



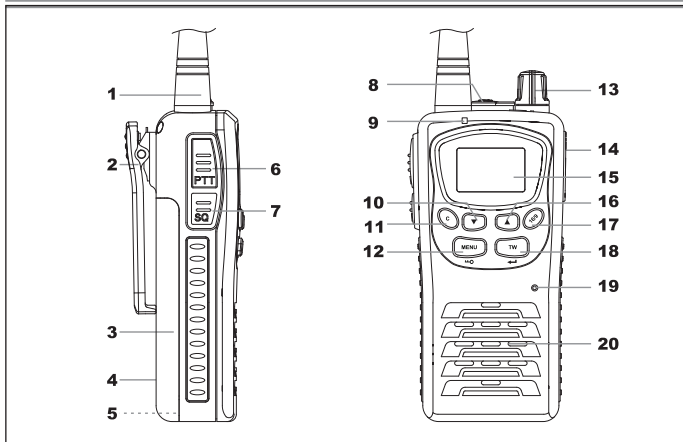
DIGITECH

DC1096



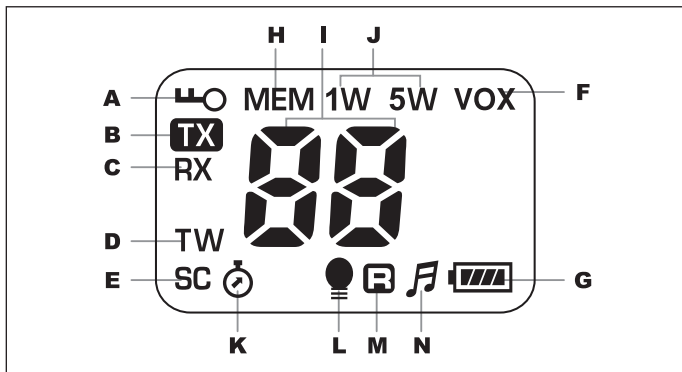
Instruction Manual


Controls and Indicators



- 1 Antenna
- 2 Belt Clip
- 3 Battery Compartment with Battery
- 4 Charger Connect
- 5 Battery Compartment Cover Latch
- 6 Push to Talk **PTT** Key
- 7 Squelch **SQ** Knob
- 8 Speaker MIC Jack
- 9 TX (Transmission) LED indicator
- 10 Down **▼** Button(CHANNEL/MENU)
- 11 Call **C** Button
- 12 MENU **MENU** /LOCK **🔒** Button
- 13 Power ON/OFF and Volume knob
- 14 CHARGER JACK
- 15 LCD Display
- 16 Up **▲** Button(CHANNEL/MENU)
- 17 Channel 16/9 **16/9**
- 18 Triple watch **TW** and Enter **↵** Button
- 19 Microphone
- 20 Speaker

LCD Display



- A Keypad LOCK Icon
- B TX Icon - is lighted when the radio is in transmit mode.
- C RX Icon - is lighted when the radio is in receive mode.
- D TW Icon - Triple Watch function
- E SC Icon - Automatic channels
- F VOX (Handsfree use) Icon
- G Battery Status Indicator
- H Memory Indicator
- I Selected Channel Indication
- J TX power Indicator
- K Stop Watch function Icon
- L Power Save function Icon
- M  Icon-Roger Beep function
- N Keypad Beep Tone Icon

Feature

- FM transmission
Marine Tx : 156.025 -157.425MHz
Rx : 156.300 -162.000MHz
1~88 channels
- 1W/5W output power selection
- TOT timer
- One touch to ch16/ch9 emergency channels
- External headset (earphone, microphone and ext PTT)
- VOX function (off, 1,2,3,4,5)
- Call tone melody (5 songs)
- Rotary switch volume with power on/off
- LCD back-light function
- Key back-light
- 5 adjustable level and automatic squelch function
- 20 memory store
- Key lock function
- Key tone function (selectable on/off)
- Roger tone function (selectable on/off)
- 4 level battery indicator
- Auto power saver /w indication
- Tx and Rx icon
- Triple watch function
- Scan channel/Memory scan
- Stop watch function (<59'59")
- IPX5* splash proof
- 1200mAh Li-ion battery pack
- Charging indication (icon flashing)
- Cigarette car charger plug (optional)

Installation

1. Removing the Belt Clip
 - a. Pull the Belt Clip Latch away from the unit.
 - b. While pulling the Belt Clip Latch, push up the Belt Clip as shown in Figure 1.

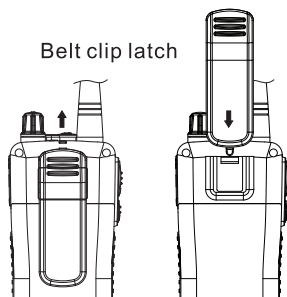


Figure 1

Figure 2

2. Installing the Belt Clip
 - a. Slide the Belt Clip into the slot as shown in Figure 2.
 - b. A “click” indicates the Belt Clip is locked into position.

3. Installing the supplied Li-ion Rechargeable Battery (Battery built-in to the battery cover).

- a. Install the supplied Li-ion rechargeable battery as shown in Figure 4.
- b. Lock the Battery Cover latch into position as shown in Figure 5.

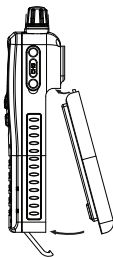


Figure 4

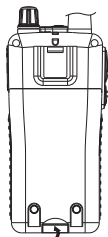


Figure 5

4. Charging the Rechargeable Battery pack.
Recommend to turning OFF the unit while charging.
Charge the Battery pack 10-14 hrs. prior to initial use.
5. Screw the supplied antenna into the antenna socket firmly.

To Charge the unit using Charger pod

1. Place the unit into the charger pod (Figure 5);
2. Insert the socket plug on the end of the AC-DC adaptor or Car Charger to the socket at the back of the charger pod (Figure 6);
3. The LED indicator on the charger pod will turn to RED once electricity get connected.
4. The LED indicator on the charger pod will turn to Green once charge fully.

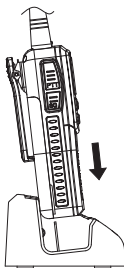


Figure 5

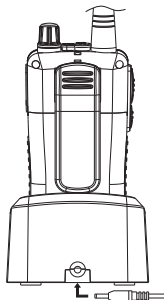



Figure 6

NOTE: The unit can be charged while ON or OFF mode.

Or Charge the unit directly

1. Insert the socket plug on the end of the AC-DC adaptor or Car Charger into the charger jack (CHG) located on the right of the unit. (Figure 7);
2. The unit indicate the  icon without blinking when the battery is fully charged.

NOTE: The unit can be charged while ON and OFF mode.

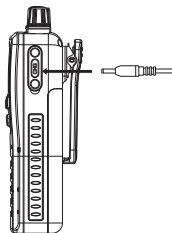


Figure 7

To Charge the battery pack using Charger pod

1. Insert the socket plug on the end of the AC-DC adaptor or Car Charger to the socket at the back of the charger pod (Figure 9);
2. The LED indicator on the charger pod will turn to RED once electricity get connected.
3. The LED indicator on the charger pod will turn to Green once charge fully.

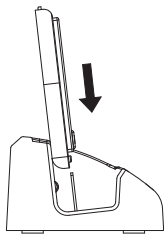


Figure 8

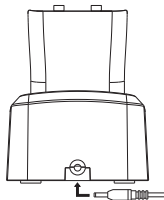


Figure 9

Battery Pack Warning

1. This equipment contains a Li-ion Battery Pack.
2. Do not mix with different battery types.
3. Do not dispose of the battery in fire.
4. Do not short-circuit the Battery Pack.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

Operation

Turning on the radio

Rotate the ON/OFF volume knob clockwise to turn ON and adjust the volume, then going to self-inspection.

A series of tones will indicate the radio is on and full screen displayed 1 second.

If it is the first time to turn on the radio, the default parameter as below:

Parameter	Default setting
Channels	1
SQ levels	Auto
TX power	5W
VOX on/off	OFF
Call Tone	5
Roger Tone	ON
Key Tone	ON
Lock states	Unlock

Turning off the radio

Rotate the ON/OFF volume knob counterclockwise to turn OFF radio.

Channel Selection

Press the ▲ or ▼ button one time to select the desired channel (1-83).

Press and hold the ▲ or ▼ button, the selection will move quicker.

Adjusting Volume

Rotate the ON/OFF volume knob to change the volume.

Receiving a signal

The unit is continuously in the RECEIVE mode when the unit is ON and not transmitting.

When you receive a signal on the current channel, the RX icon is appeared on the LCD display.

Transmitting

Press and hold the **PTT** button to transmit your voice. The **TX** icon will be displayed on the LCD display and the red LED indicator lights.

Time-out Timer

The unit will disable transmitting while the **PTT** button pressed exceed 180 seconds.

Press the **PTT** button again to re-activate transmitting.

Sending a Call Tone

With the unit in normal mode, press the **C** button.

The microphone will be muted and the unit will transmit the current Call tone to other users with the same channel .

The **TX** icon will be displayed on the LCD display and the red LED indicator lights.

Call tone can only be transmitted once (not more than 3 sec) in any 60 sec period.

It means that the unit will not transmit a call tone more than once no matter how many times you press the **C** button within a minute.

Monitor

1. Press and hold the **SQ** button more than 2 seconds to activate the Monitor Function, you will hear background noise and possible weak signal from the unit, when you released less than 5 seconds to return.
2. Press and hold the **SQ** button more than 5 seconds to extended monitor;
3. Press the **SQ** button once to return.

Squelch level setting

1. Press the **SQ** button to setting Squelch level,
2. Press the **▲** or **▼** button one time to select the desired level (Auto, 1, 2, 3, 4, 5)
Press and hold the **▲** or **▼** button, the selection will move quicker.

One touch Channel

1. Press **16/9** button one time into channel 16;
2. Press **16/9** button two times into channel 9;
3. Press three times to return.

Triple Watch setting

Triple Watch mode monitors channels 16 and 9 for a signal while you listen to the currently selected channel.

1. Press **TW** button to scanning current channel and channel 16 and 9;
2. Press **TW** button once to return.

HI/LOW power setting

This feature permits the selection of the transmitting power level to high or low. Before transmitting a speech to other units, press the **MENU** button one times to select the desired power output 1W or 5W.

VOX Sensitivity Level setting

In VOX mode, the unit will transmit a signal only when it is activated by your voice or other sounds around you. The unit will transmit for a further for 1 second even if you stop talking.

To set the VOX sensitivity level:

1. Press **MENU** button two times, the **VOX** icon will display and the current VOX level will start blinking on the LCD display.
2. Press the **▲** or **▼** button to select the VOX level sensitivity. The highest sensitiving level is 5.

Memory setting

1. Press **MENU** button three times, until the **MEM** icon is displayed and channel number is blinking.
2. Press **▲** or **▼** button to select desired channel, then press **←** button to confirm the channel. The most channel you can store 20 channels.

Channel scanning

Channel scan performs searches for active signals in an endless loop from channels.

1. Press **MENU** button four times, the **SC** , channel number will start blinking on the LCD display.
2. Press the **▲** or **▼** button to activate the channel scan mode. The channel number on the LCD display changes rapidly until an active signal is detected.

When an active signal is detected, channel scan pauses on the active channel.

Memory scanning

1. Press **MENU** button five times, until the **MEM** icon is displayed.
2. Press **▲** or **▼** button to scanning.

Call Tone setting

Call tone can only be transmitted once (not more than 3 sec) in any 60 sec period.

It means that the unit will not transmit a call tone more than once no matter how many times you press the **C** button within a minute. The unit is equipped with 5 user selectable Call tone melodies.

1. Press **MENU** button six times, until the **C** indicated and call tone code will start blinking.
2. Press **▲** or **▼** button to set the desired melody, between the 5 available melodies.
3. Press the **C** button to transmit the Call Tone Melody.

Roger Beep Tone setting

The radio is equipped with a user selectable Roger Beep Tone feature, which enables you to send a Beep Tone at the end of each transmission after every release of the PTT Key.

This will prompt any receiving unit that your transmission has ended.

1. Press **MENU** button seven times, until the **RB** icon and the ON or OFF indications will start blinking on the LCD display.
2. Press **▲** or **▼** button to set the desired selection ON (Roger Beep tone enabled) or OFF (Roger Beep tone disabled). If the Roger Beep function is enabled, a beep tone is heard to confirm the selection.

When the Roger Beep tone is enabled, the tone **RB** icon appears on the LCD display.




Key Tone setting

When a key is pressed, a beep tone is heard to confirm your command. The user may enable or disable this key tone.



1. Press **MENU** button eight times, until the **KT** icon and the ON or OFF indications will start blinking on the LCD display.
2. Press **▲** or **▼** button to set the desired selection ON (Key tone enabled) or OFF (Key tone disabled). If the Key tone function is enabled, a beep tone is heard to confirm the selection.
3. When the Roger Beep tone is enabled, the tone **KT** icon appears on the LCD display.

Stop Watch Setting


Press **MENU** button nine times, until 00:00 indications and the  icon will start blinking on the LCD display.


1. Press  button to start the timer.
2. Press  button to stop the timer
3. Press  button again to re-start.


Key Lock

Press and hold the  button for 2 seconds to activate/deactivate the Key Lock feature, the  icon will appear/disappear on the LCD display.

Battery Level Indicator

While the battery at low voltage, the  icon is blinking for every 1 second on LCD display.

The unit can indicate the  icon and containing is blinking in turn while charging.

The unit indicate the  icon without blinking when the battery is fully charged.

Automatic Power Save Feature

The unit has a Automatic Power Save circuit designed to extend battery life. If it senses no transmission within 10 seconds, it automatically switches to the Power Save mode. The power Save icon will appear on the LCD display. The unit can still receive transmissions in this mode.

Channel Table

Channel Number	Frequency(MHZ)		Traffic Type	Ship to Ship	Ship to Shore
	Transmit	Receive			
1	156.050	160.650	Duplex	Yes	Yes
2	156.100	160.700	Duplex	Yes	Yes
3	156.150	160.750	Duplex	Yes	Yes
4	156.200	160.800	Duplex	Yes	Yes
5	156.250	160.850	Duplex	Yes	Yes
6	156.300	156.300		Yes	No
7	156.350	160.950	Duplex	Yes	Yes
8	156.400	156.400		Yes	No
9	156.450	156.450		Yes	Yes
10	156.500	156.500		Yes	Yes
11	156.550	156.550		Yes	Yes
12	156.600	156.600		Yes	Yes
13	156.650	156.650		Yes	Yes
14	156.700	156.700		Yes	Yes
15	156.750	156.750		Yes	Yes
16	156.800	156.800		Yes	Yes
17	156.850	156.850		Yes	Yes
18	156.900	161.500	Duplex	Yes	Yes
19	156.950	161.550	Duplex	No	Yes
20	157.000	161.600	Duplex	No	Yes
21	157.050	161.650	Duplex	No	Yes
22	157.100	161.700	Duplex	No	Yes
23	157.150	161.750	Duplex	No	Yes
24	157.200	161.800	Duplex	No	Yes
25	157.250	161.850	Duplex	No	Yes
26	157.300	161.900	Duplex	No	Yes
27	157.350	161.950	Duplex	No	Yes
28	157.400	162.000	Duplex	No	Yes
60	156.025	160.625	Duplex		

Channel Table

Channel Number	Frequency(MHZ)		Traffic Type	Ship to Ship	Ship to Shore
	Transmit	Receive			
61	156.075	160.675	Duplex		
62	156.125	160.725	Duplex		
63	156.175	160.775	Duplex		
64	156.225	160.825	Duplex		
65	156.275	160.875	Duplex	Yes	Yes
66	156.325	160.925	Duplex	Yes	Yes
67	156.375	156.375	Duplex	Yes	No
68	156.425	156.425		Yes	Yes
69	156.475	156.475		Yes	Yes
70	RX only	156.525			
71	156.575	156.575		Yes	Yes
72	156.625	156.625		Yes	No
73	156.675	156.675		Yes	Yes
74	156.725	156.725		Yes	Yes
75	156.775	156.775		Yes	No
76	156.825	156.825		Yes	No
77	156.875	156.875		Yes	No
78	156.925	161.525	Duplex	Yes	Yes
79	156.975	161.575	Duplex	Yes	Yes
80	157.025	161.625	Duplex	Yes	Yes
81	157.075	161.675	Duplex	Yes	Yes
82	157.125	161.725	Duplex	Yes	Yes
83	157.175	161.775	Duplex	Yes	Yes
84	157.225	161.825	Duplex	Yes	Yes
85	157.275	161.875	Duplex	No	Yes
86	157.325	161.925	Duplex	No	Yes
87	157.375	157.375		No	Yes
88	157.425	157.425		Yes	No

Specifications

General

Frequency Control	PLL
Frequency Tolerance	Transmit 3.5PPM (at 25°C)
	Receive 3.5PPM (at 25°C)
Operation Temperature	0°C to +55°C
Antenna	Flexible whip
Microphone	Built-in Electret type
Display	Liquid Crystal Display
Speaker	8Ω, 1 Watt
Power Source	Rechargeable Li-ion Battery pack 7.4V 1200mAh

Transmitter

Frequency Range	156~158 MHZ
Frequency Stability	±10 PPM
Power Output	1W & 5W
Spurious Emissions	0.25 μW
Current Drain	800mA (1W), 1650mA (5W)

Receiver

Receiver Type	Double Conversion Super Heterodyne Phase Locked Loop system for Local Oscillator
Frequency Range	156~163 MHZ
Sensitivity (20dB SINAD)	-3 dBμV (emf)
Squelch Sensitivity	Tight 1μV
Audio Frequency Response	±6 dB 500 to 2000Hz
Adjacent Channel Selectivity	70 dB @ ±25 kHz
Audio Output Power	0.5W @ 10% THD
Current Drain	Squelched 40mA
	Max. Audio 350mA

Troubleshooting

- **Not enough range**

Cause: Line of sight blocked
Increase antenna height.

- **Will not transmit on 5 Watt range but will transmit on the 1 Watt range.**

Cause: Low voltage
Recharge or replace the batteries.

- **Will not transmit while charging**

Cause: Low voltage
The radio is not designed to transmit while charging.
DC or AC adaptor does not supply enough power for transmitting

- **Battery will not charge**

Cause: Low voltage
Do not to transmit while charging.
The adaptor does not supply enough power for transmitting.