TELEPHONE CONTROL SYSTEM

MPI-800

INSTALLATION MANUAL

MOOSE



APPLICATION

The MPI-800 is a telephone control system used with existing or new burglar alarm systems, or as a standalone remote controller. The MPI-800 telephone control system uses existing Touchtone® telephones on premises or from Touchtone® telephones located anywhere in the world. No other keypad control station or key control station is required.

The MPI-800 telephone control system gives access to the alarm system with tone verification of all functions such as armed or disarmed, violation, or activation of six different control relays. These control relays may be connected to lights, heating or air conditioning, alarm zone shunts or any device that can be controlled with relay contacts. The MPI-800 has various programming options to configure different control modes including line cut monitor or listen-in capability with talk back.

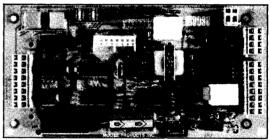
FEATURES

- Compatible with most Touchtone® telephones.
- System can be accessed from premise telephones or by dialing the premise from an outside Touchtone® telephone.
- Automatic answering after a programmed number of rings.
- System will operate from premises telephones if incoming telephone lines are cut.
- Programmed memory is retained during power failure or removal of AC and battery power.
- Built-in telephone line cut monitor.
- Momentary or shunt arming relay output with adjustable momentary relay activation time.
- Six (6) control outputs.
- Control output three (3) may be programmed for listen in and talk back.
- Inputs from security control panel for audible arming and violation indications.
- Optional MPI-280 relay board for 6 relay outputs.

Touchtone® is a registered trademark of A.T.&T.

SPECIFICATIONS

- Programmable options from Touchtone® telephone:
 - Arm/disarm code
 - System access code
 - Momentary arming contact closure time
 - Programming code
 - System reset
 - Disable remote disarming
 - Number of rings before auto answer
 - Line cut activation of control output zero (0)
 - Listen-in and talk back activation
- Negative trigger for 6 control outputs
- Operating voltage 10.5 to 15 volts DC.
- Operating current 40 to 160 milliamps.
- Quick connect terminal strips accept 14 to 26 gauge wire.
- Unique unpluggable terminal strips use no screws.
- Operating temperature range: -22 to + 122 degrees
 F (-30 to +50 degrees C).
- Circuit board 7.8 x 4.0 x 1.0 inches.



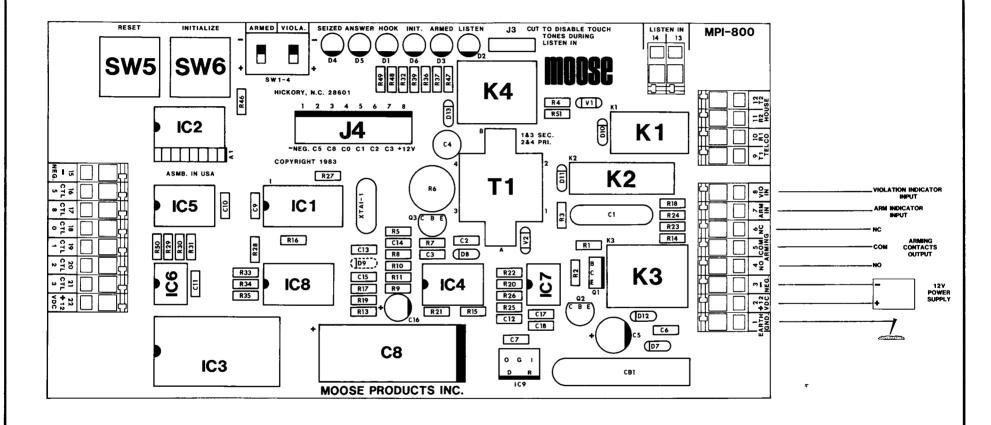
MPI-800



MPI-280

Printed in U.S.A.

L805



COMPLIES WITH THE LIMITS FOR CLASS B COMPUTER DEVICE PURSUANT TO SUBPART J OF PART 15 OF FCC RULES.

TELEPHONE COMPANY REQUIREMENTS

NOTIFICATION

All connections to the telephone network must be made through standard plugs and telephone company jacks, or equivalent, in such a manner as to allow for easy and immediate disconnection of the telephone control system. If the connecting cord is unplugged from the jack there shall be no interference to the telephone equipment still connected to the telephone network.

Before connecting the MPI-800 to the telephone network the telephone company must be notified of the installation. The telephone company will need the following information:

- 1. The telephone number to which the MPI-800 will be connected.
- 2. The FCC registration number: DLH66Y-12839-AL-N.
- 3. The ringer equivalence: 0.0B.
- 4. The manufacturer: Moose Products Inc.
- 5. The type of jack required: USOC RJ31-X.

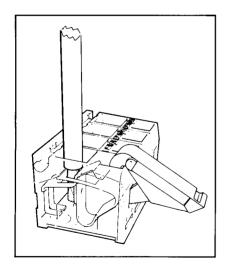
The telephone company must also be notified upon final disconnection of the MPI-800 from the telephone line.

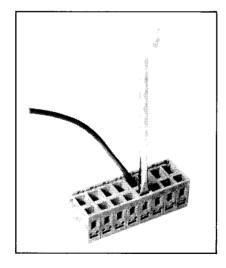
MALFUNCTIONS OF EQUIPMENT

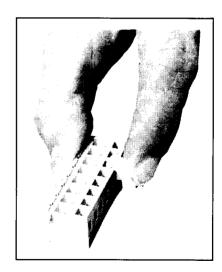
In the unlikely event that the MPI-800 Telephone Control System should ever fail to operate properly, disconnect the telephone control system from the RJ31-X jack to determine if the problem is with the telephone network or with the MPI-800. If a problem is found with the MPI-800, leave disconnected until repaired or replaced.

THE FCC PROHIBITS CONNECTION OF CUSTOMER-PROVIDED TERMINAL EQUIPMENT TO PARTY LINES OR USE IN CONJUNCTION WITH COIN TELEPHONE SERVICE.

MPI-800 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.

OPERATION OF THE MPI-800 TELEPHONE CONTROL SYSTEM

This section describes the operation of the MPI-800 Telephone Control System. While working with the MPI-800, observe the row of LED's (light emitting diodes) located along the top edge of the MPI-800. The LED functions are described below:

D2	Control Relay 3/Audio Listen-In Active
D3	Security Control Armed
D6	DTMF Tones Present/Initialization Active
D1	Premise Telephone Off Hook
D5	Auto Answer Active
D4	Telephone Line Seized

The MPI-800 is shipped from the factory initialized to known program codes and settings. These options may be re-programmed to meet the needs of any particular installation. Any options re-programmed will remain until re-programmed again. Disconnection of power will not affected the program memory.

Initialized Factory Program Codes And Settings:

Arm/Disarm Code — 1245
Programming Code — 112456
System Access Code — 789
Number Of Rings Before Auto Answer — 9
Arming Output — Momentary With 2 Second Closure
Disarming From Outside Telephones — Enabled
Audio Listen-in — Disabled
Telephone Line Cut Monitor — Disabled

The MPI-800 Telephone Control System gives audible indication of various conditions of the alarm system connected to it and of the control outputs. Basically there are two different tones or beeps involved, a low tone beep and a high tone beep. These two tones or beeps used in different combinations indicated the status of the connected devices.

The user may access the telephone control system from any Touchtone® telephone in the world or from the Touchtone® telephones within the protected premises.

NOTE: The MPI-800 Telephone Control System will work with Touchtone® telephones that generate the 12 standard DTMF tones. If the telephone will work with MCI, Sprint, tele-bank services, etc. it will work with the MPI-800. Telephones that use the * and # keys for mute or memory redial cannot be used for control functions. However, a portable "Touchtone® generator" will permit the use of any telephone or line not normally compatible.

INSTALLATION INSTRUCTIONS

Step 1. Terminal 1.

EARTH GROUND

Ideally, use a direct metal stake-earth ground to insure a good earth ground connection. Attach a ground wire from the earth ground stake to terminal 1 on the MPI-800. DO NOT use electrical conduit, gas pipe, or telephone company grounds because of the large amount of electrical noise and voltage transients on them.

Step 2. Terminals 4, 5, and 6. KEY CONTACT

Connect the key contact terminals to the arming or key terminals on the security control panel.

Terminal 4 KEY (Normally Open)

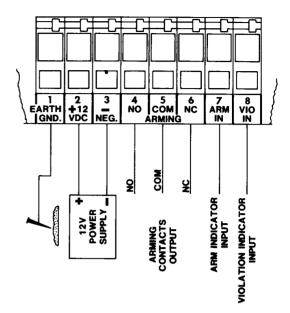
Terminal 5 KEY (Common)

Terminal 6 KEY (Normally Closed)

The key contact output has a programmable contact closure time for momentary or shunt type arming. (Refer to program option 2).

Step 3. Terminal 7. ARMED INPUT

The armed input connects to a security control panel in the same manner as a remote armed LED. The input may be positive or negative. Connect the MPI-800's terminal 7 to the control panel's armed output.



If the control panel has a negative (—) output when ARMED, switch the armed side of dip switch SW 1-4 to the (—) position. (Located in upper left corner of the MPI-800). If the control panel has a positive (+) output when ARMED, switch the armed side of dip switch SW 1-4 to the (+) position.

Audible Armed/Disarmed Indication On Telephone Receiver:

When active, this input causes the slow disarmed beeps to change to fast armed beeps when the burglar alarm system is armed.

Step 4. Terminal 8. VIOLATION INPUT

The violation input connects to a security control panel in the same manner as a remote violation LED. (This may be labeled "violation", "alarm memory", "bell output", or "siren output"). The input may be positive or negative. Connect the MPI-800's terminal 8 to the control panel's violation or alarm memory output.

If the control panel has a negative (—) output when VIOLATED, switch the violation side of dip switch SW 1-4 to the (—) position. (Located in upper left corner of the MPI-800). If the control panel has a positive (+) output when VIOLATED, switch the violated side of dip switch SW 1-4 to the (+) position.

Audible Violation Indication On Telephone Receiver:

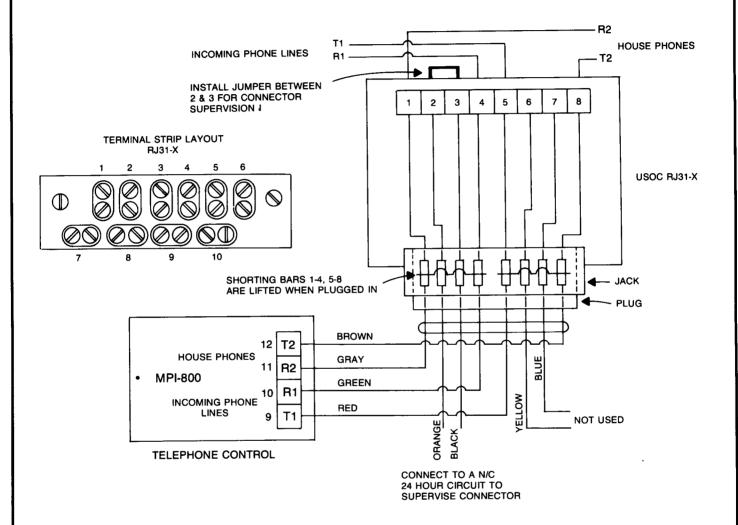
This input triggers alternating high and low tones to indicate that the burglar alarm system is in violation.

NOTE: The same tones may also indicate activation of control outputs or telephone line cut activation as described in those sections of the instructions.

Step 5. Terminals 9 thru 12. PHONE LINE CONNECTIONS

Using a TC-3 cable (RJ31-X cord), connect the wire leads to the MPI-800's terminals 9 thru 12:

Green wire to "T1" terminal 9 telephone line "tip" Red wire to "R1" terminal 10 telephone line "ring" Gray wire to "R2" terminal 11 premises telephone "ring" Brown wire to "T2" terminal 12 premises telephone "tip"



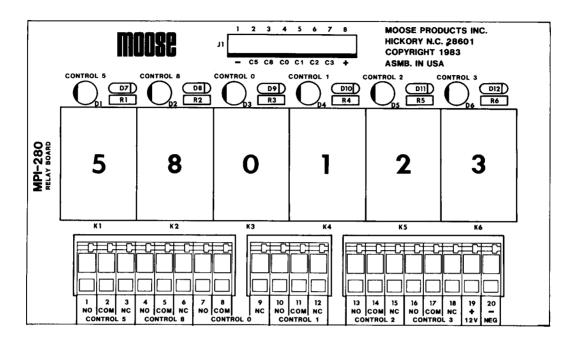
A separate instruction booklet enclosed with these instructions. (Applications and Accessories For The MPI-800 Telephone Control System), describes some alternative hookup methods.

SERVICE HINT

If the Touchtone® telephones on premises do not dial out after connecting to the RJ31-X, reverse the red and green wires on terminals 9 and 10 of the MPI-800.

If the Touchtone® telephones on premises do not generate Touchtones® after accessing the MPI-800 telephone control system, reverse the wires on terminals 9 and 10 as well as the wires on terminals 11 and 12 of the MPI-800.

Step 6. This step pertains to the optional MPI-280 relay control board. (If the plastic standoffs are not attached to the MPI-280, plug them in with the locking ears on the foil side of the MPI-280 board). Plug the MPI-280 onto the MPI-800 by aligning the eight (8) pin connector "J4" on the MPI-800 and "J1" on the MPI-280. The four plastic standoffs on the MPI-280 should mate with the corresponding holes on the MPI-800.



If the optional MPI-280 relay board is not used, individual relays (MPI-206SN) may be connected to the negative trigger outputs terminals 15 thru 22, (on the left edge of board) or unplug the terminal strip and use the solder pads located beneath it. Terminal functions are as follows:

Terminal 15	(—) Power Supply Negative
Terminal 16	(—) Control Relay 5
Terminal 17	(—) Control Relay 8
Terminal 18	(—) Control Relay 0 *
Terminal 19	(—) Control Relay 1
Terminal 20	(—) Control Relay 2
Terminal 21	(—) Control Relay 3 **
Terminal 22	(+) 12 Volts DC Power Output

- * Control relay 0 activates if the line-cut option is enabled and the telephone line is out for 3 minutes or longer.
- ** Control relay 3 activates during listen-in if this option is enabled.
- Step 7. Terminals 2 and 3.
 POWER SUPPLY INPUT
 - Terminal 2 Apply positive 12 volts DC (10.5 to 15 volts) from a filtered and regulated power supply, capable of supplying 160 milliamps continuous to the MPI-800.
 - Terminal 3 Connect the negative side of the power supply to terminal 3.
- Step 8. Plug the TC-3 (RJ31-X) cord into the telephone company jack.

ARMING/DISARMING

- Step 1. (Skip this step if using telephones on premises). Dial the telephone number of the line the MPI-800 Telephone Control System connects to. Wait for the MPI-800 to answer after the programmed number of rings. The telephone control system will beep twice, indicating that it is ready to accept commands.
- Step 2. Enter the telephone control system access code, and listen for beeps.

(Initialized access code is 789)

Slow Beeps (1 per second) indicate that the security control is disarmed.

Fast Beeps (4 per second) indicate that the security control is armed.

Alternating high and low tones indicate a violation of the alarm system, control relay 5, 8 or 0 is activated, or the telephone line is out.

Step 3. To arm or disarm the security control, enter the arm/disarm code and listen for the rate of beeps to change, indicating a new status of armed or disarmed.

(Initialized arm/disarm code is 1245)

OPERATIONAL HINT

When the arming code is entered and the beeps do not change from slow to fast, the alarm system has not armed. This may be due to a violated loop in the alarm system. Most security systems must have all protective loops secure before the system will arm.

CONTROL OUTPUTS

The MPI-800 has six (6) negative trigger control outputs activated from the telephone in a manner similiar to arming/disarming, as previously described. Once control outputs 1, 2, or 3 have been activated, enter the same numbers to de-activate the outputs. If control outputs 5, 8, or 0 have been activated, use the arm/disarm code to de-activate.

- Step 1. (Skip this step if using telephones on premises). Dial the telephone number of the line the MPI-800 Telephone Control System connects to. Wait for the MPI-800 to answer after the programmed number of rings.
- Step 2. Enter the telephone control system access code, and listen for beeps, indicating that the system is armed or disarmed. (Initialized access code is 789).
- Step 3. To activate control output 5, enter keys (#) (#) (5). To verify activation, listen for the violation tone. (Rapidly alternating high and low tones).
- Step 4. To activate control output 8, enter keys (# (#) (8). To verify activation, listen for the violation tone. (Rapidly alternating high and low tones).

- Step 5. To activate control output 0, enter keys (#) (#) (0). To verify activation, listen for the violation tone. (Rapidly alternating high and low tones).
- Step 6. To cancel or reset these three control outputs, simply enter the arm/disarm code. This will clear all three control relays, but will not activate the key (arm/disarm) relay output. After entering the arm/disarm code, the audible indication will return to fast or slow beeps to indicate status of the security control either armed or disarmed or remain with the high/low tone to indicate violation.
- Step 7. To activate or de-activate control relay 1, enter (#) (1).
- Step 8. To activate or de-activate control relay 2, enter (#) (2).
- Step 9. To activate or de-activate control relay 3, enter (#) (3).

OPERATIONAL NOTE

The star (*) key turns the tones on and off, or resets any keyboard errors. Use the star (*) key to silence the tones before making any new command entries into the telephone.

AUDIBLE VERIFICATION OF ACTIVATED CONTROL RELAYS

Control outputs 5, 8, or 0 all verify with the alternating high/low violation tone.

To verify which control outputs 1, 2, or 3 have been activated, depress (#) (9).

The MPI-800 gives an audible indication for the control outputs 1, 2, or 3 whichever ones are activated. A high tone will beep once, twice or three times indicating which output is activated. A low tone preceeds each of the counts as a marker. If none of the control outputs are activated, only the low marker tone occurs. Examples: Press (#) (9).

No control outputs active You will hear one low marker tone.

Control output 1 active You will hear a low marker tone followed by a single beep.

Control output 2 active You will hear a low marker tone followed by two beeps.

Control output 3 active You will hear a low marker tone followed by three beeps.

Control output 1 and 2 active You will hear a low marker tone followed by a single beep, followed

by another low tone, then two beeps.

Control relays 2 and 3 active You will beep a low marker tone followed by two beeps, followed by

another low tone, then three beeps.

Any combination of control outputs will beep out the number as in the examples above, the low marker tone being the marker between

en counts.

OPERATIONAL NOTE

If the user does not press a key on the telephone at least once every 30 seconds, the telephone control system will hang up the telephone line.

PROGRAMMING THE MPI-800

Review the programming options below and record choices on the enclosed programming card. (1 space requires 1 entry and 6 spaces require 6 entries, etc.) The security control must be DISARMED TO PROGRAM.

- 1. (Skip this step if using telephones on premises). Dial the telephone number of the line the MPI-800 is connected to. Wait for the MPI-800 to answer and beep twice, indicating that it is ready for commands.
- 2. Enter your telephone control system access code, and listen for beeps indicating that the system is armed or disarmed. (Initialized access code is 789).
- 3. Make sure the burglar alarm system is disarmed (slow beeps). The telephone control system will not accept programming commands while armed (rapid beeps).
- 4. Enter the program code (Initialized to 112456). The telephone control system will beep four (4) times indicating entry of the program mode.
- 5. Enter the number of the option you have selected (1 to 7). The telephone control system will beep three (3) times indicating acceptance of the option.
- 6. Enter the program changes for the option selected. The telephone control system will beep three (3) times indicating acceptance of the program changes; the control system will return to the regular running mode.
- 7. After each entry, the telephone control system returns to the regular running mode. Re-enter the program code to program additional options.

PROGRAMMING OPTIONS

Option 1 Arm/Disarm Code.

Option 2 Arming Contact Closure Time.

Option 3 Program Code.

Option 4 Reset System/Disable Remote Disarming.

Option 5 Listen-In/Line Cut Monitor.

Option 6 System Access Code.

Option 7 Number Of Rings To Auto Answer.

initialized (1245)

initialized (2 seconds)

initialized (112456)

initialized (112400)

initialized (both disabled)

initialized (789)

initialized (9)

Option 1: Arm/Disarm Code: (Must enter 6 digits)

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 when programming. (The last digit of the arm/disarm code cannot be 0).

Example:

123000 = 123 is the arm/disarm code

112233 = 112233 is the arm/disarm code

050000 = 05 is the arm/disarm code

(Shipped initialized to 1245)

Option 2: Key Or Arming Contact Closure Time: (Must enter 1 digit)

This option determines how long the key or arming relay stays activated. The user can adjust activation time from 1 to 9 seconds by entering a single digit, 1 to 9. Entering a zero (0), causes the arming contacts to become latching (or shunt) contacts. The latching contacts will alternately open and close each time the arm/disarm code is entered. (When programmed for momentary, the contacts will stay closed for as long as the last key in the arming code is held down).

Example:

2 = 2 second contact closure time

8 = 8 second contact closure time

0 = Latching contact (Alternating on and off)

(Shipped initialized for 2 second closure)

Option 3: Program Code: (Must enter 6 digits)

This sets a new code for entering the program mode. The program 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 when programming. (The last digit of the program code cannot be 0).

Example:

145000 = 145 is the program code

995432 = 995432 is the program code

080000 = 08 is the program code

(Shipped initialized to 112456)

OPERATIONAL NOTE

To lock out the program code so that it cannot be accessed, enter the same codes for option 1 and 3. To access programming after this type of entry, reset the telephone control system with the initilization procedure described below, or with the procedure described in that section entitled "Revert To Initialized Factory Program Codes And Settings".

Option 4: Reset System/Disable Remote Telephone Disarming:

This option may be used for different purposes depending on the digit or digits entered. (1 digit required per entry). Re-enter program mode and select a second digit if desired on this option).

Digit (1) This digit resets the telephone control system to the initialized factory program codes and settings. Depress digit (1): LED-D6 will illuminate and a rapid beeping will occur on the telephone for 2 minutes. After 2 minutes the telephone control system will hang up the telephone line and revert to the initialized codes. Depress any digit to cancel this option before the 2 minutes expire. Hanging up the telephone will NOT cancel the reset command.

Digit (4) This digit allows arming, but not disarming, from a remote telephone.

As a safety feature the user may access the program mode, while it is armed, with this portion of option 4 activated. This allows program options to be changed from remote telephone locations.

(Shipped initialized to enable remote disarming)

Digit (0) This digit cancels the remote disarming restriction entered with digit (4) above.

Option 5: Audio Listen-In/Line Cut Monitor (1 digit required per entry)

AUDIO LISTEN-IN option (This option can be used only when calling into the premises from a remote telephone). The MPI-800 uses an inexpensive speaker phone (available at most phone stores *). Place the speaker phone where desired and, through an RJ-11 jack, wire the speaker phone directly into terminals 13 and 14 on the MPI-800 circuit board. Adjust talk and listen volume to the desired level.

When listen-in is activated, from a remote telephone, the user can hear sounds from within the building as well as talk to anyone in the building. Listen-in and control output 3 are active for 30 seconds during listen-in.

Depress a digit once every 30 seconds to extend the listen-in time and the momentary closure of control output 3. If listen-in is not desired but a momentary 30 seconds output from control output 3 is desired, activate the listen-in option but do not plug in a speaker phone. (Control output 3 when activated from premises telephones, is a latching output).

To activate listen-in option or momentary control output 3 — depress digit (1)

To disable listen-in option or momentary control output 3 — depress digit (0)

(Shipped initialized with listen-in disabled)

*The least expensive speakerphones are better to hear all of the background sounds in a room. The more expensive speakerphones cancel out background noise.

MOMENTARY ACTIVATION-CONTROL OUTPUT 3

To activate Control Output 3 (and listen-in), depress (#) (3). Control output 3 (and listen-in) will activate for 30 seconds. Depress any key to extend the time another 30 seconds. Each time the user depresses a digit the time extends another 30 seconds.

TELEPHONE LINE CUT MONITOR option allows control output 0 to be triggered if the telephone line is out for 3 minutes or more. Control output 0 clears itself when the telephone line returns to normal operation. Violation tones (alternating high and low tones) occur during line cut activation. To allow for routine maintenance of the telephone network activation of control output 0 will not activate until the telephone line has been out for 3 minutes.

To activate line cut monitor option — depress digit (2)

To disable line cut monitor option — depress digit (4)

(Shipped initialized to disable line cut monitor)

Option 6: System Access Code (6 digits must be entered)

The system access code is the code entered on a telephone to gain access to the MPI-800 Telephone Control System. This code number 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 when programming. (The last digit cannot be 0).

(Shipped initialized to 789)

PROGRAMMING NOTE

The system access code cannot be the same as the arm/disarm code or the program code.

Option 7: Number Of Rings To Auto-Answer (Enter 1 digit only)

This option sets the number of rings before the telephone control system automatically answers the telephone. The user may adjust the number of rings before auto-answer from 1 to 9 rings. If the user programs a 0, the telephone control system will not auto-answer, and no access from outside telephones is possible; however the premises telephones will still have access to the telephone control system.

(Shipped initialized to 9 rings)

PROGRAMMING EXAMPLES

The user must access the telephone control system before entering the program mode. Follow the proper procedure as described under "Programming the MPI-800" (initialized access code 789). Each example shows the program code as 112456, followed by the programming option number and the new program entries for the particular option.

- Example 1. Set "Arm/disarm code" to 456.
 - 112456
- 1 456000
- Example 2. Change "Arming contact closure time" to 4 seconds.
 - 112456
- 2
- Example 3. Change "Program code" to 2978.
 - 112456
- 297800

Change the "Program code" back to 112456 for the following examples.

- 2978
- 3 112456
- Example 4. Initialize telephone control system to initialized factory program codes and settings, and prohibit disarming from outside telephones.
 - 112456
- 4
- 1 (wait 2 minutes)
- 112456
- 4
- Example 5. Enable "Line cut monitor" and "listen-in/talk back".

2

- 112456
- 5
- 112456
- 1
- Example 6. Change "System access code" to 11.

5

- 112456
- 110000

Example 7. Set the telephone control system to "auto answer" after 3 rings. 112456 6 3

Revert To Initialized Factory Program codes And Settings

NOTE: Interruption of power does not reset the MPI-800. If the user forgets the access code or program code, and must return the MPI-800 to the factory initialized program codes, use the following procedure:

- 1. Depress the initialize pushbutton (SW6) and hold.
- 2. Depress the reset pushbutton (SW5) momentarily.
- 3. Release the initialize pushbutton (SW6).
- 4. D6 LED will illuminate.
- 5. Wait 2 minutes for D6 LED to go off.
- 6. The telephone control system is now back to factory program codes and settings.

If the user remembers the access and program codes, but wants to make the system initialize itself from a telephone: Enter the program mode, option 4, and then digit 1. LED-D6 illuminates and rapid beeping will occur on the telephone for two (2) minutes. After 2 minutes the MPI-800 will hang up the telephone and revert to initialized codes. (DO NOT press a key during the two minutes or it will cancel the command. The telephone may be hung up at anytime).

SUMMARY OF CONNECTIONS

Terminal 1 Terminal 2 Terminal 3 Terminal 4 Terminal 5 Terminal 6 Terminal 7 Terminal 8 Terminal 9 Terminal 10 Terminal 11 Terminal 12 Terminal 13 Terminal 14 Terminal 15 Terminal 15 Terminal 16 Terminal 17 Terminal 18 Terminal 19 Terminal 19 Terminal 20	Earth Ground Input + 12VDC Supply Input Negative Supply Input Normally Open Arming Or Key Contacts Output Common For Arming Or Key Contacts Output Normally Closed Arming Or Key Contacts Output Arming Indicator (+ or —) See Step 3 Input Violation Indicator (+ or —) See Step 4 Input T1 Tip Of Incoming Telephone Lines Input R1 Ring Of Incoming Telephone Lines Input R2 Ring To Premises Telephones Output T2 Tip To Premises Telephones Output Listen-In/Speakerphone Output Listen-In/Speakerphone Output Negative Power Supply Output (—) Control Relay 5 Output (—) Control Relay 8 Output (—) Control Relay 1 Output (—) Control Relay 1 Output (—) Control Relay 2 Output (—) Control Relay 2 Output
Terminal 19 Terminal 20 Terminal 21 Terminal 22	(—) Control Relay 2 Output (—) Control Relay 3 Output (+) 12VDC Power Supply Output

INCIDENCE OF HARM TO THE TELEPHONE NETWORK

In the unlikely event that the MPI-800 Telephone Control System would cause a problem on the telephone line, the telephone company has the right to temporarily discontinue telephone service. If this ever happens, the telephone company will notify the subscriber and allow time to correct the problem. The telephone subscriber has the right to bring a complaint to the FCC if he feels the disconnection is not warranted.

CHANGES IN TELEPHONE COMPANY EQUIPMENT OR FACILITIES

The telephone company has the right to make changes in its communications facilities, equipment, operations or procedures. Should any such changes affect the MPI-800 controller or require changes in its connection, the telephone company will notify the subscriber in writing so he may take necessary measures to insure uninterrupted service.

OPERATION WITHOUT PREMISES TELEPHONES

If the MPI-800 is going to be used without an actual premises telephone connected to the telephone line, a foil strip must be cut to enable the ring detector to operate without a telephone connected. If this jumper is not cut, the MPI-800 will not auto-answer. The jumper is on the FOIL side of the printed circuit board, directly ACROSS resistor R51. (R51 is to the right of K4 relay. See diagram). (DO NOT CUT R51).

Touchtone® is a registered trademark of AT & T Inc.

MOOSE products inc.

1510 Tate Boulevard, S.E. • P.O. Box 2904 • Hickory, N.C. 28603 Phone (704) 322-2333

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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 bookiet 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.

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

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.