#### \* Try these other fine ELK products \* Magic Module Series

MM443 Magic Module, 4 Input, 4 Output, Programmable MM447 Automation Controller w/Voice,Caddx Interface MV480 Recordable Voice Module, 400 Channels

MKHOME1 Home Control Kit for Caddx NX Controls MK400 Starter Kit. Includes MM443 & MK485

MK485 Programming Kit, MB485, Cables, Software X-10® Transceiver Kit, Programmed MM443 MK410 MK420 iButton™ Access Kit w/ MM443, MA100, MA101

iButton™ 'Touchkey' Reader & Interface Pack iButton™ 'Touchkeys',10 pcs w/keyring holders MA100 MA101 Proximity / Wiegand Data Interface to MM443 MA290

**MB485** Data Bus Interface, RS232 to RS485 MC100 Clock / Calendar Module for MM443

ML8 Link Interface to Caddx NX Controls MT100 Temperature Sensor Module for MM443

MM220 Magic Module, 2 Input, 2 Output, Programmable Rust Free Sirens / Speakers

1RT Speaker & Stainless Steel Enclosure 150RT Siren & Stainless Steel Enclosure 155RT

Voice Siren in Stainless Steel Box Speakers & Sirens 44 Speaker, 30 W,8 Ohm Compact Horn

45 Siren, Compact Horn, 118db 55 Voice Siren, Compact Horn M120 Siren, Single Tone, 107db, Mini Horn Speaker, 15 watt, Small Horn SP15

SP30 Speaker, 30 watt, Horn SP35 Speaker, 20 watt, Interior **SP40** Speaker, 40 watt, Horn

Siren, Dual Tone, 110db, Horn **SS15 SS30** Siren, Dual Tone, 120db, Horn

Siren, Dual Tone, 105db, Interior <u>ECHO™</u> <u>Sirens & Speakers</u> **SS36** 73 ECHOSpeaker, 20 Watt, Interior

74 ECHO Dual Tone Siren, Interior 75 ECHO Voice Siren, Interior

870 ECHO Speaker, Self Amplified Siren & Voice Drivers

100 High Performance Siren Driver 110 Voice Siren Driver, English & Spanish

120 Recordable Voice Module and Siren 124 Recordable Voice Module, 4 Channels

Surge Suppressors 950 Surge Suppressor, Phone & Power Line

951 Surge Suppressor, Phone - Single Line Surge Suppressor, Phone - Dual Line 955

Relay Modules 912

Compact Relay, 12 Vdc, SPDT 912B Heavy Duty Compact Relay,12/24 Vdc, SPDT

924 Sensitive Relay, 12/24 Vdc, DPDT

941 Alarm Output Director 960 Delay Timer Relay, 1 sec. to 60 min.

Power Products

Battery, Lead Acid, 12v, 5Ah 1240 Battery, Lead Acid, 12v, 8Ah 1270 Battery, Lead Acid, 12v, 12Ah Battery, Lead Acid, 12v, 18Ah 12100

12170 12250 Battery, Lead Acid, 12v, 25Ah

12 Volts DC, 1 Amp Power Supply w/Enclosure P112

P124 24 Volts DC, 800mA Power Supply w/Enclosure P1216 12 Volts DC, 1.5 Amp Power Supply

P412 12 Volts DC, 4 Amp Power Supply

Power Supply & Battery Charger P624 PD9 Power Distribution Module

965 Low Battery Cutoff and Power Switch TRG1640 Transformer, 16.5VAC @ 40 VA

TRG2440 Transformer, 24VAC @ 40 VA

# **Accessories**

Computer Sound Card Interface 129 800 Audio Amplifier, 10 Watts 900-2 "B" Connectors, Unfilled, 500 pcs "B" Connectors, Gel filled, 500 pcs 902-2 980 Telephone Line Fault Monitor

998 Warning Alarm System Decals

999 Double Sided Tape SL<sub>1</sub> Strobe Light, 4 colors available Wall Mount Kit for SL1 Strobes WK1

01/03

For more information contact your local Distributor or: ELK PRODUCTS, INC 828-397-4200 FAX 828-397-4415 

# **Telephone Line Fault Monitor ELK-980**

## APPLICATION:

The ELK-980 triggers a relay output upon sensing a dead telephone line. Circuitry monitors phone line voltage as well as current in order to protect against false sensing. It installs easily between the incoming telephone block and the equipment using standard 8 conductor modular cables (not supplied).

**Telephone Line Fault Monitor ELK-980** 



# **FEATURES:**

- Detects a Faulted Telephone Line.
- Monitors Phone Line Voltage and Current.
- Selectable Time Delay period on the relay.
- Built-in LED displays Status / Fault Memory.
- Unit is Powered by 12 or 24 Volts D.C.
- Provides Form "C" Relay Output on Fault.
- Dual RJ31/38X 8 Position Modular Jacks.
- Lifetime Limited Warranty, call for details.

## SPECIFICATIONS:

- Operating Voltage: 12 or 24 Volts D.C.
- Current Draw: 30mA.
- Dimensions: 4.4" x 3.0" x 1.125".
- Relay Contact Rating: 1A @ 250VAC.
- Requires (2) 8 Pin Modular Cables (not included).

This device complies with Part 68 of the FCC rules. FCC Reg. No. 5K6USA-25252-KX-N Ren No. 0.0B. It has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. See label on ELK-980 for Canadian DOC Certification Number.

Features and Specifications subject to change without notice.



828-397-4200 Voice 828-397-4415 Fax http://www.elkproducts.com email: info@elkproducts.com

Instructions Printed On Inside

## INSTALLATION

- Connect the ELK-980 to the incoming phone jack using a standard 8 wire full modular "male to male" phone cord (J2).
- Connect the security equipment using a second 8 wire cord (J1). Depending on the equipment, this cord may be identical or it may have a male plug on one end and spade terminals on the other end. (PHONE CORDS ARE NOT SUPPLIED)
- Connect two (2) wires from the ELK-980 to 12 Volts D.C. To power from 24 VDC, move Jumper JP3 to the 24V position.
- Connect two (2) wires from the relay output to the device that is to be activated when a dead phone line is detected. Option: Power and relay connections can be made using the four (4) extra wires in modular cord J1. This requires a cord with a male plug on one end and spade terminal wires on the other. This is not possible if the security equipment requires a male plug ended cord. See FIGURES 1 and 2 below for details on the various jumper options and wiring configurations.

## **OPERATION**

A typical on-hook phone line will measure around 48 volts. The voltage is lower during a call in process (off-hook), however the telephone instrument will then draw current on the line. The ELK-980 utilizes both telco voltage and current to properly detect a faulted line while reducing incidents of false detects. The ELK-980 considers the phone line to be faulted whenever the line voltage falls below 3 volts and the line current draw is less than 18mA.

PHONELINEOK-**FAULT MEMORY -**

STATUS LED blinks once per second as line is tested. Relay energized, contacts COM and NC are closed. PHONE LINE FAULT - STATUS LED steady ON. Relay de-energized, contacts COM and NC are open, COM and NO are closed. Upon restoral of a phone line fault the LED remains predominantly ON and blinks OFF once every 3 seconds. To reset memory indication, momentarily short (for 2 seconds) the two small pins beside the STATUS LED. LED should return to 1 blink per second if phone line is OK.



