SSW-521-F-SPK1.07UNVL-ADA-ISSUE4.0

SERVICE MANUAL

FOR

MODEL SSW-521-F
(FORMERLY SSW-521-FS)

STAINLESS STEEL HANDS FREE WALL TELEPHONE

OPTIONAL ADA FEATURE AVAILABLE

EQUIPPED WITH SPK1.07UNVL FIRMWARE

Serving the Telephone Industry Since 1930

Communication Equipment	**519 W South Park Street**
& Engineering Company	**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-F STAINLESS STEEL HANDS FREE WALL TELEPHONE EQUIPPED WITH SPK1.07UNVL 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 W South Park Street
Okeechobee, FL 34972
863-357-0798- telephone
863-357-0006- facsimile
info@ceeco.net
www.ceeco.net

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<u>**SECTION**</u>   <u>**PAGE**</u>

1.0   INTRODUCTION

The practices in this manual provide installation and maintenance information for the CEECO Model SSW 521-F 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
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2.0   GENERAL

2.1   The CEECO Model SSW-521-F 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 has a Press to start/Press to stop button ("CALL" button) for the initiation and termination of phone calls. Manual volume control is also provided inside the telephone.

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)
- implement call restrictions
- automatically time and disconnect a phone call
- automatically dial a PBX or other access number
- exercise speed dialing.

2.4   Programming is accomplished via the DTMF keypad.

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 <u>sold separately</u>). Separate the telephone
           housing from the back plate by pulling the housing bottom away from the
           back plate and up. **Connect the telephone** to a working telephone line or a
           DTMF test set (Please refer to diagram on page 13).

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 "CALL" button** 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…

- Be sure to record your selections below for future reference.

   #00 __ __ <u>0</u> __ <u>0</u> <u>0</u> <u>1</u> <u>0</u> <u>0</u> ___

   <u>Digit 1:</u>
   0   Implement call restrictions.
      (*Must be set to 0 to implement call restrictions in section 3.7).
   1   No call restrictions.

   <u>Digit 2:</u>
   0   No incoming calls allowed.
   1   Incoming calls allowed (if equipped with ringer).

   <u>Digit 3:</u>
   0   **Always 0** for this model.

   <u>Digit 4:</u>
   0   No conversation time-out.
   1-9 Minute(s) conversation time-out. (Telephone will automatically time and
      disconnect a phone call after the selected time period).

   <u>Digit 5:</u>
   0   **Always 0** for this model.

   <u>Digit 6:</u>
   0   **Always 0** for this model.

   <u>Digit 7:</u>
   1   **Always 1** for this model.

   <u>Digit 8:</u>
   0   Do not dial PBX/Access number stored under #18 (see section 3.7).
   1   Dial PBX/Acess number stored under #18.

   <u>Digit 9:</u>
   0   **Always 0** for this model.

   <u>Digit 10:</u>
   0   No Wink Detect
   1-9 Length of the Wink (l = 50ms incremental to 450ms. **5** is recommended)

PROGRAMMING CONTINUED…

EXAMPLE:

Enter #00 0106001005

Phone will be set as follows:
>DIGIT 1 .. CALL RESTRICTIONS IN EFFECT
>DIGIT 2 .. INCOMING CALLS ALLOWED
>DIGIT 3 .. ALWAYS 0
>DIGIT 4 .. 6 MINUTE TIME OUT
>DIGIT 5 .. ALWAYS 0
>DIGIT 6 .. ALWAYS 0
>DIGIT 7 .. ALWAYS 1
>DIGIT 8 .. NO PBX/ACCESS NUMBER
>DIGIT 9 .. ALWAYS 0
>DIGIT 10 .250ms WINK

3.7 If it is necessary for the telephone to **automatically dial a PBX or other access number** when the "CALL" button is pressed, **enter #18 followed by the desired number.** Otherwise proceed to section 3.8.

Example: entering **# 1 8** 9 will cause the telephone to automatically dial the number "9", when the phone is in operation and the call button is pressed.

3.8 <u>**LOCATION #71-#89:**</u>   **(CALL RESTRICTIONS)**

If it is necessary for the phone to implement call restrictions, enter the numbers the telephone is "allowed" to call, as described in this section. Otherwise, proceed to the next section. Remember that Digit 1 in section 3.6 must have been set to "0" in order to utilize the call restriction function. If this was not done, simply repeat section 3.6 <u>only</u> and return to this section. By programming the telephone with the numbers or calling patterns it is allowed to call, all other numbers or patterns are blocked. The allowed number(s) can range from 1 to 11 digits. There are twenty (20) memory locations available (#71-#89). Simply **enter** the intended **memory location**, **followed by the desired/allowed calling pattern.** Please refer to the example on the following page.

PROGRAMMING CONTINUED…

EXAMPLE:

NOTE: The * (Asterisk) symbol is defined as a wildcard. This means that any digit 0-9 may be entered in its place from the telephone keypad.

#71 0-***-***-****   Allows all 0 minus and 0 plus calls.

#72 1-555-1212   Allows 1-555-1212 information calls.

#73 911   Allows 911 emergency calls.

#74 1-800-***-****   Allows 1-800 calls.

#75 ***-****   Allows only local (7 digit) calls.

#76 587-****   Allows only 587 prefix calls.

Etc.

- Be sure to log your entries in the allowed call table below for future reference.

ALLOWED CALL TABLE

#70 _ - _ _ _ - _ _ _ - _ _ _ _   #80 _ - _ _ _ - _ _ _ - _ _ _ _

#71 _ - _ _ _ - _ _ _ - _ _ _ _   #81 _ - _ _ _ - _ _ _ - _ _ _ _

#72 _ - _ _ _ - _ _ _ - _ _ _ _   #82 _ - _ _ _ - _ _ _ - _ _ _ _

#73 _ - _ _ _ - _ _ _ - _ _ _ _   #83 _ - _ _ _ - _ _ _ - _ _ _ _

#74 _ - _ _ _ - _ _ _ - _ _ _ _   #84 _ - _ _ _ - _ _ _ - _ _ _ _

#75 _ - _ _ _ - _ _ _ - _ _ _ _   #85 _ - _ _ _ - _ _ _ - _ _ _ _

#76 _ - _ _ _ - _ _ _ - _ _ _ _   #86 _ - _ _ _ - _ _ _ - _ _ _ _

#77 _ - _ _ _ - _ _ _ - _ _ _ _   #87 _ - _ _ _ - _ _ _ - _ _ _ _

#78 _ - _ _ _ - _ _ _ - _ _ _ _   #88 _ - _ _ _ - _ _ _ - _ _ _ _

#79 _ - _ _ _ - _ _ _ - _ _ _ _   #89 _ - _ _ _ - _ _ _ - _ _ _ _

PROGRAMMING CONTINUED…

3.8   LOCATIONS #30-69   (SPEED DIALING)

If repertory/speed dialing is needed, enter the desired numbers as described in this section. Otherwise, proceed to section 3.9. There are forty (40) memory locations available (#30-#69). The number(s) can range from 1-11 digits in length. Simply **enter** the intended **memory location**, **followed by the desired speed dial number**. When the phone is placed into operation, the user will dial the # key followed by the appropriate two-digit memory location code. This will cause the corresponding speed dial number to automatically dial out.

EXAMPLE:

Enter **#30**18005551212 in the programming sequence. When in normal operating mode, the user dials #30 and the phone will Speed Dial - 1-800-555-1212.

- Be sure to log your entries in the speed dial table on the next page for future reference.

PROGRAMMING CONTINUED…

SPEED DIAL TABLE

#30 _ - _ _ _ - _ _ _ - _ _ _ _   #50 _ - _ _ _ - _ _ _ - _ _ _ _

#31 _ - _ _ _ - _ _ _ - _ _ _ _   #51 _ - _ _ _ - _ _ _ - _ _ _ _

#32 _ - _ _ _ - _ _ _ - _ _ _ _   #52 _ - _ _ _ - _ _ _ - _ _ _ _

#33 _ - _ _ _ - _ _ _ - _ _ _ _   #53 _ - _ _ _ - _ _ _ - _ _ _ _

#34 _ - _ _ _ - _ _ _ - _ _ _ _   #54 _ - _ _ _ - _ _ _ - _ _ _ _

#35 _ - _ _ _ - _ _ _ - _ _ _ _   #55 _ - _ _ _ - _ _ _ - _ _ _ _

#36 _ - _ _ _ - _ _ _ - _ _ _ _   #56 _ - _ _ _ - _ _ _ - _ _ _ _

#37 _ - _ _ _ - _ _ _ - _ _ _ _   #57 _ - _ _ _ - _ _ _ - _ _ _ _

#38 _ - _ _ _ - _ _ _ - _ _ _ _   #58 _ - _ _ _ - _ _ _ - _ _ _ _

#39 _ - _ _ _ - _ _ _ - _ _ _ _   #59 _ - _ _ _ - _ _ _ - _ _ _ _

#40 _ - _ _ _ - _ _ _ - _ _ _ _   #60 _ - _ _ _ - _ _ _ - _ _ _ _

#41 _ - _ _ _ - _ _ _ - _ _ _ _   #61 _ - _ _ _ - _ _ _ - _ _ _ _

#42 _ - _ _ _ - _ _ _ - _ _ _ _   #62 _ - _ _ _ - _ _ _ - _ _ _ _

#43 _ - _ _ _ - _ _ _ - _ _ _ _   #63 _ - _ _ _ - _ _ _ - _ _ _ _

#44 _ - _ _ _ - _ _ _ - _ _ _ _   #64 _ - _ _ _ - _ _ _ - _ _ _ _

#45 _ - _ _ _ - _ _ _ - _ _ _ _   #65 _ - _ _ _ - _ _ _ - _ _ _ _

#46 _ - _ _ _ - _ _ _ - _ _ _ _   #66 _ - _ _ _ - _ _ _ - _ _ _ _

#47 _ - _ _ _ - _ _ _ - _ _ _ _   #67 _ - _ _ _ - _ _ _ - _ _ _ _

#48 _ - _ _ _ - _ _ _ - _ _ _ _   #68 _ - _ _ _ - _ _ _ - _ _ _ _

#49 _ - _ _ _ - _ _ _ - _ _ _ _   #69 _ - _ _ _ - _ _ _ - _ _ _ _

PROGRAMMING CONTINUED…

3.9   When programming is finished, **hang up** the telephone by pressing the "CALL & HANGUP" button. Return the two plastic **mini-jumpers** to the **"OFF"** or outermost position, as depicted in the diagram on the last page of this manual. The phone is now ready for installation/use. For installation instructions, please refer to section 6.0.

4.0   OPERATION

To make a call, press the "CALL" button located on the front of the phone and wait for dial tone. The RED LED (if provided) will light at this time. When dial tone is received the transmitter is muted and the phone waits for numbers to be dialed. The user may utilize the keypad to dial numbers in accordance with any programmed call restrictions or speed dial numbers. When the call is answered, a normal speakerphone conversation is allowed.

After the call is complete, press the button again. The RED LED (if provided) goes out and the call is terminated. If user does not press the "CALL" button when he or she is finished using the phone, then the phone will hang up after detecting dial tone or when the telephone automatically disconnects as programmed.

If Digit 1 of Location #00 is "0" then call restrictions are in effect. The numbers that may be dialed are restricted to the numbers entered into Location #70-#89. If the number dialed is not in the Location #70-#89, then the phone gives three tones and drops the line.

If Digit 1 of Location #00 is set to "1", then there are no restrictions and any number may be dialed.

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
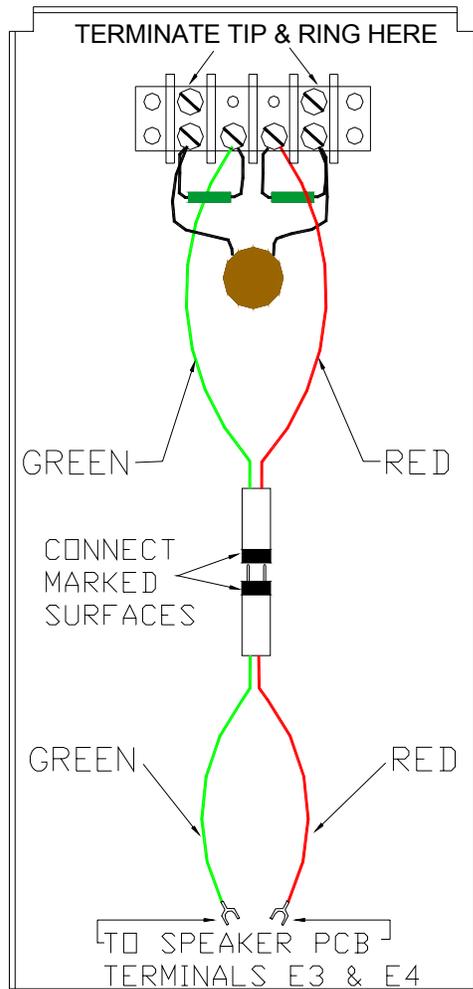Flat Blade Screw Driver
DTMF Test Set

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**

TERMINATE TIP & RING HERE

GREEN —   — RED

CONNECT
MARKED
SURFACES

GREEN   RED

TO SPEAKER PCB
TERMINALS E3 & E4

7.0   TESTING

Action: Connect the telephone to the telephone line.
             Press the "CALL" button.

Reaction: Dial tone.
             Any pre-programmed PBX/Access number should automatically
             dial. If no such number was pre-programmed, dial tone will
             remain.
             Red LED lights (if provided).

Action: Dial a number in accordance with the programming.

Reaction: The called party answers.
             A normal speakerphone conversation is allowed.

Action: Finish the conversation.
             Press the "CALL" button, or wait until time out occurs.

Reaction: Red LED goes out (if provided).
             The call is terminated.

Action: Make several calls as described above to test any pre-programmed
             call restrictions or speed dial numbers.

Reaction: The telephone should only allow calls to be made as programmed.
             Preprogrammed speed dial numbers should automatically dial
             when the corresponding location code is pressed (i.e. #30).

             Note: If any trouble is encountered, repeat the appropriate
                    programming section(s). If trouble persists, please refer to
                    section 10.2.

8.0   SPECIFICATIONS

INPUT POWER :   C.O. Line powered

LOOP CURRENT :   30ma. min. 80ma. max.

IMPEDANCE :   600 ohms

SIGNALING: DTMF, 70ms tone, 50ms spacing

OUTPUT :   -4.0 to -6.0dbm

ENVIRONMENTAL: Temperature   0°c to 50°c
                         Humidity   20%-90% non-condensating

PROGRAMMING :   Via DTMF keypad.

DIMENSIONS :   5"W X 10"H X 3 1/2"D

WEIGHT :   Approximately 6 Pounds

RINGER EQUIVALENCY: 0.4A

TYPE JACK :   RJ11C

UL LISTED NO.:   6OF5

FCC NO.:   BWBUSA-73021-MT-E

9.0   PARTS LIST

QUANTITY	PART NUMBER	DESCRIPTION
1	301-018	MODULAR LINE CORD
1	301-054	MODULAR CONNECTOR (RJ11C)
1	N/A	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	14024	SPEAKER
1	12017	RINGER
1	11071	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
863-357-0798- telephone
863-357-0006- facsimile
info@ceeco.net
www.ceeco.net

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

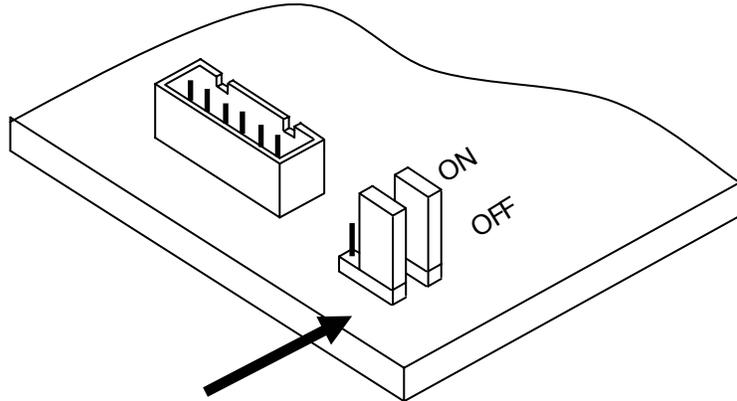# 11.0 WARRANTY POLICY

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.
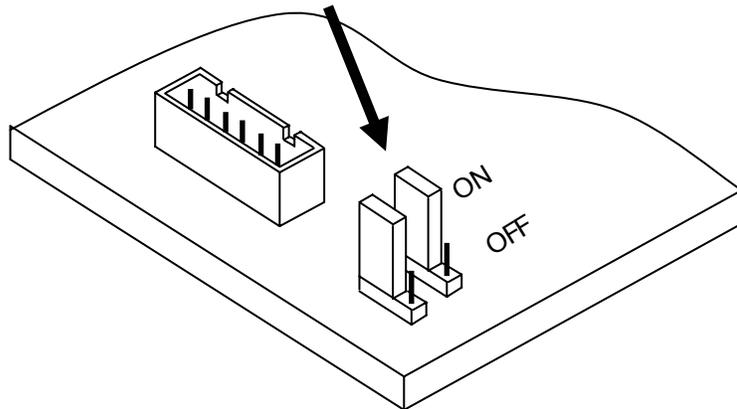
11.2 PRINTED CIRCUIT BOARDS

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.
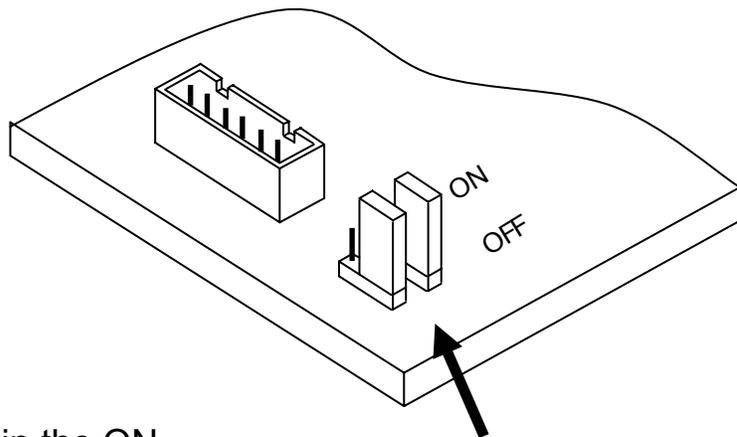
12.0 DIAGRAM

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.