


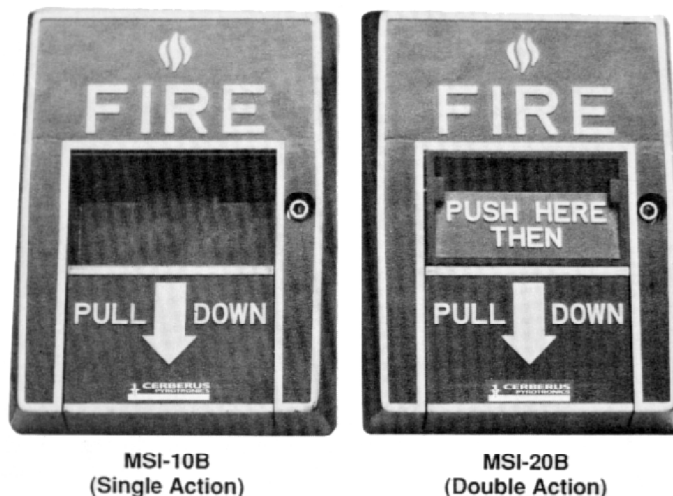
# Intelligent Initiating Devices

## Manual Fire Alarm Boxes

### ENGINEER AND ARCHITECT SPECIFICATIONS

#### MSI-10B And MSI-20B Intelligent Manual Fire Alarm Boxes for MXL and XL3 Control Panels

- Durable Design
- Shock and Vibration Resistant
- Pull Down Lever Remains Down Until Reset
- New Custom Microcomputer Chip Technology
- Dynamic Supervision
- Reset with Allen Key
- No Break Rods Necessary
- Two Wire Operation
- Surface or Semiflush Installation
- FPI-32 Programs and Verifies Device's Address and Tests Device's Functionality
- Electronic Address Programming is Easier and More Dependable
- Single and Double Action Models
-  Listed, CSFM, FM and NYMEA Approved



### Introduction

Cerberus Pyrotronics MSI-10B and 20B intelligent manual fire alarm boxes provide the markets' most advanced method of address programming and supervision, combined with sophisticated control panel communication. Each MSI manual fire alarm box incorporates a new custom microcomputer chip. The microcomputer chip technology, and its sophisticated bi-directional communication capabilities with the control panel, achieves the state of an "Intelligent Initiating Device."

### Description

The MSI-10B and 20B are constructed of durable molded polycarbonate material which is matte finished in red with raised white lettering. The housing accommodates a "pull-down" lever which, when operated, locks in position indicating the manual fire alarm box has been activated. The pull down lever remains down and locked until the manual fire alarm box is reset. The manual fire alarm box is reset only by opening the hinged housing cover with an allen key and then closing and locking the cover.

The MSI-10B and 20B manual fire alarm boxes operate with the MXL, IXL/ICON-1 and XL3 control panels.

The manual fire alarm box's microcomputer chip has the capacity of storing, in memory, identification information as well as important operating status information.

Cerberus Pyrotronics' innovative technology also allows all MSI Series Intelligent manual fire alarm boxes to be programmed by using the Model FPI-32 Programmer/Tester. The FPI-32 Programmer/Tester is a compact, portable, menu driven accessory which makes programming and testing a manual fire alarm box device faster, easier and more dependable than previous methods. The FPI-32 eliminates the need for the device's mechanical addressing mechanisms, such as program jumpers, dipswitches or rotary dials because the FPI-32 electronically sets the manual fire alarm box's address into its microcomputer chip, nonvolatile memory. Vibration, corrosion and other conditions which deteriorate mechanical addressing mechanisms are no longer a cause for concern.

The MSI-10B and 20B are fitted with screw terminals for connection to an addressable circuit. They can be either surface or semiflush mounted.

The MSI Series manual fire alarm boxes derive their power, communicate information and receive commands over a single pair of wires.

The MSI Series is compatible on the same circuit with all IL and ID-60 Series ionization, photoelectric or thermal detectors, TRI Series interfaces or CZM Series addressable conventional zone modules.

The MSI-10B and 20B intelligent manual fire alarm boxes are Underwriters Laboratories, Inc. listed.

### Engineer and Architect Specifications

The addressable manual fire alarm box shall incorporate a custom microprocessor based integrated circuit which shall provide communication with its compatible control panel. The addressable manual fire alarm box shall be a Cerberus Pyrotronics Model MSI-10B or MSI-20B which shall be compatible with both the Cerberus Pyrotronics MXL, IXL/ICON-1 and XL3 control panels.

The addressable manual fire alarm box shall be constructed of durable molded polycarbonate material which is matte finished in red with raised white lettering. The housing shall accommodate a “pull down” lever, which when operated locks in position after releasing a spring loaded switch. To indicate the manual fire alarm box has been activated, the pull down lever shall remain down and locked until the manual fire alarm box is reset. The manual fire alarm box shall be reset only by opening the hinged housing cover with an allen key and then closing and locking the cover.

The addressable manual fire alarm box shall be UL listed.

The addressable manual fire alarm box shall be dynamically supervised and uniquely identifiable by the control panel.

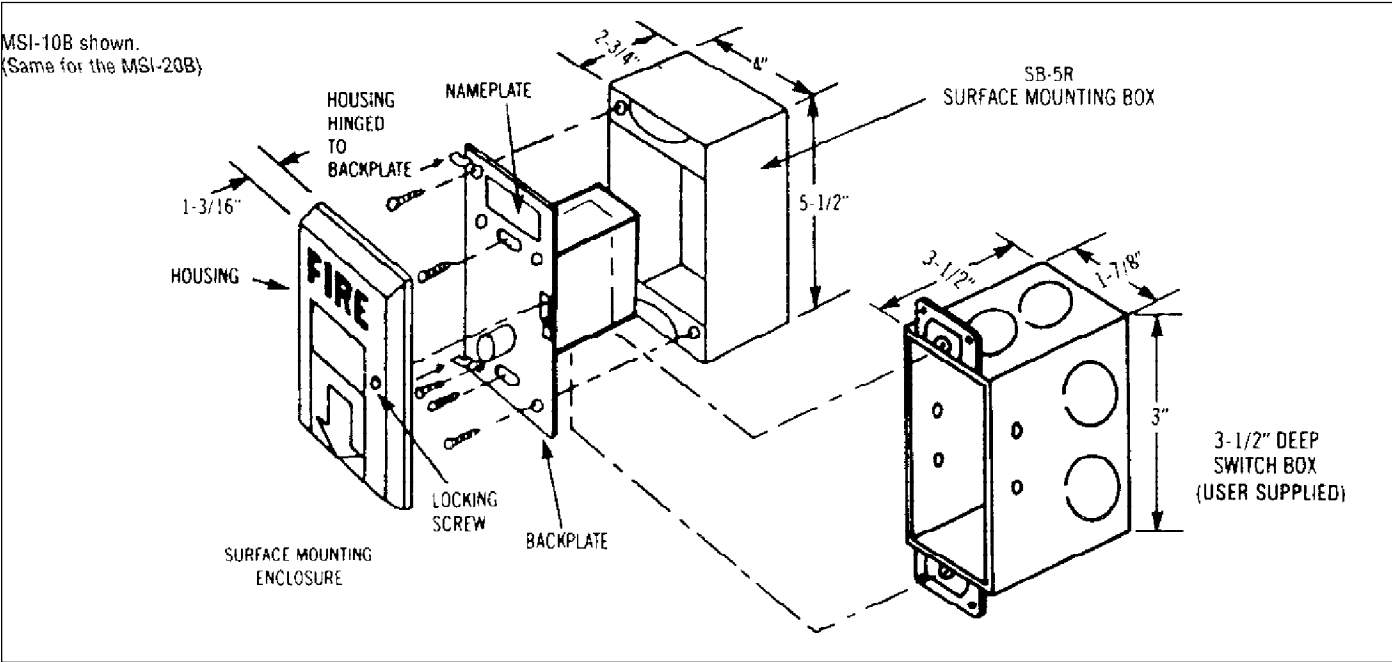
The addressable manual fire alarm box’s address shall be programmed with the use of a portable programming accessory. The programming accessory shall be a Cerberus Pyrotronics FPI-32 Programmer/Tester. The portable programmer shall be menu driven. Once the desired address is entered, the programmer shall set and verify the address. The programming accessory shall also be capable of testing the device’s functionality. The addressable manual fire alarm box’s address shall be set by electronic means only. No mechanical means such as programming pins, dipswitches or rotary dials shall be required to set the device’s address.

The MSI-10B or MSI-20B Manual Fire alarm box shall be compatible on the same circuit with all other Cerberus Pyrotronics IL, ID-60 Series or X Series detectors. MSX or MSI Series addressable manual fire alarm boxes, TRX or TRI Series addressable interface modules, or CZM Series addressable conventional zone modules.

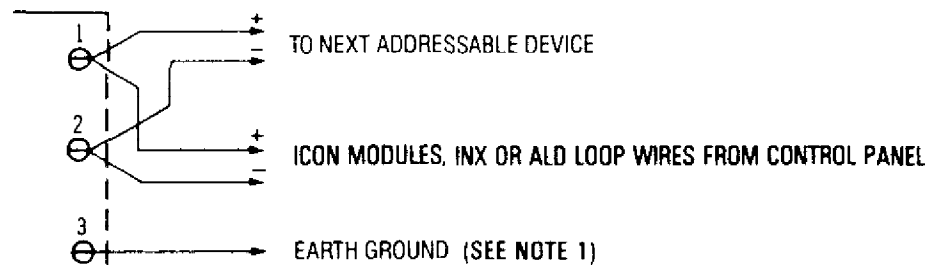
### Ordering Information

Model No.	Description	Shipping Weight
MSI-10B	Adressable Manual Fire Alarm Box, Single Action	2 lb. (.90 kg.)
MSI-20B	Adressable Manual Fire Alarm Box, Double Action	2.5 lb. (1.13 kg.)
SB-5R	Surface Mounting Box	1.5 lb. (.68 kg.)
500-620490	Reset Tool Package (Contains 2 tools)	.5 lb. (.23 kg.)

### Mounting Data



## Typical Wiring Diagram



### NOTES:

1. **If shielded cable is being used, the following wiring details should be adhered to:**
  - A. If the device is connected to a ground electrical box, the shields should be wired through and not connected to ground. The earth ground terminal of the device should be tied to the electrical box.
  - B. If shielded cable is used in grounded metallic raceway, tie the shield through and tie the earth ground terminal to the electrical box/raceway.
  - C. If the device is connected to a non-grounded electrical box tie the shields to the earth ground terminal.
  - D. If shielded cable is used without raceway or in non-metallic raceway tie the shields to the earth ground terminal.