Fireye YZ300, YZ320

Fireye BurnerLogix Interlock Annunciator Module YZ300/YZ320 User Manual

Model: YZ300, YZ320 | Brand: Fireye

1. INTRODUCTION

The Fireye BurnerLogix Interlock Annunciator Module (models YZ300 and YZ320) is designed to significantly enhance the interlock monitoring capabilities of the Fireye BurnerLogix system. This module integrates seamlessly with BurnerLogix YB110 (YB230) and ZB110 (ZB230) chassis/amplifiers, providing advanced diagnostic and messaging functions without interfering with the normal operation of the BurnerLogix system. It expands the display's functionality to act as a "first out" annunciator for up to twenty interlock switches, and includes a standard fuel selection circuit for comprehensive annunciation, even when two fuels are in use simultaneously.

2. KEY FEATURES

- Enhanced interlock monitoring for BurnerLogix YB110/ZB110 systems.
- "First out" annunciation for up to twenty interlock switches.
- Standard fuel selection circuit for comprehensive annunciation with dual fuels.
- Ability to modify interlock messages using BLV512 or BLL510 display modules.
- Custom message programming (up to 40 characters) via Windows-based YZ300P software.
- Compact wiring bases (4 in. wide by 7 in. high) with a 24-position terminal block.

3. SETUP AND INSTALLATION

The YZ300/YZ320 Interlock Annunciator module connects to the BurnerLogix YB110 or ZB110 chassis/amplifier via a dedicated cable. Ensure that the BurnerLogix YB110 system has an engineering code of 3 or later for proper operation. Any ZB110 chassis/amplifier is compatible. The wiring bases are designed for minimal cabinet space consumption.

3.1 Wiring

The module's wiring bases feature a 24-position terminal block. Each position is clearly numbered and includes a locking mechanism to ensure secure connections. Refer to the specific wiring diagrams provided with your BurnerLogix system and the YZ300/YZ320 module for detailed connection instructions.
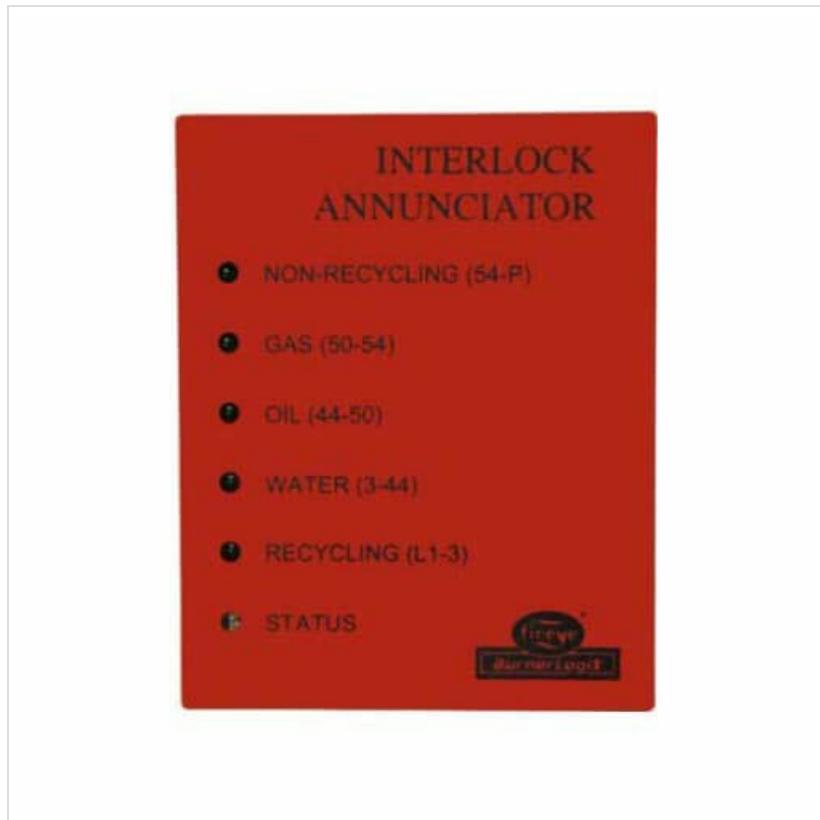
Figure 1: Front panel of the Fireye Interlock Annunciator module. This image displays the front panel of the Fireye Interlock Annunciator module. It features indicators for 'NON-RECYCLING (54-P)', 'GAS (50-54)', 'OIL (44-50)', 'WATER (3-44)', 'RECYCLING (L1-3)', and 'STATUS', along with the Fireye logo.

4. OPERATION

Once connected, the BurnerLogix display automatically utilizes the Interlock Annunciator module's capabilities. When any of the twenty interlock switches connected to the module are activated, the BurnerLogix display will indicate the "first out" alarm, simplifying fault identification. The integrated fuel selection circuit ensures that all relevant annunciation messages are displayed, even in systems operating with two different fuels.

5. PROGRAMMING AND CONFIGURATION

The YZ300/YZ320 module allows for flexible customization of interlock messages:

5.1 Using Display Modules

You can select pre-defined interlock alarm messages for individual YZ300/YZ320 terminals from a library of available messages using a BLV512 or BLL510 display module. Refer to Fireye Bulletins BL-1001 and BLZ-1001 for detailed instructions on operating these controls.

5.2 Custom Message Programming

For more specific needs, custom messages (up to 40 characters in length) can be programmed for individual YZ300/YZ320 terminals. This requires a compatible PC running Windows-based YZ300P programming software, available from Fireye, along with the appropriate hardware interface. The YZ300/YZ320 Interlock Annunciator module does not need to be connected to a BurnerLogix system to undergo custom programming.

6. SPECIFICATIONS

- **Product Type:** Interlock Annunciator Module
- **Models:** YZ300, YZ320
- **Compatibility:** Fireye BurnerLogix YB110 (engineering code 3 or later), ZB110 (any engineering code) chassis/amplifiers.
- **Input Voltage:** 120V (as per product title)
- **Wiring Base Dimensions:** 4 inches (width) x 7 inches (height)
- **Terminal Block:** 24-position, clearly numbered, with locking mechanisms.
- **Annunciation Capacity:** Up to 20 interlock switches.
- **Custom Message Length:** Up to 40 characters.
- **First Available:** September 1, 2020

7. TROUBLESHOOTING

If you encounter issues with the Fireye BurnerLogix Interlock Annunciator Module, consider the following general troubleshooting steps:

- **Verify Connections:** Ensure all cables and terminal block connections are secure and correctly wired according to the installation diagrams.
- **Check BurnerLogix Compatibility:** Confirm that your BurnerLogix YB110 system meets the engineering code 3 or later requirement.
- **Review Error Messages:** Pay close attention to any messages displayed on the BurnerLogix system, as they often provide specific diagnostic information.
- **Consult Fireye Bulletins:** Refer to Fireye Bulletins BL-1001 and BLZ-1001 for detailed operational and troubleshooting information related to the BurnerLogix system and compatible modules.
- **Software Check:** If custom programming issues arise, ensure the YZ300P programming software is correctly installed and the hardware interface is functioning.

For persistent issues, it is recommended to contact Fireye technical support or a qualified service technician.

8. MAINTENANCE

The Fireye BurnerLogix Interlock Annunciator Module is designed for reliable operation with minimal maintenance. Regular maintenance should focus on ensuring the integrity of its connections and cleanliness of the unit.

- **Periodic Inspection:** Periodically inspect all wiring connections to the terminal block to ensure they remain tight and free from corrosion.
- **Cleanliness:** Keep the module and its surrounding area clean and free from dust, debris, and moisture. Use a soft, dry cloth for cleaning. Do not use abrasive cleaners or solvents.
- **Environmental Conditions:** Ensure the module operates within its specified environmental conditions (temperature, humidity) to prevent premature wear or malfunction.

No user-serviceable parts are inside the sealed module. Any internal servicing should only be performed by authorized Fireye personnel.
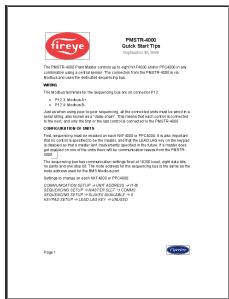
9. WARRANTY AND SUPPORT

For information regarding the warranty coverage for your Fireye BurnerLogix Interlock Annunciator Module, please refer to the warranty documentation provided at the time of purchase or visit the official Fireye website. For technical support, service, or to obtain the latest software and bulletins, please contact Fireye customer service or your authorized Fireye distributor. Ensure you have your product model number and any relevant system information ready when contacting support.

Related Documents - YZ300, YZ320

Fireye ED510 Display Module: Features, Installation, and Operation
Comprehensive guide to the Fireye ED510 Display Module, covering its features, installation procedures, general operation, message displays, historical information, system sub-menus, and troubleshooting diagnostics for burner management controls.

Fireye NX6100 Operator's Guide: 10.4" Color Touchscreen Manual
This operator's guide provides essential information for using the Fireye NX6100 boiler control system with its 10.4" color touchscreen. It covers system operation, parameter adjustments, troubleshooting, and fault finding.

Fireye 45UV5 UV Self-Checking Scanner: Description and Installation
Comprehensive guide to the Fireye 45UV5 series UV self-checking flame scanners, covering description, application, principles of operation, specifications, installation, alignment, maintenance, and troubleshooting.

Fireye 25SU3-2150 Rack-Mounted Flame-Safeguard Amplifier Technical Manual
Comprehensive technical manual for the Fireye 25SU3-2150 Rack-Mounted Flame-Safeguard Amplifier. Includes product overview, features, specifications, installation, operation, setpoints, wiring diagrams, and warranty information.

PMSTR-4000 Quick Start Tips

A quick start guide for the PMSTR-4000 Plant Master, covering wiring, configuration, troubleshooting, and operational messages.

Fireye 60-3008 Adapter: NXD410TS to NXD410 Cutout Installation Guide

Installation instructions for the Fireye 60-3008 adapter, enabling the mounting of the NXD410TS user interface into an NXD410 cutout. Details included components and the step-by-step process for a secure installation.