SERVICE MANUAL

FOR

MODEL SSP-561-FD-ADA

HANDSFREE STAINLESS STEEL PANEL TELEPHONE

EQUIPPED WITH SPK1.07 UNVLr3 FIRMWARE

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	SPP-561-FD-ADA 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
(863)-357-0006 Fax

TABLE OF CONTENTS

SECTION		PAGE
1.0	INTRODUCTION	4
2.0	GENERAL	4
3.0	PROGRAMMING	5
	PROGRAMMING CONTINUED…	6
	PROGRAMMING CONTINUED…	7
	PROGRAMMING CONTINUED…	8
	PROGRAMMING CONTINUED…	9
	PROGRAMMING CONTINUED…	10
	PROGRAMMING CONTINUED…	11
4.0	OPERATION	11
5.0	RECOMMENDED TOOLS AND TEST EQUIPMENT	11
6.0	INSTALLATION NOTES AND ASSEMBLY INSTRUCTIONS	12
7.0	TESTING	14
8.0	SPECIFICATIONS	15
9.0	PARTS LIST	16
10.0	FCC NOTICE	17
11.0	REPAIR AND RETURN INFORMATION	18
12.0	WARRANTY POLICY	19
13.0	DIAGRAM	20

1.0 INTRODUCTION

The practices in this manual provide installation and maintenance information for the CEECO Model SSP-561-FD-ADA with SPK1.07UNVLr3 firmware.

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 hands free telephone is a sturdy, vandal resistant, Stainless Steel Panel Speakerphone. Instead of a hookswitch and handset, the telephone has a Press to start/Press to stop button for initiation and termination of phone calls. An Emergency Auto Dial button is also provided for one button dialing of a preprogrammed emergency number of up to 11 digits. Manual volume control is also provided inside the telephone.

2.2 The microphone is muted during periods of dial tone to deter the use of hand held dialers.

2.3 Incoming calls may be allowed or blocked depending on the programming.

2.4 The telephone is equipped with a visual call progress indication light that changes colors to display the status of the call. The light is RED when the phone is “off-hook”, it flashes red and green when the phone is ringing, and it turns steady green when the call is answered.

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 **Connect** the phone to a working telephone line or a DTMF test set to begin programming.

3.2 Move the **mini-jumpers** (located on the CEECO-SPK Printed Circuit Board) to the **"ON"** position, as depicted on the last page of this manual.

3.3 **Press** the **CALL button** and wait for dial tone before programming any digits.

3.4 Each location is accessed by dialing the "#" sign and a two digit code. The valid program locations are: #00, #01, #02, #18, #30-#69 (speed dial locations), and #70-#89 (allowed call locations). The previous contents of the location are automatically erased when the location code is accessed.

NOTE: Once the "#" (pound) key has been entered you may get an operator recording or a fast busy, please disregard and continue programming. It is important to be slow and deliberate when pressing the keys during programming. A missed or partial tone could result in improper programming.

3.5 Utilizing the keypad, enter **#97#18#**. This will **clear all** user programmable memory to begin programming.

3.6 **Enter #00.** Location "00" is the telephone options location. It is comprised of ten digits, all of which must be filled to render the phone functional. By entering 0 through 9 into each of the **10 digits**, the phone is customized to a particular installation. The 10 Digits and corresponding options are located on the following page. Review your options and then make the appropriate entries on the keypad, one right after the other. Be sure to record your entries in the Location #00 Option Table for future reference.

PROGRAMMING CONTINUED…

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

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

Digit 1:
0 Call restrictions are in effect. (Default)
1 No call restrictions.

Digit 2:
0 No incoming calls allowed. (Default)
1 Incoming calls allowed.

Digit 3:
0 No Conversation Time-Out. (Default) For ***Emergency*** Button
1-9 Minutes Conversation Time-Out

Digit 4:
0 No Conversation Time-Out. (Default) For ***Call*** Button
1-9 Minutes Conversation Time-Out

Digit 5:
0 **Always 0 for this model**. (Default)

Digit 6:
0 Deactivate ADA feature (visual call progress light)
9 **ACTIVATE** ADA feature.

Digit 7:
1 **Always 1 for this model**

Digit 8:
0 Do not dial PBX access number #l8 (Default)
1 Dial PBX access number stored in Location #18 For ***Call*** Button

Digit 9:
0 Do not dial PBX access number #02. (Default)
1 Dial PBX number stored in location #02. For ***Emergency*** Button

Digit 10:
0 No Wink Detect
l-9 Length of the Wink (l = 50ms incremental to 450ms – entering a 5 is recommended)

PROGRAMMING CONTINUED…

EXAMPLE:

DIAL #00 0152090015

Phone will be set as follows:

DIGIT 1 .. CALL RESTRICTIONS IN EFFECT
DIGIT 2 .. INCOMING CALLS ALLOWED
DIGIT 3 .. 5 MINUTE TIME OUT FOR EMERGENCY CALLS
DIGIT 4 .. 2 MINUTE TIME OUT FOR BLACK CALL BUTTON
DIGIT 5 .. ALWAYS 0
DIGIT 6 .. ADA light is ON
DIGIT 7 .. ALWAYS 0
DIGIT 8 .. DO NOT DIAL PBX NUMBER STORED IN LOCATION #18
DIGIT 9 .. DIAL THE PBX ACCESS NUMBER FIRST FROM LOCATION #02 (SHORT PAUSE THEN DIAL EMERGENCY NUMBER).
DIGIT 10 . 250MS WINK

LOCATION #01: (**EMERGENCY NUMBER – RED BUTTON**)

#01 ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___

This location holds the **Emergency number** to be dialed. **Enter #01 followed by the desired emergency number**. The number can be in the range of 1 to 11 digits. Whenever a caller pushes the "EMER" (RED) button the number in location #01 will be dialed. If caller wants to hang up then he or she must push the "CALL " button. The automatic time out disconnect features will begin to work after the number has been dialed. The call will also disconnect when the called end hangs up, provided the PBX gives the proper wink back on the line. Be sure to record your number above for future reference.

LOCATION #02: (**PBX - EMERGENCY NUMBER RED BUTTON**)

#02 ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___

This location holds any **PBX** number to be dialed **for "Emergency"** Calls. If this is desired, **enter #02, followed by the desired PBX number**. The number can be from 1 to 11 digits. Any number stored in location #02 will automatically dial first, followed by a pause, and then the phone will automatically dial the number stored in location #01. Be sure to record you number above for future reference.

PROGRAMMING CONTINUED…

LOCATION #18: (**PBX – BLACK CALL BUTTON**)

#18 ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___

This location holds any **PBX number** to be dialed **for normal Calls**. If this is desired, **enter #18, followed by the desired PBX number**. The number can be from 1 to 11 digits. Any number stored in location #18 will automatically dial when the black call button is pressed. The keypad is then available for use. Be sure to record your number above for future reference. If the #18 Location is not utilized, the phone will simply deliver dial tone and an enabled keypad, when the Black Call button is pushed.

LOCATION #30 - #69: (**SPEED DIAL LOCATIONS**)

If **Speed Dialing** is desired, **enter any of the Speed Dial Locations (#30-#69), followed by the desired speed-dial number** for that location. There are 40 locations to choose from and use. The numbers to be speed-dialed can range from 1 to 11 digits.

EXAMPLE:

Enter #3018005551212 in the programming sequence. When in normal operating mode, the user dials #30 and the phone will Speed Dial 1 800 555 1212. This is true for all of the Speed Dial Locations from #30 to #69.

- Be sure to record your entries in the Speed Dial Table on the next page for future reference.

PROGRAMMING CONTINUED…

SPEED DIAL TABLE

LOCATION	DESCRIPTION	LOCATION	DESCRIPTION
#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…

LOCATION #70 - #89: (**CALL RESTRICTIONS/ALLOWED CALLS)**

If the phone is intended to **restrict certain calling patterns**, then it must be programmed to tell it specifically which calls to allow. Enter the allowed numbers in any of these 20 locations. The numbers can range from 1 to 11 digits. **Enter the # key**, followed by a **two-digit location code (#70-#89)**, followed by the **allowed calling pattern**. The * (Asterisk) symbol is defined as a wildcard. A wildcard allows any digit (0-9) to be dialed in its place. Be sure to record your entries in the table below for future reference.

EXAMPLE:

#700 * * * * * * * * * *	Allows all 0 minus and 0 plus calls.
#7115551212	Allows 1-555-1212 information calls.
#72911	Allows 911 emergency calls.
#731800* * * * * * *	Allows 1-800 calls.

RESTRICTION/ALLOWED CALL TABLE

LOCATION	DESCRIPTION	LOCATION	DESCRIPTION
#70	_ - _ _ _ - _ _ _ - _ _ _ _	#80	_ - _ _ _ - _ _ _ - _ _ _ _
#71	_ - _ _ _ - _ _ _ - _ _ _ _	#81	_ - _ _ _ - _ _ _ - _ _ _ _
#72	_ - _ _ _ - _ _ _ - _ _ _ _	#82	_ - _ _ _ - _ _ _ - _ _ _ _
#73	_ - _ _ _ - _ _ _ - _ _ _ _	#83	_ - _ _ _ - _ _ _ - _ _ _ _
#74	_ - _ _ _ - _ _ _ - _ _ _ _	#84	_ - _ _ _ - _ _ _ - _ _ _ _
#75	_ - _ _ _ - _ _ _ - _ _ _ _	#85	_ - _ _ _ - _ _ _ - _ _ _ _
#76	_ - _ _ _ - _ _ _ - _ _ _ _	#86	_ - _ _ _ - _ _ _ - _ _ _ _
#77	_ - _ _ _ - _ _ _ - _ _ _ _	#87	_ - _ _ _ - _ _ _ - _ _ _ _
#78	_ - _ _ _ - _ _ _ - _ _ _ _	#88	_ - _ _ _ - _ _ _ - _ _ _ _
#79	_ - _ _ _ - _ _ _ - _ _ _ _	#89	_ - _ _ _ - _ _ _ - _ _ _ _

PROGRAMMING CONTINUED…

3.7 When programming is **finished**, return the **mini-jumpers** to the **"OFF"** position. Then return the phone to an "on hook" state (no dial tone), by **press**ing the black **"CALL " button**.

4.0 OPERATION

4.1 To make a call, press the black "CALL" button located on the front of the phone. The LED will light red at this time. When dial tone is received, the transmitter is muted and the phone waits for numbers to be dialed. Any programmed PBX number (#18 Location) will automatically dial out.

4.2 To make an Emergency call, press the red "EMER" button located on the front of the phone. The LED will light red at this time. The preprogrammed number will dial out on the line. Any programmed PBX number (#02 Location) will automatically dial out first.

4.3 When the call is ringing, the LED light will flash red and green to indicate the ringing status. Within approximately four seconds of the call being answered, the LED light will turn steady green to indicate a connected call.

4.4 After the call is complete, press the "CALL" button again to terminate the call. The LED will go out. If user does not press the "CALL" button when he or she is finished using the phone, the phone will hang-up after detecting a WINK (momentary open) or when the timer times-out, if it was so programmed.

4.5 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 "1" then there are no restrictions and any number may be dialed.

5.0 RECOMMENDED TOOLS AND TEST EQUIPMENT

DTMF Test Set
Volt/Ohm Meter
3/8" Nut Driver
5/16" Nut Driver
Flat Blade Screw Driver
Security Tool, CEECO Part Number 301-064

6.0 INSTALLATION NOTES AND ASSEMBLY INSTRUCTIONS

6.1 Using a 301-064 security tool (**sold separately**) to remove the four locking screws.

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 telephone assembly from its housing or mounting.

6.4 Run the inside station wire through the housing or mounting and terminate on to the RJ11C modular jack inside, as depicted in the diagram on the following page. The CEECO-provided jack must be used, as it contains required over-voltage protection.

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

6.6 Plug the modular line cord from the PC board into the RJ11C terminal block.

6.7 Dress the line cord away from the locking screws and seat the telephone assembly into the housing or mounting.

6.8 Secure the telephone assembly by inserting and tightening the security screws.

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

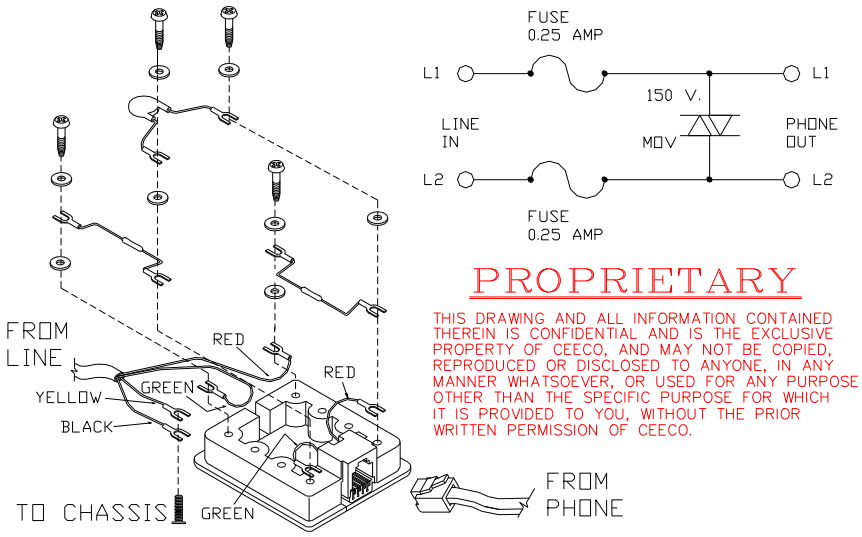
A. Never install telephone wiring during a lightning storm.

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

C. Never touch uninsultated 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 OVER-VOLTAGE PROTECTION DIAGRAM



7.0 TESTING

Assuming that the phone was programmed to automatically dial an emergency number, and also allow use of the keypad for normal calls, without automatically dialing a number when the black “CALL” button is pressed, the following should apply:

Action: With the phone connected to a working phone line,
Press the black "CALL" button.

Reaction: The LED lights red and dial tone is received. Any number programmed in the #18 Location will automatically dial out. Otherwise the phone will allow normal calls to be made with the keypad. Remember that if call restrictions are set, the phone will only allow those calls to be made that have been programmed into the #70-#89 Locations.

Note: During ringing, the ADA LED light will flash RED and GREEN.

Action: Dial a number.

Reaction: The called party answers. The ADA LED turns GREEN.
A normal speakerphone conversation is allowed.

Action: Finish the conversation.
Press the "CALL" button, or wait until time-out occurs (if programmed as such).
The LED goes out.

Reaction: The call is terminated.

Action: Press the "EMER" button. The LED lights red.

Reaction: The preprogrammed number is automatically dialed (SEE SECTION 2, LOCATION #01) and will not disconnect unless the black “CALL” button is pushed, the called party hangs up and a wink back is received, or a programmed time out disconnect occurs, at which time the LED goes out.

NOTE: If you experienced any trouble during the testing phase, please refer back to the appropriate section(s) of the manual. Remember that the mini-jumpers must be moved to “ON” for programming and to “OFF” for operation. If trouble persists, refer to section 11.2 please.

8.0 SPECIFICATIONS

INPUT POWER:	C.O. LINE POWERED (48v-52v Loop)
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.
MEMORY RETENTION:	Non-volatile storage (does not require power)
DIMENSIONS	10.25” wide x 13.125” high x 2.625” deep (handset on hook).
MOUNTING:	Vertical surface mount.
WEIGHT:	Approximately 8 lbs.
FCC REGISTRATION:	BW88T7-13716-TE-T
RINGER EQUIVALENCY:	0.4A
TYPE JACK:	RJ11C
UL LISTED NO.:	6OF5

9.0 PARTS LIST

QUANTITY	PART NUMBER	DESCRIPTION
6	406-019	Outer Cover Security Screw
1	301-018	Modular Line Cord
1	301-054	Modular Connector (RJ11C)
1	SSP-561-FD-ADA	Service Manual
1	700-008	Keypad Cable
1	660-000	CEECO SPK Board
1	705-110	Connectorized Keypad
2	6020	Momentary Panel Switch
1	14123	Speaker
1	12017	Ringer
1	361-001	Mounting Box

ACCESSORIES:

1	301-064	Security Tool

10.0 FCC NOTICE

10.1 FCC REGISTRATION AND REPAIR INFORMATION

Your new telephone has been registered with the Federal Communication Commission (FCC) in accordance with Part 68 of its rules. The FCC requires that you be advised of certain requirements involving the use of this telephone.

10.2 CONNECTION WITH THE NATIONWIDE TELEPHONE NETWORK

The FCC requires that you connect this telephone to the Nationwide Telephone Network through a registered jack provided by the Telephone Company in your area. This jack is a modular outlet, which you can order from your local telephone company.

10.3 NOTIFICATION TO THE TELEPHONE COMPANY

Before connecting this telephone, the FCC requires that you notify your local telephone company business office. The number is in the front of your phone book.

Tell them:

The "line" to which you will connect the telephone (that is, your phone number) and the telephone's FCC registration number and ringer equivalence number. These numbers are listed in Section 11.00.

The FCC further requires that you notify your local telephone company when permanently disconnecting this telephone.

11.0 REPAIR AND RETURN INFORMATION

11.1 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.

11.2 DIRECT ALL INQUIRES TO:

CEECO
Repair Department

(863) 357-0798
(863) 357-0006 Fax
info@ceeco.net

11.3 NON-WARRANTY REPAIR

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

11.4 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 RMA must be requested no later than 30 days after original shipment.

12.0 WARRANTY POLICY

12.1 GENERAL

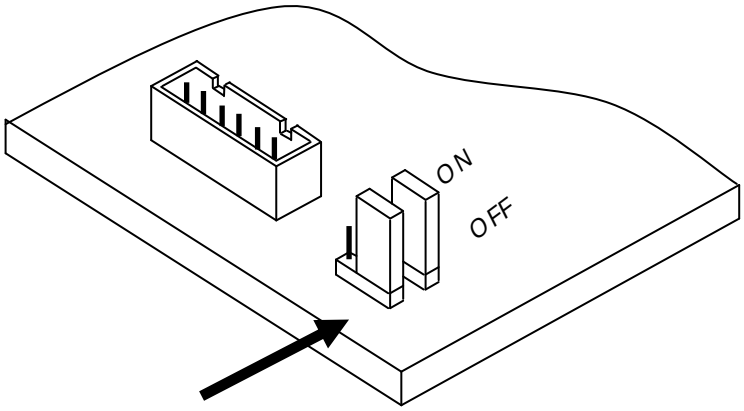
CEECO products are guaranteed to be free of defects in material and workmanship for a period of 365 days from the date of original purchase. CEECO's obligation under this warranty is limited to repair or replacement of any part found to be defective by CEECO. Under no circumstances shall CEECO be liable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

12.2 PRINTED CIRCUIT BOARDS

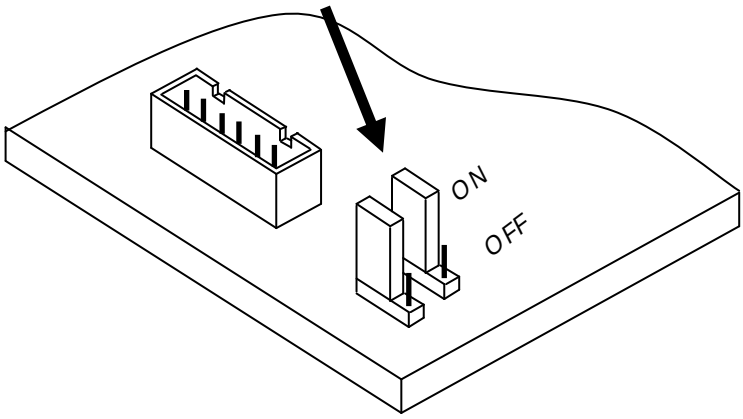
Printed circuit boards should not be repaired in the field. If a unit is found to be faulty, replace it with another unit and return the faulty unit to CEECO for repair. Modifications by any one other than CEECO will void the warranty.

13.0 DIAGRAM

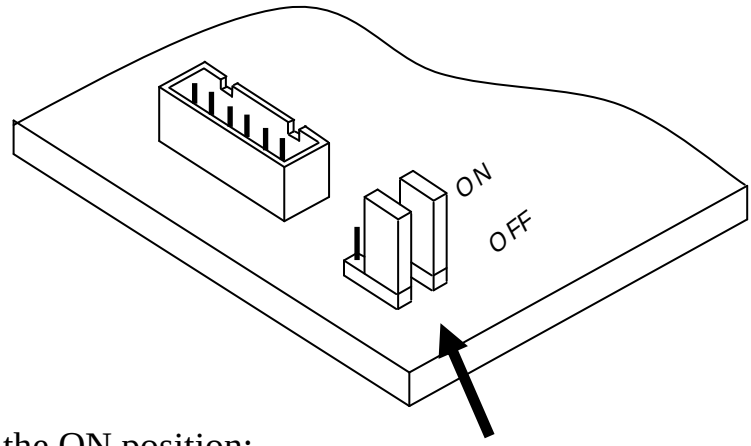
Locate the mini jumpers on the corner of the PCB.



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



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



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