# MAXON

# **ACC-900E**

**Programming Manual** 

2008-09-05

### **1. SYSTEM REQUIREMENTS**

- (1) CPU: Intel Pentium2 or higher(Pentium3 or higher recommended)
- (2) Operating System: Microsoft Windows 98, ME, 2000, XP, Vista
- (3) Communication: Serial COM Port(9pin)
- (4) Program Cable: ACC-2125
- (5) Squelch Program Cable: TAC-101D
- (6) DC Power Supply: 9~15V(200mA)
- (7) Equipment Setup



Figure 1 Equipment Setup for Program

#### 2. HOW TO INSTALL ACC-900E

 Language Selection: The following dialog appears if you run the install file(SD125E\_Prog(v1.xx).exe).



Figure 2 Install: Language Selection Window

(2) Install Start Page: Click 'Next' to continue.



Figure 3 Install: Start Page

(3) Install Location Setting: The default destination folder is 'C:\Program Files\SD125E'. Click 'Browse' and select another folder if you install in a different folder.

🕞 SD125E Programmer v1.00 Setup	_ 🗆 🔀
<b>Choose Install Location</b> Choose the folder in which to install SD125E Programmer v1.00.	(a)
Setup will install SD125E Programmer v1.00 in the following folder. To install in a diffe folder, click Browse and select another folder. Click Install to start the installation.	erent
Destination Folder C:₩Program Files₩5D125E Browse.	
Space required: 1.7MB Space available: 1.4GB	
Nullsoft Install System v2.23	Cancel

Figure 4 Install: Destination Folder Selection

(4) Install: Programmer is installed to PC if you click 'Install' button.

🕞 SD125E Programmer v1.00 Setup 📃 🗆 🔀
Installing Please wait while SD125E Programmer v1.00 is being installed.
Unregistering: C:WWINDOWS\#system32\#Msflxgrd.ocx Output folder: C:\#WINDOWS\#system32 Skipped: mfc42.dll Skipped: Msflxgrd.ocx Output folder: C:\#Program Files\#SD125E Extract: SD125New.exe 100% Extract: help.chm 100% Create folder: C:\#Documents and Settings\#김양남\#시작 메뉴\프로그램\#SD1 Create shortcut: C:\#Documents and Settings\#김양남\#시작 메뉴\프로그램\#SD1 Create shortcut: C:\#Documents and Settings\#김양남\#사장 메뉴\=로그램\#SD1 Create shortcut: C:\#Documents and Settings\#김양남\#바탕 화면\#SD125New.lnk Unregistering: C:\#WINDOWS\#system32\#Msflxgrd.ocx
Nullsoft Install System v2,23

Figure 5 Install: Progress

(5) The following page appears if the install process is finished successfully. Now, you can run ACC-900E Programmer to program SD125E and SD125.



Figure 6 Install: Complete

### 3. MODEL SELECTION



Figure 7 Model Selection Window

You can select a model between SD125E and SD125 through the model selection window.

# 4. BAND SELECTION



The range will be showed if you change the band. Programmer will show an error message if you input out of this frequency range. In SD125 model, you can select VHF and UHF band only.

### 5. CHANNEL DATA CONFIGURATION

No.	Step(KHz)	RX Freq(MHz)	TX Freq(MHz)	Band Width	TX Power	HangOn
1	6.25	470.02500	470.02500	Wide	High	0
2	5.00	470.02500	470.02500	Narrow	Low	1
3	2.50	480.02500		Wide	High	0
4	6.25					
5	6.25					
6	6.25					
7	6.25					
8	6.25					
9	6.25					
10	6.25					
11	6.25					
12	6.25					
13	6.25					
14	6.25					
15	6.25					
16	6.25					

You can configure channel data up to 16.

**Figure 9 Channel Data Window** 

- Step: this means the reference frequency. You can select a reference frequency(6.25, 5.00, 2.50 KHz) before creating a channel. Press enter key or double click to change it. RX frequency or TX frequency can be divided by this reference frequency.
- (2) RX Freq and TX Freq: you should input a frequency here to create a channel. Press enter key or double click to input a frequency. You can also use numeric keys. Press delete key in RX Freq cell to delete a specific channel. The TX frequency will only be deleted if you press delete key in TX Freq cell. The channel becomes RX-only channel in this case.
- (3) Band Width: you can choose between 'Wide' and 'Narrow'. Press enter key or double click to change it.
- (4) TX Power: you can choose between 'High' and 'Low'. Press enter key or double click to change it.
- (5) HangOn: you can input this value 0 to 5. The combo box will be appeared if you press enter key or double click here. Select a value this combo box as you wish.

### 6. TOOLBAR FUNCTIONS



Figure 10 Toolbar Icons

#### (1) New File

Programmer initializes the current setting. All data will be cleared and changed to the default value.

(2) Open File

Programmer opens the saved file. You can know the model and band information as a figure below.

SD125E	UHF3	•	Frequency Range	470 ~ 490 MHz

Figure 11 Model and Band Information

(3) Save File

Programmer saves the current setting to a specific file.

(4) Print

You can print the current setting. The print driver should be installed.

(5) Write

Programmer saves the current setting and sends data to the radio. The next window will be appeared if you click write icon.



Figure 12 Program Progress Window

First of all, you check if COM port is configured correctly and the program cable is connected well. Reset the power supply to start program. You can expect how long it will take to finish program through this window. Programmer will be showed error messages if some problems occur.

(6) Read

Programmer reads data from the radio and shows it. The current setting will be cleared. The process of reading operation is same with write.

#### (7) Squelch

The next window will be appeared if you click squelch icon.

Squelch Level Configuration
User Default
* Reset the power supply and press the next button.
* Configure unmute level and press the next button.
* Configure mute level and press the next button.
* Press the next button to confirm.
It is recommended you should stop other jobs while configuration.

Figure 13 Squelch Level Configuration Window

You can configure the squelch level through this window(You should use squelch program cable, TAC-101D instead of program cable, ACC-2125). Click user button if you want to configure the squelch level manually. Click default button if you want the radio to keep the default squelch value. You just follow the sentence blinking and click the next button. Please make sure that the squelch cable is connected not the program cable.

(8) EEPROM

You can see the current EEPROM status and edit it directly. The next window will be appeared if you click EEPROM icon.

E	EEPROM Data																
EEPROM MAP																	
Γ		0	1	2	3	4	5	6	7	8	9	А	В	С	D	E	F
li	00	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
	10	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
li	20	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
	30	5E57	6861	4532	0000	8D86	0000	0000	0000	0000	0100	0100	3003	0000	0000	0000	0000
	40	0000	0000	0000	0000	0000	1000	0000	FFFF	FFFF	0000	FFFF	FFFF	FFFF	FFFF	FFFF	FFFF
	50	0A3F	0C95	00A1	0101	0E0C	FFFF	0000	0000	0000	FFFF	FFFF	FFFF	FFFF	FFFF	FFFF	01F3
	60	FFFF	FFFF	FFFF	FFFF	00FD	FAF7	F4F3	FOFO	F1F3	0000	0000	0000	00FD	FAF7	F4F3	FOFO
	70	F1F3	0000	0000	0000	0A3F	FFFF										
Address 0X2F 1st byte 0000 0000																	
2	2nd byte 0000 0000 Save Cancel Close																

#### Figure 14 EEPROM Window

- Save Button: programmer saves values you edited.
- Cancel Button: programmer returns edited values to original values.
- Close Button: programmer closes this window without save.

# 7. OPTIONS

Option								
Time-out Timer								
Time	10 💌 secs							
F BCLO								
Power Save								
PS Off Time	20 💌 ms							
PS On Time	50 💌 ms							
Delay Time	1 secs							

**Figure 15 Options** 

- (1) Time-out Timer: Time-out Timer will be activated if you check this option. You can also configure time.
- (2) BCLO(Busy Channel Lock Out): BCLO function will be activated if you check this option.
- (3) Power Save: you can configure the values related with power save function. PS OFF Time, PS ON Time and Delay Time.

#### 8. SQUELCH TUNING

(1) Manual Tuning

You can configure mute and unmute point in S band. You can increase or decrease these values by pressing 'Page Up' and 'Page Down' button.





You can also set unmute point in N band. This is the difference value from S bans unmute value in this case. For example, N band unmute value is 64 if S band unmute value is 63 and you set N Band unmute value to 1.





You can also set the difference value in a specific frequency range. B1 always indicates 0 because this is the point of reference. This reference is decided by the above job. You can increase or decrease these values by pressing 'Page Up' and 'Page Down' button in like manner above.

Band Parameter								
		B 1	B 2	B 3	B 4			
		470~472		474~476	476~478			
	S Band	0	-3	-6	-9			
	N Band	0	-3	-6	-9			

Figure 18 Squelch Manual Tuning by Frequency

(2) Auto Tuning

First of all, you should connect the transceiver to HP8920. The equipment setup is as follows.



Figure 19 Equipment Setup for Squelch Auto Tuning

Press start button to start auto tuning process. HP8920 and the transceiver should be turned on. The status window shows the tuning progress.

AUTO ADJUSTMENT								
MUTE Amp.	- 113	dBm	HP8920 Address	15	Start			
UNMUTE Amp.	- 116	dBm	Status Window					

Figure 20 Squelch Auto Tuning Interface