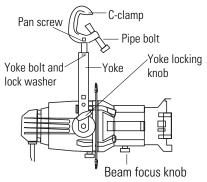
Source Four Lamp housing Reflector housing **User Manual** Retainer bolt Shutters Pattern holder slot Drop-in iris slot Yoke locking knob Gel frame Barrel rotation knob Retaining clip Lens locations Barrel Note: Lenses are not interchangeable. Gel frame holder Beam focus knob 19° (6x16) 36° (6x9) Lens tube 26° (6x12) 50° (4.5x6)



Adjusting the C-clamp

The C-clamp attaches the fixture to the mounting pipe and allows you to adjust the position of the fixture once it is mounted.

- 1. Tightly fasten the C-clamp to the yoke with the yoke bolt and lock washer provided.
- 2. Place the C-clamp on mounting pipe, then tighten the pipe bolt to secure it.
- 3. Loosen the C-clamp pan screw and rotate the yoke to the desired position.
- 4. Tighten the pan screw to lock the fixture into position.

Adjusting the yoke

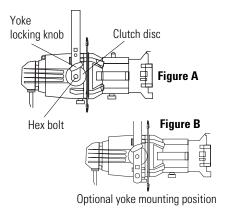
To adjust the fixture's position, loosen the yoke locking knob and tilt the fixture to the desired position. Retighten the yoke locking knob to secure it.

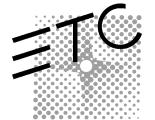
Source Four's two-position yoke allows you to modify the overall height of the fixture in the yoke.

1. To change the yoke position, remove the yoke locking knob, then remove the hex bolts on either side of the fixture.

Note: Removing the hex bolts releases a nut in the yoke channels on each side of the fixture. If the nuts come out, you may need to remove the barrel to replace them.

- 2. Move the fixture to the desired position. (See Figure B)
- 3. Replace and tighten the hex bolts and the locking knob.





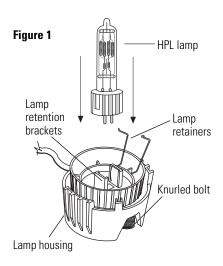
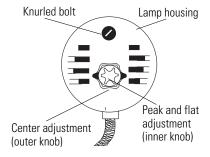
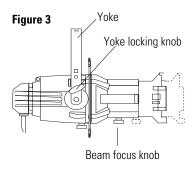


Figure 2





Fixture Version	Soft Focus Tube Back	Sharp Focus	Soft Focus Tube Forward
5°	~	~	V
10°	~	~	V
19°	×	~	V
26°	×	~	V
36°	~	V	X
50°	×	~	V

✓ = better gel life

x = worse gel life

Installing the HPL lamp

Important: Verify that the HPL lamp you use is suitable for your facility's voltage. 115-, 120-, 230-, and 240-volt HPL lamps are available. Operating HPL lamps above their rated voltage reduces lamp life and can cause premature lamp failure. The lamp must be installed before you use the fixture. See page 4 for list of available HPL lamps.

Replace the lamp if it becomes damaged or thermally deformed.

- Disconnect the unit from power before installing the lamp.

 Warning: Let lamp cool before changing.
- 2. Loosen the knurled bolt on the back of the lamp housing and pull the housing straight out.
- 3. Remove the HPL lamp from its box, holding it by the base.

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

- 4. Line up the flat sides of the lamp base with the retention brackets on either side of the socket. See figure 1.
- 5. Push down on the lamp base until the lamp seats firmly. (The top of the lamp base will be even with the top edges of the retention brackets when it is properly installed.)

Caution: Improperly installed lamps cause premature lamp failure and socket problems.

- 6. Press lamp retainers down across lamp base and clip securely.
- 7. To reinstall the lamp housing, line up the side fins and the bolt hole, then tighten the knurled bolt to secure the housing.

Aligning the lamp

Use the two concentric knobs on the rear of the lamp housing to align the lamp. The outer knob centers the lamp within the reflector and locks it in position; the inner knob fine tunes the field. See figure 2.

Important: Power must be on to align the lamp.

- 1. Unlock the outer knob by turning it counterclockwise one turn.
- Gently push the outer knob from side to side and up and down until the lamp is centered in the field.
- 3. Once the lamp is centered, tighten the outer knob to lock it in place.
- 4. Turn the inner knob right or left to adjust for optimum flat field.

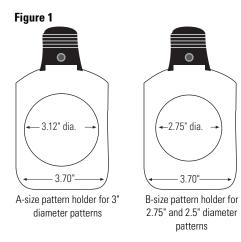
Focusing the beam

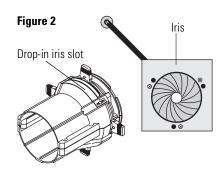
- Loosen the beam focus knob on the underside of the barrel. See figure 3.
- Slide the lens tube forward or backward to achieve the desired beam edge. (For optimum gel life, set soft focus by moving the lens as shown on table to left.)
- 3. Once the fixture is focused, tighten the beam focus knob.

Gel notes

For best results, always use a high quality, high temperature color medium. ETC does not guarantee performance with low temperature, saturated color gels.

ETC's Source Four gel frame holder extender may help increase your gel life. Contact ETC or your dealer for ordering information.





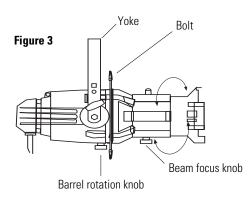
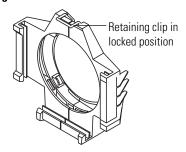


Figure 4



Shaping the beam

You may shape the beam with the shutters, a pattern, an optional drop-in iris, and/or by rotating the barrel.

Pattern projection

The pattern holder slot is on the top side of the barrel, immediately in front of the shutters. It accommodates A-size, B-size and glass pattern holders.

Note: Because the Source Four aperture is three inches wide, ETC recommends using A-size patterns for maximum pattern effectiveness.

Use an optional donut in the accessory holder to enhance pattern projection. Donut diameter may be 2.5 to 2.75 inches.

Drop-in iris slot

The drop-in iris slot is on the top side of the front barrel, immediately in front of the pattern holder slot. It accommodates either a drop-in iris or a motorized pattern device. When it is not in use, a small sheet metal cover secured with two Phillips screws prevents light leakage. To install an iris, follow these steps:

- 1. Use a Phillips screwdriver to loosen the screws on the drop-in iris slot cover. Do not remove the screws.
- 2. Slide the cover completely forward, exposing the slot.
- Insert the iris or motorized pattern device. If you install an iris, the flat side must be toward the shutters and the iris handle should extend out of slot.
- Slide the slot cover back toward the shutters until it meets the iris handle. Leave enough space to move the iris handle. Tighten the screws.

Rotating the barrel assembly

1. Loosen the barrel rotation knob directly behind the shutters on the underside of the reflector housing.

Caution: Do not remove the barrel rotation knob.

- 2. Rotate the barrel to the desired position (up to 25° in either direction from centered position).
- 3. Once the barrel is positioned, tighten the barrel rotation knob to lock it into position.

Gel frame retaining clip

The gel frame holder is equipped with a spring-loaded retaining clip that prevents gel frames and accessories from falling out of the holder.

Important: Hang Source Four with the gel frame retaining clip in the locked position before using the fixture.

- Release the retaining clip by pushing it sideways. The retaining clip pops open.
- 2. Insert the gel frame.
- 3. Press the retaining clip down until it locks.

Important: Lock retaining clip before you use the fixture.

Cleaning 19° , 26° , 36° , and 50° glass lenses

Caution: Change lenses if they become visibly damaged to the extent that their effectiveness is impaired, for example, by cracks or deep scratches.

- Remove the beam focus knob at the bottom of the barrel. Remove the lens tube from the barrel.
- Dampen a clean, lint-free cloth with vinegar or household ammonia. You may also use water, but it will leave spots which you may remove by polishing the lens gently with a clean, dry cloth.

Warning: Never use glass and window cleaner or any abrasive material to clean the lens. Glass and window cleaners will stain the lens surface. Abrasive materials (such as steel wool) will damage the lens.

- 3. Starting from the center, gently wipe the lens.
- Slide the lens tube back into the barrel with the color frame retaining clip on top. Replace beam focus knob.

Cleaning the reflector

Remove the lens tube. Remove dust from the reflector with a blast of oil-free air, or wipe with a clean, lint-free cloth. If this is not sufficient, follow the instructions below. You will need a Phillips screwdriver to complete this procedure.

Warning: Unplug the fixture before attempting to clean reflector.

Warning: Do not use glass and window cleaners on the reflector. Chemicals in these cleaners will stain the reflector.

- Unscrew and remove the barrel rotation knob located at the bottom of the barrel. Use a Phillips screwdriver to undo retainer bolt located at the top of the reflector housing.
- Grasp the barrel and rotate it 45° in either direction. Carefully remove the barrel from the reflector housing and set it aside.
- Dampen a clean, lint-free cloth with alcohol or distilled water. (Alcohol is recommended.)
- 4. Gently wipe the reflector.
- Insert the barrel into the reflector housing with the pattern slot on top. (Line up the triangles on both parts.)
- Pressing in gently, rotate the barrel 45° clockwise until it settles into position. Rotate the barrel counterclockwise 45°. The barrel should be firmly attached and the triangles should line up again.
- 7. Replace the barrel rotation knob and tighten the bolt.

Cleaning 5° and 10° polymer lenses

Remove dust with a blast of oil-free air. If this is not sufficient, follow the instructions below. You will need a Phillips screwdriver.

Caution: Handle polymer lenses by their edges only. Never rub anything dry on a polymer lens. Do not use glass and window cleaners on the lens.

Caution: Change lenses if they become visibly damaged or deformed to the extent that their effectiveness is impaired, for example, by cracks or deep scratches.

- Remove the beam focus knob. Gently pull the lens tube out of the barrel.
- Use a Phillips screwdriver to remove the brackets that hold the lens in. Remove the lens from the lens tube.
- 3. Dip lens in clean alcohol/water mixture (10% alcohol).
- 4. Use a moistened nylon bristle brush to wash the smooth side in a straight motion.
- 5. Use the same moistened brush to clean the ridged side, following the ridges, without hand pressure.
- 6. Dip lens in clean alcohol/water mixture (ten percent alcohol).
- 7. Use air gun to dry the smooth surface.
- 8. Use air gun to dry the ridged surface. Use air stream to move liquid away from you. Continue to remove as much liquid as possible.
- 9. Inspect the lens for dirt. Repeat the entire process, as necessary.
- 10. Set the lens back in the lens tube with the ridged side facing the front of the tube. Replace the brackets.
- 11. Slide the lens tube back into the barrel with gel frame retainer on top. Replace beam focus knob.

HPL lamps

Lamp code	Watts	Volts	Color temp	Ave rated life
HPL 375/115	375	115	3,250° K	300 hour
HPL 375/115X	375	115	3,050° K	1,000 hour
HPL 550/77	550	77	3,250° K	300 hour
HPL 550/77X	550	77	3,050° K	2,000 hour
HPL 575/115	575	115	3,250° K	300 hour
HPL 575/115X	575	115	3,050° K	2,000 hour
HPL 575/120	575	120	3,250° K	300 hour
HPL 575/230	575	230	3,200° K	400 hour
HPL 575/240	575	240	3,200° K	400 hour

Important: Do not use lamps other than the HPL in Source Four fixtures.



Electronic Theatre Controls

North America 3030 Laura Lane • Middleton, Wisconsin 53562 • USA • Tel: (+1) 608 831 4116 • Fax: (+1) 608 836 1736 Europe 5 Victoria Industrial Estate • Victoria Road • London W3 6UU • Tel: (+44) 181 896 1000 • Fax: (+44) 181 896 2000

Asia Room 605-606 • Tower III • Enterprise Square • 9 Sheung Yuet Road • Kowloon Bay • Hong Kong • Tel: (+852) 2799 1220 • Fax: (+852) 2799 9325

World Wide Web: http://www.etcconnect.com • Email: mail@etcconnect.com