

User's Manual

FM HANDHELD TRANSCEIVER

Model: AQ-40B

APPROVAL

1. FCC Approval

FCC ID :

1) Safety Training Information

Your FM Handheld Transceiver generates RF electromagnetic energy during transmit mode. This radio is designed for and classified as “Controlled Exposure / Occupation Environment”, meaning it must be used only during the course of employment by individuals aware of the hazards, and the ways to minimize such hazards. This radio is NOT intended for use by the “General Population / Uncontrolled Environment.

This radio complies with FCC RF radiation exposure limits set forth for a controlled environment. This radio should be installed and operated with a minimum distance of 2.5 centimeters between the radio and your body. Therefore, to ensure that your exposure to RF electromagnetic energy is within the FCC allowable limits for occupational use, always follow below information.

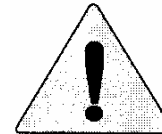
Do not operate the radio without a proper antenna as this may damage the radio and may also cause you to exceed FCC RF exposure limits. A proper antenna is the antenna supplied with this radio by the manufacturer or an antenna specifically authorized by the manufacturer for use with this radio.

Do not transmit for more than 50% of total radio use time (“50% duty cycle”). Transmitting more than 50% of the time can cause FCC RF exposure compliance requirements to be exceeded.

Always use Airtech supplied accessories (antennas, batteries, belt clips, speaker/mics, etc.). Use of unauthorized accessories can cause the FCC RF exposure compliance requirements to be exceeded.

Always keep the antenna at least 2.5 cm (1 inch) away from the body when transmitting and only use the belt-clips, when attaching the radio to your belt, etc., to ensure FCC RF exposure compliance requirements are not exceeded.

2) LABEL



This radio complies with the FCC RF exposure limits for Occupational Use Only.

CONTENTS

| | |
|----------------------------------|----------|
| GENERAL FEATURES..... | 2 |
| UNPACKING..... | 3 |
| OPTIONAL ACCESSORIES..... | 4 |
| GETTING READY..... | 4 |
| DESCRIPTION..... | 5 |
| OPERATION..... | 5 |
| CHARGER AND BATTERY..... | 7 |

General Features

1. Compact design & size
(125(W)x55(H)x40(D), 350.7g with high capable battery)
2. Heavy duty durable construction
3. 128 channels
4. 38 CTCSS/ 83 CDCSS/ 83 INVERR CDCSS
5. PC Programmable, transferable by cloning
6. Time-out timer (TOT)
7. Busy Lockout (BCLO)
8. Battery saving mode
9. Low battery alert
10. DTMF ANI
11. Transmit output power High/Low
DC 7.5V Ni-Mh battery

Unpacking

Unpack and check that all items have been enclosed.

Packing contents: ±radio ↑antenna →battery pack
(1,650 mAh) ↓belt clip °hand strap ±charger "user's manual



Optional

Accessories External speaker/microphone

1. Additional battery pack

Getting Ready

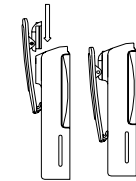
1. Installation and Removal, Belt Clip

Installation: Align the belt clip with the plastic slots of the battery pack. Slide the belt clip onto the battery pack, pushing firmly until a click heard.

Removal: Hold up the belt clip release tab with a fingernail or a coin (or like instrument). While holding up the release tab, slide the belt clip out and away from the battery pack.

2. Installation and Removal, Battery Pack

Installation: Turn off the transceiver. Hold the transceiver with the back of the unit facing up. Place the battery pack against the back of the transceiver so that the tabs on the transceiver engage the four openings in the battery pack. Slide the battery pack toward the top of the transceiver until a click heard.

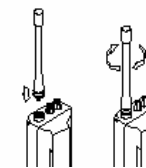


Removal: Turn off the transceiver. Hold the radio with the back of the unit facing up. With the thumbnail of your other hand slide the latch lever down. While holding the latch lever down, slide the battery pack down toward the bottom of the transceiver.

Separate the battery pack from the transceiver.

3. Installation

Rotate the antenna until it is seated firmly.
*. Before starting operation, make



Antenna operation, make sure the battery is fully charged.

Description



Operation

1. Power on / off

On : Holding down on/off switch for 2 seconds, LED lamp would be flashed red and green alternately. When LCD window is lighted, it is Okay.

Off : Holding down on/off switch for 2 seconds, LED Lamp will be flashed red and green alternately. When LCD window light goes off, it is Okay.

2. Audio Volume Control

Audio volume is increased when rotating volume switch clockwise.

Audio volume is decreased when rotating the volume switch counter-clock.

3. Channel Selection:

Possible to channel selection when rotating volume knob clockwise or counter clock wise while holding down Function switch.

4. Transmit:

Hold down the PTT Button (h) and talk into the MIC at 1-2 in distance. The LED lights red on transmitting. Release the PTT button (h) to receive.

5. Receive:

Choose the desired channel by rotate right/left switch (k). The LED lights green on receiving. In case the signal doesn't match the sub-tone the green LED will blink.

6. Monitor:

Press to monitor. Pressing the monitor button for more than 2 seconds will cause continuous monitor condition. To release the monitor mode, press and release the monitor button quickly.

7. Transmit operation during scan

①. If the radio is programmed in PTT channel at scanning is home channel: TX will occur on the channel the scan started.

②. If the radio is programmed in PTT channel at scanning is last busy channel: TX will occur on the last busy channel

8. TX ANI

If the radio was initially programmed for this feature pressing the PTT will cause a DTMF code to be send that can identify the sending radio.

9. 2/5 Tone Decode (Selcall)

During initial radio programming by the technician this radio

can be configured for several different types of decode operation. If a channel is selected that has Selcall activated the radio will be muted until the proper signal is received. When this occurs the radio can sound a ringing type alert signal or a voice message maybe heard. Depending upon the initial programming, pressing the PTT may cause an automatic identifier to be sent. When programmed for Selcall pressing the monitor and function buttons at the same time can cause the Selcall mode to be cancelled and generate an automatic identification. Please have your radio technician or dispatcher fully explain this operation.

Charger and Battery

1. Battery (Ni-Mh)

| | |
|--------------------|------------------|
| Voltage & Current | DC 7.5V , 1650mA |
| Duty time (5-5-90) | Over 8 hrs |

2. Charger

| | |
|-----------------------|--|
| Input power | CHARGER INPUT DA 12V (120VAC)ADAPTOR INPUT POWER |
| Operating temperature | 10-30 deg. C |

Connect the charger to an appropriate outlet (120VAC ADAPOR). Turn the transceiver power off and place the radio into the front socket of the charger. The red light illuminates during charging and the green light comes on when the charge is complete. When you place two batteries in the charger at the same time, the front battery will charge first. The rear battery will begin charging when the front battery charge is complete.

| | | |
|--------|----------|----------------------------------|
| Red | On | Charging |
| | Blinking | Abnormal battery |
| Green | On | Fully charged |
| Orange | On | Stand-by for charging (rear cup) |
| | Blinking | Discharging |

- When you put a battery in the rear cup of the charger the charger checks the voltage. If voltage is over 7.4V, the charger starts discharging for 4 minutes then checks again. If voltage is still more than 7V, it discharges until the voltage is 6V then starts charging.