I. Introduction

This Quick Installation Guide provides instructions for installation of the **ETP-520 Call Station**. It is recommended to read this guide completely before starting any installation.

II. Contents

Please ensure receipt of each of the included **ETP-520 Call Station** components:

QTY	Part Number	Description
1		ETP-520 Series Analog Call Station
6	42935	#10-24 x 3/4" L, Stainless Steel, Flat Head, Pin-in Torx (T-20), Tamper Resistant Screws

III. Tools Required

Tools required for installation are not provided and are as follows:

Part Number	Description
42938	Pin-in torx (T-20) bit, 1/4-inch shank, for #10 screws
	5/16-inch hex nut driver
	Wire cutter/stripper
	Wire nuts (twist-on connectors), Dolphin connectors, or "beanie" connectors for 24-22 AWG wire

IV. Model Configurations

This Quick Installation Guide provides instructions for installation of the **ETP-520 Call Station**. It is recommended to read this guide completely before starting any installation.
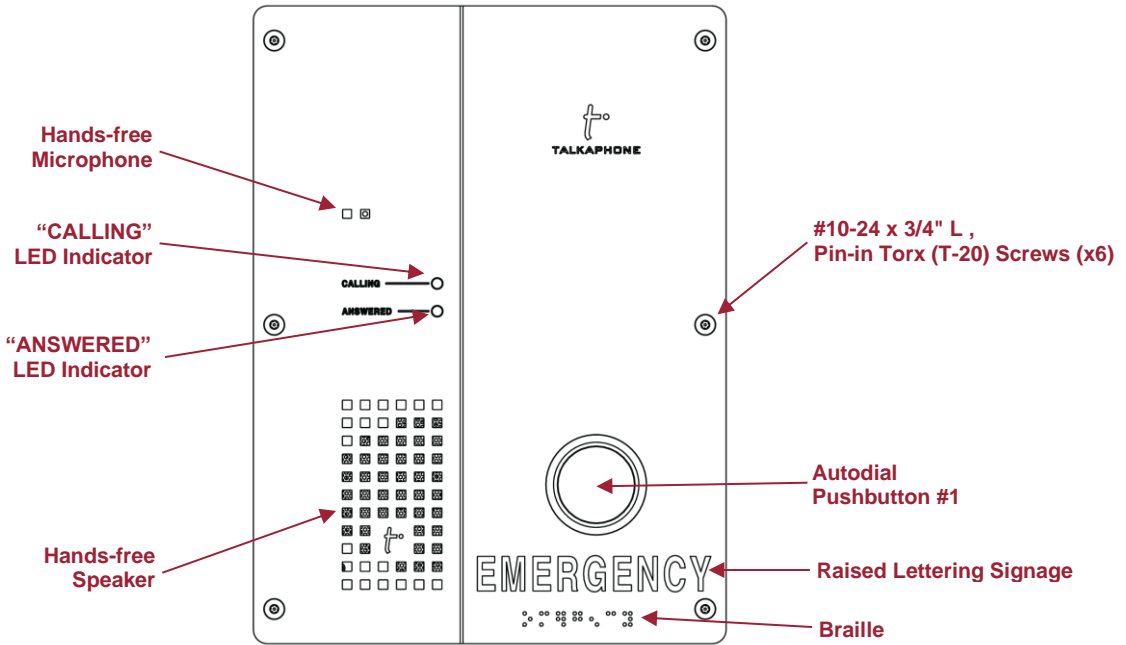

Figure 1. **Front view of Model ETP-520E.**
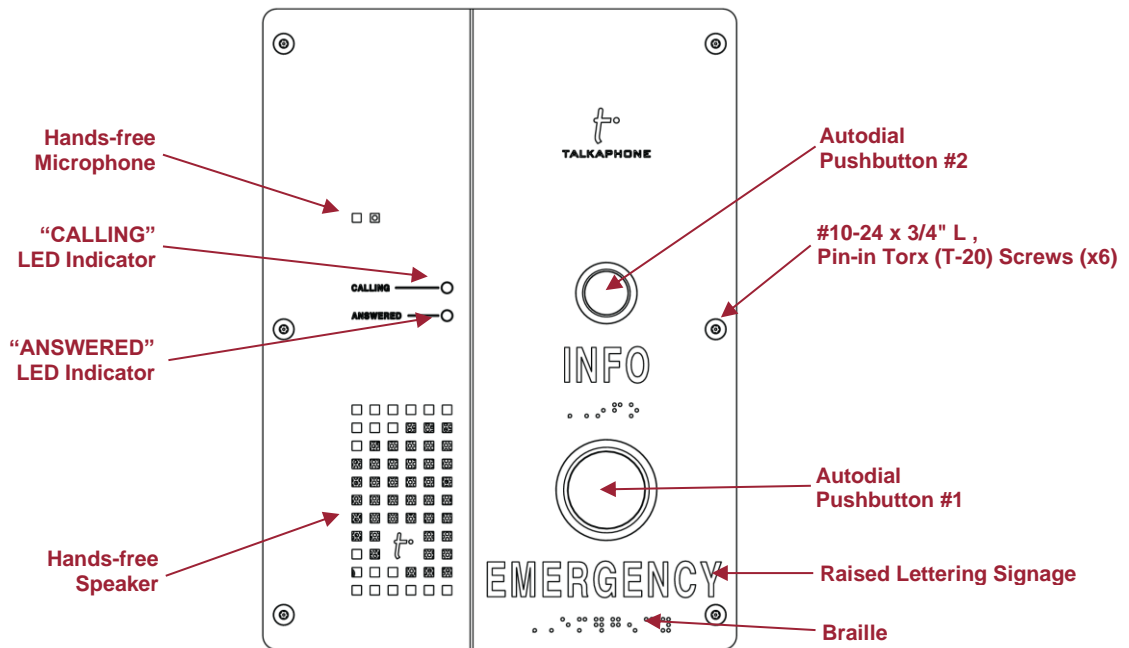
III. Model Configurations (Continued)
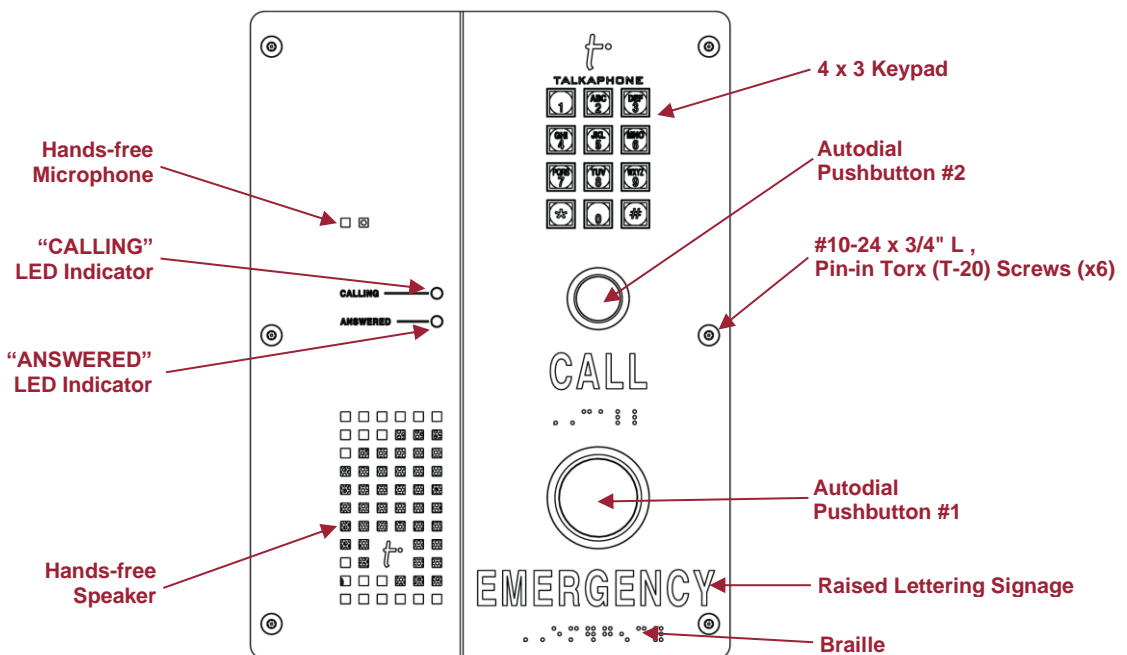

Figure 2. Front view of Model ETP-520EI.

Hands-free Microphone

"CALLING" LED Indicator

"ANSWERED" LED Indicator

Hands-free Speaker

Autodial Pushbutton #2

#10-24 x 3/4" L , Pin-in Torx (T-20) Screws (x6)

Autodial Pushbutton #1

Raised Lettering Signage

Braille

Figure 3. Front view of Model ETP-520ECK.

Hands-free Microphone

"CALLING" LED Indicator

"ANSWERED" LED Indicator

Hands-free Speaker

4 x 3 Keypad

Autodial Pushbutton #2

#10-24 x 3/4" L , Pin-in Torx (T-20) Screws (x6)

Autodial Pushbutton #1

Raised Lettering Signage

Braille

IV. Field Wiring Installation

1. Unpack and set aside the **ETP-520 Call Station** assembly.

2. Remove the back box from the **ETP-520 Call Station** assembly by unfastening the six (6), #6-32 hex nuts and washers.

3. For wiring termination details, please refer to the information below and **Sections V through XI**.
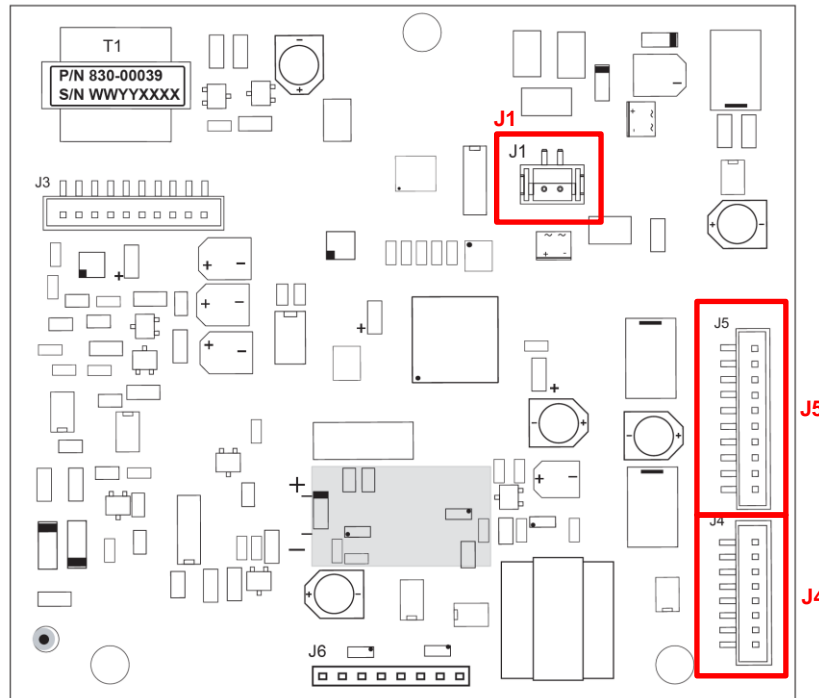

Figure 4. PCBA.

Connector Number	Wire Pair Color	Connect To
J1	Green-Red	Tip/ring for analog telephone line, extension, or PSTN interface
J4	Purple-Purple	Line level audio output #1 for active induction hearing loop (600 Ohm)
	Yellow-Yellow	Line level audio output #2 for the Wide-Area Emergency Broadcast System (WEBS®) or audio paging (600 Ohm)
	Blue-Blue	Aux Input battery (Not included—please order **ETP-AUXIN-KIT-2**)
	Green-Green	Aux Input (N.O. relay input)
J5	Red-White	Aux Output #1 (N.O. relay output)
	Black-Orange	Aux Output #2 (N.O. relay output)

V. Power Requirements

The **ETP-520 Call Station** is an analog telephone line powered. No additional or external power supply is required.

The **ETP-520 Call Station** requires **24 V talk battery on-hook (idle state)** and **20mA loop current off-hook (when in use)**.

Cabling should meet these specifications:

- Shielded, twisted pair (STP) specifically designed for use with analog telephones

- Connect shield to earth ground

- End-to-end wire run distance ranges along with the respective recommended wire gauges are provided in the table below:

End-to-End Distance to Source of Dial Tone	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

VI. Telephone Line or Gateway Connection

The **ETP-520 Call Station** connects to a standard analog telephone line, analog PBX extension, or PSTN gateway (e.g., Voice over LTE gateway, Voice over IP (VoIP) analog telephone adapter (ATA), etc.).

The service being provided to the **ETP-520 Call Station** must be a "basic voice line" with no advanced features such as ringdown, voicemail, flash hook (or hook flash), or call waiting.

The telephone line connections are as follows:

	Connect to Wire Pair Color	Connector Number
Tip/Ring for analog telephone line, extension, or PSTN interface	Green-Red	**J1**

VII. Earth Ground

The faceplate of the phone must be connected to earth ground. Install a #10 ring terminal to the ground wire before connecting it to the earth ground terminal on the rear of the faceplate.

VIII. Auxiliary Input

The **ETP-520 Call Station** has one (1) Auxiliary Input that is normally open (N.O.).

> ⚠️ **IMPORTANT NOTE:**
>
> In order for the **Auxiliary Input** to operate, an external battery is required. This battery is not included—please order **ETP-AUXIN-KIT-2**.

The Auxiliary Input allows a peripheral device such as a vehicle detector, external ADA push plate switch, etc. to place a call without requiring the press of the push button.

The Auxiliary Input rating and connections are as follows:

	Rating	Connect to Wire Pair Color	Connector Number
Aux Input Battery (Not included—please order **ETP-AUXIN-KIT-2**)		Blue-Blue	**J4**
Aux Input	2.2-30 VAC/VDC Accepts a momentary contact closure	Green-Green	

IX. Auxiliary Outputs

The **ETP-520 Call Station** has two (2) Auxiliary Outputs that are normally open (N.O.).

Auxiliary Outputs allow peripheral equipment such as blue light beacons/strobe lights, PTZ cameras, door entry systems, etc. to be activated when the push button is pressed.

The Auxiliary Output ratings and connections are as follows:

	Rating	Connect to Wire Pair Color	Connector Number
Aux Output #1	Maximum of 1.0A at 30VDC or 0.5A at 110VAC	Red-White	**J5**
Aux Output #2		Black-Orange	

X. Line Level Audio for Audio Paging

Line Level Audio Output #2 is provided for use with a **Wide-Area Emergency Broadcast System (WEBS®)** amplifier or audio paging amplifier.

The **Line Level Audio Output #2** rating and connection are as follows:

	Rating	Connect to Wire Pair Color	Connector Number
Line Level Audio Output #2 or audio paging	600 Ohm	Yellow-Yellow	**J4**

XI. Line Level Audio for Active Induction Hearing Loop Panel

Line Level Audio Output #1 is provided for use with the external active induction hearing loop panel, **Model AHLP-1**.

The **Line Level Audio Output #1** rating and connection are as follows:

	Rating	Connect to Wire Pair Color	Connector Number
Line Level Audio Output #1 for External Active Induction Hearing Loop	600 Ohm	Purple-Purple	**J4**

XII. Final Assembly

After completing the field wiring installation, reattach the back box on to the faceplate with the six (6) hex nuts and washers that were removed earlier.

IMPORTANT NOTE:

It is the installer's obligation to ensure that the wiring should pass through the cable entry hole at the bottom of the back box.

Please exercise caution when reinstalling the back box and ensure that no cables are crushed during the process.

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

Install the **ETP-520 Call Station** into its appropriate mount (e.g. **ETP-SM-1**, as shown in **Figure (5)** below), with the six (6) pin-in Torx (T-20) #10 faceplate screws provided.
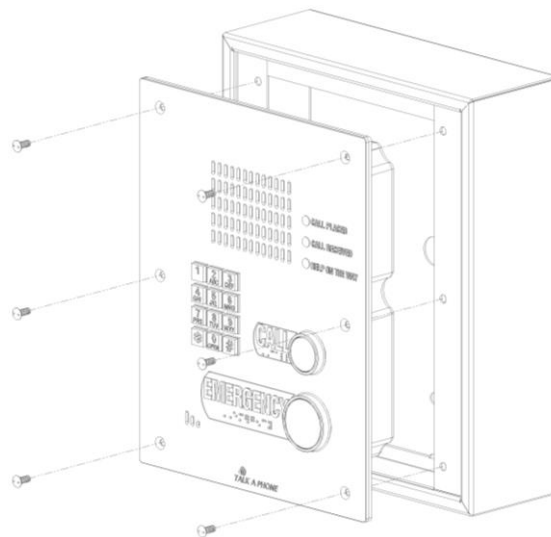

Figure 5. Installing a Call Station into an ETP-SM-1 surface mount.

XIII. Accessing Programming Mode

After completing the field wiring installation, fasten the back box on to the faceplate with the six (6) hardware nuts and washers.

NOTE: It is the installer's obligation to ensure that the wiring should pass through the cable entry hole at the bottom of the back box. Please exercise caution when reinstalling the back box and ensure that no cables are crushed during the process.

XIV. Quick Programming Guide

Programming the **ETP-520 Call Station** is relatively quick and easy—the following quick programming guide will serve most installations and can be followed once wiring connections are completed and the call station is mounted.

> **ATTENTION:**
>
> After each **ETP-520 Call Station** programming code, a single beep indicates the code has been accepted. A double-beep indicates an error—re-enter the code again.

1. Call into the **ETP-520 Series Call Station**—it will answer with a rapid series of touch tones.
2. Enter the default security code:

    *4**

> **ATTENTION:**
>
> For dialing a number on a PSTN (POTS) telephone line (i.e. calling an outside phone number), use the 10-digit phone number format (i.e. 1 + area code + 7-digit number) of the answering point as the phone number.

3. **Programming Phone Numbers for Button #1 to Dial**

    a. Enter the **Phone Number #1**:   **[0-20 digits for Phone Number #1] # 00**

    b. Enter the **Phone Number #2**:   **[0-20 digits for Phone Number #2] # 01**

    c. Enter the **Phone Number #3**:   **[0-20 digits for Phone Number #3] # 02**

    d. Enter the **Phone Number #4**:   **[0-20 digits for Phone Number #4] # 03**

    e. Enter the **Phone Number #5**:   **[0-20 digits for Phone Number #5] # 04**

4. **Recording a Location Voice Message**

    a.   Enter code to begin recording for **Button #1**:   *** 41**

    b.   Wait for the tone to begin speaking/recording. The recorded message has a **maximum length of 16 seconds**.

    c.   Press the **#** key to stop recording or it will end after 16 seconds. The recorded message will automatically play back.

    d.   To review the recorded message for **Button #1** again, press: *** 51**

    e.   To delete the recorded message for **Button #1**, press: *** 31**

    f.   To re-record the location message, return to **Step (5)(a)**.

5. **Activating Auxiliary Output #2 When Call Placed with Button #1**

Enter code to activate Auxiliary Output #2 when a call is placed with **Button #1**—e.g., trigger ETP-EL LED Blue Light Beacon to flash:

121111#76

6. **Programming Phone Numbers for Auxiliary Input to Dial**

    a.   Enter the **Phone Number #1**:   **[0-20 digits for Phone Number #1] # 10**

    b.   Enter the **Phone Number #2**:   **[0-20 digits for Phone Number #2] # 11**

    c.   Enter the **Phone Number #3**:   **[0-20 digits for Phone Number #3] # 12**

    d.   Enter the **Phone Number #4**:   **[0-20 digits for Phone Number #4] # 13**

    e.   Enter the **Phone Number #5**:   **[0-20 digits for Phone Number #5] # 14**

7. To disconnect and exit programming mode, enter: **# 7**