

SERVICE MANUAL

FOR

MODEL SSP-363-F

STAINLESS STEEL PANEL TELEPHONE

EQUIPPED WITH CAC6.00 FIRMWARE



Serving the Telephone Industry Since 1930

*Communication Equipment
& Engineering Company*

519 W South Park Street
Okeechobee, FL 34972

Voice: 863-357-0798

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IMPORTANT INFORMATION FOR CUSTOMER

Please fill in before you continue.

The following information is necessary when calling CEECO for assistance.

MODEL NUMBER	MODEL SSP-363-F EQUIPPED WITH CAC6.00 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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1.0 INTRODUCTION

The practices in this manual provide installation and maintenance information for the Model SSP-363-F Stainless Steel Panel Telephone, equipped with CAC6.00 software.

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

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2.0 GENERAL

The CEECO Model SSP-363-F Telephone, equipped with CAC6.00 Firmware, is a microprocessor-based coinless telephone designed to withstand abuse and fraudulent call attempts. The phone may be programmed to implement call restrictions, allow or not allow incoming calls, select the width of the dial detect window, mute the microphone to guard against fraud, select tone (DTMF) or pulse dialing, automatically time and disconnect a phone call, speed-dial numbers, and automatically dial one or two numbers (typically access numbers) when the handset is lifted. As you can see, this telephone has a number of useful features and you may use any or all of them. Attempts to hookswitch dial will cause the microprocessor to go "on hook" until the attempt has ended. The steel housing and chrome plated tone dial are vandal resistant. An armored cord, hearing aid compatible handset is standard.

3.0 PROGRAMMING

- 3.1 **Connect the telephone** to a working telephone line or a DTMF test set.
- 3.2 Locate the two plastic **mini-jumpers** on the edge of the printed circuit board and move them to the “**ON**” position, as depicted on the last page of this manual.
- 3.3 **Lift the handset** and wait for dial tone before beginning programming. First read through the programming section and then do the actual programming as you read along again. Programming is accomplished by way of the DTMF keypad. The programming can be accomplished in one continuous sequence without having to stop or perform any measures between programming sections. It is important to be slow and deliberate when pressing the keys during programming. A missed or partial tone will result in improper programming.
- 3.4 Utilizing the keypad, enter # **9 7**. This will **clear all memory** locations.
- 3.5 Enter # **0 0**, which accesses the **telephone options** memory location. There are six (6) selections to be made in this location. By entering a selection into each of the six programming digit locations, the phone is customized for the particular installation. You **must** make an entry for each of the six digit locations. The six digit locations and the available selections are shown on the next page. Compare the example below to the information on the next page and then enter the 6 numbers you choose.

Example: Entering #00 followed by 101003 would program the phone to have no call restrictions, no incoming call allowed, a wide dial tone detect window, a muted microphone initially, DTMF dialing, and a 3 minute automatic timed call disconnect.

PROGRAMMING CONTINUED...Location #00:Digit 1

- 0 Implement Call restrictions
1 No call restrictions

Digit 2

- 0 No incoming calls allowed
1 Incoming calls allowed

Digit 3

- 0 Narrow dial tone detect window
1 Wide dial tone detect window (Always recommended)

Digit 4

- 0 Mute the microphone until the user dials a digit
1 Unmute the microphone after the access number is dialed

Digit 5

- 0 DTMF dialing
1 10 PPS pulse dialing
2 20 PPS pulse dialing

Digit 6

- | | |
|------------------------|-----------------------|
| 0=no call timeout | 5=12 min.call timeout |
| 1=2 min.call timeout | 6=15 min.call timeout |
| 2=3 min.call timeout | 7=20 min.call timeout |
| 3=5 min.call timeout | 8=25 min.call timeout |
| 4=10 min. call timeout | 9=30 min.call timeout |

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

Telephone Options Table: #00

1	2	3	4	5	6
---	---	---	---	---	---

PROGRAMMING CONTINUED...

- 3.6** If you desire the phone to **automatically dial a number** (up to eleven digits in length) when the handset is lifted, now is the time to enter it. If this is not a desired function, proceed to section 3.8. Programming location **#19** stores the auto-dial number. Therefore, enter # 1 9 followed by the desired auto dial number. For example: Entering #199 will program the phone to automatically dial a 9, when the handset is lifted. Be sure to record your entry in the table below for future reference.

1st Auto Dial Number Table: #19 _ _ _ _ _

- 3.7** If you desire the phone to **automatically dial a second number** (up to eleven digits in length) after the one stored in location #19 (see above), now is the time to enter it. If this is not a desired function, then proceed to section 3.8. Programming location **#18** stores the second auto dial number. In order to use #18, you must first use #19. This number will dial out approximately one second after any number stored in the #19 location. Enter # 1 8 followed by the desired auto dial number. For example: Entering #1818005551212 will program the phone to dial 1-800-555-1212 approximately one second after it dials the number stored in location #19. Combining the examples from this section and the one above, entering #199#1818005551212 will program the phone to automatically dial 9, pause one second and automatically dial 1-800-555-1212, when the handset is lifted. Be sure to record your entry in the table below for future reference.

2nd Auto Dial Number Table: #18 _ _ _ _ _

- 3.8** If you desire to have **speed-dialing** capability, now is the time to program it. If this is not a desired function, proceed to section 3.10. There are 40 speed-dial locations available. Those **locations are #30 thru #69**. The speed numbers may be up to eleven digits in length. Simply enter the pound key, followed by the location number, followed by the desired speed dial number.

Example: Entering **#305551212#315875430#325839907** will program the phone to automatically dial 555-1212 when #30 is dialed, 587-5430 when #31 is dialed, and 583-9907 when #32 is dialed. Please note that, when the phone is put into operation, the # key must be dialed preceding the two digit location number, in order to release the speed dial number.

PROGRAMMING CONTINUED...

* Be sure to record your speed dial entries in the table below for future reference:

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** If you desire the phone to implement **call restrictions**, we will program the restrictions now. If this is not a desired function, proceed to section 3.10. In order for the phone to implement restrictions, a “0” must have been selected for Digit 1 under programming location #00. If this was not done, repeat section 3.5 in its entirety. The associated programming locations are **#70 thru #89**. Each of these twenty (20) locations may be used to program one call restriction. Each location will store a number (pattern) of up to eleven (11) digits in length. An “*” represents a wild card, so any time you enter the “*” key, you tell the phone to allow any single digit in its place. In order to restrict calling patterns, you program the phone to tell it which patterns to allow. In turn, it will block all others. Take a moment to look over the examples below. When you are finished, enter the # key, followed by a location code, followed by the desired number/pattern.

EXAMPLE: Entering #700***** allows all 0+ and 0- calls.
 Entering #71911 allows 911 to be dialed.
 Entering #721800***** allows any 1-800 call.
 Entering #73***** allows 7-digit calls.
 Entering #74587**** allows 7-digit calls beginning with 587.

Each pattern that you program will be “allowed” by the phone. If call restrictions are implemented (Location #00 Digit 1), the phone will only permit the calls that it is specifically programmed to allow. Any numbers that have been programmed into the speed, #19 or #18 locations do not have to be programmed again under this section.

- 3.10** Programming is now completed. **Hang up** the phone and return the **mini-jumpers** to the “**OFF**” position, as depicted on the last page of this manual. The phone is now ready for Testing/Operation.

4.0 TESTING/OPERATION

- 4.1 With the phone connected to the DTMF test set or working telephone line, lift the handset. Any number that was programmed into Location #19 should automatically dial out, at this time. If not, hang up the phone and repeat sections 3.2, 3.3, 3.6 and 3.10 only. If this does not solve the problem, please refer to section 7.0.
- 4.2 If any number was programmed into Location #18, that number should automatically dial out approximately one second after the number stored in Location #19 dials out. If not, hang up the phone and repeat sections 3.2, 3.3, 3.7 and 3.10 only. If this does not solve the problem, please refer to section 7.0. Please note that, in order to use Location #18, Location #19 must first be used.
- 4.3 If Locations #19 and/or #18 have not been programmed, you should receive dial tone on the line.
- 4.4 If you programmed speed-dial numbers into it, try them now. When you press the # key followed by the two-digit location code, any number stored in that location should be released. For example, entering #30 should cause the phone to automatically dial any number stored in Location #30. If not, hang up the phone and repeat sections 3.2, 3.3, 3.8, and 3.10 only. It is not necessary to try to reprogram all of the speed dial locations, but only the ones that are not working. If this does not solve the problem, please refer to section 7.0.
- 4.5 If you opted to use phone implemented call restrictions, try some of them now. The phone should only permit “allowed” calls to be dialed. When you try to dial a number that you did not “allow”, the phone should sound an error tone (three short beeps) and reset the line. If not, hang up and repeat sections 3.2, 3.3, 3.5, 3.9, and 3.10 only. If this does not solve the problem, please refer to section 7.0.

TESTING/OPERATION CONTINUED...

- 4.7** Try placing a call to the phone. If the phone was programmed to accept incoming calls, it should ring and be answered with normal phone operation to follow. If it was programmed not to accept incoming calls, it will still ring, but when it is answered the called party will not be heard on the far end. The microphone will be muted. The Phone will then sound an error tone after approximately four seconds and reset itself. If this does not solve the problem, please refer to section 7.0.
- 4.8** If the phone was programmed to automatically time and disconnect the phone call (Call timeout feature), try making a telephone call. Time the call and see if the phone, in fact, automatically disconnects after the programmed time period. Please keep in mind that this will not be exact. If this fails, hang up and repeat sections 3.2, 3.3, 3.5, and 3.10 only. If this does not solve the problem, please refer to section 7.0.
- 4.9** Also be sure to determine that the microphone is muting as it was programmed (Location #00) and that the phone is in either DTMF (tone) dialing mode or pulse dialing mode as programmed (Also Location #00). DTMF sounds like definite tones or beeps, whereas pulse-dialing sounds like rhythmic clicks. If the phone does not seem to be functioning as programmed, hang up and repeat sections 3.2, 3.3, 3.5, and 3.10 only. If this does not solve the problem, please refer to section 7.0.
- 4.10** Attempt to “hookswitch dial” by tapping quickly on the tongue of the hookswitch assembly. The phone should momentarily open the line, until the attempt is over, and then return dial tone. If not, please refer to section 7.0.

5.0 RECOMMENDED TOOLS AND TEST EQUIPMENT

DTMF Test Set	Security Tool 301-037
1/4" Nut Driver	*The security tool is for a standard 5/32" button-head screw generally used on the framework of telephone booth
5/16" Nut Driver	
Volt/Ohm Meter	
Flat Blade Screw Driver	

6.0 INSTALLATION NOTES AND ASSEMBLY INSTRUCTIONS

NOTE: Be sure to avoid touching the circuit boards with metal objects, as this may cause damage.

- 6.1 Using a 301-037 security tool (sold separately), loosen and remove the security screw.
- 6.2 Separate the cover assembly from the backplate assembly by pulling the bottom forward and pushing up.
- 6.3 The backplate assembly may be installed on any standard backboard or suitable vertical surface. Four mounting holes are provided.
- 6.4 Run the inside station wire through the backplate assembly and terminate on to the RJ11C terminal block on the backplate.
- 6.5 The use of a gas tube station protector is recommended. The station ground should not exceed 50 ohms.
- 6.6 Plug the modular line cord from the cover assembly into the RJ11C terminal block.
- 6.7 Dress the line cable away from the security screw and install the cover assembly by inserting the tabs into the slots on top of the backplate.
- 6.8 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.**

7.0 TROUBLE SHOOTING GUIDE

Always visually check the phone for loose or shorted wires, damaged terminals, or damaged parts.

PROBLEM: NO DIAL TONE AND/OR MCRK-2 CARD DOES NOT FUNCTION

POSSIBLE CAUSE:

LINE CORD
RJ11C CONNECTOR
MCRK-2 CARD
NETWORK
NETWORK CABLE ASSY.
HOOKSWITCH CABLE ASSY.
HOOKSWITCH ASSY.
MICROPROCESSOR
HANDSET

PROBLEM: DIAL TONE IS DISTORTED

POSSIBLE CAUSE:

NETWORK CABLE ASSY.
HOOKSWITCH CABLE ASSY.
HOOKSWITCH ASSY.
MCRK-2 CARD
NETWORK
HANDSET

PROBLEM: TRANSMITTER DOES NOT TURN ON

POSSIBLE CAUSE:

HANDSET
MCRK-2 CARD
NETWORK CABLE ASSY
NETWORK

PROBLEM: TRANSMITTER DOES NOT TURN ON FOR INCOMING CALLS

POSSIBLE CAUSE:

PHONE NOT PROGRAMMED TO ALLOW INCOMING CALLS.
MCRK-2 CARD

TROUBLE SHOOTING CONTINUED...

PROBLEM: KEYPAD DOES NOT OPERATE PROPERLY

POSSIBLE CAUSE:

KEYPAD CABLE ASSY.

KEYPAD

MCRK-2 CARD

PROBLEM: LOSES MEMORY CONTENTS AFTER EXTENDED PERIODS
OF NO USE.

POSSIBLE CAUSE:

LITHIUM BATTERY

PROBLEM: PHONE CANNOT BE PROGRAMMED

POSSIBLE CAUSE:

MEMORY CHIP

MCRK-2 CARD

KEYPAD

KEYPAD CABLE ASSY.

PROBLEM: RINGER DOES NOT OPERATE

POSSIBLE CAUSE:

RINGER

NETWORK

8.0 SPECIFICATIONS

INPUT POWER:	C.O. Line powered
LOOP CURRENT:	23ma minimum
IMPEDANCE:	600 ohms
SIGNALING:	DTMF, 70ms tone, 50ms spacing
OUTPUT:	-10.0 to -12.0dbm
HEARING AID COMPATIBLE:	Meets EIA standards
ENVIRONMENTAL:	Temperature 0oC to 50oC Humidity 20%-90% non condensating.
PROGRAMMING:	Via DTMF keypad.
TELEPHONE PANEL:	Brushed 16 ga. Stainless Steel
DIMENSIONS:	10.12" Wide x 13.12" High x 2.75" Deep
MOUNTING:	Vertical surface mount
MEMORY RETENTION:	Lithium Battery – Long Life
FCC REGISTRATION:	BW88T7-13823-TE-T
UL LISTED NO.:	6OF5
RINGER EQUIVALENCE:	0.8A
TYPE JACK:	RJ11C

9.0 PARTS LIST

<u>PART NUMBER</u>	<u>DESCRIPTION</u>
301-004	Handset with armored cord
301-005	Ferrule
301-009	Network
301-588	Hookswitch cradle
301-581	Tongue and bracket assembly
301-018	30" Modular cord
301-051	Modular jack
301-052	Grommet
11020	Stainless steel panel
11025	Apparatus box
321-016	1/4"x20"x3/4" security screw
650-521	MCRK-2 Board
650-570	Network cable
705-110	Chrome keypad - alphanumeric
700-008	Keypad cable
<u>Accessories:</u>	
301-037	Security tool
705-113	Chrome keypad

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. 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 9.00.

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: RMA Number, return shipping instructions., original purchase order number, serial number and special marking instructions. A tag with 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
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 guarantees its products to be free from 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 or improper operation of equipment.

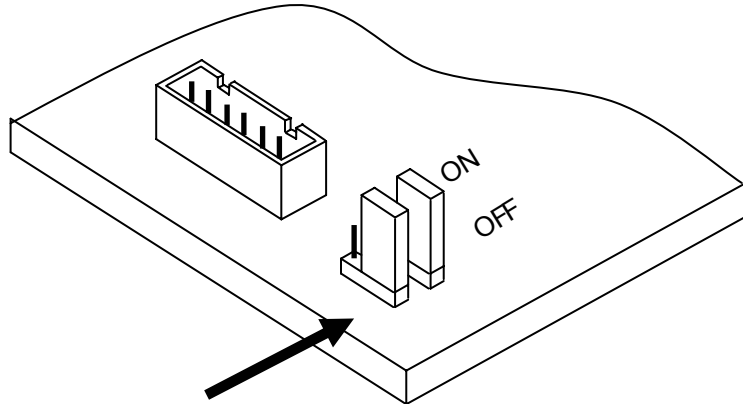
CEECO will repair or replace any unit during this period if found to be defective for reasons other than abuse and improper use or improper installation. It is the buyer's responsibility to return the defective unit to the factory. CEECO will then repair or replace any defective parts and return them to the buyer free of charge.

12.2 PRINTED CIRCUIT BOARDS

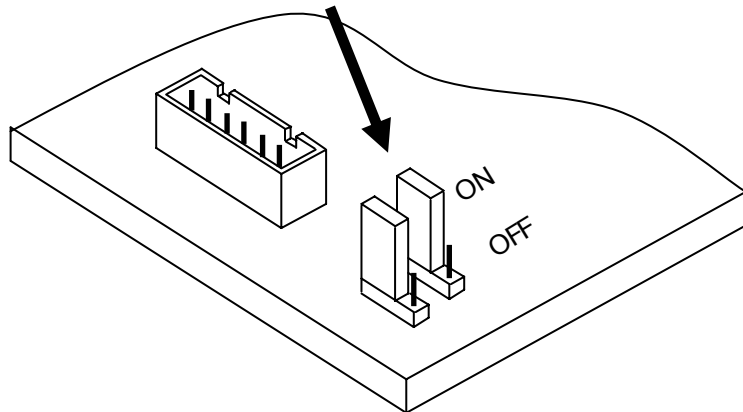
Printed circuit boards should not be repaired in the field. If a unit is found to be faulty, replace it with another unit and return the faulty unit to CEECO for repair. Modifications by any one other than CEECO will void the warranty.

13.0 DIAGRAM

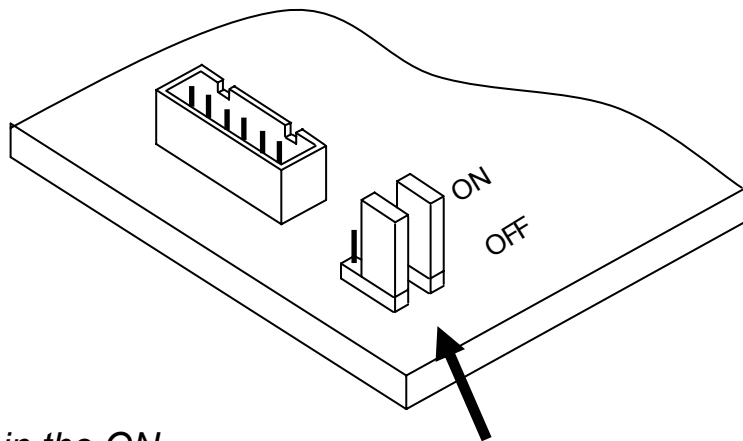
Locate the mini jumpers on the corner of the PCB.



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.