

TWO-WAY RADIO

Model Name: AWR-ID

Brand Name: ADVANCED WIRELESS COMMUNICATIONS

FCC ID: Q9SAWR2000V1

Instruction Manual



THANK YOU

We are grateful for your purchase of this product and welcome you to the Business Radio Service (BRS). Your 2-way Business Radio is called a “transceiver”, meaning “transmitter & receiver”. We believe this easy-to-use transceiver will provide you with dependable and reliable communications. This transceiver is a precision device. Treat it with care, and you will enjoy years of reliable operation.

FEATURES

- Light weight and compact design using a lithium-ion battery pack, with sturdy polycarbonate and a spring-loaded belt clip.
- Automatic battery power saver, providing you with longer battery usage.
- Battery power level indicator with low battery power warning.
- Key lock and super lock, preventing you from accidentally changing your transceiver settings.
- Hands free operation when using an optional headset.

OPERATING CONDITIONS

Open locations (no obstructions)	Up to 4 miles (approximately 6 1/2 km)
Residential areas (near buildings)	Up to 1 1/2 miles (approximately 2 1/2 km)
In steel/ concrete reinforced buildings	Up to 200,000 square feet (approximately 18,580 m ²)
In high rises	Up to 15 floors

Note: The listed ranges are based on field testing and may vary with individual transceivers.

PRECAUTIONS

- Refer service to qualified technicians only. Do not modify or attempt to adjust the 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, or wet areas, nor on unstable surfaces.
- Avoid extremes in exposure to weather, heat, and cold. This transceiver can be used in harsh weather conditions, but it is not waterproof.
- Turn OFF your transceiver while taking on fuel or while parked in gasoline service stations.
- Do not operate your transceiver or charge your battery pack in an explosive atmosphere (gases, dust, fumes, etc.).
- If an abnormal odor or smoke is detected coming from the transceiver, immediately switch OFF the power and remove the battery from the transceiver. Contact your dealer.

Government law prohibits the operation of unlicensed radio transmitters within the territories under government control. Illegal operation is punishable by fine and/or imprisonment.

SAFETY: It is important that the operator is aware of and understands hazards common to the operation of any transceiver.

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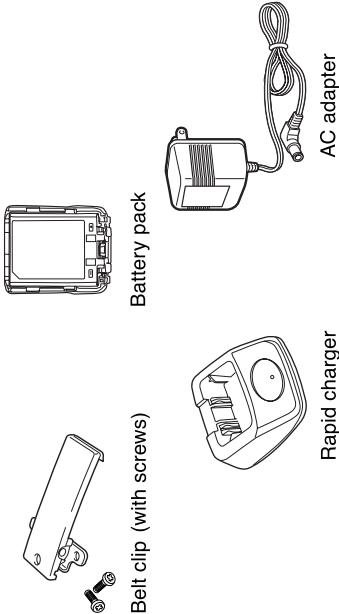
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UNPACKING AND CHECKING EQUIPMENT

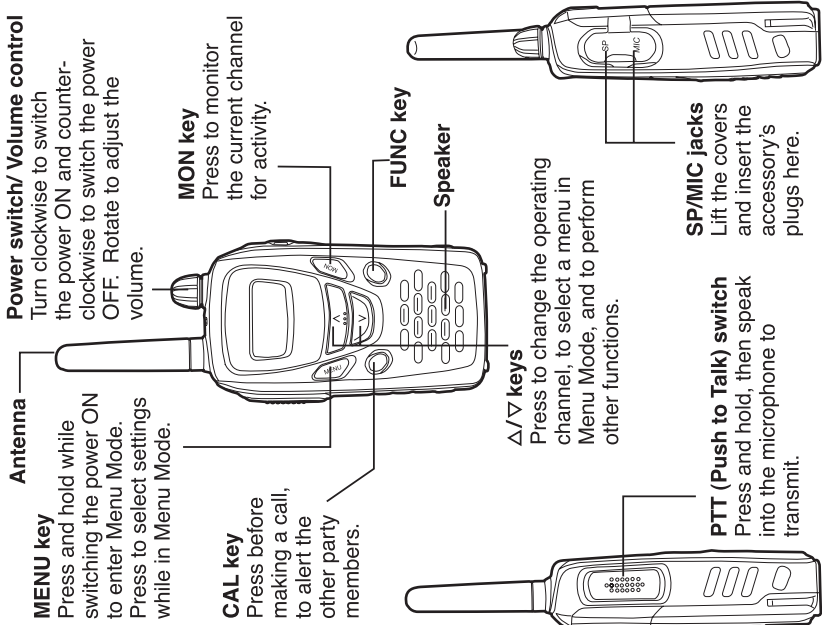
Carefully unpack the transceiver. We recommend you identify the items listed in the following table before discarding the packing material. If any items are missing or have been damaged during shipment, file a claim with the carrier immediately.

SUPPLIED ACCESSORIES

Item	Quantity
Belt clip (with screws)	1
Battery pack	1
Rapid charger	1
AC adapter	1
Instruction manual	1



OPENTATION



PREPARATION

INSTALLING/ REMOVING THE BATTERY PACK

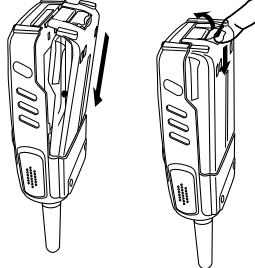
The battery pack is not charged at the factory; charge it before use (pages 6 and 7).

- Average battery pack life: 10 hours
- Average times are calculated using 5% transmit time, 5% receive time, and 90% standby time.
- Average battery pack life: 10 hours



- Do not short the battery terminals or dispose of the battery by fire.
- Never attempt to remove the casing from the battery pack.

- 1 Match the four grooves of the battery pack with the corresponding guides on the upper rear of the transceiver, then firmly press the battery pack to lock it in place.
- 2 To remove the battery pack, lift the safety catch, press the release latch, then pull the battery pack away from the transceiver.



CHARGING THE BATTERY PACK

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.



- ◆ Do not recharge the battery pack if it is already fully charged. Doing so may cause the life of the battery pack to shorten or the battery pack may be damaged.
- ◆ After recharging the battery pack, disconnect it from the charger. Charging the battery pack for more than 5 days may reduce the battery pack life due to overcharging.

Note:

- ◆ The ambient temperature should be between 41°F and 104°F (5°C and 40°C) while charging is in progress. Charging outside this range may not fully charge the battery.
- ◆ 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.
- ◆ The battery pack life is over when its operating time decreases even though it is fully and correctly charged. Replace the battery pack.

- 1 Plug the AC adapter cable into the adapter jack located on the rear of the charger.

- 2 Plug the AC adapter into an AC outlet.

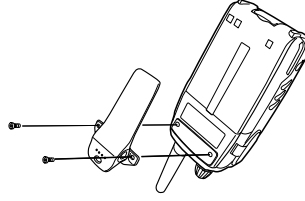
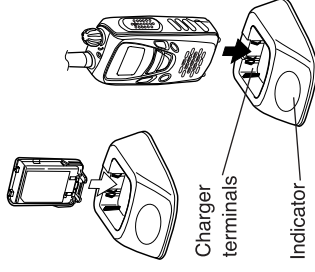
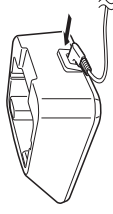
- 3 Slide a battery pack or a transceiver equipped with a battery pack into the battery pack slot.

- Make sure the metal contacts of the battery pack mate securely with the charger terminals.
- The indicator lights red and charging starts.

- 4 When charging is completed, the indicator lights green.

Remove the battery pack or the transceiver from the battery pack slot.

- It takes approximately 2.5 hours to charge the battery pack.
- When the charger will not be used for a long time, unplug the AC adapter from the AC outlet.



INSTALLING/REMOVING THE BELT Clip

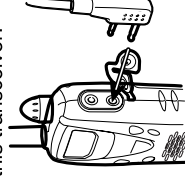
If desired, attach the belt clip to the rear of the transceiver using the 2 supplied screws.

INSTALLING/ REMOVING OPTIONAL ACCESSORIES

Note: Always switch OFF the transceiver power when installing or removing the optional accessories.

The following accessories can be used with this transceiver:

- Speaker-Microphone
- Headset
- Clip Microphone with Earphone

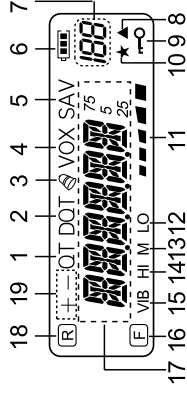


To install these accessories:

- 1 Open the **SP/MIC** tabs on the side of the transceiver.
- 2 Insert the accessory's plugs into the **SP/MIC** jacks.
- 3 When you remove the accessory from the transceiver, be sure to cover the **SP/MIC** jacks with the attached tabs in order to keep dust and dirt away from the contacts.

Note: Refer to the accessory instruction manuals for detailed instruction on each of the accessories.

DISPLAY



1. Appears when the CTCSS function is activated
2. Appears when the DCS function is activated
3. Appears when the calling function is activated
4. Appears when the VOX function is activated
5. Appears when set the unit in saving mode
6. Displays the battery power remaining
7. Display the MENU No. and various No. for function setting
8. Appears when press **【MON】** key
9. Appears when the memory channel lockout function is ON
10. Appears when the lock function is ON
11. S-meter (RX) and TX Power Output indicator when the transceiver transmits.
12. No displayable
13. No displayable
14. No displayable
15. No displayable
16. No displayable
17. No displayable
18. No displayable
19. No displayable

BASIC OPERATION

SWITCHING THE POWER ON/OFF

Switch ON the transceiver by turning the POWER SWITCH/VOLUME CONTROL knob clockwise.

- A high pitch double beep sounds, full display appears and a POWER-ON message appears briefly followed by the frequency and others indicators.

To switch the transceiver OFF by turning the POWER SWITCH/VOLUME CONTROL knob anticlockwise.

- The transceiver stores the current frequency and parameters when it is turned OFF and recalls their parameters the next time you turn the transceiver ON.

ADJUSTING THE VOLUME

- Turn the POWER SWITCH/VOLUME CONTROL knob clockwise to increase the audio output level and anticlockwise to decrease the output level.
- If you are not receiving a signal, press and hold **【MON】** key to un-mute the speaker, then adjust the POWER SWITCH/VOLUME CONTROL to a comfortable audio output level.

ADJUSTING THE SQUELCH

The purpose of squelch is to mute the speaker when no signal is present.

With the squelch level correctly set, you will hear sound only when actually receiving signals. The higher the selected squelch level, the stronger the signal must be in order to receive it.

The appropriate squelch level depends on the ambient RF noise conditions.

1. Press **【MENU】** key, and then press **【MENU】** again. The current squelch level appears.



2. Press **【▲/▼】** key to adjust the level.
 - Select the level at which the background noise is just eliminated when no signal is present.
 - The higher the level, the stronger the signals must be to receive.
 - 9 different levels can be set (: minimum, 9: Maximum, Default value: 2) .
3. Press **【MENU】** key to store the new setting and continue to set other functions. Or press **【PTT, MON, CALL】** key to store the new setting and exit Menu mode.

TRANSMITTING

1. To transmit, hold the transceiver approximately 5 cm (2 inches) from your mouth, then press and hold **【PTT】** and speak into the microphone in your normal tone of voice.
 - The LED lights red and the bar-graph meter appear.
2. When you finish speaking, release **【PTT】** .

Note:

If TOT function is activated, continuously transmit for longer than the time specified, the internal timeout timer generates a warning beep and the transceiver stops transmitting. In this case, release **【PTT】** and let the transceiver stop for a while, then press **【PTT】** again to resume transmission.

SETTING THE FREQ. NO. IN THE VFO MODE.

The factory setting for the transceiver is the VFO mode. The VFO mode allows you to change the frequency number and other settings.

Press and hold **【PTT】** switch plus **【MENU】** key and turn ON power to enter VFO mode.

The transceiver toggles between VFO mode and memory channel mode each time by operating above.

Setting the frequency number

Please make sure under VFO mode

Press **【▲】** key to increase the frequency number.

Press **【▼】** key to decrease it.

If the desired operating frequency is far away from the current frequency, it is quicker to use the MHz Tuning Mode to adjust the MHz digit:

Press **【MENU+MON】** key, and press **【▲/▼】** key to select the desired MHz value.

Note: pls make sure under frequency channel mode, repeat to press **【MON】** key to toggles between frequency mode and frequency channel mode.

Memory Channel Mode

This mode allows you to call up previously stored frequencies. The transceiver has 199 memory channels.

Calling up a memory Channel

Please make sure under memory channel mode.

Press **【▲】** key to increase the memory channel No. by one.

Press **【▼】** key to decrease the memory channel No. by one.

Items that can be stored in Memory

The following items can be stored in each of the memory channel (CH1 to 199) CTCSS code

Writing to a Memory channel

Please make sure under VFO mode.

Select a frequency that you want to write, press **【MENU+PTT】** key, it appears "SAVE" on my screen, press **【▲/▼】** key to select the memory channel number that you want to write,

- Channel number is flashing..

- If appears "▲" symbol under the digital channel number, it means the memory channel is being used.

Press **【MON】** key to confirm and store.

Deleting a Memory channel

Please make sure under VFO mode(frequency channel mode).

Press **【▲/▼】** key to select the frequency channel No. that you want to delete.

Press and hold **【MON】** key and turn ON power, while "dEL. ?" is displayed on the LCD, then press **【MON】** key.

Repeat the same operation of step 3.

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MONITOR

1. When you are receiving as the squelch function is ON, weak signals may become intermittent.

2. If the CTCSS or DCS function is ON, you may want to disable the squelch function temporarily to monitor the current channel activities.

3. In both of these cases, use the Monitor function to temporarily disable the squelch function.

Activate the Monitor function:

1. Press and hold **【MON】** key above 2 seconds.

- The speaker is unmuted and you can monitor the signals.

Release **【MON】** key to return to normal operation.

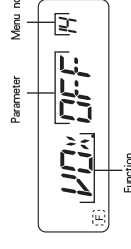
MENU SETUP

WHAT IS A MENU?

Many functions on this transceiver are selected or configured via a software-controlled Menu rather than through the physical controls of the transceiver. Once you become familiar with the Menu system, you will appreciate its versatility. You can customize the various timings, settings, and programming functions on this transceiver to meet your needs without using many controls and switches.

MENU ACCESS

1. Press **【MENU】** .A brief explanation of the Menu, and the setting and Menu No. appear on the display.

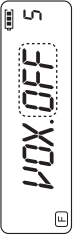


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2. Press **【▲/▼】** key to select your desired Menu. As you change the Menu No., a brief explanation of each Menu appears along with its current parameter.



3. Press **【MENU】** to configure the parameter of the currently selected Menu No.



4. Press **【▲/▼】** key to select your desired parameter.



5. Press **【MENU】** to store the new setting. Press **【▲/▼】** key to continue to select other Menu, or press **【PTT, MON, CAL】** key to store the new setting and exit Menu mode.

MENU FUNCTION LIST

On the display	Menu No.	Function	Selections	Default	Description
SQL	1	Squelch Setting	00 to 09	0.2	5 level
CT.DCS	2	CTCSS/DCS selection	OFF/CTCSS/DCS	OFF	OFF
Roger	3	Roger Beep	N/Y	N	OFF
TOT	4	Time-out timer	OFF/1/3/10 minutes	1	1 minute
VOX	5	VOX function	OFF/1 – 16	OFF	OFF
BP	6	Beep	ON/OFF	ON	ON
LEd	7	Lamp setting	ON/OFF/AUT	AUT	Auto
SCAN	8	Scan resume method	TO/SO/SE	TO	Time
CK	9	Call tone selection	OFF/1 – 8 /1750MHz	1	1
SAV	10	Save power selection	OFF/0.2/0.4/0.6/0.8/1.0	0.4	0.4 second
KY	11	Keypad lock selection	MANU/AUTO	MANU	Manual

USEFUL FUNCTION

SCAN

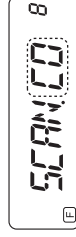
SCAN RESUME METHOD

The transceiver stops scanning through the frequencies (or memory channel) where a signal is detected. It then continues or stops scanning according to which Resume Mode you have selected.

- **Time-Operated Mode (default)**The transceiver remains on a busy frequency (or memory channel) for approximately 5 seconds, and then continues to scan even if the signal is still present.
- **Carrier-Operated Mode**The transceiver remains on a busy frequency (or memory channel) until the signal drops out. There is a 5-second delay between signal dropout and scan resumption.
- **Seek Mode**The transceiver moves to a frequency or memory channel where a signal is present and stops.

To change the scans resume method:

1. Press **【MENU】**.
2. Press **【▲/▼】** key to select Menu No. 8 (SCAN).
3. Press **【MENU】**.
4. Press **【▲/▼】** key to select "TO" (Time-Operated), "CO" (Carrier-Operated), or "SE" (Seek) Mode.



5. Press **【MENU】** key to store new setting and continue to set other function, or press **【PTT, MON, CAL】** key to store new setting and exit Menu mode.

ACTIVATE SCANNING

Activate scanning function under frequency and channel mode.

Press and hold **【MON】** key and press **【▲/▼】** key to start scanning.

- To change the scanning direction by press **【▲or▼】** key (press **【▲】** key, the scanning direction is from high to low, and press **【▼】** key, the scanning direction is from low to high.)

KEYPAD LOCK (MANU/AUTO)

1. Press **【MENU】** then press **【▲/▼】** key to select Menu No. 11 (KY) The currently parameter appears on the display.



2. Press **【MENU】** then press **【▲/▼】** key to select a desired lock mode.

- **MANU**: manual mode (press **【F】** key 3 seconds)
 - **AUTO**: auto mode (auto lock the keypad while you didn't press any keys approximately 60 seconds)
- "-o-" appears when this function is ON.

Notify: The following keys cannot be locked: **【PTT】**、**【PWR/VOL】** control

LAMP

To illuminate the display and keys:

1. Press **【MENU】**.
 2. Press **【▲/▼】** key to select Menu No.7 (LED)
 3. Press **【MENU】**.
- The currently parameter appears on the display.



4. Press **【▲/▼】** key to select a desired parameter.
 - **AUT**: The light turns OFF approximately 5 seconds
 - **OFF**: To keep the light OFF continuously
 - **ON**: To keep the light ON continuously
5. Press **【MENU】** to store the net setting and continue to set other function. Or press **【PTT, MON, CAL】** key to store new setting and exit Menu mode.

SELECTIVE CALL

CTCSS AND DCS

You may sometimes want to hear calls only from specific persons or groups. In this case, use the Selective Call. This transceiver is equipped with CTCSS (Continuous Tone Coded Squelch System) and DCS (Digital Coded Squelch). These Selective Calls allow you to ignore (not hear) unwanted calls from other persons who are using the same frequency. The transceiver response only when it receives a signal having the same CTCSS tone or DCS code.

Note:

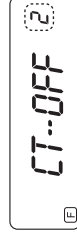
CTCSS and DCS do not cause your conversation to be private or scrambled. It only relieves you from listening to unwanted conversations.

CTCSS

A CTCSS tone is a sub-audible tone and is selectable from among the 50 tone frequencies listed in the table.

◆ Using CTCSS

1. Press **【MENU】** and then press **【▲/▼】** key to select Menu No. 2 (CTCSS).



2. Press **【MENU】** and then press **【▲/▼】** key to select the desired CTCSS code.

3. Press **【MENU】** key to store new setting and continue set other function. Or press **【PTT, MON, CAL】** key to store new setting and exit Menu mode.

- "QT" appears on the upper part of display, indicating that the CTCSS function is activated.

Note:

When CTCSS is ON, you will hear calls only when the selected CTCSS tone is received. To answer the call, press and hold **【PTT】**, then speak into the microphone.

Note:

- If you select a high CTCSS frequency, receiving audio or noise that contains the same frequency portions may cause CTCSS to function incorrectly. To prevent noise from causing this problem, select an appropriate squelch level.

Instruction for DCS

1. Press **【MENU】** to enter into menu mode while the transceiver is in the stand-by status. And then press **【▲】** **【▼】** to select menu No. 13.

LCD will display as below:



2. Press **【MENU】** again to enter into the CDCSS setting. Press **【▲】** **【▼】** to choose the desired CDCSS Code.
 Note: Press **【F】** to switch the CDCSS direction, N=Normal
 I= Reverse direction

3. Press **【MENU】** to confirm storing the CDCSS and continue other menu settings. Or press **【PTT】** to confirm the storing and exit menu mode at the same time, the transceiver will return to stand-by status.

Note: (1) When the CTCSS is already activated, and then to active CDCSS again, the CTCSS will be closed automatically.
(2) When the CDCSS is already activated, and then to active CTCSS again, CDCSS will be closed automatically.

Available CTCSS Tone Frequencies

OFF	91.5	127.3	167.9	199.5	199.5	254.1
67.0	94.8	131.8	171.3	203.5	203.5	
69.3	97.4	136.5	173.8	206.5	206.5	
71.9	100.0	141.3	177.3	210.7	210.7	
74.4	103.5	146.2	179.9	218.1	218.1	
77.0	107.2	151.4	183.5	225.7	225.7	
79.7	110.9	156.7	186.2	229.1	229.1	
82.5	114.8	159.8	189.9	233.6	233.6	
85.4	118.8	162.2	192.8	241.8	241.8	
88.5	123.0	165.5	196.6	250.3	250.3	

CTCSS TONE TABLE 50 TONI

NO	FREQ.(HZ)	NO	FREQ.(HZ)	NO	FREQ.(HZ)
01	67.0	18	118.8	35	183.5
02	69.3	19	123.0	36	186.2
03	71.9	20	127.3	37	189.9
04	74.4	21	131.8	38	192.8
05	77.0	22	136.5	39	196.6
06	79.7	23	141.3	40	199.5
07	82.5	24	146.2	41	203.5
08	85.4	25	151.4	42	206.5
09	88.5	26	156.7	43	210.7
10	91.5	27	159.8	44	218.1
11	94.8	28	162.2	45	225.7
12	97.4	29	165.5	46	229.1
13	100.0	30	167.9	47	233.6
14	103.5	31	171.3	48	241.8
15	107.2	32	173.8	49	250.3
16	110.9	33	177.3	50	254.1
17	114.8	34	179.9		

DCS: DIGITAL CODE 107 TONES

NO	DCS CODE	NO	DCS CODE	NO	DCS CODE
01	023	36	223	71	445
02	025	37	225	72	446
03	026	38	226	73	452
04	031	39	243	74	454
05	032	40	244	75	455
06	036	41	245	76	462
07	043	42	246	77	464
08	047	43	251	78	465
09	051	44	252	79	466

10	053	45	255	80	503
11	054	46	261	81	506
12	065	47	263	82	516
13	071	48	265	83	523
14	072	49	266	84	526
15	073	50	271	85	532
16	074	51	274	86	546
17	114	52	306	87	565
18	115	53	311	88	606
19	116	54	315	89	612
20	122	55	325	90	624
21	125	56	331	91	627
22	131	57	332	92	631
23	132	58	343	93	632
24	134	59	346	94	645
25	143	60	351	95	654
26	145	61	356	96	662
27	152	62	364	97	664
28	155	63	365	98	703
29	156	64	371	99	712
30	162	65	411	100	723
31	165	66	412	101	731
32	172	67	413	102	732
33	174	68	423	103	734
34	205	69	431	104	743
35	212	70	432	105	754
		106	017	107	050

OPERATOR CONVENIENCES

REMAINING BATTERY CAPACITY

Before you operate the transceiver outside using a battery pack, it is important to know how long the battery pack will last.

The battery remaining indicator shows the remaining capacity.

- High battery power
- Medium battery power
- Low battery power
- Recharge or replace the batteries.

ROGER TONE

1. Press [MENU] , and then press [▲/▼] key to select Menu NO.3 (Roger) .



2. Press [MENU] ,and then press [▲/▼] key to select N or Y.
3. Press [MENU] key to store the new setting and continue to set other function. Or press [PTT, MON, CAL] key to store new setting and exit Menu mode.

TIME-OUT TIMER

The Time-out Timer limits the time of each transmission. The built-in Time-out Timer limits each transmission time to a maximum of 1 (default) , 3 or 10 minutes. Just before the transceiver stops the transmission, a warning beep sounds. This function is necessary to protect the transceiver from thermal damage due to overheat and therefore is recommended not to be turned OFF.

4. Press **【MENU】** , and then press **【▲/▼】** key to select Menu NO.4 (TOT) .



5. Press **【MENU】** ,and then press **【▲/▼】** key to select 1 (default) , 3 or 10 minutes.

6. Press **【MENU】** key to store the new setting and continue to set other function. Or press **【PTT, MON, CAL】** key to store new setting and exit Menu mode.

VOX (VOICE-OPERATED TRANSMISSION)

VOX eliminates the necessity of manually switching to the Transmission Mode each time you want to transmit. The transceiver automatically switches to Transmission Mode when the VOX circuitry senses that you have begun speaking into the microphone.

To turn the VOX function ON:

1. Press **【MENU】** then press **【▲/▼】** key to select Menu No. 5(VOX).
2. Press **【MENU】** then press **【▲/▼】** key to select the desired VOX gain level from 1 (least sensitive) to 16 (most sensitive).



3. To turn OFF the VOX function, select "OFF" in step 2 .

Note:

- While in Menu Mode, the VOX function is temporarily disabled.
- Since the VOX circuit must detect the presence of your voice, you may notice a slight delay in transmission; the very first part of your message may not be transmitted.
- VOX cannot be used with an optional Speaker/ Microphone.

VOX Gain

To enjoy the VOX function, take the time to properly adjust the VOX Gain level. This level controls the VOX circuit to detect the presence or absence of your voice.

While the VOX function is ON:

1. Speak into the headset microphone using your normal tone of voice to transmit.

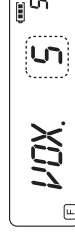
- If the transmission does not begin, you must readjust the VOX Gain so that transceiver transmits while you are speaking. To select a more sensitive gain level.

2. Adjust the VOX Gain, the transceiver reliably switches to transmission mode each time you speak while the transceiver is transmitting.

From the Menu:

1. Continue from step and from VOX (Voice-Operated Transmission).
2. Press **【MENU】** to store the net setting and continue to set other function. Or press **【PTT, MON, CAL】** key to store new setting and exit Menu mode.

- "VOX" appears on the top right of the display when the VOX function is ON.



3. Press **[MENU]** to store the net setting and continue to set other function. Or press **[PTT, MON, CAL]** key to store the new setting and exit Menu mode.
4. Adjust the VOX Gain, performing steps to until the transceiver reliably switches between transmission and reception each time you speak.

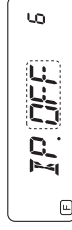
Note:

The setting should not allow background noise to switch the transceiver to Transmission Mode.

BEEP FUNCTION

The Beep function provides confirmation of entry, error status, and malfunctions of the transceiver. We recommend you leave this function ON in order to detect erroneous operations and malfunctions. However, to turn the beep function OFF:

1. Press **[MENU]**.
2. Press **[▲/▼]** key to select Menu No. 6 (BP).
3. Press **[MENU]**.
4. Press **[▲/▼]** key to select "OFF".



5. Press **[MENU]** to store the net setting and continue to set other function. Or press **[PTT, MON, CAL]** key to store new setting and exit Menu mode.

Note:

The beep output level is linked to the **VOL** control position.

Companding Setting

The companding function is arm to reduce the background noise when the earset works with transceiver. For a better performance of a transceiver with earset, it is better to set the function ON.

This function is programmed manually only. The operation procedure is as below:

1. Holding the **[Menu]** key while turning the transceiver ON, then you will enter the Menu mode.
2. "COM" will be displayed on the first menu, press **[Menu]** again, "ON" or "OFF" will blink, press **[▲]** **[▼]** to choose the function ON or OFF.
3. Lastly, press **[MENU]** again to save the function and exit the mode.

SELECTING CALL TONE

1. Press **[MENU]**.
2. Press **[▲/▼]** key to select Menu No. 9 (CK).
3. Press **[MENU]**.
4. Press **[▲/▼]** key to select a desired call tone (-8 or 1750Hz).



5. Press **[MENU]** to store the net setting and continue to set other function. Or press **[PTT, MON, CAL]** key to store new setting and exit Menu mode

BATTERY SAVER

The Battery Saver extends the operating time of the transceiver. It automatically activates when the squelch is closed and no key is pressed for more than 10 seconds. To reduce battery consumption, this function shuts the receiver circuit OFF for the programmed time, then momentarily turn it back ON to detect a signal.

To program the receiver shut-off period for the battery saver:

- 1. Press **【MENU】**
- 2. Press **【▲▼】** key to select Menu No. 10 (SAV) .
 - The currently parameter appears on the display
- 3. Press **【MENU】** .
- 4. Press **【▲▼】** key to select the receiver shutoff period from OFF, 0.2, 0.4 (default) , 0.6, 0.8 and 1.0 seconds.
- 5. Press **【MENU】** to store the net setting and continue to set other function. Or press **【PTT, MON, CAL】** key to store new setting and exit Menu mode.



Note:

The longer the shut-off period, the more you can save on battery consumption. However, there is a greater chance of missing a signal.

QUICK REFERENCE TO KEYS AND MAIN FUNCTIONS

Key	Functions
【▲】	Up
【▼】	Down
【MENU】	Menu Access
【CAL】	Call tone
【MON】	Recall stored data and related functions

WIRED CLONING

- 1. Hold CALL key to turn on the master radio, display showing "clone?", insert the clone cable.
- 2. Turn on vice radio (just turn on as normal), insert clone cable.
- 3. Press CALL key on master radio to begin cloning, during cloning, the LED on master radio flashes red, and vice radio flashes green. About 8 seconds later, LED on master radio will not flash and keep red, while LED on vice radio will be off. It means cloning successfully.
- 4. If you want to clone next radio, just pull out clone cable on vice radio and insert to next one, then press CALL key on master radio to begin clone again.

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 you're 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 2.5 cm (1 inch) away from the body when transmitting and only use the 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 5 cm (2 inches) 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.