SAMCOM

CM-300
3G IP Mobile Radio

User Guide

INTRODUCTION

Thank you for purchasing the SAMCOM CM-300 3G IP mobile radio.

We focus on ease of use, reliability and value for money. We sincerely hope our products meet your expectations.

Main Features

- Compact, simple but rugged design
- Crisp, clear and high quality sound
- Supports 2G and 3G WCDMA
- KENWOOD RJ-45 type microphone connector
- Firmware upgradable, allowing new features to be added when available
- Built in 1W speaker, providing clear speech even in the noisiest environments
- Over The Air Programming (OTAP) of contact lists

FCC Statement

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

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;
(2) This device must accept any interference received, including interference that may cause undesired operation.

IMPORTANT NOTE:

FCC Radiation Exposure Statement:
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. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.
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 can generate, use and radiate radio frequency energy and, if not installed and used in accordance with instruction, 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 will encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiver 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.

SAFETY INFORMATION

Please read this information before using your radio. Failure to do so could result in personal injury, death, and/or damage to your radio, accessories and/or other property.

Radio Care

● Do not use any parts or accessories not made specifically for this radio.
● Ensure that the radio is used within the parameters for which it was designed.
● Turn the radio OFF before connecting optional accessories.

Warning
Turn the radio OFF in the following locations:
● In explosive atmospheres (flammable gas, dust including metallic & grain powders, etc).
● While taking on fuel or while parked near a fuel station.
● Near explosives or blasting sites.
● In aircraft or medical institutions.
● Near persons known to be wearing a pacemaker.

Caution
● Do not disassemble nor modify the radio for any reason.
● Do not transmit while touching the antenna terminal or any exposed metallic parts of the aerial as this may result in burns.
● Please check and observe state laws regarding use while driving.

End of Life Disposal
● When your radio can no longer be used, please ensure that the unit is disposed of in an environmentally friendly way.

RADIO OVERVIEW

Package Includes:

1 radio unit
1 microphone speaker
1 mount bracket
1 power cable
1 GSM/WCDMA antenna
1 User guide

At a Glance

1 – On/Off/Volume Knob
Turns the radio ON or OFF, and adjusts the volume.

2 – Enter Button
Press this button to enter the menu functions and confirm your selections.

3 – Exit Button
Press this button to cancel your selections and exit the menu functions.

4 – Menu Button
Press this button to enter menu operation mode.

5 – Up Button
Press this button to select your desired menu functions.

6 – Down Button
Press this button to select your desired menu functions.

7 – Accessory Jack
Speaker Microphone and programming jack.

8 – LED Indicator
LED Blue flashing means searching for network.
LED Blue fast flashing means logging on to the network.
LED Blue slow flashing means logged on to the network.
LED Green permanent means receiving.
LED Orange means programming mode.
When pressing **PTT** button on the speaker microphone LED RED means transmitting.
LED Red flashing means firmware updating mode.

GETTING STARTED

Mobile Installation

To install the mobile, select a safe, convenient location inside your car that minimizes danger to your passengers and yourself while the car is in motion. Consider installing the unit at an appropriate position so that knees or legs will not strike it during sudden braking of your car. Try to pick a well ventilated location that is shielded from direct sunlight.

1.   Install the mounting bracket in the car using the supplied self-tapping screws and flat washers.
2.   Position the mobile, then insert and tighten the supplied hexagon SEMS screws.

Note: double check that all screws are tightened to prevent car vibration from loosening the bracket or transceiver.
Determine the appropriate angle of the mobile, using the 3 screw hole positions on the side of the mounting bracket.

DC Power Cable Connection

The mobile can support both 12V and 24V car battery. Be sure to use a 12V vehicle battery at least that has sufficient current capacity. If the current to the mobile is insufficient, the display may darken during transmitting.

1.   Route the DC power cable supplied with the mobile directly to the car's battery terminals using the shortest path from the mobile.
Note: the entire length of the cable must be dressed so it is isolated from heat, moisture, and the engine secondary (high voltage) ignition system cables.
2.   After installing cable, in order to avoid the risk of damp,

please use heat-resistant tap to tie together with fuse box. Don't forget to reinforce whole cable.

3.   In order to avoid the risk of short circuit, please cut down connection with negative (-) of battery, then connect with mobile.

4.   Confirm the correct polarity of the connections, then attach the power cable to the battery terminals; red connect to the positive (+) terminal and black connects to the negative (-) terminal.

Use the full length of the cable without cutting off excess even if the cable is longer than required. In particular, never remove the fuse holders from the cable.

5.   Reconnect any wiring removed from the negative terminal.

6.   Connect the DC power cable to the mobile's power supply connector.

Press the connectors firmly together until the locking tab clicks.

Programming Mode

To make the radio to enter programming mode, press the Down button and turn on the radio, the LED will display orange.

Firmware Updating Mode

To make the radio to enter firmware updating mode, press the Menu button and turn on the radio, the LED will red flash.

SPECIFICATIONS

General

Frequency Range	GSM: 850MHz PCS: 1900MHz WCDMA Band 2: 1900MHz WCDMA Band 5: 850MHz
Operating Voltage	9~24V DC
Dimensions	115 x 105 x 38mm
Weight with battery	280g
Operating Temperature	-30℃ to +50℃
Storage Temperature	-40℃ to +70℃
Operating Current	5mA (-75dBm), 120mA (-75dBm), 780mA (-104dBm)
Receiver Sensitivity	-106dBm
Usage Condition	23~26dBm
Receiver Type	-56-** u-blox7 engine, GLONASS L1 FDMA SBAS: WAAS, EGNOS, MSAS
Maximum Refresh Rate	10Hz

The above is correct at time of print, however SAMCOM Radio Ltd reserves rights to update specifications as and when these become available.

WARRANTY INFORMATION

Warranty Period

Radio: 1 year from date of purchase.
Battery Pack: 6 months from date of purchase.
Note: Please retain your receipt as your proof of purchase.

Warranty Exclusions

The warranty will not apply to the following:
- Failure to provide a proof of purchase
- Product has been modified or serial number has been removed
- If any damage results from the use of incompatible accessories
- Product fails because of misuse, abuse or inappropriate use
- Improper battery or antenna installation