Wildhorse Innovations, LLC

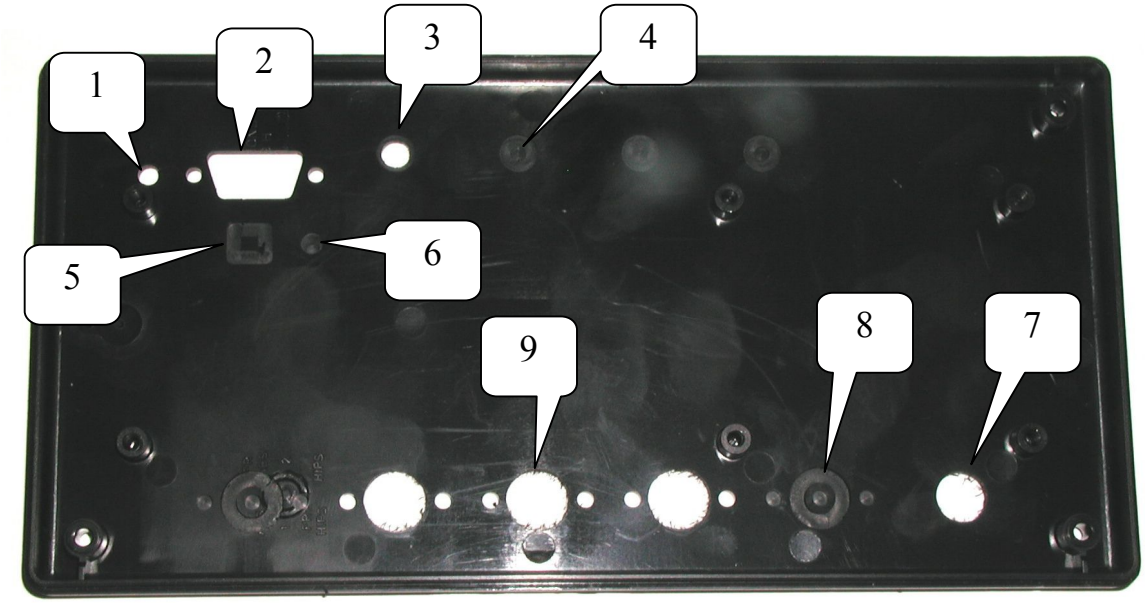
The New Wildhorse Innovations DRO-350/DPU-550 Machined Enclosure

The release of the DPU-550 expanded the capabilities of the DRO-350 significantly. These changes required an alteration in the manner that the Enclosure's Rear Cover is machined.

Wildhorse Innovations' approach to these alterations is to provide a Universal Layout on the Enclosure's Rear Cover, to allow for the expansion of the number of connectors needed as the functions of the DPU-550 are added.

The picture below is of the inside of the Enclosure's Rear Cover. (Please excuse the lack of quality in the picture. In the interest of time, we did not wait for the availability of a professional photographer.) The callouts on the picture are explained on the following pages.

REMEMBER, YOU ARE VIEWING THIS FROM THE *INSIDE* OF THE REAR COVER.



The configuration shown is for the standard DRO-350 without the DPU-550 Daughter Board. You will notice that pocketed areas, approximately 2/3's of the way through the

thickness of the plastic have been provided for future expansion. Depending upon the configuration you requested, the actual openings in your case may vary from this photo. But in all cases, ALL potential openings have been pocketed, and in the case of circular openings, center drilled, for ease of expansion.

CAUTION: The relief angle on standard drills is too aggressive for ABS plastic. Improper drilling procedures can result in an irregular or cracked opening. When drilling with a standard drill in ABS start with a small drill (1/8" or smaller) and work you way to the final size using small (1/16") increments. This (working in small increments) is especially important when there is a tight tolerance on the final size.

Drill with a variable speed drill at very low RPM or turn the chuck by hand. It is sometimes advantageous to allow the drill to "climb" through the plastic, then while turning the drill in the normal direction for cutting, apply pressure pulling the drill from the hole.

LEGEND FOR CALL OUTS:

These legends describe the purpose of the opening, how it machined on the various cases and brief instructions on creating a through opening from a profile or center drill.

1. RS-232 (DB-9) connector. Standard on DRO-350. Center drilled and profiled on DPU-550. Drill 3/8" then trim by hand to fit.

3 & 4. Opening for AUX/TACH connector(s). One standard on DRO-350 with 3 additional center drilled. 1 standard on DPU-550 with up to 3 additional through machined. Those not through machined on DPU-550 are center drilled. Drill 15/64 or B size.

NOTE: These openings are surrounded by a relief, approximately 0.035 deep x 0.310 diameter. This relief is to accommodate the AUX/TACH connectors sold by Wildhorse Innovations and used in the Wildhorse Innovations kits. Your drill size may vary depending upon the connector you use. The relief does not interfere with the use of the connector listed on the ShumaTech web site.

5. Opening for USB connector. Profiled and center drilled on DRO-350. Through machined on DPU-550. Drill 11/32 or size R then trim excess. Optionally drill as depicted on the ShumaTech web site.

6. Opening for programming switch. Center drilled on DRO-350, through machined on DPU-550. Drill 3/16 or #12.

7. Opening for power connector. Standard on both DRO-350 and DPU-550.

CAUTION: The power connector is a very close fit in the opening. If opening is oversized for any reason you may need to use super glue to securely mount the power connector.

8 & 9. Openings for Mini-Din scale connectors. Three through milled on both DRO-350 and DPU-550. Two additional profiled and center drilled on both DRO-350 and DPU-550. Openings 4 and/or 5 will be through machined upon request. Drill 0.125 (1/8") two places for 4-40 screws. Drill 0.500 (1/2") for body of Mini-Din connector.

NOTE: Some of the cases manufactured immediately after the release of the DPU-550 may be missing some of the center drill marks. However all openings are profiled as described in this document.

These descriptions depict the standard configurations. Our web site allows you to choose any configuration you want at no additional charge.