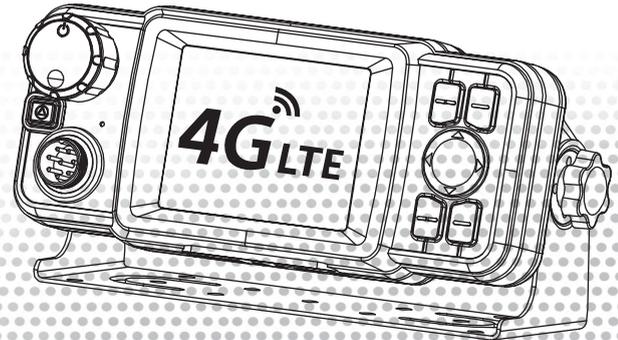




**-Rugged-reliable Two-way Communications**



**In-Vehicle POC Network  
Mobile Radio**

# **INSTRUCTION MANUAL**

**Quanzhou SFE Electronic Technology Co.,Ltd**

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## ***Welcome to use SFE two-way Radio***

### **To Customers**

*Thank you very much for using SFE two-way radio, a truly versatile, compact and durable radio that will provide reliable and high quality communication. Before operation and to obtain the best performance, please read this manual carefully to become familiar with the radio's features and uses.*



# Contents

<b>1. User Safety Information</b> .....	<b>1</b>
<b>2. Supplied Accessories</b> .....	<b>2</b>
<b>3. Getting Acquainted</b> .....	<b>3-7</b>
■ Radio Body .....	<b>3-6</b>
■ LCD Display .....	<b>7</b>
<b>4. Menu Function Operation</b> .....	<b>8-12</b>
<b>1.Contracts</b> .....	<b>8-9</b>
■ Group Call.....	<b>8</b>
■ Individual Call/Single Call.....	<b>8</b>
■ Good Friends Call.....	<b>9</b>
<b>2.Settings</b> .....	<b>9-10</b>
■ LCD Backlight.....	<b>9</b>
■ LCD Light Level.....	<b>10</b>
■ Key Backlight.....	<b>10</b>
■ Network Mode.....	<b>10</b>
<b>3.Sound</b> .....	<b>11 -12</b>
■ Key Tone .....	<b>11</b>
■ Talk Tone .....	<b>11</b>
■ Voice Code- .....	<b>12</b>
■ MIC Gain.....	<b>12</b>
■ SPK Gain .....	<b>12</b>
<b>4.GPS Function</b> .....	<b>13</b>
<b>5.SIM CARD</b> .....	<b>13</b>
<b>6.Device Info</b> .....	<b>13</b>

# Contents

<b>5. Technical Specifications</b> .....	<b>14</b>
<b>6. Trouble Shooting and Maintenance</b> .....	<b>15</b>
<b>7. Warranty and Service</b> .....	<b>16</b>

## User Safety Information

Before using your new SFE PoC network radio, please read the following safety recommendations carefully:

- ◆ Do not attempt to repair, disassemble or re-assemble the radio. Repair should only be carried out by a qualified Radio Engineer.
- ◆ In order to avoid electromagnetic interference, please turn off the radio in any areas where radio transmissions are not permitted e.g. Hospitals, Aircraft, etc.
- ◆ Do not place a radio in any area over, or in the deployment area of an Air Bag within a vehicle.
- ◆ Never operate the radio in potentially flammable and explosive atmospheres.
- ◆ Never replace or charge batteries in potentially flammable and explosive atmospheres.
- ◆ Do not operate the radio if its antenna is damaged.
- ◆ Do not place the radio in excessively dusty, humid, and/or wet areas.
- ◆ Do not expose the radio to long periods of direct sunlight, for example on the dashboard of a vehicle or close to heating appliances.  
Keep a distance of at least 20 cm between the antenna and your head and body when transmitting.

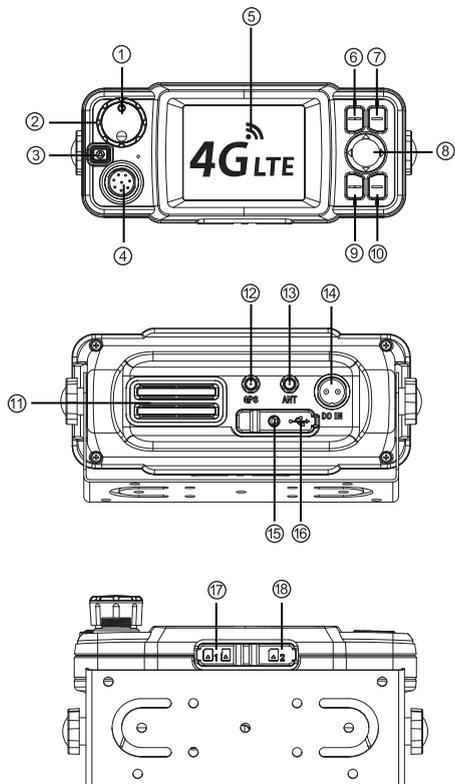
## Supplied Accessories

Please open the box carefully and check that the following items are included. If you find any items are missing or have been damaged during shipment, please contact your SFE dealer immediately.

Equipment and Accessories Supplied:

ITEM	QUANTITY
In-vehicle Radio Body	x1
4G Antenna	x1
GPS Antenna	x1
Power Supply Cable	x1
Metal Bracket	x1
Speaker MIC	x1
Instruction Manual	x1

## Diagram



## 1. Volume Control Knob & Power ON/OFF Button

Please long press it to power ON or power OFF the radio. Turn the volume knob clockwise to increase the volume level, turn the volume knob counter-clockwise to reduce the volume level.

## 2. LED Indicator

It lights Yellow for few seconds during power on.  
It lights RED during transmitting.  
It lights GREEN during the receiving.

## 3. Emergency Alarm

Please long press this button to activate the emergency alarm/SOS function, long press again to exit.

## 4. Speaker MIC Connector

Please insert air plugs MIC speaker with 8 pinholes, press and hold the PTT button, the radio will beep and LED indicator will turn RED (that means transmitting is valid), then speak clearly into the microphone with your normal voice (remember to keep the MIC around 2.5~5CM from your mouth)



## 5. LCD Display

Kindly note: this is non-touching screen.

### 6.Functional Key.

Please short press to UP the groups and long press to enter into Network Mode selection

### 7.Functional Key

Please short press to DOWN the groups and long press to switch the Backlights Mode.

### 8.UP/DOWN/LEFT/RIGHT Key

Please press it to choose the desired items from menu.

### 9.Menu Key(Green --)

### 10.Backup Key(Red -)

### 11.MIC Speaker

### 12.GPS Antenna Connector

### 13.4G Antenna Connector

### 14.Power Supply Connector

Kindly note: Please connect to 12V/24V AC Power from car.

### 15.Headset/Earpiece Connector

### 16.Micro USB Programming Cable Connector

Please long press functional key -- and functional key - at the same time and turn ON the radio device, it will enter into writing mode



### 17.SIM CARD 1

Kindly note: It only supports Micro sim card.

Please refer to the corner, aware inserting the sim card in right side.

### 18.SIM CARD 2

Kindly note: It only supports Micro sim card.

Please refer to the corner, aware inserting the sim card in right side.

# Getting Acquainted

## ■ LCD Display



- Carrier Network Signal Strength. It indicates valid carrier network signal strength
- 4G Current Network Mode. Please long press functional key - - to enter into network mode settings.
- SIM Card Indicator: Current working on SIM CARD 1
- Backlight Auto Mode.
- 00:00 Display current local time ☀ indicates backlight always ON.
- Current Group Name Tue Current Week Day
- Current Own User Name 2020-07-015 Current Date



Idle Status



Transmitting Status



Receiving Status

# Menu Function Operation

## ■ Basic Settings



## ■ Contracts



## ■ Group Call

1. Press to enter into MENU list
2. Select [CONTRACTS] and press to confirm and enter;
3. Select [GROUPS] and press to confirm and enter;
4. Press to select target group and press to confirm.  
( UP, DOWN, revert to front page, revert to next page)

## ■ Individual Call/Single Call

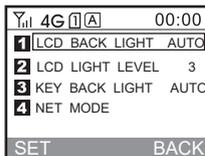
1. Press to enter into MENU list
2. Select [CONTRACTS] and press to confirm and enter;
3. Select [GROUPS] and press to confirm and enter;
4. Press to select target group and press to confirm.  
( UP, DOWN, revert to front page, revert to next page)

## Menu Function Operation

### ■ Good Friends Call

1. Press  to enter into MENU list
2. Select [CONTRACTS] and press  to confirm and enter;
3. Select [GROUPS] and press  to confirm and enter;
4. Press  to select target group and press  to confirm.  
(  UP,  DOWN,  revert to front page,  revert to next page)

### ■ Settings



### ■ LCD Backlight

1. Press  to enter into MENU list;
2. Select [SETTINGS] and press  to confirm and enter;
3. Select [LCD BACK LIGHT] and press  to confirm and enter;
4. Press  to switch between  (Auto Mode) and  (Always ON)

## Menu Function Operation

### ■ LCD Light Level

1. Press  to enter into MENU list,
2. Select [SETTINGS] and press  to confirm and enter;
3. Select [LCD LIGHT LEVEL] and press  to confirm and enter;
4. Press  to select the desired backlight level ( Range from level 1~level 5).

### ■ Key BackLight

1. Press  to enter into MENU list,
2. Select [SETTINGS] and press  to confirm and enter;
3. Select [KEY BACK LIGHT] and press  to confirm and enter;
4. Press  to switch between AUTO and ON.

### ■ Network Mode

1. Press  to enter into MENU list,
2. Select [SETTINGS] and press  to confirm and enter;
3. Select [NETWORK MODE] and press  to confirm and enter;
4. Press  to switch between 4G Only, 3G Only, 2G Only and AUTO mode.

## ■ Sound

Y	4G	1(A)	00:00
1	Key Tone	Set	
2	Talk Tone	Set	
3	Voice code	4K	
4	MIC Gain	3	
5	SPK Gain	3	
SET		BACK	

## ■ Key Tone

1. Press **[MENU]** to enter into MENU list,
2. Select [SOUND] and press **[ENTER]** to confirm and enter;
3. Select [KEY TONE] and press **[ENTER]** to confirm and enter;
4. Press **[ENTER]** to switch ON or OFF.

## ■ Talk Tone

1. Press **[MENU]** to enter into MENU list,
2. Select [SOUND] and press **[ENTER]** to confirm and enter;
3. Select [KEY TONE] and press **[ENTER]** to confirm and enter;
4. Press **[ENTER]** to switch ON or OFF.

## ■ Voice Code

1. Press **[MENU]** to enter into MENU list,
2. Select [SOUND] and press **[ENTER]** to confirm and enter;
3. Select [VOICE CODE] and press **[ENTER]** to confirm and enter;
4. Press **[ENTER]** to switch between 4K and 8K

## ■ MIC Gain

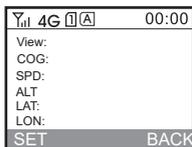
1. Press **[MENU]** to enter into MENU list,
2. Select [SOUND] and press **[ENTER]** to confirm and enter;
3. Select [MIC GAIN] and press **[ENTER]** to confirm and enter;
4. Press **[ENTER]** to select the desired MIC gain level. ( Range from level 1~ level 6)

## ■ SPK Gain

1. Press **[MENU]** to enter into MENU list,
2. Select [SOUND] and press **[ENTER]** to confirm and enter;
3. Select [SPK GAIN] and press **[ENTER]** to confirm and enter;
4. Press **[ENTER]** to select the desired speaker gain level.  
( Range from level 1~ level 6)

## Menu Function Operation

### ■ GPS Function Location



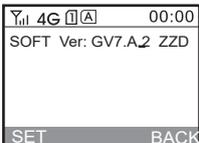
1. Press **[MENU]** to enter into MENU list,
2. Select [LOCATION] and press **[ENTER]** to confirm and enter.

### ■ SIM CARD



1. Press **[MENU]** to enter into MENU list,
2. Select [SIM CARD] and press **[ENTER]** to confirm and enter;
3. Press **[UP]** to switch between SIM CARD 1, SIM CARD 2 and AUTO.

### ■ Device Info



1. Press **[MENU]** to enter into MENU list,
2. Select [DEVICE INFO] and press **[ENTER]** to confirm and enter.

## Technical Specifications

General	
Working Voltage	DC12V-24V
Dimension(Projections excluded)	175*76*70mm
Weight	Appr. 320g
Network System	LTE/WCDMA    GPS
Working Band	B2/B4/B5/B12/B13/B14/B66/B71@FDD LTE; B2/B4/B5@WCDMA;
Working Mode	Simplex
Working Temperature	(-20 – (+)60°C
Storage Temperature	(-30 – (+)60°C
Occupied Bandwidth	≤1.48MHz
RF Power	≤30dBm
RX Sensitivity	LTE ≤-93dBm; WCDMA ≤-108dBm; GSM ≤-106dBm;
Audio Output	500mW
Antenna Impedence	50Ω

All stated specifications are subject to change without notice or obligation.

### ■ Troubleshooting

Problem	Solution
The radio does not work when switched on.	The battery is low. Please recharge the battery pack and make sure the battery pack is properly fitted, or insert a fresh battery, refit it if necessary. Swap the battery onto another radio to check if one is available.
The battery runs out in a short time.	The battery is no longer in good condition and needs to be replaced with a new one.
The radio is unable to transmit or receive calling from other radios in the same group.	The network is disconnected or the signal strength is weak or unstable, please make sure the SIM card is well connected and re-start the radio if necessary.

### ■ Maintenance and Cleaning

Do not carry the transceiver by the antenna or attached audio accessories. Always turn the transceiver OFF when attaching or detaching audio accessories. Clean the buttons, control knob and radio body with a dry cloth when it has been unused for a long time or becomes dirty.

Our warranty applies only to the purchaser if the radio has been properly used and maintained.

### **Conditions of Warranty:**

Quanzhou SFE Electronic Technology Co ,Ltd warrants for 18 months to the customer, this product (excluding supplied accessories ) to be free from defects in materials and craftsmanship. SFE warrants for 6 months to the customer the supplied accessories to be free from defects in materials and craftsmanship.

This user manual applies to SEM1000etc

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

**Note:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.