Film-Tech

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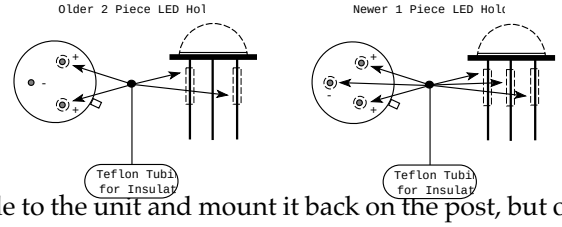
AT System IR to Visible RED LED Replacement Instructions

This Kit Contains:

1) Visible RED Replacement LED
1) 6 ohm 25 Watt Current Limiting Resistor for Power Supply
3) New Teflon Insulation Tubes
1) Pack Heat Sink Compound

1) Remove The LED Arm from the Soundhead by removing the 2 screws that hold the Arm to the Post , Next carefully unplug the cable going to the LED. Take the arm Assembly over to a clean work area and remove the old LED from the arm and Replace it with the new VISIBLE RED LED. Refer to diagram below pertaining to the new Teflon Insulation Tubes and Heat Sink Compound.

BE SURE TO USE NEW HEAT SINK COMPOUND WHEN REPLACING THE LED



2) Reconnect the LED Cable to the unit and mount it back on the post, but only hand tighten the screws at this time .

3) Open up the power Supply and replace the existing 4 ohm 25 watt resistor with the new 6 ohm 25 watt resistor. This will give the correct Current range for the RED LED

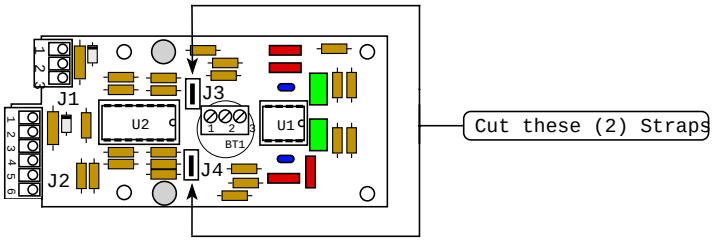
4) Set the operating current of the LED AS LOW AS POSSIBLE by turning the Trimmer pot All the way down on the DC Power Board for the LED. (for older supplies that had 2 small boards it will be the one closest to the field termination strip.)

5) Power up the supply, If the LED does not light the polarity of the LED Cable must be Reversed at the Power Supply.

PLEASE NOTE THAT IF THE POLARITY WAS REVERSED ON THE LED IT WILL NOT CAUSE ANY DAMAGE TO IT.

6) On older systems the Jumpers on the Solar cell pre-amp Board must be removed to set the Pre-amp in the high gain stage.

SOLAR CELL PRE-AMP JUMPER LOCATIONS



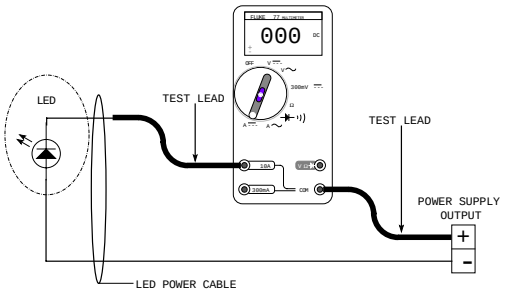
7) Realign the LED Bracket to the Solar Cell Pickup Lens by running DOLBY TONE TEST FILM in the Projector. Slightly loosen the LED Bracket Mounting Screws and move the Assembly UP and Down until you achieve the maximum output shown at the processor. Then adjust Solar Cell Pre-Amp board level trimmers for the proper Dolby tone level as indicated by the Meter card of the processor.

Maintenance

Periodic Cleaning must be done to insure proper performance over the life of the system. Cleaning of the Lens can be done with plain Window cleaner and a cotton swab. Cleaning of the LED Shuold be done with a DRY cotton Swab.

MAKE SURE THE SYSTEM IS OFF DURING CLEANING

LED Current Adjustment may have to be done periodically since the LED ages over time its' output may begin to decrease and Dolby level will not be achieved. To Adjust the current to the LED, Adjust the the trimmere pot on the DC Power board that was intially set to its lowest point in Step 4 of thses instructions. The Current reading must be done with a DC Current Meter as shown below.



1. Set the gain adjustment on the Cinema Processor Optical Pre-Amp Board to maximum.

2. Thread and play Cat. No. 69T Dolby Tone Test Film.

3. Adjust the LED current so that the top (red) level indicators on the Cat. No. 222 Noise Reduction Module are illuminated (both channels).

4. Reduce the Pre-Amp gain until the bottom red LEDs are illuminated.

5. Adjust the current driving the reader LED until the two green Dolby Level indicators are equally illuminated on one or both channels.

6. If necessary, adjust the Pre-Amp gain on the other channel to indicate Dolby level for that channel.

If the LED output cannot produce enough signal to achieve Dolby level, then the LED is at the end of its useful life and should be replaced.