

Instructions

Det-Tronics Gas Panel Model GP16XX



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Det-Tronics Gas Panel Model GP16XX

 **WARNING**

Be sure to read and understand the entire instruction manual before attempting to setup and operate the GP16XX Gas Panel. Proper device setup, operation, and maintenance is required to ensure safe and effective operation. If this equipment is used in a manner not specified in this manual, safety protection may be impaired.



DESCRIPTION

As part of Detector Electronics Corporation's (Det-Tronics) commitment to providing a variety of system solutions, the model GP16XX Gas Panel is an economical and pre-configured solution that is packaged to meet global performance approvals. The Eagle Quantum Premier® (EQP) system components, within the GP16XX, are approved for life safety to monitor low concentrations of combustible and toxic gas hazards.

A maximum of 16 detection points are available with the GP16XX, with flexibility to communicate via analog 4-20 mA and/or digital LON (Local Operating Network). The enclosure houses an EQP system controller (pre-configured with S³ software and logic), a power supply, Ground Fault Monitor, and optional Analog Input Module (AIM).

The GP16XX is equipped with a Pro-face® Human Machine Interface (HMI) touch screen that communicates to the controller through Modbus protocol. System setup and operation is performed through the HMI touch screen, with real-time status indication of gas levels, faults, alarms, and calibration.

FEATURES AND BENEFITS

- Compliance to ANSI/ISA 12.13.1-2000 (Combustible), ANSI/ISA 92.0.01-1998 (Toxic), FM 6310/6320, CSA 22.2 No.152, and EN60079-29-1
- Utilizes Eagle Quantum Premier (EQP)
- Economical and reliable
- 16 gas detection points available
- Communication flexibility (4-20 mA and/or LON)
- User friendly HMI touch screen
- Real time gas level, fault, alarm, and calibration indication
- Quick set up
- Electronics and wiring tested at the factory
- User defined alarm setpoints
- Sounder on panel
- Customized services available.

ENCLOSURE

The GP16XX Gas Panel is packaged in a wall mounted painted steel enclosure. See Figures 1 and 2 for enclosure dimensions and an internal view of a fully loaded system.

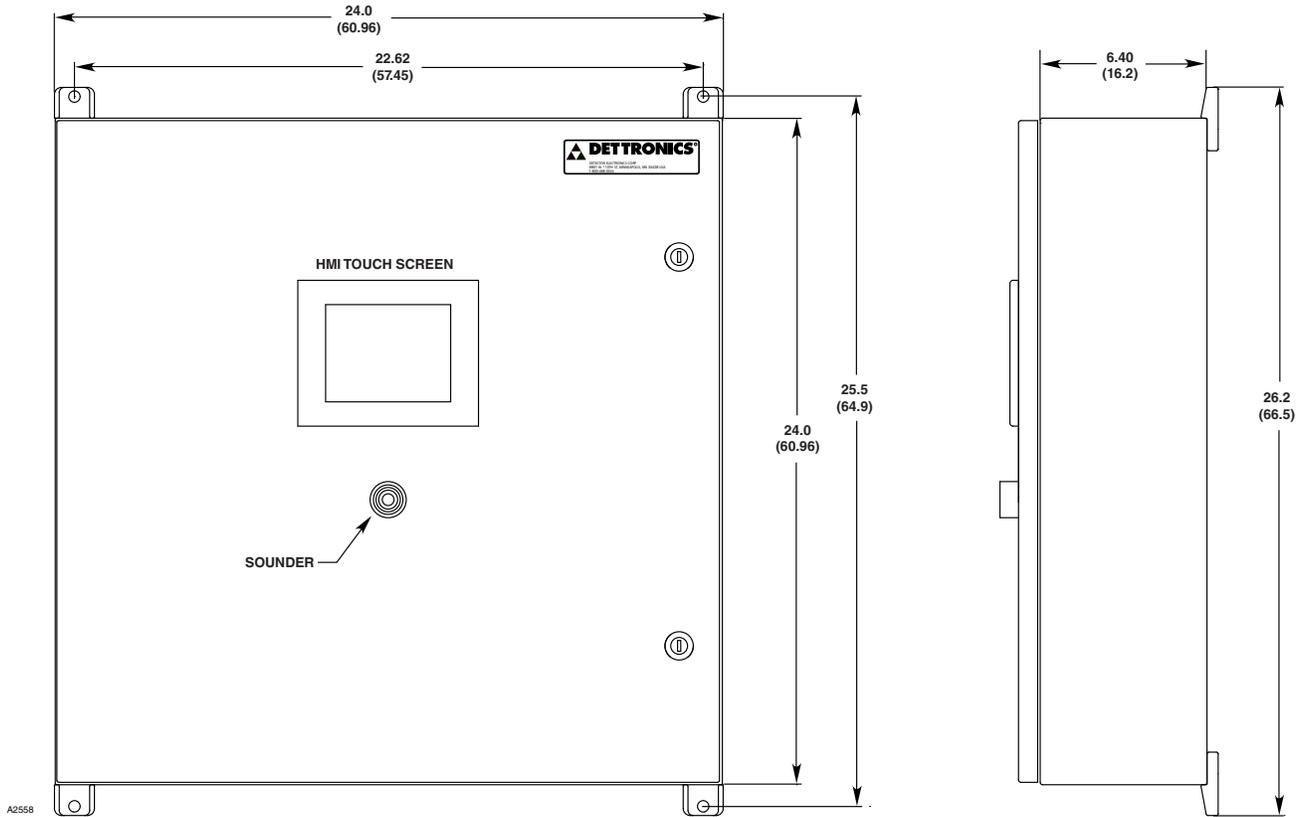


Figure 1—Dimensions of GP16XX in Inches (Centimeters)

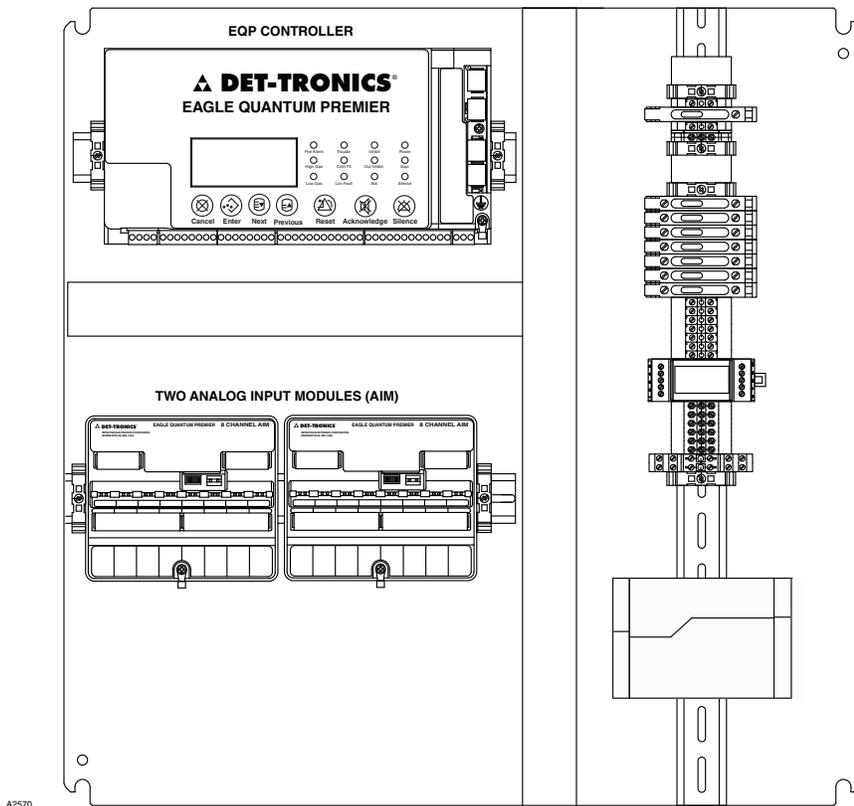


Figure 2—Internal View of a Fully Loaded GP16XX Gas Panel

SYSTEM COMPONENTS

The system has three (3) main component groups – the System Controller, LON, and 4-20 mA field devices. The following devices are included (or optional) with the GP16XX Gas Panel.

EQ3001 – EQP Controller (included)

The EQP Controller is the first and most critical component of the GP16XX Gas Panel. With pre-programmed logic from Det-Tronics' Safety System Software (S³), the controller performs all communication, command, and control functions for the system.

EQ3710AIM – Analog Input Module (optional up to 2)

The 8 channel Analog Input Module allows a device with a calibrated 4-20 mA output signal to be connected to the Eagle Quantum Premier Controller.

EQ2220GFM – Ground Fault Monitor (included)

The EQ2220GFM detects ground fault conditions on +/- power and all secondary I/O circuits.

Power Supply – 24 Vdc, 10A (included)

The Power Supply provides main power to the EQP Controller. It includes features such as voltage regulation, high efficiency, and high power factor.

Pro-face Human Interface Machine (HMI) – (included)

The HMI touch screen consists of several graphical screens that permit the setup, operation, and interrogation of the connected field devices. See the Operator Interface section for detailed descriptions of the HMI touch screen.

FIELD DEVICES

The following field devices are GP16XX compatible:

PIRECL – PointWatch Eclipse®

The PointWatch Eclipse Model PIRECL is a diffusion-based, point-type infrared gas detector that provides continuous monitoring of combustible hydrocarbon gas concentrations in the range of 0 to 100% LFL. When used with the GP16XX, the PIRECL can be setup through the AIM or LON, depending on the model type.

UD10-DCU – FlexVu Universal Display

The FlexVu Model UD10-DCU is designed for applications that require a gas detector with digital readout of detected gas levels. Its LON interface board makes the UD10-DCU compatible with Eagle Quantum Premier systems by digitizing the 4-20 mA analog signal from the attached sensor/transmitter. The digitized value is then transmitted as a process variable over the LON to the EQP controller. The UD10-DCU can be used with various 4-20 mA gas detection devices (with or without HART), including the following Det-Tronics field devices:

- GT3000
- PIRECL
- PIR9400
- OPECL
- CGS
- NTMOS.

EQ22xxDCU/DCUEX – Digital Communication Unit

The EQ22xx series of digital communication units for catalytic, combustible and toxic gas sensors digitizes the analog signal and transmits the value to the controller.

4-20 mA Devices

Connect 4-20 mA devices to the GP16XX via:

- AIM
- UD10-DCU
- EQ22xxDCU/DCUEX.

Reference Table 1 for the documentation list that contains device specific information on approvals, installation, calibration, and maintenance.

Table 1—EQP Device Specific Documentation

TITLE	FORM NUMBER
EQP Controller	95-8533
AIM	95-8533/90-1183
EQ22xxDCU	95-8533/90-1118
UD10-DCU	95-8656
ECLIPSE	95-8526

IMPORTANT SAFETY NOTES

CAUTION

The wiring procedures in this manual are intended to ensure proper functioning of the device under normal conditions. However, because of the many variations in wiring codes and regulations, total compliance to these ordinances cannot be guaranteed. Be certain that all wiring complies with the NEC (National Electric Code) as well as all local ordinances. If in doubt, consult the authority having jurisdiction before wiring the system. Installation must be done by a properly trained person.

CAUTION

This GP16XX Gas Panel (excluding field devices) has been tested and approved for use in non-hazardous areas. However, it must be properly installed and used only under the conditions specified within this manual and the specific approval certificates. Any device modification, improper installation, or use in a faulty or incomplete setup will render warranty and product certifications invalid.

CAUTION

The components and devices contain no user serviceable components. Service or repair should never be attempted by the user. Device repair should be performed only by the manufacturer or trained service personnel.

LIABILITIES

The manufacturer's warranty for this product is void, and all liability for proper function of the detector is irrevocably transferred to the owner or operator in the event that the device is serviced or repaired by personnel not employed or authorized by Detector Electronics Corporation, or if the device is used in a manner not conforming to its intended use.

WARNING

Observe precautions for handling electrostatic sensitive devices.

INSTALLATION

The panel must be securely bolted in place in a non-hazardous area (indoors).

MOUNTING

Refer to Figure 1 for mounting dimensions, and choose a location that allows for the specified maximum cable length for the field devices.

CONDUIT ENTRY

To minimize water ingress and condensation, it is recommended that conduit entries be located at the bottom of the enclosure, if the application permits. Be certain that all conduit entry locations comply with the NEC, as well as all local ordinances.

POWER REQUIREMENTS

For the GP16XX power requirements, see the "Specifications" section of this manual. Additionally, reference the "Power Wiring" in Section 3 of the EQP manual, 95-8533.

WIRING

Factory wiring is made to the appropriate terminals located inside the enclosure. Electrical wiring schematics for the GP16XX can be found in Appendix B of this manual. Field wiring and field wiring tags are the responsibility of the customer.

If a LON device is part of the system, it is important to wire the device correctly through the LON wiring terminal as shown in Figure 3. Incorrect wiring of LON devices will generate faults that will persist until corrected. Reference the wiring schematics in Appendix B of this manual, and EQP manual 95-8533 for details on LON wiring.

GROUNDING

The enclosure must be electrically connected to earth ground.

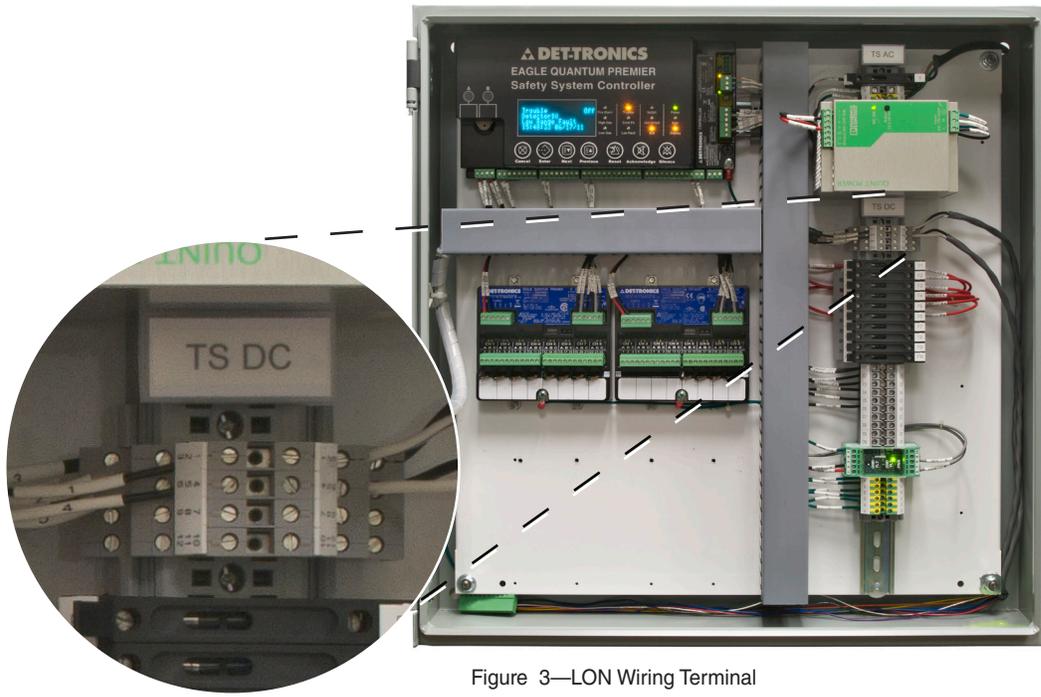


Figure 3—LON Wiring Terminal

OPERATOR INTERFACE

The HMI touch screen is located on the front of the enclosure door, and consists of several graphical screens that permit the setup, operation, and interrogation of the connected field devices. These screens include the Main screen, Setup screen, Device Setup screen, and Event Log screen.

MAIN SCREEN

The Main screen displays the overall status of the devices within the GP16XX gas panel. The vertical gauges represent the 16 available channels (Figure 4), and each channel can inherit any of the following characteristics:

- Solid Blue Channel**—Channel not active.
- Solid Black Channel**—Device active with zero gas.
- Solid White Channel**—Gas is present below alarm setpoint.
- Solid Yellow Channel**—System fault detected.
- Flashing Red Channel**—Gas is present above low alarm setpoint.
- Solid Red Channel**—Gas is present above high alarm setpoint.

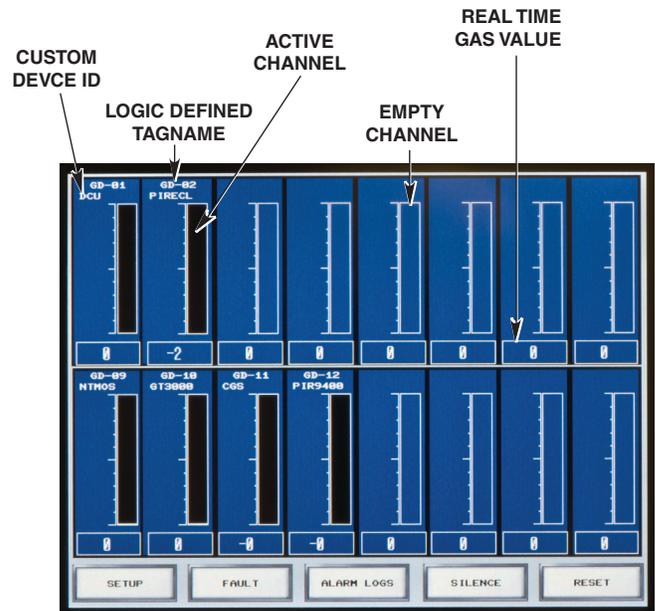


Figure 4—Main Screen

A Logic Defined tagname and a Custom Device ID tagname will appear above a channel after setup has been completed for that channel.

NOTE

The Logic Defined tagname, beginning with "GD-", cannot be altered. It is a tagname that references each channel as a "Gas Detector" and is used for identifying devices in the event logs. Custom Device IDs are entered in the Setup screen.

The buttons along the bottom (SETUP, FAULT, EVENT LOGS, SILENCE, RESET) allow the user to interact with the system to perform various tasks.

Their functions are as follows:

SETUP opens the Setup screen (Figure 6) for configuring devices on the system.

FAULT is solid yellow when a fault is present. When pressed, the Event Log screen is opened (Figure 9).

EVENT LOGS opens the Event Log screen, displaying all alarms and events (Figure 9).

SILENCE turns the sounder off during faults and alarms.

RESET resets all latched outputs that are no longer active.

Point Display

The Point Display reports the current status of a selected device, and it is accessed within the Main screen by touching an active channel (Figure 5). The available information includes Low Alarm, High Alarm, Fault, Calibration Active, and Calibration Fault.

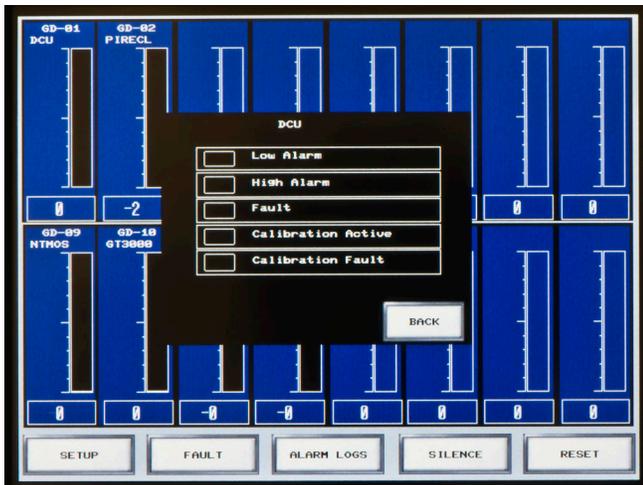


Figure 5—Point Display

SETUP SCREEN

Device setup is initiated from the Setup screen (Figure 6). Touching a channel in the Setup screen opens the Setup Login screen (Figure 7), where a user ID and password must be entered in order to begin the setup procedure.

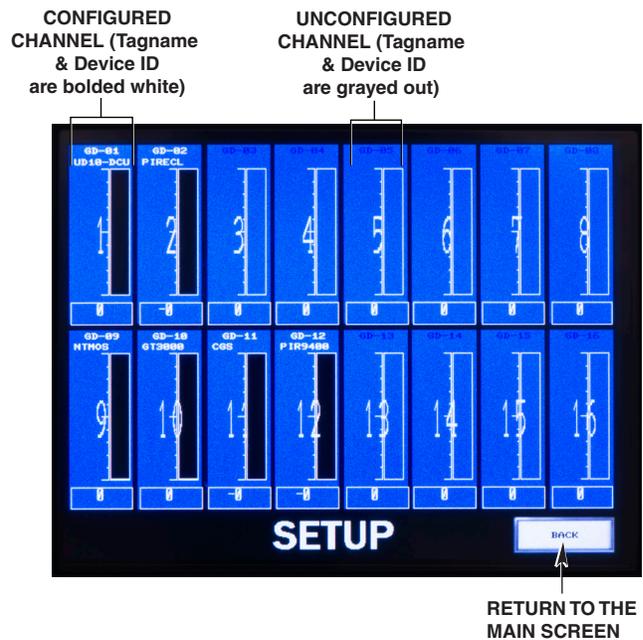


Figure 6—Setup Screen

Setup Login Screen

The Setup Login screen prevents unauthorized setup of the system. Once the username and password are entered correctly, the Device Setup screen becomes accessible and devices can be setup for use.

NOTE

The default user ID is "ADMIN" and "DEC" is the password.



Figure 7—Setup Login Screen

DEVICE SETUP SCREEN

Devices are setup for use in the Device Setup screen (Figure 8). This screen is opened after the user ID and password have been correctly entered. The three text fields along the top are intended for displaying the channel name, custom device ID, and network address of a given device.

The buttons along the bottom (CANCEL, OFF, AIM, DCU, ECLIPSE, SAVE) are used for specific device setup. Their functions are as follows:

CANCEL, when pressed, will undo all selections that are made prior to saving.

OFF, when pressed, will disconnect a device from a "device type."

AIM is a "device type" that, when pressed, allows a 4-20 mA device to communicate with the EQP Controller.

DCU is a "device type" that, when pressed, allows a compatible LON device to communicate with the EQP Controller.

ECLIPSE is a "device type" that, when pressed, allows a LON based ECLIPSE gas detector to communicate directly with the EQP controller.

SAVE stores all user settings.

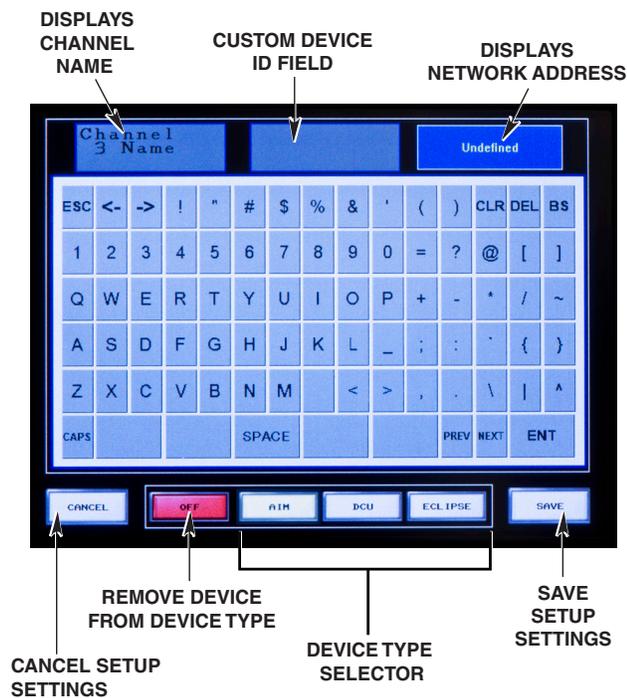


Figure 8—Device Setup screen

EVENT LOG SCREEN

Fault and alarm events are date and time stamped on the Event Log screen (Figure 9). Event logs residing on a blue background indicate active conditions that need to be investigated. Logs on a gray background are non-active events that are removed from the list after the CLR (Clear) button is pressed. The maximum number of log entries is 2,048, with newer logs overwriting older ones. The "UP" and "DOWN" buttons allow for scrolling through the event logs.

Date	Time	Message	Recover
06/17/11	15:38:21	GD-01.Fault	
06/17/11	15:38:21	GD-01.Device Offline	
06/17/11	15:38:21	EQP.Trouble	
06/17/11	15:29:54	GD-02.Fault	15:30:13
06/17/11	15:29:54	GD-02.Device Offline	15:29:59
06/17/11	15:19:06	GD-02.Fault	15:20:44
06/17/11	15:19:06	GD-02.Device Offline	15:19:09
06/17/11	15:19:04	GD-01.Fault	15:20:44
06/17/11	15:16:10	EQP.LON Fault	15:29:15
06/17/11	15:14:21	GD-02.Device Offline	15:16:20
06/17/11	15:14:10	GD-02.Fault	15:17:25
06/17/11	15:09:17	GD-01.Device Offline	15:10:11
06/17/11	15:09:07	GD-01.Fault	15:10:54
06/17/11	15:02:03	GD-10.Out of Range Low Fault	15:03:35
06/17/11	10:35:14	GD-01.Device Offline	10:35:27
06/17/11	10:35:00	GD-01.Fault	15:02:13
06/17/11	10:23:51	EQP.LON Fault	15:15:57
06/17/11	10:23:15	EQP.LON Fault	10:23:45
06/17/11	10:21:52	GD-10.Fault	15:04:27
06/17/11	10:21:52	GD-10.Out of Range Low Fault	11:46:20
06/17/11	10:21:03	EQP.Extra LON Device	10:22:25
06/17/11	10:21:03	EQP.Trouble	15:30:13

At the bottom of the screen, there is a status bar showing "06/17/11 15:38:34" and four buttons: UP, DOWN, CLR, and BACK.

Figure 9—Event Log Screen

SPECIFICATIONS

OPERATING VOLTAGE—

120-220 Vac input, 24 Vdc @ 10A output.

COMPONENTS—

EQ3001 EQP Controller
EQ3710 AIM Analog Input Module (Optional)
EQ2220 GFM Ground Fault Monitor (Included)
5.7" Human Machine Interface (HMI) - Included
24 Vdc, 10A Power Supply (Included).

TEMPERATURE RANGE—

Operating: +32°F to +122°F (0°C to +50°C)
Storage: -4°F to +140°F (-20°C to +60°C).

HUMIDITY RANGE (Instrument only)—

10 to 95% RH, non-condensing.

WEIGHT—

26.5 lb (12.0 kg) to 28.5 lb (13.0 kg), depending on configuration.

DIMENSIONS—

24 In. (60.9 mm) x 24 In. (60.9 mm) x 6.4 In. (16.2 mm).
See Figure 1.

ENCLOSURE—

Finish: ANSI 61 Gray
Door: 16 Gauge Steel
Body: 18 Gauge Steel.

CERTIFICATION—



Certification of the system's components:

EQ3001 Controller

FM/CSA: Class I, Div. 2 Groups A, B, C, D (T4)
ATEX/CE: Ⓜ II 3 G
Ex nC IIC
EN 60079-29-1
IECEX: Ex nC IIC

EQ3710 AIM

FM/CSA: Class I, Div. 2 Groups B, C, D (T4)
Class I, Zone 2, Group IIC (T4)
Gas Performance certified
ATEX/CE: Ⓜ II 3 G
Ex nA nL nC IIC
EN 60079-29-1
IECEX: Ex nA nL nC IIC

EQ2220 GFM

FM/CSA: Class I, Div. 2 Groups A, B, C, D (T4)
ATEX/CE: Ⓜ II 3 G
Ex nC IIC
IECEX: Ex nC IIC

HMI

UL: Class I, Div. 2 Groups A, B, C, D (T4)
ATEX/CE: Ex nA nC IIC

System performance compliance in ordinary locations to:

ANSI/ISA: 12.13.01-2000, 92.0.01-1998
FM: 6310, 6320
CSA: 22.2, No. 152
ATEX/CE: EN 60079-29-1

NOTE: When a non-certified stand alone detector is used with the GP16XX, the output from that device is not a certified function (when connected to AIM Module).

SETUP

The GP16XX can be setup in one of three ways:

1. An EQP only configuration, allowing all 16 channels to be used for LON devices.
2. One AIM mounted inside the enclosure that powers 8 individual 4-20 mA devices, with the other 8 channels used for LON devices.
3. Two AIMs mounted inside the enclosure to power 16 individual 4-20 mA devices.

NOTE

*Analog Input Modules are pre-installed with resistors from the factory. At minimum, one channel (for each AIM) **must** remain active, otherwise a fault will be generated.*

DEFAULT SETUP SETTINGS

If the GP16XX Gas Panel is ordered **without** specifying factory settings in the Configuration Worksheet, the following default settings will be assumed:

- Range: 0-100
- Low Alarm: 20
- High Alarm: 40

Note: Unit of measure is percent of scale.

4-20 mA DEVICE SETUP

NOTE

The following setup instruction assumes that all wiring from the device to the AIM has been completed and the GP16XX is powered up. Reference the device specific instruction manual for wiring and calibration information.

The following example is for a GT3000 gas detector connected to a Sensor Termination Box model STB, for use with an AIM:

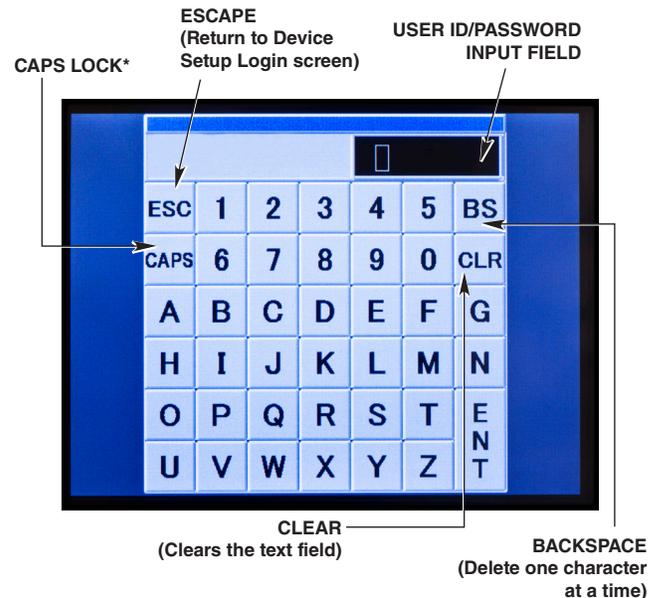
1. Power up the GT3000 and allow it to reach the normal operating mode. Refer to the GT3000 manual, 95-8616, for startup procedures.
2. From the Main screen press the SETUP button.
3. The Setup screen will open. Touch an empty channel to open the Setup Login screen (Figure 7).

NOTE

The user ID and password will be required every time setup is initiated from the Main screen.

4. Touch the "User ID" input field to open the User ID Input screen (Figure 10). Using the on-screen keyboard, type "ADMIN" then press the ENT (Enter) button to accept the user ID.

5. The Setup Login screen will re-open. Touch the "Password" input field to open the Password Input screen (Figure 10). Using the on-screen keyboard, type "DEC" and press ENT to accept the password.



*NOTE
IN THE USER ID AND PASSWORD INPUT SCREENS, THE CAPS LOCK IS ACTIVATED BY DEFAULT AND MUST REMAIN ACTIVATED WHEN ENTERING THE USER ID AND PASSWORD. BOTH THE USER ID AND PASSWORD ARE CASE SENSITIVE.

Figure 10—User ID and Password Input Screen(s)

6. The Setup Login screen will re-open. Press the OK button to accept the user ID and password.
7. The Device Setup screen will open. Touch the Custom Device ID field to activate the cursor. Type an 8 character limit tagname for the GT3000, and **make sure to press the ENT button to submit the tagname.**

IMPORTANT

The tagname will not be accepted unless the ENT button is pressed.

8. Still in the Device Setup screen, select AIM as the device type and press the SAVE button. The Setup screen will open, showing the activated channel.
9. Calibrate the device using information in the device specific instruction manual.

NOTE

Calibration of 4-20 mA devices cannot be initiated or monitored from the GP16XX, only locally on the 4-20 mA device.

LON DEVICE SETUP

The following example is for an ECLIPSE gas detector setup for use on the LON.

IMPORTANT

*The following setup instruction assumes that all wiring from the LON device to the LON wiring terminal (Figure 3) has been made, and the GP16XX is powered up. **Prior to setup, make sure that power is OFF on the LON device.** Reference the device specific instruction manual for wiring and calibration information.*

1. From the Main screen press the SETUP button.
2. The Setup screen will open. Touch an empty channel to open the Setup Login screen.
3. Touch the "User ID" input field to open the User ID Input screen (Figure 10). Using the on-screen keyboard, type "ADMIN" then press the ENT (Enter) button to accept the user ID.
4. The Setup Login screen will open. Touch the "Password" input field to open the Password Input screen (Figure 10). Using the on-screen keyboard, type "DEC" and press the ENT button to accept the password.
5. The Setup Login screen will re-open. Press the OK button to accept the user ID and password.
6. The Device Setup screen will open. Touch the Custom Device ID field to activate the cursor. Type an 8 character limit tagname for the ECLIPSE, and **make sure to press the ENT button to submit the tagname.**

IMPORTANT

The tagname will not be accepted until the ENT button is pressed.

7. Still in the Device Setup screen, select ECLIPSE as the device type and press the SAVE button. The Setup screen will open, showing the activated channel.
8. In the Setup screen, touch the channel that was activated to return to the Device Setup screen.
9. Take note of the device network address in the top right display field of the Device Setup screen (Figure 8).
10. With power still turned off on the ECLIPSE, set its address according to the device address collected in Step 9. Reference the ECLIPSE manual, 95-8526, for instructions on setting the network address.
11. With the device address set, re-assemble (if applicable) and power-up the device.

CAUTION

When the ECLIPSE Gas Detector is used in conjunction with an appropriate certified Control Unit and is setup for a non-latching high alarm, the control unit must always latch and require a deliberate manual action to clear a high gas alarm. When used as a stand alone device, the high alarm must always be programmed for latching operation.

IMPORTANT

If power is not turned off on a LON device prior to setting its network address, a fault will be generated and the device may be assigned the wrong network address.

12. Press the SAVE button on the Device Setup screen and allow approximately 1 minute for the new device to be recognized.
13. Calibrate the device using information in the device specific instruction manual.

NOTE

Calibration of LON devices cannot be initiated from the GP16XX, only locally on the LON device. However, LON device calibrations can be monitored from the GP16XX (see the Calibration section of this manual for more information).

DEVICE REMOVAL

The following procedure can be used for devices connected through the AIM or the LON.

1. On the Device Setup screen touch the Custom Device ID field to activate the cursor, then press the CLR button to delete the tagname. Press ENTER to submit the change.
2. Still in the Device Setup screen press the OFF button to disassociate the device type from the device on the channel and press SAVE. The Setup screen will open, showing an empty channel.

IMPORTANT

When disconnecting LON devices, a LON fault will be generated if the device is removed through the GP16XX touch screen. The fault is cleared by physically removing the device from the LON wiring terminal. Remember to close the LON loop if a new device is not replacing the device that was removed. Refer to the EQP manual, 95-8533, for more information.

IMPORTANT

If a 4-20 mA device is being removed from an AIM, be sure to install a resistor back into the now empty channel to avoid a fault condition.

OPERATION

NOTE

After configuring a device, it is highly recommended that calibration be performed before operation.

CALIBRATION

IMPORTANT

The Calibration Active and Calibration Fault indications are only available for LON devices, and not for 4-20 mA devices. The following instructions are specific to LON based devices.

In regards to monitoring calibration through the GP16XX, the general calibration procedure is as follows:

1. Initiate calibration locally at the device.
2. Activate the Point Display within the Main screen for the device in calibration. The "Calibration Active" indicator becomes solid white when gas is applied (Figure 11).
3. On the Main screen, the real time gas value will rise above zero and the applied calibration gas is indicated when the channel contains a solid white bar (Figure 12).
4. When calibration is successful press the BACK button to return to the Main screen.

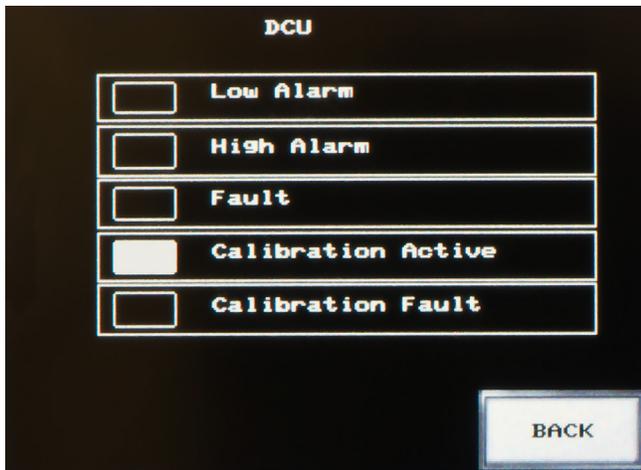


Figure 11—Calibration Active Indication on Point Display

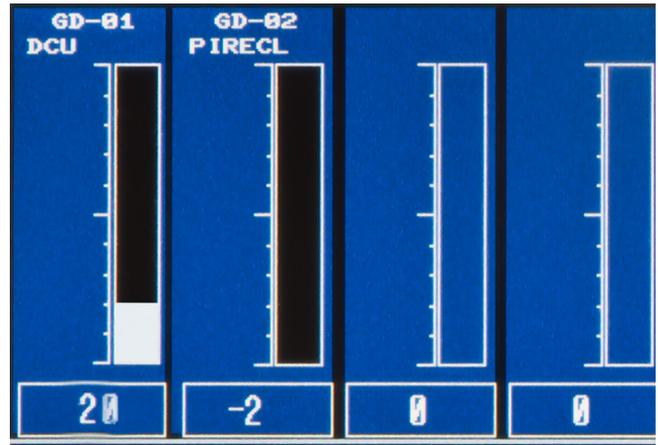


Figure 12—Real Time Gas Value and Applied Gas on Main Screen

Calibration Fault

Calibration faults are indicated on the Point Display when the "Calibration Fault" indicator is solid yellow (Figure 13). On the Main screen, the channel and the FAULT button will flash yellow (Figure 14).

Consult the device specific instruction manual for information on how to clear faults. The indication of the fault will remain latched on the touch screen display until it is corrected and the RESET button is pressed.

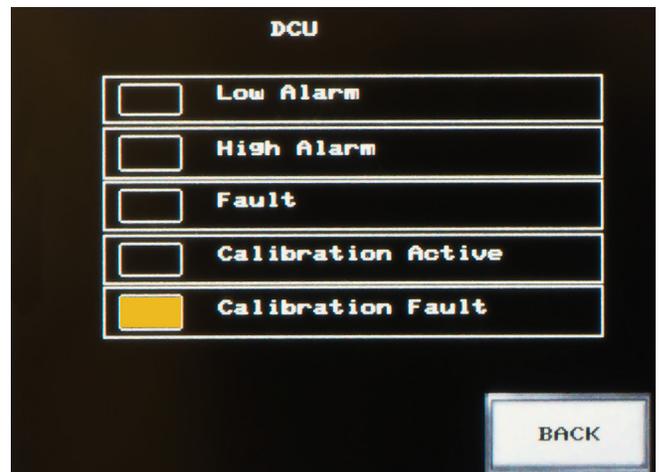


Figure 13—Calibration Fault Indication on Point Display

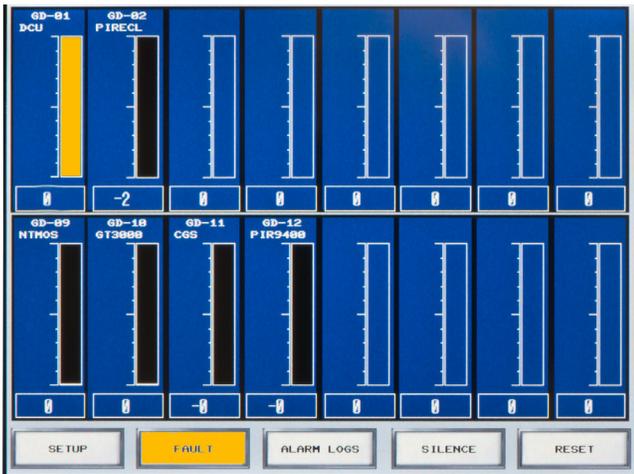


Figure 14—Fault Indication on Main Screen

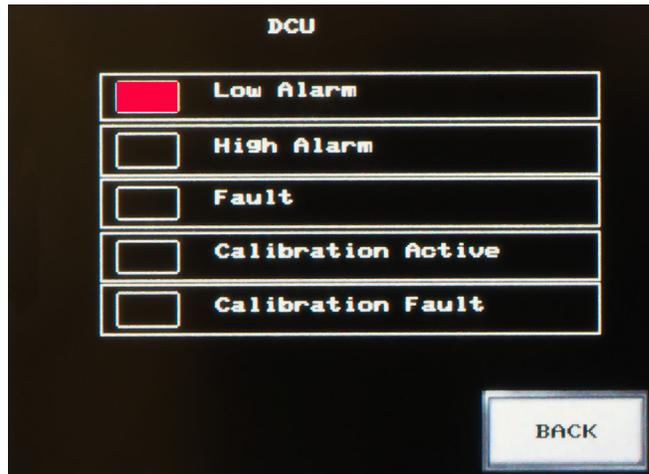


Figure 16—Low Alarm Indication on Point Display

ALARMS

IMPORTANT

Alarm setpoints are specified at the time of order placement with a configuration worksheet (see Appendix A). If the alarm setpoints are not specified at the time of order, the factory defaults will be assumed (see "Default Setup Settings" in the Setup section of this manual).

NOTE

All fault and alarm conditions are set for latching on the HMI touchscreen. When active fault and alarm conditions have been satisfied, press the RESET button to clear all active conditions.

The GP16XX is programmed to indicate low and high alarms. When a low alarm is generated, it is indicated on the Main screen when a channel is flashing with red (Figure 15). Low alarms are indicated on the Point Display when the "Low Alarm" indicator is solid red (Figure 16).

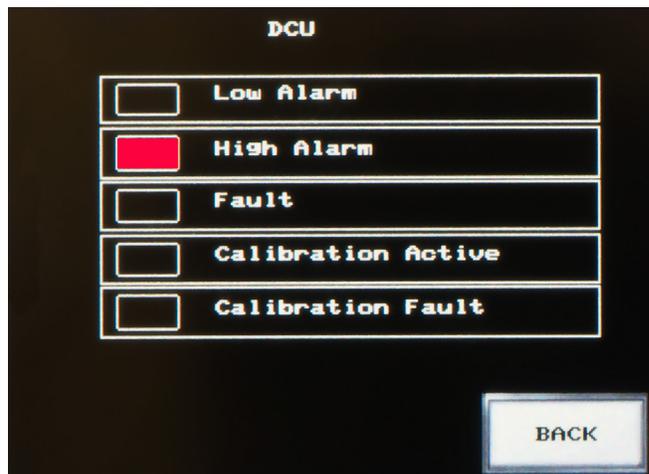


Figure 17—High Alarm Indication on Point Display

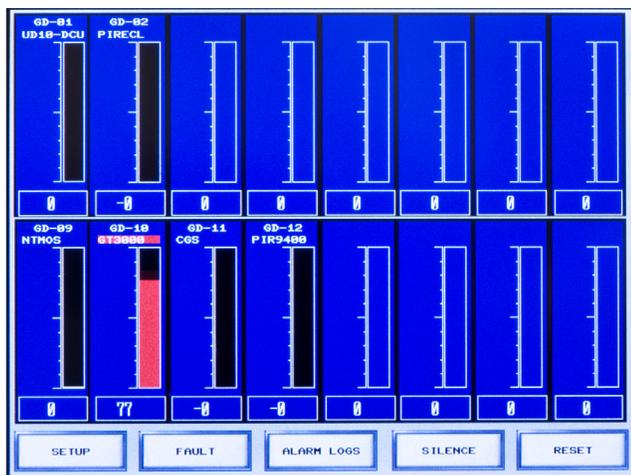


Figure 15—Low and High Alarm Indication on Main Screen

Latched alarms are indicated on the Main screen when the Custom Device ID is surrounded by a solid red border (Figure 18). This indication will remain visible until the alarm condition is investigated, corrected, and the RESET button is pressed.

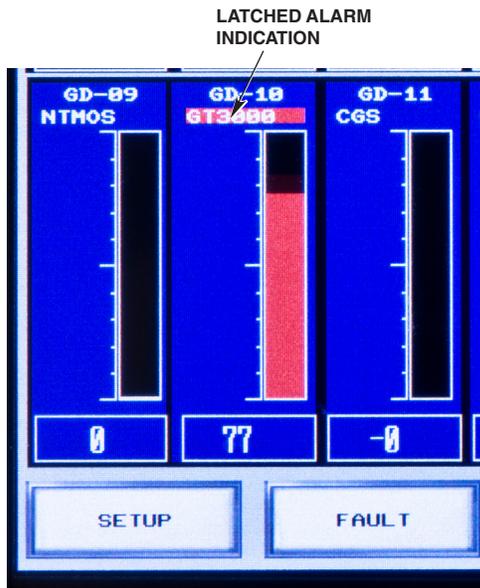


Figure 18—Latched Alarm Indication on Main Screen

FAULTS

Faults that are not associated with the calibration of a device are indicated on the Point Display when the "Fault" indicator is solid yellow (Figure 19).

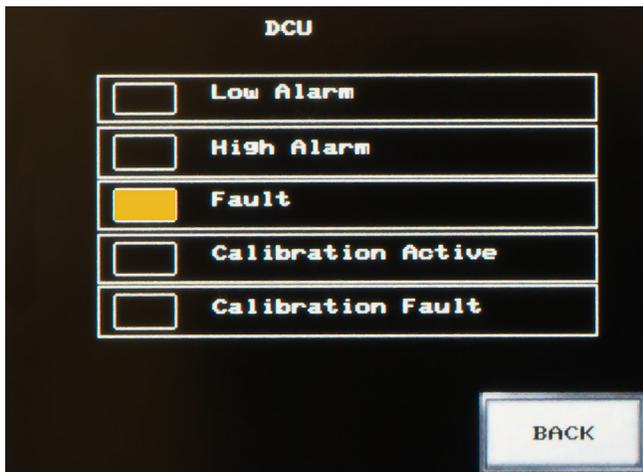


Figure 19—Fault Indication on Point Display

TROUBLESHOOTING

For detailed troubleshooting information regarding the GP16XX components and compatible devices, refer to the EQP manual, 95-8533, or the device specific instruction manual.

MAINTENANCE

Depending on the environment, the GP16XX does not require specific maintenance, but the HMI touch screen may become dirty and cause visibility problems. Avoid using any solvent when cleaning a dirty panel. A damp cloth is sufficient for wiping dirt from the HMI touch screen.

REPLACEMENT PARTS

The GP16XX devices are not designed to be repaired in the field. If a problem should develop, first carefully check for proper wiring, programming and calibration. If it is determined that the problem is caused by an electronic defect, please contact your local Det-Tronics sales representative.

DEVICE REPAIR AND RETURN

Prior to returning devices or components, contact the nearest local Det-Tronics office so that a Return Material Identification (RMI) number can be assigned. **A written statement describing the malfunction must accompany the returned device or component to expedite finding the cause of the failure.**

Pack the unit or component properly. Always use sufficient packing material. Where applicable, use an antistatic bag as protection from electrostatic discharge.

NOTE

Inadequate packaging that ultimately causes damage to the returned device during shipment will result in a service charge to repair the damage incurred during shipment.

Return all equipment transportation prepaid to the factory in Minneapolis.

ORDERING INFORMATION

When ordering a GP16XX, please complete the configuration worksheet (Appendix A). The purpose of the configuration worksheet is to establish user defined parameters prior to the shipment of the GP16XX Gas Panel. Using the information collected from the worksheet, the packaged system solution will be shipped from the factory pre-configured with all the options selected by the user. Field devices are ordered separately.

A PDF copy of the configuration worksheet can be found on our website.

APPENDIX A – CONFIGURATION WORKSHEET

The purpose of the configuration worksheet is to establish user defined parameters prior to the shipment of the GP16XX Gas Panel. Using the information collected from the worksheet, the packaged system solution will be shipped from the factory pre-configured with all the options selected by the user. Field devices are ordered separately.

A PDF copy of the configuration worksheet can be found on our website.

NOTE

The worksheet must be completed during order placement.



DETECTOR ELECTRONICS CORPORATION
6901 West 110th Street
Minneapolis, MN 55438

MODEL GP16XX GAS PANEL CONFIGURATION WORKSHEET

Date:	
Customer:	
PO#:	

HARDWARE:

Maximum number of field devices is 16 (i.e. the total of B & C cannot exceed 16)

A	Number of Analog Input Modules – AIM (Maximum of 2)	
B	Number of 4-20 mA Field Devices (Maximum 8 per AIM)	
C	Number of LON Field Devices	

SOFTWARE:

Record detector model, gas range, low alarm, and high alarm set-points in the table below.

FACTORY DEFAULT: Range = 0-100 Low Alarm = 20 High Alarm = 40

NOTE: If factory defaults are acceptable rather than specified values check here

CHANNEL	DETECTOR MODEL or PART #	RANGE (0-xxxx)	LOW ALARM SET POINT	HIGH ALARM SET POINT
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				

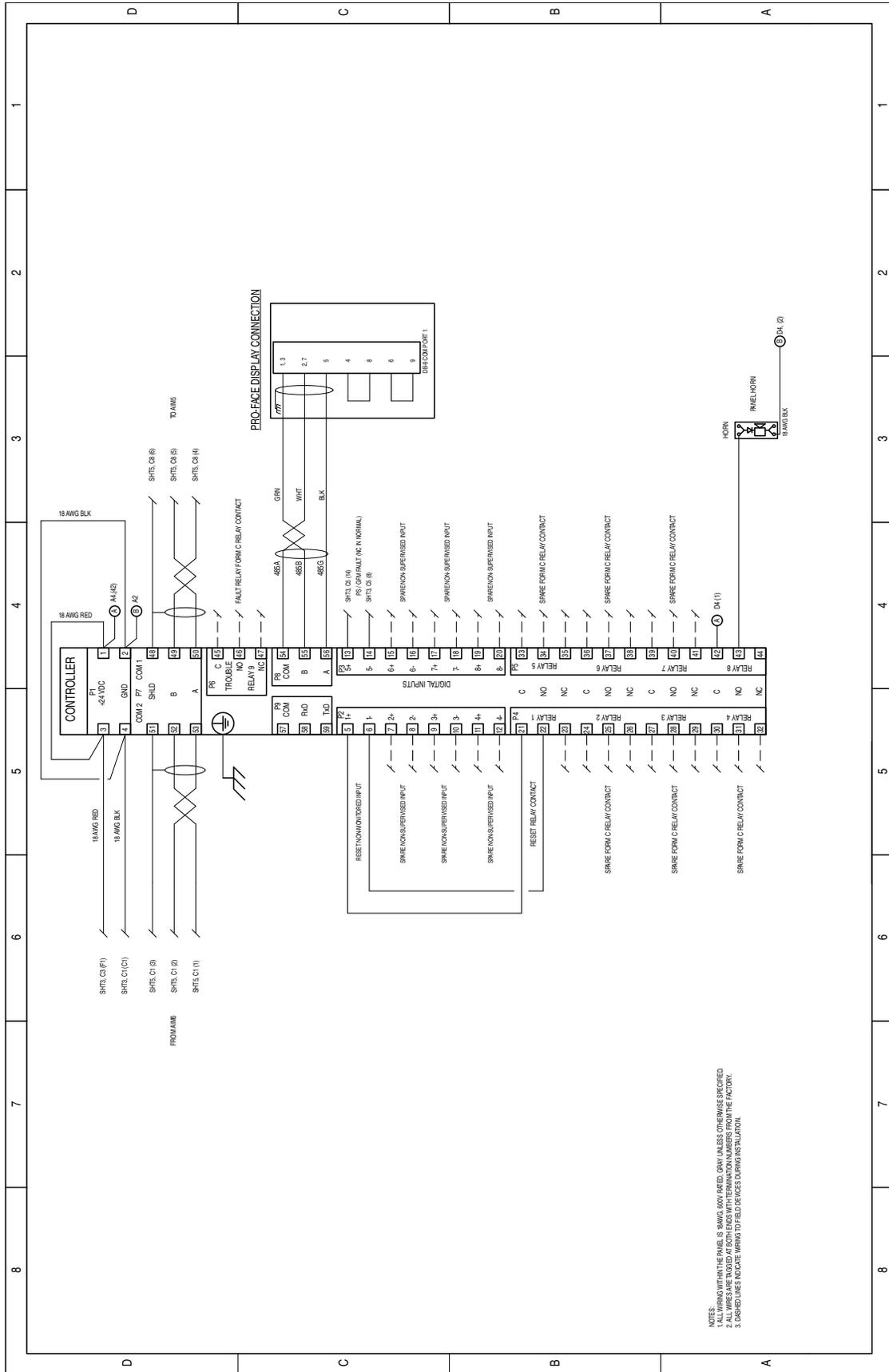
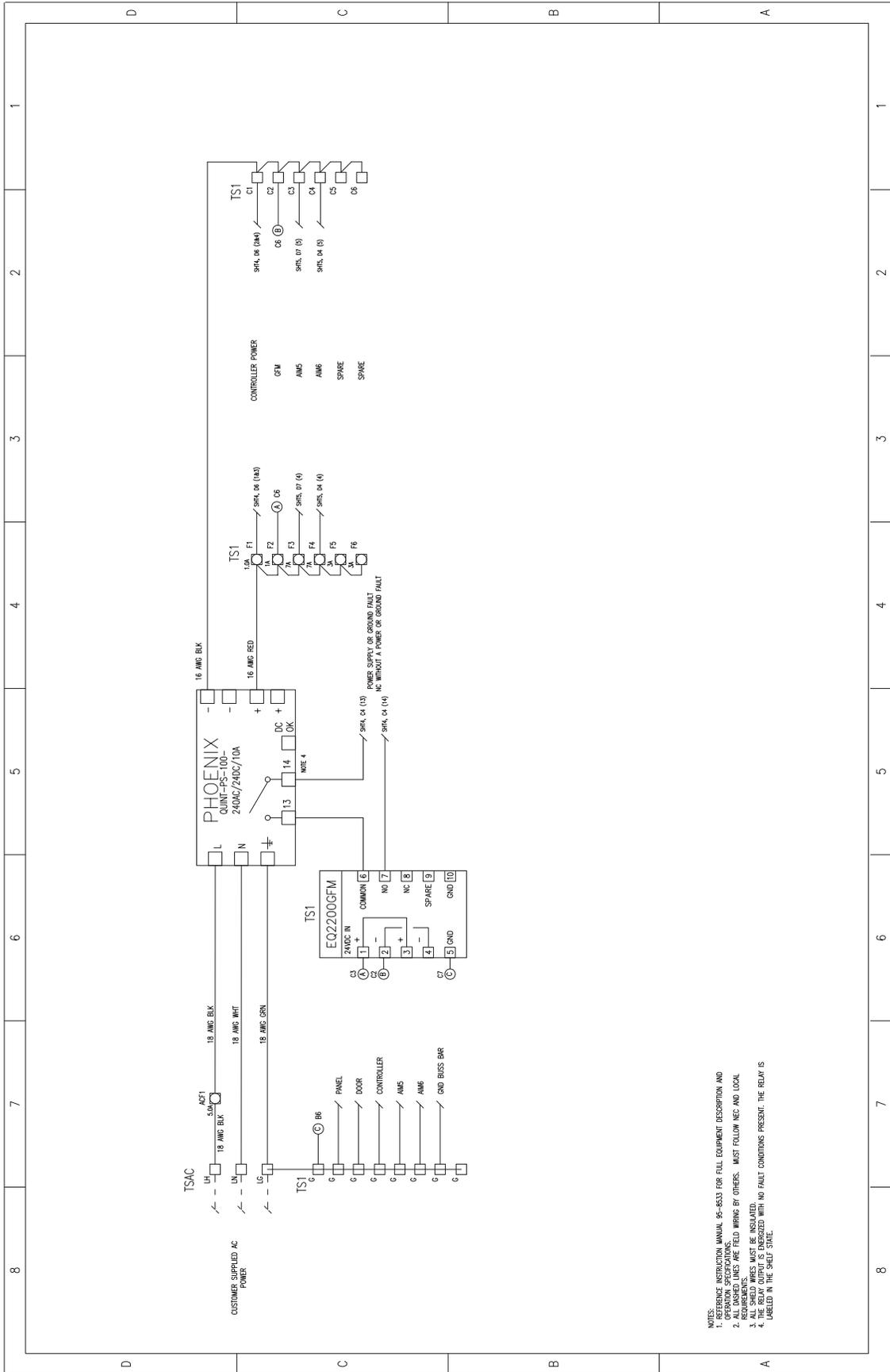


Figure B-2—Wiring for the EQP Controller



NOTES:
 1. REFERENCE INSTRUCTION MANUAL 95-8633 FOR FULL EQUIPMENT DESCRIPTION AND WIRING REQUIREMENTS.
 2. ALL DASHED LINES ARE FIELD WIRING BY OTHERS. MUST FOLLOW NEG. AND LOCAL REQUIREMENTS. MUST BE INSTALLED.
 3. THE RELAY OUTPUT IS ENERGIZED WITH NO FAULT CONDITIONS PRESENT. THE RELAY IS LABELLED IN THE SHELF STATE.

Figure B-3—Wiring for the GP16XX Power Supply



95-8671



FlexSonic® Acoustic
Leak Detector



X3301 Multispectrum
IR Flame Detector



PointWatch Eclipse® IR
Combustible Gas Detector



FlexVu® Universal Display
with GT3000 Toxic Gas Detector



Eagle Quantum Premier®
Safety System

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Det-Tronics manufacturing system is certified to ISO 9001—
the world's most recognized quality management standard.



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