
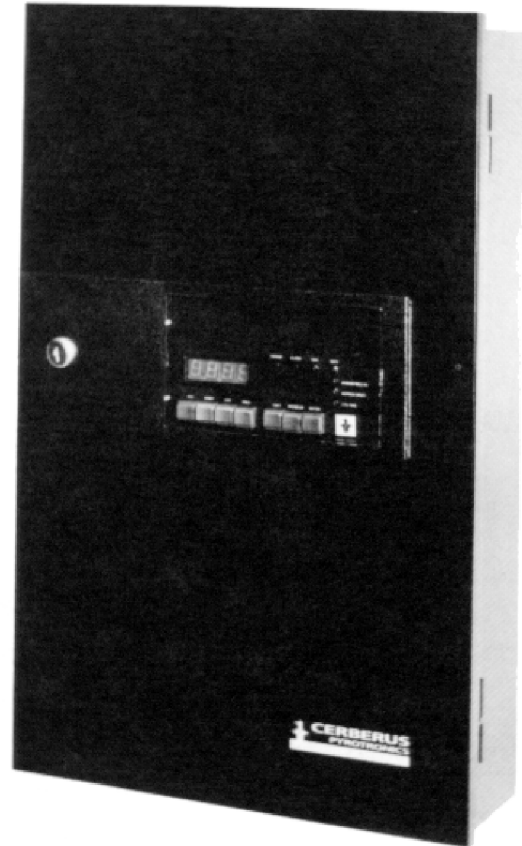


IXL

The Intermediate XL Member of the IntelLINK Family

ENGINEER AND ARCHITECT SPECIFICATIONS

- NFPA Standard 72 Style 6 (Class A) or Style 4 (Class B) Signaling Line Circuits
- NFPA Standard 72 Style Z (Class A) or Style Y (Class B) Indicating Appliance Circuits
- Microprocessor Technology
- Fully Field Programmable
- Menu Driven Programming Software
- Interactive Panel Keypad with Guided Sequential Operation
- Control of Alarm, Trouble, Supervisory Functions by Address Point or Zone
- Supports all "I" Series Intelligent/Analog Input Devices
- User Selectable "I" Series Smoke Detector Sensitivity Level Settings
- Remote UL Sensitivity Test for "I" Series Smoke Detectors
- Alarm Event and Trouble Status Buffers
- History Log
- Self Diagnosis
- Power Limited
- Password Access Protection
- Positive Alarm Sequence
- Alarm Verification
- 24-Hour Trouble Reminder
- Signal Silence Inhibit and Time Limit Cutout
- One Person Test and Print-Out
- Two Supervised Indicating Appliance Circuits Rated At 2A Each
- Jumper Programmable Master Box/Line Reversal Circuit
- Four Form C Relays Rated At 1A, 30 VDC, or 200mA, 120 VAC
- Dual Mode Battery Charger
- Degrade Operation Mode
- Full Array of Optional Modules and Devices
- Circuitry Does Not Require Shielded Cable
-  Listed, ULC Listed, FM, CSFM, NYMEA Approved



Description

The IXL part of the Cerberus Pyrotronics family of fire detection, life safety equipment. Ideal for buildings of intermediate size, the IXL provides a full array of standard and optional features.

The IXL is fully supervised, power limited and fully field programmable control panel. The standard control panel has two network communication lines (these lines are

referenced by NFPA72 as signaling line circuits). This panel can be expanded to monitor up to four network communication lines.

Each network communication line consists of one data line, two power lines and one earth return line. The data and power lines are supervised for open circuit, short circuit and earth faults.

The network communication lines can support a variety of addressable modules and devices for maximum system flexibility. These addressable modules and devices include up to:

- 256 addressable input devices. This limit can be reached by a combination of any of the following:
 - Up to 256 conventional zone modules
 - Up to 4 "I" Series control modules
 - Up to 240 "I" Series devices (detectors, manual stations, TRI interfaces),
- 224 addressable control element relay output modules,
- 24 addressable LED annunciators or graphic or voice interfaces,
- 16 high visibility LCD alphanumeric displays or printer interfaces,
- 16 remote panel control modules,
- 4 generic switch control modules.

The system operator can select one of four smoke sensitivity settings for a specific "I" Series smoke detector installed on an ICon circuit. In addition, the IXL displays at the panel a specific "I" Series smoke detector's analog sensitivity value. This feature permits the user to perform a UL listed smoke detector sensitivity test.

The system architecture allows for T-tapping of the NFPA Standard 72 Style 4 (Class B) signaling the circuits. Signaling line circuits can be configured for either NFPA Standard 72 Style 6 (Class A) or NFPA Standard 72 Style 4 (Class B) operation.

One of the major benefits of the IXL system is that it is fully field programmable. Utilizing the IBM compatible computer and the panel's interactive keypad, the IXL can be customized to meet specific installation requirements.

The interactive keypad allows you to perform basic system operations in the normal, program and test modes. You are guided through the system operation by LED's that flash in order to indicate available operation choices. The IXL also offers password access protection for the use of the panel when additional security is necessary. These features make installation, reconfiguration and maintenance service simple.

Engineer and Architect Specifications

Contact your nearest Cerberus Pyrotronics sales outlet for a copy of the IXL Specification Guide.

IXL

The IXL consists of the main control panel and enclosure for the IXL system. It contains the intelligence for the system. All data is processed and transmitted to other components in the system via the network communication lines.

The IXL also has two notification appliance (alarm signal) circuits rated at 2 Amp. Each, either Style Z (Class A) or Style Y (Class B). The IXL municipal tie circuit is jumper selectable for master box or line reversal circuit. There is

also a built-in battery charger with a 40 AH battery capacity. The IXL has four Form C contacts rated at 1A at 30 VDC, or 200 mA at 120 VAC. The relays are for alarm, trouble, supervisory and degrade mode operations.

IXL Control Panel Keypad and Display

The IXL keypad and display contains seven LEDs (Green, Red, Yellow). These LEDs are "event indicators" that indicate:

Power, Alarm, Trouble, Supervisory,
Bypass or Bell Silence, Service
Required, CPU Failure.

There are also seven keys that are function keys with corresponding indicating LEDs. For the normal program and test operations, the user will use the function keys to make selections and to receive information from the system. These function keys are:

Acknowledge/F1, Reset/F2, Day/F3,
Drill/F4, Test, Program, Enter.

The data display has four (4) red digits. Each digit illuminates to indicate a number or a letter.

Operation

The IXL has three modes of operation — normal, program and test. Each mode enables the user and the system to best monitor and control the protected environment.

In the operating mode any condition such as normal operation (power on), alarm, trouble or supervisory condition will be annunciated at the panel. During the normal operation with no events or abnormal conditions occurring, only the green "power" LED will remain lit.

The program and test modes, unlike the operating mode, may be used only after entering the user password.

Various tests can be performed by selecting the "test" key and various programming functions can be completed by selecting the "program" key. The following are the various selections:

In the Test Mode

- Test main board relays
- Test initiating devices with/without audibles
- Test control elements
- Test alphanumeric annunciators/printers
- Test panel lamps and remote lamps

- Access and print system history log
- Access and print system history log
- Test remote annunciator lamps
- Test generic switch control modules
- Test remote control modules
- Locate a initiating device
- Display detector sensitivity voltage
- Adjust detector sensitivity level

In the Program Mode

- Bypass/enable main relays
- Bypass/enable initiating devices
- Bypass/enable control elements

- Bypass/enable alphanumeric printers
- Enable all bypassed main board relays
- Enable all bypassed initiating devices
- Enable all bypassed control elements
- Enable all bypassed alphanumeric/printers
- Program initiating devices
- Program control elements
- Add the IXL-EXP module
- Program remote drivers (Annunciator/Graphic/Relay Modules)
- Program generic switch control modules
- Program remote control modules

The Expansion Module — IXL-EXP

The IXL system's IXL-EXP expansion card module gives the IXL the additional capability of accommodating optional addressable modules and devices.

The IXL-EXP is equipped with two addressable network communication (signaling line) circuit connections which provide a maximum .5 Amp. Each. This module's maximum Style 4 (Class B) wire run (including T-tap runs) to the last addressable device is (2000 feet).

"I" Series Control Module — ICon

The ICon, "I" Series control module provides the communication interface between the IXL system and the Cerberus Pyrotronics "I" Series intelligent devices. These "I" Series devices include: all models of the ID-60 Series detectors, the universal base, the MSI manual stations and TRI interfaces. The ICon module can be placed anywhere on the IXL network communication lines.

A maximum of four ICon "I" Series control modules can be used with the IXL. Each ICon must be assigned one of the four available input device addresses. Each ICon module can support up to sixty addressable intelligent "I" series devices.

When the ICon is used with the ID-60 intelligent ion or photoelectric detectors, the user, via the IXL keypad, can set the detectors' sensitivity to one of four levels — low, medium, normal or high. In addition, by using the IXL system Test mode, a user can retrieve an intelligent ion or photo detectors' actual sensitivity voltage reading. This information allows the user to remotely test the detector's sensitivity at the control panel per UL requirements.

As with all Cerberus Pyrotronics "I" Series intelligent devices, these devices can be programmed and functionally tested using the compact, menu driven, SensorLINK programmer/tester. The SensorLINK also allows the user to test the detector's sensitivity.

Conventional Zone Interface Module — CZI Series

The conventional zone interfaces, known as the CZI Series models, are addressable modules that can accommodate conventional initiating devices. The IXL can support up to 256 CZI modules as part of the total number of addressable input devices.

The CZI Series models are available for Style 4 (Class B) or Style 6 (Class A) wiring. For each of these wiring classes the CZI modules have individual models for either a "high" or "low" detector current version.

The models and their description are:

CZI-L2S: Low current unit Style 4 (Class B) for use with conventional shorting type initiating devices (i.e., manual stations, thermal detectors).

CZI-L4S: Same as CZI-L2S except it is for Style 6 (Class A) wiring.

CZI-H2S: High current unit, Style 4 (Class B) for use with all types of conventional initiating devices. This consists of all types of Cerberus Pyrotronics conventional detectors including ion, photo, photo/thermal, thermal, flame, beam; and includes conventional manual stations.

CZI-H4S: Same as CZI-H2S except it is for Style 6 (Class A) wiring.

Control Element Modules — CE

The addressable CE, control element is designed for use with the IXL control panel and provides a supervised relay or remote signaling circuit.

The IXL can support up to 224 CE modules. Of the 224 CE modules, those assigned to addresses 129 through 224 are for a specific output control.

The control element can be configured by connecting or disconnecting a number of jumpers, and/or resistors.

There are two basic configurations for the CE model:

Form C relay — The Form C relay is used for applications requiring dry contacts.

Remote Audio/Signal relay — The remote audio/signal relay is used for a number of applications, including to interface and activate a user supplied voice or audio system; or to activate alarm signal devices either with or without an auxiliary power supply.

The Alphanumeric Annunciators and Printer Interfaces — LAN, RAN, LPI, RPI

The IXL system's alphanumeric annunciator and printer interface modules are available in four different models. The model names and functions are:

The LAN is a local alphanumeric annunciator module that fits into the IXL panel enclosure above the panel's keypad. It provides high visibility LCD annunciation and has a serial printer interface port.

The RAN is a remote alphanumeric annunciator module that fits into either its own optional surface mounted housing (model RAN-SB) or a user supplied enclosure. The RAN comes completely assembled. It provides high visibility LCD annunciation and has a serial printer interface port.

The LPI is a local printer interface with only a serial printer interface port. It mounts in the IXL panel above the keypad. Please note, only one LAN or LPI model, not both, can be mounted in the IXL panel.

The RPI is a remote printer interface and has only a serial printer interface port. The RPI has its own optional surface mount box (RAN-SB). It comes completely assembled and may also be mounted in a user supplied enclosure.

The LAN and RAN modules enable the IXL system to annunciate events on a 80 character liquid crystal, high visibility LCD display. The display gives two line of 40 characters each and is backlit, with dark characters appearing against a light background for easy reading. LAN or RAN messages are in English and can also accommodate any user programmed custom words or messages, including foreign language, so long as they use English alphabetic and numeric characters.

Each module is capable of storing up to 1000 history log events. There are nine different choices as to how history log events can be reported. The events are all, alarm, trouble, supervisory, verification, generic switch, walk-test, program/test modes, normal mode (no events). The history log data can be printed on a printer that is connected to the module's RS-232 port or accessed from the IXL utility software via a laptop or PC.

Remote LED Annunciators — LED-1 and LED-2

The addressable remote LED Series annunciators provide eight points or zones of remote or local LED annunciation. The LEDs can be used to indicate the alarm or trouble status of a specific initiating device.

A maximum of 24 remote annunciators can be added to the IXL communication network system. These LED annunciators provide a total of 192 initiating display points.

The LED-1 and LED -2 models are exactly the same except for the color of their housings. The LED-1 has a white housing and the LED-2 has a black housing.

Remote Graphic Driver and Relay Driver Modules — GAD and RRD

The remote graphic driver and relay driver are modules that can be used to illuminate graphic annunciators or to energize relays.

The remote graphic driver module is model GAD and remote relay driver module is model RRD.

Both modules have a header (i.e., a male connector for a female pin wire connector). The wire connector from the GAD is fastened to a user supplied LED graphic panel. The wire connector from the RRD is fastened to a user supplied UL listed relay unit.

Generic Automatic/Manual Switch Control Module — GenCon

The GenCon, generic automatic/manual switch control module is designed for use with the IXL fire alarm system. Each GenCon module allows the user to manually or automatically control up to eight switches.

The IXL can support up to four GenCon module for a total switch control capacity of thirty-two switches.

The GenCon module is designed to fit into the GenBox enclosure. Up to four GenCon modules will fit in a Gen-Box enclosure.

The most common application for the GenCon is for HVAC fan and damper control. However, any condition requiring a generic automatic/manual-off/manual-on switch can be supported with the GenCon module.

For HVAC applications, the GenCon is used together with one or two CE control elements. When an initiating device transmits an alarm to the IXL panel, based on the software configuration program, the panel sends a message to the GenCon and respective control element modules. The IXL system that signals an "automatic" switch function condition. Also, the corresponding control element switches its relay state to directly or indirectly activate or deactivate a fan or damper or other device.

If, as required, a firefighter or responsible individual can access the GenBox. The GenCon's switch can be manually changed to the OFF or ON position. When a switch is changed, the IXL signals a particularly programmed control element to change state to affect directly or indirectly a fan or damper or other device.

Remote Control Module — RemCon

The RemCon, remote control module, features the ability to remotely acknowledge, reset or drill the IXL system. The RemCon provides a remote user interface that functions in the same way as the IXL's control panel LED display and function keys.

The RemCon module has a key switch, removable in the disable position, that enables or disables the module's function keys.

The RemCon is also equipped with a sounder horn. If desired, the sounder horn can be disabled.

A maximum of sixteen RemCon modules can be installed on the IXL communication network system.

The use of the RemCon is ideal when the main control panel is located in an area that is not convenient to a person or office where having the control functions of the fire system are required.

Emergency Voice Interface Module — INS-EVI

The INS-EVI voice interface module provides the electronic interface necessary to activate up to eight alarm zone inputs to a Cerberus Pyrotronics CPV-90 voice system. Up to 16 modules may be installed onto the IXL's network communication lines. The sixteen voice interface modules' addresses are assigned by using the IXL control panel's PROGRAM function key and menu.

Using the IXL configuration software program, each INS-EVI is programmed as a "control element." In the configuration software program, each INS-EVI is assigned eight specific CE addresses.

Remote Switch Module — RemSwitch

The RemSwitch, remote switch module is designed for use with a CZI Series module. The RemSwitch module is a key switch that provides the necessary hardware, when used with a CZI module, to perform any one of the following functions: remote acknowledge, remote reset, remote drill, generic switch.

Auxiliary Relay Module — INS-AUX

The INS-AUX module is a general purpose auxiliary alarm relay for use with the IXL control panel. This auxiliary relay is designed to be mounted in the IXL panel. The relay can be activated either immediately or after a time delay for a device programmed for positive alarm sequence.

Mechanical and Environmental

Input Power:	120 VAC @ 3 Amp. Max. 50/60 Hz
Operating Power:	24 VDC @ 6 Amp.
Battery Requirements:	24 VDC, 5-40 Amp. Hours
Alarm Output Power (unregulated):	4 Amp., 24 VDC nominal
Operating Temperature:	0°C to 49°C
Humidity:	85%, non-condensing
Addressable Peripheral Power:	2 Amp. Max. @ 24 VDC (regulated)
Dimensions:	IXL control — 22 ^{5/8} " x 14 ^{1/2} " x 4 ^{5/8} " Backbox only — 22" x 14" x 4 ^{1/2} "

Backwards Compatibility

The IXL can operate with all modules and devices that operated with the older INS-2 system, such as the INS-MTR, INS-AUX, INS-EVI, etc. In addition, the newer IXL modules, such as RemCon, GenCon and ICon, will operate with some limitation with existing INS-2 systems as long as the existing INS-2 is upgraded. For details and wiring, please refer to the IXL Compatibility and Wiring Guide (Call your nearest Cerberus Pyrotronics sales outlet).

Ordering Information

STANDARD PACKAGE	
IXL — Main IXL board and data display with menu and function buttons, includes the enclosure and transformer and an Installation and Service manual	IXL-UK1 — Utility software programming diskette (3.5" disk for laptop), includes a programming manual
BT-34 — 10AH, 24 VDC battery set	IXL-CABLE — IXL programming cable
OPTIONAL MODULES AND ACCESSORIES	
FT-I/SXL — Semi-flush trim kit for IXL enclosure	IXL-EXP — Dual line expander kit
ICon — "I" Series device control module	CZI-L2S — 2-wire Style 4 (Class B) collective zone interface for contact devices only
CZI-L4S — 4-wire Style 6 (Class A) collective zone interface for contact devices only	CZI-H2S — High current universal 2-wire Style 4 (Class B) collective zone interface for conventional detectors
CZI-H4S — High current universal 4-wire Style 6 (Class A) collective zone interface for conventional detectors	CE-S — Control element, single relay, programmable for Form "C" or notification appliance circuit
IXL-MAN — Installation and Service and Programming manuals	FR5 — Semi-flush trim ring for CE and CZI Series
LAN, RAN — Local or remote alphanumeric display/printer driver	LPI, RPI — Local or remote printer interface (driver)
FT-RAN — Flush trim kit for RAN-SB	RAN-SB — Box surface mount box for RAN or RPI
LED-1 — 8-zone, LED annunciator with white housing	LED-2 — 8-zone, LED annunciator with black housing
LED-CAB — Enclosure for up to 12 LED modules	GAD — 8-zone graphic annunciator driver
RRD - 8-circuit relay driver	MAG — Address programming magnet
RemCon — Remote control reset, acknowledge and drill module	RemSwitch — Remote generic key switch
GenCon — Generic automatic/manual switch control module	GenBox — Enclosure for up to four GenCon modules
INS-AUX — DPDT auxiliary alarm relay kit	INS-MTR — Battery voltmeter/ammeter kit
INS-EVI — Voice interface module	BP-61 — 15AH, 24 VDC battery set (requires separate enclosure)
CON CHIP KIT — Software upgrade kit for IXL panel	A/P CHIP KIT — Software upgrade kit for LAN, RAN, LPI, RPI modules
CON A/P UPGRADE — Full upgrade kit for IXL panel	IXL-DEMO — Demonstration panel includes IXL, LAN, ICon, LED, CE-S, ID-60I
IXL-EXP — Dual line expander kit	IXL-RED — Main IXL board and data display w/ menu and function buttons, includes red enclosure and transformer and an Installation and Service manual
IXL-INT — Main IXL board and data display w/ menu and function buttons, includes enclosure and 220/240V transformer for international use and an Installation and Service manual	FR5B — Black semi-flush trim ring for RemCon
PSM-1 — Auxiliary DC power supervision relay	

NOTICE: The use of other than Cerberus Pyrotronics detectors and bases with Cerberus Pyrotronics control equipment will be considered a misapplication of Cerberus Pyrotronics equipment and as such void all warranties, either expressed or implied in regard to loss, damage, liabilities and/or service problems.



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