

DSP004 Intelligent Character Display Bezel and Mounting Hardware Assembly Instructions

Pronto Electronic Displays LLC

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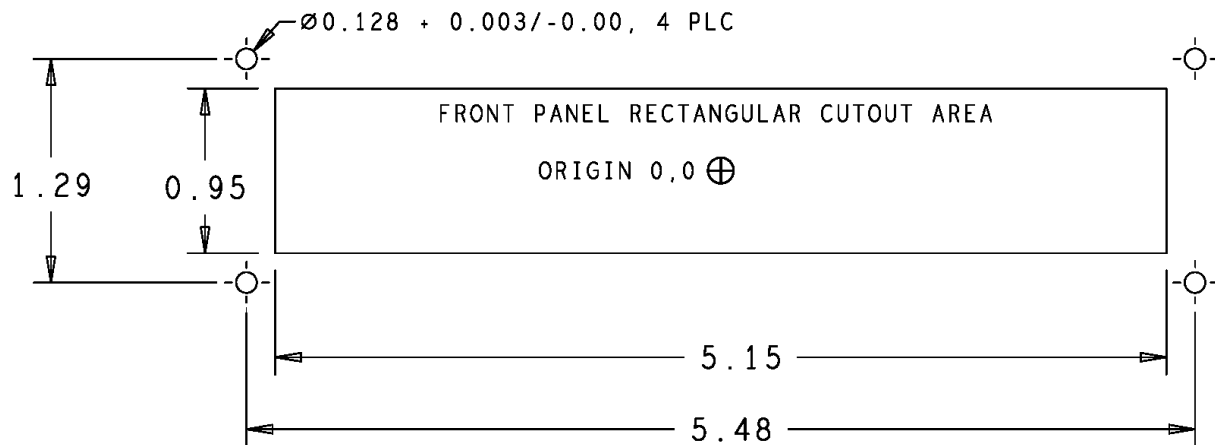
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1.0 Panel Cutout and Mounting Hole Dimensions

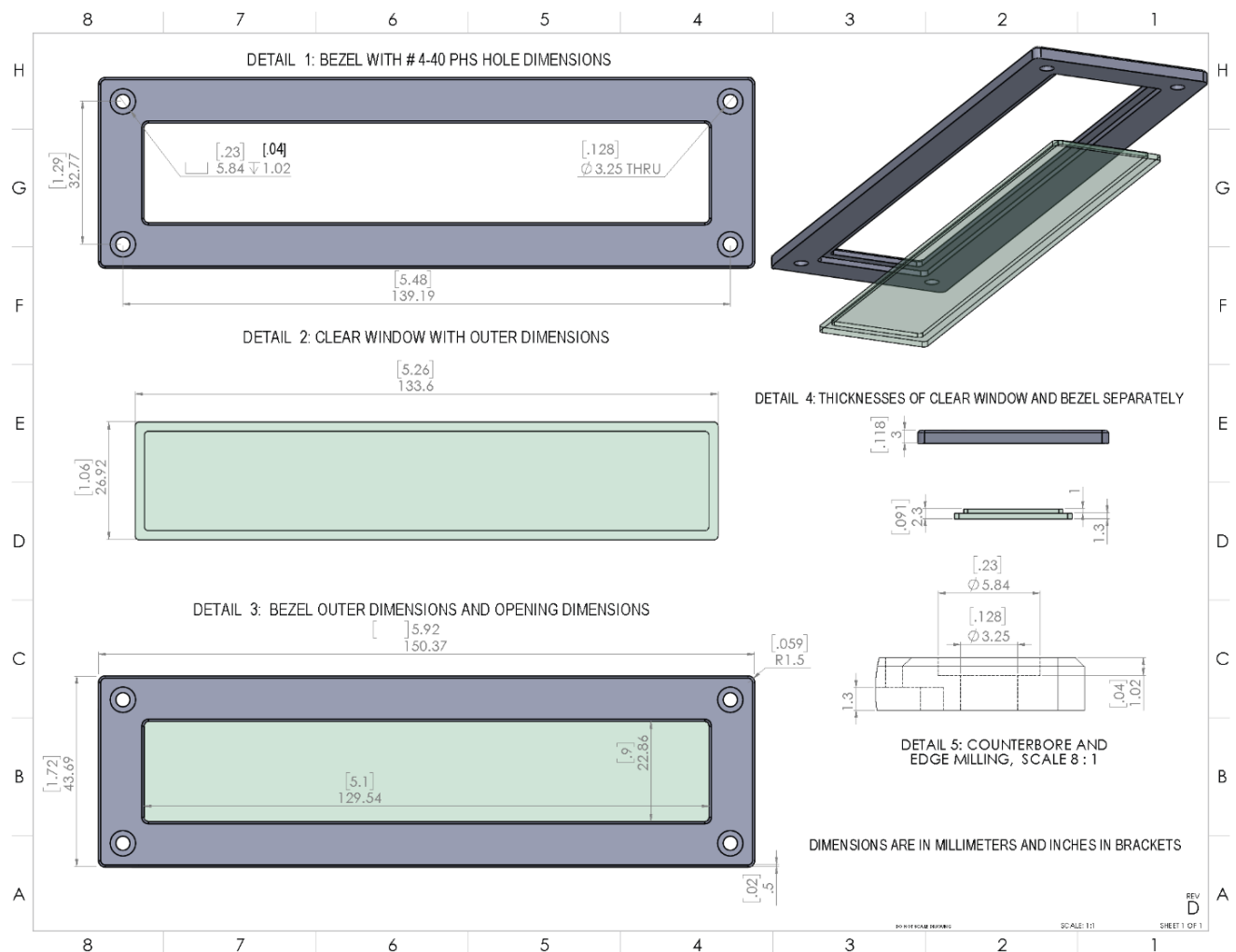
Following information is provided for customer use for fabricating a mounting panel for the DSP004 display unit.



Notes:

1. All dimensions are in Inches.
2. Dimension origin is at the center of the panel cutout.
3. Hole pattern and cutout dimensions are symmetrical about the drawing origin.
4. All hole location dimensions are +/- 0.005 inches.
5. Center cutout width and height dimensions are +/- 0.005 inches.
6. 30-60 mil radius on cutout inner corners, optional.
7. Cutout area includes functional clearance for the on-board light sensor.

2.0 Bezel and Window Dimensions Drawing



3.0 Tools Required

- #4-40 nut driver or small wrench
- Phillips screwdriver
- Optional: thread-locker for vibration environments.

4.0 What's in the Box

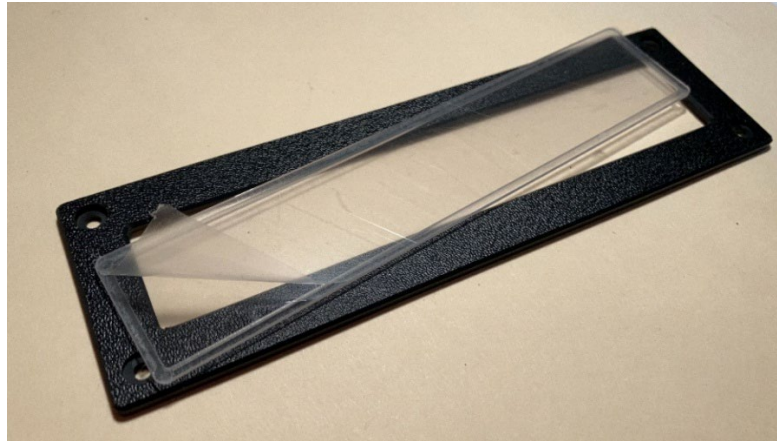


The kit includes:

- 1) Black ABS bezel.
- 2) Clear window.
- 3) Smoked grey window.
- 4) Mounting hardware, consisting of:
 - a) Qty (4) #4-40 x 1/4 in. hex standoffs
 - b) Qty (4) #4-40 x 3/4 in. pan head machine screws
 - c) Qty (4) #4 flat washer
 - d) Qty (4) #4 split lock washer
 - e) Qty (4) # 4-40 hex nut

5.0 Assembly

Step 1. First unwrap the bezel and windows and remove any protective plastic film.



The front of the bezel has a textured surface, with counterbores designed to accommodate the #4-40 pan head machine screws. The back surface is smooth with no texturing and no counterboring for the holes, and has milled stepped edges around the rectangular opening edges. The windows are designed to drop into the bezel from the back side, with the milled window edges fitting into the stepped edge of the bezel rectangular cutout area. See below on how the windows are designed to fit inside of the bezel.

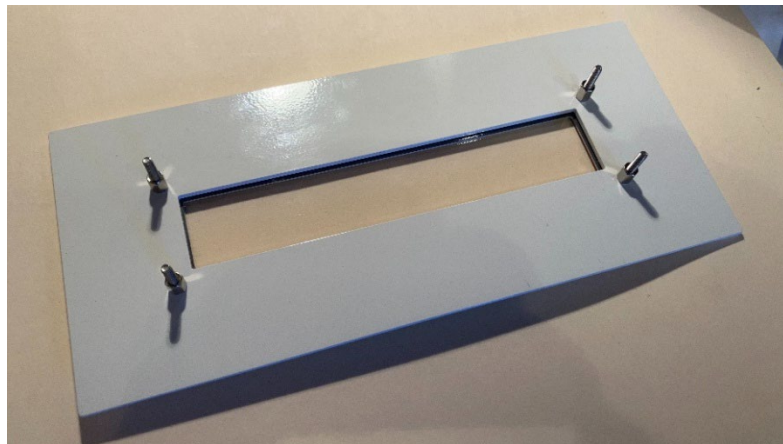


The bezel is held in place with the four mounting screws; these same screws are also used to mount the DSP004 unit onto the panel. When correctly mounted, the bezel will hold the windows securely in place, and all will fit flush on the panel surface. Note a demonstration metal panel fabricated in accordance with the drawing is used here for illustrative purposes.

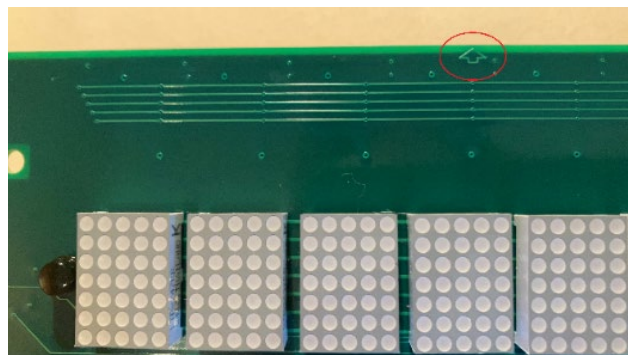
Step 2. With your panel held in place, fit the window into the bezel. The smoked grey window is slightly thicker than the clear one, and it tends to “snap” into place. Next, place the bezel/window onto the top surface of the panel and align it with the four panel mounting holes. Next, pass the four #4-40 machine screws through the bezel and panel holes as shown below:



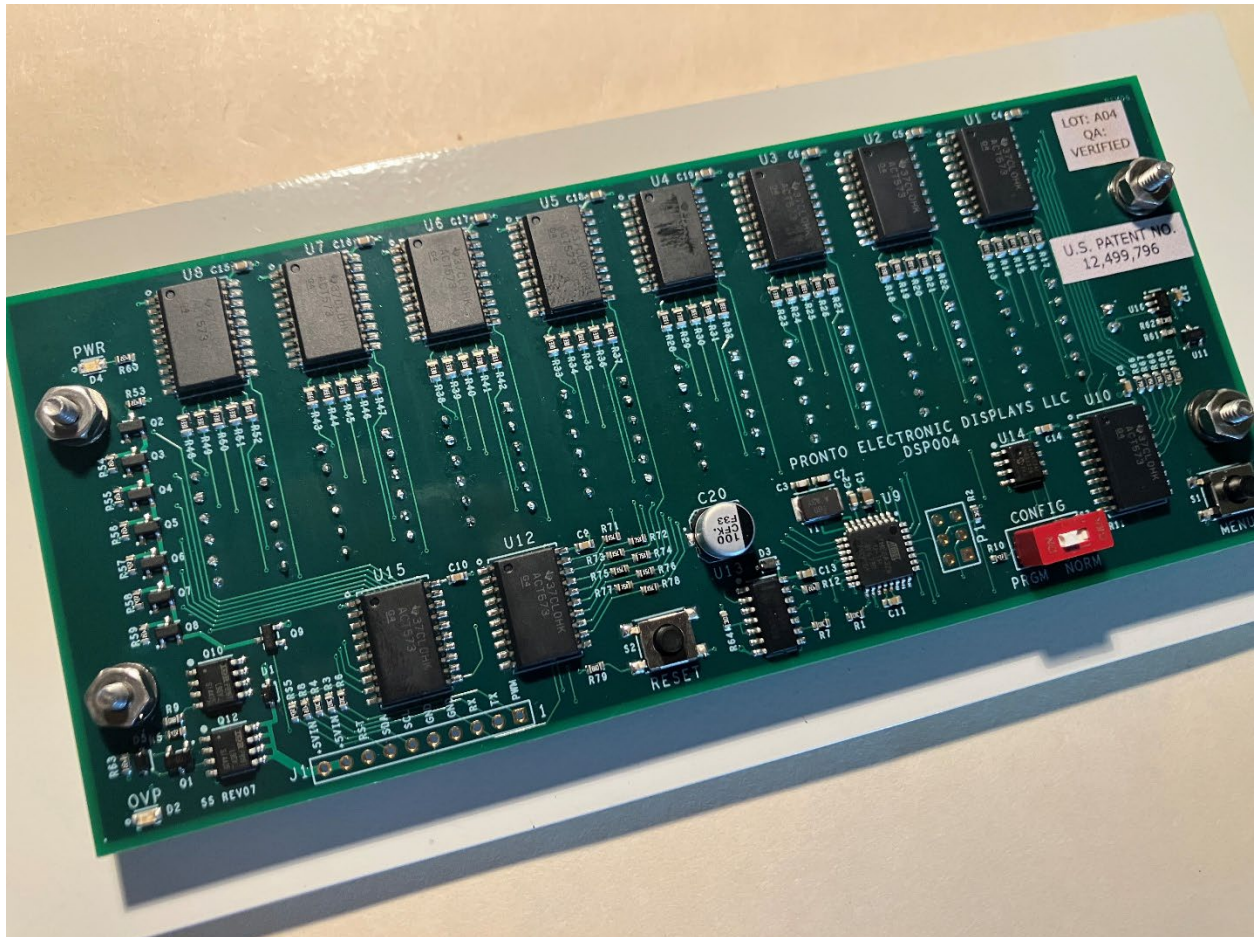
Step 3. On the back side, thread the #4-40 standoffs onto the screws until they fasten the bezel/window assembly in place. Do not tighten yet.



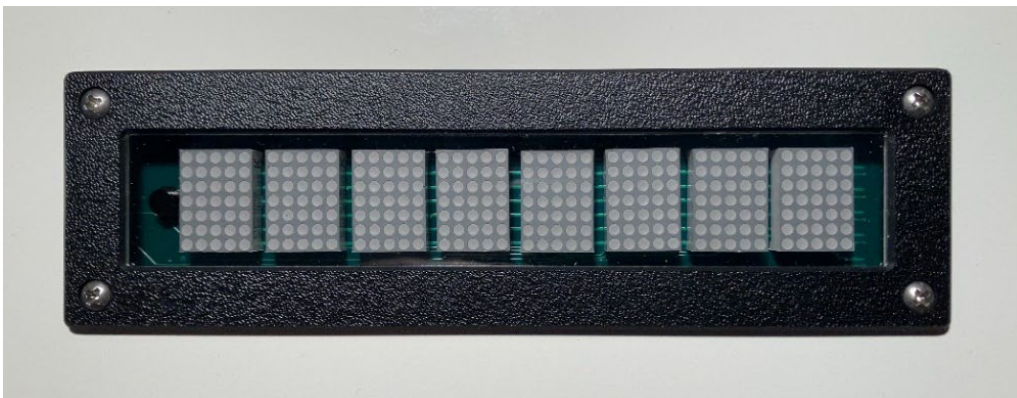
Before proceeding further, note the orientation “up arrow” that has been etched onto the display side of the DSP004, to help ensure correct orientation when placing the DSP004 unit onto the panel:



Step 4, Final step. Align the DSP004 mounting holes with the screws, and with the back side facing towards you, slide the DSP004 unit down onto the standoffs. Then, place the flat washers, followed by the split lock washers. Finally, fasten the unit using the #4-40 hex nuts and tighten the overall assembly. Do not overtighten, as excessive tightening may deform the Bezel. In high-vibration environments, omit the split lock washer. Instead, install the flat washer directly against the surface, apply an appropriate thread-locking compound to the screw threads, and secure the assembly using the hex nuts.



Below is the front view of the finished assembly:



6.0 Front Panel Express Cad file

CAD FILE USE AGREEMENT

Purpose and Specification:

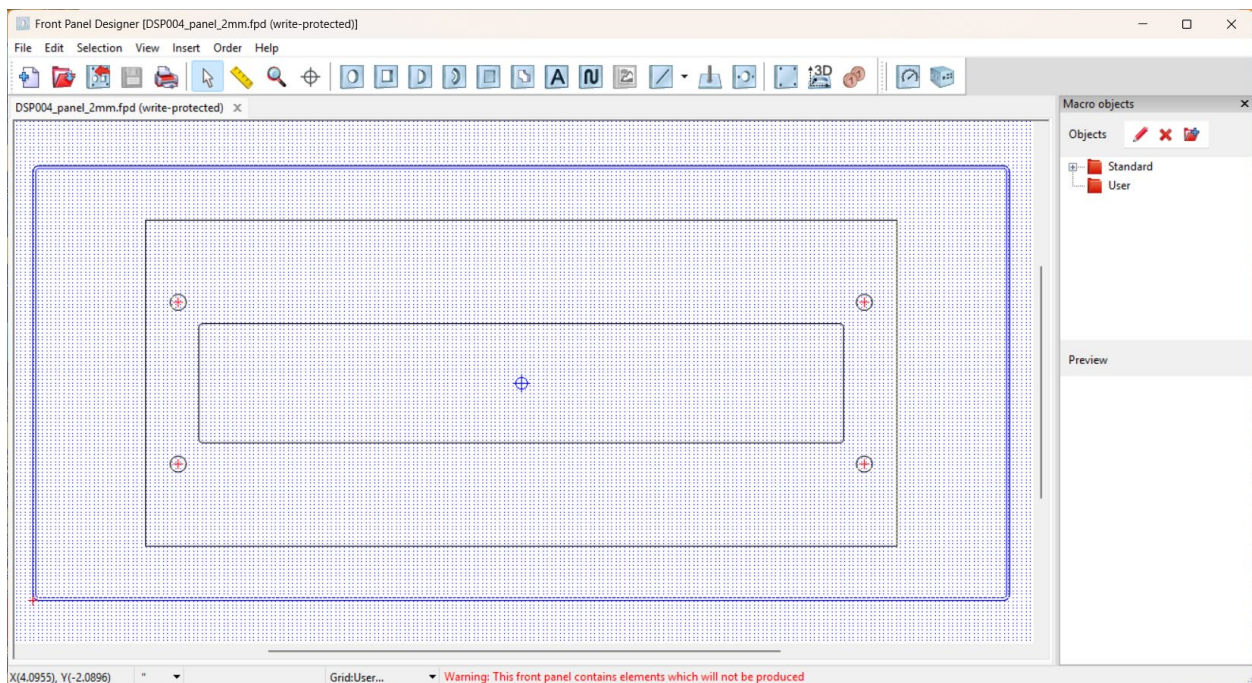
The CAD files and technical data (the "Files") provided by Pronto Electronic Displays LLC (the "Company") represent the exact physical dimensions of our standard product configurations. They are provided strictly as a professional reference and starting point for customers designing custom front panels.

User Responsibility:

Because the Company cannot control how these Files are subsequently modified, interpreted, or manufactured by third parties, the user assumes full responsibility for the final design. You must independently verify that all dimensions, tolerances, and configurations are correct and compatible with your specific components and manufacturing equipment before initiating production.

Limitation of Liability:

By using these Files, you agree that Pronto Electronic Displays LLC shall not be held liable for any financial losses, manufacturing errors, material costs, or incidental damages resulting from the production of a panel that cannot be used.



Screenshot of the Front Panel Express CAD file opened in the Front Panel Designer tool.

The outer blue outline shows the default demonstrator-panel dimensions, which the user may modify or replace to suit their own enclosure. Inside that boundary is a rectangular engraving object with property set to "do not produce object", representing the DSP004 PCB outline for reference only. Within that reference outline are the four mounting-hole locations and the rectangular cutout required for the unit. Panel size, thickness, material, finish, and other properties may be adjusted as needed within the Front Panel Designer environment.

7.0 Environmental Considerations

- The bezel and window assembly provides a protective front surface that helps reduce direct dust contact with the display.
- The assembly does **not** carry an IP rating and is not sealed against dust or moisture ingress.
- Installation should be in an enclosed, dry environment that is not subject to washdown, moisture, or direct liquid exposure.

Document Revisions		
Rev. No.	Date	Engr.
03	8/20/2026	M. Hawkins

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