



ColorDMD LCD Display Installation Instructions for **Capcom**

Congratulations on the purchase of a new ColorDMD display. The ColorDMD will enhance your pinball machine by introducing *color* to the dot matrix display graphics produced by the game.

Tools Required: Phillips Screwdriver and diagonal cutters (optional)



Instructions are only for the new style ColorDMD LCD with CHROMA A1 PCB's and newer. Be sure to turn OFF the power to the pinball machine before installing the ColorDMD LCD display.

1. Remove the four screws securing the metal cover on the rear of the backbox speaker panel to access the original display.
2. Disconnect the 14-pin DMD ribbon cable from the CPU Board and the 8-pin high-voltage wire harness from J2 on the Display Power Board.
3. Remove the original display, DMD ribbon cable, and high voltage wire harness from the game.
4. Install the ColorDMD LCD in the same location as the original display, with ColorDMD pushbuttons on the right side of the game. See Fig. A for more details about orientation. If any of the game's plastic speaker wire clamps are interfering with positioning the ColorDMD, remove them and re-route the speaker cable over the top of the ColorDMD.
5. Use the provided 14-pin DMD ribbon cable to connect the ColorDMD LCD and CPU Board. The ribbon cable should be installed with the **red stripe closest to pin 1 on the CPU board, and closest to the buttons on the ColorDMD LCD** (See Fig. A).
6. Locate and disconnect the 7-pin display power connector in the backbox whose pins are labelled +5V, +18V, and GND.
 - a. For early Capcom games like Pinball Magic, this connector is J6 on the main Power Supply Board at the top of the backbox.
 - b. On later games like Breakshot, this connector is J2 on the Power Driver Board.
7. Plug the 7-pin connector on the ColorDMD power cable into the same 7-pin header in STEP 6. The black wire should be connected to GND on the header and the gray/yellow wire should be connected to 18V on the header.
8. Plug the 4-pin connector on the ColorDMD power cable into the ColorDMD.



Double check for proper alignment of all cable connections.

9. The ColorDMD is now connected and ready for configuration. Position the metal cover over the display and carefully lift and tilt the metal cover so you can access the buttons and USB port on the ColorDMD LCD control board.



Make sure nothing in the backbox is making contact with the processor board or ColorDMD!

10. Turn on the pinball machine.
 - a. For multicolor operation, download and install a game-specific color ROM file from the firmware SUPPORT page of our site.
 - b. For single-color operation, press the right-most ColorDMD LCD push-button to customize the display settings. Set the “MOUNTING” setting to CAPCOM. When finished press the Confirm push-button to “EXIT AND SAVE”.
11. Reinstall and secure the metal display cover on the backbox speaker panel. The metal display cover prevents access to the display and provides protection against accidental electric shock.



For additional protection, a ground wire can be connected between a ground strap in the game and one of the bare metal ground connection points on the ColorDMD metal bracket.

NOTE: Light panel will need to be closed before lifting to clear the speaker panel with ColorDMD LCD installed. If the two Nylon standoffs on the upper left of the ColorDMD bracket are interfering with the wooden light panel, they will need to be snipped off.

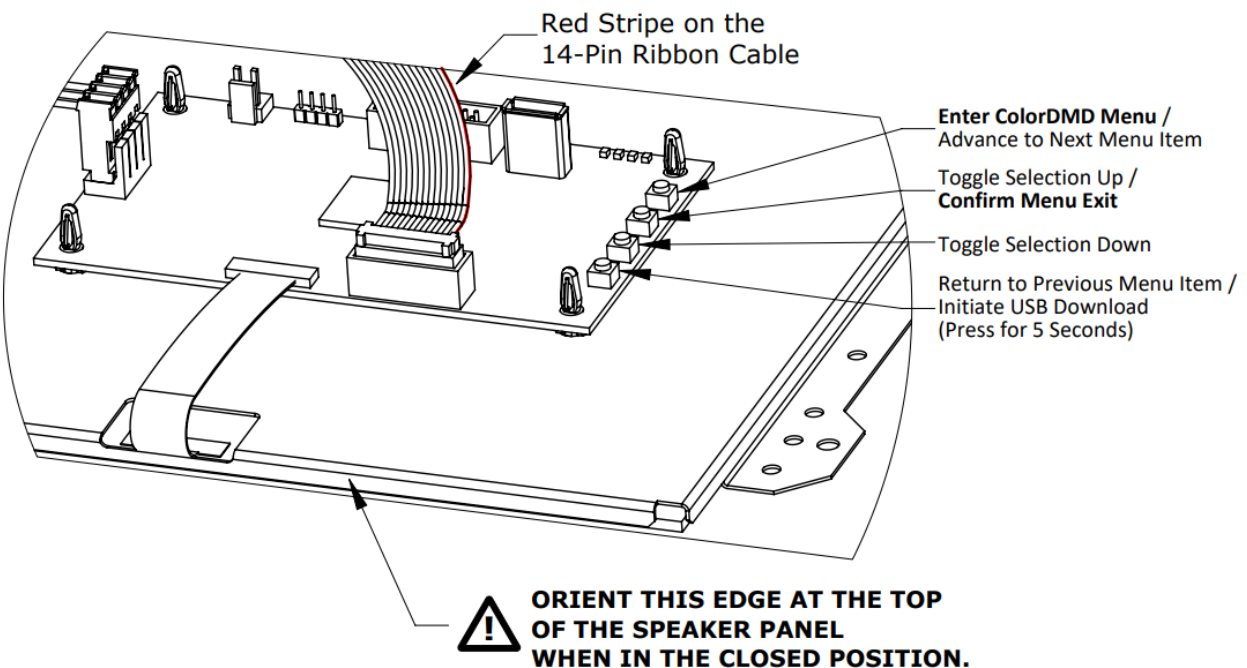


Figure A