SCS 30/60
SENTRY
COMMUNICATION

COMMUNICATION
SYSTEMS
30 ZONE RELAY OUTPUT

ROC-30

- ALARM BY ZONE OUTPUT
- GENERAL ALARM RELAY
- GENERAL SUPERVISION RELAY
- ACK RELAY FOR DATE/TIME STAMP
- INTERFACE TO OTHER SYSTEMS

GENERAL DESCRIPTION

The polling of each MUX contains information of that zone's alarm status, supervision state and if the acknowledge button is being pressed. This information is transferred by the ROC-30 to 3 banks of 10 alarm relays (or 30 zones), 3 general status relays, red LED (alarm) and yellow LED (supervision). The green LED shows the ROC-30 is powered and communication.

The ROC-30 connects into the SCS 30/60 communication wiring just like a MUX-100 except it has no polling address.

COMMUNICATION

Communication is via a RS485 two conductor shielded #20 cable at 19,200 BAUD. The ROC-30 only receives, it does not transmit.

PROGRAMMING

Three switches of the six position DIP switch on the rear are defined.

- SW1 = ON selects Zones 1-30
- SW1 = OFF selects Zones 31-60
- SW2 = ON Zone alarm relays on for 2 seconds SW2 = OFF Zone alarm relays follow front panel
- SW3 = ON General alarm & supervision relays are of Zone 1-60
- SW3 = OFF General relays show 30 zone group of the SW1 selected.

ELECTRICAL

The ROC-30 operates at 24 VDC and requires ____

milliamperes nominal current up to ____ milliamperes (33 relays on). This power is usually supplied from a PS-103 power supply together with customer supplied backup batteries. See Fig. 1 for wiring details. The power and communication lines are transient and short circuit protected. The relays are Form A, 10 VA at 0.5 amp max. The supervision relay is closed when the ROC-30 is powered and all supervision faults have been corrected and acknowledged.

MECHANICAL

The board measures 5" x 16" x 1 1/2". The enclosed assembly dimensions for mounting are shown in Fig. 2.

SYSTEM CONNECTIONS

The communications input connections are by a seven terminal pluggable block shown in Fig. 1 as JP1. JP2 shows the power supply, battery connections and earth ground connections. JP3 allows testing of the unit and provides +24 VDC at 1.5 amps for backed up power distribution at remove locations. These lines have both TransZorba¹ and PolySwitches¹ for transient protection.

LOCAL CONNECTIONS

The output connections to another system are contact closures with removable pluggable blocks. The connections are shown in Fig. 1 as JP4 through 7. The pins to relays are not short circuit protected.

TROUBLESHOOTING

Three LED's allow local monitoring of the operation of the ROC-30. The green LED monitors communication with the master control and annunciation panel, MPA 30/60. If it is on, it is

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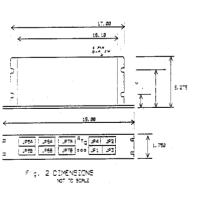
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properly communicating. The vellow LED indicates a fault condition in the system, including on battery of this ROC-30 or the MPA 30/60. The red LED is on when ever there is an alarm event.

Connecting JP3 pin 1 & 2 together will test the relays by stepping through them in sequence. Each relay turns ON for 2 seconds except the supervision relay which turns OFF. The sequence is alarm, supervision, ACK, then Zones 1-30 (or 31-60).A complete cycle takes about 1 minute.

ENGINEERING SPECIFICATION

The systems' relay output unit must close a relay when any system alarm is detected, close another relay when any system supervision has faulted, a 3rd relay when an operator has acknowledged a condition and 30 relays showing each zone's alarm status. The unit must accept 24 VDC and draw no more than ___ milliamperes. Communication must be by a RS485 two conductor shielded cable at 19.200 BAUD. All connections shall be by pluggable terminal blocks. A method of testing the relays and LED's for alarm, supervision and on line must be supplied.



2 2 2 3 3 2 4 4 4 5 5 2 6 7 7 2 6 8 7 7 7 2 1 8 7 1 8	O14 Z 19 JP58 O1 Q 2 L1 O3 Z 13 O4 Z 14 O5 Z 15 O6 Z 16 O7 Z 17 O3 Z 18 O9 Z 19 O1 Z 20 O1 Z 20 O2 Z 20 O3 Z 20 O3 Z 20 O3 Z 20 O5 Z 20 O7 Z 20 O7 Z 20 O7 Z 20 O7 Z 20	O2 O3 O4 O5 O5 O5 O5 O5 O5 O5	
Z 29 Z 30 RED HLARM LEGO'S YELLOW SUPRIV GREEN CONNECT	O 2 239	09	
SYSTEM CONTINUE SYSTEM CONTINU	01 JP1 02 03 04 05 05 07 06 07	CONNECTIONS LOCAL +2440C A	5. 02
OUTPUT GAO -24VCC OUT	O3 O4 FROM PRINEL IF	EARTH ON	9TT 04