

MUXPAD II

Specifications

Communication Protocol

Isolated RS-422/485 standard. Optional protocols include: Supervisory RS-485, RS-232, audio modem, *polling radio, fiber optic, and Ethernet

Power Requirements

- Primary power Input : (18-27 VDC @200mA max. Connect to either a non-resettable power supply ckt of interconnected control unit or a power supply listed for protective signaling use.
- DC operating power use: 2.9 Watts (max.); at 12 Volt-200mA; at 24 Volt-120mA

LED Indicators

- MUS LED-illuminates when Muxpad II is transmitting to the System 3505
- FACP LED-illuminates when Muxpad II is receiving a data character from the serial port of the FACP

Enclosure

- Red steel enclosure with door & CAM (key) lock
- 3.5 in. (H) x 13.25 in. (W) x 9.25 in. (D)
- *For Muxpad II with polling radio, see cut sheet 750240

Net Weight

- 7 lbs. (approx. weight for the standard Muxpad II)

Environmental

- Operating Temperature: 0°C to + 50°C
- Storage Temperature: 0°C to + 50°C
- Operating Humidity: 0-90% (non-condensing)
- Storage Humidity: (non-condensing)

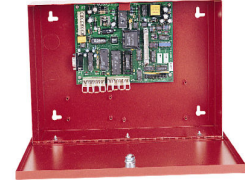
Features

- Serial interface to addressable FACP and/or dry contacts for conventional fire panel
- Eight zone supervised EOL inputs with expansion capability for internal 32-zone supervised inputs (in a larger enclosure)
- Mix & match MUXPAD II with Digitize DGM panels
- Form C relay on Muxpad II can be turned on/off or momentary with relay control option on the SYSTEM 3505*
- Monitors alarm, trouble, and secure states
- Built-in lightning protection on the RS-485 port.
- Watchdog timer
- Supervised RS-232 and RS-485 communication links
- Jumper selectable to monitor FACP, EOL zones or both

For a partial list of compatible FACP manufacturers, please see reverse.

- NFPA-72 Compliant & FM approved
- ANSI/UL 864

For MUXPAD II with polling radio, refer to cut-sheet 750240* or System 3505.



Product Description

The Muxpad II is a Data Gathering Module (DGM), which is a part of the Digitize System 3505 Supervised Bi-directional Polling Alarm Monitoring System. For a complete operating system, you also need a System 3505 with the MULTIPLEX option. The Muxpad II uses Coded Multiplex for communications. The standard communications format for the multiplex system is an isolated RS-422/485 driver. Other available line drivers include RS 232, Audio, Fiber Optic, Polling Radio and Ethernet. Connection to the FACP is via an RS-232 port on the Muxpad II. Install only in dry, indoor environments.

The Muxpad II board contains an isolated RS-422/485 serial port, an RS-232 serial port, a 5-volt switching regulator, a single FORM C relay, a watchdog timer, full lightning protection on the RS-422/485 data line and various support systems (such as 128K EPROM), and zone measurement circuitry with ground fault detection.

The Muxpad II may also be used to monitor addressable fire alarm control panels (FACP). The Muxpad II collects the supervised messages from the FACP serial printer port. As each message is transmitted by the FACP, the Muxpad II gathers the text and interprets it into a more usable format for the SYSTEM 3505. The new messages are then relayed to the SYSTEM 3505 via the Muxpad II's supervised RS-485 serial port.

Upon activation of any new condition, the Muxpad II communicates with the SYSTEM 3505 to advise new conditions as well as the English text message provided by the FACP. In the event of a data line error, the Muxpad II retains alarm information until communication is reestablished to the SYSTEM 3505. Upon receiving a command from the SYSTEM 3505, the Muxpad II can reset the FACP. Other commands (on a limited number of FACP interfaces) include Bell ON/OFF, FACP local ACK, as well as Control Module ON/OFF signals.

The Muxpad II may also be used to monitor end-of-line supervised Dry Contact points of conventional control panels—fire, security, building process, etc.

The Muxpad II utilizes eight local zones provided on the board or an optional 32-zone external plug-in board (in a separate or larger enclosure). FACP and/or ZONE Jumpers determine which system will be enabled by the software. When the FACP jumper is installed, the Muxpad will interpret the serial port data it receives into data to be relayed to the System 3505. Placing a jumper on the zone connector will allow the use of Dry Contact Zones. These zones are EOL resistor supervised and can monitor ALARM, TROUBLE, and SECURE states of the zones. When both jumpers are closed both Zones and FACP will be available. The eight local zones are used in the absence of the 32-zone board. Attachment of a 32-zone board automatically disconnects (invalidates) the presence of the eight local zones. **IMPORTANT:** in order to maintain the ANSI/UL 864 listing of this product it is mandatory that one zone of the Muxpad II is connected directly to the alarm relay contacts of the FACP being monitored. The RS-232 connection from the Muxpad II to the fire panel is an ancillary connection.



