

**LED21P
MAINTENANCE & OPERATING INSTRUCTIONS - SAVE THESE INSTRUCTIONS**

- CAUTION:** Read and understand these entire instructions before using this fixture.
- CAUTION:** Always wear protective eyewear and gloves when servicing this fixture for any reason.
- CAUTION:** Disconnect fixture from power supply before servicing fixture.
- CAUTION:** Allow fixture to sufficiently cool before servicing fixture.
- CAUTION:** Do not allow materials to come in contact with the LED.
- CAUTION:** This fixture is a source of intense heat and is not meant for residential use. There is a risk of fire or personal injury, therefore avoid contact by persons or materials when in use.
- CAUTION:** Always insure that handles and knobs are locked and secured to prevent accessories, pattern holders, or the like from falling out, and never add more than 1/4 pound to the front accessory holder.
- CAUTION:** Do not attempt to install anything other than Times Square Stage Lighting approved accessories to this fixture.
- CAUTION:** Do not block any vent holes/slots in this fixture, or use this fixture in any way other than that for which it was intended. Do not use in wet locations.
- CAUTION:** Use only with a grounded power supply. Adhere to the voltage rating as indicated on the fixture label.

SECTION 1 : MAINTENANCE (PLEASE REFER TO THE DIAGRAM BELOW)

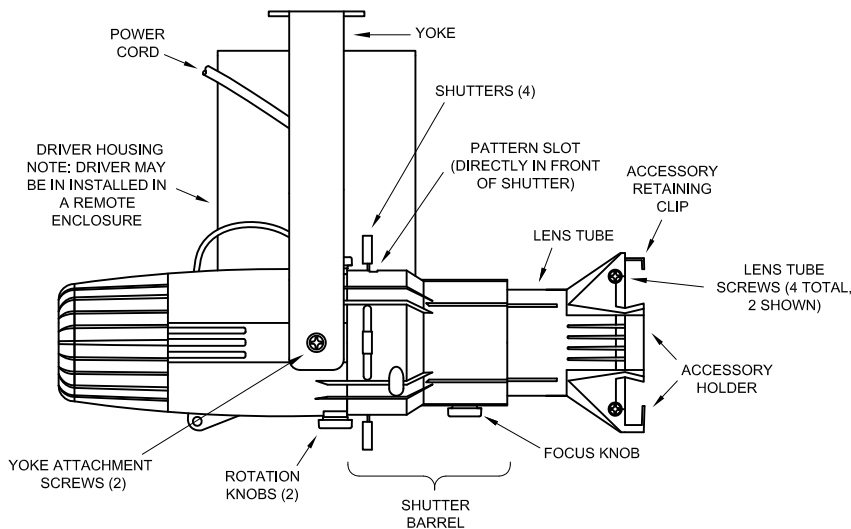
LED Module and Driver Replacement

The LED Module is designed to last years before needing replacement. It is best to consult the factory if the LED is not performing properly, or not working at all. If it is determined that the driver is not functioning properly, it is best to consult the factory before replacement.

Lens Care

NOTE: Lenses should be cleaned from time to time as dirt and other contaminants will accumulate and adhere to the lens surfaces, thereby adversely affecting performance. Never use soap, glass cleaner or window cleaner as they can leave trace amounts of residue that can bond to the lens surface. Never use abrasive materials to clean lenses as they can scratch the surface and thereby adversely affect performance.

- 1) Remove the lens tube by removing the front focus knob, and set the knob aside. The lens tube is constructed of 2 halves held together by 4 screws. Remove these 4 screws and set them aside. This will give you access to the lenses.
- 2) The lenses do not need to be removed for cleaning. Clean lenses with a soft, clean lint free cloth soaked in denatured alcohol (methylated spirits), then wipe dry with a soft, clean lint free cloth.
- 3) Reinstall the 4 screws, and reinstall the lens tube. Remember to secure the lens tube with the focus knob.



SECTION 2: OPERATION (PLEASE REFER TO THE DIAGRAM BELOW)

Lens Focusing

NOTE: It is recommended that any patterns be removed and the 4 shutters be pulled outward, extended away from the fixture body before proceeding. When aiming an energized fixture, always use caution as the fixture can become very hot in a very short time.

- 1) Aim the fixture at the target. NOTE: If the fixture will not stay in a particular position, you may need to tighten the 2 yoke attachment screws with a Phillips screwdriver.
- 2) Loosen the focus knob until the lens tube moves freely. While observing the projected beam, adjust the lens tube until the desired look of the beam's edge, whether it be sharp and clean or soft and fuzzy, has been achieved. NOTE: Beam sizes are determined by the beam angle of the lens tube. Lens tubes are rated by and marked with beam angles (19°, 26°, 36° and 50°). Larger beam angles result in wider beams. NOTE: The Spec Sheet for this fixture (available at tslight.com) will assist in determining which beam angle will be required for certain results.
- 3) Tighten the lens tube knob until snug (do not overtighten this knob).

LED Module Alignment

The LED Module is pre-aligned at the factory and needs no adjustment.

Adjusting the Shutters

- 1) Loosen the 2 rotation knobs about 3 full turns each. CAUTION: The shutter barrel can fall free from the fixture at this point and until Step 3 is completed!
- 2) Rotate the shutter barrel until the shutters are in proper alignment with the target. CAUTION: The shutter barrel can fall free from the fixture at this point and until Step 3 is completed!
- 3) Tighten the 2 rotation knobs until snug (do not overtighten these knobs).
- 4) Simply push the four shutter handles inward and rotate them to a position that frames or cuts off the light beam as desired. Repeat Steps 1 through 3 if required.
- 5) Repeat the Lens Focusing procedure (above) to fine tune the look of the beam edge on the projected shutter edges, whether it be sharp and clean or soft and fuzzy.

Pattern Holder Installation and Adjustments

- 1) Install the pattern holder with pattern installed fully into the pattern slot.
- 2) Repeat the Lens Focusing procedure (above) to fine tune the look of the beam edge on the projected pattern.

Safety Cable Installation

Install the safety cable such that the cable threads through the yoke and around the pipe to which the fixture is attached. The cable should then be latched to itself forming a complete loop, encircling the pipe and the yoke.

C-clamp Installation

Use a C-clamp to attach the fixture to a pipe, making sure that the C-clamp is sized correctly for the pipe to be used. The C-clamp attaches to the yoke via the 1/2" mounting hole located in the center of the yoke. Make sure that any washers are located between the C-clamp bolt head and the yoke. This same hole can be used to mount the fixture to a side arm, table base, or stand.

Installing Accessories into the Accessory Holder

NOTE: The accessory holder is located on the fixture front and will accept color frames, filters, etc.

- 1) Squeeze and flip the accessory retaining clip up 45°.
- 2) Install accessories such that the left, right and lower tabs fully capture the accessories installed.
- 3) Squeeze and flip the accessory retaining clip down 45° such that the lip of the retainer is fully extended beyond the fixture front and completely overlaps the accessories, securely holding them in place.

CAUTION: Do not add more than 1/4 pound to the front of this fixture.

