



EC-6
Installation & Operation Manual
v1.0

1. Getting Started

1.1. Introduction

Thank you for your purchase of this EC-6 Telephone Line Consolidator. 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.

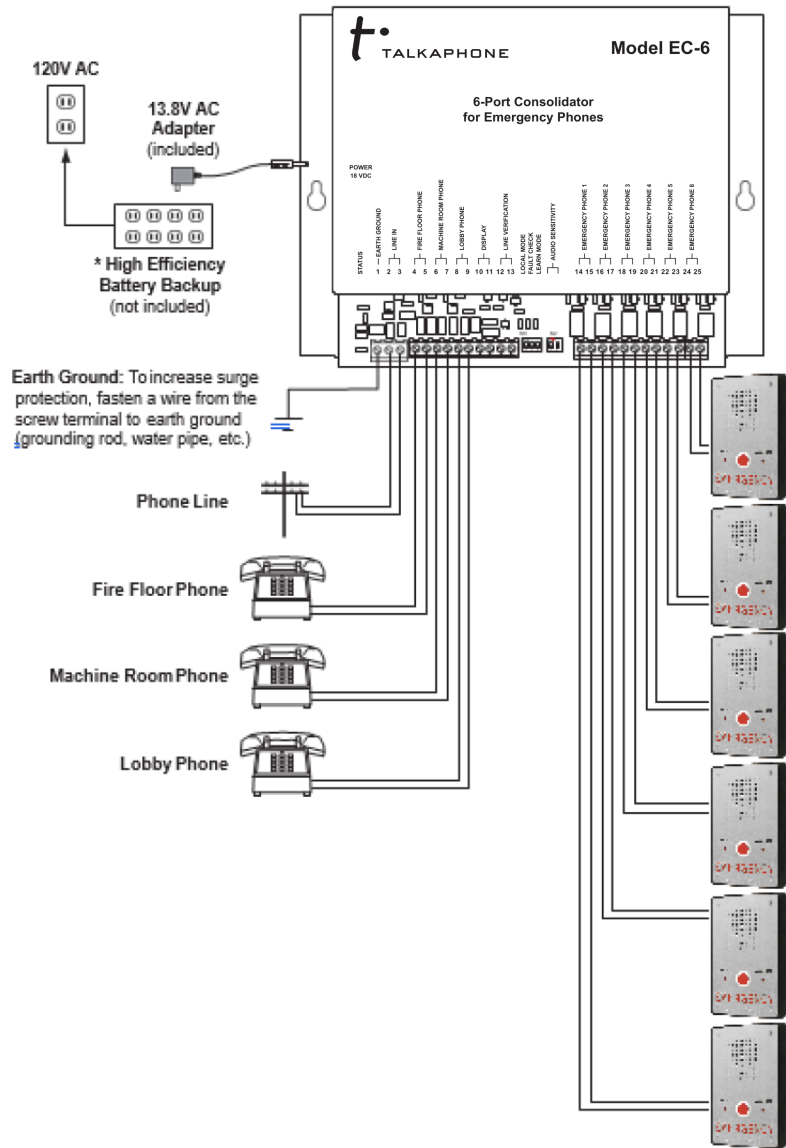
1.2. What's In the Box

- EC-6 Telephone Line Consolidator
- 13.8VAC 1250mA, Class 2 Transformer



You should inspect the EC-6 Telephone Line Consolidator 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.

2. Hardware Installation



3. Programming

3.1. Factory Configuration

In the default factory configuration mode, programming changes to the EC-6 are required in order for it to route calls through the telephone line (i.e. PSTN line).

3.2. Accessing the Programming Mode

The EC-6 can be user programmed locally or remotely through a call to the connected telephone line from any touch-tone phone.

1. Locally without a Security Code

Step 1.	Come off hook with a touch tone phone connected to the Fire Floor, Machine Room or Lobby phone, and wait for the beep.
Step 2.	Enter * followed by the 6-digit security code (factory set to 845464 , see Section 3.3, Programming the Security Code). A double beep should then be heard indicating you have entered the programming mode.
Step 3.	When finished programming, hang up.

2. Locally without a Security Code

Step 1.	Move DIP switch 3 to the ON position (Learn Mode, see Section 3.11, DIP Switches).
Step 2.	Come off hook with a touch tone phone connected to the Fire Floor, Machine Room or Lobby phone. A double beep will be heard indicating you have automatically entered the programming mode
Step 3.	When finished programming hang up and move DIP switch 3 back to the OFF position (Normal Operation Mode, see Section 3.11, DIP Switches).

3. Remotely using the Security Code

Step 1.	From a touch tone phone call the telephone line attached to the EC-6 .
Step 2.	When the EC-6 answers, wait for the beep, then enter "Q" followed by the 6-digit security code (factory set to 845464 , see Section 3.3, Programming the Security Code). A double beep should then be heard indicating you have entered the programming mode.
Step 3.	When finished programming, hang up.

4. Remotely using the Security Code

Step 1.	Move DIP switch 3 to the ON position (Learn Mode, see Section 3.11, DIP Switches).
Step 2.	From a touch tone phone call the telephone line attached to the EC-6 .
Step 3.	When the EC-6 answers, a double beep will be heard indicating you have automatically entered the programming mode.
Step 4.	When finished programming hang up and move DIP switch 3 back to the OFF position (Normal Operation Mode, see Section 3.11, DIP Switches).



IMPORTANT NOTE: For the fourth programming option outlined above, **Step (4) must be** carried out—otherwise the EC-6 will remain in **Learn Mode** and the system will not be functional.

3.3. Programming the Security Code

The security code allows the user/installer to program the **EC-6** while **DIP Switch #3** is in the **OFF** (normal operation) position. A 6-digit number is used to access programming mode.

The security code has been factory set to **845464**. It is recommended that you change the security code to your own 6-digit number as follows:

Step 1.	Access programming as outlined in Section 3.2, Accessing Programming Mode.
Step 2.	Enter your new security code followed by #47 .
Step 3.	To exit programming simply hang up the phone.



IMPORTANT NOTE: The security code must be six (6) digits in length and **MUST NOT** contain a * or #.

3.4. Quick Programming Features

<u>Description</u>	<u>Enter Digits</u>	<u>+ Location</u>
Default Ring Assignment (factory set to cleared)	none or 1-digit (0-6)	+ #44
Ring count (factory set to 9 rings)	1-digit (0-9)	+ #45
Number of Emergency Phones (factory set to 6)	1-digit (1-6)	+ #46
Security Code (factory default = 845464)	6-digits (0-9)	+ #47
Disable Dial 9 Toggle Feature (factory default)	*0	
Enable Dial 9 Toggle Feature	*1	
Exit Programming and Disconnect	##7	
Reset All Programming to Factory Default Settings	###	

3.5. Default Ring Assignment (Memory Location #44)

Inbound telephone line calls are answered by the **EC-6**. After a single beep tone is heard, the caller can direct the call to any of the phones by entering a single touch-tone command. This **#44** memory location is used to tell the **EC-6** how to default if the caller does not enter any touch-tone command within four (4) seconds of hearing the beep tone.

The factory setting is with the **#44** memory location cleared (enter only **#44** when programming), which means if no touch-tone command is entered within four (4) seconds, the **EC-6** will default to re-ringing the last Emergency Phone that was used. This enables emergency personnel to call back and automatically reach the specific Emergency Phone they had been talking to without the need to enter a touch-tone command.

The **EC-6** can be programmed so that if no touch-tone command is given, to default to one of the six Emergency Phones by entering any digit 1 through 6 in the **#44** memory location. Or enter "**0#44**" when programming so that if no inbound touch-tone command is given, to default to ringing all Emergency Phones.

3.6. Ring Count (Memory Location #45)

This location contains the number of times the **EC-6** will ring the called device when a transfer is initiated. Entering a "**0**" count will disable the ring counter altogether and the port will continue to ring until answered or the caller hangs up. The factory default setting is "**9**" rings.

3.7. Number of Phones (Memory Location #46)

This parameter is used so the **EC-6** knows how many Emergency Phone ports to ring when the "All Call" feature is used. It is also how the line verification test knows how many Emergency Phone ports will be tested. For example, if only four Emergency Phones are used, they are to be connected to Emergency Phone ports 1-4, and "**4#46**" should be entered in programming. The factory default setting is "**6**" Emergency Phones.



IMPORTANT NOTE: Ensure that all Emergency Phones are set up to answer an incoming call.

3.8. Dial 9 Toggle Feature (Q1)

This feature is factory disabled (***0**) which means dialing a single touch-tone "**9**" has only the ability to connect to the telephone line. When the dial 9 toggle feature is enabled (***1**), the **EC-6** will have the ability to both connect and disconnect from the telephone line. In other words, dialing a touch-tone "**9**" will toggle between connecting and disconnecting.



IMPORTANT NOTE: A minimum of **9 seconds** must elapse after other touch-tones have been dialed before "**9**" will be accepted as a disconnect command. See **Section 4, Operation** for an example of how this feature might be used.

3.9. Hang Up (##7)

When programming the **EC-6** from a remote location, this command can be used to cause an immediate hang up. This is useful if the **EC-6** is being used on a phone line that does not issue a CPC signal when the distant party hangs up. In those cases, and if the **##7** command is not used, the **EC-6** will still hang up, but after the programming time out of 20 seconds.

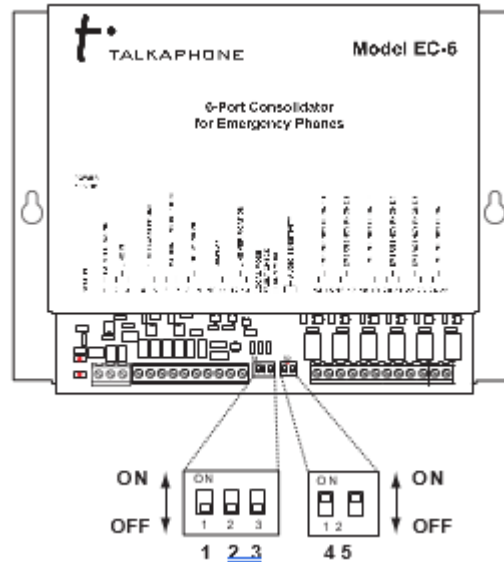
3.10. Factory Reset All Programming (###)

When in programming, entering **###** will reset all programming to the factory default settings.

Switch	Position	Description
1	ON	Emergency phones must dial 9 to connect to the telephone line (see description below)
1	OFF	Emergency phones are directly connected to the phone line (factory setting)
2	ON	Enable Line Verification test (see description in Section 3.11, Operation)
2	OFF	Disable Line Verification test (factory setting)
3	ON	Learn mode (see description below)
3	OFF	Normal operation (factory setting)

Switch 4	Switch 5	Description
ON	ON	Normal audio detect sensitivity (factory setting)
OFF	OFF	Increased audio detect sensitivity. Useful in applications in which voices or busy signals are having trouble breaking over the speaker when multiple Emergency Phones are in use at the same time.

3.11. DIP Switches



DIP Switch 1 (Dial 9 Mode)

Normally when an Emergency Phone comes off hook, it is immediately connected to the telephone line. In the Dial 9 mode, the Emergency Phone will be connected to an internal line, and a touch-tone 9 is needed to connect to the outside telephone line. This feature must be used when the **EC-6** is to be used for internal calls only and no telephone line is connected. The 9 must be followed by at least 3 seconds of silence so the **EC-6** knows it is a transfer command and not part of a dialing string.



IMPORTANT NOTE: The internal line **DOES NOT** supply dial tone.

DIP Switch 2 (Line Verification Test)

When this DIP switch is in the **ON** position, the daily line verification test feature is enabled. In accordance to ASME A17.1, once a day the **EC-6** will check the telephone line for operable loop current. The **EC-6** will also ring each of the assigned Emergency Phones (see **Section 3, Programming**), to verify the operability of the lines running to each of the Emergency Phones, (and to be sure the Emergency Phone is capable of answering). See **Section 4, Operation** for additional details.

DIP Switch 3 (Learn Mode)

This DIP switch feature can be used when the user does not know the 6-digit touch tone security code needed to enter programming. When this DIP switch is in the **ON** (Learn) position, the **EC-6** will enter the programming mode immediately on an inbound call, or locally when a Fire Floor, Machine Room, or Lobby phone comes off hook. Once in programming a new security code can be programmed. Be sure to set this DIP switch to **OFF** (Normal Operation mode) when finished, so the **EC-6** will operate properly.

4. Operation

The **EC-6** allows voice communication from up to six (6) Talkaphone analog emergency telephones to a local Fire Floor phone, Machine Room phone, and/or Lobby phone, as well as to an off-premise phone through a telephone (PSTN) line. Any or all of the Emergency Phones can talk with any or all of the authorized personnel phones. Below is a simple directory of what to dial to call each of these devices or access the telephone (PSTN) line.

4.1. Directory

<u>To Call</u>	<u>Dial</u>
Emergency Phone 1, 2, 3, 4, 5, or 6	1, 2, 3, 4, 5, or 6
Fire Floor Phone	7
Machine Room and Lobby Phones	8
Access the Telephone (PSTN) Line	9
All Call (to All Emergency Phones)	0

4.2. Emergency Phone Outbound Call

With DIP switch 1 set to **OFF**, when an Emergency Phone goes off hook, it will be directly connected to the telephone line so it can dial out for help. Alternatively, the Emergency Phone can be programmed to dial a single touch tone “7” to call the Fire Floor phone, or an “8” to ring both the Machine Room and Lobby phones. Since Talkaphone analog Emergency Phones have the ability to dial additional phone numbers when the call is unanswered or receives a busy signal, the system can be set up so that a call for help first rings the local phone(s), then if unanswered, the Emergency Phone can momentarily hang up and place an outside call to 911 or a Central Station Monitoring service.

With DIP switch 1 set to **ON**, when an Emergency Phone goes off-hook, it will NOT be connected to the telephone line. Use this feature when the EC-6 is to be used for internal calls only and no telephone line is connected. When this is the case, the Emergency Phone can be programmed to dial a single touch-tone “7” to call the Fire Floor phone, or an “8” to ring both the Machine Room and Lobby phones. If a telephone line is connected, the Emergency Phone can be programmed to place an outbound call by dialing a touch-tone “9”, pause for four (4) seconds, then dials the remote telephone number.

The EC-6 is not designed for one Emergency Phone to call or talk to another.

If additional Emergency Phones are activated while a call is in progress, they will be bridged to the existing authorized personnel.

4.3. Inbound Call

When a call comes into the **EC-6** on the telephone line, the **EC-6** will answer after the first ring, return a single “beep” tone, and listen for a touch-tone command. A single touch-tone 1 to 6 will cause the **EC-6** to ring Emergency Phone 1 to 6; or dial a 0 to call all Emergency Phones. The **EC-6** is factory set so that if no command is entered within four (4) seconds, the **EC-6** will re-ring the last Emergency Phone that was used, thus enabling emergency personnel to call back and automatically reach the specific Emergency Phone they had been talking to. The Fire Floor phone and Machine Room & Lobby phones can also be called into by dialing a single touch-tone 7 or 8 respectively

4.4. Fire Floor Phone

When the Fire Floor phone goes off hook, the **EC-6** will send a single beep. The user can then enter a touch-tone 1 to 6 to call Emergency Phones 1 to 6, a touch-tone 0 to call all Emergency Phones, or an 8 to call the Machine Room & Lobby phones. The Fire Floor phone can also dial “9” to access the telephone line to place an outbound call. While in use, if any other phone goes off-hook, it will be instantly connected to the Fire Floor phone. Because of this, it is imperative the Fire Floor phone is not left off-hook unattended.

4.5. Machine Room and Lobby Phones

The Machine Room and Lobby phones work together. Inside the EC-6 they are connected to the same circuit. You can think of them as two phones in your house connected to the same phone line. An Emergency Phone that is programmed to dial a single touch tone “8” will have the advantage of ringing both phones, thus increasing the likelihood of being answered by local authorized personnel.

When the Machine Room or Lobby phone goes off hook, the **EC-6** will send a single beep. The user can then enter a touch tone 1 to 6 to call Emergency Phones 1 to 6, a touch tone 0 to call all Emergency Phones, or a 7 to call the Fire Floor phone. The Machine Room & Lobby phones can also dial “9” to access the telephone line to place an outbound call. While in use, if any other phone goes off hook, it will be instantly connected to the Machine Room & Lobby phones. Because of this, it is imperative the Machine Room & Lobby phones are not left off hook unattended.

4.6. Dial “9” Access

The Fire Floor, Machine Room, or Lobby phones can dial 9 to access the telephone line to place an outside call. Alternatively, a single touch-tone “9” can be used as a toggle function to either access the telephone line or disconnect from the telephone line (see **Section 3, Programming**). Here is an example of how dialing 9 can be used to disconnect the telephone line. An Emergency Phone has placed a call through the **EC-6**’s telephone line to a 911 operator. A fireman arrives on the scene and joins the conversation from the Fire Floor phone. The fireman can then declare to the 911 operator that he is on-site and will take over. He can then dial a single touch-tone 9 to drop the telephone line (hanging up on the 911 operator) and continue talking to the Emergency Phone.