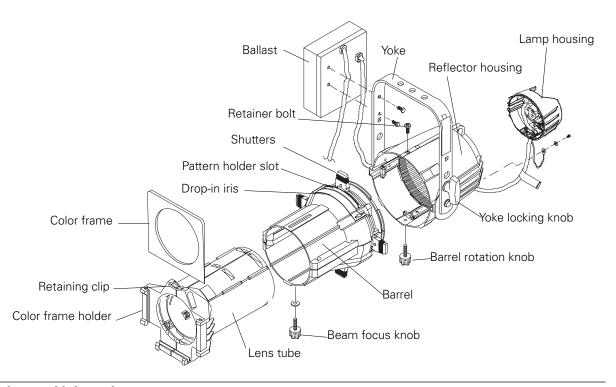
## Source Four<sup>™</sup> HID



#### Lamp type and general information:

Do not use lamps other than the following lamp type in Source Four HID fixtures. *Use of lamps other than specified below will void UL/cUL safety compliance and your warranty*.

- Source Four HID is suitable for damp locations
- Can be canopy mounted
- No recessed mounting

Caution! Source Four HID is NOT dimmable. Dimming will damage ballast and void warranty.

Lamp Type	Manufacturing Codes	Watts	Base	Bulb	LCL	Ave.	Initial	Color
						Hrs.	lumens	temp
Ceramic Metal Halide	CDM-T 150W/830	150	G12	T6	56mm	9000	14000	3000°K
	CDM-T 150W/942	150	G12	T6	56mm	9000	12700	4000°K
	MD150T6/U/G12/830	150	G12	T6	56mm	9000	14000	3000°K
	MBI150/T/30	150	G12	T7	57mm	6000	11500	3000°K
	MBI150/T/40	150	G12	T7	57mm	6000	11250	4000°K

Table 1: HID lamp reference

#### **Ballast information**

Caution! The Source Four HID cannot be dimmed.

- Acceptable voltage is 120V (+/- 10%) 50/60HZ only.
- Operating current of 1.5 Amps
- Inrush current of <14 Amps
- Room ambient temperature should not exceed 104°F (40°C)
- Lamp ignition voltage is 4.5Kv, non-hot restrike.
- Ballast case temperature should not exceed 167°F (75°C)
- The ballast is attached to the Source Four yoke by two screws, non-remotable.



#### Installing or replacing the lamp

A lamp must be installed before you use the fixture.

Note: Verify that the lamp you intend to install is correct.

Replace the lamp if it becomes damaged or thermally deformed.

WARNING! Let the lamp cool before replacing.

- 1. Disconnect power to the Source Four HID before installing the lamp.
- 2. Loosen the knurled bolt on the back of the lamp housing and pull the housing out.
- **3.** Holding it by the base, remove the lamp from its box.

**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. Insert lamp base into socket assembly as show in Figure 1.
- 5. Push down on the lamp base until the lamp seats firmly.

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

**6.** Reinstall the lamp housing by aligning the bolt hole and tightening the knurled bolt

#### Focusing the beam

- 1. Loosen the beam focus knob located under the barrel as shown in Figure 2.
- 2. Slide the lens tube forward or backward to achieve the desired beam edge.
- **3.** Once the fixture is focused, tighten the beam focus knob.

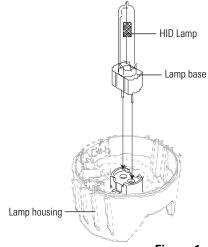
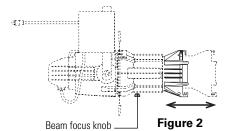


Figure 1



#### Color frame retaining clip

The color frame holder is equipped with a spring-loaded retaining clip that prevents color frames and accessories from falling out (**Figure 3**).

**WARNING!** Make sure all color frame accessories are locked in position with the retaining clip before hanging the Source Four HID.

- 1. Release the retaining clip by pushing it sideways while gently pulling backwards.
- 2. Insert the color frame.
- 3. Lock the retaining clip by pushing sideways while gently pushing forward.

# Retaining clip in the locked position Figure 3

#### Shaping the beam

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

#### **Pattern projection**

The pattern holder slot is on the top side of the barrel and in front of the shutters. It accommodates A-size, B-size and glass pattern holders (**Figure 4**).

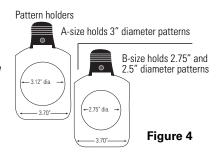
**Note:** Because the Source Four HID gate is 3.12 inches. ETC recommends using A-size patterns for maximum pattern effectiveness.

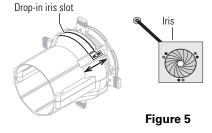
Use an optional donut in the accessory holder to enhance pattern projection. Donut diameter range should be 2.5 to 2.75 inches.

#### Drop-in iris slot

The drop-in iris slot is located on the top of the barrel and in front of the pattern holder slot. It accommodates either a drop-in iris or a motorized pattern device. When the slot is not in use, a small sheet metal cover secured with two Phillips screws prevents light leakage (**Figure 5**).

- **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 to expose the slot.
- **3.** Insert the iris or motorized pattern device. For an iris, install the flat side toward the shutters and make sure that the iris handle extends from the slot.
- **4.** Slide the slot cover back toward the shutters until it meets the iris handle. Leave enough space to move the iris handle.
- **5.** Secure the drop-in iris slot cover by tightening the screws.





#### Rotating the barrel assembly

- 1. Loosen the barrel rotation knob directly behind the shutters on the underside of the reflector housing (Figure 6). Do not remove the barrel rotation knob.
- 2. Rotate the barrel to the desired position (up to 25° in either direction from the centered position).
- 3. Once the barrel is positioned, tighten the barrel's rotation knob to lock it into position.

### € 13:----Figure 6 Barrel rotation knob

#### C-clamp mounting instructions (C-clamp not included)

The C-clamp attaches the fixture to the mounting pipe and allows you to adjust the position of the fixture once it is mounted (Figure 7).

- 1. Tightly fasten the C-clamp to the yoke with the provided yoke bolt and lock
- 2. Insert and tighten the Pan screw.

Note: A Canopy mounting option is also available.

#### 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 (Figure 7).

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



The Source Four HID provides multi-positioning capabilities within its yoke for overall fixture height and angle.

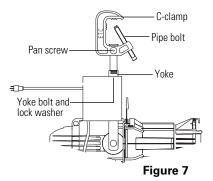
#### Setting the fixture height within the yoke

The Source Four HID has a two-position yoke for modifying the overall height in which the fixture is mounted (Figure 8). To change the height position, do the following:

- 1. Remove the yoke locking knobs, washers, and hex bolts from either side of the fixture.
- 2. Raise or lower the fixture to the desired position within the yoke.
- 3. Replace the yoke's hex bolts, washers, and locking knobs.
- 4. Tighten the yoke knobs to secure the fixture in position.

#### Setting the angle within the yoke

- 1. Loosen the yoke locking knobs. (Do not remove them.)
- 2. Tilt the fixture to the desired position (Figure 9).
- 3. Tighten the yoke locking knobs to secure the fixture in position.



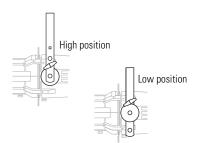
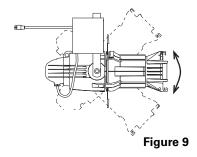


Figure 8



#### Cleaning

ETC offers the following recommendations when cleaning and inspecting lenses and reflectors:

Do not use glass or window type cleaners on lenses (glass or polymer) or reflectors.

Do not use abrasive materials such as steel wool.

Replace lenses if they contain visible damage (cracks or deep scratches) that may impair their effectiveness.

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

 Remove the beam focus knob at the bottom of the barrel. Remove the lens tube from the barrel.

**Note:** It is not necessary to remove the lens for cleaning. If you do remove the 19°, 26°, or 50° lens, make sure the identifying paint dot is not removed during cleaning. See "Lens Locations" below.

- Dampen a clean lint-free cloth with vinegar or household ammonia. You may also use water, but it will leave spots that can be removed by gently polishing the lens with a clean and dry cloth.
- 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 the beam focus knob.

#### Cleaning 5° and 10° polymer lenses

To quickly clean the 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.

- 1. Remove the beam focus knob. Gently pull the lens tube out of the barrel.
- 2. Use a Phillips screwdriver to remove the brackets that hold the lens in place. Remove the lens from the tube.
- 3. Dip the lens in a clean alcohol/water mixture (10% alcohol).
- Use a moistened nylon bristle brush to wash the lens' smooth side in a linear (non-circular) motion.
- 5. Use the same brush to lightly wash the lens' ridged side by following its ridges.
- 6. Dip the lens in a clean alcohol/water mixture (10% alcohol).
- **7.** Dry the smooth and ridged surfaces with an air gun. Make sure that the air flow moves liquid away from you.
- 8. Inspect the lens for dirt. Repeat steps 3-7 if necessary.
- **9.** Set the lens back in the lens tube with the ridged side facing the front of the tube. Replace the lens brackets.
- 10.Slide the lens tube back into the barrel with gel frame retainer on top. Replace beam focus knob.

#### **Lens locations**

The different lenses used in the Source Four are not interchangeable. When installing a new lens, refer to the adjacent illustration for proper placement. Also, remember to have the lens' color designator dot facing the color frame.

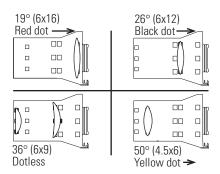


Figure 10

#### Cleaning the reflector

**WARNING!** Disconnect the power to the fixture before attempting to clean the reflector.

To quickly clean the reflector, remove the lens tube and clean the dust from the reflector with a blast of oil-free air. You may also wipe the reflector with a clean lint-free cloth. If either method is not sufficient, follow the instructions below. You will need a Phillips screwdriver to complete this procedure.

- Remove the barrel rotation knob located at the bottom of the barrel. Use a Phillips screwdriver to remove the retainer bolt located on top of the reflector housing.
- Rotate the barrel 45° in either direction. Carefully remove the barrel from the reflector housing.
- Dampen a clean lint-free cloth with alcohol or distilled water. (Alcohol is recommended.)
- 4. Gently wipe the reflector.
- **5.** Insert the barrel into the reflector housing with the iris/pattern slot on top. (Line up the triangles on both parts.)
- **6.** While pressing in gently, rotate the barrel 45° clockwise until it sets into position. Then, 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 retainer bolt.

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Specifications subject to change. Source Four™ HID is protected by US patent numbers 5,345,371, 5,446,637 and 5,544,029.

Part number: 7060M1016.

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Revised 03/00.