# CPD Surface Mount Panels Instructions

## 1. Product Overview

CPD Surface Mount Panels are an out of the box, plug and play acoustic panel, with the fiberoptic star ceiling experience built right in.  They are ready to be installed onto any finished surface

Our CPD Panel System is designed for easy installation. Each CPD star panel has it's own low voltage Star Engine built right in and only requires a 12vDC power connection. Up to 100 CPD star panels may be daisy chained together which makes wiring and installation a snap.

Each CPD system starts with a Driver (power supply) that is connected to a switched, or controlled line voltage circuit. From the Driver, a Leader Cable carries the low voltage power to the CPD Panel System. Then Jumper Cables daisy chain the power from one panel to the next. For installations with more than 100 star panels, just keep adding additional Drivers and Leader Cables to the same switched circuit.

## 2. Design Overview

Plan your installation based on your design. These instructions are a general guideline and your installation requirements may vary based on your design and job site conditions.

Ideas for configuring a star ceiling



## 3. Before You Start

Make sure all code requirements are fulfilled.  If your home theater project is going to require an electrical permit, you will be subject to the local electrical code requirements. Though it's not always easy to tell if your project requires a permit, it is best to consult with your local permitting authority.

Electrical codes generally follow the National Electric Code (NEC), which is published by the National Fire Protections Association. The main purpose of the NEC is to prevent hazards to human health and safety from electrical shock, tendency to start or perpetuate a fire and production of toxi fumes when exposed to fire.

CPD panels are made with "Class A" fiberglass and covered in a "Class A" fabric finish.  Wiring harnesses are made from CL2 and CL3 or higher rated materials. If installing in a pleum, installer must supply CL2P, CL3P, or CMP, and as always confirm and conform to local codes before installing.

## 4. Quick Installation Overview

- » Put latex gloves on to keep panels clean when handling
- » Orient first panel
- » Install leader cable
- » Mark mounting locations
- » Attach mounting anchors
- » Turn on power
- » Inspect to see that stars turn on

- » Reposition Panels
- » Engage hex tool
- » Apply steady pressure
- » Turn hex counter clockwise 2-3 turns
- » DO NOT OVERTIGHTEN
- » Panel Installation Complete
- » Repeat for Additional Panels

## 5. Measure Twice, Install Once

Square up the room. Just because it looks square, doesn't mean that it is square.  Measure twice because all the panels are aligned off of the first panel The first panel's alignment in the room is critical. Being a little out of square with the first panel could mean you are way out of square when you get to the end of the room, so take your time squaring up the first panel. Using masking tape, pencil marks, and chalk lines will also assist in keeping your installation square and true.  Locate where your first panel will be installed.
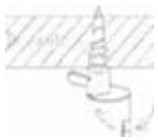
## 6. Running the Power

Based on site conditions and project design, generally you will have three options for the power. The recommended way is using a Remote Driver and pre-installing a CPD Leader Cable, or pre-wire an 18 AWG wire. Another option is to order the optional "Cloud Mount" anchors, and hang the panels from the ceiling by chain (note that this will require at least 4 or more inches of total height and may not be an option for low ceilings.) This allows the installer to plug the Driver to a ceiling outlet and locate the Driver on top of the panel. The third and alternate way is the Embedded Driver (see below). As always, check and observe local building codes.

### Remote Driver - Recommended Method

The plug-in Driver is a "table top" type of power supply, with an I.E.C. connector for the input of the line voltage. The selected outlet for powering the Driver should be controlled from a remote switch, or control system. Locate the Driver in a proper equipment area that is accessible and within 30 feet of the first CPD Leader Cable and start daisy chaining the panels together, (not to exceed 100 panels) using the supplied Jumper Cables. Your leader cable should not be longer than 30 feet. Consult with CPD if a longer leader cable is required.

## 7. Mounting the First Panel – Surface Mount

Place the first panels on the ceiling true and square in it's proper orientation (this shoud be performed by at least 2 people, and no less than 3 when installing the larger 48" x 96" panels.) Push the awl through the center of the round stickers to make an indent in the ceiling.  This is done from the finished fabric side of the panel. Once all mounting points are marked on the ceiling, remove the panel.
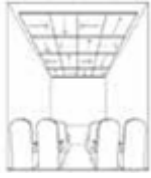


Screw the Drywall Anchor into dents you have made with the awl on the ceiling. Use the screw to anchor the yellow Mounting Anchor to the ceiling. Check and make sure the Mounting Anchor still rotates freely. Mount all anchors for the panel. Use a #2 phillips screwdriver to push the hex cap into place until it snaps.

### Option 2 - Cloud Mount

For Cloud Anchor Installation, use the same process as above, however install the "eye hook" in the ceiling, and screw the cloud anchor into the back of the panel, hang with the desired chain length.

Connect the Leader Cable to the first panel and turn on the Driver. Inspect to see that there is power to the panel by looking to see if the stars are illuminated. If not, check all connections and refer to the Troubleshooting Guide.

Carefully insert four Hex Drivers through the marked holes on the panel's face (these are the same holes used to mark the mounting points with the awl.) Insert all 4 Hex Tools and engage them into each of the Mounting Anchors. While applying gentle upward pressure on the panel, rotate one of the Hex Drivers counter-clockwise until it has engaged into the panel. Rotate about 1-2 full turns until you feel it pull up flush to the ceiling.  DO NOT OVERTIGHTEN.  You may find it best to engage each Mounting Anchor halfway at first, then snug the panel to the ceiling.

### Rotate the Panels

Each panel is marked with a no cut zone on one side that indicates the panel's orientation. Every panel gets rotated one quarter turn in order to provide a more random starry night experience. Remember to rotate the panels 90 degrees for random effect.

## 9. Installing Additional Panels

Leave the plugs hanging off the side so you can connect the next panel.  Connect a Jumper Cable to the first panel and run it to the location of the next panel's Star Engine. Because of the flat design of the Jumper Cable, you can "sandwich" the Jumper Cables between the ceiling and panel, or run them along the 2" light cove on the back of all Surface Mount Panels.  You may find that using white gaffers tape, glue dots, or double sided tape is helpful in organizing the Jumper Cables during installation.

Up to 100 CPD Panels can be connected together in any configuration. If your installation requires more than 100 CPD Panels, you would need to add an additional Driver and Leader Cable

## 10. Turn on the Switch and Gaze at the Stars.