SERVICE MANUAL

FOR

MODEL SSW-521-D2-ADA

STAINLESS STEEL HANDS FREE WALL TELEPHONE

WITH OPTIONAL ADA FEATURE AND

OPTIONAL SECOND-NUMBER AUTO-DIAL FEATURE

EQUIPPED WITH SPK1.07UNVLr3 FIRMWARE

CEECO

Serving the Telephone Industry Since 1930

Communication Equipment
& Engineering Company

519 West South Park Street
Okeechobee, FL. 34972
Voice: 863-357-0798
Fax: 863-357-0006

IMPORTANT INFORMATION FOR CUSTOMER

Please fill in before you continue.

The following information is necessary when calling CEECO for assistance.

MODEL NUMBER	MODEL SSW-521-D2-ADA STAINLESS STEEL HANDS FREE WALL TELEPHONE EQUIPPED WITH SPK1.07UNVLr3 FIRMWARE.
SERIAL NUMBER	
DATE MANUFACTURED	
LOCATION INSTALLED	

For us to better serve you, please have this information available when calling for technical support.

CEECO

Communication Equipment & Engineering Company

519 West South Park Street
Okeechobee, FL. 34972

(863) 357-0798 Voice
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SECTION **PAGE**

1.0 INTRODUCTION

The practices in this manual provide installation and maintenance information for the CEECO Model SSW-521-D2-ADA Stainless Steel Wall Telephone.

The information in this manual is subject to change without notification.

For information not included in this manual, please call or write:

CEECO
Customer Service
519 West South Park Street
Okeechobee, FL. 34972

(863) 357-0798
(863) 357-0006 (FAX)

2.0 GENERAL

2.1 The CEECO Model SSW-521-D2-ADA Hands free telephone is a sturdy, vandal resistant, Stainless Steel Speakerphone, with optional ADA feature (RED/GREEN LED). Instead of a hookswitch and handset, the telephone is equipped with a Press to start/Press to stop Emergency Auto Dial button. The button provides automatic dialing of a preprogrammed number of up to 11 digits, and can be programmed to automatically dial to a second number of up to 11 digits, if the first number is not answered in the selected number of rings.

2.2 The microphone is muted during dial tone eliminating the use of hand held dialers.

2.3 The telephone may be programmed to:

- allow or block incoming calls (if equipped with ringer)
- automatically time and disconnect a phone call
- automatically dial a PBX or other access number
- automatically dial a second number if the first number is not answered

2.4 Programming is accomplished via the DTMF keypad, which is packaged separately.

3.0 PROGRAMMING

NOTE: It is recommended that you ground yourself to prevent ESD damage to the PCB(s).

3.1 Locate the security screw on the bottom of the housing and remove it with the security tool (P/N 301-037 sold separately). Separate the telephone housing from the back plate by pulling the housing bottom away from the back plate and up.

3.2 Locate the programming keypad, which was packaged separately and has a white connector on the reverse side. Locate the multi-color ribbon cable extending from the Printed Circuit Board, with a white connector on the loose end. **Connect the keypad** and cable, via the two white connectors.

3.3 **Connect the telephone** to a working telephone line or a DTMF test set (Please refer to diagram on page 10).

3.2 Locate the pair of plastic **mini-jumpers** along the edge of the PC board. Move them to the **"ON"** or inner most position as depicted in the diagram on the last page of this manual.

3.3 **Press the "Emergency" button** on the front of the phone and wait for dial tone to begin programming.

3.4 **Enter #97#18#**, in order to **clear all** user programmable memory.

NOTE: Once the "#" key has been entered, you may hear a fast busy tone, an operator reorder, or other Central Office signals. Please disregard these sounds and continue programming, as they will have no effect on the programming.

3.5 Each programming location is accessed by dialing the # sign and the corresponding two digit code. The previous contents of the location are automatically erased when the location code is accessed.

3.6 **Enter #00, followed by** a series of **ten (10) digits** as selected from the following page. Location "00" is the telephone options location. By entering a selected number of 0-9 into each of the ten digit locations, the phone is customized for the particular installation

PROGRAMMING CONTINUED

LOCATION #00: (**OPTION TABLE**)

- Be sure to record your selections here for future reference:

#00	0	__	__	0	0	__	0	__	0	__
	1	2	3	4	5	6	7	8	9	10

Digit 1:
0 Always **0** for this model.
Digit 2:
0 **No** incoming calls allowed.
1 Incoming calls allowed (if equipped with ringer).
Digit 3:
0 No Conversation Time-Out.
1-9 Minute(s) Conversation Time-Out. (Automatically times & disconnects call)
Digit 4:
0 Always **0** for this model.
Digit 5:
0 Always **0** for this model.
Digit 6:
0 Deactivate ADA Feature
1-9 **Activate ADA** feature. **Number** of unanswered **rings** before releasing **second auto-dial** number.
Digit 7:
0 Always **0** for this model.
Digit 8:
0 **Do not** dial PBX access number stored in location #18.
1 Dial PBX access number stored in location #18.
Digit 9:
0 Always 0 for this model.
Digit 10:
0 No wink detect.
1-9 Length of the wink detect (1=50ms incremental to 450ms. **5** is recommended).

EXAMPLE: Dial #00 0160020105 and the phone will be set as follows:
DIGIT 1 .. ALWAYS 0
DIGIT 2 .. INCOMING CALLS ALLOWED
DIGIT 3 .. 6 MINUTE CONVERSATION TIME OUT
DIGIT 4 .. ALWAYS 0
DIGIT 5 .. ALWAYS 0
DIGIT 6 .. ACTIVATE ADA FEATURE 2 RINGS FOR 2ND NUMBER AUTO-DIAL
DIGIT 7 .. ALWAYS 0
DIGIT 8 .. DIAL THE PBX ACCESS NUMBER FIRST
DIGIT 9 .. ALWAYS 0
DIGIT 10..250 ms wink detect.

PROGRAMMING CONTINUED

3.7 **Enter #19 followed by the desired emergency auto-dial number**. This is the number that is automatically dialed when the button on the front of the phone is pressed. The number may range from 1-11 digits. The time-out disconnect feature (if programmed) will start after this number has been dialed.

EXAMPLE: Enter **#19** 5551212. This will cause the phone to automatically dial the seven-digit number, 5551212, when the "Emergency" button is pressed.

3.8 If it is necessary for the telephone to first dial a PBX or other access number, **Enter #18 followed by the desired PBX/Access number.** Otherwise, proceed to section 3.9. This number may also range from 1-11 digits. Provided that a 1 was entered under Digit 8 in section 3.6, the number stored in LOCATION #18 will automatically dial first, followed by a 1 second pause, and then the number stored in LOCATION #19 will automatically dial.

EXAMPLE: Enter **#18** 1800123456. This will cause the phone to automatically dial the eleven digit 1800 number, followed by a 1 second pause, followed by the automatic dialing of the number entered after #19 above.

3.9 If a **second auto-dial number** is desired, **enter # 0 1 followed by the desired second auto-dial number.** This number will automatically dial out after the selected number of unanswered rings from the first auto-dial number. The number of rings is selected under Digit 6 in programming section 3.9. The second auto-dial number may be up to eleven (11) digits in length. If this is not a desired feature, proceed to section 3.10.

Example: Enter **# 0 1** 7 7 7 1 3 1 3. During programming in the previous section (3.6), entering a "2" for Digit 6 in programming section 3.6, will program the phone to automatically dial the number 777-1313 after the first auto-dial number receives two (2) unanswered rings.

3.10 When **programming is finished**, press the "Emergency" button to **hang up** the phone. **Return** the two plastic **mini-jumpers** to the **"off"** or outermost position, as depicted on the last page of this manual. **Disconnect the programming keypad** and secure it safely somewhere for future use. The phone is now **ready for installation**/use.

4.0 OPERATION

To make a call, press the "Emergency" button located on the front of the telephone and wait to hear dial tone. The LED (if provided) will illuminate red at this time and the pre-programmed number(s) will dial out on the line. When the call is complete, press the "Emergency" button again to hang up the phone. The call will be terminated and the LED (if provided) will go out. If the phone is not manually hung up, it will reset itself upon receiving a wink back from the far end, or upon the expiration of the time entered in section 3.6 under Digit 3 (call time-out feature).

The telephone is equipped with an optional ADA LED light (visual call progress LED), which will illuminate red when the emergency button is pressed. The LED will flash red and green during the ringing cycle. The LED will then turn green when the called party answers (within a max. four seconds). Thus, the LED provides a visual indication of the call progress. In order for the ADA LED to function, it must be activated by selecting "1-9" in section 3.6 under Digit 6.

NOTE: CEECO cannot assume responsibility for the called party's response.

5.0 RECOMMENDED TOOLS AND TEST EQUIPMENT

Volt/Ohm Meter
5/16" Nut driver
3/8" Nut Driver
Security Tool, CEECO part number 301-037
Flat Blade Screw Driver
DTMF Test Set

6.0 INSTALLATION NOTES AND ASSEMBLY INSTRUCTIONS

6.1 Using a 301-037 security tool (sold separately), loosen and remove the security screw.

6.2 The security tool is for a standard 5/32" button head screw generally used on the framework of the phone booths.

6.3 Separate the cover assembly from the back plate assembly by pulling the bottom forward and pushing up.

6.4 The back plate assembly is designed to be mounted on any flat vertical surface. Four mounting holes are provided.

6.5 Run the inside station wire (tip & ring) through the back plate assembly and terminate onto the terminal block on the back plate, as depicted on the following page.

6.6 The use of a gas tube station protector is recommended. The station ground should not exceed 50 ohms.

6.7 Plug together the line cord wires (red & green) from the telephone assembly and the backplate, by matching the marked surfaces of the connectors. (refer to diagram on next page). Dress the lines/cables away from the security screw.

6.8 Install the cover assembly by placing the two tabs into the two corresponding slots and secure the cover assembly by tightening the security screw.

*******WARNING*******

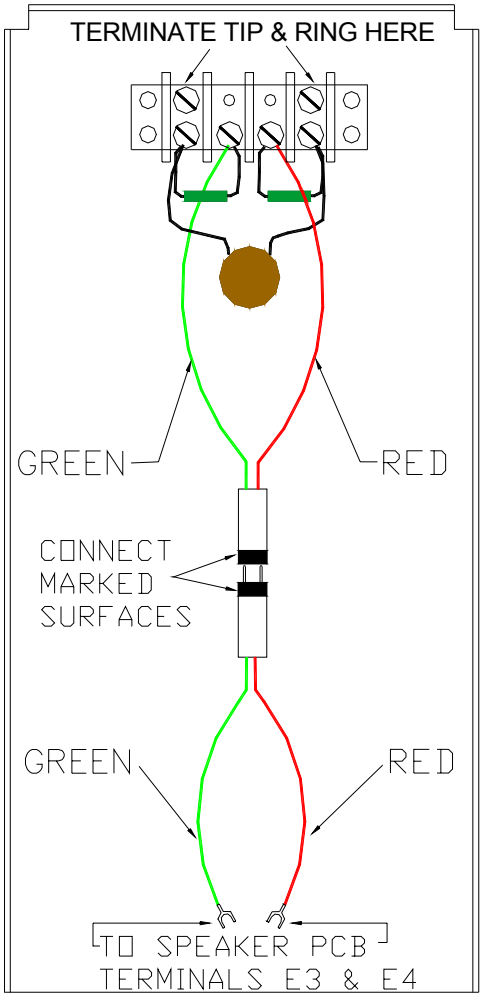
A. Never install telephone wiring during a lightning storm.

B. Never install telephone jacks in wet locations unless the jack is specifically designed for wet locations.

C. Never touch uninsulated telephone wires or terminals unless the telephone line has been disconnected at the network interface.

D. Use caution when installing or modifying telephone lines.

6.9 TELEPHONE LINE WIRING DIAGRAM



7.0 TESTING

Action: Connect the phone to the line.
Press the "Emergency" button.

Reaction: Dial tone is received.
LED illuminates.

Action: The phone automatically dials the preprogrammed number(s). The ADA LED flashes during ringing. If the Second Number Auto-Dial feature was programmed, and there is no answer after the programmed number of rings, the telephone will reset and automatically dial the second number. The phone will continue to reset and redial the alternating numbers unit answered or otherwise disconnected.

Reaction: The called party answers.
A normal speakerphone conversation is allowed.
The LED turns green within a max. four seconds of the called party's answer. The microphone is active immediately.

Remember: The ADA feature must be activated during the programming of the phone.

Action: Finish the conversation.
Press the "Emergency" button again to hang up.
The called party hangs up.

Reaction: LED goes out.
The call is terminated.

8.0 SPECIFICATIONS

INPUT POWER :	C.O. Line powered
LOOP CURRENT :	35ma. min. 80ma. max.
IMPEDANCE :	600 ohms
SIGNALING :	DTMF, 70ms tone, 50ms spacing
OUTPUT :	-4.0 to -6.0dbm
ENVIRONMENTAL :	Temperature 0c to 50c Humidity 20%-90% non-condensating
PROGRAMMING :	Via DTMF keypad.
DIMENSIONS :	**5"W X 10"H X 3 1/2"D**
MOUNTING :	Vertical surface mount
MEMORY RETENTION :	Non-volatile memory retention
WEIGHT :	Approximately 6 Pounds
TYPE JACK :	RJ11C

9.0 PARTS LIST

QUANTITY	PART NUMBER	DESCRIPTION
1	301-018	MODULAR LINE CORD
1	301-054	MODULAR CONNECTOR (RJ11C)
1	521-200	SERVICE MANUAL
1	700-008	KEYPAD CABLE
1	660-000	CEECO SPK BOARD
1	705-110	CONNECTORIZED KEYPAD
1	6020-B	MOMENTARY PANEL SWITCH
1	14123	SPEAKER
1	12017	RINGER
1	110	STAINLESS STEEL COVER
1	321-015	STAINLESS STEEL BACKPLATE
1	9023	1/4-20 X 3/4" SECURITY SCREW

ACCESSORIES:

1	301-037	SECURITY TOOL

10.0 REPAIR AND RETURN INFORMATION

10.1 WARRANTY REPAIR

Any device returned requiring warranty service, repair or credit must be accompanied with a "Return Material Authorization" (RMA) FORM. It must include: return shipping instructions, original purchase order number and special marking instruction. A description of the trouble observed must be attached to the defective unit. This information must be inside the shipping container.

10.2 DIRECT ALL INQUIRES TO:

CEECO
Repair Department
519 West South Park Street
Okeechobee, FL. 34972

(863) 357-0798
(863) 357-0006 (FAX)

10.3 NON-WARRANTY REPAIR

CEECO will repair equipment out of warranty for a set charge plus parts. The customer must pay the shipping costs for both directions.

10.4 RETURN FOR CREDIT

Material may be returned for credit only with prior approval. Material authorized for return is subject to a 20% restocking charge based on the manufacturer's list price. Return Material Authorization must be requested no later than 30 days after original shipment

11.0 WARRANTY POLICY

11.1 GENERAL

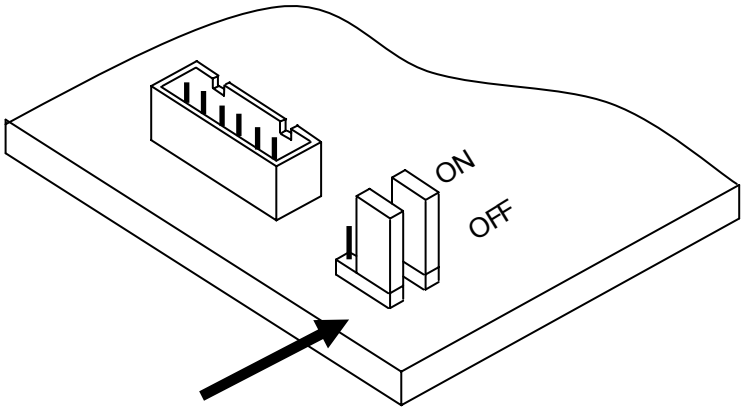
CEECO products are guaranteed to be free of defects in material and workmanship for a period of 365 days from the date of original purchase. CEECO's obligation under this warranty is limited to repair or replacement of any part found to be defective by CEECO. Under no circumstances shall CEECO be liable for loss, damage, cost of repair or consequential damages of any kind, which have been caused by neglect, abuse, acts of GOD or improper operation of equipment.

11.2 PRINTED CIRCUIT BOARDS

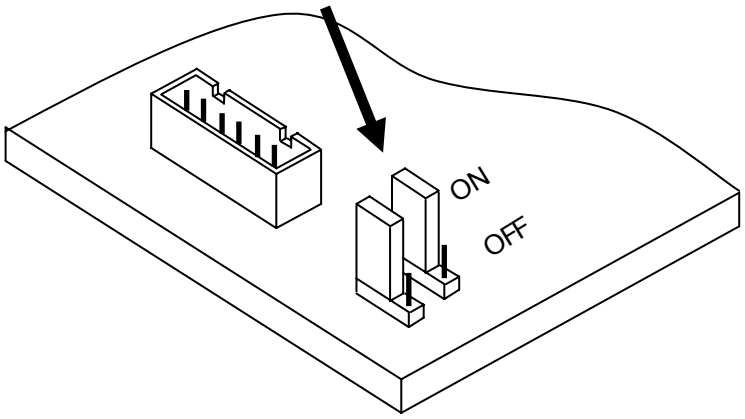
Printed circuit boards should not be field repaired. If a unit is found to be faulty, replace it with another unit and return the faulty unit to CEECO for repair. Modifications by anyone other than CEECO will void the warranty.

12.0 DIAGRAM

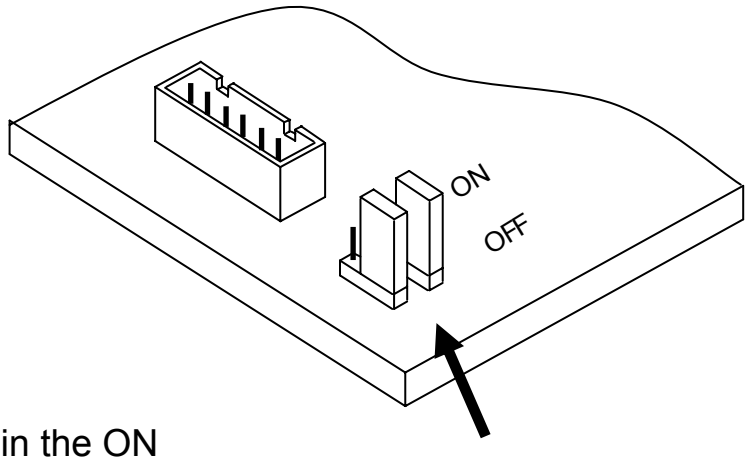
Locate the mini jumpers on the corner of the PCB.



Move the mini jumpers to the **ON** position BEFORE going off-hook.



When programming is completed, move the mini jumpers to the **OFF** position.



NOTE:
Do not leave the mini jumpers in the ON position; this will decrease battery life.