

**SERVICE MANUAL**  
**FOR**  
**MODEL WPP(HOB)-531-FD**

**HANDS FREE WEATHERPROOF TELEPHONE**

**AND**

**MODEL SSP-511-FD**

**STAINLESS STEEL PANEL TELEPHONE**

**EQUIPPED WITH SPK1.07 UNVLR1 FIRMWARE**



**Serving the Telephone Industry Since 1930**

***Communication Equipment  
& Engineering Company***

**519 W 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 WPP-531-FD OR SSP-511-FD, EQUIPPED WITH SPK1.07UNVLr1 FIRMWARE
SERIAL NUMBER	
DATE MANUFACTURED	
LOCATION INSTALLED	

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

## CEEEO

*Communication Equipment & Engineering Company*

519 W South Park Street  
Okeechobee, FL 34972  
863-357-0798- telephone  
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[info@ceeco.net](mailto:info@ceeco.net)  
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**CEEEO**  
*Communication Equipment & Engineering Company*  
**PROPRIETARY**

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## 1.0 INTRODUCTION

The practices in this manual provide installation and maintenance information for the CEECO Model WPP 531-FD or Model SSP-511-FD Telephone with SPK1.07UNVLR1 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 W South Park Street

Okeechobee, FL 34972

863-357-0798- telephone

863-357-0006- facsimile

[info@ceeco.net](mailto:info@ceeco.net)

[www.ceeco.net](http://www.ceeco.net)

## 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. The 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 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                                                                        
 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 **Always 0 for this model.**

**Digit 7:**

- 1 **Always 1 for this model**

**Digit 8:**

- 0 Do not dial PBX access number #18 (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
- 1-9 Length of the Wink (1 = 50ms incremental to 450ms – entering a 5 is recommended)

**PROGRAMMING CONTINUED...****EXAMPLE:**

DIAL #00 0152000015

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 .. ALWAYS 0  
 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**

<u>LOCATION</u>	<u>DESCRIPTION</u>	<u>LOCATION</u>	<u>DESCRIPTION</u>
#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 **pressing** 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 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.
- 4.4 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

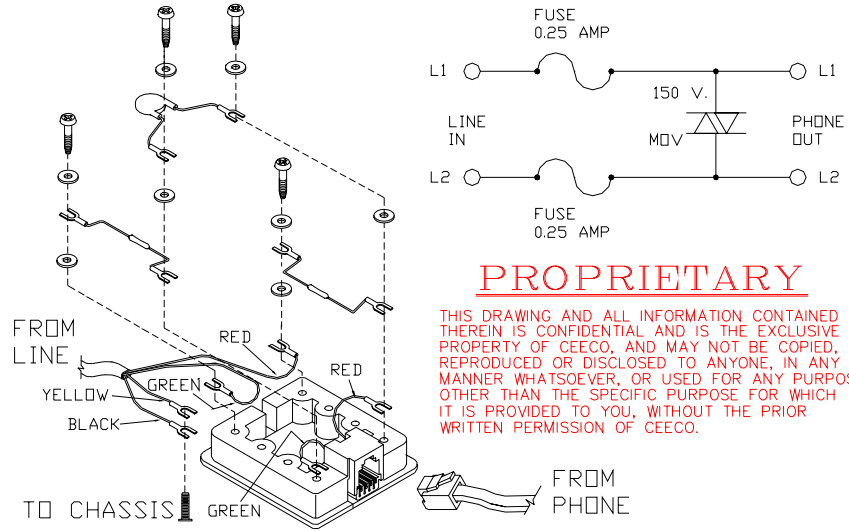
DTMF Test Set  
 Volt/Ohm Meter  
 3/8" Nut Driver  
 5/16" Nut Driver  
 Flat Blade Screw Driver  
 Security Tool, CEECO Part Number 301-064

## 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 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 **OVER-VOLTAGE PROTECTION DIAGRAM**



**PROPRIETARY**

THIS DRAWING AND ALL INFORMATION CONTAINED THEREIN IS CONFIDENTIAL AND IS THE EXCLUSIVE PROPERTY OF CEECO, AND MAY NOT BE COPIED, REPRODUCED OR DISCLOSED TO ANYONE, IN ANY MANNER WHATSOEVER, OR USED FOR ANY PURPOSE OTHER THAN THE SPECIFIC PURPOSE FOR WHICH IT IS PROVIDED TO YOU, WITHOUT THE PRIOR WRITTEN PERMISSION OF CEECO.

## 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.

Action: Dial a number.

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 (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: (SSP)	7 1/6" Wide x 11 1/4" High x 4 1/4" Deep (Handset on hook)
MOUNTING:	Vertical Surface Mount.
WEIGHT:	Approximately 4 Pounds.
WEATHERPROOF HOUSING:	Cast Aluminum
DIMENSIONS: (WPP)	9 1/2" Wide x 12 5/8" High x 8" deep. (including door).
MOUNTING:	4 holes spaced 8" x 5 7/8" x 13/32" (or optional pole mounting bracket)
WEIGHT:	Approximately 12 pounds.
FCC REGISTRATION:	BW88T7-13716-TE-T
RINGER EQUIVALENCY:	0.4A
TYPE JACK:	RJ11C
UL LISTED NO.:	6OF5



**9.0 PARTS LIST**

<b><u>QUANTITY</u></b>	<b><u>PART NUMBER</u></b>	<b><u>DESCRIPTION</u></b>
4	331-006	Outer Cover Locking- Screw
1	301-018	Modular Line Cord
1	301-054	Modular Connector (RJ11C)
1	531-200	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	331-005	Weatherproof Housing
1	331-HOB-R(B)	HOB housing, Red or Black
1	12017	Ringer

**ACCESSORIES:**

1	301-064	Security Tool
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## **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- telephone

863-357-0006- facsimile

[info@ceeco.net](mailto:info@ceeco.net)

[www.ceeco.net](http://www.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**

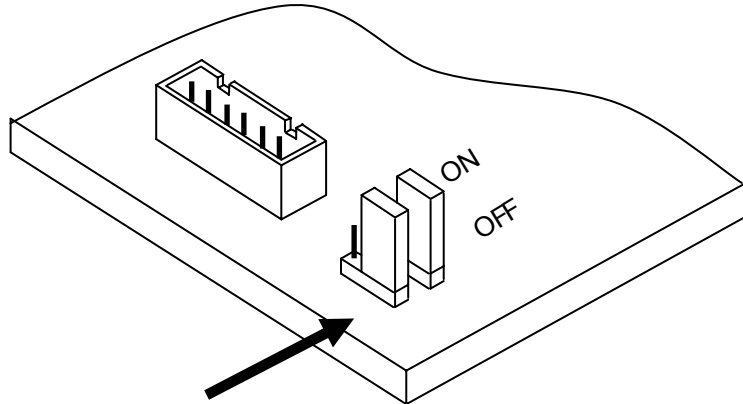
CEECO products are guaranteed to be free of defects in material and workmanship for a period of 365 days from the date of original purchase. CEECO's obligation under this warranty is limited to repair or replacement of any part found to be defective by CEECO. Under no circumstances shall CEECO be liable 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**

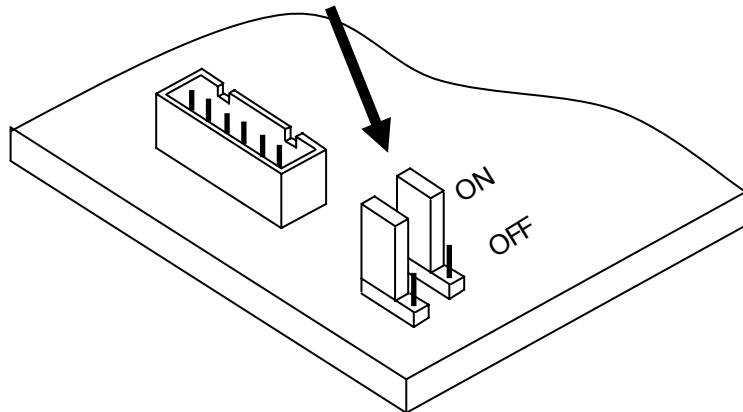
Printed circuit boards should not be repaired in the field. If a unit is found to be faulty, replace it with another unit and return the faulty unit to CEECO for repair. Modifications by any one other than CEECO will void the warranty.

### 13.0 DIAGRAM

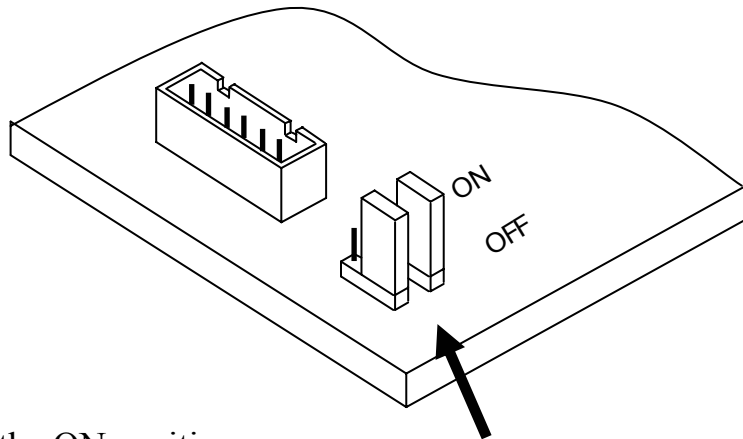
Locate the mini jumpers on the corner of the PCB.



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



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



**NOTE:**

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