ELKHART BRASS

Fire Fighting Equipment

24352078 HMI INSTALLATION MANUAL

98556000 REV. A

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PRODUCT SAFETY

Important: Before installing and operating this equipment, read and study this manual thoroughly. Proper installation is essential to safe operation. In addition, the following points should be adhered to in order to ensure the safety of equipment and personnel.

- This enclosure is suitable for indoor use in a dry location. It is not intended for use in an outdoor, wet, or a hazardous location.
- All personnel who may be expected to operate this equipment must be thoroughly trained in its safe and proper use.
- Before flowing water from a monitor, check that all personnel (fire service and civilian) are clear of the stream path. Also confirm stream direction will not cause avoidable property damage.
- Become thoroughly familiar with the hydraulic characteristics of this equipment and the pumping system used to supply it. To produce effective fire streams, operating personnel must be properly trained.
- Whenever possible, monitors should be operated from a remote location to avoid exposing personnel to dangerous fire conditions.
- Disconnect power prior to servicing controls.
- Any modifications to the electrical enclosure will destroy the NEMA 12 rating and void warranty coverage of the enclosure and all components within.
- All equipment must be installed in accordance with local codes (NFPA 70 or EN/IEC 60079-14) as appropriate and in areas where equipment classification is suitable.

WARNING: Do not attempt to disconnect or work on any electrical equipment in this system unless power is removed or the area is known to be non-hazardous.

DETAILS:

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*For our most up-to-date documentation and specifications, please visit our website at www.elkhartbrass.com

I. OVERVIEW

The human machine interface [HMI] is a touch screen. It is operated with your fingers by touching virtual pushbuttons & icons that are displayed on the screen.

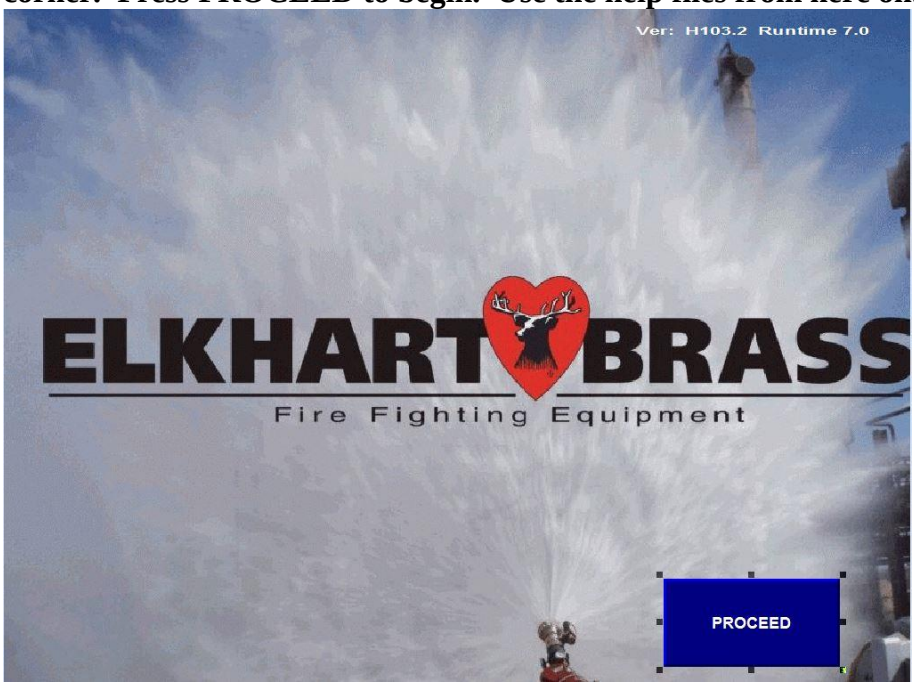
The HMI has several functions:

1) **Allows the operator to remotely control any monitor on the system**
2) **Provides the operator with status information regarding each monitor's readiness to fight a fire.**
3) **Displays details regarding which operator control panel [OCP] or radio is controlling a monitor that is in use.**
4) **Provides detailed troubleshooting information.**
5) **Offers the same functionality as an OCP in the field.**

II. OPERATION

Operation of the HMI is not described in detail in this manual; rather the user is directed to the numerous help screens that explain its operation. Pressing HELP will bring up the online user manual. Pressing QUICK HELP accesses information about the particular screen that the user is on.

This is the screen that appears first on start up. Note the program's version is displayed in the upper right corner. Press PROCEED to begin. Use the help files from here on.



III. REFERENCE DOCUMENTATION

The user's manual (hardware manual) for the Panel View terminal, and other technical documents related to the Panel View terminal, are published in several different languages at the following link.

http://ab.rockwellautomation.com/Graphic-Terminals/2711P-PanelView-Plus-6-Terminals#documentation

Title	Number	Download
PanelView Plus 6 Product Profile	2711P-PP008	EN
PanelView Plus and FactoryTalk View Machine Edition and Product Profile	FTALK-PP012	DE| EN| ES| FR| IT| JA| KO| PT| ZC| ZH
Visualization Solutions Selection Guide	VIEW-SG001	DE| EN| ES| FR| IT| JA| KO| PT| ZH
PanelView Plus Specifications Technical Data	2711P-TD005	EN| JA| ZH
PanelView Plus 6 Terminals User Manual	2711P-UM006	DE| EN| ES| FR| IT| JA| PT| RU| TR| ZC| ZH
PanelView Plus 400/600 to PanelView Plus 6 400/600 Migration Chart	2711P-QR001	EN
More PanelView Plus 6 publications in Literature Library		All Languages

IV. CLEANING

Follow these steps to clean the display window.

1. Disconnect power from the terminal at the power source.

2. Use a clean sponge or soft cloth, moistened with a mild soap or detergent, to clean the display.

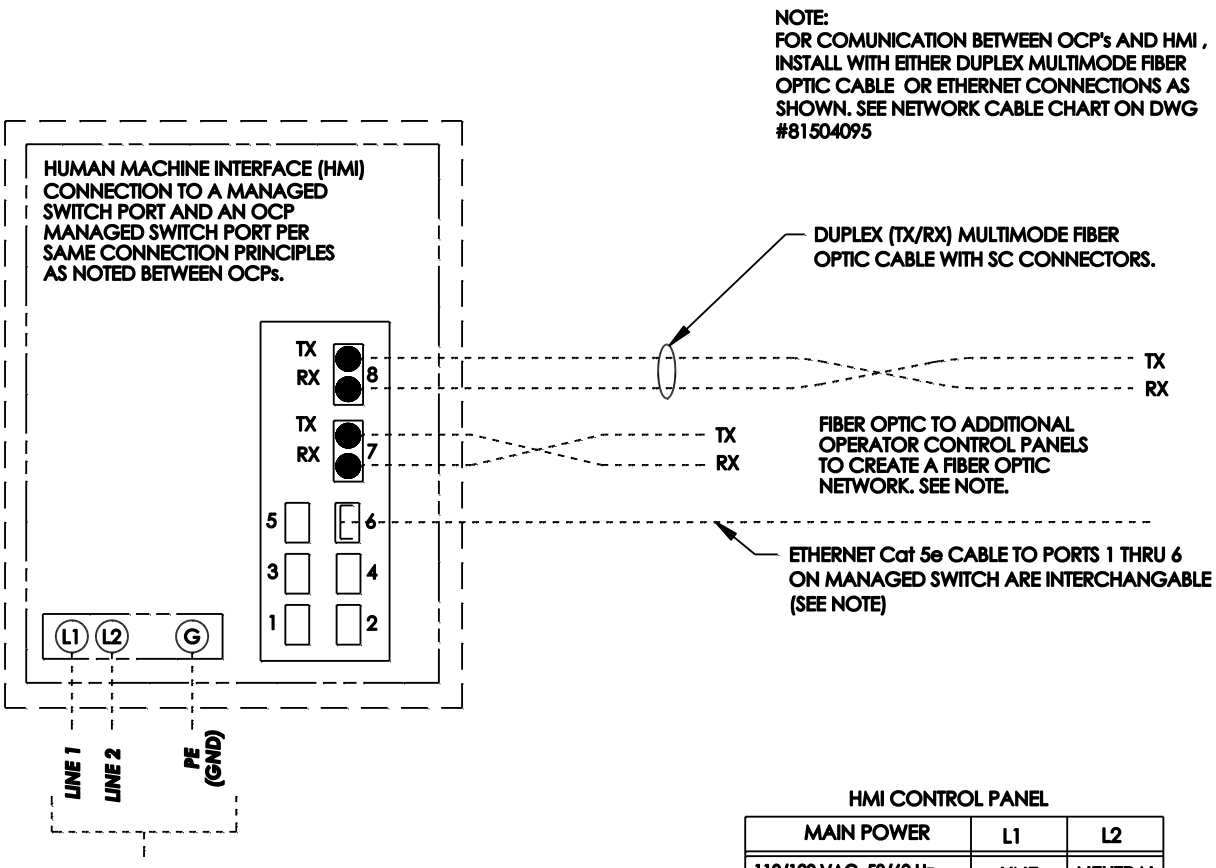
3. Dry the display with a chamois or moist cellulose sponge to avoid water spots.

Remove fresh paint splashes and grease before drying by rubbing lightly with isopropyl alcohol (70% concentration). Afterward, wash using a mild soap or detergent. Rinse with clean water.

- **Don't** use tap water or mineral water. These could leave white marks on the screen because of the dissolved solids.
- **Don't** spray liquid directly on the screen. Apply liquid to a cloth and then wipe the screen.
- **Don't** use Windex or any other glass cleaner that contains ammonia.
- **Don't** clean the display while it is on. When then display is dark, it is much easier to see dirt and fingerprints that need to be removed.

V. ELECTRICAL

Connect to power source at terminals L1 & L2. Power must be single phase AC, and the voltage must be between 100 & 240 volts. A ground connection (PE) at the G terminal is also required. Refer to interconnect drawing 30231031S5



HMI CONTROL PANEL

MAIN POWER	L1	L2
110/120 VAC, 50/60 Hz.	LINE	NEUTRAL
220 VAC, 50 Hz.	LINE	NEUTRAL
240 VAC, 60 Hz.	LINE	LINE

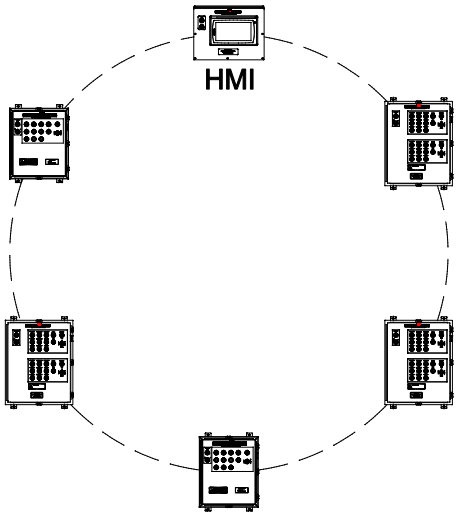
VI. FUSES

F1, F2, AND F3	3	BUSSMAN CHICAGO, IL	FNQ-R-4	CLASS CC, TIME DELAY, CURRENT LIMITING 4 AMP FUSE
F4	1	BUSSMAN CHICAGO, IL	FNQ-R-3	CLASS CC, TIME DELAY, CURRENT LIMITING 3 AMP FUSE

VII. NETWORK WIRING

So that it may communicate with the OCPs on the network, the HMI must also be connected to that same network. The touch screen (Panel View) has already been connected to the network switch inside its control cabinet. Similarly, the PLCs in the OCP cabinets have also been connected to their network switches. The user only has to connect all the network switches together to form the network.

Several network topologies can be supported by the network switch. Elkhart Brass recommends a ring topology because it provides a redundant communication path.



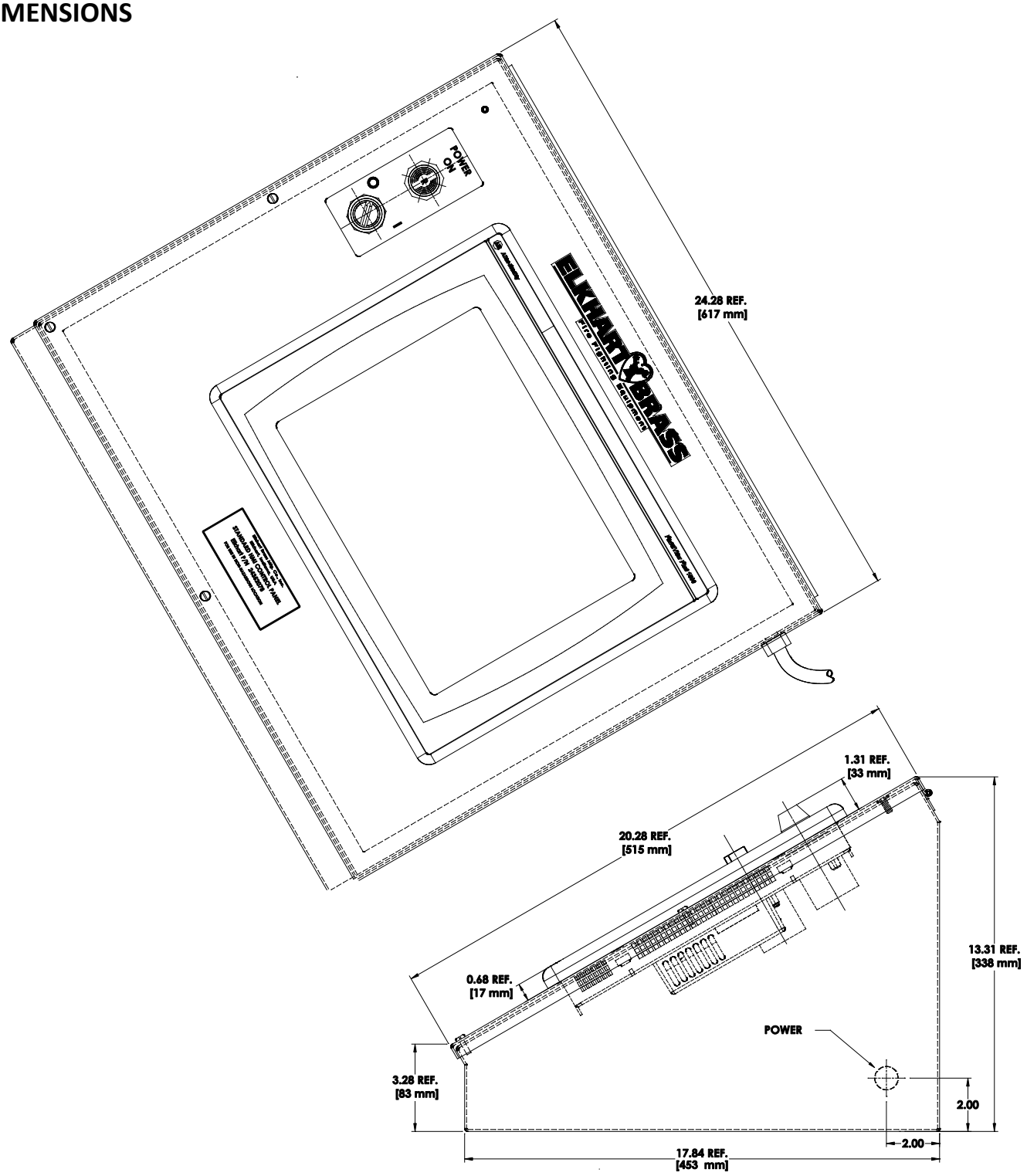
REDUNDANT RING NETWORK TOPOLOGY

The network switch is shown below. This switch will accept cables that are made of copper or fiber. The user may use either, or a mixture of both. Copper cables must not exceed 250 feet in length. Fiber cables can be up to 6200 feet long. Refer to interconnect drawing 30231031S5.

Ports 1-6 are the copper ports. They accept Cat 5E cables with a standard RJ45 connector. These cables may be either patch cables or crossover cables. The ports are interchangeable; therefore, any port may be used.

Ports FX1 & FX2 are the fiber ports. They require duplex multimode fiber optic cables with SC connectors (subscriber connectors). When using fiber, it is necessary to cross connect the TX and RX ports (e.g. connect switch one's TX to switch two's RX, and switch one's RX to switch two's TX).

VIII. DIMENSIONS

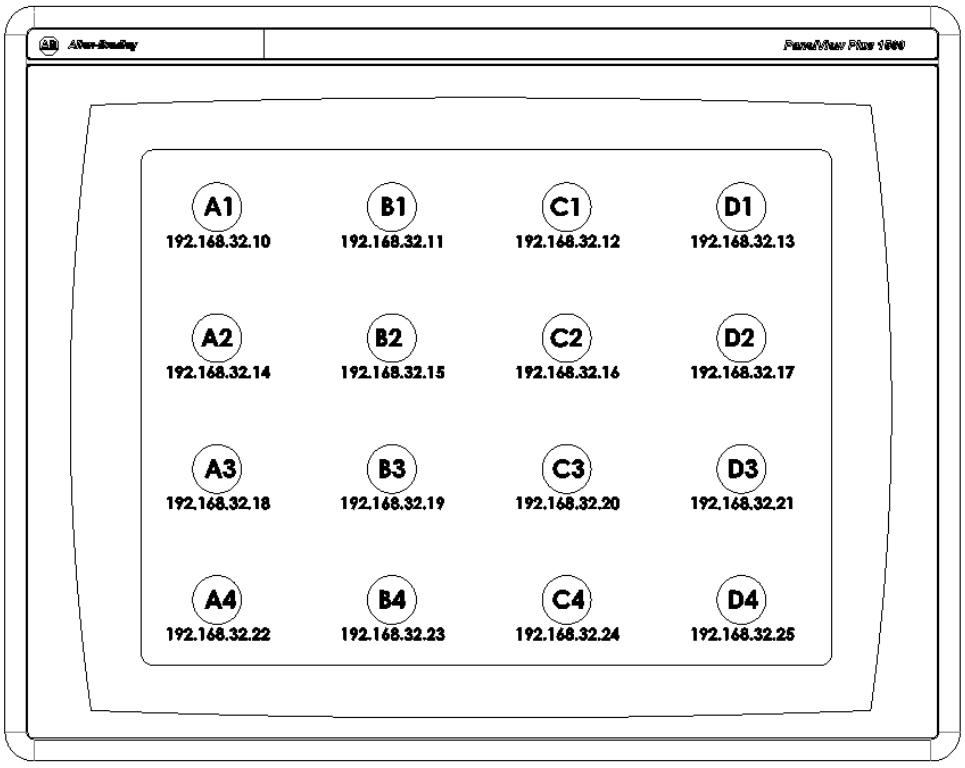


IX. MONITOR ICONS – DEFAULT POSITION LOCATION MAP

Up to 16 monitors can be controlled from the default main screen by the 16 icons shown below. If a system contains less than 16 monitors, Elkhart Brass will turn off the icons that the customer does not plan to use. Icons are named like the cells of a spreadsheet. Use this naming convention when telling your customer service rep which icons you want turned off. The remaining icons will control whichever monitor has the IP address that is assigned to that particular icon.

Example: The customer has five monitors, and they are physically located in an L shaped pattern on his property. He wants his screen to reflect how they are physically located in his plant. He chose to use icons A2, A3, A4, B4, & C4. Elkhart Brass will turn off all the rest. The PLC for the monitor in the A2 position will have to be set at 192.168.32.14, A3 would be set to 192.168.32.18, and all the other monitors will need to have their IP addresses set to match their icons as well.

Note: This screen can be customized to include a customer provided map of the site that would be laid under the icons. Icons can then be custom positioned on the map to provide a more realistic representation of the site. This will make the system more intuitive for the user. Ask your sales contact for details.



X. SPECIFICATIONS

Go to the Allen Bradley website for a complete list of specifications, approvals, etc.

http://literature.rockwellautomation.com/idc/groups/literature/documents/td/2711p-td005_-en-p.pdf

XI. TROUBLESHOOTING

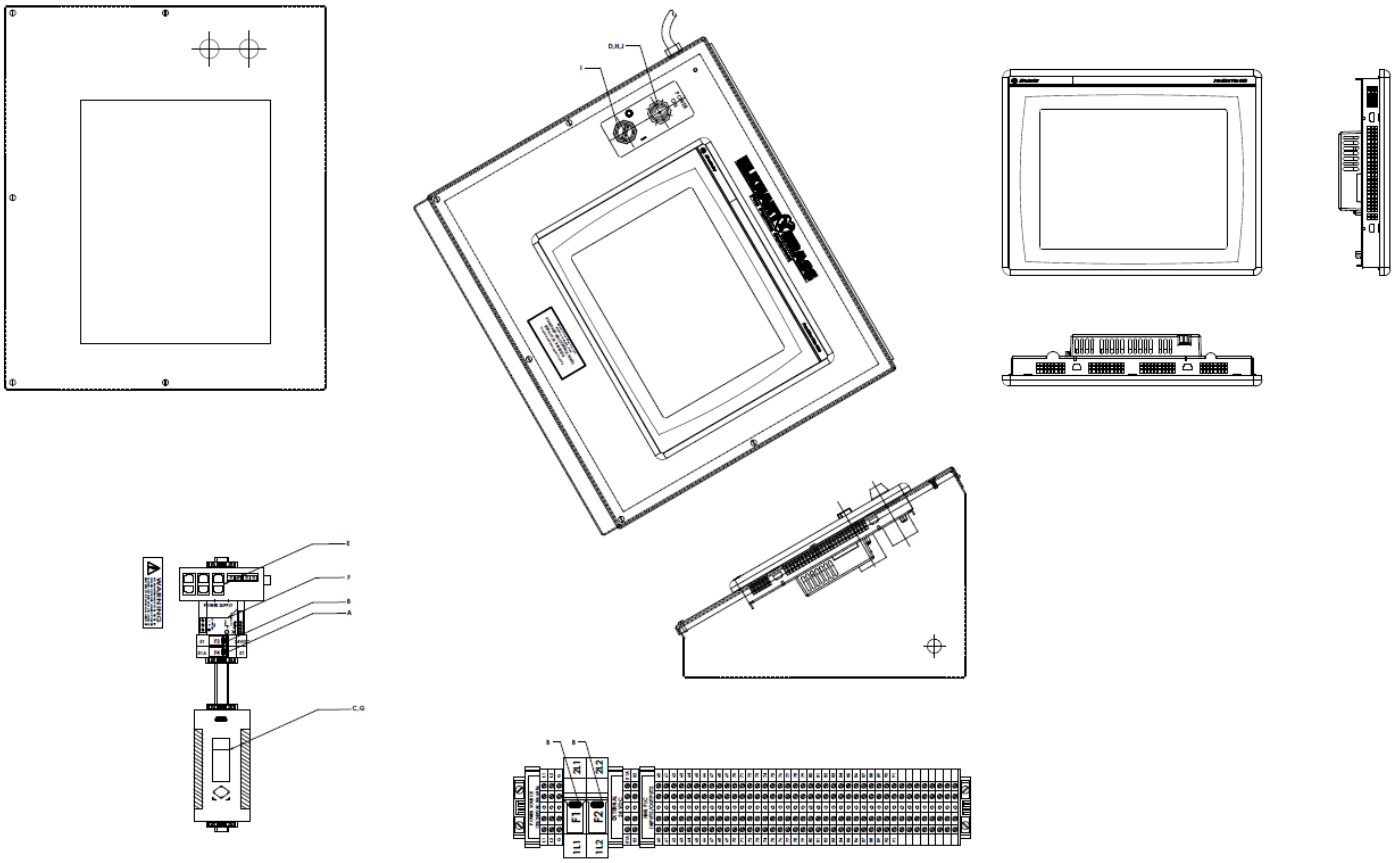
Power On Light Not Lit	Make sure power switch is set to I (on) Make sure that HMI is plugged in to a live receptacle Check for blown fuses F1, F2, or F3
On screen error, Communication error message, or COMM light is not on; located on the back of the Panel View	Make sure all OCPs on the network are powered up Make sure COMM indicators on all PLCs are on solid Check network wiring
Fault Light is ON - located on the back of the HMI	At startup, it is normal for the fault light to flash briefly, but it should then stay off during normal operation. If it stays on or keeps flashing, refer to Chapter 9 "Troubleshooting the System" of the Panel View Plus User's Manual (see link below)
Startup Message Error	Record the error message, go to page 209 of the Panel View Plus User's Manual (see link below)

COMM & FAULT Lights

Follow the link below to access the Panel View Plus User's Manual, and go to chapter 9 for troubleshooting help.

http://literature.rockwellautomation.com/idc/groups/literature/documents/um/2711p-um006_-en-p.pdf

HMI MONITOR CONTROL PANEL- P/N 24352000 SPARE PARTS DIAGRAM
SHEET 1 OF 2



	HMI Monitor Control Panel - P/N 2435xxxx	
	Part No.	**Description**
A	**32233130**	Fuse - Class CC (3A Fast Acting) Rejection Type
B	**32233070**	Fuse - Class CC (4A Fast Acting) Rejection Type
C	**28249000**	AB Micro-Logix 1400 PLC (w/o program)
D	**18455000**	Bulb - Indicator Universal (LED) White
E	**65761000**	N-Tron - Multimode Managed Switch
F	**52955000**	Power Supply 24VDC - 4.2 Amps (Single Phase Input)
G	**18503000**	PLC Battery
H	**52905000**	Pilot Light with Red Lens, NEMA 4X, Class 1, Division 2 12-130 V DC/AC
I	**65763000**	2-Position ON/OFF Selector Switch 2 N.O., 2 N.C. Sealed Contacts, NEMA 4X Class 1, Division 2
J	**44435000**	Pilot light lens, Red

NOTES:

XII. ENGINEERING CHANGE REVISION EXPLANATIONS

ECN# 160212 – Initial Release of the Manual 8/1/2016

Revised-08/22/2016

ECN# 160806 – Added Spare Parts List/Diagram 9/01/2016