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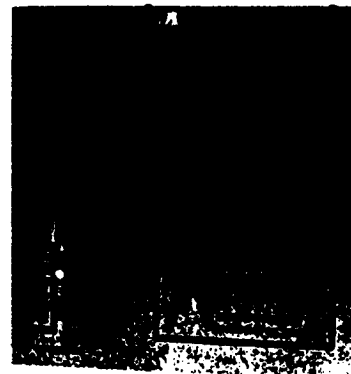
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MODEL 130

3-CHANNEL DIGITAL DIALER

(For Silent Knight, Ademco, DCI, Franklin, & SESCO Receivers)



INSTALLATION MANUAL

SILENT KNIGHT

A DIVISION OF WAYCROSSE, INC.



SECURITY SYSTEMS

1700 Freeway Boulevard North, Minneapolis, MN 55430

812/566-0510

POWER SUPPLY REQUIRED

Voltage: Maximum - 13 volts D.C.

Minimum - 6 volts D.C.

Current: Standby (not reporting) = 20 MA

Reporting = 180 MA

WIRE OPTION DESCRIPTION

Four (4) wire loops can be found on the Model 130 P.C. board with a number under each. The following is a description of these options.

Wire Option One: Labeled (1) on the P.C. board.

This is the "Restore-to-Normal" wire option. With this wire (in) the Model 130 will report only the alarm condition and will not report "Restore-to-Normal".

With this wire (out) the Model 130 will report a "Restore" condition of the alarm channel inputs if:

- a) The initiating alarm input was present continuously during the reporting sequence.
- b) The initiating alarm input is restored after the reporting sequence is completed ("Kiss-off" received).
- c) All other inputs are also in their normal (non-alarm) states.

The alarm code reported for "Restore" will be a code (7).

Wire Options Two and Three: Labeled (2) and (3) on the P.C. board. With both of these wires (in) the Model 130 will operate on the Silent Knight format.

With both of these wires (out) the Model 130 will operate on the "Sesco" format.

Wire Option Four: Labeled (4) on P.C. board.

This is the "Momentary/Continuous" input option.

With this wire (in) the Model 130 will report the activation of an alarm input only if the activation is present for the entire reporting sequence. If the activating input is removed while the 130 is still dialing or waiting for acknowledgement from the Receiver, it will immediately hang-up. If the activating input is removed while the 130 is transmitting the alarm condition, the alarm code will change to the cancel code (9).

With this wire (out) the Model 130 will respond to a momentary activation on any of its inputs.

Note: The Model 130 is designed so that individual channel options cannot be selected independently. If the "Momentary" option is selected then all channels will be momentary. If the "Continuous" option is selected, then all inputs must be continuous. (With the exception of the "Test" input).

DESCRIPTION

The Model 130 is a three (3) channel digital dialer designed to be powered and controlled as a "slave" or add-on to any alarm system.

Features of the Model 130 include:

1. Full "Memory" reporting on all channels;
If more than one alarm input is active (in alarm during the reporting sequence) they will all be reported.
2. "Restore-to-Normal" reporting (Wire Option).
3. Normally-closed and/or normally-open inputs on channel 1, normally-closed or normally-open on channels 2 & 3.
4. Momentary or Continuous activation of the alarm inputs. (Wire option).
5. Line seizure relay.
6. Anti-jam.
7. Dial tone detection.
8. Separate "Test" input.
9. Eleven digit dialing.
10. Automatic reset.
11. Compatible with Ademco, Sescos, DCI, Franklin and most other receivers. (Wire option).

OPERATION

When activated, the Model 130 will dial the telephone number of the alarm Receiver. When the Receiver has answered the call the Model 130 will transmit a three (3) digit location code (account number) and a one (1) digit alarm code. The combination of the three (3) digit account number and one (1) digit alarm code is called a "code group".

The dialing and data transmission occur in the following sequence:

1. Channel input activation.
2. The Model 130 seizes the telephone line and listens (checks) for dial tone.
3. Upon detection of dial tone, the Model 130 will dial. If dial tone is not present the Model 130 will begin dialing after 24 seconds. During this time it will have attempted to clear the telephone line connection (anti-jam) by performing an on-line/off-line operation.
4. Acknowledgement is received indicating that the alarm Receiver has answered the call.
5. Data is transmitted.
6. "Kiss-off" signal is received, indicating that the alarm Receiver has decoded, compared and displayed two (2) identical "code groups".
7. If more than one alarm input is active, the next alarm "code group" will be transmitted. This will continue until all the alarms have been reported and "Kissed-off".
8. Final "Kiss-off" after all alarms are reported causes the Model 130 to hang-up (shut-down).

WIRE OPTION SELECTION (SUMMARY)

Wire Option (1)	- IN	= No "Restore-to-Normal"
	OUT	= "Restore-to-Normal"
Wire Option (2 & 3)	- IN	= Silent Knight format
	OUT	= Sescos format
Wire Option (4)	- IN	= Continuous inputs
	OUT	= Momentary inputs

INPUT CONNECTIONS

Channel One (Ch. 1)

Terminal 6 - Ch. 1 (output)
Terminal 7 - Ch. 1 (input)

Ch. 1 will accept either normally-closed (N.C.) contacts Fig. 1 or normally-open (N.O.) contacts Fig. 2 or a combination of both Fig. 3. **NOTE:** If the normally closed contacts are not used a jumper must be connected across terminals 6 and 7.

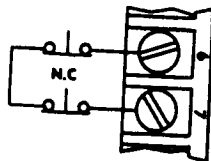


Figure 1

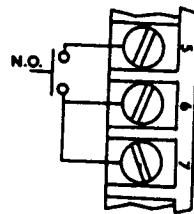


Figure 2

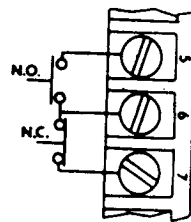


Figure 3

Ch. 1 may also be activated by applying a voltage to the input Fig. 4.

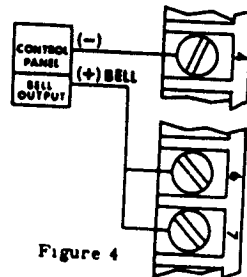


Figure 4

OUTPUT CONNECTIONS

Telephone line connections

The Model 130 incorporates a built-in line seizure relay which, when activated, will seize the telephone line and disconnect the subscribers phones to prevent "jamming" of the phone line.

To meet FCC regulations the Silent Knight Model 786 connecting cord and Telco phone jack (RJ31X) must be used when connecting to the phone lines, as shown in Fig. 13.

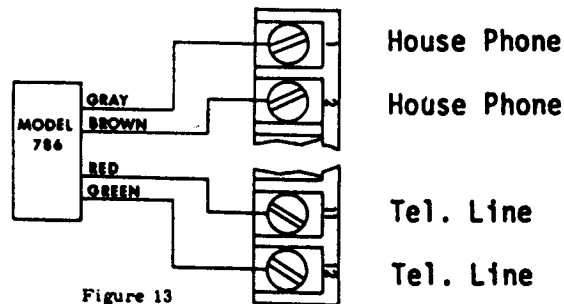


Figure 13

IMPORTANT: A LINE SEIZURE RELAY PROVIDES ONLY MARGINAL PROTECTION AGAINST LIGHTNING. IT IS STRONGLY RECOMMENDED THAT AN ADDITIONAL TRANSIENT SUPPRESSOR (MODEL 787) BE CONNECTED TO THE TELCO. TERMINAL BLOCK.

"Reporting" Light Indicator

(Terminal 3) the "Reporting" light output provides a minus (-) potential to Terminal 3 whenever the Model 130 is in a reporting sequence. This output may be used to turn on a light or activate a relay as shown in Fig. 14, when using a 6 or 9 volt power supply. When using 10 to 13 volts connect as shown in Fig. 15.

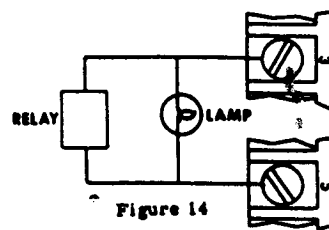


Figure 14

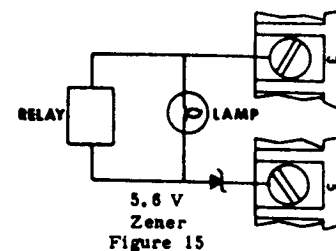
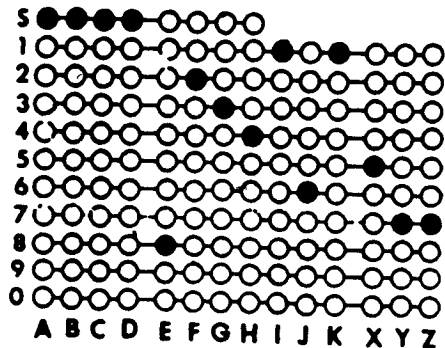


Figure 15

The current available at Terminal 3 is 50 ma.

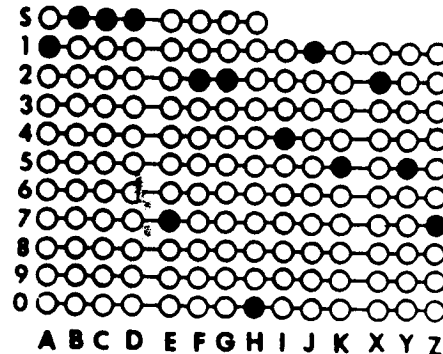
Dialer Programming

The central station telephone number and the client's account number are selected in the columns A thru K and X thru Z. If the usual 7 digit telephone number is used, it must be programmed in columns E thru K. The account number is always placed in columns X, Y, and Z.



EXAMPLE: 823-4161, Act. 577

If an 8 digit telephone number is used, the first digit must go in column A, columns B, C, and D must still be in the S row (skip position). The next 7 digits go in columns E thru K.



EXAMPLE: 1-722-0415, Act 257

the alarm code which will be transmitted to the alarm Receiver for Ch. 1 will be a code (1) for Silent Knight format or a code (3) for SESCOA formats.

Note: If a bell is used in the system a .22 MFD 200 volt capacitor must be connected directly across the bell contacts (at the bell).

Channel Two (Ch. 2)

Terminal 8 - Ch. 2 (input)

Ch. 2 will accept either (N.C.) contacts Fig. 5 or (N.O.) contacts Fig. 6 but not both.

Ch. 2 may also be activated by applying a voltage to the input Fig. 7.

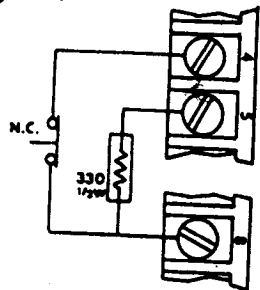


Figure 5

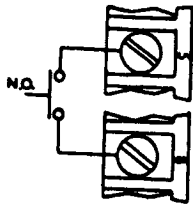


Figure 6

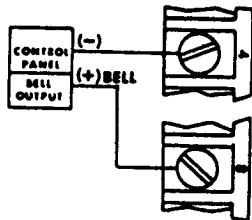


Figure 7

Channel Three (Ch. 3)

Terminal 9 - Ch. 3 (input)

Ch. 3 will accept either (N.C.) contacts Fig. 8 or (N.O.) contacts Fig. 9 but not both.

Ch. 3 may also be activated by a voltage Fig. 10.

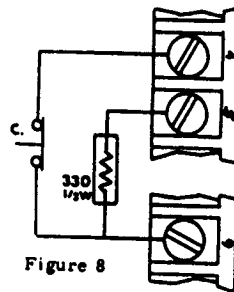


Figure 8

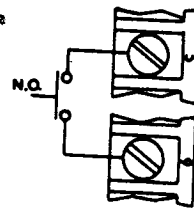


Figure 9

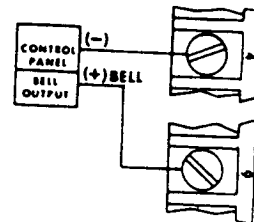


Figure 10

the alarm code which will be transmitted to the alarm Receiver for Ch. 2. will be a code (2) for Silent Knight format or a code (1) for SESCOA formats.