

Instructions

TM-1650 Delayed Trouble Relay Module

The TM-1650 module is designed to provide a delayed relay closure for SYSTEM TROUBLE on the GSM-1650 cellular backup system. The delayed relay closure prevents excessive trouble reports caused by momentary dropouts in cellular service. The TM-1650 module's SYSTEM TROUBLE relay (K1) will only trigger a trouble if cellular service is down for a period greater than the programmed delay. A second (LINE STATUS) relay may be used to trip a control panel zone during a telephone line fault condition.

TM-1650 MOUNTING

Apply the included double-sided tape to the back of the TM-1650 module and mount to front of radio, leaving clearance for access to the radio's DIP switch.

TM-1650 WIRING

Connect the TM-1650 power terminals (+12V & NEG) to the radio power terminals. **Connect ground jumpers to both relay COM terminals. Be sure to connect a common ground wire to the control panel, as well.**

SYSTEM TROUBLE RELAY WIRING

Remove the green SYSTEM TROUBLE wire from the radio's IN1 "-" terminal and connect it to the TM-1650 TRIG 1 terminal (see Figure 1). Connect a new wire from SYSTEM TROUBLE NC to the radio's IN1 "-" terminal. If local enunciation is needed for SYSTEM TROUBLE, connect the SYSTEM TROUBLE NO terminal to a control panel's trouble zone. This zone will be switched to ground during a SYSTEM TROUBLE condition.

LINE STATUS RELAY WIRING

The LINE STATUS relay provides a non-delayed output that can be connected to a control panel zone for local enunciation / radio reporting of a telephone line fault condition. Connect a wire between the C900 Input 3 terminal and the TM-1650 TRIG 2 terminal, being careful not to remove the existing yellow wire. Connect another wire between the control panel zone being used to enunciate the telephone line fault condition and the NO terminal. Since the COM terminal is wired to ground, the LINE STATUS relay will short the zone to ground when a line fault condition exists.

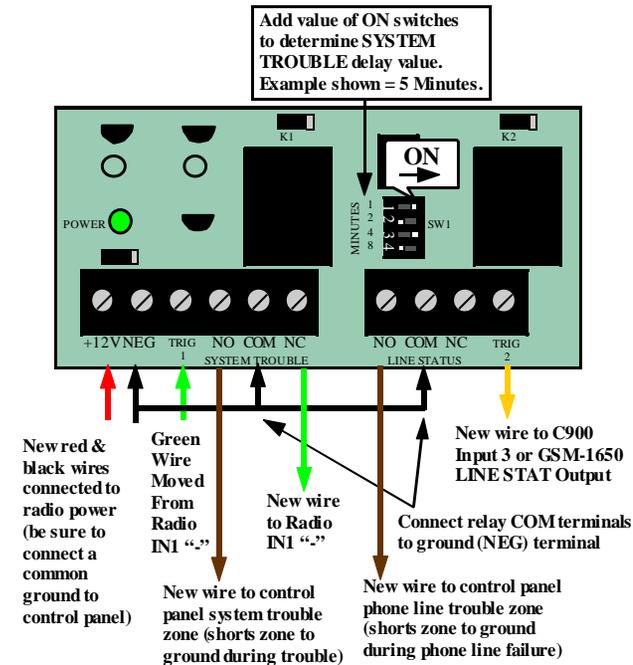


Figure 1: TM-1650 Delayed System Trouble Relay Wiring

DELAY PROGRAMMING

The factory default setting of SW1 is 5 minutes (switches 1 & 3 set to ON). Timing may be adjusted by changing SW1 switches 1 - 4. Simply add the values printed on the silkscreen. Valid delay settings = 0 minutes (all switches OFF) to 15 minutes (all switches ON) in 1-minute increments. SW1 switches are ON when set to the right and OFF when set to the left.

OPERATION AND TESTING

Reconnect power to the GSM-1650 system. Wait for the radio to login and for the GSM-1650 Interface TX / RX status LEDs to stop flashing rapidly.

To test the delay, unplug the gray cable from the side of the AnyNET radio. With the default 5 minute setting, the SYSTEM TROUBLE relay K1 should trip (drop out) after approximately six and a half minutes, causing a Supervised Input Alarm to be transmitted by the radio. Reconnect the connector to the radio. The TX / RX LEDs should stop flashing after approximately 5 minutes. The radio should send a Supervised Input Restoral (the IN1 alarms / restorals will be emailed to the address associated with the radio's account).