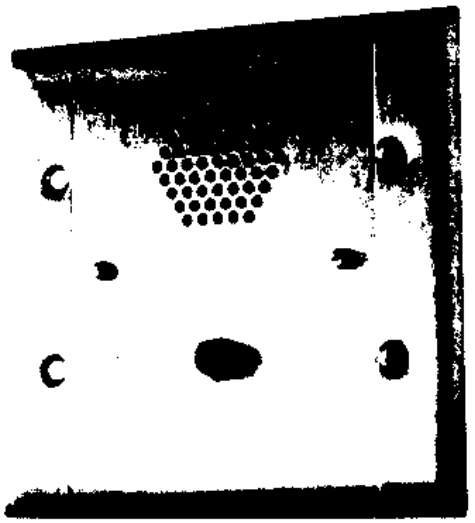

SCS 30/60

SENTRY COMMUNICATIONS SYSTEMS

MUX-100-A

- **AUDIO DURESS ALARM CONTROLLER**
- **ADDRESSABLE ZONE COMMUNICATOR**
- **REMOTE DEVICE INTERFACE**

GENERAL DESCRIPTION

The MUX-100-A is an audio capable zone controller that works with the MPA 30/60 Master Panel Annunciator. The MUX-100-A provides audio "Listen-In" in the event that a RS-100-A audio receiver is activated. The MUX-100-A is capable of supporting two RS-100-A audio receivers and eighteen RS-100 duress only receivers. It monitors momentary or latched contact closures and transmits the status to the MPA 30/60 in the control room. The MUX-100-A also receives and conditions the audio picked up by an activated RS-100-A. It then transmits the audio signal via a 600 ohm shielded twisted pair cable to the MPA 30/60 where it is heard simultaneously.

COMMUNICATION

Communication is via a RS485 two conductor shielded #20 cable at 19,200 BAUD. Each MUX-100-A is polled a minimum of four times per second. The actual polling rate is directly related to the number of zones.

PROGRAMMING

Programming the MUX-100-A is accomplished by setting a six position dip switch to a sequential unique address from one to sixty. Fig. 1, for example, shows the BCD code setting of the dipswitch for zone number 22.

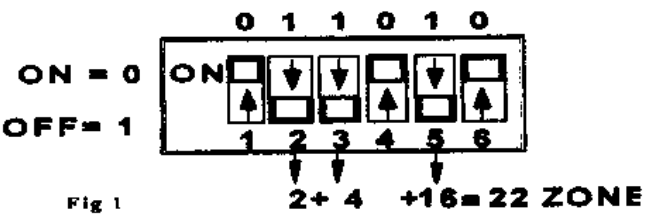

Fig 1

ELECTRICAL

The MUX-100-A operates at 24 VDC and requires 15 mA in monitor mode and 100 mA in alarm mode. The MUX-100-A can supply a total of 500 mA divided between the receivers attached to the Receiver Control Port. The power and communication lines are transient protected.

MECHANICAL

The unit is 2.75x 2.75x 1.25 inches. The MUX-100-A can be mounted piggyback on the back of a standard RS series ultrasonic duress alarm receiver, **(see fig 2.) in which case an extra**

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deep EO box will be needed for mounting.

SYSTEM CONNECTIONS

The connections are by a seven-position terminal block. The connections are shown in Fig. 2. These lines have both TransZorbs and PolySwitches for transient protection.

RECEIVER CONTROL PORT

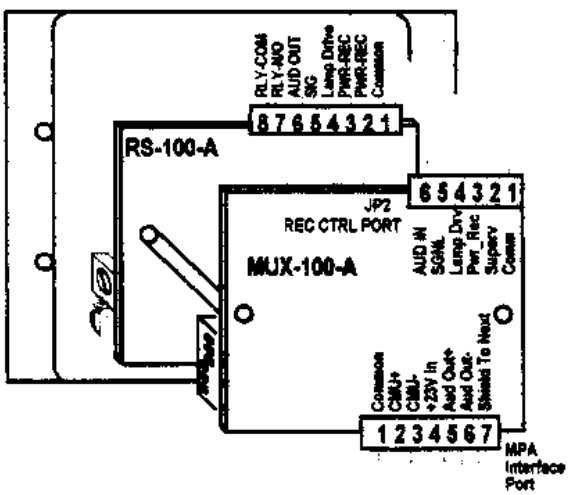
The connections to alarm receivers or other sensors with contact closure are via the Receiver Control Port's removable six-position terminal block. These outputs are all short circuit protected. The connections are shown in Fig. 2. Supervision of the line is accomplished by feeding the +24VDC line from the last receiver back to the Supervision input on the MUX-100-A. The MUX-100-A is reset when the master panel annunciator, MPA 30/60, is reset.

TROUBLESHOOTING

Three LED's allow local monitoring of the operation of the MUX-100-A. The **GREEN LED** monitors communication with the master control and annunciation panel, MPA 30/60. If it is on, the MUX-100-A is properly communicating. The **YELLOW LED** indicates a fault condition in the wiring to the sensors. The **RED LED** is on whenever there is an alarm event.

ENGINEERING SPECIFICATION

The zone communicator must be capable of monitoring either momentary contact closures greater than 0.25 second or latched contact closures. It must accept audio from two audio receivers and on control from the the front panel. Connect this audio to the shielded twisted audio pair ending at the panel. Communication must be by a RS485 two conductor shielded cable at 19,200 BAUD. It must have the ability to reset the duress alarm receivers by command. The dimensions shall not exceed 2.75 x 2.75 x 1.25 inches. All connections shall be both TransZorbs and PolySwitch protected and terminated by removable terminal blocks. One of 60 addresses must be selectable.



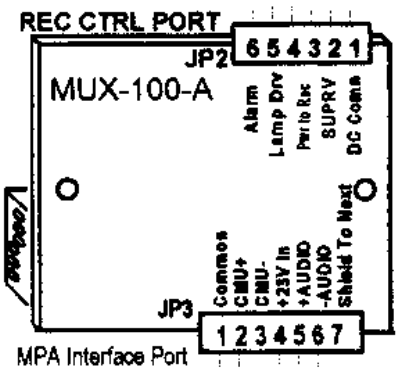


Fig.2

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