FRS COMMUNICATOR MODEL CC110 US
OWNER'S MANUAL AND OPENRATING INSTRUCTIONS

1、Appearance,display /Button Function

1.1 **Appearance Picture**

1.2 The LCD display
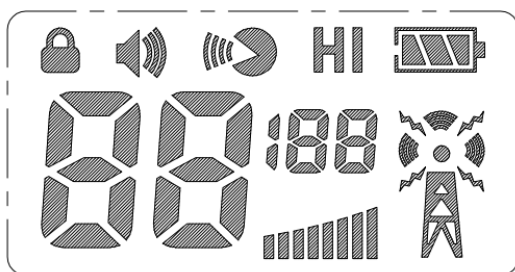
	Display Channel Number
	Display CTC/DCS Number
	Key Lock Symbol
	Key tone Symbol
	Voice control display
HI	High Power Transmitting Mode
	Battery level Symbol
	Display for volume level

Signal display, Standby，Transmitting, Receiving

1.3 Key Function Description

Key symbol	Key Instruction
⏻	**Power(on/off)**
MENU/ 🔒	Menu/Key Lock
LAMP	**Press "LAMP" button 2 times for turning on or off**
♪	Call function button
▲	Increase Volume /Menu Operation Up Button
▼	Decrease Volume/Menu Operation Down Button
PTT	PTT button(Press to transmit)

2、Turning the Unit ON:Press and hold the ⏻ button, the unit will" beep" with a signal tone and the LCD screen will briefly display the SELF-TEST screen.

3、 Turning the Unit OFF :Press and hold the ⏻ button, the unit will" beep" with a signal tone and the LCD screen will turn blank.

4.Adjust the speaker volume

4.1 The volume is shown in steps of 1-8 with the symbol "**ııılllll**"*on the display.*

4.2 Press the ▲ and ▼ button to increase or decrease the volume with prompt tone.

5、 *Receiving a Signal*

5.1 The unit is continuously in the RECEIVE mode when the unit is ON but not transmitting.

When you receive a signal on the current channel, disappeared,　　　 is displayed, speaker will make a sound by the currently signal.

5.2 In the receiving state, press the **PTT** , the unit will be immediately converted to transmitting state.

5.3 To avoid receiving information that you don't want to receive, it is recommended that you set the CTC/DCS channel.

6.Transmitting a signal:

6.1 Press and hold the **PTT** button to transmit. The symbol disappears and symbol appears , hold the unit in a vertical position with the MICOPHONE 2 to 3 inches from the mouth, and speak into the unit using a normal tone of voice.

6.2 Release the **PTT** button when you have finished transmitting.

NOTE: In order for other people to receive your transmission, they must also be on the same channel and CTC/DCS number you are currently using.

7. *Sending call tones*

You can use *call tones* to alert the other when you are attempting to contact them. You can also use *call tones* to signal the beginning or the end of a transmission.

Press the **C** button once, the red indicator will light up and the call tone continues for 2 seconds without voice.

8. *Menu Function Settings*

Use "MUNE" key to select channels respectively、**CTC**(tone)、high/low power emission、call music 、 VOX（acoustic）、sound button switch function settings.

8.1 Press "MUNE" button once to enter the channel selection mode and channel number will flash , press▲/▼ button to select channel number ,there are 16 channels can be chosen .

8.2 Press "MUNE" button twice to enter the CTC selection mode, the display shows "**CTC/DCS**" symbol and flashing, press ▲/▼ button to select the **CTC/DCS** number from 1 -121, when the CTC number is 0,this function be closed.(Note:CTC number from 1-38,DCS number from 39-121)

8.3 Press "MUNE" button 3 times to enter the high/ low power page, the screen display shows "LO", press ▲/▼ buttons to change the high/low power transmitting mode,select high power, the display shows " HI " symbol.

8.4 Press""MUNE" " button 4 times to enter the VOX setting, the display shows " ", press ▲/▼ buttons to select on/off and VOX sensitivity settings, LCD will display "LE01" to LE05 for selecting sensitivity level from 01 to 05 , LE 0**1** is the minimum sensitivity,LE 05 is maximum .

8.5 Press""MUNE" " button 5 times to enter the black light setting, the Channel Number" "will change to " COLOR", 7 backlight colors are: White,Red,Green,Blue,Purple,Orange and Cyan.

8.6 Press""MUNE" " button 6 times to enter the **CALL music** selection,10 songs include 5 kinds of animal and 5 others, the display shows CA , press ▲/▼ buttons to select what you want from 01 to 10.

8.7 Press""MUNE" " button 7 times to call up the settings for button press sounds.Use the ▲/▼ buttons to select the setting ON(button tones activated) or OFF(button tones deactivated) with " " or not.

8.8 Press""MUNE" " button 8 times to exit the menu.

Note:

During the menu setup process,press "MENU" to save the current settings then advance to next setting option.

While in the menu settings,Pressing " PTT" or "♪" **will save the current settings and also close the menu.**

If you make no entry in the menu for about 6 seconds,the unit will save the current settings and also close the menu.

9. *VOX function*

9.1 You can adjust the sensitivity for the VOX function,which automatically switches the device into transmit mode depending on the volume of your voice.you can transmit voice signals without having to press the PTT button.It will turn to receiving mode in 2 seconds after you have finished your speech.

9.2 Please press and hold "PTT" button for 3 seconds to exit VOX function then press "MENU" into VOX page to adjust the sensitivity.

10、The flashlight function
Press "LAMP" button 2 times for turning on or off

11、Key lock
11.1 Press and hold the "MENU" button while in standby mode until the keypad be locked

11.2 When the key lock is activated, only the ""PTT"、 ♪、 "LAMP"、 and "⏻ " buttons are active.

11.3 To deactivate the key lock, press the "MENU"button until the key symbol in the display disappears.

12.

Low battery indicator

12.1 If battery is full, the symbol will display "▮▮▮ "; When power is 2/3, it will display "▮▮ "; When the power if 1/3 ,it will display"▮ "; When it is low battery "☐ "symbol will flash and be a beep every 15 seconds.

12.2 When the battery is low, the intercom will shut down automatically

13. Energy-saving mode
If there is no input or signal received by the radio for 6 seconds,the device switches automatically into energy-saving mode.

In energy-saving mode, the device monitors the radio channel periodically and switches back to reception mode if it detects a signal.

14.Specifications

Channels Available	22 Channels
Output Power (TX)	≤05.W(EPR)
Range	Maximum 5 Km
Battery Life	30 Hours（typical）

15、Channels and frequency table
15.1 Channel Table

No	Frequency(MHz)	No	Frequency(MHz)
1	462.5625	12	467.6625
2	462.5875	13	467.6875
3	462.6125	14	467.7125
4	462.6375	15	462.5500
5	462.6625	16	462.5750
6	462.6875	17	462.6000
7	462.7125	18	462.6250
8	467.5625	19	462.6500
9	467.5875	20	462.6750
10	467.6125	21	462.7000

| 11 | 467.6375 | 22 | 462.7250 |

15.2 **CTC Code Table**

Code	Frequency(Hz)	Code	Frequency(Hz)	Code	Frequency(Hz)
1	67.0	14	107.2	27	167.9
2	71.9	15	110.9	28	173.8
3	74.4	16	114.8	29	179.9
4	77.0	17	118.8	30	186.2
5	79.7	18	123.0	31	192.8
6	82.5	19	127.3	32	203.5
7	85.4	20	131.8	33	210.7
8	88.5	21	136.5	34	218.1
9	91.5	22	141.3	35	225.7
10	94.8	23	146.2	36	233.6
11	97.4	24	151.4	37	241.8
12	100.0	25	156.7	38	250.3
13	103.5	26	162.2		

15.3 **Code Table**

Number	DCS CODE	Number	DCS CODE	Number	DCS CODE	Number	DCS CODE	Number	DCS CODE
1	D023N	18	D115N	35	D212N	52	D306N	69	D431N
2	D025N	19	D116N	36	D223N	53	D311N	70	D432N
3	D026N	20	D122N	37	D225N	54	D315N	71	D445N
4	D031N	21	D125N	38	D226N	55	D325N	72	D446N
5	D032N	22	D131N	39	D243N	56	D331N	73	D452N
6	D036N	23	D132N	40	D244N	57	D332N	74	D454N
7	D043N	24	D134N	41	D245N	58	D343N	75	D455N
8	D047N	25	D143N	42	D246N	59	D346N	76	D462N
9	D051N	26	D145N	43	D251N	60	D351N	77	D464N
10	D053N	27	D152N	44	D252N	61	D356N	78	D465N
11	D054N	28	D155N	45	D255N	62	D364N	79	D466N
12	D065N	29	D156N	46	D261N	63	D365N	80	D503N
13	D071N	30	D162N	47	D263N	64	D371N	81	D506N
14	D072N	31	D165N	48	D265N	65	D411N	82	D516N
15	D073N	32	D172N	49	D266N	66	D412N	83	D523N
16	D074N	33	D174N	50	D271N	67	D413N		
17	D114N	34	D205N	51	D274N	68	D423N		

FCC Warning

The device only supports simplex-mode and transmitting is no more than the rated duty cycle factor of 50% of the time. For hand-held operation, the radio should be held at least 25mm from the user's face. The use of belt clips, holsters and similar accessories should not contain metallic components in its assembly. The use of accessories that do not satisfy these requirements may not comply with RF exposure requirements, and should be avoided.

RF Exposure Information:
This product is compliance to FCC RF Exposure requirements and refers to FCC website
https://apps.fcc.gov/oetcf/eas/reports/GenericSearch.cfm search for FCC ID: 2AS7NCC110 to gain further information include SAR Values.