

Installing a ColorDMD LED Display in SLUGFEST (Contribution from Jeff Collins)

These instructions are for replacing the Williams stock DMD with a ColorDMD LED display in a SLUGFEST.

What You Will Need:

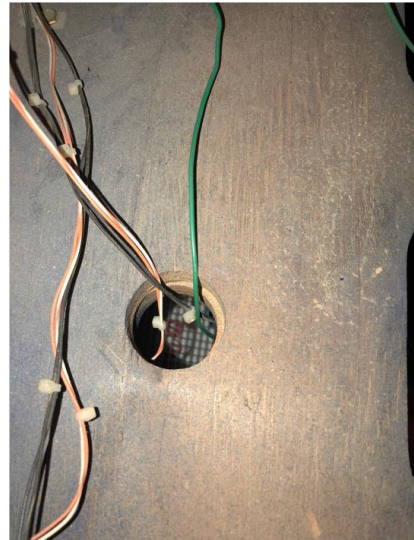
- ColorDMD LED Display for WPC
- 1/4 " nut driver
- #2 Phillips screwdriver
- 4 - #6 self tapping screws 3/4" (not included)

Also Recommended:

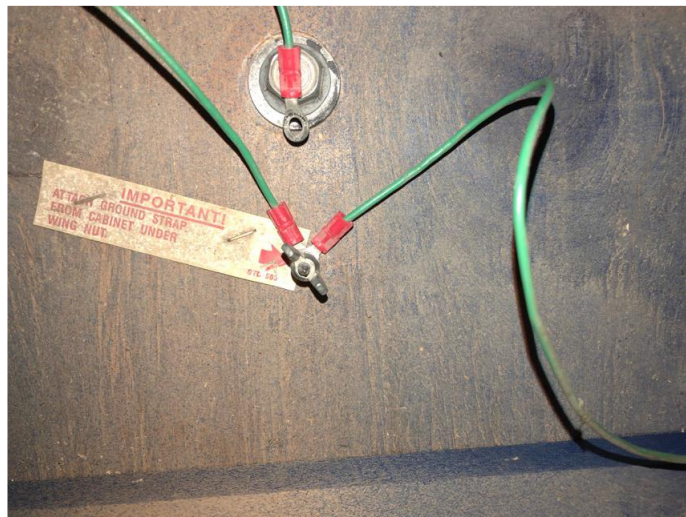
- Needlenose pliers
- Two zip or wire ties.

Getting access to the original DMD

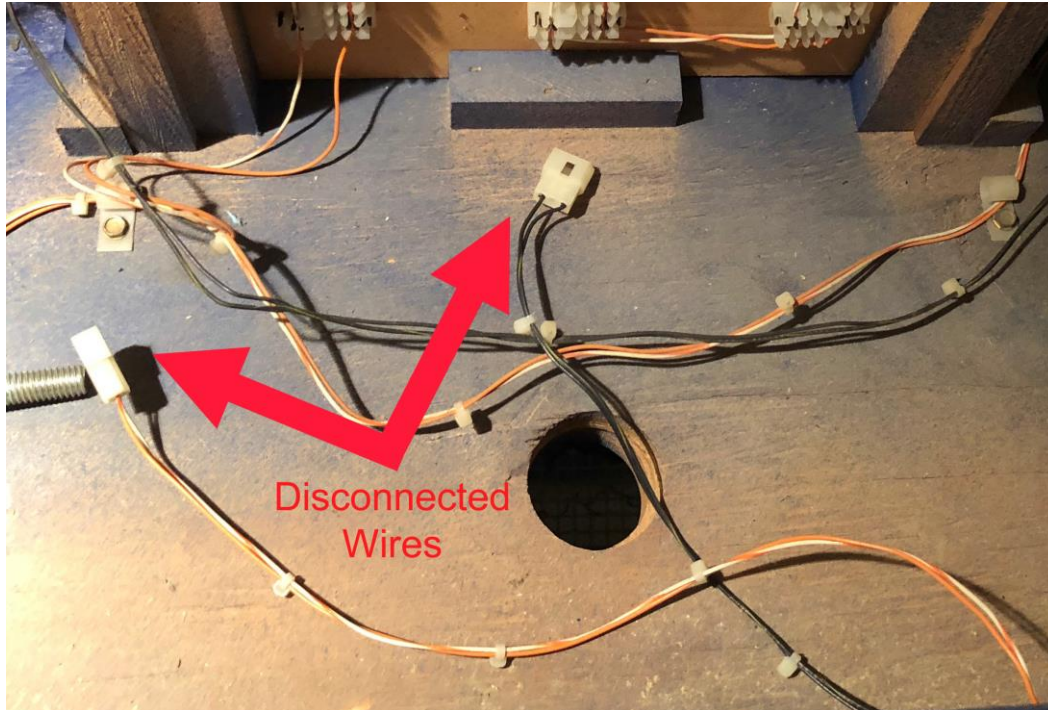
1. Unlock and remove the top panel from the head. With the panel removed, you'll see a hole in the center with 3 wires going into the lower part of the head.



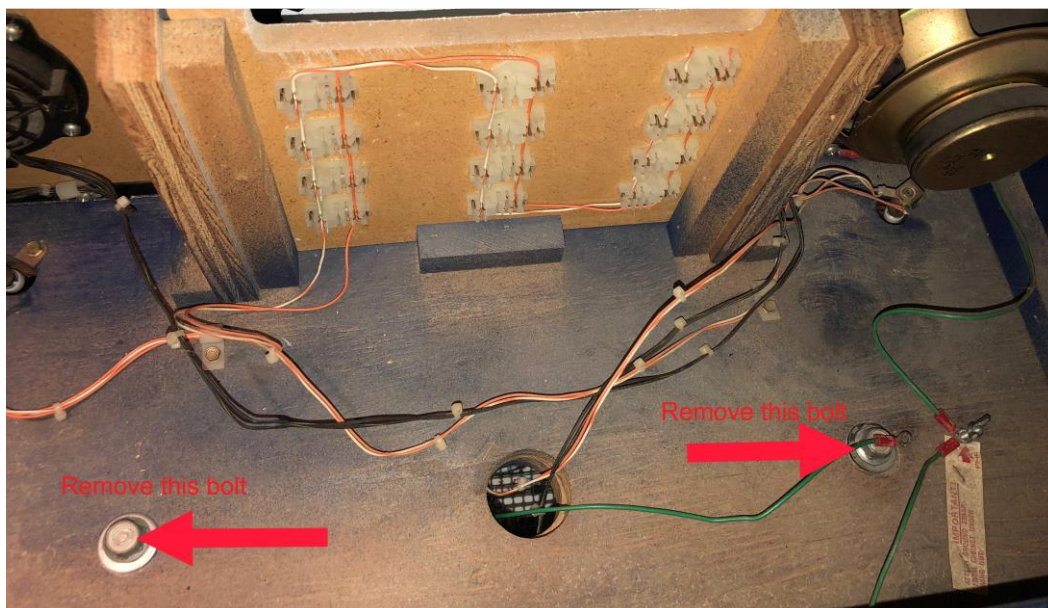
2. Standing at the rear of the machine, on the right side of the head, locate and remove the wingnut that secures the green ground wires. Remove the ground wire coming up from the lower head, and then replace the wingnut.



3. Open the back door to the lower head (or back of the machine). Locate and disconnect the orange/white wire in the lower head.
4. Locate and disconnect the black/black wire in the lower head.



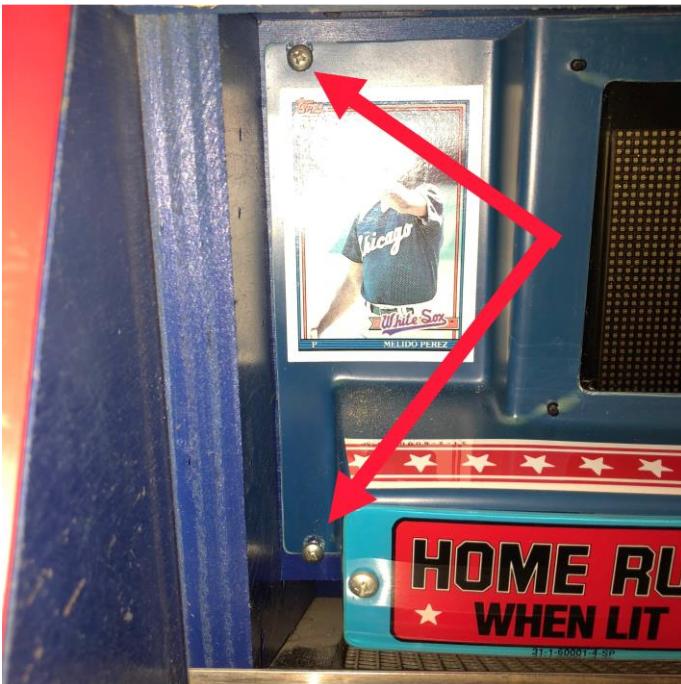
5. Prepare to remove the upper head by pulling the green wire down in the lower head. Pull the orange/white and black/black wires up in to the upper head.
6. Remove the two bolts that hold the upper head to the lower head. Then carefully remove the upper head to access the glass that shields and protects the display panel.



- Using a 1/4" nutdriver, locate and remove the 3 screws and metal bracket that retain the protective glass. Then remove the glass to access the front display panel.



- Carefully (without dropping them!) remove the 4 phillips head screws that secure the front display panel.



9. Remove the display panel to access the original factory DMD. You might have to lean the panel forward and push down a little on the top edge to ease it out.

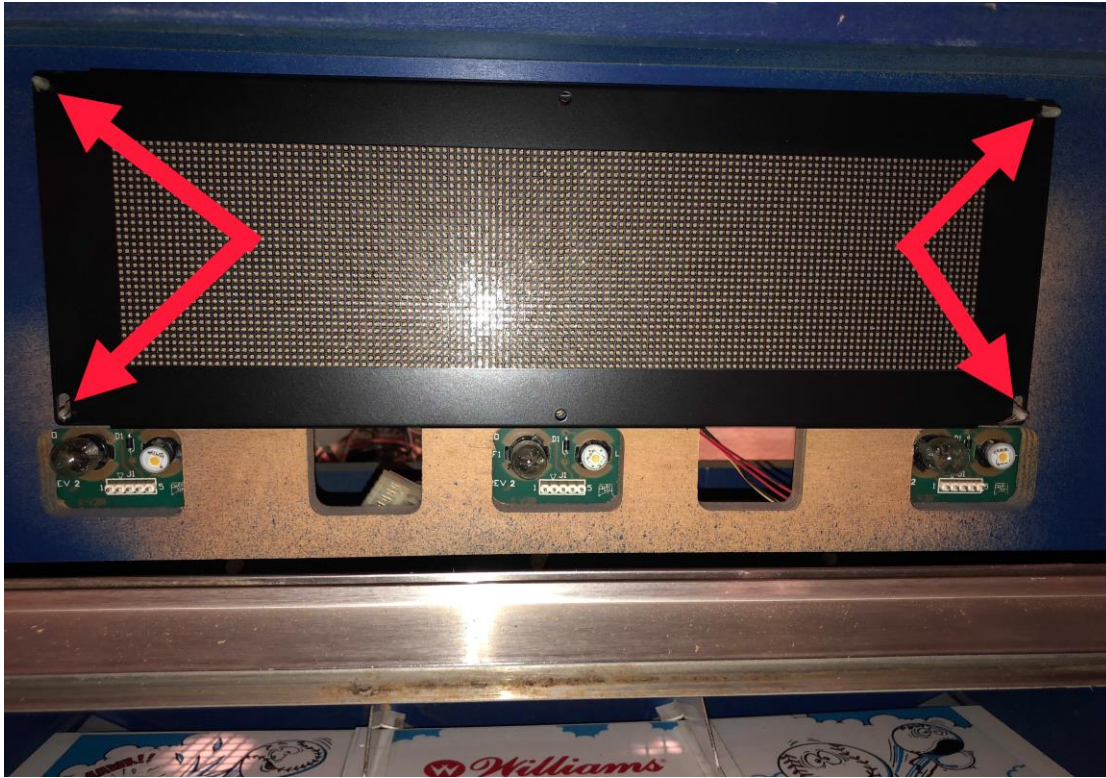


10. Remove the original factory DMD by gently pinching on the white nylon PCB standoffs and pulling the DMD forward.
11. Remove the ribbon cable and high-voltage power cable from the rear of the original factory display. The high-voltage power cable **will not** be used with the ColorDMD. **Safely secure the high-voltage power cable inside the head to ensure it cannot come in contact with any metal areas or electronics.**

Installation of the new ColorDMD LED.

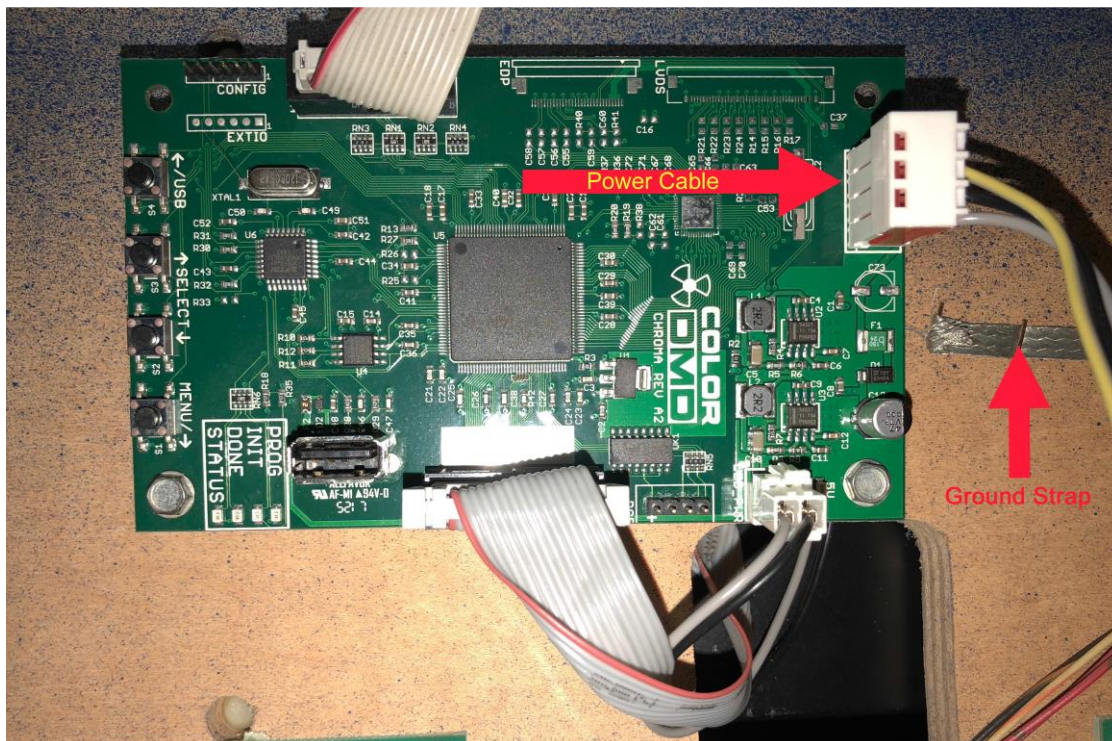
1. To mount the ColorDMD LED in a SlugFest, the ColorDMD control board must be removed from the rear of the display and remote mounted inside the head. Begin by removing the ribbon and two-pin power cable from the ColorDMD control board. Then remove the board from the rear of the display.
2. The white standoffs on the rear of the ColorDMD LED display will not be used and interfere with mounting in the SlugFest cabinet. Use a pair of neednose pliers to remove these standoffs from the rear of the ColorDMD LED and discard them.
3. Prepare to mount the ColorDMD LED on the same posts in the cabinet that held the original factory display. Before mounting the display, feed the two-pin power cable and ribbon cables through the hole into the upper head.

4. Press the display onto the original mounting posts. The top posts should snap in place. If the bottom of the display is not secure, zip or wire ties can be used with the bottom two posts to prevent it from moving.

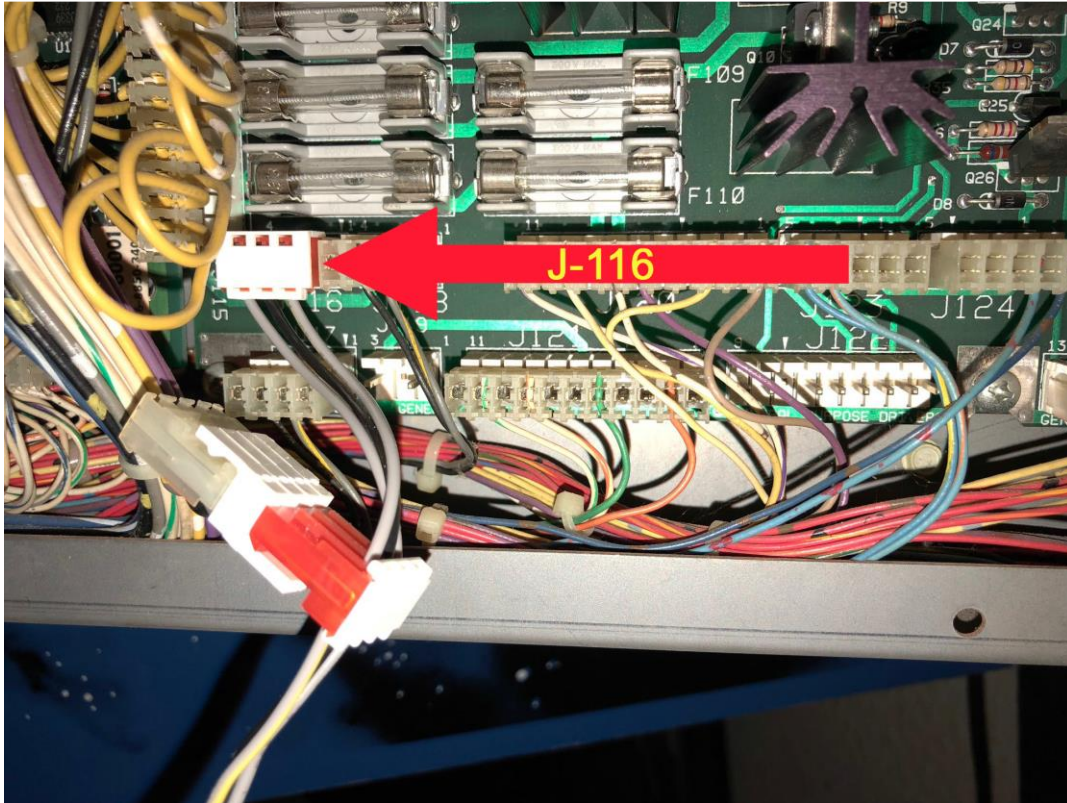


5. The ColorDMD LED control board should be mounted on the rear side of the wood panel. Make sure the wires and cables can reach their respective connectors when choosing a mounting location for the board.

The board can be secured with the supplied nylon standoffs and four #6 self-tapping screws (not included). Be careful to choose the mounting position to avoid contact between the board and exposed ground strap.



6. Reconnect the ribbon cables and two-pin power connector the ColorDMD board. The connectors for the two-pin power connector and 16-pin ribbon cable are polarized and can only be inserted in one direction. The 14-pin DMD ribbon cable should be connected with the red stripe closest to the buttons on the board.
7. Locate the 4-wire power harness that was included with the ColorDMD LED. Connect the end with the single connector to the ColorDMD control board.
8. Prepare to connect the opposite end of the power cable to J-116 on the WPC Power Driver board. First remove the connector that is currently at J116 and connect to the center connector on the ColorDMD power cable using the included male-to-male adapter. Then complete the connection to J-116 as shown.



9. The ColorDMD LED is now connected and ready for use! If you power the game on, the display should work in single color mode.
10. To enable multicolor operation for SlugFest, go to www.colordmd.com and download and install the color ROM file from our firmware SUPPORT page. If this is your first ColorDMD, there is also information there that explains how to update the ROM

Completing the Installation

1. Once you've confirmed the display is operating properly, power the game off and reverse the steps to get SlugFest back together. First reinstall the display panel using the original 4 screws.
2. Reinstall the glass and metal bracket using the original 3 screws.
3. Mount the upper head back on to the lower head and secure with the original bolts.
4. Feed the orange/white and black/black wires down from the upper head to the lower head. Reconnect using the original connectors.
5. Feed the green wire up from the lower head to the upper head and reconnect using the wingnut that holds the ground wires in place.
6. Reinstall the top head panel.

We hope you enjoy your new LED display in SLUGFEST !

