

IMPORTANT INSTRUCTIONS

INSTALLATION AND STARTUP

MODEL GDCP-A CONTROL PANEL

WARNING

USE OF TRANSMITTER HOUSING FOR FIELD WIRING WILL VOID THE FACTORY WARRANTY. Transmitter is considered water resistant only when the housing is connected to the conduit tubing with conduit access ports, (outlet bodies), rated for splicing, and compression fittings. Make all connections inside outlet bodies and secure all covers.

INSTALLATION and STARTUP INSTRUCTIONS

GDCP-A CONTROL PANEL AND TRANSMITTERS

To properly install this panel system, perform the following steps.

1. Determine the mounting location for the GDCP-A panel.
2. Determine the mounting location for all transmitters assigned to the panel.
3. Install the GDCP-A panel and all transmitters using the templates and mounting dimensions enclosed in the Important Papers package.
4. Open the door of the GDCP-A's cabinet. Using a small pair of cutters, clip and remove the plastic tie-downs at the right hand corners of the front panel/keypad door. Lift the front panel up and to the left to gain access to the panel P.C. boards. Connect each transmitter using a parallel, (daisy-chain), wiring scheme. Connect the panel to one of the closest transmitters in the group. All connections between the transmitters, and transmitter to panel, must be made using a five conductor, shielded cable. This cable should be composed of 18 AWG stranded conductors. The shield connection should be unbroken between cables, and the shield should be connected to earth ground at the GDCP-A panel only. See Fig. 1 for more details.
5. Install a disconnect switch at the panel and connect a dedicated, 120 VAC, 50/60Hz. supply to the input of this device. Connect the output of the switch to the input power terminal strip, (TS1), of the panel. This terminal strip is located at the top, left corner of the Power Supply/Relay board located on the inside, back of the GDCP-A's P.C. package. See Fig. 3 for the location of this P.C. board. Fig. 4 shows the typical wiring for the system.

Connect the 120 VAC hot lead to the terminal marked L1. Connect the neutral lead to the terminal marked L2. Any of the four terminals marked GND can connect to the supply's earth ground lead.

6. Determine the active zones for the system. Each zone has available two SPST dry contacts that are used to actuate the ventilation equipment controlled by the GDCP-A panel. Obtain a control voltage source, (**maximum of 125 VAC**), and connect to the appropriate relay terminal strips. There are six output control zones available, and each terminal strip is labeled with its zone number. Each strip is also labeled with the terms LA1, LA2, HA1 and HA2. The terminals LA1 and LA2 are connected to the contacts for the "Low Alert" relay, while terminals HA1 and HA2 are connected to the contacts for the "High Alert" relay of that zone number.

Most single fan systems will only use the LA1 and LA2 terminals. Staged fan systems may use both the LA1/LA2 and the HA1/HA2 terminals.

The control voltage is connected to the controlled device, (motor starter coil, etc.), with a wire connected to the appropriate LA2 or HA2 terminals.

7. If the system includes an external alarm device, connect the alarm control voltage and the alarm lead to the terminals marked AL1 and AL2 at the center, right edge of the Power Supply/Relay board.
8. Perform a final, visual check of the system's wiring and correct any mistakes. After checking to make sure that the GDCP-A's power switch is in the OFF, (down), position, activate both the panel's 120 VAC supply and the zone control voltage source. Using a known good volt meter, measure the AC voltage at TS1, terminals L1 and L2. This voltage should be 120 volts AC, +/- 12 volts. Also measure the zone control voltage level between LA1 and/or HA1 and the control voltage neutral or common lead. Determine that this voltage is also correct.
9. Once you have satisfied yourself that the wiring and the voltage levels are correct, place the power switch to the ON, (up), position. Close the door to the P.C. package, and inspect the front panel of the GDCP-A for the following:

The green power indicating lamp is glowing.

The display is indicating a date and time.

The display's third and fourth line indicates that the system is warming up and asking you to wait until it has finished. This display will last for approximately 2 ½ minutes. No front panel keys will be active during this time.

Depending upon the program, there may be specific zone Low Alert lamps and relays active. Whether this is the case depends upon the settings of the Power Back programming routine.

After the 2 ½ minute period has elapsed, the system will enter the monitoring mode. All transmitters will be initially poled to determine the type and the present concentration. If all transmitters are responding properly, the panel's display will place the message, "PRESS MENU FOR OPTIONS", on the third and fourth display lines.

If any transmitters are not responding, the panel's display will indicate that it has found one or more inoperable transmitters. See the Installation/Operation manual, page 25, for the keystroke sequence on checking the transmitter status. Any transmitter that is not functioning can be identified using the status checking routine.

10. Unless you have requested that the GDCP-A panel arrive with a specific program installed, the panel will operate using the default program. See the manual for the specifics of this program, and how to change the parameters of the program to suit your specific requirements.

Any questions that arise can be answered by contacting your Brasch distributor, or the Brasch service department. You can find the appropriate contact information on the GDCP-A's front panel label.

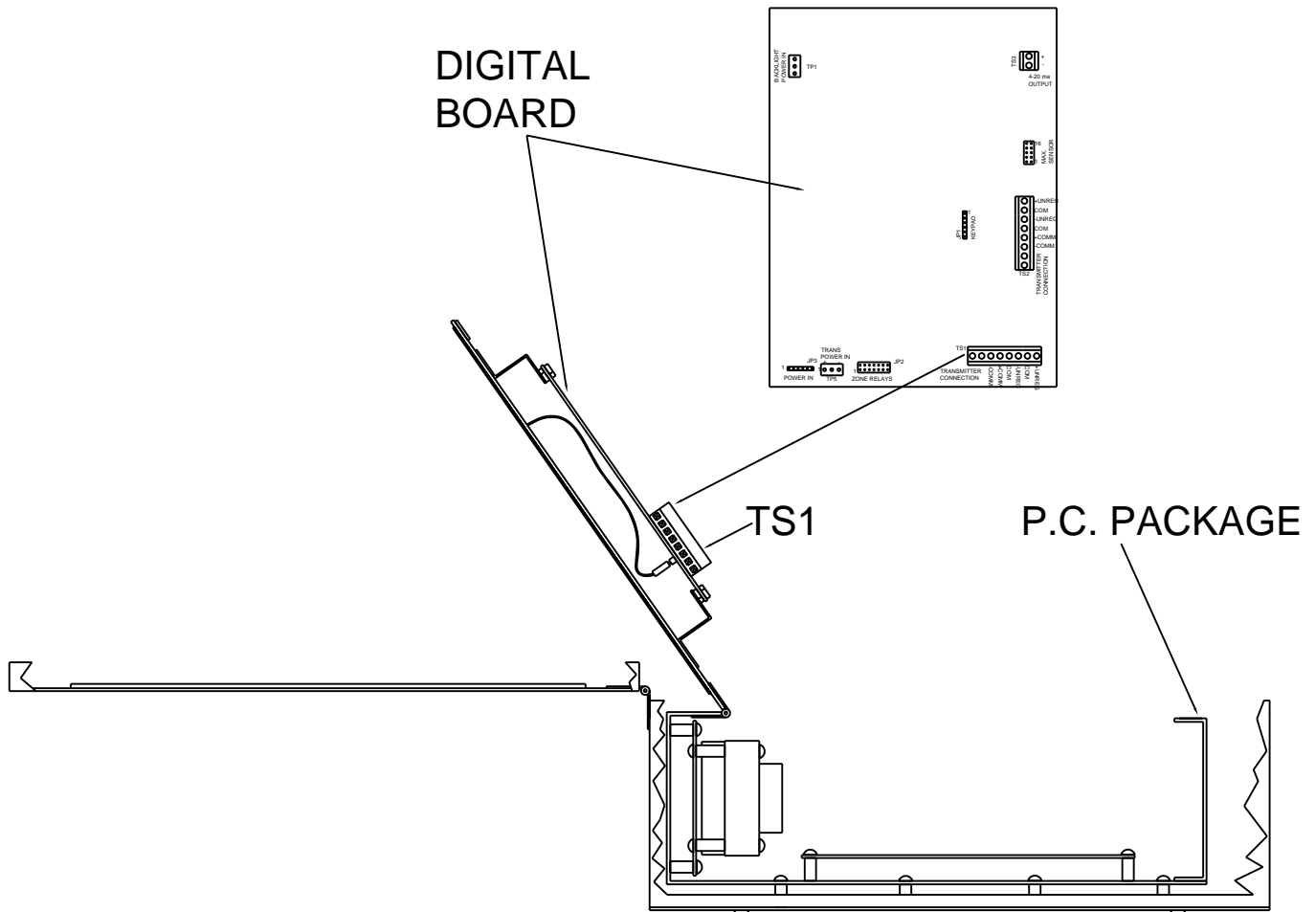


FIG. 2: GDCP-A internal bottom view with cabinet door and P.C. package door open, indicating location of TS1, transmitter wiring terminal strip.

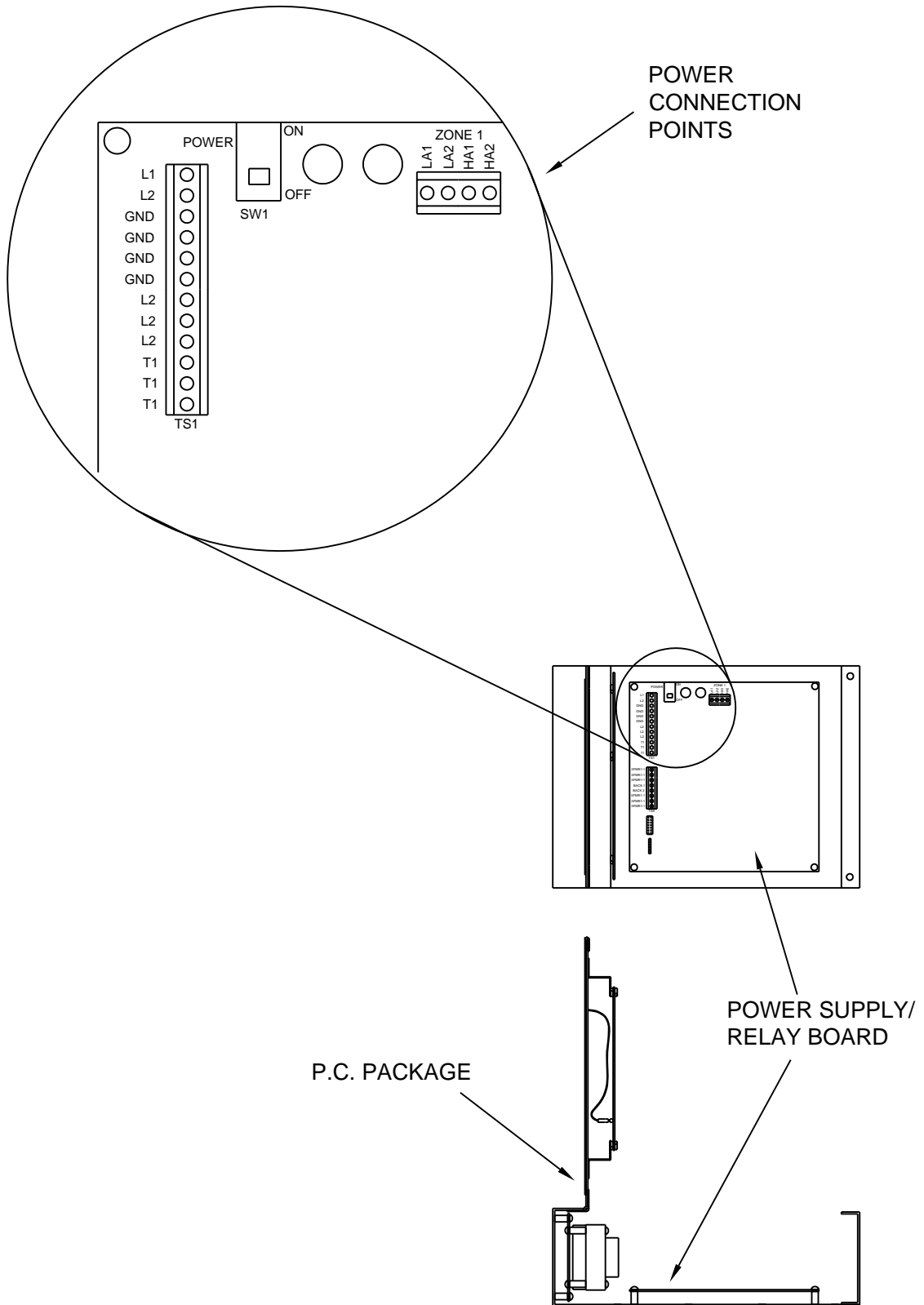


FIG. 3: GDCP-A power connection terminals.

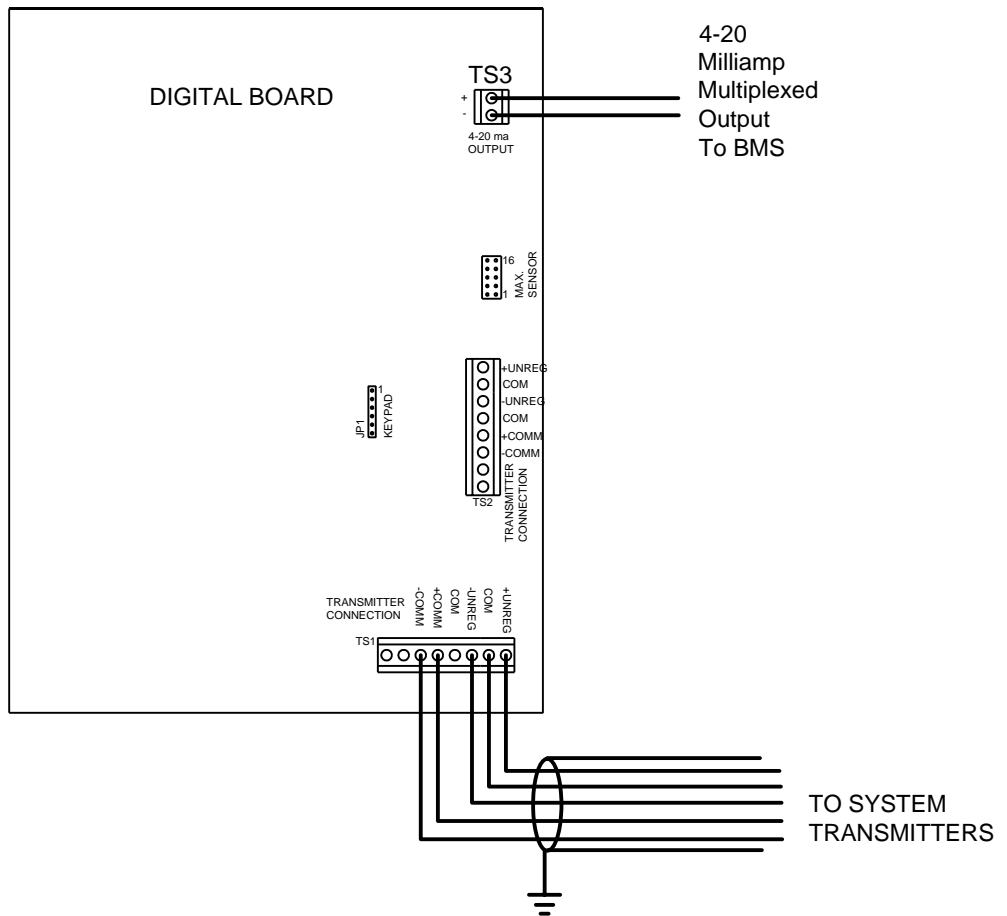
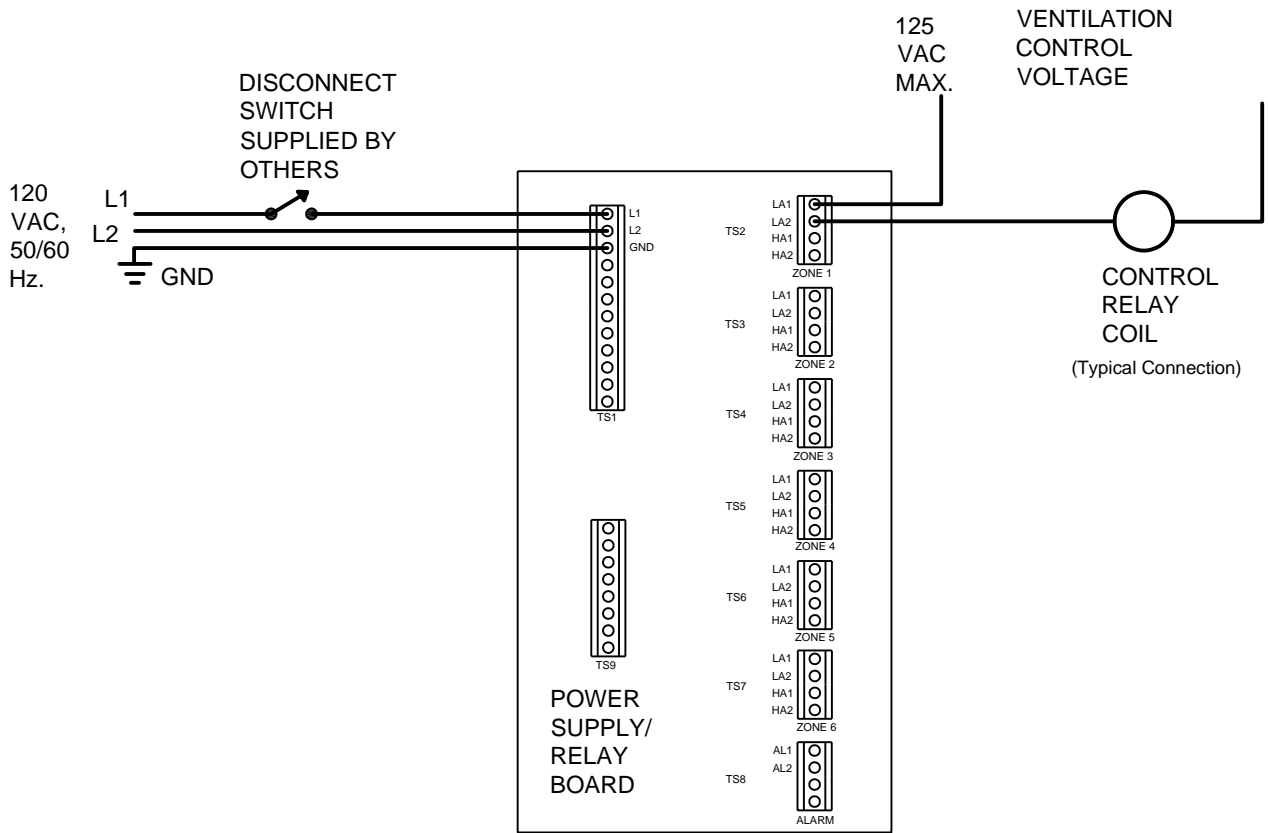
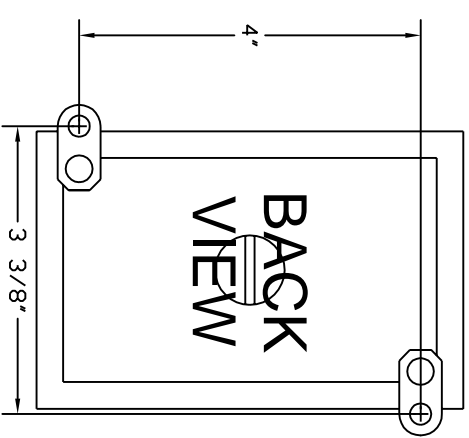
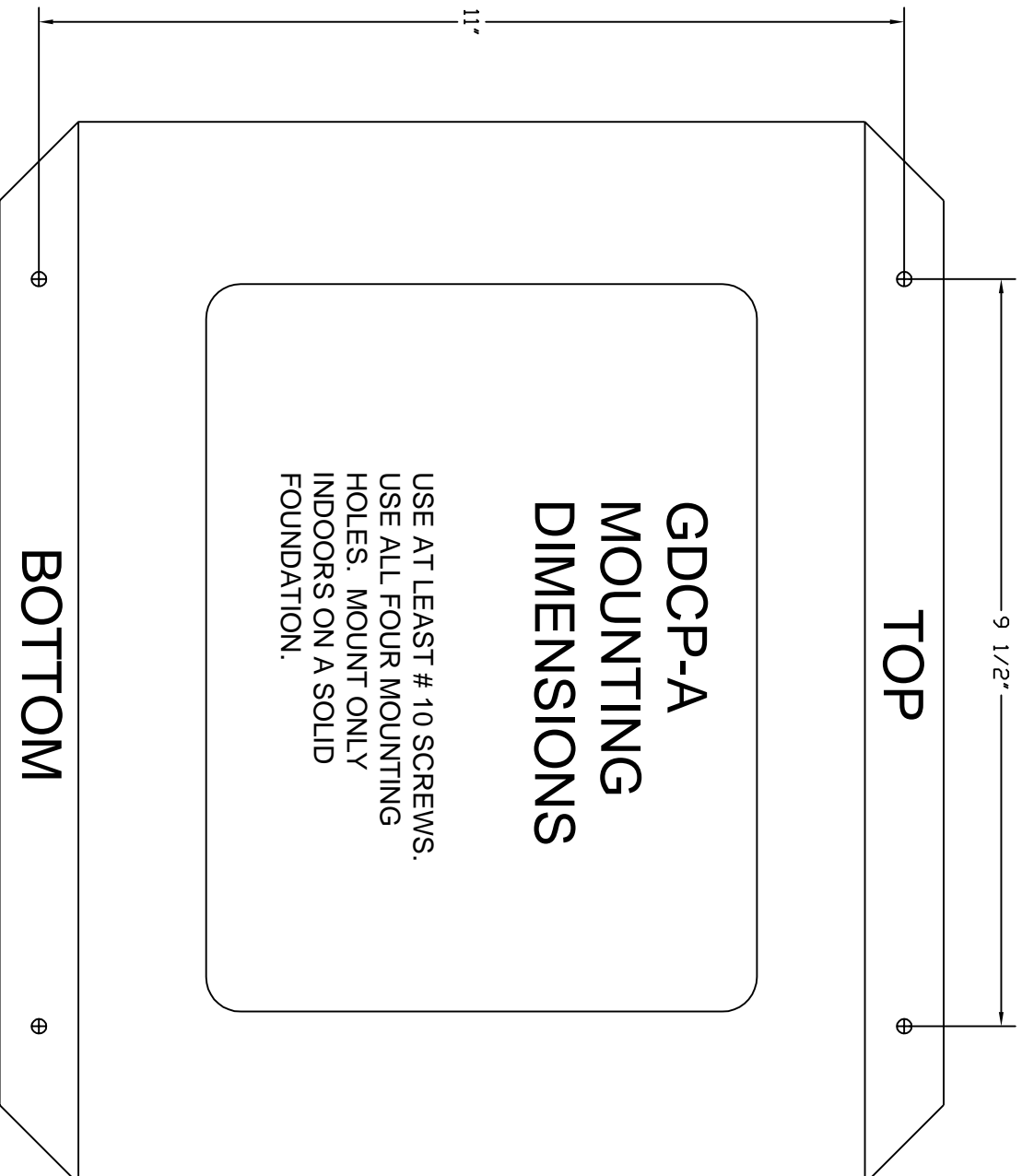


FIG. 4: GDCP-A overall wiring schematic/diagram



**GSE-TRA
MOUNTING
DIMENSIONS**

GSE-CM-TRA and GSE-ND-TRA
transmitter mounting dimensions.