

Submittal Data Sheet

Project Information

Project Number _____ Approval _____

Features

The Tri-Tech Master Alarm Panel conversion kits are designed to upgrade or retro-fit existing panels produced by several major brands. The conversion kit replaces all necessary major components re-utilizing the existing back box.

The Tri-Tech Med Touch Master Alarm Panel monitors and displays normal and alarm conditions from up to 128 remote medical gas source signals and provides alarm conditions as required by the latest edition of NFPA 99. Pressure switches, transducers and DISS union check valve connectors are sold separately.

- **Five year parts and one year labor warranty**
- 2.85" LCD touch screen displays up to 8 normal and alarm conditions for pressure switch sensor inputs
- 2.85" LCD touch screen displays up to 8 normal and alarm conditions and provides a digital pressure display for up to 4 transducer sensor inputs
- 2.85" LCD touch screen displays normal and high/low alarm conditions for one 4 – 20 mA sensor input
- The LCD touch screen allows all alarm programming and set up to be done without the use of tools
- A green normal or red alarm condition for each signal point confirms the condition for each
- Emergency preparedness instructions - Med Touch Alarm Panels allow users to set up customized instructions for each alarm signal which appear on the screen when the signal is in alarm
- Up to 128 remote master signals in a single panel
- Up to 4 master boards (32 signals) in a two slot, 8 (64 signals) in a three and 16 (128 signals) in a five slot panel
- Wireless (minimal low voltage wiring) models available
- Last event history (per gas board /signal point)
- Made in the U.S.A.
- NFPA and ISO pre-loaded gas 'labels'
- English, and English/French pre-loaded languages
- Editable text and alarm 'labels'
- Self-contained unit - Designed for ease of installation and service
- Self-diagnostic error message display for ease of maintenance
- Audio and visual alarm indicators
- Bright easy to read LCD displays – clearly visible in both day and night lighting conditions
- Constant display and monitoring of each sensor input
- User programmable high/low set points on transducer and 4 – 20 mA sensor input boards
- Dry contacts provided on the CPU module for general fault condition covering entire panel
- Hinged frame for easy accessibility
- Color coded displays



Additional features:

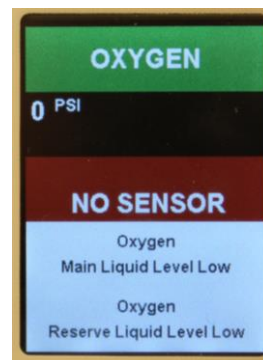
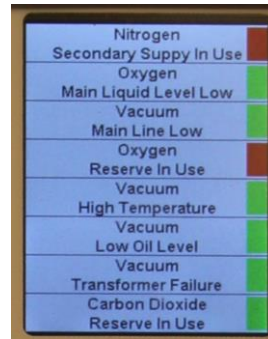
- Individual user programmable remote signal alarm points to accept NO or NC signals, or may be disabled. Factory preset to accept Normally Closed signals
- LCD indicators (Green) confirms normal status, (Red) indicates abnormal condition
- Menu of NFPA 99 master alarm signals for quick, easy selection
- Gas specific transducer master signal boards. An error message will be displayed if incorrect sensor or no sensor is attached
- Transducer master signal boards shall be capable of displaying gas readouts in PSI, kPa, BAR, inHg or mmHg
- Alarm repeat feature is turned off when unit is shipped, but is adjustable up to 240 minutes thru user programming change

Specification

The alarm shall be the Tri-Tech Medical Med Touch Master Alarm. The panel shall be microprocessor controlled and designed to comply with NFPA 99. The panel shall incorporate 2.85" LCD touch screen display(s) for groups of up to 8 signal points which shall allow all alarm programming and set up to be done without the use of tools. The unit shall be designed to accept an electrical input range of 120-240 volts AC – 50-60 hertz. The source voltage shall be stepped down with a self-contained transformer. The panel shall contain audible and visual alarm indicators. The audible alarm may be silenced by pressing the alarm silence button, but the visual alarm indicator can only be cancelled by fault correction. The alarm shall detect and filter out transient (less than 0.6 seconds) signals created by R.F.I. The alarm shall be capable of displaying alarm history for all possible alarm conditions. A security pin code shall be required and must be entered in order to access the programming software.

The following options shall be able to be added to the panel at the time of order or after installation;

- Optional Ethernet module. This module may be added to any alarm panel. It will provide the following features:
 - Webserver – allows a remote user access to the alarm’s webpage – viewing a graphic image of the alarm with all signal conditions, pressure & event / history log information
 - Webserver – allows a remote user access to the alarm’s webpage – viewing a graphic image of the alarm with all signal conditions, pressure & event / history log information
 - Text or e mail notification of alarm conditions (up to 5 addresses)
 - Modbus and BACnet gateway interface
 - Event / history log – maintains a rolling list of the 100 most recent alarm condition events and a file of the 1,000 most recent alarm events and is downloadable through embedded web pages
- Optional Ethernet connection for BACnet or Modbus transmission of signals to a building automation system



Master / Remote Signal Display (dry contact sensors)
Shown in alarm condition displaying emergency instructions. Display blinks on and off when in alarm condition drawing attention and alternates displaying signal identification with user programmed emergency instructions.

Master / Remote Signal Display (both dry and transducer sensors)
Shown in normal condition. User selects signal labels from database of NFPA signals included in the boards memory. Individual signal points are pre-programmed NC but may be re-programmed as Disabled or NO by user.

Master / Remote Signal Display (dry contact sensors)
Shown in alarm condition. Display blinks on and off when in alarm condition drawing attention and alternates displaying signal identification with user programmed emergency instructions.

Master / Remote Signal Display (transducer sensors)
Shown in alarm condition. The standard display looks and acts the same as both of the above Master/Remote displays. By touching the signal point you wish to view, the display changes to the view shown here providing the additional actual line pressure of the gas being monitored. This may be viewed at any time, in Normal or Alarm condition.

How to Order: Easy to use modular ordering system.

*Fill in the blanks to specify the Med Touch Master Alarm that meets **your** needs.*

Model Numbering:

Signal Number Group

		001 008	009 016	017 024	025 032	033 040	041 048	049 056	057 064	065 072	073 080	081 088	089 096	097 104	105 112	113 120	121 128
T	N	C	Y	S	S	S	S	S	S	S	S	S	S	S	S	S	S



Note: a 35-3032 kit may be ordered separately and installed in the field to provide; Ethernet webserver, event log, alarm notifications may be sent up to 5 users via text or e-mail and Modbus Interface. The 35-3033 Ethernet programming kit is required and must be ordered when the 35-3032 kit is ordered. Only one is needed per facility.

Note: a 35-3035 kit may be ordered separately and installed in the field to provide a BACnet interface. The 35-3032 and 35-3033 kits are also required whenever the 35-3035 kits is ordered. Only one 35-3033 kit is needed per facility.

S = Master Signal Input Type

Non-Latching Alarm Relays	Description
M	4-20mA
P	Dry Contact (8 Signal Points)
Q	Transducer (4 Gases, 8 Signal Points)

Latching Alarm Relays	Description
%	4-20mA
+	Dry Contact (8 Signal Points)
#	Transducer (4 Gases, 8 Signal Points)

B – Blank Slot - 4 Vertical Future Expansion (Blank) Positions in One slot
F – Future Expansion (Blank) Position
List Signal Input Type Choices from Left to Right Starting at Signal Number Group 001 thru 008

Y = Conversion Type

7 = All others 8 = Tri-Tech AU & DU series

C = Gas Set

U – Tri-Tech Labeled NFPA Color Code English I – Tri-Tech Labeled ISO Color Code English/French

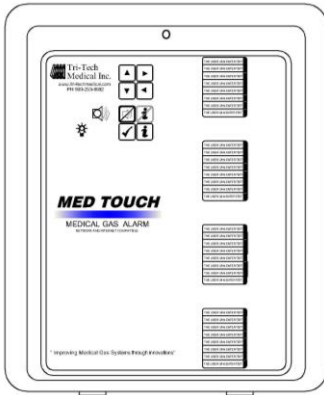
N = Number of Slots on Front Panel

2 – 2 Slot Front Panel 3 – 3 Slot Front Panel 5 – 5 Slot Front Panel

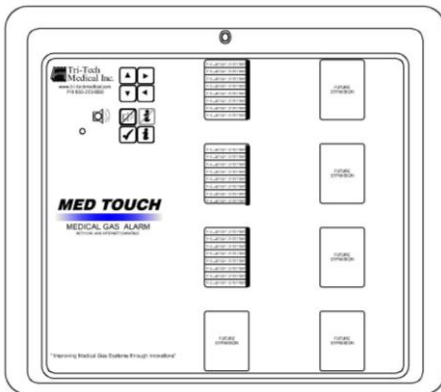
T = Type of Alarm

T - Touch Screen Digital

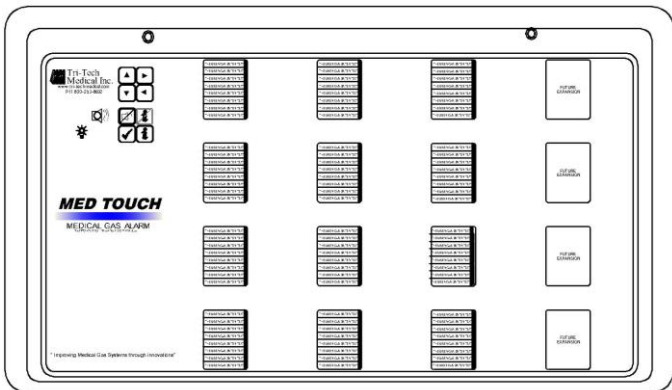
Part No. Examples



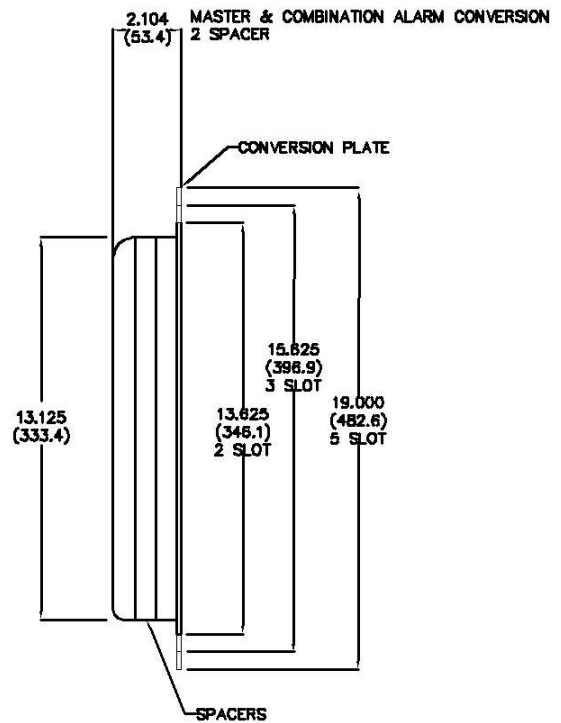
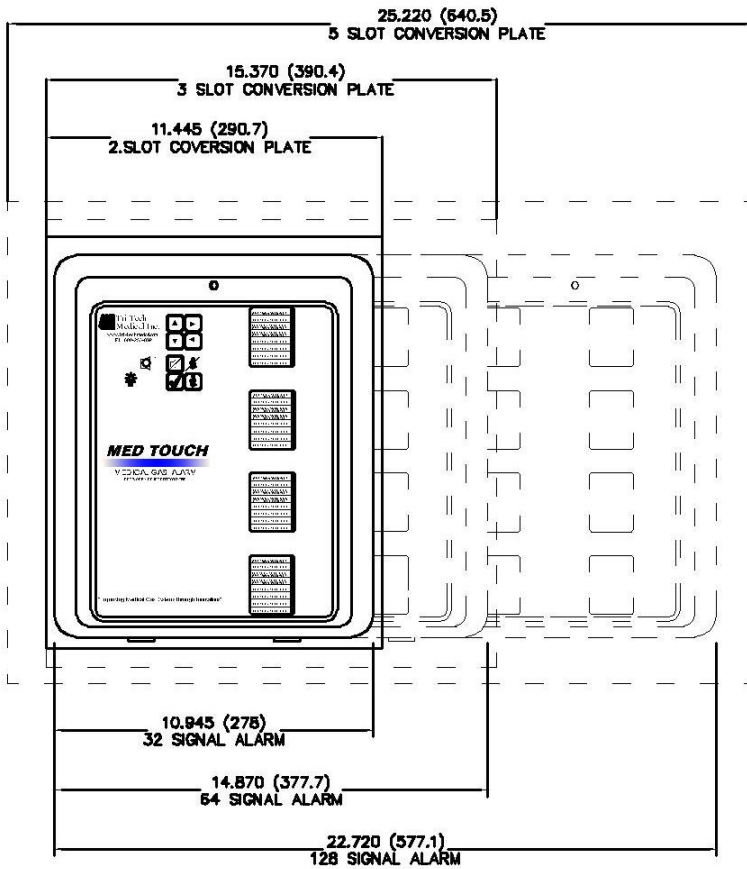
T2U8PPPP = Converts Tri-Tech AU or DU series 2 Slot Master Alarm, set for NFPA Color Code English. 32 Dry Contact Signal Points w/ Non-Latching Alarm Relays. No Interface Communication Option

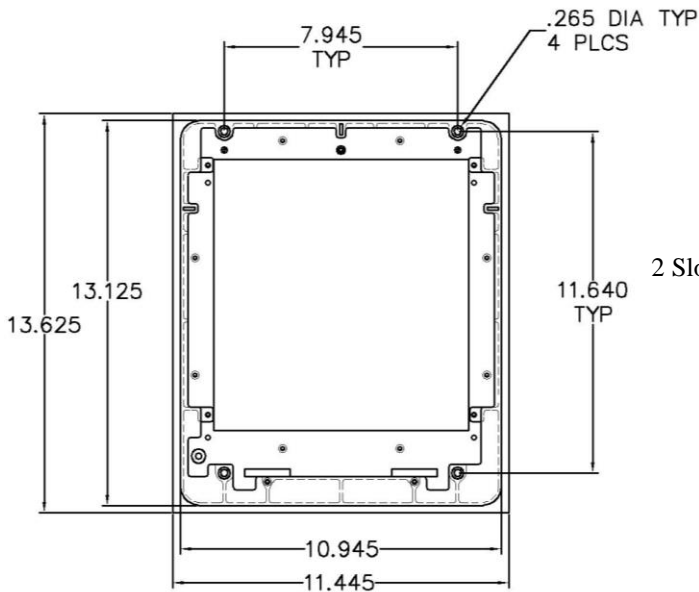


T3I7+++FB = Converts Ohio or Medaes Master Alarm, 3 slot set for ISO Color Code English/French gas set. 24 Dry Contact Signal Points w/ Latching Alarm Relays and one Future Expansion (Blank) position at bottom of 2nd slot, 3rd slot Blank. No Interface Communication Option.

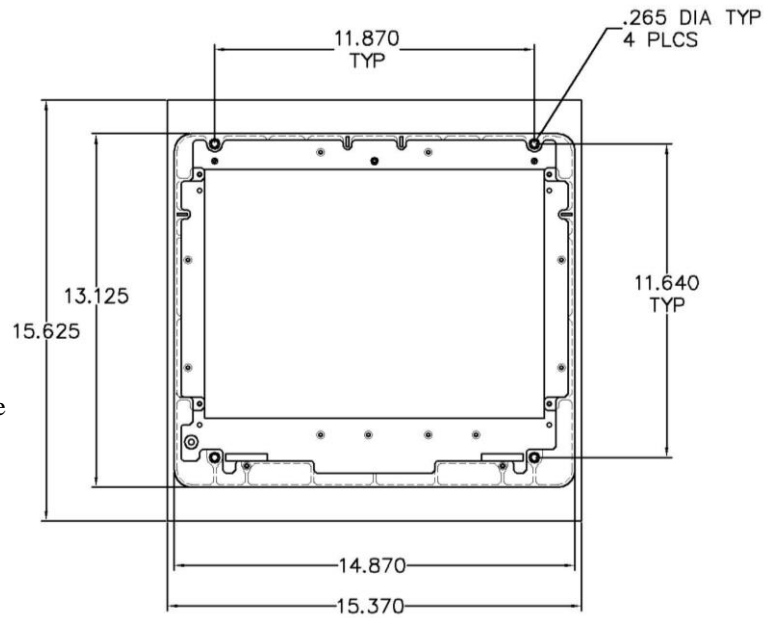


T5U4PPPPPPPPQQQB3 = Converts Chemetron Master Alarm, 5 slot set for NFPA Color Code English gas set. 64 Dry Contact Signal Points w/ Non-Latching Alarm Relays and 32 Transducer Signal Points W/ Non-Latching Alarm Relays, 5th slot is Blank. Ethernet Web Server, Modbus, and BACnet Interface Communication Option.

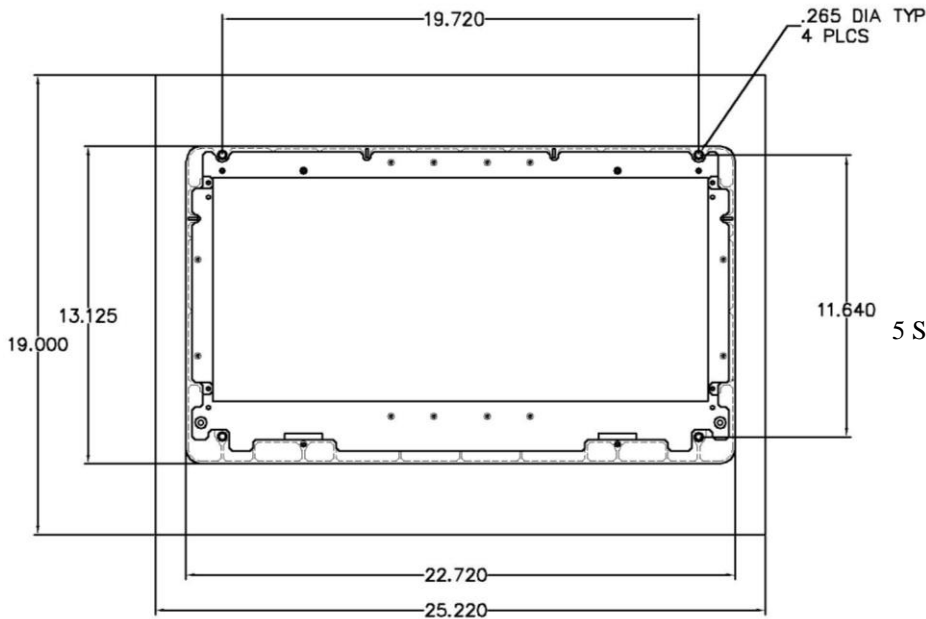




2 Slot Alarm Front Conversion Sub-Mounting Plate



3 Slot Alarm Front Conversion Sub-Mounting Plate



5 Slot Alarm Front Conversion Sub-Mounting Plate