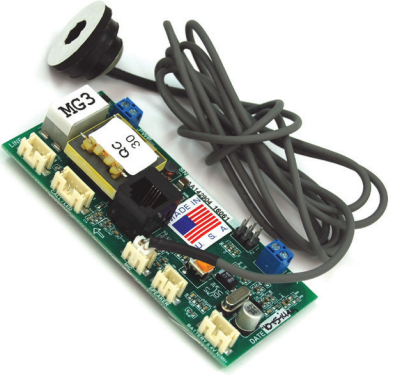
ADA Telephone MG3
User's Manual



MG3

984-0115
Rev 1
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800-527-9156 • www.januselevator.com

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If you have questions or problems, please call Janus Technical Support for assistance at 1-800-527-9156 or scan the QR code using your smart phone to be connected to our Automated Programming System. (APS-Tel: 631-864-4759)

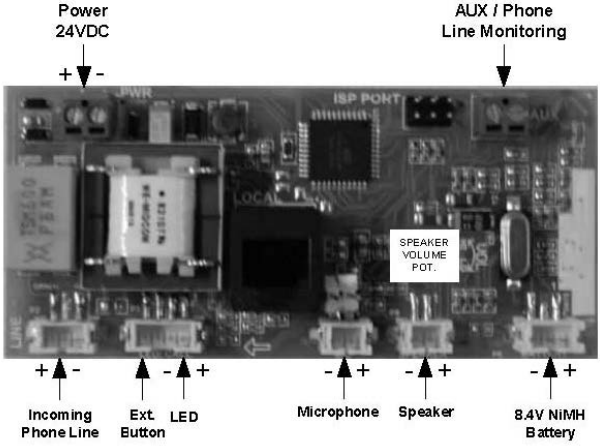
Installation

1. Mount phone on the car station using existing phone bracket.
2. Plug in the ext. button and LED to the white connector at "CALL/LED" – P3.
3. Plug in the speaker to the white "SPEAKER" connector – P8.
4. Plug in the microphone to the white "MIC" connector – P7.
5. Plug in the 24VDC external power supply to the white "PWR" connector – P4. The "PWR" connector is polarity sensitive.
6. Plug in the optional 8.4 NiMH battery to the white "BATTERY" connector. (The battery is optional and only used for backup)
7. Plug in the phone line to the white "LINE" connector - P2. The Phone line is not polarity sensitive.
8. Plug in the phone line monitoring device to the "AUX" connector –P1.

NOTE: See P.C. Board Diagram for all connections.

CAUTION: To reduce or eliminate any possible interference, it is highly recommended that the wiring used inside the traveling cable for the incoming phone line be a 20-22 AWG twisted shielded pair with the shield grounded at the elevator controller end only. Any terminations or splices between the elevator controller and the elevator phone should have the shield carried through the termination of splice and not grounded at that point.

P.C. Board Diagram (Top View)



Programming Set-Up Methods

There are two methods of setting up the MG3 phone for programming. Select the one applicable to your situation as described below.
NOTE: The telephone line provided must be a touch tone line.The phone can be programmed at any location and then installed in the elevator cab. The phone will retain its programming without the need for a battery.

Method A: Calling the elevator phone to program it.

1. From any touch tone phone, call the phone number to which the elevator phone is connected.
2. After four rings (OR if the "HELP" button is pressed) the elevator phone will turn on automatically and you will hear a diddle-diddle-diddle sound.
   NOTE: If there is more than one elevator phone on the same phone line you will need to have someone press the "HELP" button on each elevator phone, or disconnect the others, in order to program each phone.
3. Go to the "Programming Instructions" section to continue.
4. After programming the phone, you should test it by pressing the "HELP" button. The test will ensure the phone is functioning correctly and as programmed.

Method B: Setting up for programming without a phone line.

1. Disconnect phone line from the MG3.
2. Make sure you have external power or a 9-volt battery connected to the MG3.
3. Plug a touch tone phone into the black modular "LOCAL" jack (see diagram of phone board).
4. Pick up the touch tone phone handset.
5. Press the "HELP" or "CALL" button on the elevator car panel for the MG3 to turn 'ON'. Make sure that the red light of the phone turns on. REFER TO THE PROGRAMMING INSTRUCTIONS. After programming, return to step 6 below.
6. Unplug touch tone phone and test the phone completely when the phone is hooked up to a phone line.
   NOTE: You have 30 seconds to enter programming or between entering programming commands before the MG3 exit programming mode and turns 'OFF'.

Programming Instructions

1. Enter **# 94851** to get into programming mode. Listen for three beeps.
   NOTE ONE: Enter touch tone digits slowly and deliberately.
   NOTE TWO: Once you are in programming mode, you can perform any programming step in any sequence as long as you get three beeps after your programming entry.
2. Enter **# 0** (enter the first phone number to be programmed) *** #**. Listen for three beeps. **EXAMPLE: # 0 5551212 * #**.

NOTE: If you are on a phone line that requires a "9" or another digit to call the answering service, enter a # after the 9. This will insert a 4 second pause. **EXAMPLE: # 09 # 5551212 * #**.

3. Enter **# 1** (enter second phone number to be programmed) *** #**. (Optional)
4. Enter **# 2** (enter third phone number to be programmed) *** #**. (Optional)
5. Enter **# 3** (enter fourth phone number to be programmed) *** #**. (Optional)
6. Enter **# 7** and listen for the single beep. At the beep, record the **location message** by speaking into the touch tone phone handset. Enter **0** to end. The message will automatically play back for preview. If you want to listen to the location message again without changing it, enter # 8.
7. Enter **# * 1180183 * #** and listen for three beeps (enables voice prompt messages).
8. Enter **# #** to hang up the phone.

Optional Programming Instructions

***PURPOSE:* To Eliminate Autodialing:**
To disable the MG3 unit from dialing a phone number **(used on a ring down telephone line).**
Enter **# 94851** and listen for three beeps.
Enter **# 0 * #**, listen for three beeps, enter **# 1 * #**, listen for three beeps.
Enter **# 2 * #**, listen for three beeps, enter **# 3 * #**, listen for three beeps.
Enter **# * 1180180 * #**, listen for three beeps. (Optional)
Enter **# #** and hang up.

***PURPOSE:* To Disable the Voice Prompt Message:**
To disable the voice prompt from saying: *"Elevator call at the tone press one to talk, press two for location".*
Enter **# 94851** and listen for three beeps.
Enter **# * 1180180 * #**, listen for three beeps.
Enter **# #** and hang up.
CAUTION: This option cannot be used with two or more number dialing.

***PURPOSE:* To Disable Voice Prompt Message and Delay Voice Location Message:**
To disable the voice prompt and have the location message play automatically every 19 seconds.
Enter: **# 94851** and listen for three beeps.
Enter: **# * 1180185 * #** and listen for three beeps.
Enter: **# #** and hang up.

***PURPOSE:* To Enable Voice Prompt Message (DEFAULT):**
To enable the voice prompt message to say: *"Elevator call at the tone press one to talk, press two for location"*.
Enter **# 94851** and listen for three beeps.
Enter **# * 1180183 * #** and listen for three beeps.
To program location message, see programming instructions.
Enter **# #** and hang up.

List of Commands for Programming Mode

NOTE: The phone enters Programming Mode after completing step 1 of the Programming Instructions.

#0 1st Phone Number *#
#1 2nd Phone Number *#
#2 3rd Phone Number *#
#3 4th Phone Number *#
#4 Identification Code *#
#5 XXXX *# - Set Programming Access Code - 4851=Default
#6 XXXX *# - Confirm Programming Access Code - 4851=Default
NOTE: To enter programming you must enter #9 XXXX
(#9 4851=Default) #7 - records location message
#8 - Plays back location message
#* 1 XXX Y W Z *# - setup code (Default is: #* 1 180 1 8 3 *#)

- XXX – Call Timer [060-990]
- W – Unit ID [1-8]
- Z - Voice Mode [0,3 or 5]

**40 X *# - Push to Turn 'ON' Delay (0-8 range 0=No Delay-Default, 1=0.5sec., 2=1sec., 3=1.5 sec., 4=2sec., 5=2.5sec., 6=3sec., 7=3.5sec., 8=4sec)
**41 X *# - Push to Turn 'OFF' Delay (0, 3-8sec. range, 3=Default, 0=0sec.)
**42 X *# - Ring Count (for incoming calls) (0-9 range, 4=Default, 0=No Answer)
**43 XX *# -Ring Time (for outgoing calls) (18-60 range, 50=Default)
**44 X *# - AUX phone line monitoring output, Default: **44 1 *#. (X=0-1, 0=Disabled, 1=Enabled)
NOTE: If AUX is enabled it will close within 2 minutes after the phone line is disconnected from the unit. This timer can be adjusted by using code **47 below.
**45X*# - Redial, 0=disabled (Default), 1=Dial the number 1 more time, 2=Dial the number 2 more times.
**47XXX*# - AUX phone line monitoring timer. (XXX= [020-600] seconds) Default: **47120*#
**48X*# - Ring through the speaker. Default: **481*#. (X=0-1, 0=Disabled, 1=Enabled)
**8 XX *# - Set Language (1 = English: default, 2 = Spanish, X= [1-2] (must have 2 digits)
NOTE: **8XX*# - It will play both messages according to the order specified. (Ex// **812*# = English then Spanish or **821*# = Spanish then English)
NOTE: If second message is not used enter '0' for that message. For example if you want to set to play English only you must program: **810*#.
**7 0 *# - Ring through Converse Mode. (Default) With this setting, the MG3 will automatically enter two way communications after it has answered an incoming call.
**7 1 XXXX *# - Hang Up Converse Mode – Set Remote Access Code

NOTE: When user calls in they have 5 seconds to enter the 4 digit password set by *71. If not or the wrong code is entered, a long beep will be heard and the phone will turn OFF. If the correct code is entered, 3 beeps will be heard and two way communication will be established. The speaker and microphone will both be muted until the correct code is entered.

NOTE: If you forget the code, the unit can be reset by using the keypad method to program it.

- Exits programming mode

**90 *# - Sets the following Default Values:

- #*1180183*# - Default Setup Code
- **40 0 *# - Push to Turn 'ON' Delay
- *41 3 *# - Push to Turn 'OFF' Delay
- **42 4 *# - Ring Count (for incoming calls)
- **43 50 *# - Ring Time (for outgoing calls)
- **45 0*# - Disable Redial
- **47120*# - AUX close timer to 120 seconds
- **48 1 *# - Ring through the Speaker
- **70*# - Ring through Converse Mode

List of Commands for Converse Mode

NOTE: Phone enters Converse Mode when it receives an incoming call.

0 or #9 - ACK conversation (blink red LED)
1 - Enters Two Way Communication
2 - Plays Location Message and Alert Message
3 - Renew Call Timer
- Mutes the microphone if no other digit is pressed within 3 seconds
Any other digit including "#" immediately turns it back on.

NOTE: The microphone is not muted while in keypad mode.

#0 - Plays back 1st Phone Number in DTMF tones
#1 - Plays back 2nd Phone Number in DTMF tones
#2 - Plays back 3rd Phone Number in DTMF tones
#3 - Plays back 4th Phone Number in DTMF tones
#4 - Plays back Unit ID in DTMF tones
#6 - Plays Firmware Version in DTMF tones
##0 - Plays back 1st Phone Number in Voice
##1 - Plays back 2nd Phone Number for in Voice
##2 - Plays back 3rd Phone Number for in Voice
##3 - Plays back 4th Phone Number for in Voice
##4 - Plays back Unit ID in Voice
##6 - Plays Firmware Version in Voice
#* - Hangs Up with 2-3 seconds delay
*0 - Hangs the phone up with no delay

Operating Instructions

A: Trapped Passenger Calling Out

1. Passenger presses “HELP” button. Red LED turns “ON”.
2. Passenger hears dial tone and dialing of first phone number.
3. Passenger hears intermittent ringing.
4. Passenger hears a tone 2 seconds after elevator phone dials and every 7 seconds until the operator responds to the call.
5. If first phone number is not answered within approximately 50 seconds, the elevator phone will hang up and dial the second phone number. The same sequence of events will occur for any additional phone numbers the phone is programmed to call.
6. Once the receiving operator responds to the call with a touch tone digit the passenger and the operator will be able to communicate.
7. When the red LED flashes or the green light turns ‘ON’, the operator can request the passenger to press the “HELP” button again. This action will send an audible signal to let operator know that someone is actually stuck in the elevator and not just a prank call. This action is normally only important for someone who cannot speak.

B: Responding Operator - with Prompt Message Enabled

1. Operator hears ringing of incoming call from elevator and answers call.
2. Operator hears a repeating message from the elevator phone stating *“Elevator call, at the tone press one to talk, press two for location.”* The message will keep repeating until the operator presses a “1” or “2” after the tone on their phone.
3. The passenger does not hear any voice messages.
4. Normally the operator should press “1” after the touch tone at the end of the message to quickly establish two way voice communication with the trapped passenger.
5. At any time the operator can press “2” to hear location of the elevator.
6. In elevators with background noise, the operator can press # to mute the microphone. Entry of any other digit will re-enable the microphone.
7. At the end of the location message another message will be heard by the operator that says: *“Press zero to alert passenger of rescue.”*
8. When the operator presses “0” on their touch tone phone they will hear three beeps. The red light flashes or the green light turns ‘ON’. At this point the operator has acknowledged the call. The passenger knows that the call has been received because wording printed on the panel of the phone states “ALARM RECEIVED” or “BLINKING INDICATES CALL IS ANSWERED”,
9. The operator can request that the passenger press the “HELP” button again. If the passenger presses the button, the operator will hear a diddle-diddle-diddle sound. For the operator, this means that there is a passenger in the elevator.
10. Prior to the phone turning off (normally 3 minutes), the operator will hear this message twice, *“To avoid disconnect, press three now.”*
11. If the operator presses “3” on their touch tone phone within 10 seconds after this message, the elevator phone will stay on for another

3 minutes. The message will be repeated every 3 minutes for the duration of the call so that the operator can keep the passenger on the line until help arrives or as long as needed.

12. Operator presses *0 to hang up the elevator phone.

Alternate B - with Delayed Location Message - Voice Mode 5

ALL OPERATING STEPS ARE THE SAME EXCEPT:

1. Operator answers incoming call and begins talking to passenger.

2. Within 19 seconds after the call is dialed, the operator will hear the location message followed by this message: *"Press zero to alert passenger of rescue."*

3. Messages will repeat every 20 seconds until the operator enters "0".

Operator Calling Into Elevator Phone

1. Operator dials phone number of the elevator phone and hears ringing.

2. After four rings the elevator phone turns on automatically and operator will hear diddle-diddle-diddle sound.

3. At this time the operator and passenger can talk. All other operations stay the same.

Passenger Receiving Call from Operator

1. Passenger hears elevator phone ringing. Phone turns on automatically after 4 rings, OR passenger can push the "HELP" button to turn elevator phone on.

2. When elevator phone turns on the passenger and operator can communicate.

Auxiliary Output Information

AUX: The AUX output is used for Phone Line Monitoring. When a good phone line is connected to the unit this output is normally open. If the telephone line drops below 5 volts (+/- 2V), is disconnected or shorted for more than 2 minutes this output will close. This auxiliary output can also be adjusted to close from 20 to 600 seconds by using code **47XXX*# (XXX=020-600).

Battery and Power Supply Information

The MG3 phone requires an external 24VDC power supply to operate. The power supply connects to the P4 connector of the board. The P4 connector is polarity sensitive so use caution when connecting to it (P4 is labeled with + and -).

CAUTION: DO NOT USE an alkaline or lithium battery when the power supply is connected to the P4 connector.

If an 8.4V NiMH battery is connected to the P5 connector it will provide you with a minimum of 4 hours of backup.

You will need the external power supply or the battery to program the phone from the “LOCAL” phone jack. If you don’t have either one then a standard alkaline 9-volt battery could be used temporarily to program the phone and then disconnected when programming has been completed. The MG3 phone has built in non-volatile memory which will retain its memory even if power is removed.

Troubleshooting Guide

Always visually check the phone for loose or shorted wires, physically damaged or missing components. The phone will not work on a Digital phone line. It will **only** work on an Analog phone line or an Analog port from a Digital phone system.

Problem: Phone will not turn ‘ON’
Possible Cause:
- Check power connection at P4, it should measure 24VDC
- Check polarity at P4 (the “PWR” connector is polarity sensitive)
- Check button connection at P3
- Remove button connector and try shorting button connection pins

Problem: Phone dials incorrect number
Possible Cause:
- Check number programmed into phone
- Plug a phone into the same line as the phone and call the same number you are trying to program to see if you can call out
- Check to see if the phone is on a ring down line
- Check to see if another auto dialer is on the line and remove it
- Reprogram unit

Problem: No sound through speaker
Possible Cause:
- Check speaker connection (see P.C. Board Diagram)
- Try calling into unit and speaking to person in the car
- Measure the resistance of the speaker which should read approximately 40-45ohms
- Make sure the speaker is not physically damaged

Problem: Noise on the line
Possible Cause:
- Check if twisted shielded pair was used
- Check if shield was connected to ground at the controller end only
- Measure AC voltage on the phone line between tip and ground and also ring and ground (they should both be less then 1VAC)
- Check button connection
- Try a spare pair of wires through traveling cable
- Check if wire is running through hoist way by itself

Problem: Phone dials out but has broken communication
Possible Cause:
- Check if voice prompt message is being stopped

- Check if voice prompt message is being stopped
- Check if there is loud background noise in cab
- Check location of microphone
- Check mounting of microphone and speaker
- Check to see if person answering call is using a handset (headsets could cause problems

Problem: Phone cannot be programmed
Possible Cause:

- Try holding down keys slowly and deliberately
- Try disconnecting the speaker (see P.C. Board Diagram)
- Make sure you are using a touch tone phone
- If you are using a cell phone do not stand in the car
- Check if phone is hearing tones (see if red LED flickers when a DTMF tone is received)
- Check if twisted shielded pair was used
- Check if shield was connected to ground at the controller end only
- Measure AC voltage on line, it should be zero voltage
- The phone will only work on an Analog phone system and not Digital

Problem: Phone rings busy
Possible Cause:

- Check if other devices are on the line
- Check where phone line is properly connected to the unit
- Check voltage on phone line
- Check polarity on phone line
- Make sure unit is off
- Remove our unit from the line to see if line is still busy

Specifications

Input Connections: One shielded twisted pair communication cable (shield should be grounded at the controller only).
Phone Line Requirements: Standard (analog) loop start voice grade touch tone telephone line, PBX or key system station analog telephone line.
Electrical
Optional AC Adapter: 24VDC @ min. 100mA
Operating Current Range: 18mA to 55mA
Phone Line Voltage: On-hook 24VDC to 70VDC (nominally 48VDC)
Phone Line Voltage: Off-hook 8 to 20VDC (nominally 14VDC)
Dialing: DTMF (Dual Tone Multi-Frequency)
Frequency Response: 550Hz - 3400Hz +/- 3db
Operational Loop Impedance: 600 ohms
Ring Sensitivity: 30 - 120VAC RMS
FCC Registration: US: NLFTE07BMG3X7771
Ringer Equivalency Number: 0.7B
Environmental
Operating Temperature Range: 0 to 50C / 32 to 122F
Storage Temperature Range: -20 to 70C / -4 to 158F
Relative Humidity: Up to 95% (non-condensing)