INSTRUCTION MANUAL
EAS TELEPHONE INTERFACE
MODEL 986
S/N _____

IF FOR SOME REASON YOU HAVE TO
RETURN THIS ITEM TO THE FACTORY
FOR ANY SERVICE OR REPAIR, YOU
MUST CONTACT CUSTOMER SERVICE
FOR AN **RMA** NUMBER AT (716) 765-2254

ME> MONROE ELECTRONICS

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WARRANTY

Monroe Electronics, Inc. warrants to the owners, each instrument and sub-assembly manufactured by them to be free from defects in material and workmanship for a period of one year after shipment from factory. This warranty is applicable to the original purchaser only.

Liability under this warranty is limited to service, adjustment or replacement of defective parts (other than fuses or batteries) on any instrument or sub-assembly returned to the factory for this purpose, transportation charges prepaid.

This warranty does not apply to instruments or sub-assemblies subjected to abuse, abnormal operating conditions, or unauthorized repair or modification.

Since Monroe Electronics, Inc. has no control over conditions of use, no warranty is made, or implied as to the suitability of our product for the customer's intended use.

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RETURN POLICY TO FACTORY:

Materials returned to Monroe must have a Return Material Authorization number. To obtain a RMA number, contact our A/V Switching & Control Customer Service at 716-765-2254 or fax 716-765-9330. Customers have 30 days to determine that the product ordered fills their need and performs as described in Monroe's literature. Units returned for approved repair or credit, must be in the original packaging including all parts and paperwork plus be in very good physical condition. If not, the customer is billed the cost to refurbish the unit and for missing accessories and merchandise. No products may be returned for exchange or credit after 12 months of the shipment date. Monroe reserves the right to repair
or replace units under warranty.

GENERAL DESCRIPTION

This device interfaces a two wire (POTS) telephone service with control switching and modulator input for an EAS system.

It allows the user to determine how many rings will occur before the telephone line is seized.

It allows the user to determine if he wishes to have the unit hang up after a pre-determined time, or if he wishes it to look for the line current interuption (WINK) on the telephone line to effect a disconnect.

A custom message, of up to 20 seconds, may be input by the operator. This message is played upon the unit picking up the phone, onto the telephone line.

Upon the telephone caller entering the three number access code - programmed via jumpers by the operator - the unit will cease playing the message and proceed to the next stage of operation.

After the access code has been entered, the device will connect the telephone to the included audio amplifier, allowing the telephone caller to speak over the EAS system. Before he speaks, however, the unit may play an alarm signal over the EAS system if the jumpers have been installed to enable this feature.

Also after the access code has been entered, two separate relays will actuate. One will close immediately, and the second after 0.5 seconds. Both relays are SPDT, and all contacts are available on the screw terminals of the connector.

Power is supplied from a 12 volts DC plug mounted supply.

SPECIFICATIONS

Rings to answer
no answer, 1, 3 or 9

Time out in seconds
no time out, 30, 90, or 240

Access codes
16 unique

Audible alarms
none or 1 of 3

Audible alarm length in seconds
1,4,6 or 8

Power required
+ 12 volts DC +, from supplied 110 volt wall unit

External switching
Two(2) SPDT relays, 2 Amp 30 volts DC non-inductive loads

Indicator lights
One (1) to indicate "off hook"

Audio Adjustments
Gain for Phone Audio, Modulator Audio, Alarm Audio and
Message Audio

Message length
20 seconds

INSTALLATION

The unit is supplied to the customer, with default settings, as defined later in the setup section.
If it becomes necessary to change these settings, remove the four (4) screws holding the cover on the unit to gain access to the jumpers. Change the jumpers to configure the unit to the settings desired, and replace the cover and reinstall the retaining screws. Take care not to over tighten the screws, as it is possible to strip the hole in the case.

Once the unit is configured, it may be mounted in a convenient place relative to the other equipment it must be connected with.

After connecting the relevant wiring to the modulator, and the wires to be switched by the relays, plug in the RJ-11 from the telephone (POTS) line, and connect the wires from the power module.
Plug in the power module.

The unit is ready to adjust the audio levels.

See the following sections for jumper installations, and audio amplifier adjustments.

JUMPER SETTINGS

AN X INDICATES THE JUMPER IS INSTALLED,
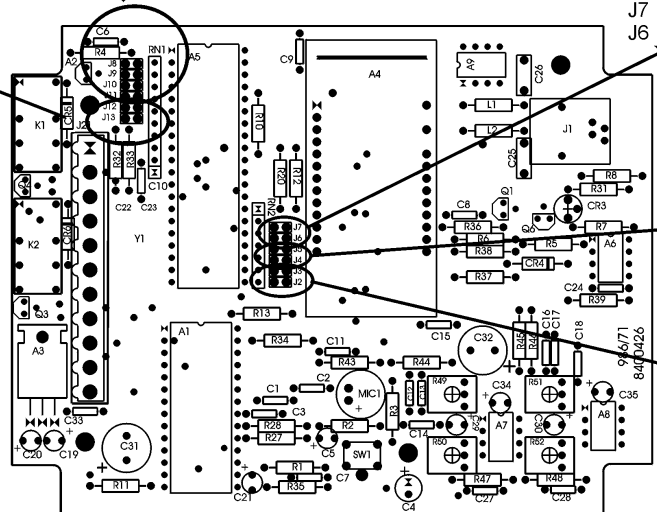AND A 0 INDICATES THE JUMPER IS NOT INSTALLED.

ACCESS CODES

	445	756	867	489	745	856	467	789	132	321	231	123	628	294	573	911
J8	X	0	X	0	X	0	X	0	X	0	X	0	X	0	X	0
J9	X	X	0	0	X	X	0	0	X	X	0	0	X	X	0	0
J10	X	X	X	X	0	0	0	0	X	X	X	X	0	0	0	0
J11	X	X	X	X	X	X	X	X	0	0	0	0	0	0	0	0

TIME OUT IN SECONDS

	NONE	30	90	240
J12	0	0	X	X
J13	0	X	0	X

TYPE OF ALARM

	NO ALARM	LOW LOW	LOW HIGH	HIGH LOW
J7	0	0	X	X
J6	0	X	0	X

LENGTH OF ALARM IN SECONDS

	2	4	6	8
J5	0	0	X	X
J4	0	X	0	X

NO. OF RINGS TO ANSWER

	NO ANSWER	1	3	9
J3	0	0	X	X
J2	0	X	0	X

ADJUSTMENTS

Referring to Figure 1, install jumper(s) to set number of rings to answer, alarm enable if desired (and alarm type and duration if enabled), time out enable (and length if enabled), and access code.

[A jumper is connected between two posts to have a connection, and installed on only one to have an open for the jumper.]

When setting the number of rings to answer, refer to Figure 1, and set it to 1, 3 or 9 rings as desired. (Default is 3 rings)

Setting the Alarm Enable jumpers (see Figure 1), gives one of audible alarm tones for the length of time selected by the jumpers, played over the system. It also plays them into the telephone for the caller, so that he may know when he may make his announcement(s). (Default is NO alarms)

If the user wishes the unit to have an automatic disconnect, after the jumper selected (see Figure 1) is installed, the unit will remain active on the telephone line for the number of seconds selected. It will then automatically hang up, and wait for another call. (Default is no automatic hang up.)

Refering to figure 1 for the jumpers needed, select the access code desired. This code, when punched into the telephone, will turn off the pre-recorded message, and allow the user to make announcements over the EAS system. It will also start the audible alarm tones if selected. (Default is 911)

When the unit is first received, the operator needs to enter his announcement message.
This is done by pressing the record button on the PC board and, in a quiet area and speaking in a normal tone of voice with the user's mouth about 6 or 8 inches from the microphone on the PC board, enter the message. Please leave a silent period for 4 or 5 seconds after speaking to allow a time for entering the access code.
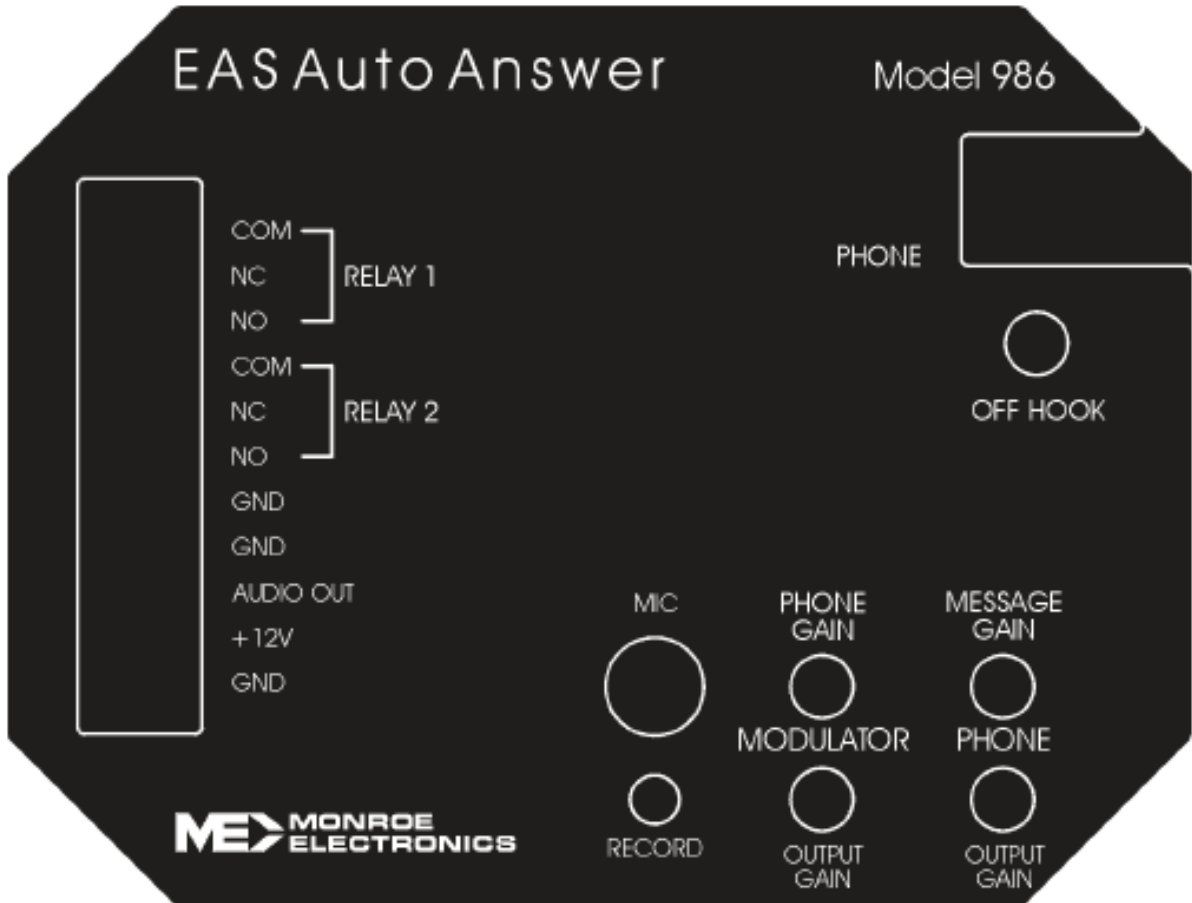The message will repeat until the access code is pressed.
Note that if the unit is called, but the access code is not entered for 60 seconds after the 986 picks up the telephone line, it will automatically hang up. Pressing the activation code turns off the voice and activates the relays. If the first two digits plus * are then pressed, the relays open and the voice resumes. If the first two digits plus # are pressed, the unit hangs up.

The gain controls are adjusted as follows:

First, dial up the unit. Enter the Access Code. If the alarm is activated, adjust the Phone Output Gain for a comfortable level without distortion. If the alarm is not activated, dial up the phone again, and adjust first the Phone Output Gain to about mid range, then adjust the Phone Message Gain for a distortion free pre-recorded message. If the alarm is activated, adjust first the Phone Output Gain for a good signal and then the Phone Message Gain.

Second, dial up the unit. Enter the Access Code. If the alarm is activated, adjust the Modulator Output Gain for a proper level without distortion into the modulator used. Then speak into the telephone handset, and adjust the Modulator Phone Gain for proper distortion free input into the modulator. If the alarm is not set, adjust the Modulator Output Gain to about the center of it's range, and then adjust the Modulator Phone Gain. Refer to Figure 2 for placement of the gain controls, record switch and microphone.

Figure 2