

SECURITY CONTROL WITH ZONING

MPI-725

SPECIFICATIONS & INSTRUCTIONS

moose

APPLICATION

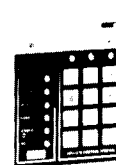
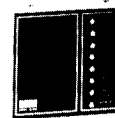
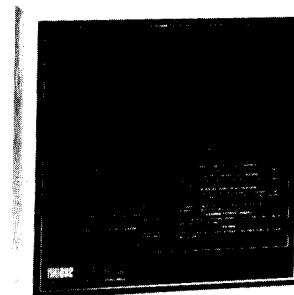
The MPI-725 With 3 Burglar Zones Is An Ideal Choice For The Basic Residential Package With Either Touchpad Or Key Control Stations. The MPI-725 With The Optional Zone Expander Is An Ideal Commercial Package With Full Shunting Capability.

SPECIFICATIONS

- Keypad programmable:
 - Exit Delay Time
 - Entrance Delay Time
 - Alarm Cutoff Time
 - Arm/Disarm Code
 - Auxiliary Arm/Disarm Code
 - Loop Response Times
- Separate 12 VDC Output For Burglar, Fire, Police, & Medical Channels.
- All Burglar Zones And Fire Channel Supervised With 4700 Ohm End-Of-Line Resistors.
- 1 Amp Regulated Power Supply.
- 18 Volt 35VA, Plug-In, UL Class II Transformer.
- Control Board Current Drain 25 Milliamps At 13.8 VDC.
- Quick Connect Terminal Strips Accept 14 To 26 Gauge Wire.
- Unique Unpluggable Terminal Strips Use No Screws.
- Operating Temperature Range: 0 To 122 Degrees F (-30 To + 50 Degrees C).
- Circuit Board 8.75 x 5.87 Inches.
- Metal Cabinet 11 x 15 x 3.5 Inches.

FEATURES

- Three Burglar Zones (Delay, Perimeter And Interior) With Separate Dialer Outputs.
- Burglar Zones Expandable From Three To Eight Zones With Optional MPI-228 Zone Expansion Module, And MPI-238 Eight Zone Annunciator Station.
- 24 Hour Supervised Fire Channel With Trouble Output (Class "B" Circuit).
- Separate 24 Hour Police And Medical Channels.
- Accepts Optional MPI-825 Plug-In Eight (8) Channel Communicator.
- Up To Eight (8) Burglar Zones May Be Shunted From Keypad Control Stations.
- Alarm Memory On Keypad Control Stations Indicates First Zone To Violate.
- One (1) Amp Fully Regulated And Filtered 12VDC Power Supply.
- Violated Burglar Zones Auto Shunt After Alarm Cutoff.
- Multiple Keypad Or Keyswitch Capability.
- Day Loop With MPI-228 Zone Expansion Board.
- Plug In Terminal Strips.
- Control Mounted In An 18 Gauge Steel Cabinet With Knockouts For Optional MPI-279 Keypad Control Station, MPI-238 Zone Annunciator, Or Key Switch.
- Lamp Output For AC Line Carrier Devices.
- Automatic Self-Restoring Circuit Breakers.
- Five (5) Stage Lightning/Transient Protection.



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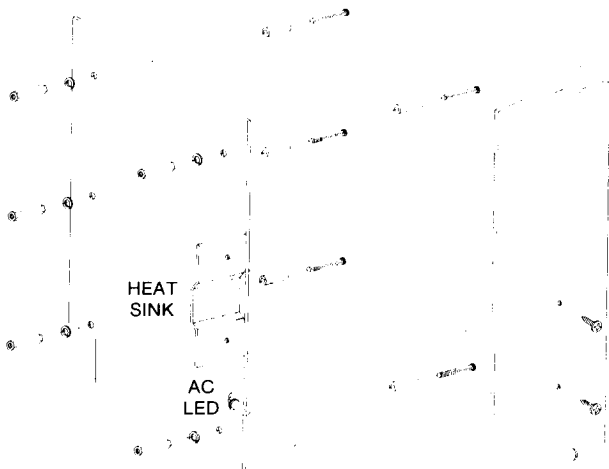
moose products inc.

Installation Instructions

- Step 1. Remove all packing and components from control box. See page 12 for hardware list.
- Step 2. Remove knockouts for wiring where needed.
- Step 3. Mount the control box in a dry location.

NOTE: Make sure the outlet for the transformer is not switched and will remain live twenty four (24) hours per day.

- Step 4. After mounting the control box securely to the wall, the main control board is ready to install.



- Step 5. Place the five (5) plastic spacers on the control board mounting studs in the back of the control box.
- Step 6. Install the control board onto the mounting studs with the heat sink and AC LED on the right side. (see diagram right).
- Step 7. Place the lock washers on the five (5) board mounting studs.
- Step 8. Screw the one (1) inch metal standoffs snugly onto the five (5) board mounting studs.
- Step 9. Install the two (2) sheet metal screws (provided) through the right side of the metal enclosure and into the prepunched holes on the heat sink. Hold the heatsink steady while installing screws.

NOTE: The power supply may be damaged from excess heat if the heatsink is not screwed to the metal enclosure.

- Step 10. Install a direct metal stake earth ground. Attach a ground wire from the earth ground stake to the spade lug marked "G" on the control board or to the control box itself, making sure surfaces are free of dirt and paint.

***Do not plug in the 18 volt transformer or attach the battery at this time.

Installation Hint

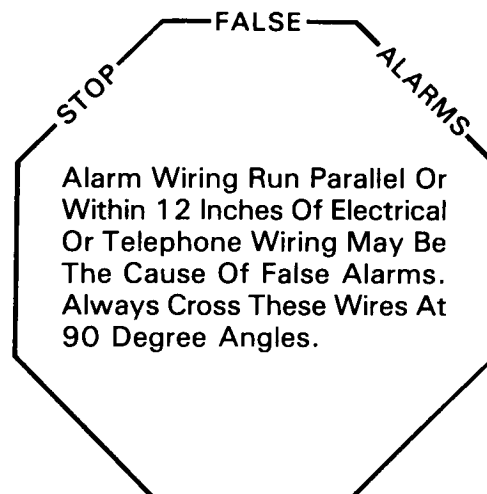
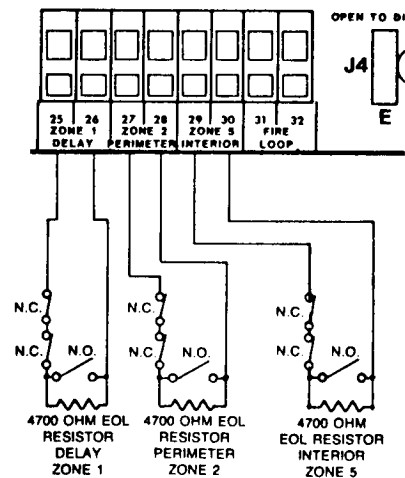
For the lightning protective circuits to be effective, the MPI-725 must be earth grounded as close to the control box as possible. It is recommended that this ground connection be made with a separate ground rod and a minimum #14 gauge copper wire. Do not use electrical conduit, gas pipe, or telephone company grounds because these earth grounds have a large amount of electrical noise on them.

*Warning: DO NOT EARTH GROUND THE NEGATIVE SIDE OF THE POWER SUPPLY

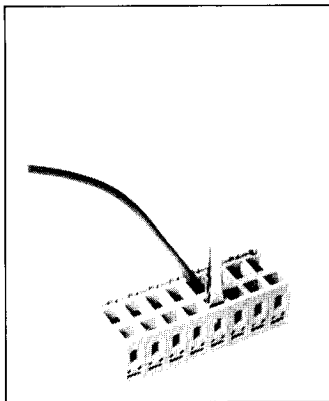
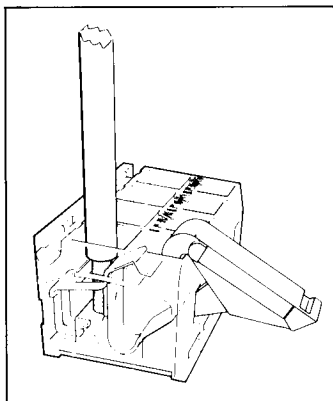
- Step 11. Terminals 25 to 30.

Burglary Zones

Connect the three burglar zones to terminals 25 thru 30 as shown on the diagram below. All zones are class "B" end-of-line resistor supervised with 4700 ohm resistors. For proper supervision the EOL resistor should be placed at the most distant switch from the control panel. This type of circuit allows the use of Normally Open and Normally Closed switches on the same loop. If the loop is opened or shorted a violated loop condition will result.



TERMINAL CONNECTIONS



This device incorporates a new unpluggable terminal strip. These new terminals clamp the wire with spring tension forming a gas-tight connection. The terminal has two slots, one for the wire and one for opening the slot. (See illustration) The slot may be opened with a small actuating lever (provided) or with a thin blade pocket screwdriver. Both methods are illustrated but the installer will have to choose which method is the most comfortable to use.

Installation Hint

If any of the burglary zones or the fire channel is not going to be used, the 4700 ohm EOL resistor must be left on the unused terminals.

To wire a burglar zone with all normally closed devices and not use the EOL resistors, cut the proper jumper:

Jumper J7—Cut to remove EOL resistor from zone 1—terminals 25 & 26.

Jumper J8—Cut to remove EOL resistor from zone 2—terminals 27 & 28.

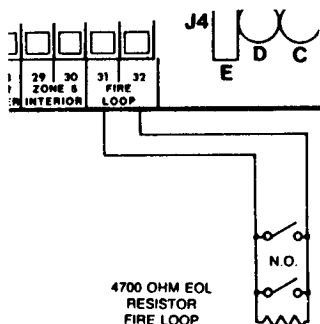
Jumper J9—Cut to remove EOL resistor from zone 5—terminals 29 & 30.

Step 12. Terminals 31 and 32.

Fire Channel

Connect the normally open fire detectors to terminals 31 and 32 with the 4700 ohm EOL resistor located at the most distant detector from the control panel. The diagram below shows proper hookup of a fire circuit.

*Note: the fire system will not be supervised if the EOL resistor is left on terminals 31 and 32 instead of at the far end of the fire loop. If installed properly an open or a break in the fire detection loop will cause the fire LED on the keypad control station to flash on and off. At the same time the pre-alarm will beep indicating a fire trouble condition. A short or closure on the fire detection loop will activate the fire channel output, pre-alarm, and the fire LED on the control station.



Installation Hint

If a fire detector should short out and cannot be restored, jumper J4 may be opened to allow resetting the fire channel.

The audible beeping on fire trouble may be silenced by opening jumper J5.

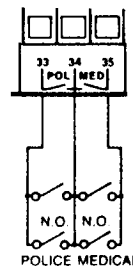
Jumper J4—open to disable the fire circuit and activate fire trouble.

Jumper J5—cut to silence trouble pre-alarm on fire trouble.

Step 13. Terminals 33 and 34.

Police Channel

Terminals 33 and 34 provide an input for normally open panic devices. A closure across these terminals will activate the Police Channel output, the pre-alarm, and illuminate the Police LED on the control stations.



Installation Hint

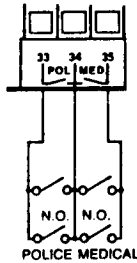
Jumper J11 if cut, will silence the pre-alarm during activation of the Police Channel.

Note

Refer to page 9 and section entitled "Emergency Channels" for manual activation and operating instructions for the Police, Fire and Medical channels.

Step 14. Terminals 34 and 35.
Medical Channel

Terminals 34 and 35 provide an input for normally open medical devices. A closure across these terminals will activate the medical channel output, the pre-alarm, and will illuminate the Medical LED on the control stations.



Installation Hint

Jumper J12 if cut, will silence the pre-alarm during activation of the medical channel.

Keyswitch Option

If you are going to be using a keyswitch with the MPI-725, go to the section on "Keyswitch Operation".

Step 15. Terminals 1 thru 15.

Remote Station Hook-Up

Terminals 1 thru 15 are a pin-for-pin match to the MPI-279 keypad control station.

Installation Hint

Enclosed with the MPI-279 is a light blue card that provides a place to record the color code of the wires that will connect the MPI-279 keypad remote station to the MPI-725 control panel.

The output from the keypad provides a positive binary format:

A one (1) represents (+) 12VDC

A zero (0) represents no input

PIN	4	5	6	7
	D	C	B	A
No Key	0	0	0	0
Digit 1	0	0	0	1
Digit 2	0	0	1	0
Digit 3	0	0	1	1
Digit 4	0	1	0	0
Digit 5	0	1	0	1
Digit 6	0	1	1	0
Digit 7	0	1	1	1
Digit 8	1	0	0	0
Digit 9	1	0	0	1
Digit 0	1	0	1	0
• Instant	1	0	1	1
• Police •	1	1	1	1
5 Fire 8	1	1	0	1
4 Medical 0	1	1	1	0

MPI-279 Remote With MPI-725 Control

MPI-279

J1
Pin 1 Black
Pin 2 White

Pin 3 Red
Pin 4 Green
Pin 5 Brown
Pin 6 Blue
Pin 7 Orange
Pin 8 Yellow

MPI-725

Terminal 1 (-) Medical LED Output
Terminal 2 (+) 12VDC Power Supply Output
Terminal 3 (-) Pre-Alarm Output
Terminal 4 Keypad "D" Input
Terminal 5 Keypad "C" Input
Terminal 6 Keypad "B" Input
Terminal 7 Keypad "A" Input
Terminal 8 (-) AC Power On LED Output

Terminal 9 (-) Armed LED Output
Terminal 10 (-) Home (Instant) LED Output
Terminal 11 (-) Zone 5, Interior Status LED Output
Terminal 12 (-) Zone 2, Perimeter Status LED Output
Terminal 13 (-) Zone 1, Delay Status LED Output
Terminal 14 (-) Police LED Output
Terminal 15 (-) Fire/Trouble LED Output

MPI-725 Usage

Installation Hint

On the other side of the blue record card is a chart for hooking up the MPI-275 keypad control station. The MPI-275 does not have all the LED's that the MPI-279 does but may be used with the MPI-725 as a keypad control station.

MPI-275 Remote With MPI-725 Control

MPI-275

J1
Pin 1 Black
Pin 2 White
Pin 3 Red
Pin 4 Green
Pin 5 Brown
Pin 6 Blue
Pin 7 Orange
Pin 8 Yellow

MPI-725

Terminal 2 (+) 12VDC Power Supply Output
Terminal 3 (-) Pre-Alarm Output
Terminal 4 Keypad "D" Input
Terminal 5 Keypad "C" Input
Terminal 6 Keypad "B" Input
Terminal 7 Keypad "A" Input
Terminal 2 (+) 12VDC
Terminal 8 (-) AC Power On LED Output

Terminal 22 (-) Alarm Memory (Violation) LED Output
Terminal 9 (-) Armed LED Output
Terminal 16 (-) Circuit Status LED Output
Terminal 10 (-) Home (Instant) LED Output

MPI-725 Usage

Step 16. Terminals 2, 11, 12, 13, and 17 thru 21.

MPI-238 Zone Annunciator Station

The MPI-238 is an eight (8) zone annunciator station for use with the MPI-725. The MPI-228 zone expansion module must be plugged into the MPI-725 for zones 3, 4, 6, 7, and 8 to function. Zones 1, 2, and 5 may be picked up at the MPI-279 control station.

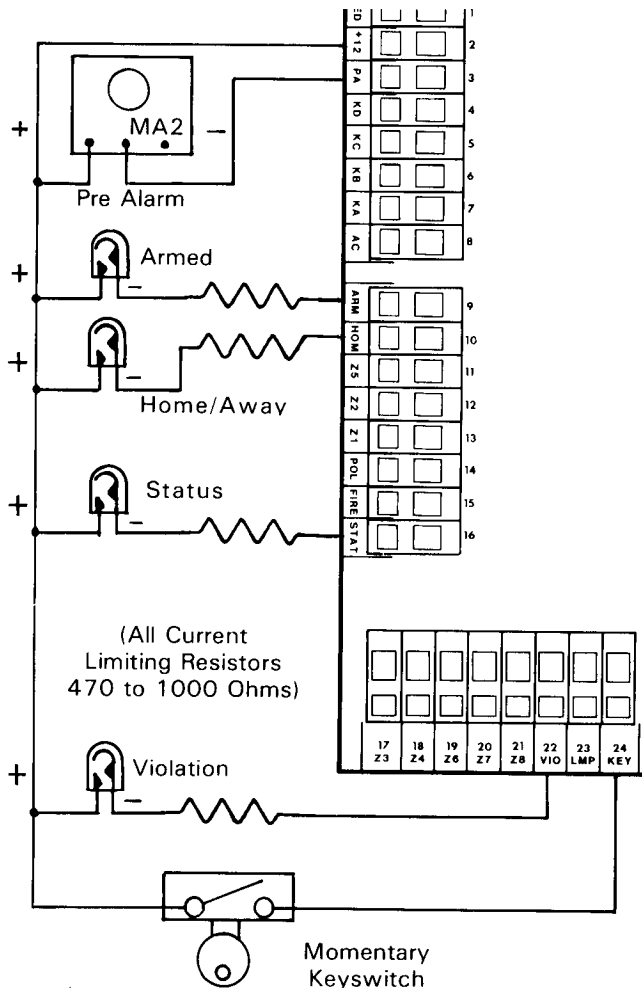
MPI-725**MPI-238**

Terminal 2	(+) 12VDC Power Supply to (+) Of All LED's
Terminal 11	(-) Zone 5, Interior Status LED Input
Terminal 12	(-) Zone 2, Perimeter Status LED Input
Terminal 13	(-) Zone 1, Delay Status LED Input
Terminal 17	(-) Zone 3, Status LED Input
Terminal 18	(-) Zone 4, Status LED Input
Terminal 19	(-) Zone 6, Status LED Input
Terminal 20	(-) Zone 7, Status LED Input
Terminal 21	(-) Zone 8, Status LED Input

Keyswitch Operation

Follow the terminal guides below for using key station remote with LED indicators.

Terminal 2	(+) 12VDC Power Supply
Terminal 3	(-) Pre-Alarm Output
Terminal 9	(-) Armed LED Output
Terminal 10	(-) Home (Instant) LED
Terminal 16	(-) Common Status LED
Terminal 22	(-) Violation LED Output
Terminal 24	(+) Momentary Key Input



Installation Hint

The MPI-711, and the MPI-712 self contained digital control stations may be substituted for a keyswitch.

Step 17. Terminal 23.

Lamp Output

Terminal 23 is designated as a lamp output. This terminal is a negative output for two minutes each time a keypad key is depressed. It is also active for the entry/exit time and alarm cutoff time. The lamp output may be used to activate household lighting for additional security and safety for the homeowner.

This output can be connected to transistor driver relays (MPI-206SN) or an AC line carrier system such as BSR or Functional Devices. (100 milliamps maximum current available. Exceeding this current limit will damage the control).

Step 18. Terminals 40, 41, and 42

Power Supply

The MPI-725's power supply provides a total continuous filtered and regulated current of one (1) amp. In alarm condition, current drains in excess of one (1) amp (1000 milliamps) will be drawn from the standby battery up to two (2) amps maximum.

NOTE: Current drains in excess of one (1) amp should not be continuous as this will prevent the battery from ever reaching full charge. The power supply is protected by thermal resetting circuit breakers.

24 hour auxiliary output: Terminal 42 is + 12VDC Power Supply Output for auxiliary equipment.

Terminal 41 is the Common Negative Output.

Smoke Detectors: Terminal 40 is + 12VDC/Smoke Detector Output.

Installation Hint

Terminal 40 provides + 12VDC for powering latching smoke detectors. Depress the (*) button on the keypad control station or operate the keyswitch for two (2) seconds to interrupt + 12VDC from terminal 40.

Step 19. Terminals 43 and 44.

Transformer

Terminals 43 and 44 are input terminals for a class II, UL, 18VAC, minimum 35 VA transformer.

Step 20. Terminals 36 thru 39 and 41.

Channel Outputs

Terminals 36 thru 39 are available for connection to a siren driver, telephone tape dialer, digital dialer, radio transmitter, reversing relays, or any equipment requiring + 12VDC for activation. Terminal 41 is the common negative for these outputs.

Warning

When using bells (Or any device with vibrating contacts) with this control an 18 volt MOV must be placed across the bell terminals at the bell to prevent transients from interfering with the proper operation of the control.

Terminal 36 — (+ 12VDC) Burglar channel output.

Terminal 37 — (+ 12VDC) Fire channel output.

(Does not cutoff-reset manually)

Terminal 38 — (+ 12VDC) Police channel output.

Terminal 39 — (+ 12VDC) Medical channel output.

Jumpers may be 0 ohm resistors. These jumpers look like resistors but with a single black band. They normally face the opposite direction from the other parts.

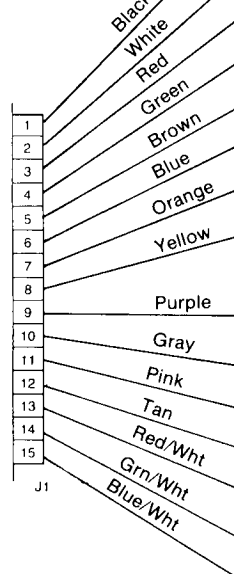
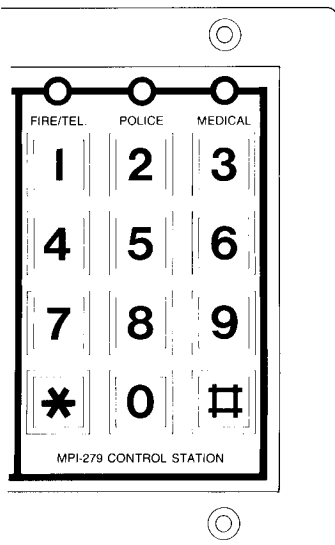
CUT J13 FOR
NO OPENING/CLOSING
REPORT TO DIALER

CUT J10 FOR
NO PRE-ALARM
BURGLAR CHANNEL

**+12 VDC OUTPUT @ 100 MA
WHEN ARMED**

+ 12 VDC AUXILIARY TRIGGER
FOR DIALER CHANNEL 8

CUT J5 TO SILENCE TROUBLE
PRE—ALARM ON FIRE TROUBLE



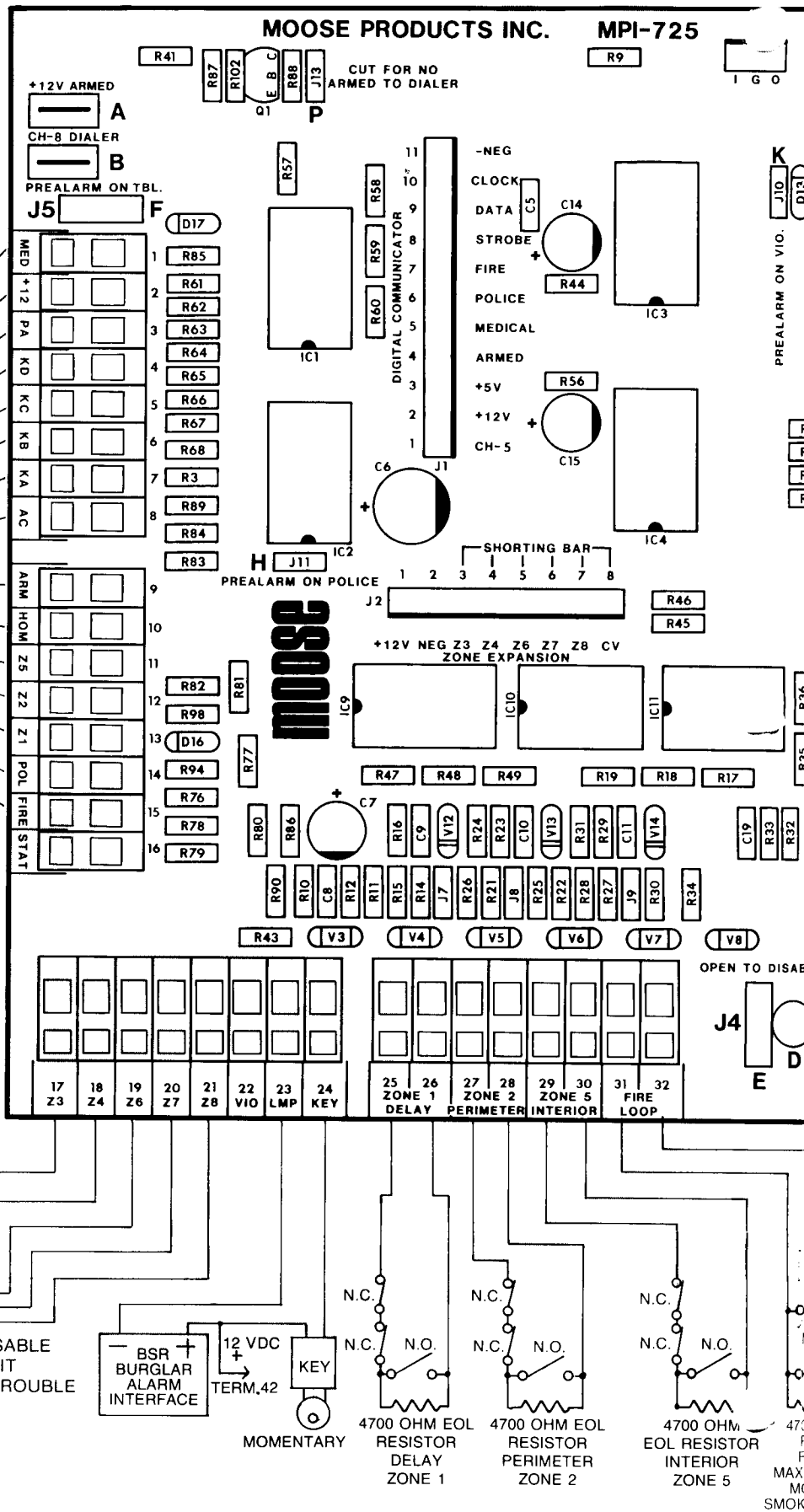
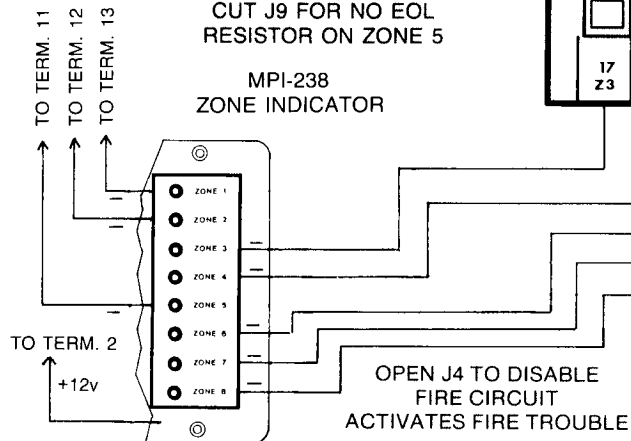
CUT J11 TO SILENCE
PRE-ALARM ON POLICE

CUT J7 FOR NO EOL
RESISTOR ON ZONE 1

CUT J8 FOR NO EOL
RESISTOR ON ZONE 2

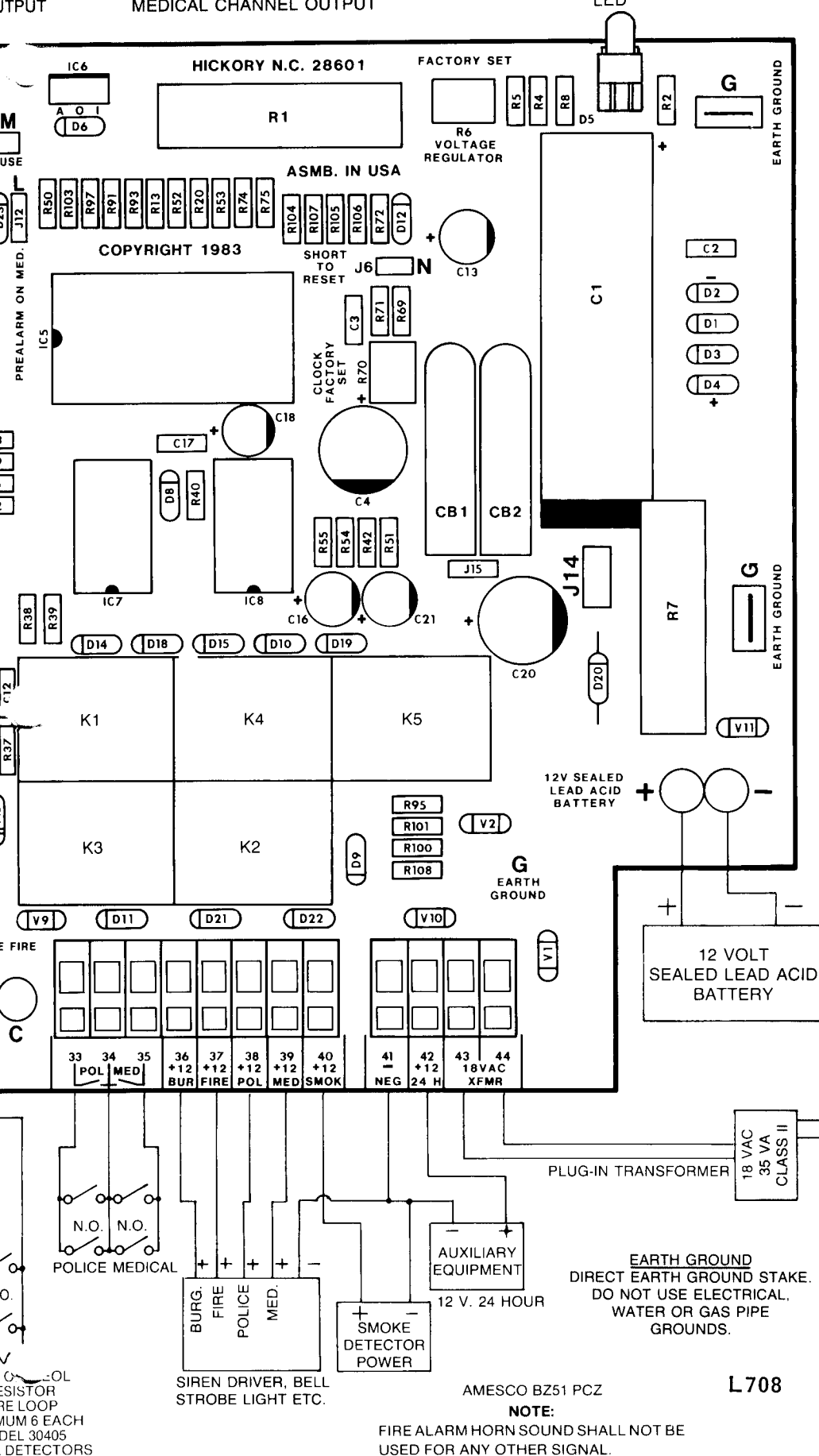
CUT J9 FOR NO EOL
RESISTOR ON ZONE 5

MPI-238
ZONE INDICATOR



OUTPUT

CUT J12 FOR
NO PRE-ALARM ON
MEDICAL CHANNEL OUTPUT



LIGHTNING PROTECTION

In order for lightning/transient suppression to be effective, the control panel must be "Earth" grounded as close to the control box as possible. This ground connection should be to a separate ground rod. DO NOT use electrical conduit, gas pipe, or telephone company grounds because of the large amount of electrical noise on them.

WARNING: Do not connect the negative (-) side of the battery or power supply to earth ground. Lightning/transient protection is greatly reduced if the negative (-) side of the battery is earth grounded.

TEST WEEKLY

Notify central monitoring station before beginning test of system.

1. Arm the control.
2. After exit time has expired, violate the instant circuit.
3. Burglar alarm output should activate.
4. Disarm the system.
5. Repeat steps 2, 3, and 4 for the delay circuit.
6. Depress digits (5) and (8), to test Fire Channel. Use arm/disarm code to reset.
7. Depress digits (4) and (0), to test medical channel. Depress the (*) digit to reset.
8. Depress digits (*) and (#) to test the police channel. Use arm/disarm code to reset.

All fire detection devices should be installed in accordance with the National Fire Protection Association's standard #74 (National Fire Protection Association, Battery - march Park, Quincy, Mass. 02269).

Note: Do not exceed the power supply limits of one (1) amp continuous and four (2) amps maximum with battery connected.

Zone 8 — Day Loop

With the MPI-228 zone expansion module installed, zone 8 is designated as a day loop. With the MPI-725 disarmed, a violation of zone 8 will make the pre-alarm sound as long as zone 8 is violated.

Powering Up The Control

After all input connections have been made, you are now ready to power-up the control. Read this section over carefully before proceeding with power-up:

1. Plug the 18VAC, 35VA transformer into a twenty four (24) hour outlet.
2. The pre-alarm should start beeping.
(If the pre-alarm is not beeping, unplug the transformer. Wait 10 seconds, and plug the transformer in again).
3. Press any digit (0-9) or operate keyswitch to silence pre-alarm.
(If the pre-alarm did not silence, check wiring to keypad or keyswitch).
4. All zone LED's will be illuminated if all zones are in a non-violated condition. If some zone LED's do not illuminate:
 1. Make sure all detection devices are in a non-violated condition.
 2. Check wiring to those zones for any errors in their hookup.
 3. Check wiring to remote plates and zone indicators.
5. Connect the battery to the red and black wire leads. OBSERVE POLARITY. Red lead is positive, black lead is negative.

Installation Hint

Terminal blocks may be unplugged from the control board for measuring resistance and voltages. EOL resistor zones should read 4700 ohms. Normally Closed loops should read less than 100 ohms. No loops should read AC voltages.

6. The MPI-725 control automatically sets certain program options on power-up as follows:
 - Arm/Disarm code - 1245
 - Programming code - 112456
 - Exit time - 40 seconds
 - Entrance time - 20 seconds
 - Cutoff time - 5 minutes
 - Loop response time - 40 milliseconds
 - Auxiliary code usage - 2
 - Delay before alarm - 0 seconds

These options are explained on page 9 and 10, along with other programming options available from the keypad control station. A yellow card is provided with space to record the program options desired and a way of retaining this information for future use.

Operational Note

The MPI-725 will turn off all zone status LED's after two (2) minutes if no keypad key has been pressed. To illuminate the status LED's simply press any keypad key or operate keyswitch.
(This feature extends the standby time when running on battery.)

Home/Away Mode

The "Home/Away" mode may also be referred to as "Instant/Delay" mode. When the control is in the "Home" or "Instant" mode all zones are instant and there is no provision for a time delay on entry. The "Away" or "Delay" mode is the mode that the control will most often be in, with zone one allowing entry delay. To change the MPI-725 from "Away" to "Home" depress the star (*) key. When in the "Home" mode the "Home" LED will be illuminated. Since the star (*) key is also used to clear keypad errors it may be necessary to depress the star (*) key twice to return to the proper "Home/Away" mode of operation.

NOTE: Exit time applies to all zones 1-8

Arming The Control

1. Select the "Home" or "Away" mode as described above.
2. All zone LED's should be illuminated, indicating all zones are secure or flashing indicating that a zone has been "Shunted Out".
3. Enter the arm/disarm code (1245 on power-up) or operate the keyswitch. The pre-alarm will beep 6 times and the armed LED will illuminate when the system arms.

Operational Note

When depressing a keypad key, contact must be maintained for 1/10 second for the audible beep to occur. If the audible beep does not occur when depressing the keys, the control did not accept the keypad entry. Always enter digits slowly and firmly for correct operation.

Disarming The Control

Enter the arm/disarm code (1245 on power-up) or operate the keyswitch. The pre-alarm will beep two (2) times and the armed LED will go out when the control disarms. The control will automatically switch to the "Away" mode and cancel all zone shunts.

Shunting By Zone

After initial installation it may be necessary to "Shunt Out" a burglar zone. To "Shunt Out" any of the burglar zones simply depress the (#) key and the appropriate zone number (1-8). This will cause the zone LED which has been "Shunted Out" to flash. Some program options include automatic shunting of certain zones. To cancel an incorrect shunt, depress the (#) key and the digit (9). Shunting will also be cancelled when the system is disarmed and must be re-entered, if needed, before being armed again. The burglar channel must be disarmed before a zone can be shunted.

Operational Note

1. If an error is made while entering the arm/disarm code or if more than seven (7) seconds are taken to enter the arm/disarm code, a two (2) second error tone will sound.
2. A keypad entry error may be corrected by depressing the star (*) key. If the control is disarmed, the star (*) key must be depressed twice to return to the correct "Home/Away" mode.
3. The control cannot be armed if any zone is violated. A two (2) second error tone will sound if arming is attempted with a violated zone.

Installation Hint

At this point all keypad control stations, zone plates, or keyswitch control stations should be checked to make sure that each operates and gives proper LED status indications.

Emergency Channels

Medical Channel: This channel may be activated by depressing digits (4) and (0) simultaneously or by activating a remote medical button tied to terminals 34 and 35. This channel can be reset by depressing the star (*) key or by operating the keyswitch for 2 seconds.

Fire Channel: This channel may be activated by depressing digits (5) and (8) simultaneously or by activating detectors on the fire channel tied to terminals 31 and 32. This channel can be reset with the arm/disarm code or by operating the keyswitch.

Note: When using latching smoke detectors, they must be reset by depressing the star (*) key or keyswitch for 2 seconds.

Police Channel: This channel may be activated by depressing digits (*) and (#) simultaneously or by activating a remote police panic button tied to terminals 33 and 34. This channel can be reset with the arm/disarm code or keyswitch.

Programming

Review the programming options below and record choices on the enclosed yellow programming card. (3 spaces require 3 entries and 6 spaces require 6 entries, etc.) The control must be disarmed.

To program:

1. Enter the programming code (112456 on power-up). The pre-alarm will beep four (4) times indicating the program mode has been entered.
2. Enter the number of the option you have selected. The Pre-alarm will beep three (3) times indicating the option has been accepted.
3. Enter the program changes for the option selected. The Pre-alarm will beep three (3) times to indicate the program changes have been accepted and the control will return to the regular running mode.
4. After each entry the control will return to the regular running mode. The program code must be re-entered in order to program additional options.

Programming Options

0. Return To Regular Running Mode.

1. Exit Time In Seconds:

Must enter 3 digits. Operating range 1 to 255 seconds.

Example: 023 = 23 seconds

005 = 5 seconds

180 = 180 seconds

(Set to 40 seconds on power-up)

NOTE: Exit time applies to all zones 1-8

2. Entrance Time In Seconds. Same parameters as exit time above.
(Set to 20 seconds on power-up)

3. Alarm Cutoff Time In Minutes.

Must enter 3 digits as in option 1 above.

Operating range 1 to 255 minutes.

Example: 008 = 8 minutes.

(Set to 5 minutes on power-up)

Note: Entering 000 will result in no alarm cutoff except with keypad or keyswitch activation.

4. Delay Before Alarm Time In Seconds.

Must enter 3 digits as in option 1 above.

000 results in no delay before alarm.

(Set to 000 on power-up)

Note: This option is used to cut down on subscriber caused false alarms sent to a central station. The violation output activates and the pre-alarm sounds, but other audibles and Central Station signals are delayed for the delay before alarm time. (This will not delay zone reporting of zones 2, 3, & 4. To delay reporting on 2, 3, & 4, the delay must be programmed on the dialer prom)

5. Arm/Disarm Code:

The arm/disarm code may be 1 to 6 digits in length and numbers may repeat. If less than 6 digits are used, trailing 0's must be added. (The last digit of the code cannot be a 0)

Example:

123000 = 123 is the arm/disarm code

112233 = 112233 is the arm/disarm code

050000 = 05 is the arm/disarm code

(Set to 1245 on power-up)

Total Code Combinations = 900,000.

6. Program Code:

This sets a new code for entering the program mode. For the security of the system, it is recommended that a full 6 digits be used for this code.

This code is set the same as option 5 above.

(Set to 112456 on power-up)

Service Note

To lock out the program code so that it cannot be accessed, enter the same codes for options 5 and 6. Before programming can be accessed after this type of entry, the entire control must be powered down and back up which restores the power-up options.

7. Auxiliary Arm/Disarm Code:

(Option 95 should be set before option 7)

This option is set up the same as option 5 above (Do not use 0 as the first digit of the auxiliary code). This code could be given out to servicemen, maids, etc. This allows a separate arm/disarm code which will erase after the auxiliary arm/disarm code has been used the number of times programmed in option 95.

Note: Option 95 does NOT have to be reprogrammed each time option 7 is programmed.

8. Loop Test:

The pre-alarm beeps continuously when any zone is violated. This option allows one person to trouble shoot all zones. Pressing any keypad key (0-9) will return the system to normal operation.

91. Zones 2 Thru 8 Loop Response Time:

Set zones 2 thru 8 loop response time in 20 millisecond increments. Operating range 20 to 300 milliseconds. (001 to 015)

Example:

001 = 20 milliseconds (not recommended)

002 = 40 milliseconds

003 = 60 milliseconds

015 = 300 milliseconds

(Set to 40 milliseconds in power-up)

92. Delay Zone 1 Loop Response Time:

Set delay zone 1 loop response time as in option 91.

(Set to 40 milliseconds on power-up)

Installation Note

Loop response time is the amount of time a switch must remain violated to cause an alarm condition. The longer the loop response time, the fewer false alarms caused from loose fitting doors and windows. The power-up loop response time is set at 40 milliseconds.

93. Shunt Instant Loops Option (Zones 2 Thru 8):

With this option activated, if the delay zone 1 is violated first, all instant loops (zones 2 thru 8) will be "Shunted Out".

111 = activate option

999 = de-activate option

(This option is de-activated on power-up)

94. Loop Monitor Option:

This option beeps the pre-alarm each time the circuit status LED goes out or one of the zone status LED's goes out (All zones must be in a non-violated condition or shunted out for this option to work.) This option allows the MPI-725 to be used as an annunciator or entry warning device when the system is disarmed.

111 = activate option

000 = de-activate option

(This option is de-activated on power-up)

95. Auxiliary Code Usage Count:

This option sets the number of times the auxiliary code may be used before the control erases the auxiliary code. Must enter 3 digits.

Operating range: 001 to 009.

***Maximum number of usages is 9 times.

Example: 001 = 1 use before code erasure

002 = 2 uses before code erasure

009 = 9 uses before code erasure

(Set to 2 usages on power-up)

NOTE: If changing the usage count, it must be set before the auxiliary arm/disarm code is set.

96. Zone 1 Instant And Zones 3 and 4 Delayed When In "Home" Mode:

This option is used for arming system in the "Home" mode with the delay zone 1 becoming instant and zones 3 and 4 being active but in a "delay mode". If the user violates zones 3 or 4 with the system armed in the "Home" mode, the pre-alarm would activate for the entrance time before the burglar alarm activates.

111 = activate option

000 = de-activate option

(This option is de-activated on power-up)

97. Hold Keyswitch For Five (5) Seconds To Switch To "Home" Mode:

When this option is activated and the keyswitch is operated for five (5) seconds, the control will switch from "Away" mode to "Home" mode.

111 = activate option

000 = de-activate option

(This option is de-activated on power-up)

98. Auto-Shunt Zones 5 and 6 When In "Home" Mode:

This option allows interior zones 5 and 6 to be auto-shunted (automatically removed from circuit) when the control is in the "Home" mode. The zone status LED's on zones 5 and 6 will flash when this option is activated and the control is in the "Home" mode.

111 = activate option

000 = de-activate option

(This option is de-activated on power-up)

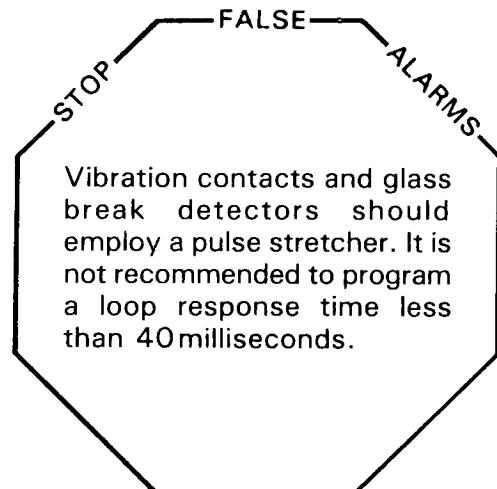
Programming Examples

Example A: Change exit time to 45 seconds.

1. Enter program code (112456 power-up program code).
2. Select exit time option. (1)
3. Enter new exit time. (045)

Example B: Change arm/disarm code to 1144.

1. Enter program code. (112456 power-up program code)
2. Select arm/disarm code option. (5)
3. Enter new arm/disarm code. (114400)



Programming Examples For Each Option

Each example shows the program code as 112456, the programming option number, and the programming entries for the particular option.

- | | | |
|--|---|--------|
| 1. Set "Exit Time" to 30 seconds. | | |
| 112456 | 1 | 030 |
| 2. Set "Entrance Time" to 120 seconds. | | |
| 112456 | 2 | 120 |
| 3. Set "Alarm Cutoff Time" to 18 minutes. | | |
| 112456 | 3 | 018 |
| 4. Set "Delay Before Burglar Alarm Time" to 120 seconds. | | |
| 112456 | 4 | 120 |
| 5. Set "Main Keypad Control Station Arm/Disarm Code" to 531. | | |
| 112456 | 5 | 531000 |
| 6. Set "Program Code" to 553214. | | |
| 112456 | 6 | 553214 |
| Change back to 112456 for clarity of examples. | | |
| 553214 | 6 | 112456 |

7. Set "Auxiliary Arm/Disarm Code" to 21.		
112456	7	210000
8. Activate "Loop Test".		
112456	8	
Depress any digit 1 to 9 to end loop test.		
91. Set "Instant Zones (2 thru 8) Loop Response Time" to 300 milliseconds.		
112456	91	015
92. Set "Delay Zone 1 Loop Response Time" to 60 milliseconds.		
112456	92	003
93. Activate "Shunt Instant Zones" option.		
112456	93	111
94. Activate "Loop Monitor" option.		
112456	94	111
95. Set "Auxiliary Arm/Disarm Code Usage Count" to 7 usages.		
112456	95	007
96. Activate "Zone 1 Instant and Zones 3 and 4 Delayed When In Instant Mode" option.		
112456	96	111
97. Activate "Hold Keyswitch For Five (5) Seconds To Activate "Home" Mode" option.		
112456	97	111
98. Activate "Auto Shunt Zones 5 and 6 When In "Home" Mode" option.		
112456	98	111

Summary Of MPI-725 Connectors

THE MPI-825 COMMUNICATOR plugs directly into the 11 pin connector J1 on the MPI-725 control board.

J1-Pin 1	Channel 5, Common Burglar Output, + 12VDC.
J1-Pin 2	+ 12VDC Power Supply Output.
J1-Pin 3	+ 5VDC Power Supply Output.
J1-Pin 4	Channel 8, Open/Closing Output, + 12VDC.
J1-Pin 5	Channel 6, Medical Output, + 12VDC.
J1-Pin 6	Channel 5, Police Output, + 12VDC.
J1-Pin 7	Channel 4, Fire Output, + 12VDC.
J1-Pin 8	Data Strobe Output, + 5VDC.
J1-Pin 9	Zoned Burglar Data Output, + 5VDC.
J1-Pin 10	Data Clock Output, + 5VDC.
J1-Pin 11	Common Negative-Power Supply Output.

THE MPI-228 ZONE EXPANSION MODULE plugs directly into connector J2 on the MPI-725 control board. (The shorting bar plugged into connector J2 must be removed to plug-in the MPI-228).

J2-Pin 1	+ 12VDC Power Supply Output
J2-Pin 2	Negative Power Supply Output
J2-Pin 3	Zone 3 zone Input*
J2-Pin 4	Zone 4 zone Input*
J2-Pin 5	Zone 6 zone Input*
J2-Pin 6	Zone 7 zone Input*
J2-Pin 7	Zone 8 zone Input*
J2-Pin 8	Reference Voltage*

*NOTE: Pins 3, 4, 5, 6, 7, and 8 of the J2 connector must be shorted together with the shorting bar provided, when the MPI-228 board is not being used.

Jumper Options & Solder Pads

Jumpers may be 0 ohm resistors. These jumpers look like resistors but with a single black band. They normally face the opposite direction from the other parts.

J4	Open to disable fire alarm loop and activate fire trouble.
J5	Cut to silence trouble pre-alarm on fire trouble.
J6	A momentary short between solder pads at J6 resets microprocessor.
J7	Cut for no EOL resistor supervision on delay zone 1.
J8	Cut for no EOL resistor supervision on perimeter zone 2.
J9	Cut for no EOL resistor supervision on interior zone 5.
J10	Cut to silence pre-alarm on burglar alarm violation.
J11	Cut to silence pre-alarm on police alarm.
J12	Cut to silence pre-alarm on medical alarm.
J13	Cut for no arming output (openings & closings) to dialer.
J14	Do not cut.

Solder pad A + 12VDC output when armed (100 Milliamps maximum).

Solder pad B Dialer channel 8 trigger input, + 12VDC.

Solder pad G Earth ground connections.

Service Note

Point "M" located near the center top of board is a fusible link in addition to the circuit breakers protecting the microprocessors on the main board. If this fusible link is blown by accident it may be replaced by soldering into its place a single strand of copper wire from a #22 or #24 stranded conductor. It is recommended that this be done from the back of the board.

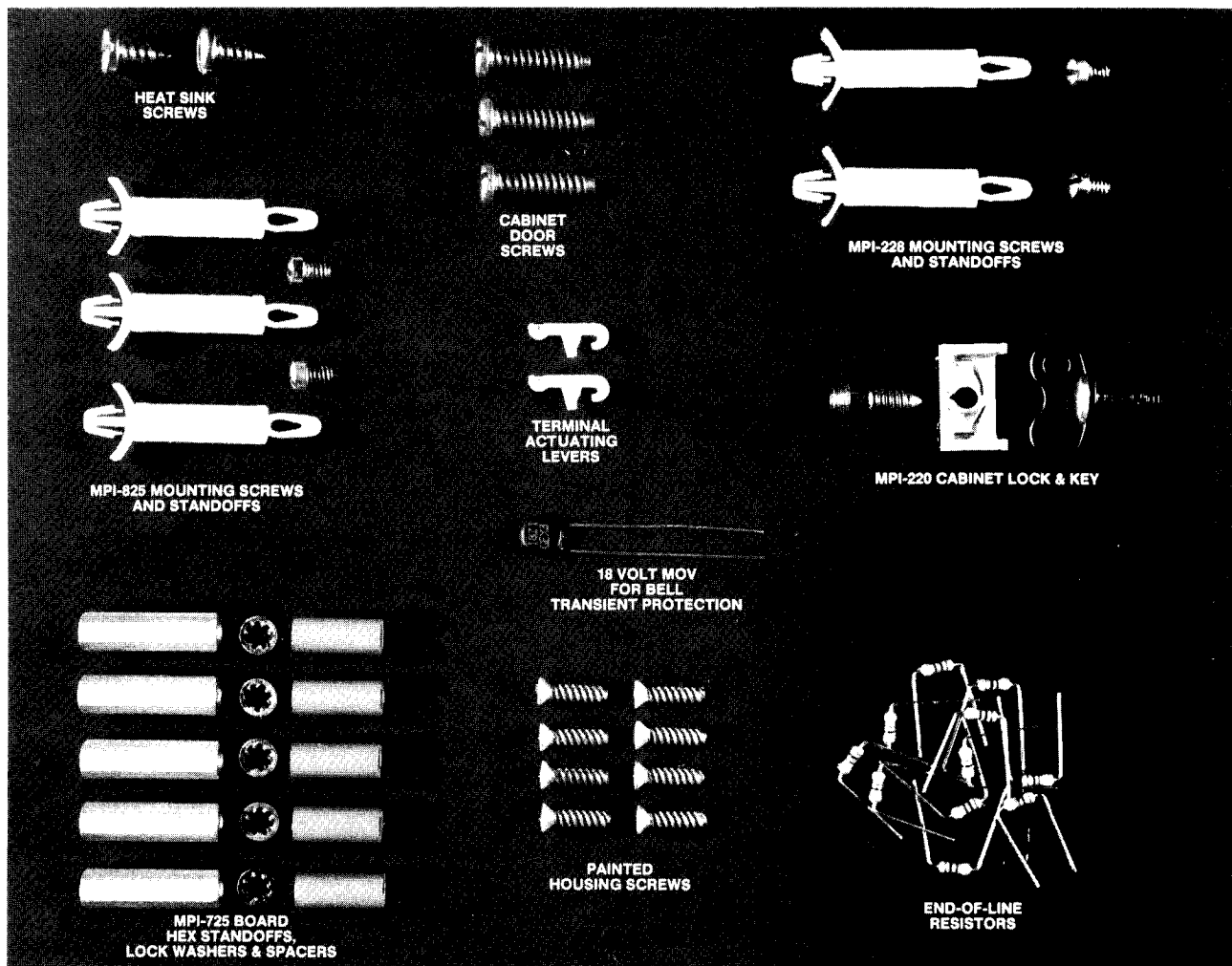
Preventing False Alarms

Proper methods of installation prevents false alarms later. The following guidelines are suggested:

1. Do not overload the power supply. Measure the actual load with a milliammeter.
2. Use high quality wire and devices. The cheapest will probably work but may cause service problems and false alarms later.
3. Make sure the detection devices are the right ones for the application.
4. Follow the wiring suggestions in the instructions. These guidelines are based on the abundance of RF noise and AC transients in today's world that was not a problem 5 or 10 years ago.

Warning

When using bells (Or any device with vibrating contacts) with this control an 18 volt MOV must be placed across the bell terminals at the bell to prevent transients from interfering with the proper operation of the control.



Above is pictured a hardware package for a complete MPI-725. Hardware pictured for the MPI-228 and MPI-825 may not be included if the control is shipped without these accessories.

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FCC COMPLIANCE

This equipment generates and uses radio frequency energy and if not installed and used properly, that is, in strict accordance with the manufacturer's instructions, may cause interference to radio and television reception. It has been type tested and found to comply with the limits for a Class B computing device in accordance with the specifications of Subpart J of part 15 of FCC rules, which are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

1. Reorient the TV or radio antenna.
2. Relocate or move the alarm control away from the receiver.
3. Plug the transformer for the alarm control into a different outlet so that the receiver and the alarm are on different branch circuits.
4. If necessary, the user should consult the alarm dealer or an experienced radio/television technician for additional suggestions.

The user may find the following booklet prepared by the Federal Communications Commission helpful: "How To Identify and Resolve Radio-TV Interference Problems." This booklet is available from the U.S. Government Printing Office, Washington, DC 20402 stock #004-000-00345-4.

"LIMITED WARRANTY"

Parties and Products

This warranty is extended to all purchasers of and includes products sold under the trademarks Moose or Moose Power and actually manufactured or sold by Moose Products, Inc., Hickory, N.C. 28601.

Warranty Time Period

All products covered by this warranty are date stamped with a six (6) digit number, the first digit being the tester number, the last two the year and the remaining the day of the year involved. For the eighteen months immediately subsequent to the date stamped thereon, Moose Products will replace or repair at its option, any part that proves to be defective in materials or workmanship. The cost of parts, labor and return transportation, if necessary, are included. All other costs are the responsibility of the purchaser.

Conditions and Exclusions

- (a) There is no other express warranty. All implied warranties and fitness for use are limited to the duration of the express warranty. Some states do not allow limitations on how long an implied warranty last, so the above limitation may not apply to you.
- (b) Moose Products, Inc. is not liable for indirect, incidental, or consequential damages in connection with the use of the products including but not limited to (a) any cost or expense of providing substitute equipment or service during periods of malfunction or non use and/or (b) any destruction to and/or loss of property or bodily injury.
- (c) Repairs by anyone other than Moose Products, Inc. and/or misuse by anyone voids all warranty.

Other Rights

This warranty gives you specific legal rights and you may also have other rights, which may vary from state to state.

Procedure

Should you discover that any products of Moose Products covered by this warranty is defective within the warranty time period, you should contact any Moose Products, Inc. dealer who will instruct you on the proper procedure. If for any reason you are dissatisfied with the suggested procedures, you may contact us in writing at:

Moose Products, Inc., P.O. Box 2904, Customer Service Department, Hickory, N.C. 28603