



# **FM Transceiver**

Long Range High Capacity Battery Rugged











# **THANK YOU**

We are grateful that you chose our TIDRADIO radio for your communication. This easy to use transceiver will provide dependable and cost -effective communication for you.

Our professional two-way radio is incorporate the latest in advanced technology ad craft. Hope you will be pleased with the quality and features of your products. Please read this manual carefully to ensure you know how to properly operate the radio.

# **PRECAUTIONS**

- **1.** Refer service to qualified technicians only.
- **2.** Do not disassemble or modify the transceiver for any reason.
- **3.** Do not expose the transceiver under direct sunlight long time or to extremely hot condition.
- **4.** Do not place the transceiver on the unstable surface.
- **5.** Keep the transceiver out of dust, moisture, and water.
- **6.** Do not operate the transceiver or charge the battery pack under explosive conditions.

Unpacking and Checking Equipment	1
Supplied Accessories	1
Charging the Li-ion Battery Pack	2
Installing/Removing the Battery Pack	3
Installing Belt Clip	4
Installing Audio Accessories	4
Getting Acquainted	5
Opreation	6
Features	7
Specification	10
Troubleshooting	11

# **UNPACKING AND CHECKING EQUIPMENTS**

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, please contact the dealers immediately.

# **SUPPLIED ACCESSORIES**

Item Name	Quantity
Handstrap	1
Charger	1
Battery	1
Belt Clip	1
User's Manual	1



Handstrap



**Battery** 



Charger



Belt Clip

#### CHARGING THE BATTERY PACK

1. Using the Battery Pack

The battery pack is not charged at the factory, please charge it before use. To extend the battery pack lifetime, please power off the TIDRADIO radio and remove the battery pack when not in use and leave the battery in a dry and cool place.

2. Battery Pack Characteristics

The battery efficiency will reduce after a period of time, where it will be noticeable that operating and standby times are shorter than normal. Overcharging will shorten the life of a battery.

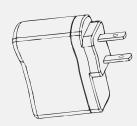
3. Charging the Battery Pack

Charge your battery only with the approved TIDRADIO charger From new battery will reach its full efficiency after two to three cycles of charging.

#### PLEASE CHARGE THE BATTERY PACK AS FOLLOWS:

- 1. Plug in the USB charging cable to charging the battery
- 2. Ensure the radio connects with the charging terminals on the charger.
- 3. The charging LED lights red and charging begins.
- 4. The charging LED will change to blue once the battery in fully charged.
- 5. Fit battery to rear of radio.
- 6. Fit belt clip with supplied screws to rear of radio.
- 7. Fit hand strap to "O" ring at rear of channel selector.
- 8. Earpiece accessories (where supplied) can be connected to side accessory socket.





#### NOTE:

Do not recharge the battery pack if it is fully charged. Doing so may cause the life of the battery pack to shorten or the battery pack may be damaged.

#### INSTALLING/REMOVING THE BATTERY PACK

The usage time of Battery Pack is about 8 hours, which is based upon 5% transmit/5% receive/90% standby (standard duty cycle).

#### **CAUTION:**

- **1.**Do not short-circuit the terminals of the battery or throw the battery into the fire.
- 2.Do not disassemble the battery pack yourself.

### **INSTALLING BELT CLIP**

Put belt clip in the positio fixed with the screws which provied.

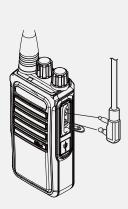


# INSTALLING THE (OPTIONAL) EARPIECE/MICROPHONE

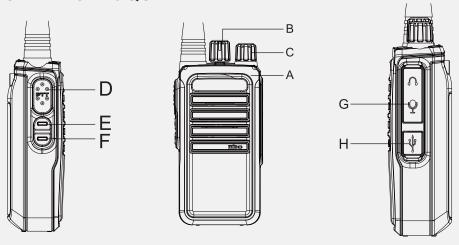
Insert the Earpiece /microphone plugs into the the speaker/microphone jacks of the transceiver.

#### NOTE:

The transceiver is not fully water resistant when using speaker/microphone.



#### **GETTING ACQUAINTED**



- **A.LED Indicator** The LED indicator lights continuously red when transmitting. And lights green when in reception condition.
- **B.Channel Switch**—Rotate it to select the channel. (22 channels can be chosen)

#### C.POWER SWITCH/VOLUME CONTROL

Turn clockwise to switch ON the transceiver.

Turn counterclockwise fully to switch OFF the transceiver. Rotate to adjust the volume.

#### **D.PTT (PUSH-TO-TALK) BUTTON**

Press this button, then speak into the microphone to call a station. Release to receive a call.

#### **E.MONITOR BUTTON**

Press and hold (Squelch OFF) to hear the background noise; Release to return to normal operation.

#### **F.SCAN BUTTON**

Scan is a useful function for hands-off monitoring of your favorite channel:

Press and the transceiver will automatically detect the activities of scanning channel from NO.1 to NO.22; The transceiver stops scanning at the frequency (or memory channel) where a signal is detected. It then continues or stops scanning.

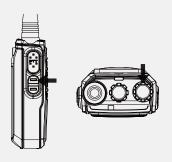
# G.EARPIECE PORT H.USB CHARGING PORT



#### **OPERATION**

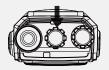
#### **SWITCHING POWER ON/OFF**

Turn the power switch/volume control clockwise. You will hear a beep and speech, indicating the transceiver is ON.



#### ADJUSTING THE VOLUME

Hold Monitor button down to listen to audio level while rotating the Power switch/Volume control. Rotate clockwise to increase and counterclockwise to decrease volume.



#### **SELECTING THE CHANNEL**

Turn the channel switch to select your desired channel.

5



#### **TRANSMITTING**

To transmit, press and hold [PTT] and speak into the microphone in your normal tone of voice.

The LED indicator lights continuously red when transmitting.

To maximize sound clarity at the receiving station, hold the transceiver 2 to 3 inches from mouth and talk in normal tone of voice.

# FEATURES TIME-OUT TIMER (TOT)

Time-Out-Timer is use to prevent any caller from using a channel for an extended period of time(OFF 15 ~600seconds) /If you continuously transmit for a period of time that exceeds the programmed time. The transceiver will stop transmitting and an alert tone will sound. To stop the tone, release the PTT switch.

#### **SQUELCH**

0-9 level help you suppress background noise, enhancing signal sensitivity and sound clarity.

General CPS programming software, set the Squelch Level option, the setting range is: 0/1/2/3/4/5/6/7/8/9. The factory default is 5 levels.

#### **AUTOMATIC POWER SAVE**

Your radio has a unique circuit designed to dramatically extend the life of the battery.

If you do not transmit and do not receive an incoming call, or no button and knob operation within 5 seconds, your radio switches to the Power Save mode. and still able to receive transmissions in this mode.

General CPS programming software, set the Battery Save option in the list. Select to enable this feature, unchecked to turn off this feature.

#### **CHANNEL NUMBER AN NOUNCEMENT**

Your dealer may have programmed channel number announcement on the transceiver.

### **VOX(Voice Operated Transmission)**

VOX stands for Voice Activated Transmit, Vox allows you to talk hands free, Vox autoTransmits when you speak. It required accessories with Vox feature.

#### **LOW BATTERY ALERT**

Low Battery Alert reminds you of recharging.

When the battery power is very low, an alert tone will sound and the LED indicator will blink red. Please recharge or replace the battery pack.

# **Frequency Hop**

Each channel can be set with frequency hopping on/off. Frequency hopping "on" can protect your communication privacy. To further foil eavesdroppers, both your information and the pseudo noise codes hop from frequency to frequency. So that other machines can't receive your TX and RX frequency, then your communication will be privacy. (Notice: If frequency hop is selected "on", the other party also needs to selected "on" to talking.)

# Compander

The compander can effectively compress part of the transmitted set signal before transmitting it to the other end, and then expand the signal at the receiving end. Also can noise reduction which improves the sound clarity and reduces the static hissing sound between two transmitted. (Notice: If compander is selected "on", the other party also needs to selected "on" to talking)

#### Scramble

Each channel can be set with scramble mode for different level. Scrambles your voice so eavesdroppers will not understand your conversation. Those who need privacy without eavesdroppers listening to their conversations can open this function to protect the conversation privacy. (Notice: All device be set to work in the scrambled mode under same level).

#### CTCSS/DCS

CTCSS (Continuous Tone Coded Squelch System)/ (Digital CodedSquelch)

You may sometimes want to hear calls from only specific persons or groups. In this case, use the selective call which allows You to ignore unwanted calls from other persons who are using the same frequency.

CTCSS or DCS is a sub-audible tone and is selectable from among the 39 or 83 tone frequency listed.

#### NOTE:

CTCSS and DCS do not cause your conversation to be private and scrambled. It only relieves you from listening to unwanted conversations.

# **SPECIFICATIONS**

Technical parameters	
Frequency Range	FRS
RF Rated Power	2W
Channel Capacity	22
Operated Voltage	3. 7V
Dimensions	145mm $ imes 56$ mm $ imes 33$ mm
Weight	145g

#### NOTE:

All specifications are subject to change without notice.

# TROUBLESHOOTING GUIDE

TROUBLES	GUIDE
No Power	Check battery installation and/or replace batteries. Voltage Capacity Quickly Go Out. The battery life is over, replace new one.
Couldn't I communicate with other group members.	First, please verify that the channel frequency and the CTCSS you are using are the same as those of your group members. If the channel frequency and the CTCSS are the same, please verify that your group members are within the radio coverage
Hear the voice from other groups.	Please change your CTCSS for the channel. At the same tim eyou also need to the CTCSS for all the radios in your group. If you don't like this, you may apply another channel frequency.
Why can I hear the voices clearly from other group, sometimes, my voice is intermittent.	Please check whether the MIC is blocked by something. If so, Please return the radio to your authorized dealer for maintenance. Sometimes, your frequency is same as the frequency of other groups.
Can't turn on the radio and even it is turned on, it often shuts off automatically.	Please check the battery contacts on the radio. If it is broken or twisted, please return the radio to your authorized dealer for maintenance



## **WARRANTY CARD**

Model:	Serial NO.:
Dealer:	User name:
Address:	Purchase Date:
Tel NO.:	Fax NO.:
Zip Code:	

### **Warranty Remarks:**

- 1. The consumer keeps the warranty card as the proof for repairing.
- **2.**The card is of validity with the stamp and date.
- **3.**The card mustn' t be altered. Please confirm that the card NO. and the machine NO. must be same, or else it is not valid.
- **4.**The accessories, such as charger, battery, earphone, antenna, and program cable are not covered. The dealer will repair or replace any defective parts during one year limited warranty period.
- **5.**The consumer can send the machine to the purchase site or our maintenance sites for repairing.

#### **FCC Compliance Statements:**

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.

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 device complies with FCC radiation exposure limits set forth for an uncontrolled environment. Do not use this device when the antenna shows obvious damages. Hold this transmitter approximately 25 mm away from your face and speak normal with the antenna pointed up and away. Use the supplied belt clip for body-worn configuration as other accessories may not comply to the limits.

WARNING: MODIFICATION OF THIS DEVICE TO RECEIVE CELLULAR RADIOTELEPHONE SERVICE SIGNALS IS PROHIBITED UNDER FCC RULES AND FEDERAL LAW.