



USER'S MANUAL

PROFESSIONAL TWO-WAY RADIO

AWR-991

FCC ID:Q9S-AWR991

- 50 CTCSS**
- 107 DCS**
- 1200mA Li-ion Battery**
- PC Programmable**

TO USER

Thank you for purchasing our transceiver. We appreciate your trust in our products and believe this easy to operate transceiver would well serve your diverse communication needs.

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1 SAFETY INFO

NOTE TO THE USER

- Illegal operation is punishable by fine or imprisonment or both.
Refer service to qualified technicians only.

SAFETY

- It is important that the operator is aware of and understands common hazards to the operation of any transceiver.
- We does not guarantee the safety and operation of the transceiver when using accessories and /or attachments not sold by us.

WARNING

EXPLOSIVE ATMOSPHERES(GASES, DUST, FUMES, etc.)

- Turn off your transceiver while taking on fuel, or while parked in gasoline service stations.

▲ PRECAUTIONS

Observe the following precautions to prevent fire, personal injury and transceiver damage.

- Do not modify or attempt to adjust this transceiver for any reason.
- Do not expose the transceiver to long periods of direct sunlight, nor place it close to heating appliances.
- Do not place the transceiver in excessively dusty, humid, and/or wet areas, nor on unstable surfaces.
- If an abnormal odor or smoke is detected coming from the transceiver, switch OFF the power immediately and remove the optional battery pack from the transceiver. Contact your dealer.

2 UNPACKING AND CHECKING EQUIPMENT

Carefully unpack the transceiver. We recommend that you identify the items listed in the following table before discarding the packing material. If any items are missing or have been damaged during shipment, file a claim with the carrier immediately.

SUPPLIED ACCESSORIES

Item	Quantity
Antenna	1
Charger (with adaptor)	1
Li-ion Battery Pack	1
Belt clip	1
User's manual	1
Hand Strap	1

3 BATTERIES

CHARGING WARNINGS:

Initially charging the battery pack after purchase or extended storage (greater than 2 months) will not bring the battery pack to its normal operating capacity. After repeating the charge/discharge cycle two or three times, the operating capacity will increase to normal. Please replace or charge the battery pack while low power alarm.

AVAILABLE BATTERIES

Please use our special battery to charge transceiver, if using other brand batteries, it may explode and damage nearby subjects or people.

Note:

1. Do not short the battery terminals or dispose of the battery by fire. Never attempt to remove the casing from the battery pack.
2. The ambient temperature should be between 5 and 40°C while charging is in progress. Out of the range, the battery may not be charged fully.

3. Always switch OFF the transceiver equipped with a battery pack before charging. Using the transceiver while charging its battery pack will interfere with correct charging.
4. Do not plug/unplug the AC adaptor and battery during charging, to avoid interference charging program.
5. The battery pack life is over when its operating time decrease even though it is fully and correctly charged. Replace the battery pack.
6. Do not recharge the battery pack if it is already fully charged. It would shorten the life of the battery pack or the battery pack may be damaged.
7. Do not charge transceiver while the battery or units were wet. Ought to dry it with cloth before charging, avoid damaging the unit.

3 BATTERIES

Note: All batteries can cause property damage and/or bodily injury such as burns if conductive materials such as jewelry, keys, or beaded chains touch exposed terminals. The conductive material may complete an electrical circuit (short circuit) and become quite hot. Carefully handling any charged battery, particularly when placing it inside a pocket, purse, or other container with metal objects.

CHARGE OPERATION

When installing the battery, the transceiver lights red. If three beeps sound each 30 seconds, it means low power, please start to charge the transceiver.

Please use our special charger for battery charging, the charger LED display charging status..

LED appears	Status
Red	Charging
Green	Fully charged

TO CHARGE BATTERY PACK, PERFORM THE FOLLOWING STEPS:

1. Plug the AC adaptor cable into the adaptor jack located on the rear of the charger.
2. Put the battery pack or transceiver with a battery pack into the charger.
3. Plug the AC adaptor into AC outlet.
4. Make sure the battery pack contacts are in contact with the charging terminals, the charger LED lights red and charging begins.
5. The supplied charger LED lights green, complete charged. Remove it or the transceiver equipped with it from the charger.

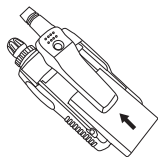
Note:

1. The charger's LED flashing before unplugging battery pack, it is normal.
2. When replace a battery pack to charge, please charging after LED is steady.
3. The charger lights red while charging after plugging the battery, flashing means defective battery or the temperature is too high or low.

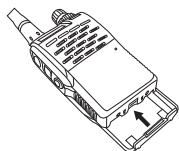
4 PREPARATION

INSTALLING/REMOVING THE BATTERY PACK

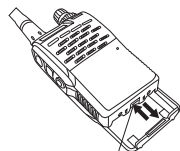
The battery pack is not charged at the factory. Charge it before use.



1. Matching the positive and negative poles on the battery and radio to get the battery pack into the radio. Hearing the warning tone means the battery contacts normally.



2. Match the front two bulges of the battery pack with the corresponding two holes on the back of the transceiver, then press the battery and radio firmly together to pull up the back housing smoothly.



3. Fasten the battery latch forward to the back of battery.

Battery lock

INSTALLING THE ANTENNA

Screw the antenna into the connector on the top of the transceiver by holding the antenna at its base and turning it clockwise until secure.

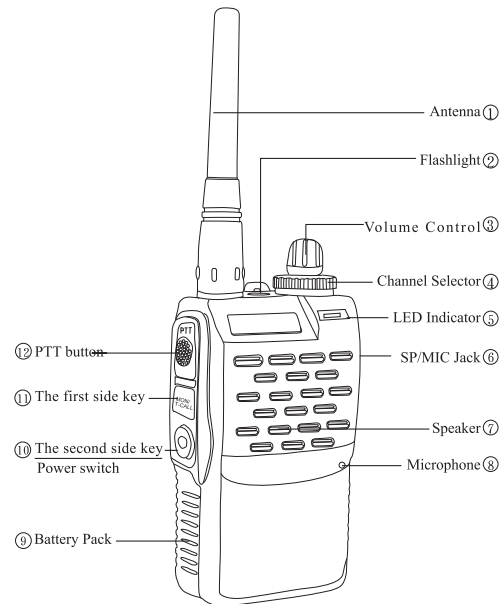
Note: The antenna is either a handle, a key ring retainer, or a speaker/microphone attachment point.

Using the antenna in these ways may damage the antenna and degrade your transceiver's performance.



5 GETTING ACQUAINTED

KEYS AND CONTROLS

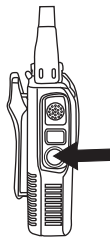


1. Antenna
2. Flashlight
3. Volume control
Adjust the volume level by rotating the Volume control.
4. Channel selector
Rotate Channel selector to select channel 1-16.
5. LED indicator
Lights red while transmitting. Lights green while receiving a signal.
Flashing red when the battery voltage is low while transmitting.
6. Speaker/microphone jack
7. Speaker
8. Microphone
9. Battery pack
10. Power switch
11. The first side key 1 (MONI key0)
Press the side key for 3 seconds, then the squelch is turned off, meanwhile you can hear the background noise. Release the side key, then the squelch is opened.
12. PTT button
Press it and speak into the micphone to call the receiver; release it and you can have the receiving.

6 BASIC FUNCTION

1. TURN ON THE RADIO

Install the battery and press side key 2 (power key) for 3 seconds, after hearing the tone of opening radio, loosen power key.



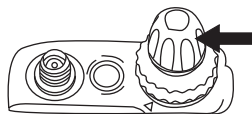
2. TURN OFF THE RADIO

Press side key 2 (power key) for 3 seconds, after hearing the tone of opening radio, loosen power key.

3. FLASHLIGHT

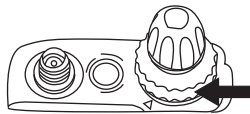
Press power key for a short time, then the flashlight is open; and then press power key for a short time again, the flashlight is closed.

4. Volume Control



5. Rotate the Channel selector to select your desired channel.

- When you receive an appropriate signal, you will hear voice from the speaker.



Note: once the battery strength is too low, the transceiver will stop transmitting and sound an alarm voice.

7 AUXILIARY FUNCTIONS

Transmitting 【PTT】 :

- Press PTT and speak to the microphone to make a call, the LED lights red.
- If this channel is empty or is forbidden by the software, it sounds "do" and doesn't light red.
- Release PTT to receive the signal. If there is a signal, LED lights yellow and turn on the speaker.
- If it isn't locked, it sounds "beep" alarm.

CHANNEL SCAN

You can scan all the channels that you stored the desired frequencies.

1. COMMON SCAN

Set radio to channel 16, and turn off the power, meanwhile press side key 1 and key 2 for 3 seconds. After hearing the tone of opening radio and a beep sound, release keys 1 and 2, then the radio enter into scanning mode. Exit scanning mode, turn off the power and re-open the radio.

2. PRIORITY SCAN

Set radio to channel 1, and turn off the power, meanwhile press side key S1 and 2 for 3 seconds. After hearing the tone of opening radio and two beep sounds, release side keys 1 and 2, then the radio enter into priority scanning mode. Exit scanning mode, turn off the power and re-open the radio.

Note: Stop 3 seconds when the transceiver receives the signal and without any operation, it will continue to scan.

VOX FUNCTION

When the radio is set at any channel, turn off the power first, meanwhile press PTT button and power key for 3 seconds. After hearing the tone of opening radio and two beep sounds, release PTT button and power key, then the radio enter into VOX opening mode.

7 BASIC OPERATIONS

ACTIVATE VOX TRANSMISSION OPERATION

If you configured to an appropriate VOX gain level, and activate VOX transmission, perform the following steps.

- Turn OFF power
- Press and hold **【PTT】** switch and then turn ON power.
- A double-beep sounds, and then release the **【PTT】** switch, the transceiver sounds the current channel number.
- Press **【PTT】** switch to cancel VOX transmission, and press **【PTT】** switch to go on transmit.

QT(50 GROUPS)/DQT(107 GROUPS POSITIVE AND NEGATIVE POSITION)

- The sellers or manufacturers can use the programmable software to set QT or DQT code. When a channel set QT or DQT code, the squelch function can be used only when receive the same QT or DQT signal. Similarly, only when the QT/DQT signal mode is same as yours, the radio station can receiver the signal you transmit. If others use different QT/DQT at the same channel from yours to make a call, the squelch function can't

work and it only has yellow light indicates.

Note: the way to set QT or DQT refers to the programmable software.

POWER SAVING FUNCTION:

Power saving: after turning on the transceiver for ten seconds and not receiving any signals or operations, it will automatically be in the power saving state.

VOICE ANNUNCIATION

Turning on the transceiver or rotating the channel selector, the transceiver has the voice annunciation.

SAFETY TRAINING INFORMATION



Your Northfield Telecommunications, Inc. d/b/a Advanced Wireless Communications radio generates RF electromagnetic energy during transmit mode. This radio is designed for and classified as “Occupational Use Only”, 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” in an uncontrolled environment.

This radio has been tested and complies with the FCC RF exposure limits for “Occupational Use Only”. In addition, your Northfield Telecommunications, Inc. d/b/a Advanced Wireless Communications radio complies with the following Standards and Guidelines with regard to RF energy and electromagnetic energy levels and evaluation of such levels for exposure to humans:

- ▮ FCC OET Bulletin 65 Edition 97-01 Supplement C, Evaluating Compliance with FCC Guidelines for Human Exposure to Radio Frequency Electromagnetic Fields.
- ▮ American National Standards Institute (C95.1-1992), IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz.
- ▮ American National Standards Institute (C95.3-1992), IEEE Recommended Practice for the Measurement of Potentially Hazardous Electromagnetic Fields– RF and Microwave.
- ▮ The following accessories are authorized for use with this product. Use of accessories other than those (listed in the instruction) specified may result in RF exposure levels exceed the FCC requirements for wireless RF exposure.



To ensure that your expose to RF electromagnetic energy is within the FCC allowable limits for occupational use, always adhere to the following guidelines:

- ▮ **DO NOT** operate the radio without a proper antenna attached, as this may damaged 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 antenna specifically authorized by the manufacturer for use with this radio.
- ▮ **DO NOT** transmits 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. The radio is transmitting when the “TX indicator” lights red. You can cause the radio to transmit by pressing the “PTT” switch.
- ▮ **ALWAYS** keep the antenna at least 30 cm (1 inch) away from the body when transmitting and only use the HYT belt-clip which is listed in instructions when attaching the radio to your belt, etc., to ensure FCC RF exposure compliance requirements are not exceeded. To provide the recipients of your transmission the best sound quality, hold the antenna at least 15cm from your mouth, and slightly off to one side.

The information listed above provides the user with the information needed to make him or her aware of RF exposure, and what to do to as-sure that this radio operates with the FCC RF exposure limits of this radio.

Electromagnetic Interference/Compatibility

During transmissions, your Northfield Telecommunications, Inc. d/b/a Advanced Wireless Communications radio generates RF energy that can possibly cause interference with other devices or systems. To avoid such interference, turn off the radio in areas where signs are posted to do so. **DO NOT** operate the transmitter in areas that are sensitive to electromagnetic radiation such as hospitals, aircraft, and blasting sites.

Occupational/Controlled Use

The radio transmitter is used in situations in which persons are exposed as consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure.