

# E Series Shutter Rework Instruction Sheet

#### INTRODUCTION

These instructions explain the necessary steps to rework a Christie® E Series projector to a Version C shutter enabled model. This upgrade procedure will install the mechanical shutter assembly and the identification jumper.

When upgraded to firmware version 1.0.2.5, the projector will detect the jumper and enable the shutter feature. If the jumper is not installed, the firmware will modify the shutter feature to function as video mute; to produce a video black when the shutter feature is enabled.

**A WARNING** HIGH VOLTAGES MAY BE EXPOSED! Always unplug the projector prior to disassembly.

ALLOW LAMP AND PROJECTOR TO COOL DOWN! Once you have turned off the projector, allow the cooling fans to automatically turn off before disconnecting from AC and opening the projector. This takes approximately 15 minutes.

**A WARNING** OBSERVE ALL ELECTROSTATIC PRECAUTIONS! Use a grounded wrist strap when handling electronic assemblies.

#### **TOOLS REQUIRED**

- · ESD Wristband
- #0, #2 Phillips<sup>TM</sup> screwdriver
- Small jewelers flathead screwdriver
- Side cutters
- Small plastic zip tie
- Christie® E Series service manual (020-000296-XX)
- Firmware version 1.0.2.5 (upgrade available at www.christiedigital.com)
- Shutter assembly (003-004142-XX)



# **INSTRUCTIONS**

# **Remove the Top Cover**

1. Loosen 2 access screws at the rear of the projector. Open the lamp compartment lid.



2. Remove 10 black screws from under the lamp compartment lid.



3. Disconnect the harness from the colour wheel.





- 4. Pull forward and lift the lens access lid at the front of the projector.
- 5. Remove 2 black screws from under the lens access lid.

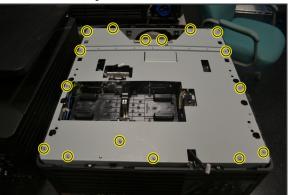


- 6. Start from the rear of the projector and lift the top cover to release it. **NOTE:** The front of the top cover is secured by 2 clips that will release when the cover is lifted from the rear.
- 7. Disconnect the LED harness from the top cover. Remove the top cover.



#### Remove the Metal Lid

1. Remove 16 silver screws from the perimeter of the metal lid.

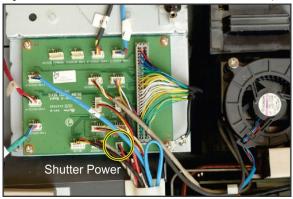


2. Remove the metal lid.

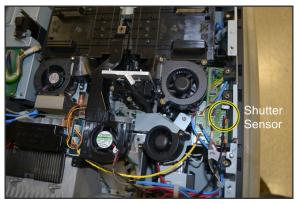


# **Replace the Shutter**

1. Remove the shutter power harness from the connector-A board (J10).



- 2. Cut the plastic zip tie and remove the shutter power harness.
- 3. Remove the shutter sensor harness from the connector-B board.



4. Remove 4 screws from the shutter cover (shown in yellow) and 2 black screws from the small DA board (shown in red).

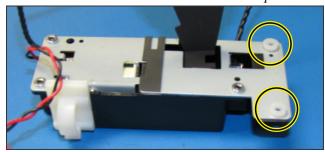


5. Remove the existing shutter assembly.

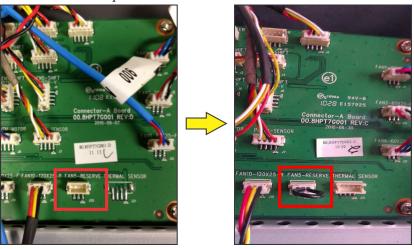


6. Install the new shutter assembly and perform previous steps 1-4 in reverse order.

NOTE: The new shutter assembly ships with two extra washers attached in the locations shown below. Secure these two locations with the M2.6 x 8 screws provided in the shutter kit.

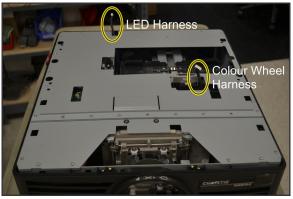


- 7. Use a new zip tie to secure the harness wires.
- 8. Install the jumper on the connector-A board at the connection labeled "FANS-RESERVE" (J20). **NOTE**: The connectors are keyed so they can only connect one way. There may or may not be a thermal sensor connection present at location J31.



### Replace the Metal Lid

- 1. Seat the metal lid back into the projector.
- 2. Ensure the LED harness and the colour wheel harness are sticking out of the metal lid in the correct placement.



3. Secure the metal lid with 16 silver screws.



## Replace the Top Skin

1. Angle the top skin downwards at the front and ensure the front clips are attach properly. **NOTE:** *If the front clips are not properly attached, the front lid will not sit flush, as shown below.* 



- 2. Guide the colour wheel harness under the lamp compartment lid, through the small triangular opening on the top skin.
- 3. Connect the LED harness as you lower the top skin to the rear of the projector. **NOTE:** Ensure the wire-slack is fed down into the projector so it does not become pinched between the top skin and the metal lid.
- 4. Secure the top cover with 12 black screws.
- 5. Connect the colour wheel harness.
- 6. Ensure the projector firmware version is at 1.0.2.5 or higher. Upgrade the firmware if necessary. **NOTE:** *The firmware upgrade is available at www.christiedigital.com (login required).*