

PRESIDENT
by Uniden

LTD95

Handheld Marine VHF Radio

Operating Manual

DM
1/22/04

Please read this Operating Guide carefully before operating this radio.

Safety Information

DO NOT operate the transmitter of any radio equipment with the antenna touching, or close to the eyes, face, or exposed body parts.

DO NOT let children operate any transmitter-equipped radio equipment.

Have your radio equipment serviced by a qualified technician.

Nickel-Cadmium Battery Warning

This equipment contains a nickel-cadmium battery.

Cadmium is a chemical known to the State of California to cause cancer.

The nickel-cadmium battery contained in this equipment may explode if disposed of in a fire.

Do not short circuit the battery.

Do not charge the nickel-cadmium battery used in this equipment in any other charger other than the one designed to charge this battery. Using another charger may damage the battery, or cause the battery to explode.

Nickel-Cadmium Battery Disposal

Nickel Cadmium Batteries must be disposed of properly. Read the Nickel-Cadmium Battery Disposal package insert for important information.

President® is a registered trademark of Uniden America Corporation.

Features, Specifications, and availability of Optional Accessories are all subject to change without notice.

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Introduction

Congratulations! You've chosen the President **LTD95** for your Handheld Marine VHF Radio. The **LTD95** has been engineered to exacting marine specifications for reliable, dependable operation. This radio gives you the full complement of all USA and International channels, instant Channel **16** access, all NOAA and International weather channels, rechargeable batteries, and more. The **LTD95** features Phase Locked Loop frequency synthesis for precise transmit and receive frequency control and long term stability. This radio has been type accepted and certified by the FCC for marine use.

Important

The Marine Radiotelephone Service is under the jurisdiction of the Federal Communications Commission (FCC). Any adjustments or alterations which would alter the performance of the transceivers original FCC type acceptance or would change the frequency determining method are strictly prohibited.

Replacement or substitution of crystals, transistors, IC's regulator diodes, or any other part of a unique nature, with parts other than those recommended by us may cause violation of the technical regulation of the FCC rules or violation of type acceptance requirements of the rules.

Before operating the radiotelephone, you must obtain your license. It is illegal to transmit without the appropriate license which can be obtained by submitting a completed FCC Form 506 (included) to the FCC. Furthermore, you are required to understand Part 80 of the FCC Rules and Regulations prior to the operation of your radiotelephone. It is the user's responsibility to see that this unit is operating at all times in accordance with the FCC Rules and Regulations.

Warning

PRESIDENT does NOT warrant this unit to be waterproof. When using this unit in a marine environment, care must be taken to prevent spray or water from entering the unit, which may damage it.

Feature Highlights

USA and International Channels - Includes a full complement of Marine VHF FM frequencies.

Ten Weather Channels - Get vital weather information in your area.

Scan and Seek Modes - Provide rapid, automatic scanning of all channels.

Dual Watch Mode - Checks for activity on both the current channel and Emergency Channel **16**.

Rechargeable Battery Pack - Eliminates the costly expense of frequent battery replacement.

LO/HI Switch - Lets you transmit at 1 watt or 5 watts for short-range or long-range communication.

Battery Save Mode - Conserves battery energy when there is no activity on the current channel for over 3 seconds.

LCD Backlight - Illuminates the channel display for visibility at night or under dim conditions.

5-Minute Transmit Timer - Limits transmitting activity to 5 minutes at a time, per FCC regulations.

Unpacking

Carefully check the package contents against this list:

- President **LTD95** Handheld Marine Radio
- Flexible Antenna
- AC Adapter/Charger (AD-978)
- Nickel-Cadmium Battery Pack (BP95) (installed on radio)
- Belt Clip
- Wrist Strap
- This Operating Guide (read carefully and save)
- Product Registration Form
- FCC License Application Form

If any items are missing or damaged, contact your place of purchase immediately.

Be sure to complete and mail in the Product Registration Form.

Optional Accessories

Speaker-Microphone (SPMG) - A 2-in-1 feature combination for convenient transmitting and receiving.

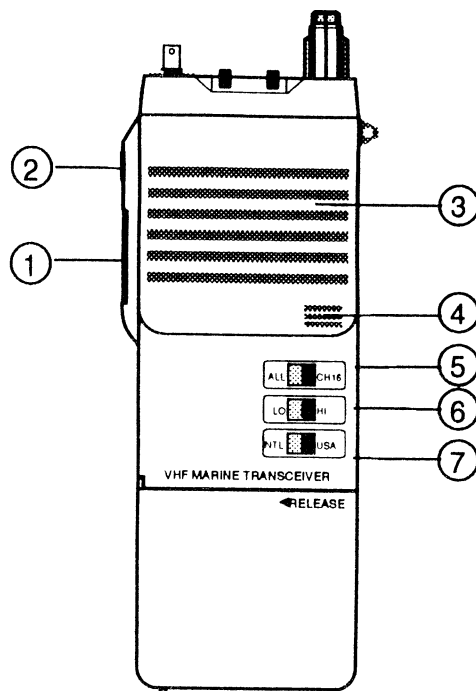
External Speaker (MC12) - A must for high performance receiver monitoring.

Spare Battery Pack (BP95) - A replacement pack for your rechargeable battery pack.

Controls and Indicators

Main controls

- PTT (Push-to-Talk) Switch** - Press the PTT Switch to transmit. When you are finished talking, release the PTT Switch and listen for a reply.
- LAMP Switch**- Press the button to illuminate the LCD Channel Display.
- Internal Speaker** - Clear and convenient audio output.
- Electret Microphone** - When transmitting, talk into the built-in microphone, holding the radio just a few inches away when speaking.
- ALL/CH 16 Switch** - Set the switch to **CH16** to immediately access Channel 16 for calling or use in emergency transmitting. Set the switch to **ALL** to access all VHF channels, including weather.
- LO/Hi Switch** - This switch controls the transmit power. Set the switch to **LO** for short-range, 1-watt transmission. Set the switch to **HI** for maximum range, 5-watt transmission.
- INTL/USA Switch** - Set this switch to operate on either USA or International channels. (See the frequency table for more information.)

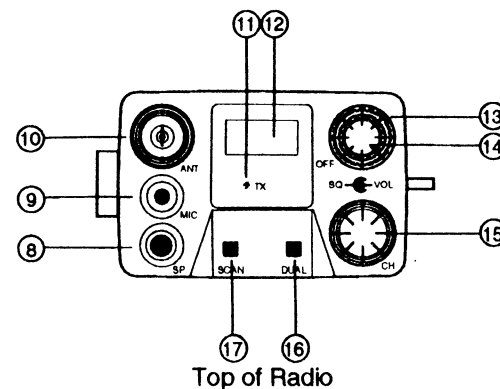


Main Controls

Top Controls and Indicators

- SP (Speaker) Jack** -Use to plug in an external speaker (optional accessory).
- MIC (Microphone) Jack** -Use to plug in an external microphone (optional accessory).

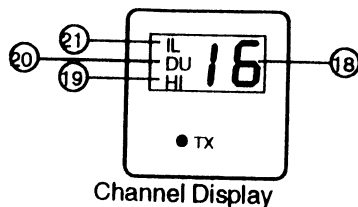
Note: You can also plug an optional speaker/microphone into these jacks. The plug is a two-prong plug that fits only one way.



Top of Radio

- ANT (Antenna) Connector** - Attach the flexible antenna to this BNC connector. **Warning:** Do not use any other antenna other than the one supplied. This can permanently damage the radio.
- TX Indicator**-This red LED lights when you press the PTT Switch and transmit. (**Note:** If the battery power is low and needs recharging, the LED will not light.)
- LCD Channel Display** - The liquid crystal display (LCD) shows the current channel and the operating mode indicators.
- SQ (Squelch) Control** - (outer knob) Use to eliminate background noise (the "rushing" sound) heard between transmissions.
- On-Off/VOL (Volume) Control** - (inner knob) Use to turn the radio on or off, and to adjust the volume level.
- Channel Selector** - Rotate this knob to select any of the USA or International Marine VHF FM frequencies, including NOAA and International Weather Channels.
- DUAL Key** - Press this key to monitor activity on both the selected channel and Emergency Channel 16. DUAL WATCH Mode switches the LCD display between **CH16** and the other channel every two seconds as it checks for a broadcast signal on these channels. If a transmission is received on Channel 16, it takes priority over any broadcast on the current channel.
- SCAN Key** - Press this key to set the radio in **SEEK Mode**, or press and *hold* this key for two seconds to set the radio in **SCAN Mode**. In either mode, the radio scans all marine (or all weather) channels for activity. In **SEEK Mode**, if frequency activity is found on a channel, the Busy Channel is monitored for only four seconds before the radio continues to search other channels. In **SCAN Mode**, if frequency activity is found on a channel, the busy channel is monitored as long as the signal is present. When the signal is no longer present, the radio continues to search the other channels for activity. (**Note:** Channel 16 is excluded from the search unless **DUAL WATCH Mode** is also activated during SEEK or SCAN Mode.)

Channel Display



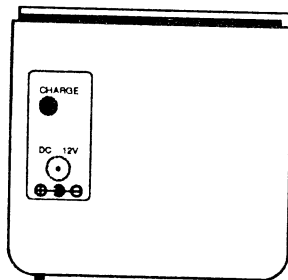
18. **Channel Number** - All standard communication channels appear in digital format. (01 through 88) Weather channels are displayed with a hyphen preceding the number (-0 through -9).
19. **HI** - Indicates High Power Mode (See **LO/HI** Switch description.)
20. **DU** - Indicates Dual Watch Mode (See **DUAL** Key description.)
21. **IL** - Indicates International Channel Mode (See **INTL/USA** Switch description.)

Getting Started

Charging the Battery Pack

Before using the **LTD95** for the first time, or whenever the battery pack is low, fully charge the battery pack. Charging the battery pack on your **LTD95** is easy – just plug the **AD-978** adapter into any 120V AC 60 Hz outlet, and plug the other end into the charging jack on the rear of the battery pack. The **CHARGE** indicator will light to show that charging power is being applied to the battery pack. (Note: You can charge the battery pack on or off the radio.)

If the battery power is very low, it will take approximately 10 hours to fully charge it.



Note: You may operate the receiver or transmitter while the battery pack is being charged on the radio, but this will increase the time it takes to charge the battery pack. If the battery power is very low, the transmitter may not operate at all, since the **AD-978** adapter will not provide sufficient current to charge the battery pack and operate the transmitter at the same time.

Warning

Using an AC Adapter/Charger other than the one specified may cause permanent damage to the unit.

Connecting the Antenna

Connect the flexible antenna by plugging the BNC connector of the antenna into the antenna connector on the top of the unit, and turn clockwise to tighten.

OPERATION

1. Place the **LO/HI** switch into the desired position. (**LO** to conserve the batteries, or **HI** when maximum range is required).
 2. Set the selector to the desired channel. (Note: if operation is desired on a channel other than 16, make sure that the **ALL/CH16** switch is in the **ALL** position.) Also make sure that the **INTL/USA** switch is set to the appropriate position.
 3. Turn the radio on, and adjust the volume to a comfortable listening level.
- Note:** The **LTD95** always starts with Channel 16. If the Squelch is set to high, or if there is no activity on Channel 16, you may not get any sound at first.
4. Turn the squelch control clockwise until the background noise just disappears. This is the proper squelch setting and the control should not be rotated beyond this point, or receiver sensitivity will be degraded.
 5. To operate on a channel other than Channel 16, use the Channel Selector to select another channel. The channel numbers appear in the LCD Channel Display.

6. When a station is heard, adjust the volume control to the desired listening level.
7. To transmit, press the **PTT** (press to talk) switch and hold in while you speak slowly and distinctly into the built-in microphone.

While you are transmitting, the **TX** indicator will light. If the indicator does not light, your battery pack may be low.

8. When you have finished transmitting, release the **PTT** switch so you can hear the reply.

Note: The **LTD95** has a 5 minute transmit timer. If you transmit continuously for 5 minutes, the transmitter will automatically cut off. You will need to release the **PTT** switch before you can transmit again.

DUAL WATCH Mode

In **DUAL WATCH** Mode, you can listen to one channel (current channel) while the radio periodically checks Channel 16 for activity. If a transmission is received on Channel 16, it takes priority over any communication you hear on the current channel. When the Channel 16 transmission stops, the **LTD95** will continue monitoring the current channel and Channel 16.

If you press the **PTT** Switch to transmit on the current channel, **DUAL WATCH** Mode is disabled and you will remain on the selected channel. If you press the **PTT** Switch while the radio is monitoring Channel 16 (example: to reply to the emergency communication,) the radio will remain on Channel 16.

To start **DUAL WATCH Mode**:

1. Set the **ALL/CH16** Switch to **ALL**. (**Note**: **DUAL WATCH Mode** will not function when this switch is set to **CH16**.)
2. Turn the radio on and select any channel (normal VHF or weather) other than Channel **16**.
3. Press **DUAL** to activate **DUAL WATCH**. A beep sounds, and you will see Channel **16** and the selected channel alternately displayed as they are being monitored for activity. The **DU** indicator appears on the LCD display.

Note: While in **DUAL WATCH Mode** you can select any channel to listen to and still remain in this mode. Turn the Channel Selector to the desired channel, and the radio will monitor the new channel along with Channel **16**.

To end **DUAL WATCH Mode**:

Press **DUAL**.
or ...

Press the **PTT** Switch.

Searching for Active Channels

You can search for channel activity in either of two Modes:

- **SEEK Mode**
- **SCAN Mode**

SEEK Mode

When set in **SEEK Mode**, the **LTD95** automatically searches the entire range of standard VHF channels or all 10 Weather channels for an active frequency. When one is found, the radio will remain on that channel for only four seconds and then continue scanning until you exit **SEEK Mode**. This feature is useful for brief sampling of channels without remaining on one that transmits *continuous* noise or broadcasts continuously.

To start **SEEK Mode**:

1. Set the **ALL/CH16** Switch to **ALL**. (**Note**: **SEEK** does not operate when the switch is set to **CH16**.)
2. Select a weather channel or a standard VHF channel other than Channel **16**. The channel you select will determine the *group* of channels to be scanned (that is, standard or weather channels). The channel you begin scanning from is the "home" channel.
3. Press **SCAN** to activate the **SEEK Mode**.

You will hear a beep, and the radio automatically goes into **DUAL/SEEK Mode** (**DU** appears on the display.) The channels are displayed as they are being scanned.

The radio checks for activity between **CH16** and the channels being scanned. When a signal is found, the radio will stop to monitor that channel for four seconds. Then the radio will continue to search the other channels.

To eliminate **DUAL Mode**, press **DUAL**. (A beep sounds, and **DU** disappears from the display.) Now, all channels *except* Channel **16** will be scanned.

To end **SEEK Mode** press **SCAN**. Scanning will stop and the radio will return to the "home" channel.

You can also cancel **SEEK Mode** by:

- a. Turning the Channel Selector knob to select any channel. or ...
- b. Press the **PTT** Switch. The radio will stop scanning and return to the "home" channel, but will not transmit until you release the **PTT** Switch and press it again.

SCAN Mode

Like **SEEK Mode**, the **LTD95** searches for an active channel. However, in **SCAN Mode**, an active channel is monitored *as long as there is a signal present*. When the signal stops, scanning continues for other active channels after a brief delay.

To start **SCAN Mode**:

1. Set the **ALL/CH16** Switch to **ALL**. (**Note**: **SCAN** does not operate when the switch is set to **CH16**.)
2. Select a weather channel or a standard VHF channel other than Channel **16**. The channel you select will determine the *group* of channels to be scanned (that is, standard or weather channels). The channel you begin scanning from is the "home" channel.
3. Press *and hold* **SCAN** for two seconds to activate the **SCAN Mode**.

You will hear a long beep, and the radio automatically goes into **DUAL/SCAN Mode** (**DU** appears on the display.) The channels are displayed as they are being scanned. To eliminate **DUAL Mode**, press **DUAL**. (A beep sounds, and **DU** disappears from the display.) Now, all channels *except* Channel **16** will be scanned.

To cancel **SCAN Mode**, press **SCAN**. Scanning will stop and the radio will return to the "home" channel.

You can also cancel **SCAN Mode** by:

- a. Turning the Channel Selector knob to select any channel. or ...
- b. Press the **PTT** Switch. The radio will stop scanning and return to the "home" channel, but will not transmit until you release the **PTT** Switch and press it again.

Note: Whenever you cancel **SCAN Mode**, you need to press and hold **SCAN** for two seconds to reenter **SCAN Mode**. Just pressing **SCAN** will put you in **SEEK Mode**.

Care and Maintenance

The LTD95 is designed to give you years of trouble-free service. There are no user-serviceable parts inside, and except for occasionally replacing the rechargeable battery pack, no maintenance is required.

Note: Do not expose the unit to moisture. Rain, dew, or other liquids may damage the internal components.

Replacing the Rechargeable Battery Pack

When it is time to install a new battery pack, use **only** the same type (nickel-cadmium) that came with your LTD95. Any other type of battery pack may damage your unit.

To replace the battery pack:

1. Remove the battery pack from the radio by sliding it off in the direction shown.
2. Align the grooves on the new battery pack with the tracks on the bottom of the radio, and slide into place.

Note: Be sure to recharge the battery pack before using.

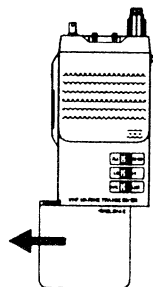
Operation for maximum range

To increase the transmission and reception range, the following has been found to be effective:

1. Orient the antenna vertically.
2. Rotate the squelch control counterclockwise allowing some background noise to be heard.
3. Move the unit away from shielding caused by nearby structures.
4. Elevate the unit as high as possible over the surrounding structures.
5. Speak slowly and distinctly into the microphone.
6. Be sure the unit has a fully charged battery pack.

Service

If your radio does not work properly, please call the President Customer Service Center at 1-317-842-2483, 8:00 A.M. to 5:00 P.M. EST, Monday through Friday. If service is necessary, contact your local President dealer or return the product in its original carton. If you are shipping the item, enclose a description of the problem along with a copy of the original purchase receipt. Send the product to the address listed in the Warranty (at the end of this manual).



VHF FM MARINE RADIOTELEPHONE CHANNELS AND FUNCTIONS (U.S.A. CHANNELS)

CHANNEL DESIG	FREQUENCY (MHz)		TYPE OF TRAFFIC	SHIP TO SHIP	SHIP TO SHORE
	TRANSMIT	RECEIVE			
WX1		162.550	NOAA Weather		RX Only
WX2		162.400	NOAA Weather		RX Only
WX3		162.475	NOAA Weather		RX Only
WX4		162.425	NOAA Weather		RX Only
WX5		162.450	NOAA Weather		RX Only
WX6		162.500	NOAA Weather		RX Only
WX7		162.525	NOAA Weather		RX Only
WX8		161.650	Can. Weather		RX Only
WX9		161.775	Can. Weather		RX Only
WX0		163.275	NOAA Weather		RX Only
01	156.050	156.050	Com'l, Port Ops, VTS	Yes	Yes
02	156.100	156.100	Port Ops	Yes	Yes
03	156.150	156.150	Com'l, Port Ops, VTS	Yes	Yes
04	156.200	156.200	Port Ops	Yes	Yes
05	156.250	156.250	Port Ops, VTS	Yes	Yes
06	156.300	156.300	Safety	Yes	No
07	156.350	156.350	Com'l	Yes	Yes
08	156.400	156.400	Com'l	Yes	No
09	156.450	156.450	Com'l & Non Com'l	Yes	Yes
10	156.500	156.500	Com'l	Yes	Yes
11	156.550	156.550	Com'l, VTS, SMS	Yes	Yes
12	156.600	156.600	Port Ops, VTS, SMS	Yes	Yes
13	156.650	156.650	Navigational	Yes	No
14	156.700	156.700	Port Ops	Yes	Yes
15		156.750	Environmental		RX Only
16	156.800	156.800	Distress, Safety, Calling	Yes	Yes
17	156.850	156.850	State Control	Yes	Yes
18	156.900	156.900	Com'l	Yes	Yes
19	156.950	156.950	Com'l	Yes	Yes
20	157.000	161.800	Port Ops	Yes	Yes
21	157.050	157.050	U.S. Govt Only	Yes	Yes
22	157.100	157.100	Coast Guard	Yes	Yes
23	157.150	157.150	U.S. Govt Only	Yes	Yes
24	157.200	161.800	Public Corresp.	No	Yes
25	157.250	161.850	Public Corresp.	No	Yes
26	157.300	161.900	Public Corresp.	No	Yes
27	157.350	161.950	Public Corresp.	No	Yes
28	157.400	162.000	Public Corresp.	No	Yes
80	156.025	156.025			
81	156.075	156.075			
82	156.125	156.125			
83	156.175	156.175			
84	156.225	156.225			
85	156.275	156.275	Port Ops	Yes	Yes
86	156.325	156.325	Port Ops	Yes	Yes
87	156.375	156.375	Com'l	Yes	No
88	156.425	156.425	Non Com'l	Yes	Yes
89	156.475	156.475	Non Com'l	Yes	Yes
90	156.525	156.525	Digital Selective Calling	Yes	No
91	156.575	156.575	Non Com'l	Yes	Yes
92	156.625	156.625	Non Com'l	Yes	No
93	156.675	156.675	Port Ops	Yes	Yes
94	156.725	156.725	Port Ops	Yes	Yes
77	156.875	156.875	Port Ops	Yes	No
78	156.925	156.925	Non Com'l	Yes	Yes
79	156.975	156.975	Com'l	Yes	Yes
80	157.025	157.025	Com'l	Yes	Yes
81	157.075	157.075	U.S. Govt Only	Yes	Yes
82	157.125	157.125	U.S. Govt Only	Yes	Yes
83	157.175	157.175	U.S. Govt Only	Yes	Yes
84	157.225	161.825	Public Corresp.	No	Yes
85	157.275	161.875	Public Corresp.	No	Yes
86	157.325	161.925	Public Corresp.	No	Yes
87	157.375	161.975	Public Corresp.	No	Yes
88	157.425	157.425	Com'l	Yes	No

VHF FM MARINE RADIOTELEPHONE CHANNELS AND FUNCTIONS (INTERNATIONAL CHANNELS)

CHANNEL DESIG	FREQUENCY (MHz)		TYPE OF TRAFFIC	SHIP TO SHIP	SHIP TO SHORE
	TRANSMIT	RECEIVE			
WX1		162.550	NOAA Weather		RX Only
WX2		162.400	NOAA Weather		RX Only
WX3		162.475	NOAA Weather		RX Only
WX4		162.425	NOAA Weather		RX Only
WX5		162.450	NOAA Weather		RX Only
WX6		162.500	NOAA Weather		RX Only
WX7		162.525	NOAA Weather		RX Only
WX8		161.650	Can. Weather		RX Only
WX9		161.775	Can. Weather		RX Only
WX0		163.275	NOAA Weather		RX Only
01	158.050	160.850	Com'l, Port Ops, VTS	Yes	Yes
02	158.100	160.700	Port Ops	Yes	Yes
03	158.150	160.750	Com'l, Port Ops, VTS	Yes	Yes
04	158.200	160.800	Port Ops	Yes	Yes
05	158.250	160.850	Port Ops, VTS	Yes	Yes
06	158.300	158.300	Safety	Yes	No
07	158.350	160.950	Com'l	Yes	Yes
08	158.400	158.400	Com'l	Yes	No
09	158.450	158.450	Com'l & Non Com'l	Yes	Yes
10	158.500	158.500	Com'l	Yes	Yes
11	158.550	158.550	Com'l, VTS, SMS	Yes	Yes
12	158.600	158.600	Port Ops, VTS, SMS	Yes	Yes
13	158.650	158.650	Navigational	Yes	No
14	158.700	158.700	Port Ops, VTS, SMS	Yes	Yes
15	158.750	158.750	Environmental		RX Only
16	158.800	158.800	Distress, Safety, Calling	Yes	Yes
17	158.850	158.850	State Control	Yes	Yes
18	158.900	161.500	Com'l	Yes	Yes
19	158.950	161.550	Com'l	Yes	Yes
20	157.000	161.600	Port Ops	Yes	Yes
21	157.050	161.650	U.S. Govt Only	Yes	Yes
22	157.100	161.700	Coast Guard	Yes	Yes
23	157.150	161.750	U.S. Govt Only	Yes	Yes
24	157.200	161.800	Public Corresp.	No	Yes
25	157.250	161.850	Public Corresp.	No	Yes
26	157.300	161.900	Public Corresp.	No	Yes
27	157.350	161.950	Public Corresp.	No	Yes
28	157.400	162.000	Public Corresp.	No	Yes
60	158.025	160.625			
61	158.075	160.675			
62	158.125	160.725			
63	158.175	160.775			
64	158.225	160.825			
65	158.275	160.875	Port Ops	Yes	Yes
66	158.325	160.925	Port Ops	Yes	Yes
67	158.375	158.375	Com'l	Yes	No
68	158.425	158.425	Non Com'l	Yes	Yes
69	158.475	158.475	Non Com'l	Yes	Yes
70		158.525	Digital Selective Calling	Yes	No
71	158.575	158.575	Non Com'l	Yes	Yes
72	158.625	158.625	Non Com'l	Yes	No
73	158.675	158.675	Port Ops	Yes	Yes
74	158.725	158.725	Port Ops	Yes	Yes
77	158.875	158.875	Port Ops	Yes	No
78	158.925	161.525	Non Com'l	Yes	Yes
79	158.975	161.575	Com'l	Yes	Yes
80	157.025	161.625	Com'l	Yes	Yes
81	157.075	161.675	U.S. Govt Only	Yes	Yes
82	157.125	161.725	US Gov Only	Yes	Yes
83	157.175	161.775	U.S. Govt Only	Yes	Yes
84	157.225	161.825	Public Corresp.	No	Yes
85	157.275	161.875	Public Corresp.	No	Yes
86	157.325	161.925	Public Corresp.	No	Yes
87	157.375	161.975	Public Corresp.	No	Yes
88	157.425	162.025	Public Corresp.	No	Yes

Specifications

General

Channels:	Transmit: 55 INTL/USA Receive: 90 INTL/USA 10 Weather
Frequency Control:	Phase Locked Loop (PLL)
Frequency Tolerance:	TX: 0.001% RX: 0.001%
Operating Temperature:	-20° C to +50° C
Dimensions:	177 mm H x 46.4 mm D x 65 mm W
Weight:	500 g
Power Source:	7.2V, Battery 600 mAh
Microphone:	Built-in Electret type
Speaker:	16 Ω 0.4 W
Channel Display:	Liquid Crystal Display (LCD)

Transmitter

Frequency Range:	156.025 ~ 157.425 MHz
Frequency Stability:	300 Hz nominal
Power Output:	High: 5 Watts Low: 1 Watt
Spurious Emissions	5W: -60 dB 1W: -50 dB
Microphone Sensitivity:	±3 KHz
Current Drain	HIGH: 1.6 A LOW: 0.7 A