary suspension point on the Source Four MultiPAR CE.
- If the external cable is damaged, it shall be replaced by ETC or our service agents.
- Always hang the Source Four MultiPAR CE with the colour frame held securely behind the MultiPAR retaining channel.
- Always replace the lamp if it becomes damaged or thermally deformed.
- · Lighted objects at this distance or greater will not exceed 90°C temperature from projected light.
- · Disconnect the unit from power before all cleaning and maintenance.
- The Source Four MultiPAR CE is suitable for indoor use with a maximum ambient temperature: Ta=45°C
- Maximum exterior surface temperature: T_{max}=200°C
- A multilingual label sheet is included with this manual. Affix the label of the appropriate language over the existing warning label on the extension yoke. Do not cover ETC trademark or CE mark.
- The Source Four MultiPAR CE contains a CE safety screen that covers the lens in the event of accidental discharge. Do not remove the safety screen.
- Keep the luminaire at least 0.7 meters away from anything it is shining on.



Wiring and power information

A plug of at least 2.5 amp (220/240V) rating should be attached to the fixture's mains lead. The wires in the mains lead are 1.5mm² each and coloured in accordance with the following code:

Green and Yellow:	Earth
Blue:	Neutral
Brown:	Live





IG: The CE Source Four MultiPAR must be earthed.

Current rating:	240V/2.5 amp maximum
Operating fre-	50/60Hz
quency:	00/00112

Power requirements

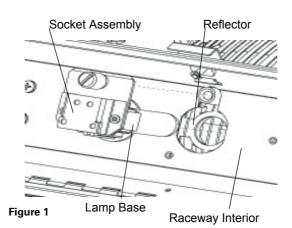
The Source 4 MultiPAR CE has several different standard, as well as custom configurations of electrical circuitry. Make certain you are familiar with the wiring of the MultiPAR and that you have sufficient power (dimmer capacity) to operate the fixture. Make sure that the total wattage used by your MultiPAR does not exceed the power available by dimmer.

Installing the HPL lamp

Always replace the lamp if it becomes damaged or deformed. Use care installing the lamp. Improperly installed lamps will cause premature lamp and socket failures.

- 1. Disconnect power before installing the lamp.
- 2. Let the lamp cool before replacing.
- 3. Loosen the captured screw on the back of the raceway and open the raceway lid.
- 4. The raceway lid is designed to remain open using gravity. If lid swings shut, reposition the MultiPAR unit using the hanging irons or trunnions to lock the unit in position.
- 5. Remove lamp socket by loosening the gnurled knob and removing the socket assembly. Remove the HPL lamp from its box, holding it by the base.
- 6. Insert lamp base into pin holes in socket assembly.
- 7. Push down on the lamp base until the lamp is firmly inserted. Make sure that the lamp is fully seated, with the bottom of the lamp heat sink flush to the socket assembly surface.
- 8. To reinstall the socket assembly, insert until the heat sink base rests flush against the reflector, then tighten the knurled bolt to secure the socket assembly in place. See (*Figure 1*)

Note: To avoid premature lamp failure, do not touch the lamp glass with your fingers. If you touch the lamp during installation, clean it carefully with rubbing alcohol and a clean, lint-free cloth before operation.



HPL lamps

Lamp code	Watts	Volts	Color temp	Ave rated life
HPL 375/230X	375	230	3,000°K	1,000 hours
HPL 375/240X	375	240	3,000°K	1,000 hours
HPL 575/230	575	230	3,200°K	400 hour
HPL 575/230X	575	230	3,050°K	1500 hours
HPL 575/240	575	240	3,200°K	400 hour
HPL 575/240X	575	240	3,050°K	1500 hours
HPL 750/230	750	230	3,200°K	300 hours
HPL 750/230X	750	230	3,050°K	1500 hours
HPL 750/240	750	240	3,200°K	300 hours
HPL 750/240X	750	240	3,050°K	1500 hours



WARNING: Use of other lamps may pose a safety risk, damage the fixture, and will void your warranty.

Lens identification

Lenses for the Source Four MultiPAR CE come in four versions. The type or beam spread can be identified by the lens texture.





Very narrow spot Clear glass 15° Round beam shape



Medium flood Fewer facets, sized 6 x 22mm 21° x 34° Oblong beam shape

Narrow spot Stipple glass (slight diffuse texture) 19° Round beam shape



Wide flood Many facets, sized 6 x 12mm 30° x 51° Oblong beam shape

Accessories

	ETC Part #
Colour frame 19 cm sq./17cm inside diameter)	7061A3047
Safety cable (79 cm)	7060A1022
Very Narrow Spot lens	7061A4002
Narrow Spot lens	7061A4003
Medium Flood lens	7061A4005
Wide Flood lens	7061A4006
Set of four Source Four PAR lenses (VNSP, NSP, MFL, WFL)	7061A1013

Changing Source Four MultiPAR CE lenses

Removing a lens

- 1. Disconnect power from the fixture before attempting to remove or install a lens.
- 2. Source Four MultiPAR CE lenses become hot while in operation. Let the fixture cool before handling the lens.
- 3. Place the fixture on a flat, stable work surface.
- 4. Tilt the front of the fixture down at least 45 degrees.
- 5. Press one (or both) of the spring clips with your finger(s) to release the lens. (Figure 2).
- 6. Allow the lens to drop forward from under the clip.
- 7. When the lens drops, remove your finger, maintain pressure on the clip while sliding your finger(s) off the clip. Allow the lens to slide forward until you can grip it securely.
- 8. Carefully remove the lens from the fixture.



Figure 2

Installing a lens

Never operate the Source Four MultiPAR CE without a lens in place.

Change lenses if they become cracked or badly scratched

- 1. Position the fixture with the front of the unit (the lens side) facing you, and tilted up slightly (*Figure 3*).
- 2. Hold the lens by the edge, and position it so the convex side faces the back of the fixture (*Figure 4*). Installing the lens with the convex side out will not impair the optics, but it will make removing the lens more difficult.
- 3. From the top of the fixture, slide the lens behind one of the lens clips and into the cast metal lens channel.
- 4. Gently push the top of the lens inward until it snaps behind the other lens clip



Figure 3

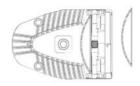


Figure 4

Colour frames and accessories

The Source Four MultiPAR CE does not use colour frame clips. However, both sides of the fixtures have a bent sheet metal retainer to hold the gel frames in place. One side of the fixture has a piece of spring steel that serves as a gel frame spring. The spring steel pushes the gel frame into the Source Four MultiPAR CE. ETC identifies the side of the Source Four MultiPAR CE that holds the colour frame as the colour frame retaining channel.

<u> Note:</u>

Use only colour frames or accessories with 17 cm inside diameter.

- 1. Insert the colour frame or accessory by pressing it against the spring. (Figure 5)
- 2. Once the edge of the frame has cleared the retaining channel, allow the edge of the frame to spring into the channel, thereby securing it.
- 3. Make certain the color frame is secured in the Source Four MultiPar CE opening by the spring clip before operating.

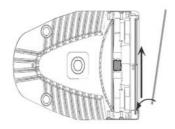


Figure 5

Cleaning the reflector

Do not use glass or window cleaners on the reflector. Chemicals in the cleaners will harm the reflective coating. Do not use paper towels or harsh materials to wipe the reflector. These materials can scratch the surface of the reflector.

- 1. Unplug the fixture before attempting to clean the reflector.
- 2. Remove the lamp before attempting to clean the reflector.
- 3. Remove the lens so you can access the reflector from the front of the fixture. See *Removing a lens* on page 6.
- 4. Remove dust with a blast of oil free air, or wipe with a clean, soft, lint-free cotton cloth. If this is sufficient to remove dust, go to step 7. Otherwise, continue to step 5.
- 5. Dampen a clean, soft, lint-free cotton cloth with a mild, soapy water solution and gently wipe the reflector.
- 6. Remove any soapy water residue with a clean, soft, lint-free cotton cloth dampened with water.
- 7. Reinstall a lens before using the fixture.

Adding hanging brackets and clamps to Source Four MultiPAR CE

<u>Note:</u> The hanging irons attach to the Source Four MultiPAR CE. The clamp is bolted to the other end of the hanging iron and then secured to the hanging pipe.

- 1. Loosen and remove the bolt and washer in the end casting.
- 2. Attach the hanging iron to the Source Four MultiPAR CE with the bolts and washers provided. (*Figure 6*) Be certain to attach the longer section of the hanging iron to the MultiPAR and the shorter section to the c-clamp.
- 3. Make sure the smaller length of the hanging iron is secured over the MultiPAR fixture body when attaching it to the unit.
- 4. The clamp attaches the fixture to the mounting pipe.
- 5. Tightly fasten the clamp to the yoke with the provided yoke bolt and lock washer.
- 6. Place the clamp on mounting pipe, then tighten the pipe bolt to secure it.
- 7. Tighten the pan screw to lock the fixture into position.

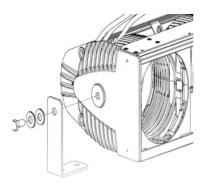
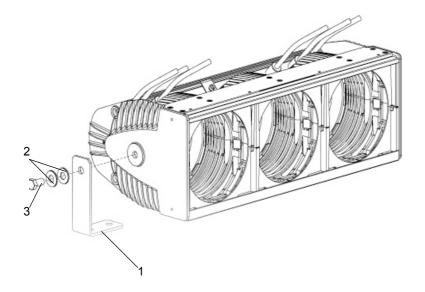


Figure 6

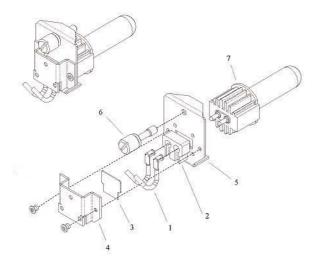
Spare parts list



Source Four MultiPAR CE Final Assembly

Reference Number	Part Number	Description	Quantity Required
1	7061A3051	Hanger Bracket, MultiPar	2
2	HW587	1/2" washer	4
3	HW5138	1/2 -13 x 1" HH bolt	2
not pictured	7061A1030	Source 4 Par safety screen	varies
not pictured	7061A3050	Trunnion Bracket, Multi- Par	2

Spare parts list



Lamp Burner Assembly

•			
Reference Number	Part Number	Description	Quantity Required
1	W330-01	TP22 CLCLM assembly, 1, 5 mm Wire, Silver con- tact	2
2	W330-02	TP22 CLCM assembly, ceramic	1
3	W330-03	TP22 CLCM assembly, mica	1
1-6	7061A2027	Lamp Burner Assembly 90 cm	1
1-6	7061A2028	Lamp Burner Assembly 150 cm	1
1-6	7061A2029	Lamp Burner Assembly 210 cm	1
6	7061A3061	Thumbscrew	1
7	various	HPL lamp	1

Circuit wiring configurations for the MultiPar-12.

The Source 4 MultiPAR CE can be wired for 3 circuit or 4 circuit configurations. Before changing the configuration, make sure that you have sufficient power (dimmer capacity) to operate the fixture. There are four terminal blocks inside the unit to place wiring. Each terminal block has four lead connection points. All of the hot and neutrals are labeled with a number for your convenience.

Three circuit configuration

- 1. Disconnect power before changing the wiring.
- 2. Loosen the captured screw on the back of the raceway and open the raceway lid.
- 3. In the first terminal block on the left, insert the wires labeled 1,4,7,10.
- 4. In the second terminal block from the left, insert the wires labeled 2,5,8,11.
- 5. In the third terminal block from the left, insert the wires labeled 3,6,9,12
- 6. The fourth terminal block from the left is not used and is left empty.See Figure 7 for detail.



Figure 7

Four circuit configuration

- 1. Disconnect power before changing the wiring.
- 2. Loosen the captured screw on the back of the raceway and open the raceway lid.
- 3. In the first terminal block on the left, insert the wires labeled 1,5,9.
- 4. In the second terminal block from the left, insert the wires labeled 2,6,10.
- 5. In the third terminal block from the left, insert the wires labeled 3,7,11.
- 6. In the fourth terminal block from the left, insert the wires labeled 4,8,12. See *Figure* 7 for detail.



Americas = 3030 Laura Lane, P.O. Box 620979, Middleton, Wisconsin 53562-0979 USA = Tel: +608 831 4116 =+800 688 4116 = Fax: +608 836 1736 = +800 555 8912 = Email: (US) mail@etcconnect.com Europe = Unit 5, Victoria Industrial Estate, Victoria Road, London W3 6UU, UK = Tel: +44 (0)20 8896 1000 = Fax: +44 (0)20 8896 2000 = (UK) mail@etceurope.com Asia = Room 605-606, Tower III Enterprise Square, 9 Sheung Yuet Road, Kowloon Bay, Kowloon, Hong Kong = Tel: +852 2799 1220 = Fax: +852 2799 9325 = (Acia) mail@etceurope.com

Asia = Room 003-000; Tower in Enterprise Square, 9 Sheung Yuer Road, Rowborn Bay, Rowborn Bay,