

YJ-TLCD Touch panel User and Installation guide

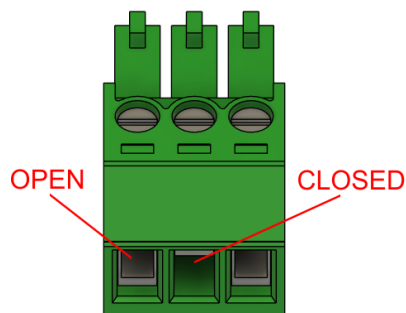
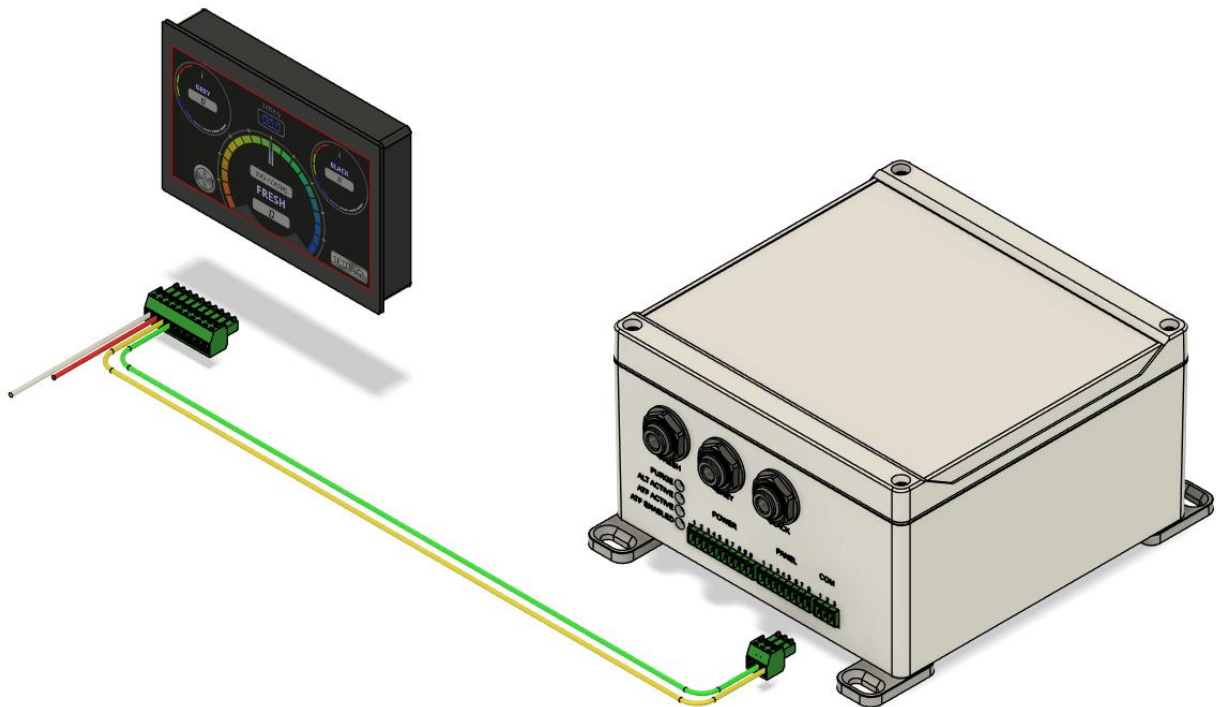
YJ-TLCD_v2_rev4a



- 2 modes of operation, Digital (Primary Panel) or Analog (Secondary Panel).
- Fresh Water Auto-Fill control.
- Audible Tank alarm for Low Fresh and Full Grey and Black.
- Adjust Tank level for accurate readings (Digital only).
- Option to display Auxiliary button to control Alternate output on the tank monitor system for controlling additional 12v loads.
- Option to display Temperature and Humidity of tank system location (see below).
- Displays Service data for aiding in trouble shooting (Digital only).

Use as Primary Panel option – Setup as “Digital” (recommended)

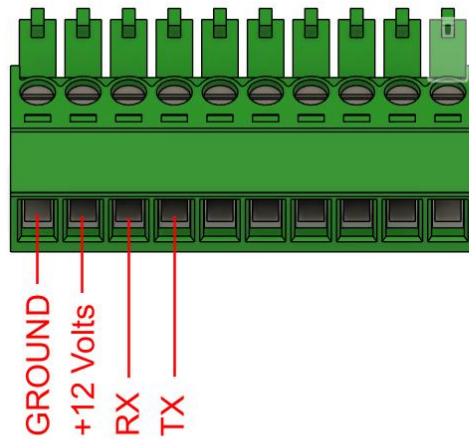
Connect the YJ-TLCD to the COM connector of the YJ-TMS Tank Monitor System. If both the panel and the system share a common power source, only 2 wires are needed between them.



Open each screw clamp with a small flat screwdriver. Strip wire approx. 3/16". Insert stripped end into the screw clamp and tighten screw.

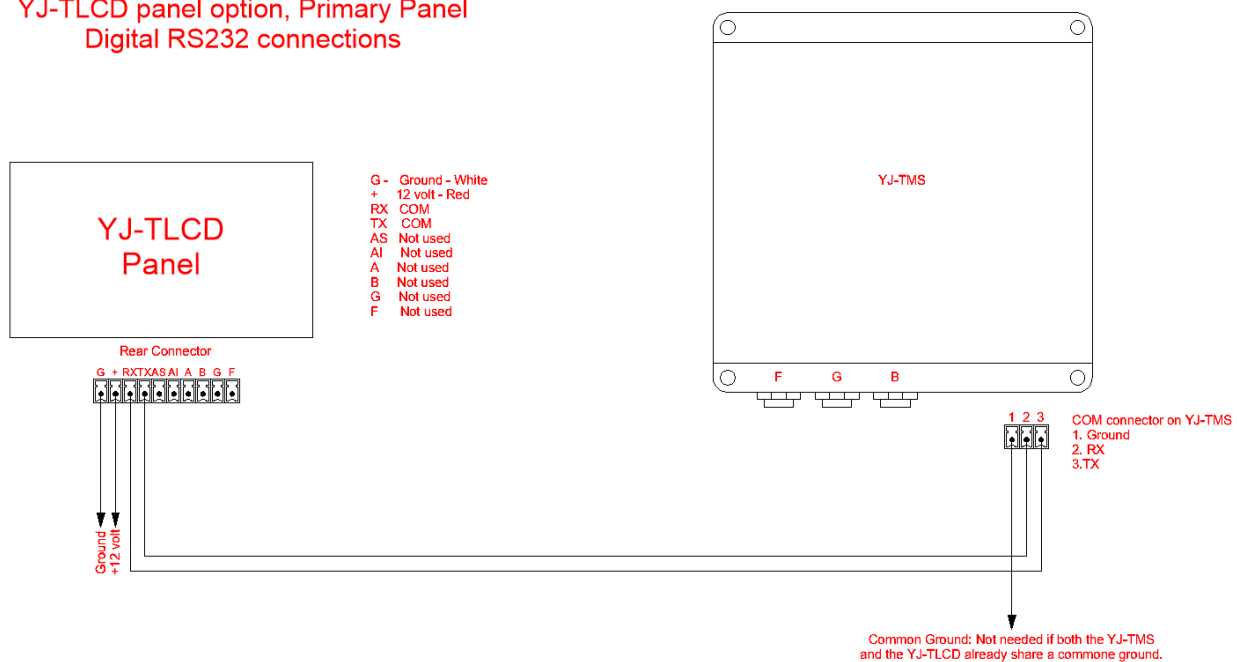
Be sure clamp is OPEN before inserting wire.

Panel Connections for use as Primary panel (Digital)



Make connection using 18awg wire between Panel and the TMS system. Note the Panel RX should connect to the TMS TX connection, and the Panel TX should connect to the TMS RX connection. Note: Only one device can be connected to the COM port.

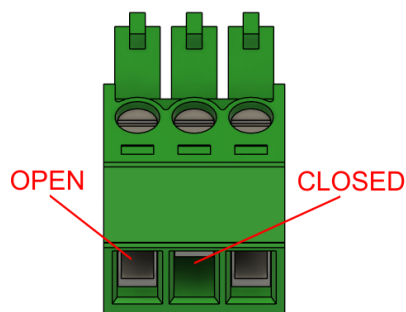
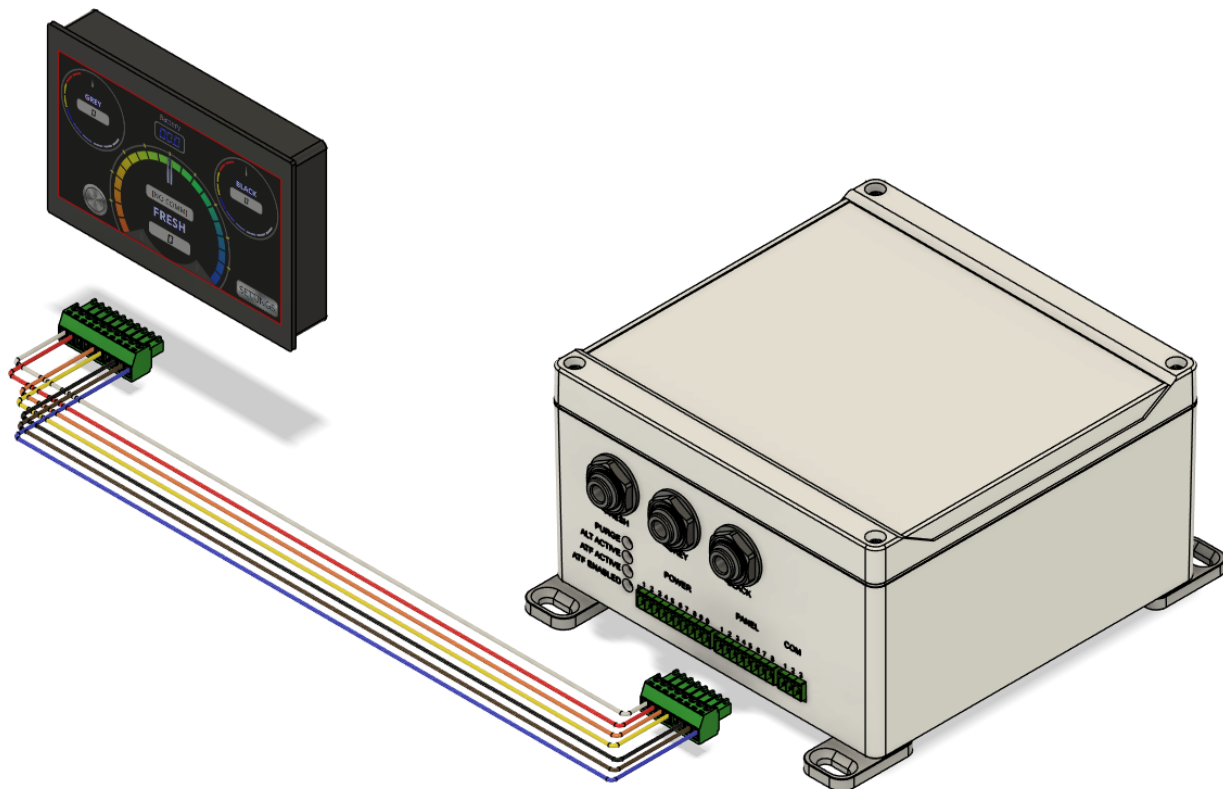
YJ-TLCD panel option, Primary Panel Digital RS232 connections



Use as Secondary Panel option – Setup as “Analog”

If the COM port on the YJ-TMS tank system is already in use by another device then the YJ-TLCD panel can be set to ANALOG and used as a secondary panel.

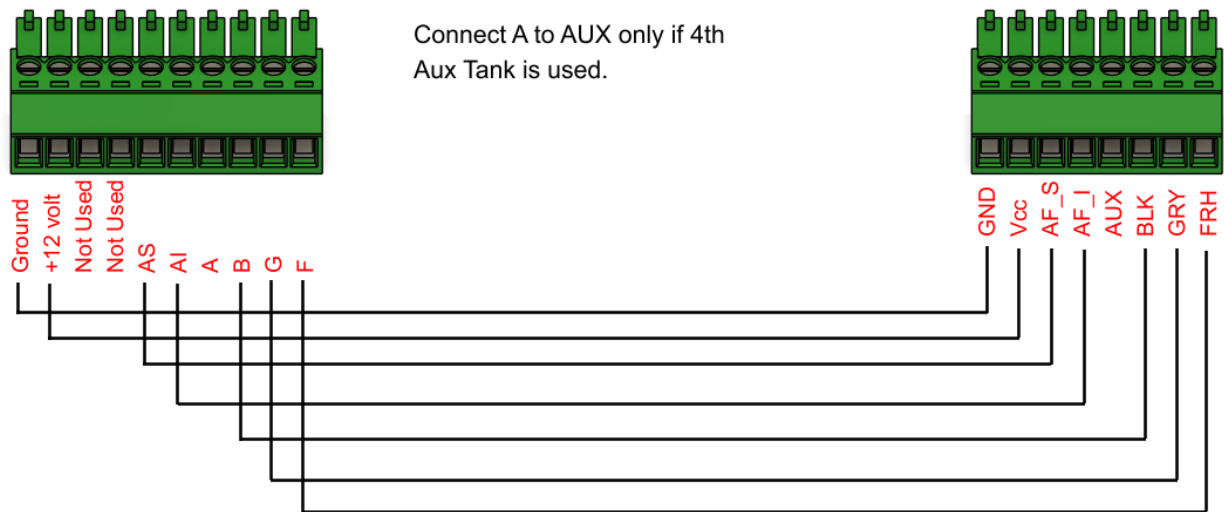
Connect the YJ-TLCD display to the PANEL connector of the YJ-TMS Tank Monitor System.



Open each screw clamp with a small flat screwdriver. Strip wire approx. 3/16". Insert stripped end into the screw clamp and tighten screw.

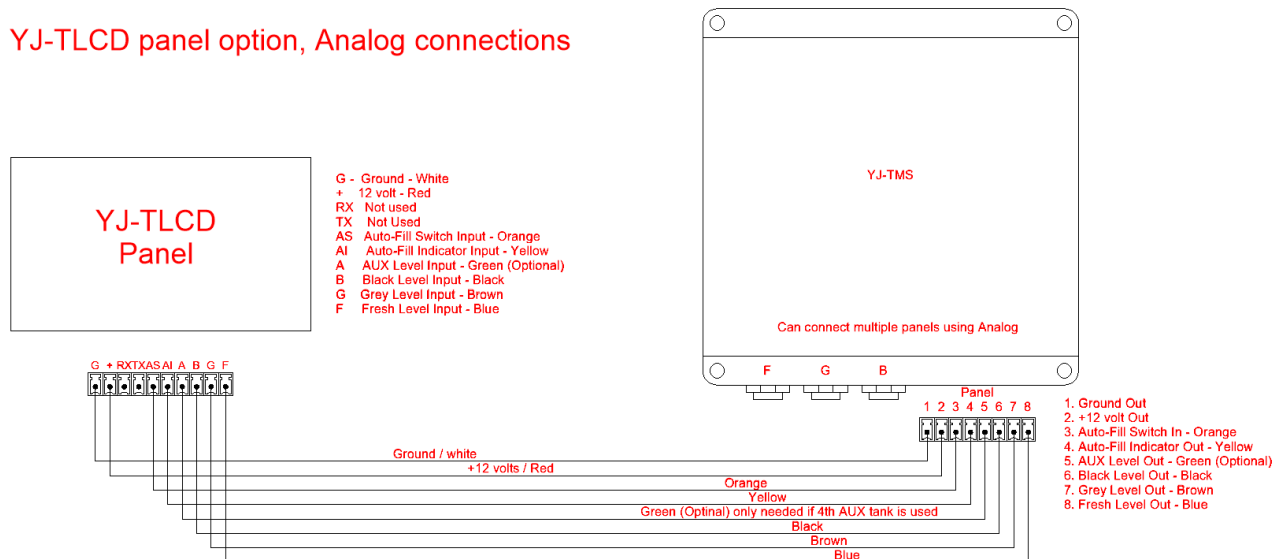
Be sure clamp is OPEN before inserting wire.

Panel Connections for use as Secondary panel (Analog)



Make connection using 18awg wire between Panel and the TMS system. Note the AUX connection is only needed when a 4th AUX tank is Installed and the TMS has 4 air tube connections.

YJ-TLCD panel option, Analog connections



Once connections are made and the system is powered up, the default digital screen will be displayed as shown below.



NOTE: If [NO COMM] appears and the panel is wired as DIGITAL then check the RX and TX connections. This indicates NO COMMUNICATION, and the wiring may be incorrect, often RX and TX maybe reversed. If the panel is wired as ANALOG, the display will need to be set to ANALOG in SETTINGS – see below.

When pressing buttons on the display, use a firm tap and allow 3 seconds for change before pressing a second time.

GREY: Shows the tank level of the Grey Tank in Percent Full. Once over 80% the meter will turn Red.

BLACK: Shows the tank level of the Black Tank in Percent Full. Once over 80% the meter will turn Red.

FRESH: Shows the tank level of the Fresh Tank in Percent Full. Once over 90% the grey F will turn blue. Once below 10% the grey E will turn Red.

AUTO-FILL: The text window above the word FRESH will display the current state of the Auto-Fill. Tap the word “FRESH” to turn the Auto-Fill ON or OFF.

BATTERY: Displays the nominal voltage supplied to the YJ-TMS monitor system. Press and hold the battery display for 3 seconds will force a short tank purge.

ALARM: Pressing the round “Bell” button will enable/disable the audible alarm. Alarm can be set to sound on Fresh Empty, Black/Grey Full, or both – see SETTINGS

SETTINGS: Displays the Settings Page.

SETTINGS : TANKS

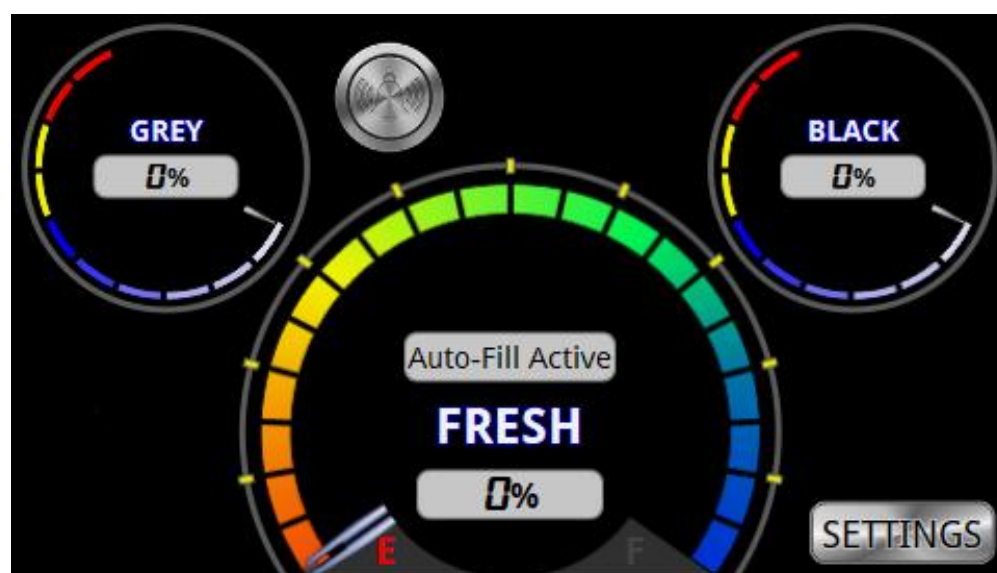


Show Fresh, Grey, and Black tanks are selected by Default. If the TMS system is equipped with the 4th AUX tank, it can be selected here by tapping the white box next to the AUX Tank. The AUX tank will appear on the main screen, lower left of the display. The Black and Grey tank can be enabled or disabled if the system is only using 2 tanks. The Fresh Tank is default and cannot be removed.

Enable or Disable the Audible alarm for each tank.

EXIT button returns to main screen. The “>>>” button advances to the next page in Settings.

If the YJ-TLCD panel is wired as a Secondary Analog panel, then “Use Analog Inputs” must be selected for proper operation. The main display will change and appear as shown below.



SETTINGS: CALIBRATION



This Screen is only available with the Panel connected as Digital.

Use the UP/DOWN arrows to adjust the tank Depth of each tank to that of the Drop tube in the tank. Example: If the Drop tube is 23" long for the Fresh tank, adjust "Fresh Tank Depth" to 23". The Tank Depth can be adjusted up/down to best represent actual levels.

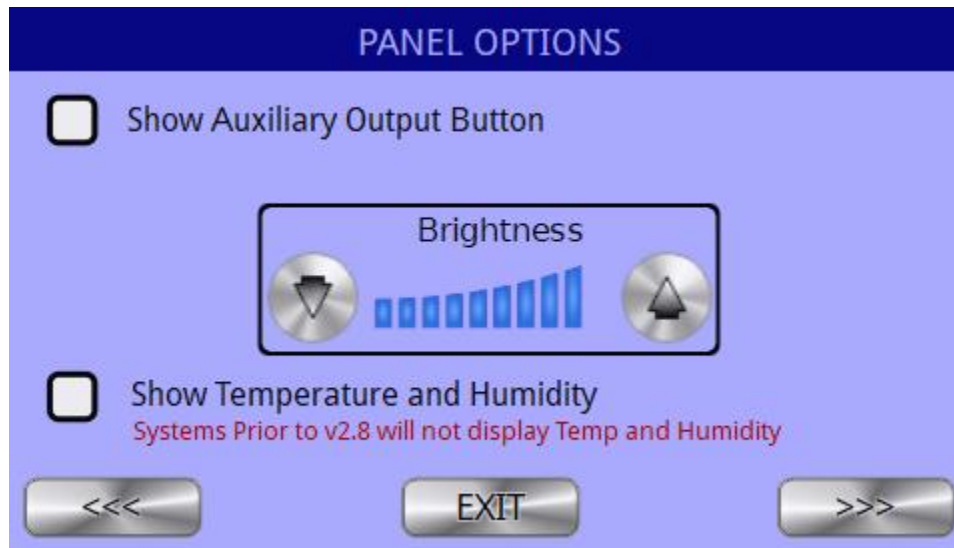
Tap Arrow to adjust by 0.1" each press. Press and HOLD arrow to adjust by 1" while holding the arrow button.

AutoFill start and Stop can also be adjusted.

If the AUX tank is used, the AUX tank Depth settings will appear on screen.

Tanks Depths are set to 25.0" by default and should be set to best represent the tank.

SETTINGS: PANEL OPTIONS



Show Auxiliary Output Button, selecting this will place a new button on the main screen to enable or disable the Alternate Output, ALT_O (pin 7), on the YJ-TMS system. This output is a ground out that can provide ground to a cube relay (required) for control of various items, see the YJ-TMS Installation and user instructions for more details. Once selected you will be given the option to select a label for the button.

Use the UP/DOWN arrows to adjust panel brightness

Show Temperature and humidity, select to display temperature and humidity based on the location of the YJ-TMS unit. This can be useful for monitoring water bay temperatures and humidity. Older TMS systems do not have this feature, and the box should remain unchecked. Older systems can be upgraded if desired.

SETTINGS: SYSTEM INFORMATION

System Information

Model: YJ-TMS
 Panel: YJ-TLCD v2 Build 4a
 Software: Prior v2.8

Yellow Jacket Concepts LLC
 gjb@yellowjacketconcepts.com

Displays system information and contact email for Service, Questions or Suggestions.

Service Data is useful for trouble shooting the system as all controls and information are available on a single page.

Service Data

	Fresh:	Grey:	Black:	AUX:
Inches:	0	0	0	0
Set Depth:	0	0	0	0
Percent:	0	0	0	0
Sensor Data:	0	0	0	0

ATF Status: 0 **ATF State:** 0 **ON at:** 0 **OFF at:** 0
Battery: 0 **ALT State:** 0 **Temp:** 0 **Hum:** 0

Displays current Inches, Set Depth, Percent and Sensor Data for each tank. Note: systems prior version 2.8 will always show “0” for Fresh sensor data.

SETTINGS: SYSTEM INFORMATION cont.

Auto-fill (ATF) state and status is shown, Battery voltage and the Alternate output state. If equip, temperature and humidity is also displayed here.

Auto-Fill button will enable and disable the Auto-fill.

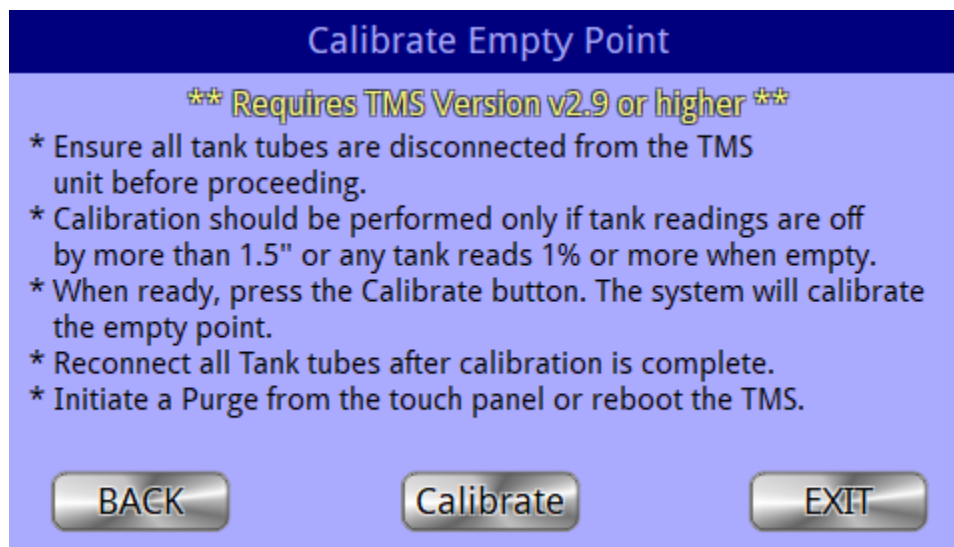
Purge button will cycle the tank pumps for 3 seconds. This is handy for trouble shooting air leaks in the system. Alternatively press and hold the voltage display on the main screen for 3 seconds will force a short purge.

Alt-Out button will enable and disable the alternate output on the YJ-TMS system.

Calibrate will display the empty point calibration screen.

Press the Back button to return to the System Information Screen.

Empty Point Calibration (TMS version 2.9 or higher)



Calibration of the empty points can improve accuracy. This calibration is performed at factory and should not need re-calibration. However there are times that re-calibration may be necessary. Sensors can drift over time, extreme temperatures or changes in altitude. If the tanks are reading 1% or more even when the tanks are empty, recalibration may be necessary. Note it is also important to make sure the tank tube is clear from debris as a clogged air tube can cause erroneous readings as well.

For panel customization, questions or suggestions contact gjb@yellowjacketconcepts.com

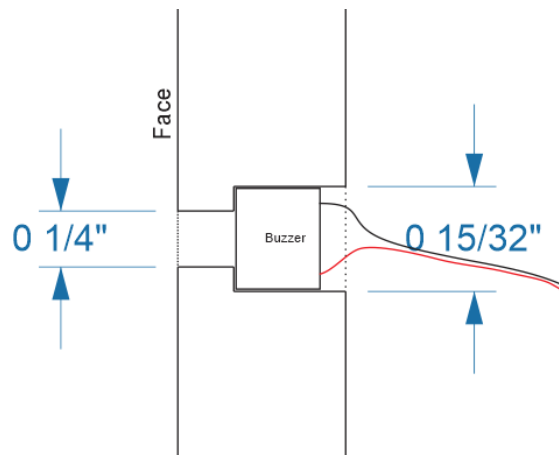
ALARM BUZZER MOUNTING:

Normally the Alarm Buzzer can free hang behind the Panel. However, if installed inside a cabinet the buzzer may be hard to hear. The Buzzer can be routed to a more suitable location. For example, next to the Panel itself.

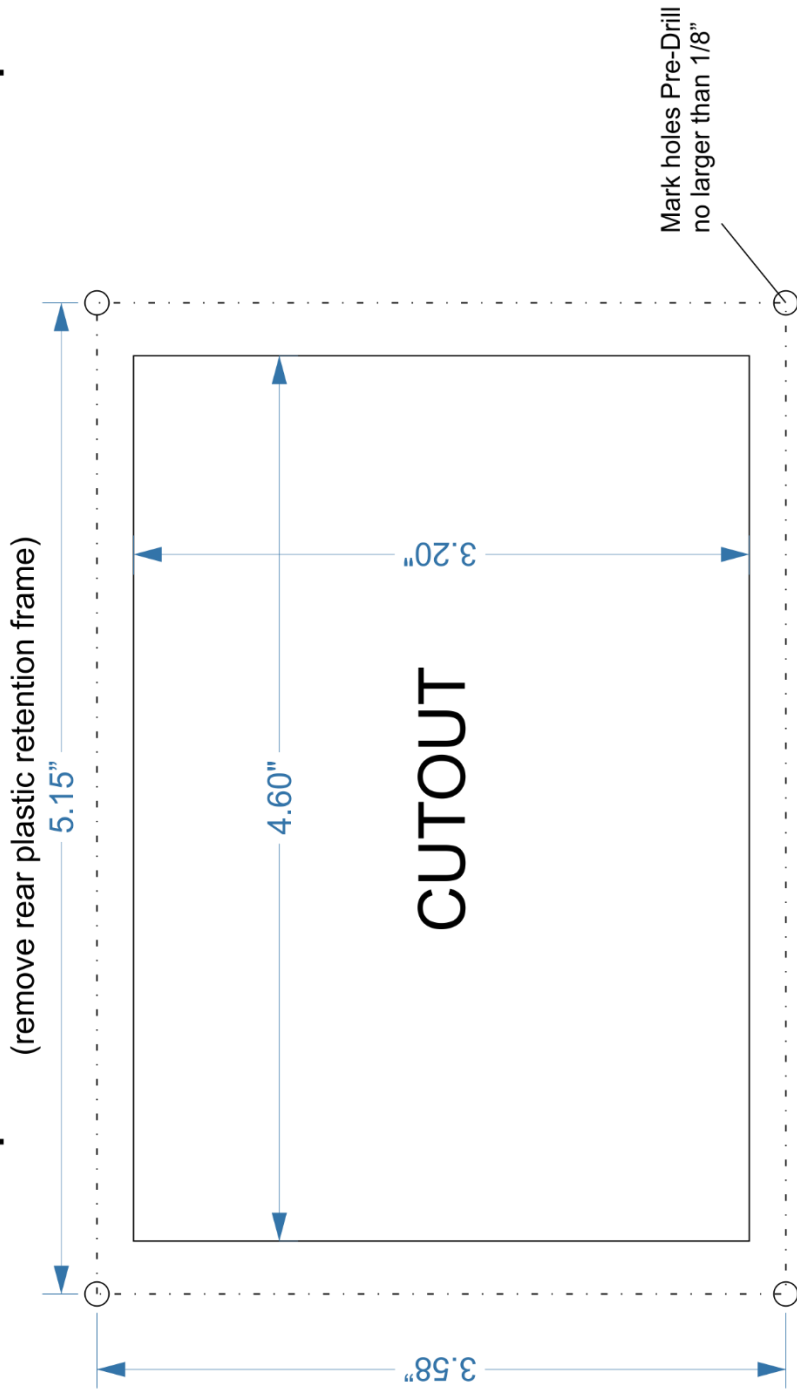
Drill a 15/32 (12mm) Hole. Use a small amount of adhesive to hold the buzzer in place. It is important that the small hole in the center of the buzzer is not covered in any way.



If the panel the buzzer is being mounted in is thick enough, a counter bore can be done for even less exposure.



Cutout and Hole pattern for YJ-TLCD touch screen Display



The panel cut-out is 117.0 x 78.0mm (4.6" x 3.07").

There are two mounting methods:

Option 1: Uses clips that protrude from the plastic assembly and is suitable for panels between 1 and 3mm (0.04" and 0.12") in thickness.

Option 2: Uses a rear mounting plastic bracket featuring grub screws for a more secure and adaptable fit. This second mounting method is suitable for panels between 0.5 and 4.0mm (0.01" and 0.15") in thickness.

The plastic retention frame can be removed, as well as the Plastic outer frame and the panel can be mounted in an existing panel.

