

# TELEDIAL HS

Telephone-line powered



## INSTALLATION and OPERATION INSTRUCTIONS

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## **INTRODUCTION**

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This manual contains the information required to install and program the TRIGON Teledial HS. If you are using this manual to install this unit, it is very important to read all the sections in order.

You should read these instructions before you begin installation. This will insure that everything is done efficiently.

If you are using this manual as a programming guide after the initial installation, you may find the TABLE OF CONTENTS useful in locating the particular programming procedure you need.

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## **PRODUCT OVERVIEW**

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The Trigon Teledial HS is a Hand Set autodial telephone. It is a multi-number telephone line powered autodialing industrial telephone.

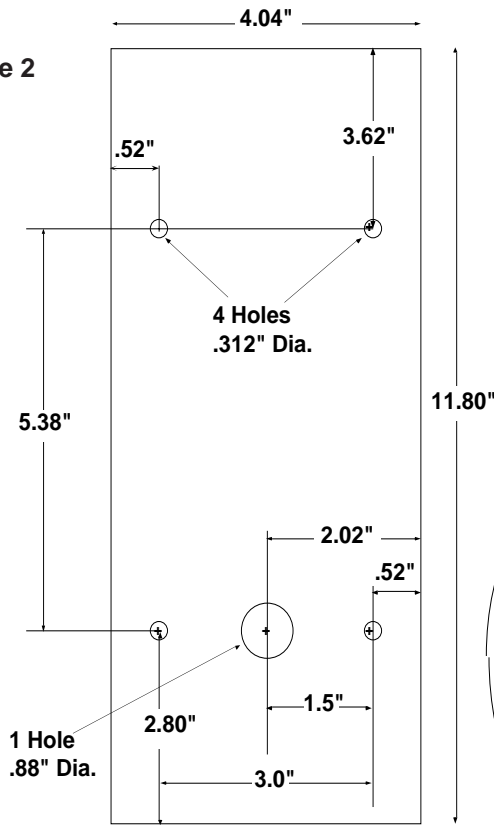
The Teledial HS has a capacity of up to 10 telephone numbers and is PBX compatible. It is constructed for rugged outdoor use. Its long-lasting brushed-finish stainless steel housing complements its thin design lines. A matching flush-mount trim-ring or lighted hood may be selected to add the finishing touches to an installation.

**Figure 1**

Hookup Specifications

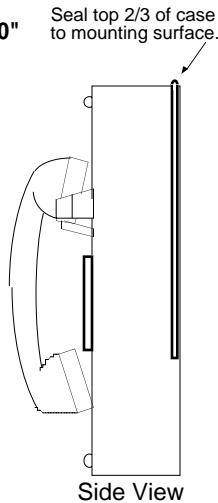
## MOUNTING

Figure 2



**Note:** Mount backplate with .88" Dia. wire entry hole toward the bottom.

Figure 2b



Arrangements must be made for the installation of a standard voice-grade telephone line (touch-tone or rotary, telco or PBX Port), as close to the unit mounting location as possible. The telephone company may require the following information.

FCC Registration No.....1Z8898-62546-DI-T

Ringer Equivalence.....0.8B

Connector.....Terminal Block

When selecting a mounting location, Trigon recommends some shelter be provided from direct rain and sunlight. An overhang is usually sufficient. If a heater element is installed, be sure to use a bi-metal thermal switch to prevent over-heating during the summer months.

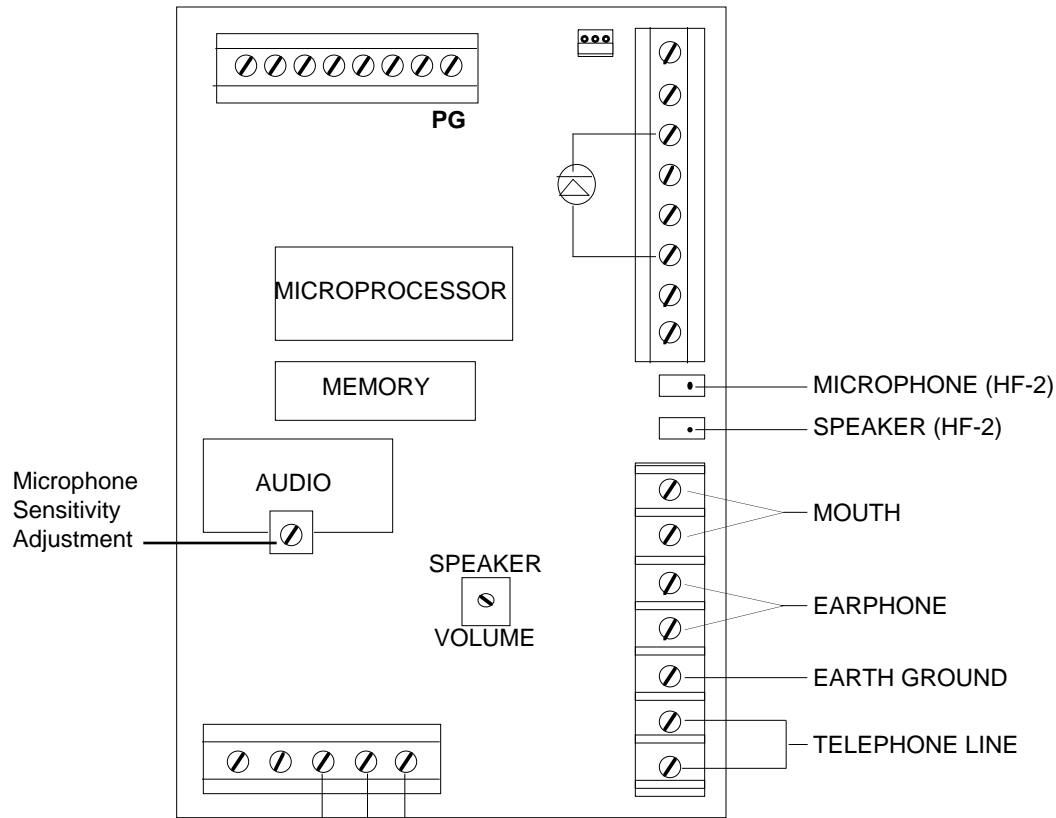
Pull the wiring through the access hole in the lower portion of the back plate (Fig. 2). Bolt the plate to the surface through the four .312" mounting holes provided. At this time, the wiring should NOT be energized.

**Note:** If used in extreme weather, a bead of silicon sealant should be run around the outside top two thirds of the unit, after the front case is secured. (Fig. 2b).

## WIRING

1. Use the wiring diagram on pg. 5 for wire connection information.
2. Isolate the phoneline from 120 VAC power wires. This will prevent 60 Hz hum from occurring on the phoneline. Use 22 AWG wire on Telco line run distances of up to 2400 feet. Consult the factory for distances greater than 2400 feet.
3. If all wiring and grounding is completed, mount the faceplate onto the backbox.

**WIRING DIAGRAM**



**Telephone line cabling**  
Voice Grade 24 to 48V  
22AWG; Shielded or  
Twisted up to 2400'

**TELEDIAL HS**

Figure 3

## PROGRAMMING INFORMATION

### General Programming Information

The "Initial Setup" for the HS-2 has been programmed at the factory. These factory default settings may be changed to better suit your particular application. If you decide to alter these settings, follow the instructions below. It is important that each programming step be taken in order. When reprogramming a specific feature, you must always enter the programming mode first. You may then go to the appropriate procedural steps for the changes desired.

Record below the autodialed numbers to be programmed into the HS-2.

### Autodialed Numbers

Primary Auto dial Number (16 digit max)

-----

Second Auto dial Number (16 digit max)

-----

Third Auto dial Number (16 digit max)

-----

Fourth Auto dial Number (16 digit max)

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Fifth Auto dial Number (16 digit max)

-----

Sixth Auto dial Number (16 digit max)

-----

Seventh Auto dial Number (16 digit max)

-----

Eighth Auto dial Number (16 digit max)

-----

Ninth Auto dial Number (16 digit max)

-----

Tenth Auto dial Number (16 digit max)

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Site ID Number-if required Number (4 digits)

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## PROGRAMMING

### (A) To Enter Program Mode:

1. Call the telephone number of the unit.
2. Listen for the two second tone.
3. Enter '#' then the unit's Program Code.
4. If desired, exit Program Mode by pressing '#' (wait for two second tone).
5. To terminate call, press '7'.

If the unit is new, use the preset factory code. (Factory code is 9753).

### (B) Setting the Primary and Backup Telephone Numbers:

1. Unit must be in Program Mode.
2. Press '2' then '1' (wait for tone) and enter the first phone number. Press '#' when complete. Press '2' then '2' (wait for tone) and enter the second phone number. Press '#' when complete. If more numbers are needed press '2' then '3' (wait for tone) and so on for up to 10 phone numbers. Press '#' when complete.
3. If desired, exit Program Mode by pressing '#' (wait for two second tone).
4. To terminate call, press '7'.

### (C) Verifying Telephone Numbers:

1. Unit must be in Program Mode.
2. Press ' ' then press '1' to verify the first phone number entered.
3. Press ' ' then press '2' to verify the second phone number entered etc.
4. If desired, exit Program Mode by pressing '#' (wait for two second tone).
5. To terminate call, press '7'.

## PROGRAMMING

### (D) Setting the Site ID Number:

This number identifies the unit upon request from a central office.

1. Unit must be in Program Mode.
2. Press '1'.
3. Enter a four digit number.

You will hear two 'beeps' indicating command accepted.

4. If desired, exit Program Mode by pressing '#' (wait for two second tone).
5. To terminate call, press '7'.

### (E) Changing Program Access Number:

This will change the factory preset number of '9753'.

1. Unit must be in Program Mode.
2. Press '3'.
3. Enter a new four digit number.

You will hear two 'beeps' indicating command accepted.

4. If desired, exit Program Mode by pressing '#' (wait for two second tone).
5. To terminate call, press '7'.

### (F) Setting Incoming Ring Count:

Entering a digit value of 1 to 9 will set the number of rings the unit will count before answering an incoming call.

1. Unit must be in Program Mode.
2. Press '5'.
3. Enter the number of rings desired ( 1 to 9).

or

4. Enter '0' if an audible ring is desired from the HS--2 whenever it is called.

You will hear two 'beeps' indicating command accepted

5. If desired, exit Program Mode by pressing '#' (wait for two second tone).
6. To terminate call, press '7'.

**Note:** If '0' was programmed for an audible ring, the call may be answered by pressing the first 'Call' button on the face of the unit.

### (I) Setting the Dial Mode.

This will select Rotary or Touch-Tone dialing.

1. The unit must be in Program Mode.
2. Press '6'.
3. Press '1' for Rotary.

or

4. Press '0' for Touch-Tone.

You will hear two 'beeps' indicating command accepted

5. If desired, exit Program Mode by pressing '#' (wait for two second tone).
6. To terminate call, press '7'.

This is the period of time allowed for conversation before time-out. The time desired is measured in seconds, and entered using a 3 digit number. (060= 1 minute, 180= 3 minutes, etc).

1. Unit must be in Program Mode.
2. Press '8'.
3. Enter call length in seconds (001 to 999).

You will hear two 'beeps' indicating command accepted.

4. If desired, exit Program Mode by pressing '#' (wait for two second tone).
5. To terminate call, press '7'.

### (K) DTMF Echo Test:

1. Press '9'.

The unit will send a tone sequence 1 thru 0 ,\*, #, and then echo any tones received from the caller.

2. To stop test. press '#' (wait for two second tone).
3. To terminate call, press '7'.

### Remote Operation Time-out:

If you call the unit to operate it remotely, you have 30 seconds until auto-termination. Any tone instruction will restart this 30 second timer. If you find that you need more than 30 seconds:

1. Enter "8" on your telephone's keypad to extend your call time to three minutes.

### Remote Function Tests:

The TRIGON Teledial HS has the ability to run a series of self-tests to verify its functionality.

Call the unit. When it answers choose from the following.

1. Enter "0" for touch tone echo test.

Unit will "echo" any touch tone you send with your phone.

2. Press "# #" to escape from this test.
3. Enter "1" for memory test. (One tone = good; two tones = bad).
4. Enter "2" for touch tone sequence. (Unit answers by transmitting touch tones 1 through 9, \*, and #).

## OPERATION

### STANDARD MODE

When the handset is lifted, the Teledial HS dials a pre-programmed phone number and monitors the line for the following signals:

**Busy Signal:** *The HS will hang up and redial the number after approximately three busy tones.*

**Ring Signal:** *The HS will hang up and redial the number after approximately six unanswered rings (36 seconds).*

**Voice or Touch-tones:** *This indicates an answer. The unit then enters the Talk Mode.*

### Answering the Call From the Teledial HS

Answer the Teledial HS incoming call with a short phrase **at least 3 seconds long**. The unit may fail to recognize a short greeting such as “Hello” and may not turn on the microphone.

*To **Terminate the Call**, press '7'.*

*To **Reset the Teledial HS's Call Length Timer**, press '8'.*

**Note:** The unit will beep twice to warn of auto-call termination in 10 seconds.

*To **Retrieve the HS-2s Site ID number**, press '#'.*

**Note:** If the wrong Program code is entered, the unit will immediately hang up. If the program code or other information is not entered completely, the HS-2 will time-out and hang up.

### EMERGENCY MODE

When the handset is lifted, the Teledial HS dials a pre-programmed phone number, and monitors the line for the following signals:

**Busy Signal:** *The HS will hang up and redial the number after approximately three (3) busy tones.*

**Ring Signal:** *The HS will hang up and redial the number after approximately six unanswered rings (36 seconds).*

**Voice or Touch-tones:** *This indicates an answer. The unit then enters the Talk Mode.*

### Answering the Call From the HS-2

Answer the Teledial HS incoming call with a short phrase **at least 3 seconds long**. The unit may fail to recognize a short greeting such as “Hello” and may not turn on the microphone.

Once voice communication has been established you may then press keys on your touch-tone telephone to do any of the following:

**1. To **Terminate the Call**, press '7'.**

**2. To **Reset the HS-2's Call Length Timer**, press '8'.**

**Note:** The unit will beep twice to warn of auto-call termination in 10 seconds.

**3. To **Retrieve the HS-2's Site ID number**, press '\* '.**

**4. To **Enter the Program Mode**, press '#', followed by the four digit Program Code.**

When the Teledial HS is in the Emergency Mode, the call can only be terminated by the party that answers the call when they press '7' on their telephone keypad.

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## TROUBLE SHOOTING GUIDE

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### NO DIAL TONE

1. Check for phone line. Voltages across terminals should be 48-52 VDC (on hook), 6-12 VDC(off hook).
2. Check VOLUME adjustments on PC board.
3. Check handset connections to PCB.
4. Verify that contacts and wires are clean and tight.

### CANNOT PROGRAM

1. Incorrect/lost program code.
2. Not entering "\*" before program code.
3. Try 'NO DIAL TONE' troubleshooting procedures.
4. Keypad damaged. Check for vandalism.
5. Check that the Program Prom/Microprocessor is fully seated.

