SensorLINK Programmer and Tester
For Intelligent Initiating Devices

**ENGINEER AND ARCHITECT SPECIFICATIONS**

**Model: FPI-32 Programmer/Tester**
- Program, Test and Menu Modes
- User Can Change Modes Anytime During FPI-32 Operation
- Simple Menu Operation
- Compact and Portable
- Withstands Field Handling and Shock
- Up to 4 Hours of Operation on Full Battery Charge
- Standard Rechargeable Batteries
- AC Adapter
- Built-in DB-3S Base for Use with Detectors
- Non-Polarized Jack for Use with Manual Stations, Interface Modules and ICP Modules
- Green Light on Keyboard Indicates Charger On
- Red Light on Keyboard Indicates Low Battery
- Automatic Shut Off After 5 Minutes of Keyboard Inactivity
- Optional Carrying Case
- Listed, ULC Listed, FM and CSFM Approved

**Program Mode:**
- **Electronically sets address into device’s chip memory**
- **Automatically verifies programmed address**
- **Automatically verifies device’s functionality**
- **Stores in memory last programmed address until power is off**
- **Eliminates need for mechanical address programming pins, dipswitches or rotary dials**

**Test Mode:**
- **Automatically performs a sequence of functionality tests**
- **Informs user if device has passed or failed tests**

**Menu Mode:**
- **Gives device’s analog response information**
- **Special test-function options**

**Introduction**
Cerberus Pyrotronics SensorLINK model FPI-32 Programmer/Tester is the most sophisticated technological advancement for programming and testing Cerberus Pyrotronics “Intelligent Initiating Devices.” The FPI-32 can be used with IL and ID-60 Series detectors, MSI Series manual stations, TRI Series Interfaces, CZM-1 Conventional Zone Modules, or ICP Control Modules.

**Description**
The FPI-32 Programmer/Tester is a compact, portable, menu driven accessory which makes programming and testing an intelligent initiating device faster, easier and more dependable than previous methods. The FPI-32 communicates with the Cerberus Pyrotronics Intelligent Initiating Devices and electronically programs an address.
into the device’s microcomputer chip nonvolatile memory. The FPI-32 can also test Cerberus Pyrotronics Intelligent Initiating Devices for functionality.

The FPI-32 comes with an integral keypad and LCD display, an integral DB-3S base for use with detectors, a nonpolarized jack for use with manual stations and interface modules, CZM-1 modules and ICP modules, six standard long-life rechargeable batteries, and an AC adapter. The AC adapter is for using the FPI-32 with AC power and to charge the batteries. Both a shoulder strap and carrying handle are also standard. The carrying case is optional.

Operation

The keyboard includes three mode keys, one for programming, one for testing and one for special menu functions, as well as keys for yes, no, clear, numbers 0 to 9, on and off and a 2 line by 16 character LCD display.

The keys to turn the FPI-32 on and off are colored blue and are on the opposite end of the keyboard from the other keys.

All questions or menu selections can be made using either the yes, no, clear, or numeric keys 0 through 9. The yes, no and clear keys are red colored and appear on the keyboard as YES, NO and C respectively. When the C key is pressed the FPI-32 will either clear any current user entry or return the user to the previously shown text. The numeric keys are blue colored and are used to assign a device’s numeric address. For the XL3 system, the FPI-32 will accept address numbers 1 through 30. For the MXL and IXL systems, the FPI-32 will accept address numbers 1 through 60. If the user attempts to use an unacceptable numeric address, the FPI-32 will give the user an “invalid address” error message.

Three main mode keys found on the keypad allow the user to select between a program, test or special menu mode. These keys are colored red and are labeled as “PROG,” “TEST” and “MENU” respectively. Upon selection of a mode, the FPI-32 guides the user in completing a program or test by the use of questions. If the user desires to use or switch to a different mode anytime the FPI-32 is being operated, the user may do so by simply pressing the desired “PROG,” “TEST” or “MENU” key.

If the user wishes to program a Cerberus Pyrotronics Intelligent Initiating Device’s address, the PROG key is pressed. The FPI-32 will ask if the user is using an XL3 or MXL control panel. When programming or testing “I” Series devices for the IXL system, the “MXL” choice is selected. Then the FPI-32’s menu question format will guide the user, so the user can program the device’s new address. The FPI-32 will also automatically test the device for functionality and will verify the device’s new address. This process takes less time and is more accurate than any other programming method available in today’s market. The device’s address is electronically set by the FPI-32. The FPI-32 will hold in its memory the last programmed address number. When the user is ready to program another intelligent device’s address, the FPI-32 will automatically query the user if the next address in sequence should be used. The user may either select the next sequenced address or input a different address. The FPI-32 address sequence memory will remain active until the FPI-32 is turned off.

The FPI-32 also has two device testing modes. The first test mode can be used by pressing the TEST key. The TEST mode will automatically perform a sequence of functionality tests and inform the user if the device has passed or failed the functionality test. The second test mode can be used by pressing the MENU key. The user has several test and test-function options in the MENU mode. The MENU mode is designed for the advanced technician who is familiar with the device’s analog responses. The device’s analog responses which are displayed by the FPI-32 are the CAL, ID1, ID2 and ANALOG2 values. During any mode, when the FPI-32 tests a detector, the FPI-32 will pulse only a functional detector’s LED. Also, when testing a TRI-60R interface or ICP, the FPI-32 will switch the interface’s relay on and off.

For portability, the FPI-32 is designed to operate on its own battery power for up to four hours when the batteries are fully charged. The user can carry the FPI-32 to an area where it is most convenient to address or test the device. The FPI-32 has six standard long-life rechargeable batteries. To keep the batteries from being depleted when the FPI-32 is not in use, the FPI-32 is designed to automatically shut off if the keypad is not used for 5 minutes. For longest battery life, the batteries should be fully recharged when the red, “low battery” light comes on.

The AC adapter supplies AC power for the FPI-32 and for recharging its batteries. When the AC adapter is used, a green light on the keyboard will come on to indicate the batteries are being charged.

A non-polarized jack is for use with intelligent manual stations, interfaces modules, ICP control modules and CZM-1 Conventional Zone Module. The FPI-32 has built-in polarization equalizer which automatically ensures the proper polarity connection to a manual station or interface module or CZM-1 module. There is an indented area on the FPI-32 for resting a manual station, an interface device or a CZM-1 module.

The FPI-32 is designed to take shocks from a typical field handling. For instance, a drop from table height will typically not affect the FPI-32.
NOTE: If desired, this specification can be used in addition to the Cerberus Pyrotronics Intelligent Initiating Device’s specification.

The addressable initiating device’s programmer/tester accessory shall be capable of programming the device’s address or testing the device for functionality. The programmer/tester accessory shall be a Cerberus Pyrotronics Model FPI-32. The unit shall be portable and shall contain standard, replaceable, rechargeable batteries. The programmer/tester shall have a keyboard which shall include three mode keys, one for programming, one for testing and one for special menu functions, as well as keys for yes, no, clear, numbers 0 to 9, on and off and a 2 line by 16 character LCD display. The programmer/tester shall have an integral detector base. Other standard items shall be an AC adapter to allow the programmer/tester unit to operate on AC power and to recharge its batteries, a nonpolarized jack and receptacle for programming and testing for manual stations, interface modules, CZM-1 Conventional Zone Modules and ICP control modules. The programmer/tester shall be menu driven.

When an addressable initiating device is programmed the programmer/tester shall electronically set the device’s address into the device’s memory and automatically verify the address to the user. The last programmed address shall reside in the programmer/tester’s memory as long as the programmer/tester remains on. The programmer/tester shall be capable of testing the intelligent devices for functionality. The programmer/tester shall have two test modes. One test mode shall inform the user if the device has passed or failed a set sequence of functionality tests. The other test mode shall inform the user of the intelligent device’s analog responses.

If the keyboard is not used for a period of 5 minutes, the programmer/tester shall turn itself off. The program and test accessory shall have a “Charge On” light indicator and a “Low Battery” light indicator. An optional carrying case shall be available.

In the Programming (“PROG”) mode, when programming devices for the XL3 system, the “XL3” menu option shall be selected. For programming devices for the IXL or MXL systems, the “MXL” menu option shall be selected.

### Technical Specifications

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<thead>
<tr>
<th>Weight (FPI-32 with batteries):</th>
<th>4 lbs. 5 oz.</th>
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<tbody>
<tr>
<td>Dimension:</td>
<td>12 ¾” x 9¼” x 1½”</td>
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<tr>
<td>Power:</td>
<td>Using Transformer 120 VAC</td>
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<td></td>
<td>Using Batteries 9 volts (6 x 1.5 volt)</td>
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<tr>
<td>Replacement Batteries Use:</td>
<td>Size AA, NiCAD Panasonic P/N#P-50A or YUASA P/N#500AA or equivalent</td>
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For additional information refer to the Operations Manual (P/N 315-090077).

### Ordering Information

<table>
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<tr>
<th>Model</th>
<th>Description</th>
<th>Part No.</th>
<th>Shipping Wt.</th>
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<tbody>
<tr>
<td>FPI-CC</td>
<td>Carrying Case</td>
<td>310-190247</td>
<td>3 lbs. 2 oz. (1.4kg.)</td>
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<tr>
<td>FPI-32</td>
<td>FPI-32 Package</td>
<td>500-790248</td>
<td>5 lbs. 2 oz. (2.3kg.)</td>
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