



THIS PRODUCT MUST BE INSTALLED IN ACCORDANCE WITH THE APPLICABLE INSTALLATION CODE BY A PERSON FAMILIAR WITH THE CONSTRUCTION AND OPERATION OF THE PRODUCT AND THE HAZARDS INVOLVED

CE PRODUIT DOIT ÊTRE INSTALLÉ SELON LE CODE D'INSTALLATION PERTINENT, PAR UNE PERSONNE QUI CONNAÎT BIEN LE PRODUIT ET SON FONCTIONNEMENT AINSI QUE LES RISQUES INHÉRENTS



THIS PRODUCT MUST BE INSTALLED IN AN ENVIRONMENT CONSTANTLY MAINTAINED BETWEEN THE AMBIENT TEMPERATURE RANGE OF +52°F to +98°F (+11°C to +37°C).

ENSURE THAT THE HEATING AND COOLING SYSTEMS FOR THE CONTROLLED ENVIRONMENT ARE SUPPLIED BY A STANDBY POWER SOURCE CAPABLE OF SUSTAINING THE SYSTEMS FOR A MINIMUM STANDBY TIME OF 24 HOURS.

I. Introduction

This installation guide provides instructions for installation, programming, and operation of **Model AOR-5 or Model AOR-10**. For instructions on installation or programming of Talkaphone Area of Rescue Call Stations, please refer to the manual for the AOR-CSE Analog Call Station.

It is recommended that this instruction set be read completely prior to the start of any installation.

II. Contents

Please ensure receipt of each of the included **AOR-5 / AOR-10** components:

QTY	Part Number	Description
1	AOR-5 or AOR-10	5- or 10-Station Area of Rescue Command Unit
1	68684	12VDC, 7Ah Backup Battery

Optional components (sold separately) include:

QTY	Part Number	Description
1	AOR-TR10	Trim Ring for Flush Mounting Model AOR-5 or Model AOR-10 without Latched Door
1	AOR-TR10-D	Trim Ring for Flush Mounting Model AOR-5 or Model AOR-10 with Latched Door
8	42970	6-18 Phillips Screw for Flush Mount Trim Ring



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III. Technical Requirements

Programming:

At time of installation or programming, please have either of the below ready:

- Connect a Sub-Command Unit or telephone test set to either the **SUB-C 1** or **SUB-C 2** terminal.

The Sub-Command Unit (Model **AOR-SCU-1**) is sold separately as an accessory.

A telephone test set can be purchased from any telecom retailer—examples include the Fluke TS30 Series or a basic corded trimline telephone.

- Connect a PSTN/POTS telephone line (i.e. analog telephone line) to the **PSTN Line** terminal.

Please note the phone number of the telephone line—you will need that number in order to call from another telephone (e.g., cell phone).

Power for Command Unit:

Please provide either:

- **115VAC, 3.5A** when installed with Model **AOR-PSU-5-10** power supply (sold separately);
- Or a **regulated 24 VDC, 2A power source** (supplied by others).

Power for AOR-CSE Analog Call Stations:

AOR-CSE Analog Call Stations are line-powered by the AOR-5 / AOR-10 Command Unit.

Cabling should meet these specifications:

- Twisted, shielded pair specifically designed for use with analog telephones
- Connect shield to earth ground at the Command Unit
- Distance ranges for recommended wire gauges are provided in the table below:

Distance from Command Unit to AOR-CSE Analog Call Station or Local Phone(s)	Recommended Wire Gauge
0 to 1,000 feet	24 AWG
1,001 to 1,500 feet	22 AWG
1,501 to 2,500 feet	20 AWG
2,501 to 3,500 feet	18 AWG

PSTN/POTS Telephone Line:

For Local Mode Only:

No external phone line (i.e. POTS/PSTN telephone line) is required.

For Remote Mode:

One (1) dedicated POTS/PSTN telephone line (i.e. analog telephone line or analog PBX extension line).

If connected to a PBX, the analog extension must provide:

1. Minimum of 24V talk battery and 20 mA off-hook loop current
2. Either a CPC (Calling Party Control) disconnect pulse (voltage drop at end of call) or 30-seconds of silence after hang-up (no re-order or howler feature)

If connected to a POTS/PSTN line, there must be no special features, such as hook-flash, call-waiting, auto-redial when busy or voicemail. If the telephone company has activated any such features, contact them to have these features turned off.

IV. System Overview

1. Local Mode

In Local Mode, pressing the button on any of the Talkaphone Analog Call Stations will call the **AOR-5 / AOR-10** Command Unit and/or Sub-Command Unit(s).

2. Remote Mode

Remote Mode is primarily used when a central control point is not always constantly attended.

In Remote Mode, the Command Unit will allow any of the Talkaphone Analog Call Stations access to a phone line for remote dial out.

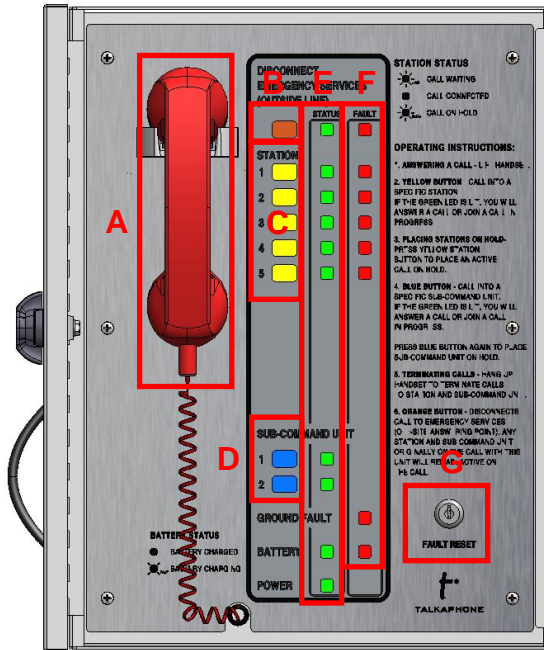
In this mode, Talkaphone Analog Call Stations can dial, in round robin fashion, from a list of up to five (5) phone numbers—this list can be comprised of a mix of remote phone numbers or local answering points (i.e. the **AOR-5 / AOR-10** Command Unit and/or Sub-Command Unit(s)).

For this configuration, connect an outside phone line to the **PSTN Line** terminal.



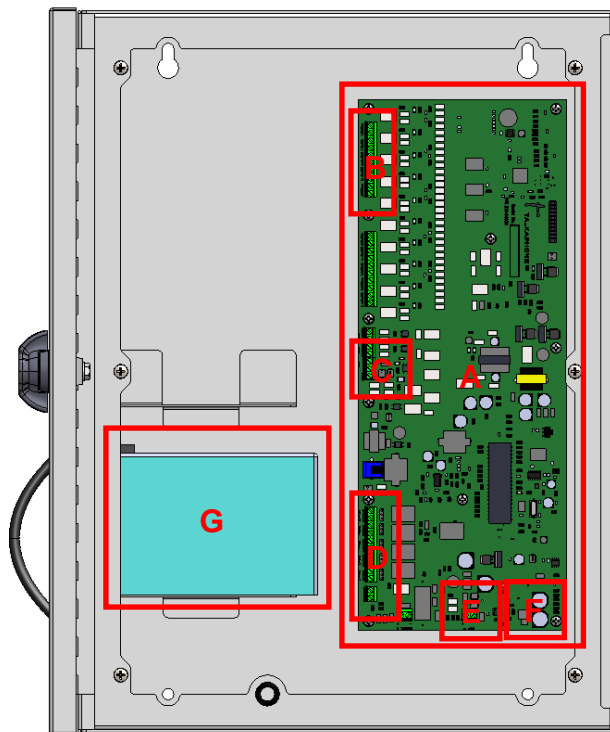
NOTE: See p.2, **Technical Requirements**, for outside phone line requirements.

V. Internal System Components



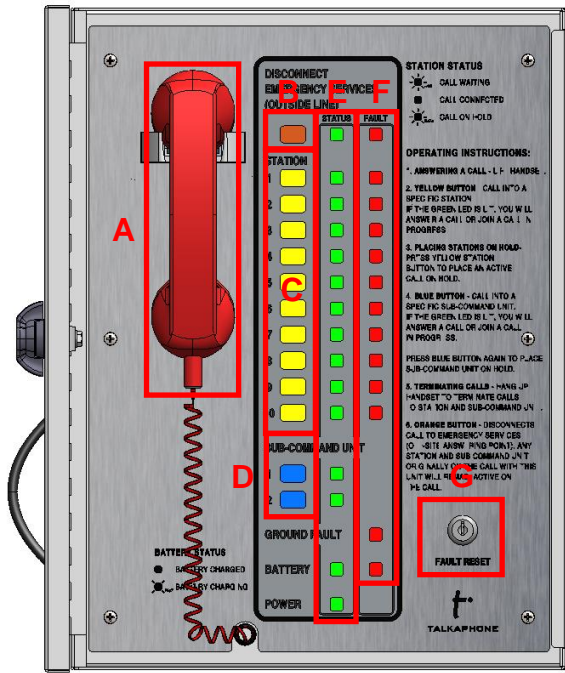
Item	Component
A	Local Handset
B	PSTN Line Disconnect Button
C	Station Selection Buttons
D	Sub-Command Unit Selection Buttons
E	Status LEDs
F	Fault LEDs
G	FAULT RESET Key Switch

Figure 1. Model AOR-5, front view.



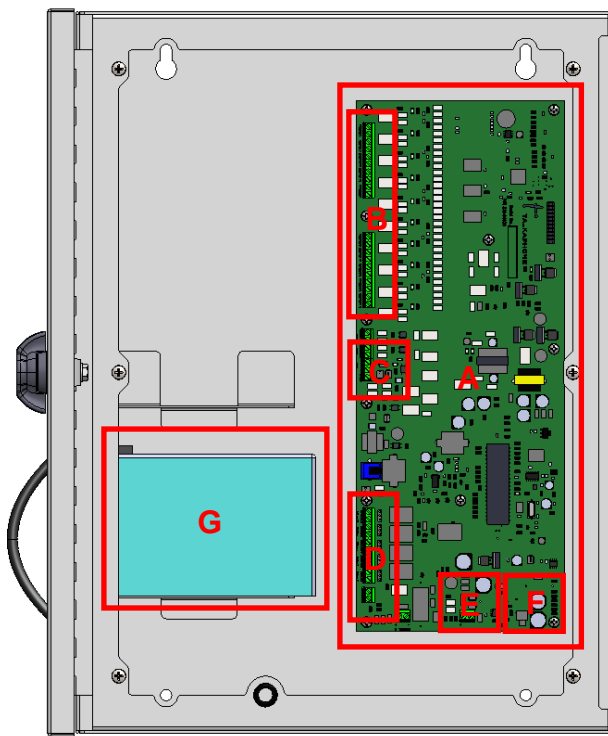
Item	Component
A	5-channel Controller Board
B	Station 1-5 Terminals
C	PSTN Line Terminal
D	Open/Short/System Ground Fault/AOR-CSE Station Activation Relay Outputs
E	24VDC Input Terminal
F	Orange-red Configuration Button
G	12VDC, 7Ah Backup Battery

Figure 2. Model AOR-5, internal components.



Item	Component
A	Local Handset
B	PSTN Line Disconnect Button
C	Station Selection Buttons
D	Sub-Command Unit Selection Buttons
E	Status LEDs
F	Fault LEDs
G	FAULT RESET Key Switch

Figure 3. Model AOR-10, front view.



Item	Component
A	10-channel Controller Board
B	Station 1-10 Terminals
C	PSTN Line Terminal
D	Open/Short/System Ground Fault/AOR-CSE Station Activation Relay Outputs
E	24VDC Input Terminal
F	Orange-red Configuration Button
G	12VDC, 7Ah Backup Battery

Figure 4. Model AOR-10, internal components.

VI. Installation

1. Remove the **AOR-5 / AOR-10** unit from its packaging carton and inspect for any possible damage. If the unit is damaged or if any components are missing, please contact your Talkaphone distributor immediately.

Do not discard any hardware or packaging prior to checking for all included components listed in **Section II, Contents** and ensuring that the unit is installed and functioning as expected.

2. **Model Configurations without Latched Door:**

Remove the six (6) screws from the stainless steel front panel. Carefully take the panel off the enclosure—there are cables connected to the front panel.

Model Configurations with Latched Door:

Open the latched door and remove the packaged front cover door handle. Install the handle onto the outside surface of the latched door using the provided screws.

Remove the six (6) screws from the stainless steel front panel. Carefully take the panel off the enclosure—there are cables connected to the front panel.

3. The **AOR-5 / AOR-10** unit may be either surface mounted or flush mounted to a wall.



NOTE: For flush mounting configuration without the latched door, **AOR-5 / AOR-10** units should be ordered with the available **AOR-TR10** Flush Mount Trim Ring (sold separately).

For flush mounting configurations with latched door, **AOR-5 / AOR-10** units should be ordered with the available **AOR-TR10-D** Flush Mount Trim Ring (sold separately).



NOTE: Conduit knockouts exist on the left, right, and bottom sides of the cabinet for access to power and communication lines. Determine the method of bringing in these power and communication lines **before** mounting the enclosure.



NOTE: Whenever possible, it is best to keep the maximum clearance possible between analog phone lines and alternating current. Running phone lines too close to hot VAC lines will lead to noise or interference on the phone line.

4. **Surface Mounting onto an Interior Wall:**

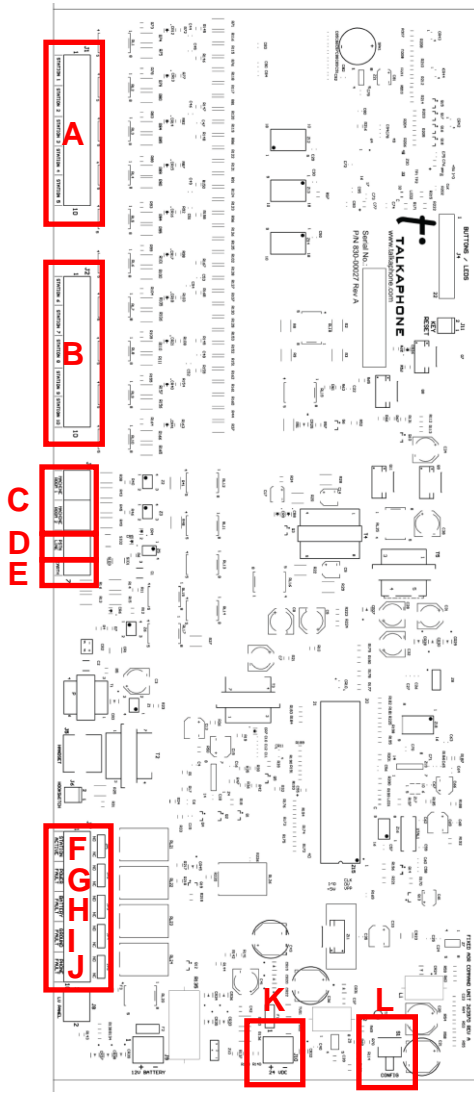
The **AOR-5 / AOR-10** unit has four (4) surface mounting keyholes located on the rear of the chassis.

5. **Flush Mounting into an Interior Wall:**

The **AOR-5 / AOR-10** unit has six (6) screw points on the sides which can be used to mount the Command Unit within a wall.

Both halves of the **AOR-TR10** trim ring (or **AOR-TR10-D** for latched door configurations) should be secured to the wall using the provided 6-18 screws.

6. Interfaces



This section outlines the interfaces on the controller board:

- (A) **Station #1-5** – Each AOR-CSE Station is provided with a dedicated terminal
- (B) **Station #6-10 (for AOR-10 only)** – Each AOR-CSE Station is provided with a dedicated terminal
- (C) **SUB-C 1 and SUB-C 2**– Dedicated terminal for Sub-Command Units #1 and #2
- (D) **PSTN Line** – Connect an analog (PSTN/POTS) telephone line or analog PBX extension line for dialing off-site or to a remote answering point
- (E) **Earth Ground** – Connect Earth ground
- (F) **Station Active** – This relay output (normally open, NO) will provide a contact closure when any AOR-CSE Station is activated
- (G) **Power Fault** – This relay output (normally open, NO) will provide a contact closure when there is a loss in 24VDC power
- (H) **Battery Fault** – This relay output (normally open, NO) will provide a contact closure when the backup battery is disconnected or providing a low voltage output
- (I) **Ground Fault** – This relay output (normally open, NO) will provide a contact closure when a system ground fault is present
- (J) **Phone Fault** – This relay output (normally open, NO) will provide a contact closure when a short or open is present on any **Station** or **PSTN Line** terminal
- (K) **24 VDC** – Connect a 24VDC power supply
- (L) **Config** – Used to configure the **Station** and **PSTN Line** terminals

7. The **AOR-5** can support up to five (5) AOR-CSE Stations and the **AOR-10** can support up to ten (10) AOR-CSE Stations.

The AOR-CSE Stations can dial out through an analog (PSTN/POTS) telephone line, to the local handset on the Command Unit, or to a Sub-Command Unit.

8. Routing Cabling:

Route the AOR-CSE Station cabling and the analog (PSTN/POTS) telephone line (depending on the local jurisdiction, may or may not be required) through the conduit knockouts located on the left, right, or bottom sides of the Command Unit. Always try to separate power lines from communication lines in order to mitigate the risks of noise or interference on the communication lines.

9. Terminating AOR-CSE Station Cabling:

Terminate the cabling for each AOR-CSE Station to **Station 1 through Station 5 (or through Station 10)**.

The tip and ring connections for the AOR-CSE Stations are **NOT** polarity sensitive.

10. Terminating PSTN/POTS Telephone Line for Off-site Dialing:

If an analog (PSTN/POTS) telephone line or analog PBX extension line is to be used for off-site dialing, terminate the analog telephone line or PBX extension line to the **PSTN Line** terminal on the controller board—this connection is **NOT** polarity sensitive.

Each **AOR-5 / AOR-10 Command Unit** supports one (1) dedicated POTS/PSTN telephone line.



IMPORTANT NOTE:

See Technical Requirements (p.2), for analog PSTN/POTS telephone line specifications.

11. Connecting Primary Power:

Once the appropriate low voltage field cabling terminations have been completed, connect the primary power (24VDC, 2A) to the controller board—the power input connector is located at the center-bottom of the controller board.

Earth ground should be connected to the **Earth Ground** terminal on the center-left side of the controller board.



IMPORTANT NOTE:

The Command Unit will only power on when primary power is connected. If the backup battery is connected first, the Command Unit will not power on until primary power is connected to the system.



It is the installer's obligation to ensure compliance with all national, regional, and local regulations.

12. Fault Detection Configuration for AOR-CSE Stations and PSTN Line:

Carrying out this procedure on the controller board is required for proper open/short fault and PSTN/POTS telephone line fault detection on the system.

In the lower-right of the controller, there is an orange-red configuration button.

Once you have the AOR-CSE Stations and the PSTN/POTS telephone line (if required) terminated to the controller board, press and hold the orange-red button for three (3) seconds—the LED will flash rapidly. When the LED turns solid, release the orange-red button. You will hear a beep to confirm that configuration has been completed.

13. Connecting the Backup Battery:

Install the backup battery inside the Command Unit cabinet and connect its faston tabs to the appropriately marked battery cable—black goes to black, red goes to red.



It is the installer's obligation to ensure compliance with all national, regional, and local regulations.



It is the installer's obligation to mark the "date of installation" on each battery.

VII. System Programming

List of Programming Codes for the Command Unit

Command	Function
* 31 * [up to 8 digits] *	Guard Access Code entry for phone programming [Default * 31 * *]
* 30 * [up to 8 digits] *	Master Access Code entry to change Guard Access Code, Master Access Code, and/or factory default the unit [Default * 30 * 12345678 *]
* 30 * 14725836 *	Resets controller board programming to factory defaults. Requires prior Master Access Code entry.
* 32 * [up to 8 digits] *	Programs and stores a new Master Access Code. Requires prior Master Access Code entry.
* 33 * [up to 8 digits] *	Programs and stores a new Guard Access Code. Requires prior Master Access Code entry.
* 34 * [1 to 99] *	Sets number of rings before controller board picks up when it is dialed (1 to 99) [Default 3]
* 37 *	Local Mode NOTE: All calls will route to the Command Unit handset and/or Sub-Command Unit(s).
* 38 * [1 to 24] *	PSTN line test interval in hours (1-24 hours) [Default 23]
* 39 * 1 *	PSTN line is a Central Office (CO) line from the telephone company (allows 9 transfers) [Default]
* 39 * 2 *	PSTN line is a PBX extension (disables 9 transfers)
* 56 * 1 *	Ignore any inbound PSTN line call when Stations, Command Unit, and/or Sub-Command Unit(s) are active [Default]
* 56 * 2 *	Allow any inbound PSTN line call to barge in when Stations, Command Unit, and/or Sub-Command Unit(s) are active
* 57 *	Erase the "On Hold" voice message for calls in queue or on hold
* 58 *	Record the "On Hold" voice message for calls in queue or on hold. Press the # key to stop recording or it will end after 50 seconds. The recorded message will automatically play back.
* 59 *	Preview the recorded "On Hold" voice message for calls in queue or on hold
* 62 *	Remote Mode [Default]

<p>* 4 [1 through 5 or 0 through 9] *</p>	<p>Enter this code when connected through a Sub-Command Unit or a remote PSTN call – routes to a specific AOR-CSE Station on Station #1-5 or #1-10.</p> <p>Does not require Guard Access Code or Master Access Code entry.</p>
<p>* 4 # *</p>	<p>AOR-CSE Station all call when connected through a Sub-Command Unit or a remote PSTN call.</p> <p>Does not require Guard Access Code or Master Access Code entry.</p>
<p>5</p>	<p>Call the Command Unit handset. Dial this number from an AOR-CSE Station, Sub-Command Unit, or remote PSTN call.</p> <p>Does not require Guard Access Code or Master Access Code entry.</p>
<p>6</p>	<p>Call Sub-Command Unit #1. Dial this number from an AOR-CSE Station, Sub-Command Unit #2, or remote PSTN call.</p> <p>Does not require Guard Access Code or Master Access Code entry.</p>
<p>7</p>	<p>Call Sub-Command Unit #2. Dial this number from an AOR-CSE Station, Sub-Command Unit #1, or remote PSTN call.</p> <p>Does not require Guard Access Code or Master Access Code entry.</p>
<p>8</p>	<p>Call Command Unit handset and Sub-Command Unit(s). Dial this number from an AOR-CSE Station or remote PSTN call.</p> <p>Does not require Guard Access Code or Master Access Code entry.</p>
<p>9</p>	<p>Switch to a CO line (requires * 37 * and * 39 * 1 *)</p> <p>Does not require Guard Access Code or Master Access Code entry.</p>
<p>#</p>	<p>Terminate connection when not recording the “On Hold” voice message</p>

Programming the Command Unit

1. There are two (2) methods to program the Command Unit:
 - Via the keypad on a Sub-Command Unit;
 - Remotely by calling the phone number of the connected PSTN/POTS telephone line.
 In either case, the Command Unit will answer and output one (1) beep.

2. When entering programming codes, the controller board will provide the following feedback:

One (1) Beep	Programming code successfully accepted
Two (2) Beeps	Error code—please re-enter the programming code

If you hear two (2) beeps or silence, re-enter the programming code again. If you continue to hear two (2) beeps or silence a second time, hang up and try again.

3. **Remote Mode:**

1. Pick up a Sub-Command Unit handset (or remotely call into the connected PSTN/POTS telephone line) and listen for one (1) beep.

2. Enter the Guard Access Code to enter programming mode: ***31****

3. Program the controller board for Remote Mode: ***62***

4. Program the controller board for the type of PSTN/POTS telephone line:

39*1 for a CO line from the telephone company (allows 9 transfers)

39*2 for a PBX extension (disables 9 transfers)

5. Recording the “On Hold” Voice Message for Calls in Queue or on Hold:

- a. To begin recording, enter: ***58***

Wait for the tone to begin speaking/recording. The recorded message has a maximum length of **50 seconds**.

- b. Press the **#** key to stop recording or it will end after 50 seconds. The recorded message will automatically play back.

- c. To review the recorded message again, press: ***59***

- d. To delete the recorded message, press: ***57***

6. To exit programming and disconnect, hang up the call or press: **#**

7. Move onto **Programming the AOR-CSE Stations** (p.14).

4. **Local Mode:**

1. Pick up a Sub-Command Unit handset and listen for one (1) beep.

2. Enter the Guard Access Code to enter programming mode: ***31****

3. Program the controller board for Local Mode: ***37 ***

4. Recording the “On Hold” Voice Message for Calls in Queue or on Hold:

- a. To begin recording, enter: ***58***

Wait for the tone to begin speaking/recording. The recorded message has a maximum length of **50 seconds**.

- b. Press the **#** key to stop recording or it will end after 50 seconds. The recorded message will automatically play back.
 - c. To review the recorded message again, press: ***59***
 - d. To delete the recorded message, press: ***57***
5. To exit programming and disconnect, hang up the call or press: **#**
 6. Move onto **Programming the AOR-CSE Stations** (p.14).

Programming the AOR-CSE Stations

Once the Command Unit has been programmed, the AOR-CSE Stations will need to be programmed individually.

1. Calling into the AOR-CSE Station to enter programming mode.
 1. To call from a remote phone, dial the telephone number of the analog (PSTN/POTS) telephone line connected to the Command Unit. Go to **Step (3)**.
 2. To call from a Sub-Command Unit, simply pick up the handset.
 3. In either case, you will hear one (1) beep when the Command Unit is ready.
 4. Enter the code to route to a specific AOR-CSE Station:
*** 4 [1 through 5 or 1 through 0] ***
There will be a short pause and then the AOR-CSE Station will answer with an open channel (microphone and speaker are active).

NOTE:

After each AOR-CSE Station programming code, two (2) beeps indicate the code has been accepted. Four (4) beeps indicate an error—re-enter the code again.

2. Enter the security code: **827827** (or **TAPTAP**)
3. Program the Primary Phone Number to dial: **[0-20 digits for phone number] # 00**
For **local mode**, use **any of the following numbers** as the phone number:
 - 5** calls the Command Unit handset
 - 6** calls Sub-Command Unit #1
 - 7** calls Sub-Command Unit #2
 - 8** calls the Command Unit handset and the Sub-Command Unit(s)—rings all at the same time, first to pick up answers the callFor **remote mode** (i.e. calling an outside phone number), use the **10-digit phone number** of the answering point as the phone number.
Please program the phone number in the following format depending on whether a PSTN/POTS telephone line or analog PBX extension line is connected.
 - For a Central Office (CO) line from the telephone company:
1 + Area Code + 7-digit Phone Number
 - For a PBX extension:
9 + 1 + Area Code + 7-digit Phone Number
4. Program the Second Phone Number to dial: **[0-20 digits for phone number] # 01**
Follow the same dialing rules as outlined in **Step (3)** above.
5. Set the call length, silence time out, ring count, and dial next number on busy: **294521 # 18**
See **Timing/Dialing Options for the AOR-CSE Station (p.18)** for further details or other options.

6. Recording a Location Message:
 - a. Record the location message for the AOR-CSE Station in question: * 4
Wait for the tone to begin speaking/recording. The recorded message has a maximum length of **16 seconds**.
 - b. Press any key to stop recording or it will end after 16 seconds. The recorded message will automatically play back.
 - c. To review the recorded message again, press: * 5
 - d. To delete the recorded message, press: * 3
7. To exit programming and disconnect, press: # 7

List of Programming Codes for the AOR-CSE Station

Command	Memory Slot	Function
0-20 digits	#00	Primary autodial phone number *
0-20 digits	#01	Secondary autodial phone number *
0-20 digits	#02	Third autodial phone number *
0-20 digits	#03	Fourth autodial phone number *
0-20 digits	#04	Fifth autodial phone number *
6 digits	#18	Timing/dialing options. For further details, see “ Timing/Dialing Options for the AOR-CSE Station ” on p.17. [Default 234721]
6 digits	#19	Change the security code [Default 827827 or TAPTAP]
* 7		Add 4-second pause at any point of the dial string
[Enter No Digits]	#00 through #04	Clear autodial phone numbers
# 7		Exit programming mode and disconnect
# # #		Reset to factory defaults

* For **Remote Mode with a CO Line connected**, the dial string should be set to the following format to route the call through the **PSTN Line** port: **1 + Area Code + 7-digit Phone Number**

Alternatively, any of the following numbers can be set as a phone number to reach local answering points:

- 5 calls the Command Unit handset
- 6 calls Sub-Command Unit #1
- 7 calls Sub-Command Unit #2
- 8 calls the Command Unit handset and the Sub-Command Unit(s)—rings all at the same time, first to pick up answers the call

NOTE:

After each AOR-CSE Station programming code, two (2) beeps indicate the code has been accepted. Four (4) beeps indicate an error—re-enter the code again.

Timing/Dialing Options for the AOR-CSE Station

The timing/dialing option code is comprised of six (6) digits defined in the table below.

Parameter	Function	Values	Definition
A	Talk/Listen Delay. Switching time between talk and listen modes (i.e. VOX switching time).	1	0.1 seconds
		2	0.2 seconds [Default]
		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	Call Length. Sets maximum length of time the AOR-CSE Station can be connected to a call.	0	Disabled
		1	1 minute
		2	2 minutes
		3	3 minutes [Default]
		4	4 minutes
		5	5 minutes
		6	6 minutes
		7	7 minutes
		8	8 minutes
C	Silence Time Out. 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 [Default]
		5	50 seconds
		6	60 seconds
		7	70 seconds
		8	80 seconds
D	Dial Next Number Timer. Sets the number of rings before the AOR-CSE 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
E	Dial Next Number on Busy. When a busy is detected the AOR-CSE Station will dial the next phone number in the number list.	1	Disabled
		2	Enabled [Default]
F	Not Used	Always set to 1.	-

VIII. Operating Instructions

1. General Information

When the push button on the AOR-CSE Station is pressed, it will automatically either ring the Command Unit handset, the Sub-Command Unit(s), or dial out using the phone line connected to the **PSTN Line** terminal.

When a call comes in to the **AOR-5 / AOR-10 Command Unit**, an LED will light indicating which AOR-CSE Station is calling in. If a call is already in progress, any other calls which come in will cause the appropriate LED to blink to indicate they are awaiting an open line—if recorded and configured, the “On Hold” voice message will also playback at the AOR-CSE Stations in queue. Alternatively, a double ring back will be heard at the AOR-CSE Station(s) in queue.

As soon as the initial call has been completed, any calls that were waiting will be put through in the order in which they were placed.

2. Calling Into AOR-CSE Stations from the Command Unit

1. To call from a remote phone, dial the telephone number of the phone line connected to the command unit—you will hear one (1) beep when the system is ready. Go to **Step (4)**.
2. To call from the Command Unit, simply pick up the handset—you will hear one (1) beep when the system is ready.

Press the button dedicated to the particular AOR-CSE Station. Go to **Step (5)**.
3. To call from a Sub-Command Unit, simply pick up the handset—you will hear one (1) beep when the system is ready. Go to **Step (4)**.
4. Enter the code to route to a specific AOR-CSE Station:
*** 4 [1 through 5 or 1 through 0] ***
5. There will be a short pause and then the AOR-CSE Station will answer with an open channel (microphone and speaker are active).

3. Answering Calls at the Command Unit

1. When calls are routed to the Command Unit handset, the Command Unit will ring.
2. To answer the call, pick up the Command Unit handset.
3. A prerecorded voice message with physical location information may play at the beginning of the call.

4. Answering Calls at a Sub-Command Unit

1. When calls are routed to a Sub-Command Unit, the Sub-Command Unit will ring.
2. To answer the call, pick up the Sub-Command Unit handset.
3. A prerecorded voice message with physical location information may play at the beginning of the call.

5. Answering Calls Off-site or at a Central Station

When calls are routed off-site (i.e. monitoring service, call center, central station, or 911), calls are answered accordingly and a prerecorded voice message with physical location information may play at the beginning of the call.

6. All Call to AOR-CSE Stations

From either Sub-Command Unit or through a remote PSTN call, enter * 4 # *. This command will call every AOR-CSE Station and initiate a one-way audio page.

An all call initiated through a remote PSTN call has a 90 second limit.

An all call initiated through a Sub-Command unit does not have a time limit.

This operation command does **not** require initial entry of the Guard Access Code or the Master Access Code.

IX. System Faults

1. Fault Condition:

- a. **Audible Indicator** – When any fault occurs, a steady tone will be emitted from the Command Unit.
- b. **Visual Indicator for Opens** – When an open occurs on an AOR-CSE Station cable run, the respective **FAULT** LED(s) will flash on the Command Unit panel indicating the specific station location(s) with the fault.
- c. **Visual Indicator for Shorts** – When a short occurs on an AOR-CSE Station cable run, the respective **FAULT** LED(s) will flash on the Command Unit panel indicating the specific station location(s) with the fault.
- d. **Visual Indicator for PSTN/POTS Telephone Line Fault** – When the PSTN/POTS telephone line has an open or a short, the **OUTSIDE LINE FAULT** LED will flash on the Command Unit panel.
- e. **Visual Indicator for System Ground Fault** – When a system ground fault occurs at the Command Unit, the **GROUND FAULT** LED will flash on the Command Unit panel.
- f. **Visual Indicator for Battery Fault** – When a battery fault occurs at the Command Unit, the **BATTERY FAULT** LED will flash on the Command Unit panel.
- g. **Visual Indicator for Power Fault** – When a primary power loss occurs at the Command Unit, the **POWER** LED will disengage on the Command Unit panel.

2. Correcting Faults:

- a. **Opens/Shorts on an AOR-CSE Station Cable Run** – Check cable for continuity and repair or replace cable.
- b. **Opens/Shorts on the PSTN/POTS Telephone Line Cable Run** – Check cable for continuity and repair or replace cable.
- c. **System Ground Faults** – Check the Command Unit for proper electrical grounding and correct any ground loops.
- d. **Battery Faults** – Check the voltage level of the backup battery. Replace the battery if the voltage level is low.
- e. **Power Faults** – Check that primary power is available—restore primary power.

3. Temporarily Silencing a Fault Condition:

Use the **FAULT RESET** key switch to silence the audible fault indicator. The audible alarm will be temporarily silenced until the next timed supervisory test occurs (programmable with a factory default of every 23 hours). If the fault remains during the next timed supervisory test, the audible alarm will be provided again.

The LED fault indicators will remain in their trouble condition until the faults have been fully corrected. An audible double beep will also be heard when the **FAULT RESET** key switch is toggled to silence the alarm.

4. Resetting Fault Condition:

When any faults have been corrected, use the **FAULT RESET** key switch on the Command Unit panel to have it conduct its supervisory tests and clear audible and visual alarms for any corrected faults.

Any faults that have not been corrected will continue to provide a visual alarm. The audible alarm will return on the next timed supervisory test (programmable with a factory default of every 23 hours) if the fault is still present.

5. Primary Power Loss:

When the Command Unit loses primary power and begins to run on battery backup, the **POWER** LED will disengage or turn off on the Command Unit panel.

The **POWER** LED will illuminate once the primary power has been restored.

X. System Maintenance

NFPA 72 requires that area of refuge two-way communication systems be **inspected, tested, and maintained** on an **annual basis**. NFPA 72 specifies the method required as “verify location and condition”.

As such, the following guidelines are highly recommended:

- An annual inspection and testing be scheduled as part of the facility/building preventative maintenance schedule
- Each AOR-CSE Station should be inspected and tested.
- The Command Unit should be inspected and tested.
- The Sub-Command Unit(s) should be inspected and tested.
- Verify the condition of the backup battery and replace if necessary.

XI. Frequently Asked Questions

1. Can the system support more than one (1) local answering point?

Yes, in addition to the Command Unit handset as the main local answering point, the system supports up to two (2) Sub-Command Units as additional local answering points.

2. If I have more than one Command Unit can each one be connected to same PSTN/POTS telephone line?

Because an Area of Rescue system is considered a life safety system, each AOR-5 / AOR-10 Command Unit requires a dedicated telephone line.

3. If I forgot the Master Access Code or the programming configuration, can I reset the programming on the Command Unit?

If you have forgotten your Master Access Code or the programming configuration, you can reset the programming to factory defaults through the following procedure.

- (1) First, power off the Command Unit.
- (2) While pressing and holding the orange-red configuration button, apply power to the Command Unit.
- (3) Release the orange-red configuration button when the LED turns on and a single-beep is heard.

After the factory reset has been completed, you will need to perform the Fault Detection Configuration procedure (p.9, Section 12) and/or reprogram the controller board (pp.10-13).

NOTE: You will NOT have to reprogram the individual AOR-CSE Stations.

4. Does the Command Unit controller board retain its programming if there is complete power loss?

Yes, memory is non-volatile and does not require a backup battery.

5. Are the AOR-CSE Stations powered by the Command Unit?

Yes, they are line-powered by the Command Unit.

6. Is the ETP-500 Series Analog Call Station compatible with the Command Unit?

No, the ETP-500 Series is not compatible at this time. Please contact info@talkaphone.com for alternative solutions.

XII. General Troubleshooting

Problem	Possible Causes
<p>The Command Unit does not function at all. It cannot dial out or it cannot be called into.</p>	<ol style="list-style-type: none"> 1. The internal power supply is not properly connected (check primary power and the battery). 2. The cabling for the PSTN/POTS telephone line or analog PBX extension line may not have been properly terminated inside the Command Unit. Verify the internal connections. 3. The cabling for the PSTN/POTS telephone line or analog PBX extension line may have been disconnected. Please verify continuity throughout the cable run. 4. The Command Unit has been damaged by a power surge. Contact Talkaphone Technical Support.
<p>I hear noise on the line.</p>	<ol style="list-style-type: none"> 1. The cabling run for the AOR-CSE Station may not be twisted, shielded wire. Fluorescent lights, elevator machinery, and other devices can emit noise onto the wire run if they are not twisted and shielded. 2. See Section III – Technical Requirements for further details.
<p>The Local Phone rings briefly, but then when I pick up the handset I hear one beep.</p>	<ol style="list-style-type: none"> 1. The Analog Call Station that called in was not programmed with a phone number.
<p>The controller board will not accept the Guard Access Code.</p>	<ol style="list-style-type: none"> 1. You may be remotely programming through a PSTN/POTS telephone line or analog PBX extension line that does not transmit in-band DTMF. Please ensure that in-band DTMF is available. 2. The Guard Access Code has been changed. You can reset the code by first entering the Master Access Code (default is *30*12345678*). 3. Enter the following command to change the Guard Access Code: * 33 * [0-8 digits] *