



**AOR Series Analog Stations**  
**Installation & Operation Manual**  
**v1.0**

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## See Section 6.1 (p.9) for Quick Programming Guide

## **1. Getting Started**

### **1.1 Introduction**

Thank you for your purchase of this AOR Series Analog Station. All Talkaphone equipment is built with an exceptional standard of quality and will provide years of reliable service.

This manual will guide you through the installation of this product and provide comprehensive operating instructions. Please read this instruction manual **COMPLETELY** before you install this product.

Once you have installed the product and are familiar with its operation, store this manual in an accessible location for future reference.

### **1.2 What's In the Box**

- AOR Series Analog Station
- Owner Information Card
- Instruction Manual
- Qty. (4) 6-32 Stainless Steel TS-10 Pin-in-Torx screws (P/N 42937)



You should inspect the AOR Series Analog Station when unpacking the box for possible damage in shipment. If it is damaged or any of the components are missing, please contact your Talkaphone dealer or distributor immediately. Do not discard any hardware or packing material before you are certain you have all the items listed above, and the unit is installed and functioning correctly.

### **1.3 Technical Requirements**

- When connected to an analog AOR Command Unit, the line must provide a minimum of 24V at 20 mA off-hook (no current is drawn on-hook).

## 2. Hardware Installation



Installation should be performed by qualified personnel only in accordance with the National Electrical Code and other federal, state and local statutes and building codes. Using shielded cable is recommended to avoid noise, hum, and other operational anomalies.

You will need a TS-10 Pin-in-Torx screwdriver or bit to complete this. If you do not own one, you may purchase one from your local industrial supply store or from Talkaphone. Contact your Talkaphone distributor for purchasing information.



Talkaphone Model **FM-110** and Model **SM-110** are designed to accommodate the AOR Series Analog Stations for flush mounting and surface mounting, respectively. Contact your distributor or Talkaphone for more information.

1. Terminate the red-green pair to the appropriate station port/terminal on the analog AOR Command Unit (red is ring, green is tip). The red-green pair should route back to a small 2-pin connector located near center-right on the circuit board (see photo below).



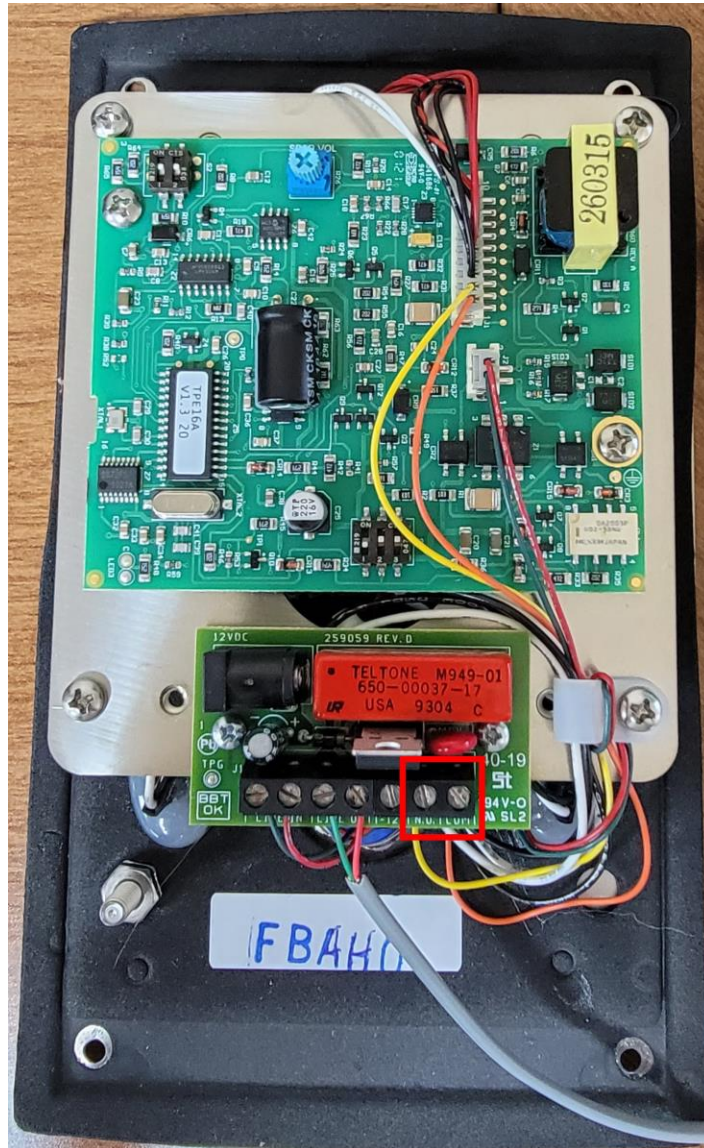
2. Connect the Earth Ground wire to the faceplate grounding stud that is located in the lower-left.



3. The AOR Series Analog Station includes one (1) Auxiliary Input and is optionally available in a configuration that provides one (1) Auxiliary Output (only model numbers with the **-1RO** designator). The optional single Auxiliary Output is rated at a maximum of 500 mA at 200VDC.

The **Auxiliary Input** connection is comprised of the **red-red wires**.

The **Auxiliary Output** connection can be found on **N.O.** and **COM** pins as shown below in the boxed area.



4. Place the phone into its mounting accessory (i.e. either the FM-110 or the SM-110) and secure with four (4) Torx TS-10 security screws (included).

### **3. Auxiliary Inputs/Outputs**

All AOR Series Analog Station models include **one (1) Auxiliary Input**. Some models are **optionally available in a configuration that provides one (1) Auxiliary Output** (only model numbers with the **-1RO** designator).

#### **3.1 Auxiliary Input**

The Auxiliary Input connection is comprised of the **red-red wires**. This input accepts a standard dry contact closure.

#### **3.2 Auxiliary Output**

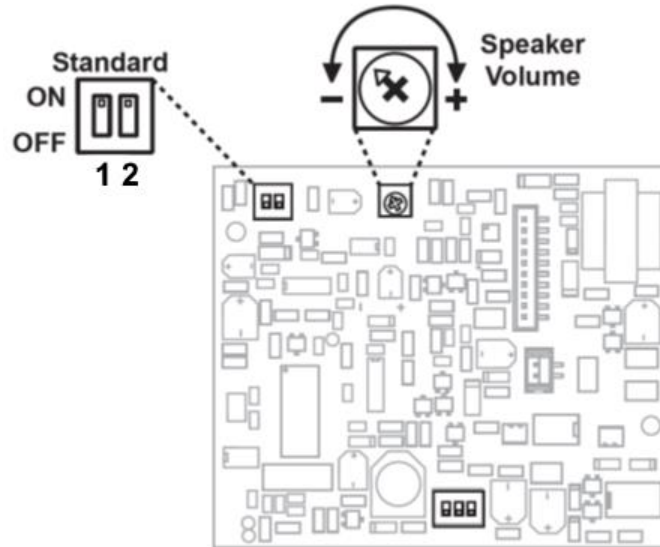
The AOR Series Analog Station is **optionally available in a configuration that provides one (1) Auxiliary Output** (only model numbers with the **-1RO** designator).

The single Auxiliary Output is rated at a maximum of 500 mA at 200VDC. This Auxiliary Output provides a dry contact closure when the unit goes off-hook.

The **Auxiliary Output** connection can be found on **N.O.** and **COM** pins.

**4. Speaker and Microphone Volume**

A speaker volume potentiometer (POT) is provided to increase or decrease the speaker volume—please refer to the illustration below to determine how to adjust the speaker volume.



**NOTE:**

Microphone sensitivity is microprocessor controlled and allows the microphone gain to be automatically increased in a quiet environment—allowing the answering point (receiving end) to clearly hear even soft or distant sounds.

The microprocessor will automatically reduce the microphone sensitivity when the local environment becomes noisy. This Automatic Noise Canceling (ANC) feature allows for intelligible two-way hands-free communication even in environments with the presence of diesel engine or vehicular traffic noise.

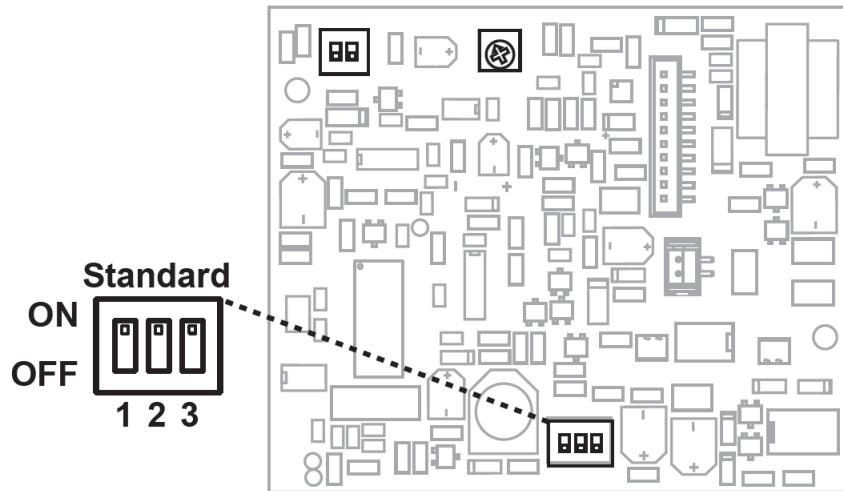
**DIP Switches 1 and 2** are provided to configure a few audio detection modes as outlined below.

DIP Switch 1 Position	DIP Switch 2 Position	Function Description
ON	ON	Normal audio detection mode [Default]
OFF	OFF	Increases sensitivity for audio detection on low level lines. For situations where voice or busy signals have trouble breaking over the speaker.



**5. Mode Configuration DIP Switches**

Mode Configuration DIP Switches #1, 2, and 3 are provided to configure a number of modes as outlined below.



Mode Configuration DIP Switch #	Position	Function Description
1	ON	Pushbutton is used to both place <b>and</b> disconnect calls
	OFF	Pushbutton is only used to place calls [Default]
2	ON	Auto-answers inbound calls [Default]
	OFF	Does <b>NOT</b> auto-answer inbound calls
3	ON	Normal operation mode [Default]
	OFF	Learn mode - Any inbound calls automatically enter into programming mode (no security code required). Use this option if the security code has been lost or forgotten. Any outbound call will dial Talkaphone Technical Support (see <b>Section 6.11, Assisted Programming, p.18</b> ).  <b>IMPORTANT NOTE:</b> When finished programming, set this switch back to the <b>ON</b> position or else the unit will only call Talkaphone Technical Support instead of the programmed phone number(s).

## **6. Software Programming**

### **6.1. Quick Programming Guide**

Programming the AOR Series Analog Station is relatively quick and easy. While it is recommended that you read the complete manual before you begin, the following quick guide will serve many applications.

**NOTE:**

After each **AOR Series Analog Station** programming code, a double-beep indicates the code has been accepted. Four (4) beeps indicate an error—re-enter the code again.

1. Call into the AOR Series Analog Station—it will answer with an open channel (microphone and speaker are active).
2. Enter the default security code: **827827** (or **TAPTAP**)
3. Program the Primary Phone Number to dial: **[0-20 digits for phone number] # 00**  
For dialing a number on a POTS or PSTN telephone line (i.e. calling an outside phone number), use the **10-digit phone number** (i.e. 1 + area code + 7-digit number) of the answering point as the phone number.
4. Program the Second Phone Number (optional, for when the primary phone number is busy or does not answer) to dial: **[0-20 digits for phone number] # 01**
5. Set the call length, silence time out, ring count, and dial next number on busy: **294521 # 18**  
See **Section 6.8, Timing/Dialing Codes, p.15** for further details.
6. Recording a Location Message:
  1. Record the location message for the AOR Series Analog Station in question: **\* 4**  
Wait for the tone to begin speaking/recording. The recorded message has a maximum length of **16 seconds**.
  2. Press any key to stop recording or it will end after 16 seconds. The recorded message will automatically play back.
  3. To review the recorded message again, press: **\* 5**
  4. To delete the recorded message, press: **\* 3**
7. To exit programming and disconnect, press: **# 7**

## 6.2. Accessing Programming Mode

The AOR Series Analog Station can be programmed from a standard touch-tone telephone through an analog PBX extension or an analog PSTN line.

It is essential to program at least one telephone number for the Talkaphone unit to operate.

After entering the access code, the order in which codes are entered is irrelevant.

**NOTE:**

After each programming code, a double-beep indicates the code has been accepted. Four (4) beeps indicate an error—re-enter the code again.

### 1. **Using the Security Code**

1. **Mode Configuration DIP Switch #2** is configured at the factory to be in the **ON** position—this configures the call station to answer incoming calls. Move to the **ON** position if that is not the case.
2. Call into the AOR Series Analog Station.
3. Enter the default security code: **827827** (or **TAPTAP**)
4. The call station will output a double-beep and enter programming mode—any programming code(s) may now be entered. See **Section 6.4, p.13** for a comprehensive list of programming codes.
5. When programming is completed, enter this code to disconnect: **# 7**

### 2. **Without Using the Security Code**

1. **Mode Configuration DIP Switch #2** is configured at the factory to be in the **ON** position—this configures the call station to answer incoming calls. Move to the **ON** position if that is not the case.
2. Move **Mode Configuration DIP Switch #3** to the **OFF** position—this configures the call station to answer incoming calls and automatically enter programming mode without the security code.
3. Call into the AOR Series Analog Station.
4. When the call station answers, it will output a double-beep and automatically enter programming mode—any programming code(s) may now be entered. See **Section 6.4, p.13** for a comprehensive list of programming codes.
5. When programming is completed, enter this code to disconnect: **# 7**
6. Finally, return **Mode Configuration DIP Switch #3** to the **ON** position.

**NOTE:**

If **Mode Configuration DIP Switch #3** is not returned to the **ON** position, activating the pushbutton will call Talkaphone Technical Support instead of the programmed phone number(s).

### 6.3. Security Code

When **Mode Configuration DIP Switch #3** is in the **ON** position, the AOR Series Analog Station will require a security code before it can be programmed.

The default security code is: **827827** (or **TAPTAP**)

Talkaphone highly recommends that this security code be changed from the default value. To change the security code, follow these steps:

1. Access programming mode as outlined in **Section 3.2**.
2. Enter:              # 19

**NOTE:**

The security code must be comprised of six (6) numeric digits.

3. Hang up or enter this code to disconnect:        **# 7**

If the security code is lost or forgotten, either reprogram the security code when **Mode Configuration DIP Switch #3** is set to the **OFF** position or reset the unit to factory defaults.

### 6.4. Summary List of Programming Codes

Programming Code	Then Enter	Memory Slot	Function Description
0-20 digits	+	#00	Primary autodial phone number for pushbutton
0-20 digits	+	#01	Secondary autodial phone number for pushbutton
0-20 digits	+	#02	Third autodial phone number for pushbutton
0-20 digits	+	#03	Fourth autodial phone number for pushbutton
0-20 digits	+	#04	Fifth autodial phone number for pushbutton
0-20 digits	+	#05	Autodial phone number for central station receiver line
0-20 digits	+	#06	Autodial phone number for central station voice line
0-20 digits		#07	Primary autodial phone number for Auxiliary Input
0-20 digits		#08	Secondary autodial phone number for Auxiliary Input
0-20 digits		#09	Third autodial phone number for Auxiliary Input
6 digits	+	#17	Voice message/other options. For further details, see <b>Section 6.9, Voice Message Codes, p.16.</b> [Default 001210]
6 digits	+	#18	Timing/dialing options. For further details, see <b>Section 6.8, Timing/Dialing Codes, p.15.</b> [Default 234721]
6 digits	+	#19	Change the security code [Default 827827 or TAPTAP]
0-20 digits	+	#20	Primary ID number for central station [Default no ID number set]
0-20 digits	+	#21	Secondary ID number for central station [Default no ID number set]
6 digits	+	#23	Talk-A-Lert ID number
* *			Add a * at any point of the dial string
* #			Add a # at any point of the dial string
* 7			Add 4-second pause at any point of the dial string
[Enter No Digits]	+	#00 through #06	Clear autodial phone numbers
* 0			Diagnostic tones to check microphone/speaker operation
* 1			Enable the Talk-A-Lert ID number to be transmitted when the AOR Series Analog Station auto-answers an inbound call
* 2			Enable the Talk-A-Lert ID number to be transmitted when the remote side answers the call (i.e. an outbound call)
* 6			Disable * 1 and * 2 [Default]
#			Disconnect or terminate an active outbound call only (i.e. cannot terminate/disconnect inbound calls or programming mode calls)
# 7			Exit programming mode and disconnect
# # #			Reset to factory defaults

**NOTE:**

After each programming code, a double-beep indicates the code has been accepted. Four (4) beeps indicate an error—re-enter the code again.

## 6.5. Autodial Phone Numbers for the Pushbutton

When the pushbutton is activated, the unit will dial up to five (5) phone numbers in round robin fashion. If the first phone number does not answer or is busy, the unit will dial the second phone number. If the second phone number does not answer or is busy, the unit will dial the third phone number—and so on.

To program autodial phone numbers, enter the phone number (up to 20 digits) followed by the memory slot number (i.e. **#00** through **#04**).

To delete or clear a speed dial location, enter the memory location only (**#00** through **#04**).

There are no autodial phone numbers programmed at the factory.



Entering **\* 7** inserts a four second pause at any point of the dial string.

For example:

- When needing to dial 9 to obtain an outside line, enter: **9 \* 7 + phone number**
- This allows the phone system to switch to an outside line without missing dialed digits.
- When dialing pagers or voice mail systems, use **\* 7** in the dial string where a pause is required.

## 6.6. Autodial Phone Numbers for the Auxiliary Input

When a dry contact closure is provided to the Auxiliary Input, the unit will dial up to three (3) phone numbers in round robin fashion. If the first phone number does not answer or is busy, the unit will dial the second phone number. If the second phone number does not answer or is busy, the unit will dial the third phone number. If the third phone number does not answer or is busy, the unit will dial the first phone number—and so on.

To program autodial phone numbers, enter the phone number (up to 20 digits) followed by the memory slot number (i.e. **#07** through **#09**).

To delete or clear a speed dial location, enter the memory location only (**#07** through **#09**).

There are no autodial phone numbers programmed at the factory.

## 6.7. Talk-A-Lert Identification (ID) Number

The Talk-A-Lert ID number (6-digits) is used by the AOR Series Analog Station as a means to identify the location of the caller to the remote side. When the **\* 2** programming code is enabled, the Talk-A-Lert ID number will transmit when the answering point (receiving side) answers the call.

Alternatively, the answering point (receiving side) can request the Talk-A-Lert ID number to transmit on demand by pressing **\*** on their keypad.

This ID number (6-digits) can be utilized by Talk-A-Lert (ETP-TAL) for both listening and polling functions.

To program the Talk-A-Lert ID number, enter 6-digits followed by **#23**. For example, if the ID number is 123456, enter this as the programming code: **1 2 3 4 5 6 # 2 3**

Talk-A-Lert ID numbers should be logically assigned—for example, if the call station is located in the third elevator of the second elevator bank in the fifth building on campus, an ID number of **0 5 0 2 0 3** may be assigned.

## 6.8. Timing/Dialing Codes

The timing/dialing code is comprised of six (6) digits in the following format—parameters A through F are defined in the table below:      **A B C D E F # 1 8**

The factory default timing/dialing code is:      **2 3 4 7 2 1 # 1 8**

Parameter	Function Description	Values	Definition
A	<b>Talk/Listen Delay.</b> Switching time between talk and listen modes (i.e. VOX switching time).	1	0.1 seconds
		2	0.2 seconds <b>[Default]</b>
		3	0.3 seconds
		4	0.4 seconds
		5	0.5 seconds
		6	0.6 seconds
		7	0.7 seconds
		8	0.8 seconds
		9	0.9 seconds
B	<b>Call Length.</b> Sets maximum length of time the AOR Series Analog Station can be connected to a call.  When disabled, a CPC (Calling Party Control) disconnect pulse (voltage drop at end of call), busy signal, silence, or return to dial tone will be required for proper hang up.	0	Disabled
		1	1 minute
		2	2 minutes
		3	3 minutes <b>[Default]</b>
		4	4 minutes
		5	5 minutes
		6	6 minutes
		7	7 minutes
		8	8 minutes
C	<b>Silence Time Out.</b> Sets the length of time a call will be connected without any voice transmission.	0	Disabled
		1	10 seconds
		2	20 seconds
		3	30 seconds
		4	40 seconds <b>[Default]</b>
		5	50 seconds
		6	60 seconds
		7	70 seconds
		8	80 seconds
		9	90 seconds
D	<b>Dial Next Number Timer.</b> Sets the number of rings before the AOR Series Analog Station dials the next phone number in the number list.	0 or 1	Disabled
		2, 3, 4, ..., 9	Dials next number after 2, 3, 4, ..., 9 rings <b>[Default 7 rings]</b>
E	<b>Dial Next Number on Busy.</b> When a busy is detected the AOR Series Analog Station will dial the next phone number in the number list.	1	Disabled
		2	Enabled <b>[Default]</b>
F	<b>Not Used</b>	Always set to 1.	-

### 6.9. Voice Message Codes

Voice messages allow for a pre-recorded message to play automatically when the answering point (receiving end) answers the call. Typically, physical location information is provided through this voice message to identify the unit to the answering point. The maximum length of a voice message is 16 seconds.

**NOTE:**

The voice message feature is **NOT** supported on calls placed via the Auxiliary Input.

The voice message code is comprised of six (6) digits in the following format—parameters A through F are defined in the table below:      **A B C D E F # 1 7**

The factory default timing/dialing code is:      **0 0 1 2 1 0 # 1 7**

Parameter	Function Description	Values	Definition
A + B	<p><b>Two-Digit Voice Message Delay.</b> Sets the amount of time required to elapse (1-99 seconds) after dialing the phone number before the voice message plays.</p> <p>Factory set to automatically start playing the voice message after the AOR Series Analog Station has determined the call has been answered.</p> <p><b>Important Note:</b> If this delay is used, adequate time must be allowed for the unit to detect ring-no-answer and busy signals when used in conjunction with redial features.</p>	00	Play automatically <b>[Default]</b>
		01	1 second
		02	2 seconds
		...	...
		98	98 seconds
		99	99 seconds
C	<p><b>Repeat Voice Message.</b> The AOR Series Analog Station can be programmed to play the voice message from 1-9 times, or to continuously repeat the voice message every 8 seconds until a touch tone * is detected from the answering point. The “ANSWERED” LED will turn on automatically after the voice message has stopped repeating.</p>	0	Repeat every 8 seconds
		1	Play 1 time <b>[Default]</b>
		2	Play 2 times
		...	...
		8	Play 8 times
		9	Play 9 times
D	<p><b>Hang Up on Return to Dial Tone.</b> If enabled and a return dial tone is detected, the AOR Series Analog Station will hang up.</p>	1	Disabled
		2	Enabled <b>[Default]</b>
E	<p><b>Double Ring Cadence Mode.</b> The AOR Series Analog Station can be programmed to recognize the double ring cadence that is outputted by many phone systems. If the AOR Series Analog Station is connected to an extension that provides a double ring cadence, then enabling this mode will</p>	1	Disabled <b>[Default]</b>
		2	Enabled



	allow for proper call progress detection.		
F	<p><b>Lap Counter.</b> The lap counter determines how many times the AOR Series Analog Station will cycle through its list of up to five (5) phone numbers (or up to three (3) phone numbers if calling through the Auxiliary Input) before it stops the dialing process and hangs up.</p> <p>When all of the programmed phone numbers have been dialed, the lap counter increments and the dialing process repeats. When the lap counter has been met, the dialing process stops and the AOR Series Analog Station hangs up.</p> <p>When the lap counter is disabled (default), if the AOR Series Analog Station is programmed to dial the next number on ring-no-answer and/or busy signal, the AOR Series Analog Station will continuously call its programmed phone numbers indefinitely until the call is answered.</p>	0	Disabled [Default]
		1	1 time
		2	2 times
		...	...
		8	8 times
		9	9 times

### 6.10. Recording the Voice Message

The voice message is recorded from a standard touch-tone telephone through an analog PBX extension or analog PSTN line.

Typically, physical location information is provided through this voice message to identify the unit to the answering point. For example, "233 South Wacker, northeast stairwell B, 8th floor requires assistance. Press \* to repeat this message".

1. Call into the AOR Series Analog Station and access programming mode (see **Section 6.2 Accessing Programming Mode, p.11**).
2. Enter this code to initiate recording, wait for a single beep, and begin speaking:     \* 4  
**NOTE:** The maximum duration for a voice message is 16 seconds.
3. Press any key to stop recording.  
**NOTE:** After recording, the voice message will automatically play back as a preview.
4. Enter this code to preview the voice message again:                                     \* 5
5. Enter this code to clear the voice message:   \* 3

**NOTE:**

The voice message feature is **NOT** supported on calls placed via the Auxiliary Input.

### 6.11. Assisted Programming

If the phone number of the line connected to the AOR Series Analog Station is unknown, the call station can be configured to automatically call Talkaphone Technical Support for assistance.

Set **Mode Configuration DIP Switch #3** to the **OFF** position (programming mode) and activate the pushbutton. The unit will then call Talkaphone Technical Support no matter if it is connected directly to a PSTN line or on an analog PBX extension.

The unit will first dial 9 and listen for a second dial tone. If a second dial tone is detected, the unit will then continue to dial the following:

**1-773-539-1100, 12-second pause, 2, 16-second pause, 1**

This call is long distance, so the phone line must support long distance calls.

**NOTE:**

If **Mode Configuration DIP Switch #3** is not returned to the **ON** position, activating the pushbutton will call Talkaphone Technical Support instead of the programmed phone number(s).

### 6.12. Operation Codes

The following codes can be used to perform functions during an active phone call:

Operation Code	Function Description
*	<b>Three (3) functions:</b> <b>(1)</b> Play the voice message only (if recorded) <b>(2)</b> Transmit the ID number (if programmed) only when no voice message is recorded <b>(3)</b> Transmit the ID number (if programmed), then play the voice message (if recorded)
#	Immediately disconnect the call and hang up the AOR Series Analog Station (only for outbound calls)

## 7. Operation

### 7.1. Pushbutton Operation

When the pushbutton of the AOR Series Analog Station is pressed, the unit will go off-hook and dial up to five (5) pre-programmed phone number(s) in round robin fashion if a phone number is busy or does not answer.

The “**ANSWERED**” LED momentarily flashes while dialing.

When the call is answered, the voice message (if recorded) will automatically play to identify the physical location of the phone call. The unit by default plays the voice message once, and then automatically illuminates the “**ANSWERED**” LED to indicate that hands-free communication to the answering point has been established.

During an active call, if the remote side (answering point or receiving end) presses the \* key, the unit will transmit the ID number (if programmed), then play the voice message again. The remote side will then be advised of the physical location of the phone call through either the voice message or the information displayed in the Talk-A-Lert software when it decodes the DTMF ID number.

Once the “**ANSWERED**” LED is activated, the # key can be used on the remote side to terminate the call or hang up the AOR Series Analog Station.

### 7.2. Auxiliary Input Operation

The Auxiliary Input allows for remote call activation on the AOR Series Analog Station via a dry contact closure. Examples of external devices that could provide this dry contact closure include Model SA-1 Scream Alert, an elevator emergency stop button, a sensor for a stuck elevator or open elevator door, smoke detector, alarm switch, etc.

When a dry contact closure is provided to the Auxiliary Input, the unit will go off-hook and dial up to three (3) pre-programmed phone number(s) in round robin fashion if a phone number is busy or does not answer.

The “**ANSWERED**” LED momentarily flashes while dialing.

When the call is answered, the unit will automatically illuminate the “**ANSWERED**” LED to indicate that hands-free communication to the answering point has been established.

The voice message feature is **NOT** supported on the Auxiliary Input.

Once the “**ANSWERED**” LED is activated, hanging up the handset or pressing the # key on the remote side phone will terminate the call.

### 7.3. Calling the AOR Series Analog Station from the Remote Side

1. On a regular touch-tone telephone, enter the telephone number of the Phone you wish to call. After a short pause, the unit will answer with an open channel (i.e. microphone and speaker are active).
2. Begin speaking to any person at the unit.
3. Hang up the handset on the remote side to terminate the call.

**NOTE:**

The # key cannot be used to terminate inbound calls to the AOR Series Analog Station.

#### **7.4. Answering a Call from the AOR Series Analog Station at the Remote Side**

1. The telephone at the remote side (answering point or receiving end) will ring.
2. The attendant should answer and speak—two-way communication has now been established with the unit.
3. To terminate the call, press the # key on the remote side telephone or hang up the handset.

#### **7.5. Auxiliary Output Operation**

The AOR Series Analog Station is **optionally available in a configuration that provides one (1) Auxiliary Output** (only model numbers with the **-1RO** designator). The Auxiliary Output allows for triggering external devices or systems, such as activating a siren or strobe light, triggering a camera to pan/tilt/record, opening a door, etc.

This Auxiliary Output provides a dry contact closure when the unit goes off-hook.

## **8. Frequently Asked Questions**

1. **If the security code is lost or forgotten, can Talkaphone access my unit through a software "backdoor" to retrieve it?**

**Answer:** Unfortunately not. If the security code is lost or forgotten, either reprogram the security code when **Mode Configuration DIP Switch #3** is set to the **OFF** position or reset the unit to factory defaults.

2. **I have made several mistakes in programming my phone and/or I do not know what has been programmed into the unit. Can I start over from the factory settings?**

**Answer:** Yes, enter programming mode and enter **###** to reset the unit to factory defaults. You can then reprogram the unit accordingly.

3. **Does the AOR Series Analog Station retain its programming if I unplug it?**

**Answer:** Yes, the unit utilizes non-volatile memory and does not require a backup battery to retain its programming.

6. **How do I change the programming on an AOR Series Analog Station when it is on an active call?**

**Answer:** You cannot. Please refer to **Accessing Programming Mode, Section 6.2, p.11**.

7. **The AOR Series Analog Station is installed in an area or environment with a highly reflective surface (e.g., glass or metal), is there anything I can do to improve the sound quality?**

**Answer:** At the top of the printed circuit board assembly (PCBA), there is a **blue** POT trimmer that controls the speaker volume. **CAREFULLY** adjust this trimmer with a small Phillips screwdriver and decrease the volume accordingly. See **Speaker and Microphone Volume, Section 4, p.8** for further information.

## 9. Basic Troubleshooting

Problem	Possible Causes
My unit does not function at all. I cannot call it or call out on it.	<ol style="list-style-type: none"> <li>1. The phone line is not properly connected.</li> <li>2. The unit has been struck by lightning or another very high voltage source. Contact Talkaphone's Service Department.</li> <li>3. There isn't enough power on the line (see <b>Technical Requirements, Section 1.3, p.3</b>).</li> </ol>
I can hear the remote side, but they cannot hear me.	The unit is programmed to play a voice message upon answering, but background noise or silence has been recorded. The answering point (remote side) will hear this voice message before the unit establishes two-way communication.
The unit does not hang up.	<ol style="list-style-type: none"> <li>1. The unit is not programmed properly (see <b>Software Programming, Section 6, p.10</b>).</li> <li>2. The unit is on a phone line that does not provide (A) a hang up pulse and (B) produces a re-order tone or howler. Consult the phone system administrator for further assistance.</li> </ol>
When the remote side answers the phone, they hear a series of tones before being able to speak.	The unit is transmitting its unique Talk-A-Lert ID number. If you are using Talk-A-Lert to identify the location of incoming calls, these tones are required. If not, use this programming code to disable transmission of the Talk-A-Lert ID when the call is answered: * 6
The unit gets dial tone, dials and then hangs up.	The phone line is not providing sufficient power (see <b>Technical Requirements, Section 1.3, p.3</b> ).
My external device is connected to the Auxiliary Input, but it does not activate the AOR Series Analog Station.	Check that the external device is providing a dry contact closure. The Auxiliary Input on the AOR Series Analog Station only supports a dry contact closure.
My phone will not successfully dial the second phone number if the first one is busy or not answered.	Make sure you have programmed a secondary number in the <b>#01</b> memory slot. Reprogram <b>#01</b> for good measure.

## 10. Talkaphone Terms of Use and Limited Warranty

This Product includes intellectual property and proprietary rights owned by Talk-A-Phone, LLC and/or its licensors. Your use of this Product confirms your agreement that Talk-A-Phone, LLC and/or its licensors retain all right, title and interest in and to all such property; that your rights are to access and use the Product for your internal business use only; that all Product elements will be maintained as confidential; and that the Product may not be rented, leased or lent to third parties, reverse engineered, decompiled or disassembled, or otherwise used for any purpose other than as an access device for your premises.

Talk-A-Phone, LLC warrants Talk-A-Phone Emergency Phone, Call Station, and Wide-Area Emergency Broadcast System equipment against any defects in material and workmanship, under normal use, for a period of twenty-four (24) months from date of installation, provided that Talk-A-Phone receives a completed "Installation Certification" certifying the date on which the system has been installed. An "Installation Certification" card is enclosed with every unit. In the event that no "Installation Certification" is received by Talk-A-Phone, the twenty-four (24) months will commence on the date of shipment by Talk-A-Phone. Warranty period for the metal elements of models in the GP Series Pedestals, MT Series Towers, MTE Series Towers, MT/R Series Towers, PM Series Pedestals, SM Series Surface Mounts, Via Series Mounts, and WM Series Wall Mounts is five (5) years, under the same terms and conditions. Warranty period for Area of Rescue Products is sixty (60) months, under the same terms and conditions. Warranty period for Intercommunication Products is twelve (12) months, under the same terms and conditions.

If the Product is found by Talk-A-Phone to be defective within the warranty period, **Talk-A-Phone's only obligation, and your exclusive remedy**, is for the repair or replacement of any defective parts, provided that the Product is returned to us at 7530 N. Natchez Ave., Niles, IL 60714. Talk-A-Phone shall have no obligation to furnish or pay for the labor of any third parties or bear the expense of shipping defective Products for repair. In no event shall Talk-A-Phone or its licensors or suppliers be liable for any form of exemplary or punitive damages, or any special, indirect or consequential damages. TALK-A-PHONE EXPRESSLY DISCLAIMS ALL OTHER WARRANTIES, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. In no event shall Talk-A-Phone or its licensors or suppliers be liable for any form of exemplary or punitive damages, or any special, indirect or consequential damages. Your use of this Product constitutes your agreement to all of the foregoing terms.

Further information is available at [talkaphone.com/legal](http://talkaphone.com/legal)

THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.

**Talkaphone Factory Service.** Talkaphone's factory repair service is available to Talkaphone's product owners at a reasonable charge, plus transportation to and from our factory. When returning units freight prepaid to our factory, Talkaphone's technicians will examine, service and promptly return the units back to you, transportation collect.

**You must receive a Return Materials Authorization (RMA) number from the Talkaphone's service department prior to sending units in for repair.** Contact Talkaphone at 773-539-1100 for troubleshooting or to obtain an RMA number.

Talkaphone also offers replacement components for most of our products to dealers and end users at a reasonable charge. When ordering, please give either the component part number or a brief description of the component's function and the model for which it is needed. Also, please have your purchase order number ready and provide Talkaphone's representative with your full name, address, and telephone number for faster service

## **11. Federal Communications Commission (FCC) Information**

This equipment complies with Part 68 of the FCC Rules and the requirements adopted by the ACTA. In order to comply with the FCC Rules, the following information must be carefully read and the applicable portions followed completely. This information must be provided to the consumer.

1. The ringer equivalence number (REN) is used to determine the number of devices that can be connected to a telephone line. Excessive RENs on a telephone line may result in the devices not ringing in response to an incoming call. In most, but not all areas, the sum of the RENs should not exceed 5.0. To be certain of the maximum number of devices that can be connected to a line, as determined by the total RENs, contact the local telephone company.
2. The plug used to connect this equipment to the premises wiring and telephone network must comply with the applicable FCC Part 68 rules and requirements adopted by the ACTA. If your facility has specially wired alarm equipment connected to the telephone line, ensure the installation of the equipment does not disable the alarm equipment. If there are any questions or concerns regarding the impact on alarm equipment, consult your telephone company or a qualified installer.
3. If this equipment (indicated with trade name and model) causes harm to the telephone network, the telephone company will notify you in advance that temporary discontinuance of service may be required. However, if advance notice is not practical, the telephone company will notify the customer as soon as possible. Also, you will be advised of your right to file a complaint with the FCC if you believe it is necessary.
4. The telephone company may make changes to its facilities, equipment, operations, or procedures that could affect the operation of this equipment. If this happens, the telephone company will provide advance notice in order for you to make the necessary modifications to maintain uninterrupted service.
5. If trouble is experienced with this equipment (indicated below with trade name and model, together with the address and telephone number of a service center in the United States), contact the manufacturer for repair and/or warranty information.
6. If the trouble is causing harm to the telephone network, the telephone company may request that you disconnect the equipment from the network until the problem is resolved. User repairs must not be made—doing so will void the warranty.
7. For troubleshooting, repair, or warranty information, please contact our service center:  

**Talkaphone Service Co.**  
7530 N. Natchez Ave.  
Niles, IL 60714  
Phone: 773-539-1100  
Email: [support@talkaphone.com](mailto:support@talkaphone.com)
8. Connection to a party line service is subject to state and local tariffs. Contact the state's public utility commission, public service commission, or corporation commission for information.
9. The user is cautioned that any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
10. **WHEN PROGRAMMING EMERGENCY NUMBERS AND/OR PLACING TEST CALLS TO EMERGENCY NUMBERS:**  
Remain on the line and briefly explain to the dispatcher the reason for the call. Perform such activities in the off-peak hours, such as early morning or late evenings.
11. It is recommended that the customer install a surge arrester to the telephone line on which this device is connected. This mitigates risk of damage to the equipment as a result of local lightning strikes and other electrical surges.



## **12. Part 15 Limitations**

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 when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at their own expense.

## **13. Maintenance**

### **13.1. Testing**

It is recommended to periodically test the functionality of an AOR Series Analog Station to ensure it is operational. You should consult your integrator or Talkaphone dealer about the necessity of such functional tests and their frequency. Optionally, Talk-A-Lert polling software (Model **ETP-TAL**) can be utilized to verify connectivity and basic functioning of AOR Series Analog Stations on a regular basis.

### **13.2. Cleaning**

It is recommended to periodically clean the faceplate surface of the AOR Series Analog Station with a cleanser or a cleanser and water mixture. If it is safe to use on glass, it is generally considered safe to use on stainless steel. Wipe the faceplate dry when finished.

Inspect the equipment frequently. If you notice discoloration, tarnish, or water stains, increase the frequency of your cleanings. You can also try cleaning with borax, soda ash, or a non-abrasive commercial cleanser and water. Deeper stains may be removed with a magnesium oxide, ammonia, and water paste. Wipe clean with water, rinse, and dry the faceplate.

Light corrosion or rusting on the faceplate can be removed with a stronger cleaning agent, such as Simichrome Polish. For stronger corrosion, naval jelly is recommended. To remove or reduce pitting damage caused by corrosion, mechanical polishing is preferred to chemical cleansing. Scotch-Brite works well for this purpose. Work only in the direction of the existing grain and never use steel wool.

Please refer to ASTM A-967 and ASTM A-380 guidelines regarding stainless steel passivation and maintenance.

### **13.3. Preventative Maintenance**

For most installations, the stainless steel finish does not require any maintenance to prevent the occurrence of corrosion. In rare cases (e.g., high humidity environment, exposure to airborne contaminants or direct contact with certain chemical compounds like salt spray), it may be required to perform preventative maintenance on a regular basis.

A regular automotive wax can be used to prevent corrosion of the stainless steel. Follow these directions to reinforce the chromium oxide layer on the faceplate and prevent it from further corrosion:

- Wet a cleaning pad with fresh water (do not use chlorine water) and apply powered cleanser;
- Using gentle pressure, rub stained areas in the same direction of the existing polishing grain until stains are removed;
- Rinse with clean water. Use cleaner de-greaser to remove any stains;
- Thoroughly dry the stainless steel faceplate;
- Apply a layer of an automotive wax on the faceplate and wait until it dries out to a haze;
- Buff the wax in with a soft dry cloth until the residue is gone.

#### **IMPORTANT NOTE:**

**DO NOT** use steel wool, sandpaper, mineral acids, bleach, or chlorine-based cleansers on the stainless steel surface.

**14. AOR Series Analog Station Installation Information Sheet**

This installation information sheet has been provided in order to retain this information for future maintenance and operation of this call station.

**Model Number: AOR-CS\_\_\_\_\_**

**Installation Date: \_\_\_\_\_**

1. To Reach This Unit, Call This Phone Number: \_\_\_\_\_
2. Phone Physical Location: \_\_\_\_\_  
\_\_\_\_\_
3. Type of Phone Line: \_\_\_\_\_ Telephone Company  
\_\_\_\_\_ PBX Extension
4. Phone Number #1 Programmed: \_\_\_\_\_
5. Phone Number #2 Programmed: \_\_\_\_\_
6. Phone Number #3 Programmed: \_\_\_\_\_
7. Phone Number #4 Programmed: \_\_\_\_\_
8. Phone Number #5 Programmed: \_\_\_\_\_
9. Voice Message: \_\_\_\_\_ Yes \_\_\_\_\_ No
10. PBX Ringdown: \_\_\_\_\_ Yes \_\_\_\_\_ No
11. PBX Prefix (If Needed): \_\_\_\_\_
12. Auxiliary Devices (If Used)

**NOTES**

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