

XP95A

Sounder Control Module



Product overview

Product	XP95A Sounder Control Module
Part No.	55000-825
Digital communication	XP95 - see Protocol Compatibility below

Compliance



Product information

The XP95A Sounder Control Module designed for indoor use only, is used to control a circuit of notification appliances or speakers.

- Enables sounders to be operated continuously or be pulsed, one second on, one second off
- May be synchronized when in pulsed operation
- Can also be used for public address speakers

Protocol Compatibility

The Sounder Control Module uses XP95 protocol and is compatible with control equipment using XP95, Discovery and CoreProtocol® communication.

Technical data

All data is supplied subject to change without notice. Specifications are typical at 24 V, 73°F and 50% RH unless otherwise stated.

Working voltage	17 V - 28 V dc
Digital communication	XP95
Signal Line Circuit (SLC)	Supervised power limited
Modulation voltage	5 - 9 V peak to peak
Supervisory current	1.3 mA
Surge current	7.5 mA
Maximum operating current	4 mA
Analog level	16 (normal) 4 (trouble)*
Wiring styles	Supervised power limited Class A or Class B
Operating temperature	32 °F to 120 °F (0°C to 49°C)
Humidity (no condensation)	10 to 93% RH
Standards and approvals	UL, ULC, FM and CSFM
Dimensions	4½ in. (114 mm) x 4½ in. (114 mm) x 1 in. (25 mm)
Weight	1.05 oz. (30 g)
Materials	White flame-retardant polycarbonate

Note: * Local supply failure, notification appliance circuit short/open circuit or group address conflict.

Features

The XP95A Sounder Control Module enables sounders to be operated continuously or be pulsed, one second on, one second off. Sounders may be operated individually or in groups and whichever address mode has been applied may be synchronized when in pulsed operation.

Addressing

The XP95A Sounder Control Module responds to its own individual address set with a seven segment DIP-switch. It also responds both to a group address set by means of a four segment DIP-switch and to a pulsed-mode synchronization address which is embedded in the Module.

Addresses 1 to 111 are used exclusively for individual addresses (if '0' is selected on the DIP-switch the Module will return a pre-set analog value of 4 to signal 'trouble'); addresses 112 to 126 are used for group addressing while the synchronization address to which all Modules respond is '0'. Any sounder control module on a loop may be freely assigned to a group. The address for any group must be chosen from the range 112 - 126. Addresses 112 to 126 may be used as individual addresses but only if the 4 segment DIP-switch is set to 127 - group addressing is then disabled. If the 4 segment DIP-switch were set to any number other than 127 a pre-set analog value of 4 would be transmitted to indicate 'trouble'.

The Sounder Control Module is normally polled by its individual address. If more than one Module is addressed (by individual or group address) and the sounders are switched to pulsed mode it is possible for sounders to be out of synchronization, such that the sounder tone is not distinguishable as 'pulsed'.

To prevent this it is recommended that the pulsed-mode synchronization address '0' be sent either regularly at hourly intervals or once immediately before energizing sounders. The result is that the sounders are synchronized with each other in pulsed mode, one second on, one second off. All sounder control Modules will recognize the '0' address and synchronize their clocks, but they will not return any data to the control panel on such a polling.

Note: Modules on two or more loops can be synchronized in pulsed mode only if the panel transmits address '0' to all loops synchronously.

It may be desirable in alarm conditions to switch more than one sounder control Module simultaneously. To enable this Modules may be drawn together to form a group and given a group address which is common to all Modules in the group. When a Module recognizes its group address it will process the forward command bits but it will not return any data to the control panel on that address. If it is required to confirm the status of the output bits of devices under group address control it is necessary to poll all devices in the group by their individual addresses.

Notification appliance circuit (NAC)

Wiring styles

Supervised power limited outputs Class A and Class B
 End-of-line supervisory resistor: 47 K Ω , 0.5 W (Class B only)

External supply

Connected between vext + and vext - Monitored input (dc voltage supplies only)

Max (NAC)

Regulated 24 V dc, 1 A. Use a regulated power limited dc supply that is listed for fire protection applications. The maximum number of connected devices must be within the output rating.

Max NAC line loss

Maximum line loss when using a NAC supply from a control panel - refer to panel manufacturers documentation regarding total allowable line losses.

Maximum line loss when using a regulated supply (including wiring from regulated supply to module) - 4 V dc when a 24 V dc regulated power supply is used.

Refer to fire control panel literature for details on how to achieve audio and visual synchronization.

Max (speakers)

70.7 V rms, 500 mA, with wire supervision capability as per NFPA requirements. The speakers used must be listed for fire protection applications.

End-of-line resistors

47 K Ω (A UL listed end-of-line resistor is available from Apollo, Part No. 44251-146.