

KENWOOD

PKT-23

UHF FM TRANSCEIVER

INSTRUCTION MANUAL

ProTalk LT

JVCKENWOOD Corporation

BSA-0805-10 (X)



THANK YOU

We are grateful for your purchase of this **KENWOOD** product for your Citizen Band mobile radio applications.

NOTICES TO THE USER

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

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

Firmware Copyrights

The title to and ownership of copyrights for firmware embedded in KENWOOD product memories are reserved for JVC KENWOOD Corporation.

PRECAUTIONS

- Do not charge the transceiver and battery pack when they are wet.
- Ensure that there are no metallic items located between the transceiver and the battery pack.
- Do not use options not specified by **KENWOOD**.
- If any transceiver part is damaged, do not touch the damaged parts.
- If a headset or headphone is connected to the transceiver, reduce the transceiver volume. Pay attention to the volume level when turning the squelch off.
- Do not place the cable of the clip microphone with earphone/hanger around your neck while near machinery that may catch the cable.
- Do not place the transceiver on unstable surfaces. If the transceiver switches OFF/ON as a result of falling or hard impact, the volume and channel configurations may reset.
- Ensure that the end of the antenna does not touch your eyes.
- Do not immerse the transceiver in water.
- Always switch the transceiver power off before installing optional accessories.



WARNING

Turn the transceiver power off in the following locations:

- In explosive atmospheres (flammable gas, dust particles, metallic powders, grain powders, etc.).
- While taking on fuel or while parked at gasoline service stations.
- Near explosives or blasting sites.
- In aircraft. (Any use of the transceiver must follow the instructions and regulations provided by the airline crew.)
- Where restrictions or warnings are posted regarding the use of radio devices, including but not limited to medical facilities.
- Near persons using pacemakers.



CAUTION

- Do not modify the transceiver for any reason.
- Do not place the transceiver on or near airbag equipment while the vehicle is running. When the airbag inflates, the transceiver may be ejected and strike the driver or passengers.
- Do not transmit while any metallic parts are exposed from the antenna covering. Transmitting at such a time may result in a high-frequency burn.
- If an abnormal odor or smoke is detected coming from the transceiver, switch the transceiver power off immediately, remove the battery pack from the transceiver, and contact your **KENWOOD** dealer.
- Use of the transceiver while you are driving may be against traffic laws. Please check and observe the vehicle regulations in your area.
- Do not expose the transceiver to extremely hot or cold conditions.
- Do not carry the battery pack with metal objects, as they may short the battery terminals.
- Danger of explosion if the battery is incorrectly replaced; replace only with the same type.
- When operating the transceiver in areas where the air is dry, it is easy to build up an electric charge (static electricity). When using an earphone accessory in such conditions, it is possible for the transceiver to send an electric shock through the earphone and to your ear. Do not use an earphone/microphone accessory in areas where static electricity can be easily generated.
- When attaching a commercial strap to the transceiver, ensure that the strap is durable. In addition, do not swing the transceiver around by the strap; you may inadvertently strike and injure another person with the transceiver.

Information concerning the battery pack:

The battery pack includes flammable objects such as organic solvent. Mishandling may cause the battery to rupture producing flames or extreme heat, deteriorate, or cause other forms of damage to the battery. Please observe the following prohibitive matters.



DANGER

- **Do not disassemble or reconstruct the battery!**
The battery pack has a safety function and protection circuit to avoid danger. If they suffer serious damage, the battery may generate heat or smoke, rupture, or burst into flame.
- **Do not short-circuit the battery!**
Do not join the + and – terminals using any form of metal (such as a paper clip or wire). Do not carry or store the battery pack in containers holding metal objects (such as wires, chain-necklaces or hairpins). If the battery pack is short-circuited, excessive current will flow and the battery may generate heat or smoke, rupture, or burst into flame. It will also cause metal objects to heat up.
- **Do not incinerate or apply heat to the battery!**
If the insulator is melted, the gas release vent or safety function is damaged, or the electrolyte is ignited, the battery may generate heat or smoke, rupture, or burst into flame.
- **Do not leave the battery near fire, stoves, or other heat generators (areas reaching over 60°C)!**
If the polymer separator is melted due to high temperature, an internal short-circuit may occur in the individual cells and the battery may generate heat or smoke, rupture, or burst into flame.
- **Do not immerse the battery in water or get it wet by other means!**
If the battery's protection circuit is damaged, the battery may charge at extreme current (or voltage) and an abnormal chemical reaction may occur. The battery may generate heat or smoke, rupture, or burst into flame.
- **Do not charge the battery near fire or under direct sunlight!**
If the battery's protection circuit is damaged, the battery may charge at extreme current (or voltage) and an abnormal chemical reaction may occur. The battery may generate heat or smoke, rupture, or burst into flame.
- **Use only the specified charger and observe charging requirements!**
If the battery is charged in unspecified conditions (under high temperature over the regulated value, excessive high voltage or current over regulated value, or with a remodeled charger), it may overcharge or an abnormal chemical reaction may occur. The battery may generate heat or smoke, rupture, or burst into flame.
- **Do not pierce the battery with any object, strike it with an instrument, or step on it!**
This may break or deform the battery, causing a short-circuit. The battery may generate heat or smoke, rupture, or burst into flame.
- **Do not jar or throw the battery!**
An impact may cause the battery to leak, generate heat or smoke, rupture, and/or burst into flame. If the battery's protection circuit is damaged, the battery may charge at an abnormal current (or voltage), and an abnormal chemical reaction may occur. The battery may generate heat or smoke, rupture, or burst into flame.
- **Do not use the battery pack if it is damaged in any way!**
The battery may generate heat or smoke, rupture, or burst into flame.
- **Do not solder directly onto the battery!**
If the insulator is melted or the gas release vent or safety function is damaged, the battery may generate heat or smoke, rupture, or burst into flame.
- **Do not reverse the battery polarity (and terminals)!**
When charging a reversed battery, an abnormal chemical reaction may occur. In some cases, an unexpected large amount of current may flow upon discharging. The battery may generate heat or smoke, rupture, or burst into flame.
- **Do not reverse-charge or reverse-connect the battery!**
The battery pack has positive and negative poles. If the battery pack does not smoothly connect with a charger or operating equipment, do not force it; check the polarity of the battery. If the battery pack is reverse-connected to the charger, it will be reverse-charged and an abnormal chemical reaction may occur. The battery may generate heat or smoke, rupture, or burst into flame.
- **Do not touch a ruptured and leaking battery!**
If the electrolyte liquid from the battery gets into your eyes, wash your eyes with fresh water as soon as possible, without rubbing your eyes. Go to the hospital immediately. If left untreated, it may cause eye problems.



WARNING

- **Do not charge the battery for longer than the specified time!**
If the battery pack has not finished charging even after the regulated time has passed, stop it. The battery may generate heat or smoke, rupture, or burst into flame.
- **Do not place the battery pack into a microwave or high pressure container!**
The battery may generate heat or smoke, rupture, or burst into flame.
- **Keep ruptured and leaking battery packs away from fire!**
If the battery pack is leaking (or the battery emits a bad odor), immediately remove it from flammable areas. Electrolyte leaking from the battery can easily catch on fire and may cause the battery to generate smoke or burst into flame.
- **Do not use an abnormal battery!**
If the battery pack emits a bad odor, appears to have different coloring, is deformed, or seems abnormal for any other reason, remove it from the charger or operating equipment and do not use it. The battery may generate heat or smoke, rupture, or burst into flame.

UNPACKING AND CHECKING EQUIPMENT

Carefully unpack the transceiver. If any of the items listed below are missing or damaged, file a claim with the carrier immediately.

SUPPLIED ACCESSORIES

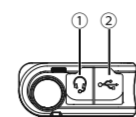
- Li-ion battery pack (KNB-71L) 1
- Belt clip (KBH-20) 1
- Screw (M3 x 6 mm with washer) 2
- Instruction manual 1

Note: Refer to "PREPARATION" for accessory installation instructions.

ORIENTATION

① 3.5 mm phone jack

Connect the earphone/ microphone plug to this jack.



② Micro USB jack (B Type)

Connect a USB cable to this jack to charge the transceiver battery pack.

③ PF-1 key

Press or hold this key for 1 second to activate its programmable functions. The default setting is **[None]**.

- For function descriptions and details on how to change the key functions, refer to "KEY ASSIGNMENT MODE".

④ PTT (Push to Talk) switch

Press and hold, then speak into the microphone to transmit.

⑤ Power switch

Hold for 1 second to turn the transceiver power ON. Hold for 2 seconds to turn the transceiver power OFF.

Momentarily press this key while the transceiver power is ON to activate the Battery Level Guide. Refer to the "BATTERY LEVEL GUIDE" table.

⑥ LED indicator

Refer to the "LED INDICATOR STATUS" table.

⑦ PF-2 key

Press this key to toggle the function of the Up/Down keys between Volume Adjustment mode and Channel Select mode. Hold this key for 1 second to activate its programmable function. The default setting is **[None]**.

- For function descriptions and details on how to change the key functions, refer to "KEY ASSIGNMENT MODE".

⑧ Up/Down keys

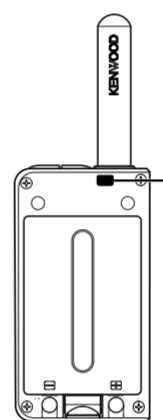
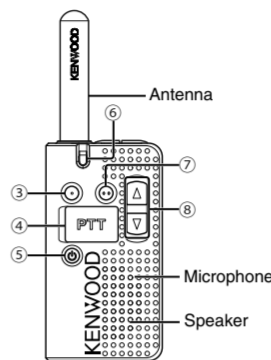
Press these keys to adjust the volume and change the radio table.

- Press the **PF-2** key to toggle the function of the Up/Down keys between Volume Adjustment mode and Channel Select mode.
- To change the operating frequency or CTCSS/DCS settings of a channel, refer to "CB CHANNEL SETUP MODE".

⑨ Strap hole

Connect a commercially available strap here.

- When using the belt clip, the strap hole will be covered and cannot be used. Instead, use the strap hole of the belt clip.



PREPARATION

CHARGING THE BATTERY PACK

The battery pack is not charged at the factory; charge it before use. Average battery pack life (calculated using 5% transmit time, 5% receive time, and 90% standby time) is 15 hours.

Note:

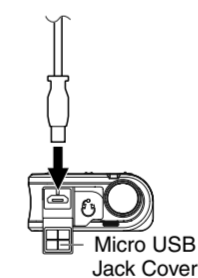
- ◆ The ambient temperature should be between 0°C and 40°C while charging is in progress. Charging outside this range may not fully charge the battery.
- ◆ The battery pack life is over when its operating time decreases even though it is fully and correctly charged (approximately 500 cycles). Replace the battery pack.
- ◆ While operating the transceiver using a Li-ion battery pack in areas with an ambient temperature close to 0°C, the operating time may be shortened.

ATTENTION: Switch OFF a transceiver equipped with a battery pack before charging.

- Use a commercially available USB cable (Micro USB B Type).
- Charge the transceiver through a commercially available PC or AC adapter power source.

- 1 Plug the USB cable (B Type) into the Micro USB jack.
- 2 Connect the USB cable to your PC or AC adapter.

- The LED indicator lights blue.



- 3 When charging is complete, the LED indicator turns off.

- It takes approximately 4 hours to charge the battery pack.



Note:

- ◆ Use a USB cable shorter than 3 meters.
- ◆ We recommend using a short USB cable (low loss) for charging.

REPLACING THE BATTERY PACK

Replace an expired battery pack with a newly purchased KNB-71L battery pack.



CAUTION

- ◆ Do not disassemble the battery pack.
- ◆ Be sure to follow local laws concerning the disposal of battery packs.

- 1 Pull back the battery pack latch, then remove the battery cover from the transceiver.

- When using the belt clip, be sure to remove it before removing the battery cover.

- 2 Lift the battery pack and its packing away from the transceiver.

- Lift the battery pack cable and remove the connector from the PCB terminal.

- 3 Remove the old battery pack from the packing and insert the new battery pack.

- Pass the battery pack cable through the hole in the packing.

- 4 Insert the connector of the new battery pack into the PCB terminal by pressing down on it.

- Match the direction of the connector and insert it vertically.

- 5 Pull back the battery pack latch, then insert the battery pack into position.

- Failure to pull back the battery pack latch will cause the battery pack to be misaligned.

- 6 Replace the battery cover over the battery pack.

- Ensure that the battery pack latch locks the cover in place.

INSTALLING THE BELT CLIP

If necessary, attach the belt clip using the two supplied M3 x 6 mm screws (with washers).

Note: If the belt clip is not installed, its mounting location may get hot during continuous transmission or when left sitting in a hot environment.



CAUTION

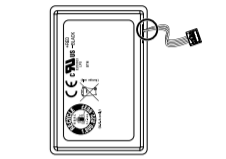
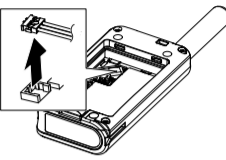
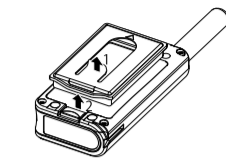
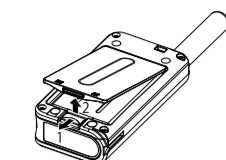
Do not use glue which is designed to prevent screw loosening when installing the belt clip, as it may cause damage to the transceiver. Acrylic ester, which is contained in these glues, may crack the transceiver's back panel.

CONNECTING AN EARPHONE/ MICROPHONE

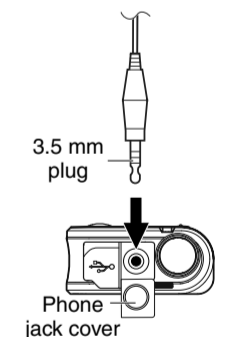
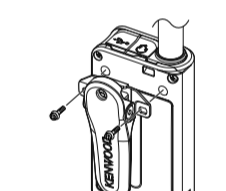
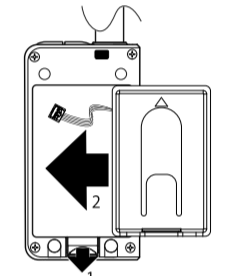
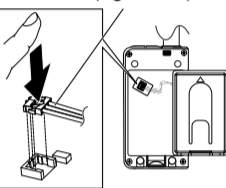
Connect an earphone/ microphone to the phone jack on the top of the transceiver.

Note:

- ◆ Be sure to connect an earphone/ microphone to the phone jack fully and tightly. If the pin jack of an earphone/ microphone is not inserted fully, a pin contacting error will happen and a noise may occur.
- ◆ Depending on the sleeve shape of an earphone/ microphone jack foot, it may be difficult to judge the inserted condition. Before using the radio, confirm the Transmit/ Receive operation with an earphone/ microphone.
- ◆ To keep the transceiver water resistant, the phone jack cover must remain closed.



Red cable (right side)



BASIC OPERATIONS

POWER AND VOLUME

- Hold the **Power** switch for approximately 1 second to switch the transceiver power ON.
 - A beep sounds and the LED indicator blinks blue a number of times as described in the "BATTERY LEVEL GUIDE".
 - To turn the power OFF, hold the **Power** switch for 2 seconds.
- In Volume Adjustment mode, press the **Up/Down** keys to adjust the volume.
 - Press the key programmed as [**Squelch Off**] to hear background noise.
 - Press the **PF-2** key to switch between Volume Adjustment mode and Channel Select mode.

TRANSMITTING AND RECEIVING

- In Channel Select mode, press the **Up/Down** keys to select your desired channel.

Radio Table No.	LED Indicator		Voice Announcement (example)	
	LED Color	Number of times LED blinks	Default CB Channel No.	Voice Announcement
1	Yellow	1	12	"Channel" "Twelve"
2		2	13	"Channel" "Thirteen"
3		3	14	"Channel" "Fourteen"
4		4	15	"Channel" "Fifteen"
5	Blue	1	50	"Channel" "Fifty"
6		2	51	"Channel" "Fifty-one"
7		3	52	"Channel" "Fifty-two"
8		4	53	"Channel" "Fifty-three"

- After selecting a channel, the transceiver announces the CB channel number.
 - The LED indicator blinks yellow or blue for a number of times corresponding to the radio table number. For example, when selecting radio table 3, the LED indicator blinks yellow 3 times.
 - Press the **PF-2** key to switch between Volume Adjustment mode and Channel Select mode.
- To make a call, press and hold the **PTT** switch, then speak into the microphone using your normal speaking voice.
 - Hold the microphone approximately 3 to 4 cm from your mouth.
 - Release the **PTT** switch to receive.

Note:
◆ When the battery pack voltage becomes too low, transmission will stop and an alert tone will sound. (Low Battery Warning: While operating the transceiver, the Low Battery Warning sounds an alert tone every 30 seconds and the LED indicator blinks red when the battery needs recharged or replaced.)
◆ Even when setting the volume to 0, the transceiver will continue to emit beep sounds and channel announcements.
◆ Continuously transmitting when the transceiver becomes too hot will cause the output power to decrease and may eventually stop transmission. Stop transmitting for a while to allow the transceiver to cool down.
◆ You may sometimes hear noise during communications, depending on the caller's transceiver.

LED INDICATOR STATUS

Indicator Color	Meaning
Red	Transmitting
Green	Receiving a call
Blinking green	Scanning
Blinks light blue 1 time	Standby state *
Blinking red	Battery power is low

* The transceiver has not been used for at least 10 seconds.

BATTERY LEVEL GUIDE

You can determine the remaining battery power level by pressing the Power switch while the transceiver power is ON. The LED indicator will blink blue a number of times corresponding to the battery power remaining.

Indicator Status	Battery Level
Blinks 3 times	High
Blinks 2 times	Medium
Blinks 1 time	Low

TIME-OUT TIMER (TOT)

The Time-out Timer prevents callers from using a channel for an extended duration (60 seconds). If you continuously transmit for the duration, transmission will stop and an alert tone will sound. To stop the tone, release the **PTT** switch.

VOICE OPERATED TRANSMISSION (VOX)

VOX operation allows you to transmit hands-free. VOX can only be used if you are using a supported clip microphone with earphone/hanger. This function can be turned off for specific channels. To activate VOX and set the VOX Gain level, perform the following steps:

- Connect the microphone with earphone/hanger to the transceiver.
 - The VOX function does not activate when a microphone with earphone/hanger is not connected to the accessory terminal of the transceiver.
- With the transceiver power OFF, press and hold the **Up** key while turning the transceiver power ON.
 - The LED indicator lights yellow and "VOX" and the channel number are announced.
- Press the **PF-1** key to select the VOX Gain level of the radio (from 1 ~ 5 or Off).
 - The transceiver will announce the VOX Gain level. If the VOX Gain level is Off, a double beep sounds.
 - Press the **PF-2** key to enable or disable the VOX function for the current channel (you can change this setting for each channel by selecting a channel with the **Up/Down** keys). When VOX is turned ON, a beep sounds. When it is turned OFF, a double beep sounds.
- While adjusting the level, speak into the microphone to test the sensitivity level. When sound is recognized, the LED lights red.
- Press and hold the **PTT** switch for 3 seconds to save the setting.
 - A beep will sound.
- Turn the transceiver power OFF and then ON again to activate VOX.

Note:
◆ The transceiver will automatically return to normal operation if no action is performed for 20 seconds.
◆ VOX Gain level 1 is the least sensitive and VOX Gain level 5 is the most sensitive.
◆ When the microphone with earphone/hanger is inserted and the VOX function is enabled, battery save mode will be disabled.
◆ If a microphone with earphone/hanger is connected to the transceiver while the VOX function is switched ON and the VOX Gain level is configured to a higher, more sensitive level, louder received signals may cause the transceiver to start transmitting.

CB CHANNEL SETUP MODE

This transceiver allows you to reprogram each of the radio tables with different CB frequencies and CTCSS (Continuous Tone-Coded Squelch System)/ DCS (Digital Coded Squelch) settings. The table below lists the default channel settings.

Radio Table No.	CB Channel No.	Frequency	CTCSS/DCS Setting
1	12	476.7000 MHz	OFF
2	13	476.7250 MHz	OFF
3	14	476.7500 MHz	OFF
4	15	476.7750 MHz	OFF
5	50	476.6625 MHz	OFF
6	51	476.6875 MHz	OFF
7	52	476.7125 MHz	OFF
8	53	476.7375 MHz	OFF

OPERATING FREQUENCY AND CTCSS/ DCS SETTING

To change the operating CB frequency of a radio table:

- With the transceiver power OFF, press and hold the **PTT** switch and **Up** key while turning the transceiver power ON.
 - Continue to hold the **Power** switch, **PTT** switch, and **Up** key until the LED indicator lights yellow and the transceiver announces "Self".
- Release the **Power** switch, **PTT** switch and **Up** key.
 - The transceiver announces "Table Number".
- Press the **Up/Down** key to select your desired radio table, then press the **PTT** switch to confirm the selected radio table number.
 - Upon releasing the **PTT** switch, a beep will sound and the transceiver announces "Channel Zero".
- Press the **Up/Down** key to increment/ decrement the CB channel number, to select the new CB frequency.
 - Press and hold the **Up/Down** key to continuously increment/ decrement the CB channel number.
 - CB channel numbers and their corresponding operating frequencies are provided in the tables below.
 - A voice announcement will inform you of the selected Table number.
- Press the **PTT** switch to save the setting and switch to the CTCSS/ DCS setting.
 - A beep will sound and the transceiver announces "QT" (Continuous Tone-Coded Squelch System).
- Press the **Up/Down** key to select CTCSS or DCS, then press the **PTT** switch to confirm the selection.
 - When selecting CTCSS, a beep will sound and the transceiver announces "QT", and when selecting DCS, a beep will sound and the transceiver announces "DQT" (Digital Coded Squelch).
- Press the **Up/Down** key to increment/ decrement the CTCSS/ DCS number, to select the new value.
 - Press and hold the **Up/Down** key to continuously increment/ decrement the CTCSS/ DCS number.
 - CTCSS/ DCS numbers and their corresponding settings are provided in the tables below.
 - A voice announcement will inform you of the selected CTCSS/ DCS number.
- Press the **PTT** switch to save the setting.
 - A beep will sound and the transceiver announces "Radio Table Number".
 - Repeat steps 3 to 8 to set up another radio table.
- Press and hold the **PF-2** key and **PTT** switch to store the settings and return to normal operation.

Note: The transceiver will automatically return to normal operation if no action is performed for 20 seconds.

UHF CB CHANNELS & FREQUENCIES

CB Ch. No.	Frequency (MHz)	Remark	CB Ch. No.	Frequency (MHz)	Remark
1	476.4250	Duplex Transmit Frequency CH No. 31	41	476.4375	Duplex Transmit Frequency CH No. 71
2	476.4500	Duplex Transmit Frequency CH No. 32	42	476.4625	Duplex Transmit Frequency CH No. 72
3	476.4750	Duplex Transmit Frequency CH No. 33	43	476.4875	Duplex Transmit Frequency CH No. 73
4	476.5000	Duplex Transmit Frequency CH No. 34	44	476.5125	Duplex Transmit Frequency CH No. 74
5	476.5250	Duplex Transmit Frequency CH No. 35 (Emergency use only)	45	476.5375	Duplex Transmit Frequency CH No. 75
6	476.5500	Duplex Transmit Frequency CH No. 36	46	476.5625	Duplex Transmit Frequency CH No. 76
7	476.5750	Duplex Transmit Frequency CH No. 37	47	476.5875	Duplex Transmit Frequency CH No. 77
8	476.6000	Duplex Transmit Frequency CH No. 38	48	476.6125	Duplex Transmit Frequency CH No. 78
9	476.6250		49	476.6375	
10	476.6500		50	476.6625	
11	476.6750	(Call Channel)	51	476.6875	
12	476.7000		52	476.7125	
13	476.7250		53	476.7375	
14	476.7500		54	476.7625	
15	476.7750		55	476.7875	
16	476.8000		56	476.8125	
17	476.8250		57	476.8375	
18	476.8500		58	476.8625	
19	476.8750		59	476.8875	
20	476.9000		60	476.9125	
21	476.9250		61	–	Reserved for Future Expansion
22	476.9500	(RX Only)	62	–	Reserved for Future Expansion
23	476.9750	(RX Only)	63	–	Reserved for Future Expansion
24	477.0000		64	477.0125	
25	477.0250		65	477.0375	
26	477.0500		66	477.0625	
27	477.0750		67	477.0875	
28	477.1000		68	477.1125	
29	477.1250		69	477.1375	
30	477.1500		70	477.1625	
31	477.1750		71	477.1875	
32	477.2000		72	477.2125	
33	477.2250		73	477.2375	
34	477.2500		74	477.2625	
35	477.2750	(Emergency Use Only)	75	477.2875	
36	477.3000		76	477.3125	
37	477.3250		77	477.3375	
38	477.3500		78	477.3625	
39	477.3750		79	477.3875	
40	477.4000		80	477.4125	

CTCSS/ DCS

CTCSS (Continuous Tone-Coded Squelch System) and DCS (Digital Coded Squelch) are functions that reject undesired signals on your channel. You will hear a call only when you receive a signal that contains a matching CTCSS tone or DCS code. If a call containing a different tone or code is received, squelch will not open and you will not hear the call. Likewise, when transmitting using CTCSS or DCS, the receiving station must have a matching tone or code to hear your call.

Be aware that other parties can still hear your calls if they set up their transceiver with the same tone or code.

Follow the steps described in "OPERATING FREQUENCY AND CTCSS/ DCS SETTING".

CTCSS Channel Settings:

CTCSS No.	CTCSS Frequency	CTCSS No.	CTCSS Frequency	CTCSS No.	CTCSS Frequency	CTCSS No.	CTCSS Frequency	CTCSS No.	CTCSS Frequency	CTCSS No.	CTCSS Frequency
1	67.0 Hz	12	97.4 Hz	23	141.3 Hz	34	179.9 Hz	45	225.7 Hz		
2	69.3 Hz	13	100.0 Hz	24	146.2 Hz	35	183.5 Hz	46	229.1 Hz		
3	71.9 Hz	14	103.5 Hz	25	151.4 Hz	36	186.2 Hz	47	233.6 Hz		
4	74.4 Hz	15	107.2 Hz	26	156.7 Hz	37	189.9 Hz	48	241.8 Hz		
5	77.0 Hz	16	110.9 Hz	27	159.8 Hz	38	192.8 Hz	49	250.3 Hz		
6	79.7 Hz	17	114.8 Hz	28	162.2 Hz	39	196.6 Hz	50	254.1 Hz		
7	82.5 Hz	18	118.8 Hz	29	165.5 Hz	40	199.5 Hz	0	OFF		
8	85.4 Hz	19	123.0 Hz	30	167.9 Hz	41	203.5 Hz				
9	88.5 Hz	20	127.3 Hz	31	171.3 Hz	42	206.5 Hz				
10	91.5 Hz	21	131.8 Hz	32	173.8 Hz	43	210.7 Hz				
11	94.8 Hz	22	136.5 Hz	33	177.3 Hz	44	218.1 Hz				

DCS Channel Settings:

DCS No.	DCS Code	DCS No.	DCS Code	DCS No.	DCS Code	DCS No.	DCS Code	DCS No.	DCS Code	DCS No.	DCS Code
1	D023N	19	D116N	37	D225N	55	D325N	73	D452N	91	D631N
2	D025N	20	D122N	38	D226N	56	D331N	74	D454N	92	D632N
3	D026N	21	D125N	39	D243N	57	D332N	75	D455N	93	D645N
4	D031N	22	D131N	40	D244N	58	D343N	76	D462N	94	D654N
5	D032N	23	D132N	41	D245N	59	D346N	77	D464N	95	D662N
6	D036N	24	D134N	42	D246N	60	D351N	78	D465N	96	D664N
7	D043N	25	D143N	43	D251N	61	D356N	79	D466N	97	D703N
8	D047N	26	D145N	44	D252N	62	D364N	80	D503N	98	D712N
9	D051N	27	D152N	45	D255N	63	D365N	81	D506N	99	D723N
10	D053N	28	D155N	46	D261N	64	D371N	82	D516N	100	D731N
11	D054N	29	D156N	47	D263N	65	D411N	83	D523N	101	D732N
12	D065N	30	D162N	48	D265N	66	D412N	84	D526N	102	D734N
13	D071N	31	D165N	49	D266N	67	D413N	85	D532N	103	D743N
14	D072N	32	D172N	50	D271N	68	D423N	86	D546N	104	D754N
15	D073N	33	D174N	51	D274N	69	D431N	87	D606N	0	OFF
16	D074N	34	D205N	52	D306N	70	D432N	88	D612N		
17	D114N	35	D212N	53	D311N	71	D445N	89	D624N		
18	D115N	36	D223N	54	D315N	72	D446N	90	D627N		

CHANNEL CONFIRMATION MODE

To confirm your channel settings:

- With the transceiver power OFF, press and hold the **PTT** switch while turning the transceiver power ON.
 - Continue to hold the **PTT** switch until the LED indicator lights yellow and the transceiver announces "Confirm".
- Release the **PTT** switch.
 - The transceiver announces the radio table number, CB channel number, CTCSS/DCS number of the selected channel and "VOX".
- Press the **Up/Down** keys to confirm additional channels within 20 seconds, otherwise the operation will cancel.
 - The transceiver announces the radio table number, CB channel number, CTCSS/DCS number of the selected channel and "VOX".

Note: The transceiver will automatically return to normal operation if no action is performed for 20 seconds.

UHF CB CHANNEL GUIDELINES

- Use of the citizen band radio service is licensed in Australia by the ACMA Radiocommunications (Citizens Band Radio Stations) Class Licence and in New Zealand by the Ministry of Business, Innovation and Employment (MBIE) General User Radio Licence (GURL) for Citizens Band Radio. CB Radio operation is subject to the conditions contained in those licences.
- Channels 5 and 35 (Australia only) are Emergency channels. Use these channels only for emergencies. CTCSS/DCS will not operate on these channels.
- Channels 22 and 23 (Australia only) are data (telemetry/telecommand) channels. Voice transmissions are inhibited on these channels. The ACMA reserves the right to add additional channels for telemetry/ telecommand, should they be necessary.
- Channel 11 (Australia only) is designated as the normal Call channel.
- Channel 40 (Australia only) is designated as the Road Vehicle channel.
- Channels 31 to 38 and 71 to 78 are repeater input channels. Channel numbers 1 to 8 and 41 to 48 are repeater receiving channels. Do not use these channels unless long distance communication is specifically required.
- Before transmitting on a channel, ensure that the channel is not in use by listening on the channel or observing the channel busy indicator.

Note:
◆ The ACMA has implemented a changeover in CB channel capacity. The current wideband system is being replaced with a narrowband system. Thus, newly purchased CB radios will have a larger channel capacity than older CB radios. You can obtain a list of currently authorized channels from the ACMA website in Australia and the MBIE website in New Zealand.
◆ Transmitting and receiving between old wideband radios and new narrowband radios is possible, although you may experience poor audio quality. When receiving a call on a new narrowband radio, from an old wideband radio, the sound level may be higher than normal. When receiving a call on an old wideband radio, from a new narrowband radio, the sound level may be lower than normal. This is not a malfunction of the CB radios, but a result of differing bandwidths of the radios. Adjust your volume levels accordingly, for best use.
◆ Interference may occur