

Tel-A-Greeter 204

Installation & Operation Instructions

Please leave these instructions with the unit at all times

Limited Warranty and Limitation of Liability	4
To Order Additional Systems	5
For Technical Assistance	5
Specifications	5
Overview	7
What does the Nel-Tech Labs, Inc. Tel-A-Greeter 204 do?	7
Call answering with audio messages (day mode)	7
Message on hold audio (MOH mode)	7
Phone line considerations	8
Tel-A-Greeter controls and indicators	9
Installation	10
Physical installation.....	10
1 – Connecting the phone lines.....	10
2 – Connecting the local program telephone (optional).....	10
3 – Connecting the MOH output channel	10
4 – Connecting the power supplies	10
5 – Connecting the phone system MOH port	10
Final installation checklist	12
Set Up / Operation.....	13
Factory reset.....	13
Seizing control	13
Local	13
Remote	13
Recording messages and programming system settings	13
Available commands.....	14
Delete message.....	14
Record message.....	14
Review message.....	15
Set line message number	15
Request line message number	15
Mode request.....	16
Set line to day mode	16
Set line to MOH mode.....	16
Set Answer ring	16
Set wait time	17
Set master password	17
Restore default configuration	17
FCC Notice	18

Reference Information	19
Frequently asked questions	19
Command summary	20
Default settings	20

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If you purchase the product directly from Nel-Tech Labs, Inc., Nel-Tech Labs, Inc. will perform warranty repair on your premises in accordance with the terms and conditions of Nel-Tech Labs, Inc. "Business Day" or "Around-the-Clock" warranty plans. The details of Nel-Tech Labs, Inc. warranty plans may be obtained from Nel-Tech Labs, Inc.. If you purchased the product from an authorized dealer, you will be covered by Nel-Tech Labs, Inc. authorized dealer plan during the warranty period. Contact your authorized dealer for details of Nel-Tech Labs, Inc. authorized dealer warranty plan. Nel-Tech Labs, Inc. obligation to repair, replace or refund as set forth above is your exclusive remedy.

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- Unauthorized modification or alteration of the product or its components;
- Product abuse, misuse or the negligent acts of persons not under the reasonable control of Nel-Tech Labs, Inc.;
- Actions of third parties and acts of God other than power surges (e.g. lightning).

This limited warranty applies only to the product purchased directly from Nel-Tech Labs, Inc. or purchased directly from an authorized Nel-Tech Labs, Inc. dealer. This limited warranty does not apply to products purchased or operated outside the United States.

You may be required to provide Nel-Tech Labs, Inc. with proof of purchase before Nel-Tech Labs, Inc. will perform any warranty replacements.

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Indicators: 5 LEDs on front panel: Mode LED indicates the current operational status of the unit (see table under operation section of this manual). 4 line LEDs indicate the status of each line.

Mounting: Desktop or wall-mount using supplied bracket and screws

Dimensions: 1.60" x 8.25" x 9" (H x W x D)

Shipping Weight: 5 lbs. (Tel-A-Greeter and ProAmp together)

ProAmp Specifications

Power Required: 12VDC power supply included with the unit provides 12VDC @ 500mA (center pin positive) from a nominal 110 VAC source.

Input: RCA jack for line-level audio source input.

Input Impedance: 10K Ω

Input Sensitivity: 1 Volt RMS max.

Amplification: Variable, 0 to 3 watts.

Output: (2) RCA jacks: 8 Ω /3 watts RMA – 10V p-p or 600 Ω /6 mwatts 2V p-p

Controls: Volume knob on rear of unit.

Indicators: Green LED on rear panel indicates power supply is connected.

Mounting: Desktop or wall-mount using supplied screws.

Dimensions: 1.60" x 5" x 5.25" (H x W x D)

What does the Nel-Tech Labs, Inc. Tel-A-Greeter 204 do?

The Nel-Tech Labs, Inc. *Tel-A-Greeter 204* (TAG) is an advanced **four-line** telephone messaging system designed to provide both call answering with audio message play, plus a continuous-loop telephone message-on-hold audio source. Each unit has four separate and independent lines, each of which can be configured to provide either:

Call answering with audio messages (day mode)

The line answers incoming calls and plays an audio message. A standard phone line is connected to the line's input jack. When a call is received, the unit answers the call, plays the message assigned to that line, then hangs up.

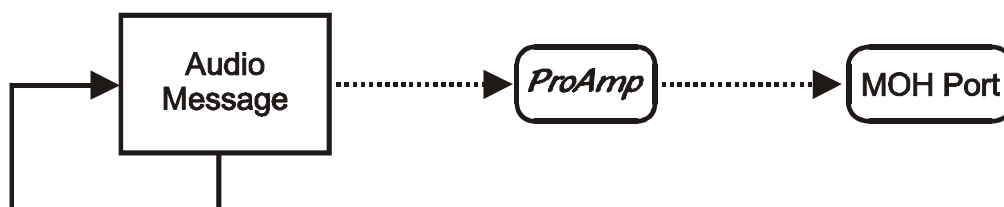
The TAG's memory is divided into four messages, each of which can be up to two minutes long. This provides the capability to play a different message for each of the four lines. Initially, message #1 is assigned to line 1, message #2 to line 2, message #3 to line 3, and message #4 to line 4. However, you can assign any message to any line, or assign one message to all lines so that every caller hears the same message, whichever configuration best suits your needs.

— or —

Message on hold audio (MOH mode)

The line is not connected to a phone line and does not receive incoming calls. Instead, it plays the message number assigned to that line in an endless loop, which can be provided to a telephone system's message-on-hold (MOH) port. This is accomplished by connecting the line to a *ProAmp* external signal amplifier with a special RJ-11 to RCA connector cable. The ProAmp is then connected to the phone system's MOH port using a standard RCA-to-RCA cable.

Use of MOH mode is optional. If you do not need an MOH audio source, it frees up another Tel-A-Greeter line to answer calls.



In a typical installation, lines 2 through 4 are each connected to an incoming phone line and are set to day mode, while line 1 performs the MOH function.

Audio message recording and system programming functions are accomplished using a standard Touch-Tone® phone connected to the TAG's program jack or by dialing into one of the phone lines connected to the TAG.

Phone line considerations

Consider the following information when selecting which phone lines the Tel-A-Greeter answers.

Required Lines

A normal working analog CO phone line must be connected to the TELCO jack of each line used for call answering. Do not connect the TAG to a PBX extension, digital phone line, or any other type of line, as this will not work correctly and will also damage the TAG and the other equipment. For local programming and audio recording, connect a standard analog phone to the TAG's program jack. Do not connect a phone line or telephone to the MOH line.

Line(s) to be Answered

The TAG normally answers three phone lines, with line 4 reserved for MOH. However, if desired, all four channels can be used for call answering. Note the TAG can only answer the phone line(s) that are directly connected to it.

Hunt Groups

Hunt groups are a set of separate phone lines that are all linked to a single, main phone number. This service is arranged through the phone company. As calls are received, if the first line in the hunt group is busy, the call rings in on the next available line; if that line is busy, the next line rings and so on through the remaining lines. If you install hunt group lines, be sure to use the lines that ring first. Since the TAG can only answer the lines to which it is attached, subsequent calls that ring other lines in the group will not be answered by the TAG.

RJ-11 Wiring

The TAG uses only the inner pair of conductors on its RJ-11 jacks.

Hook Flash Transfers

Some installations may use services such as CENTREX or call waiting that rely on a hook flash signal being sent to the central office. The TAG is not compatible with these services and interferes with the hook flash signal.

CPC

The TAG is designed to use the Calling Party Control signal sent from the central office to sense when the caller has hung up. Not all central offices support CPC signaling. If the TAG does not receive the CPC signal it may take as long as 90 seconds before the unit recognizes the hang-up and can answer another call.

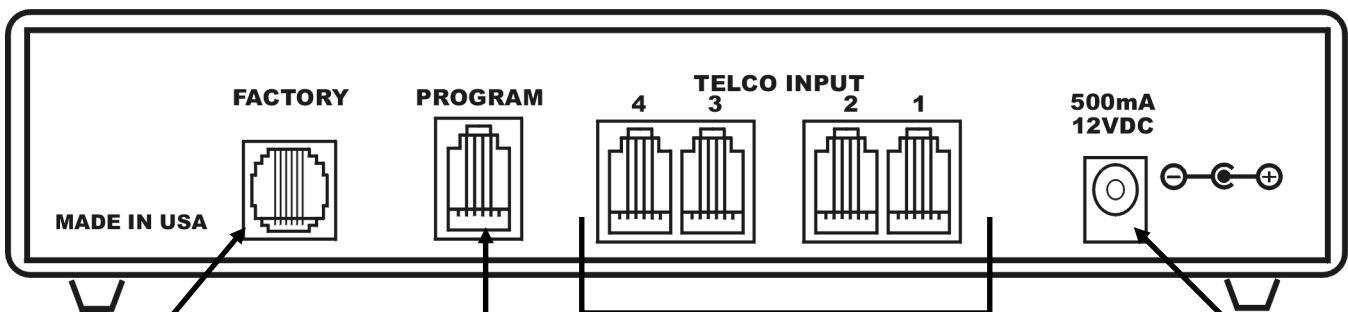
Tel-A-Greeter controls and indicators

Front panel



Line status lights:
Off = line idle
On = call in progress

Rear panel



Factory jack
(not used)

Program jack:
Connect normal home telephone to record messages and program unit.

(4) RJ-11 telco inputs:
Connect 3 phone lines + 1 message on hold port (using special cable and ProAdapter), or connect 4 phone lines if MOH not needed.

Power supply jack

Physical installation

Locate the Tel-A-Greeter near the phone company boxes of the telephone lines the unit is to answer. The Tel-A-Greeter must be installed directly to the CO lines, before any KSU, PBX, or other equipment. If you are not familiar with how your phone system is installed, or do not know which lines go directly to your phone company please find a qualified person to perform the installation.

The following instructions describe a typical installation utilizing lines 2, 3, and 4 for call answering and line 1 for MOH. However, if desired, you can configure all four channels for call answering, leave one or more lines unused, or any other configuration that suits your requirements. **The ProAmp is an optional accessory and may not be included with your system.**

1 – Connecting the phone lines

For standard phone lines not connected to a KSU/PBX: Connect the selected CO lines to the TAG's telco line inputs using RJ-11 to RJ-11 cables (included).

For a phone line connected to a KSU/PBX: Disconnect the selected CO lines from the KSU/PBX and connect to the TAG's telco line inputs using the lines' existing RJ-11 cables.

2 – Connecting the local program telephone (optional)

Connect a standard analog phone (home phone) to the program jack on the Tel-A-Greeter's rear panel using an RJ-11 to RJ-11 cable (not included).

3 – Connecting the MOH output channel

Select the line to be used for MOH audio and connect its telco input jack on the TAG's rear panel to the ProAmp's AUDIO IN jack using an RJ-11 to RCA cable (included).

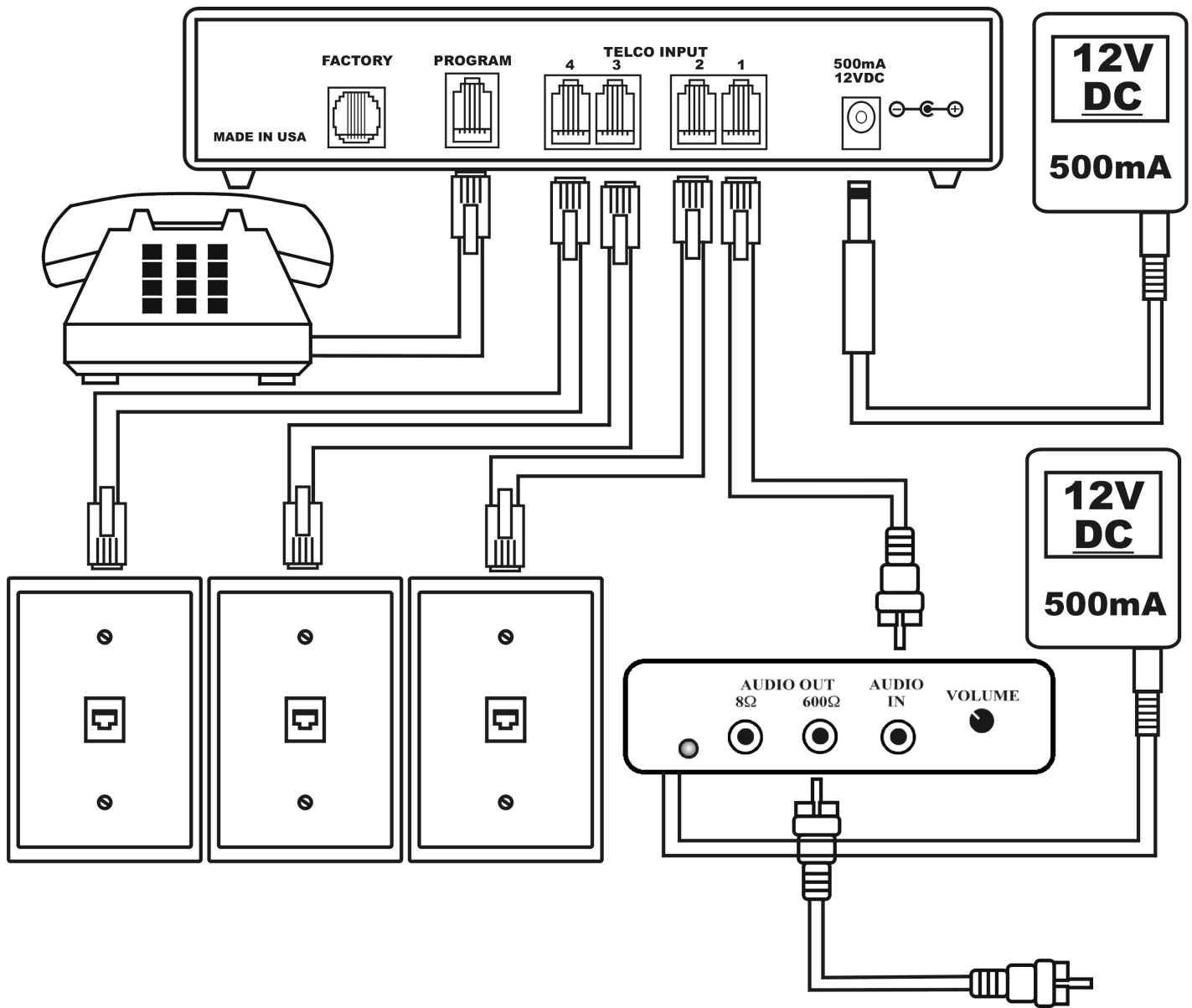
4 – Connecting the power supplies

Plug the Tel-A-Greeter's power supply (12V DC, 500mA, center-pin-positive) into a 110V AC outlet (not controlled by a wall switch) and the 12VDC jack on the TAG. Plug the ProAmp's power supply (12V DC, 500mA, center pin positive) into a 110V AC outlet (not controlled by a wall switch) and the 12VDC jack on the ProAmp's front panel.

5 – Connecting the phone system MOH port

Connect the phone system's MOH port to the 600 Ω or 8 Ω AUDIO OUT jack on the ProAmp using an RCA to RCA cable (included). Consult the

phone system's documentation to determine which output (600Ω or 8Ω) is appropriate. An adapter may be required on the phone system end of this connection (not included).



Installation Diagram

Note: Each line used as a continuous-play audio source (MOH mode) requires a separate ProAmp and special RJ-11 to RCA connector cable. The ProAmp is an optional accessory and may not be included with your system. See page 5 for information on ordering the ProAmp and connector cable.

Final installation checklist

After the connections are completed, use the following as a checklist of actions needed to finish installation (detailed instructions for these steps are listed in the next section.)

- Enter command mode by dialing # * * followed by the master password (factory default=1234) using the telephone connected to the program jack. You can also dial the phone number of one of the lines connected to the TAG's telco input jacks, then dial # * * followed by the master password (factory default=1234) when the unit answers.
- Record messages 1 through 4, or however many messages you will use.
- Set the mode for each line using the **set line to day mode** and/or **set line to MOH mode** commands as needed. The default configuration sets lines 1 through 4 to day mode.
- Assign a message number for each line using the **set line message number** command as needed. The default configuration assigns message 1 to line 1, message 2 to line 2, message 3 to line 3, and message 4 to line 4.
- Change other settings if desired (master password, answer ring, or day wait time). Then hang up to exit command mode.
- This step is only necessary if the ProAmp and MOH mode are used:** Finally, call into the phone system to which the MOH channel is connected and ask to be placed on hold. While listening to the on-hold audio, adjust the volume knob on the ProAmp until a comfortable listening level is achieved.

Factory reset

The TAG can be reset to the factory default settings by disconnecting the 12VDC power plug, waiting 5 seconds, then re-connecting the plug while holding the mode button down. This brings the system to a known state which provides a good starting point for message recording and system configuration. See page 20 for a listing of default values.

Seizing control

Setting up the TAG requires seizing control of the unit to enter command mode and then entering a series of Touch-Tone® command codes to record audio messages and change system settings. Seizing control can be done two ways:

Local

Through the use of a normal analog phone (home telephone) connected to the TAG's program jack. Control is seized by picking up the handset of the local phone, then dialing # * * followed by the master password (factory default=1234). Within 5 seconds the TAG seizes the line and plays a triple beep indicating it is in command mode.

Remote

Through the use of a phone installed on a different line. Control is seized by calling the phone number of a line connected to one of the TAG's telco input jacks. This line must be set for day mode, not MOH mode, or your call will not be answered. When the TAG answers, dial # * * plus the master password (factory default=1234) when the unit answers. Within 5 seconds the TAG seizes the line and plays a triple beep indicating it is in command mode. The password must be entered within 10 seconds after the unit answers if no message is present, or within 10 seconds after the message plays if a message is present.

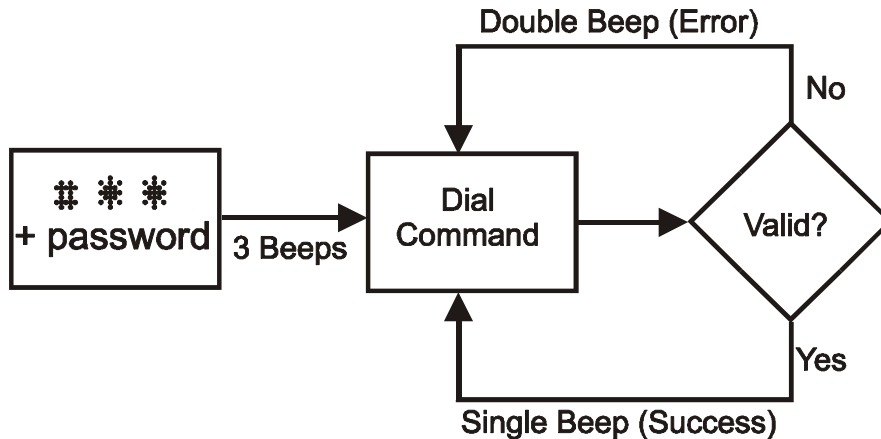
Recording messages and programming system settings

Recording messages and configuring the Tel-A-Greeter 204 for your particular messaging needs is done by seizing control of the unit as described above, which places you in command mode. You then enter one or more commands to set the mode for a line, record messages, change the master password, etc.

The general format of the various commands is illustrated below:

* Y Y # X X # (YY = command, XX = value)

After finishing a valid command, a single-beep “success” tone plays, indicating the command or recording was accepted. If an invalid command or value is entered, a double-beep “error” tone plays.



Available commands

The following are all the possible commands.

Delete message

Allows the user to erase a message from memory. While the message is deleted the system busy signal is heard.

Syntax:

- * 7 0 # 0 1 # Delete message number 1
- * 7 0 # 0 2 # Delete message number 2
- * 7 0 # 0 3 # Delete message number 3
- * 7 0 # 0 4 # Delete message number 4

Record message

Allows the user to record messages. **If the message already exists, you must first delete it before recording (see delete message command above).** After the command is entered, the TAG plays a steady series of short beeps, indicating it is ready to record. To begin recording, dial *, to stop recording, dial #. If the maximum record time for the message is reached (2 minutes), recording stops automatically. The double beep error tone sounds if the selected message has not been deleted first.

Syntax:

- * 5 0 # 0 1 # Record message number 1
- * 5 0 # 0 2 # Record message number 2
- * 5 0 # 0 3 # Record message number 3
- * 5 0 # 0 4 # Record message number 4

Review message

The review message commands allows the user to listen to any of the 4 messages. After the command is entered the requested message plays. Dial # at any point to stop the playback. An error occurs if you select a message that has not been recorded.

Syntax:

- * 6 0 # 0 1 # Review message number 1
- * 6 0 # 0 2 # Review message number 2
- * 6 0 # 0 3 # Review message number 3
- * 6 0 # 0 4 # Review message number 4

Set line message number

Sets which message number will play on which line number. Valid message number range is 01-04.

Syntax:

- * 4 1 # X X # Set line 1 to play message number XX
- * 4 2 # X X # Set line 2 to play message number XX
- * 4 3 # X X # Set line 3 to play message number XX
- * 4 4 # X X # Set line 4 to play message number XX

Request line message number

Plays a series of beep tones to indicate the message number set to play from the entered line number.

- 1 beep = message number 1
- 2 beeps = message number 2
- 3 beeps = message number 3
- 4 beeps = message number 4

Syntax:

- * 3 X # Request line X message number

Mode request

The mode request command plays a series of beep tones to indicate the current mode of the selected line.

1 beep = day mode

3 beeps = MOH mode

Syntax:

* 0 0 # 0 1 # Request line 1 mode

* 0 0 # 0 2 # Request line 2 mode

* 0 0 # 0 3 # Request line 3 mode

* 0 0 # 0 4 # Request line 4 mode

Set line to day mode

Sets a line to day mode.

Syntax:

* 0 1 # 0 1 # Set line 1 to day mode

* 0 1 # 0 2 # Set line 2 to day mode

* 0 1 # 0 3 # Set line 3 to day mode

* 0 1 # 0 4 # Set line 4 to day mode

Set line to MOH mode

Sets a line to MOH mode.

Syntax:

* 0 3 # 0 1 # Set line 1 to MOH mode

* 0 3 # 0 2 # Set line 2 to MOH mode

* 0 3 # 0 3 # Set line 3 to MOH mode

* 0 3 # 0 4 # Set line 4 to MOH mode

Set Answer ring

Sets how many rings the unit waits before answering incoming calls. Valid settings are 01-15 rings. This setting applies to all lines set to day mode.

Syntax: (XX = any value 01 - 15)

* 1 1 # XX # Set answer rings to XX

Set wait time

This is how long the TAG waits for input on a call answering channel before disconnecting a caller in command mode, and also how long it will wait for the user to enter command mode (by dialing # * * followed by the master password, factory default=1234 before hanging up. Valid wait time settings are 01-30 seconds.

Syntax... (X X = any value 01 - 30)

* 1 5 # X X # Set wait time to XX seconds

Set master password

Changes the unit's master password. The master password is required to access to command mode.

Syntax... (X X X X = any value 0000 - 9999)

* 9 2 # X X X X # Set master password to XXXX

IMPORTANT NOTE: If you forget or lose your master password you will be unable to seize control of the unit unless you use the restore default configuration command (see next command). or perform a power-on reset.

Restore default configuration

WARNING: This command erases all messages and resets the unit to the factory default settings!

This command brings the system to a known state which provides a good starting point for system configuration. If the command is correctly entered the user hears the system busy signal for a period of time while the memory is erased, followed by the single success beep. See page 20 for a list of default values.

Syntax...

* 9 9 # Restore default configuration

RADIO AND TELEVISION INTERFERENCE

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful 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:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

You may also find helpful the following booklet, prepared by the FCC: "How to Identify and Resolve Radio-TV Interference Problems." This booklet is available from the U.S. Government Printing Office, Washington D.C. 20402.

Changes and Modifications not expressly approved by the manufacturer or registrant of this equipment can void your authority to operate this equipment under Federal Communications Commissions rules.

This digital apparatus does not exceed the Class A limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.

Le present appareil numerique n'emet pas de bruits radioelectriques depassant les limites applicables aux appareils numeriques de la class A prescrites dans le Reglement sur le brouillage radioelectrique edicte par le ministere des Communications du Canada."

NOTICE:

The Industry Canada label identifies certified equipment. This certification means that the equipment meets telecommunications network protective, operation and safety requirements as prescribed in the appropriate Terminal Equipment Technical Requirements document(s). The Department does not guarantee the equipment will operate to the user's satisfaction. Before installing this equipment, users should ensure that it is permissible to be connected to the facilities of the local telecommunications company. The equipment must also be installed using an acceptable method of connection. The customer should be aware that compliance with the above conditions may not prevent degradation of service in some situations.

Repairs to certified equipment should be coordinated by a representative designated by the supplier. Any repairs or alterations made by the user to this equipment, or equipment malfunctions, may give the telecommunications company cause to request the user to disconnect the equipment.

Users should ensure for their own protection that the electrical ground connections of the power utility, telephone lines and internal metallic water pipe system, if present, are connected together. This precaution may be particularly important in rural areas.

CAUTION: Users should not attempt to make such connections themselves, but should contact the appropriate electric inspection authority, or electrician, as appropriate.

NOTICE: The Ringer Equivalence Number (REN) assigned to each terminal device provides an indication of the maximum number of terminals allowed to be connected to a telephone interface. The termination on an interface may consist of any combination of devices subject only to the requirement that the sum of the Ringer Equivalence Numbers of all the devices does not exceed 5.

Reference Information

Frequently asked questions

Problem or Indication	Possible Cause and Solution
What are the indications of the channel status lights on the front panel?	<ul style="list-style-type: none"> ▪ Light off = idle (no call) ▪ Light on = line answering a call or playing MOH audio
Why can't I record a message?	Make sure that you are in command mode, and that the message you are trying to record has been deleted first.
I recorded a message but when I call it, it doesn't play.	Make sure the line is in day mode and the message is assigned to the line.
I press *50#01# to record the message number 1 but my message doesn't get recorded.	<ul style="list-style-type: none"> ▪ You must press * after entering the record command to begin recording, then # to end recording. ▪ Make sure that you are in command mode, and that the message you are trying to record has been deleted first.

Command summary

Command	Syntax	XX Range	Description
Line mode request	*00#XX#	01 – 04	Number of beeps indicate line's mode: 1 beep=day mode, 3 beeps=MOH mode
Day set	*01#XX#	01 – 04	Sets line XX to day mode
MOH set	*03#XX#	01 – 02	Sets line XX to MOH mode
Day rings	*11#XX#	01 – 15	Sets ring to answer on in day mode.
Day wait	*15#XX#	01 – 30	Sets wait time for input in day mode.
Message record	*50#XX# (* to record) (# to stop)	01 – 04	Records messages 1, 2, 3, or 4.
Message review	*60#XX#	01 – 04	Plays message 1, 2, 3, or 4.
Message delete	*70#XX#	01 – 04	Deletes message 1, 2, 3, or 4.
Line message number request	*3X#	1-4	Number of beeps (1-4 beeps) indicates message number assigned to line X.
Set line message number	*4X#YY#	X=1-4 YY=01-04	Sets line X to play message number YY.
Master password	*92#XXXX#	0000 – 9999	Sets the master password
Restore default configuration	*99#	N/A	Resets unit to factory default settings. See table below for a list of default settings.

Default settings

This table lists the settings the unit has when shipped from the factory, after restoring the default configuration (***99#**), or after performing a power-on reset (disconnect the 12VDC plug on the rear panel, wait 5 seconds, then hold down the mode button while re-connecting the plug).

Parameter	Default Setting
Lines 1-4 mode	Day mode (all 4 lines)
Line 1 message	01
Line 2 message	02
Line 3 message	03
Line 4 message	04
Day rings	01
Day wait time	10 (seconds)
Master password	1234

