West Marine®

VHF100 VHF Radio
Owner's Manual

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Revised 3/05

Welcome!

Thank you for purchasing the West Marine VHF100. This product was designed and built for boaters to use in the harsh marine environment. With proper care this product should provide you with years of trouble-free operation.

Your satisfaction with this product is backed by the entire West Marine organization worldwide.

Remember:

- Safety and distress calls take priority over all others.
- You must monitor Channel 16 when you are not operating on another channel.
- False or fraudulent distress calls are prohibited under law.
- Information overheard but not intended for you cannot lawfully be used in any way.
- Indecent or profane language is prohibited.

Service:

In the event that the radio fails to perform, or needs servicing, please send directly to our Electronics Repair Center in Hollister, CA. Be sure to include your return mailing information and a detailed accounting of the problems experienced and/or the service requested.

**West Marine
Electronics Repair Center
2395 Bert Court
Hollister, CA 95023**

Radio Licenses:

1. Ship Station License

An FCC ship station license is no longer required for any vessel traveling in US waters which uses a VHF marine radio, RADAR, EPIRB, and which is not required to carry radio equipment. A license is necessary however for a DSC MMSI number, or for any vessel required to carry a marine radio on an international voyage, carrying a HF single side band radiotelephone or marine satellite terminal. For more information, see the FCC's Fact Sheet PR 5000 #14. FCC license forms, including applications for ship (506) and land station licenses can be downloaded via the Internet at www.fcc.gov/forms. To obtain a form from the FCC, call (888) 225-5322.

2. Radio Call Sign

Currently the FCC does not require recreational boaters to have a Ship Radio Station License. The USCG recommends that the boat's registration number and the state to be used.

3. Canadian Ship Station Licensing

You do not need a license if your vessel is not operated in sovereign waters of a country other than Canada or the USA. If you do need a license, contact their nearest field office or regional office or write:

**Industry Canada
Radio Regulatory Branch
Attn: DOSP
300 Slater Street
Ottawa, Ontario
Canada, K1A OCA**

LCD Description
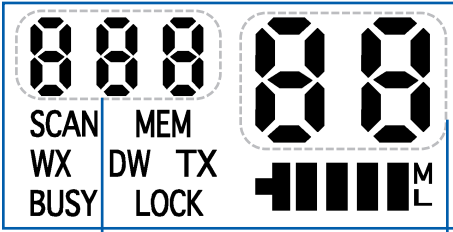
USA/INTERNATIONAL/
CANADIAN (UIC) Mode
indicator

Current
channel
indicator

Battery level indicator;
more bars indicate the bat-
tery is more fully charged

M L	Transmit power indicator; M= Medium, L=Low, (none)=High
SCAN	Indicates that the radio is in Memory Scan or Priority Scan Mode
MEM	Indicates that the channel is entered into the Scan Memory
WX	Indicates that the radio is in Weather Mode
DW	Indicates that the radio is in Dual Watch Mode
TX	Shown when transmitting
BUSY	Shown when receiving
LOCK	Shown when keypad is locked

1. Turning the Radio On

Turn the Power/Volume Knob clockwise until it clicks. The radio will power up in the same condition as it was last used. The last Channel Mode (USA/INT/CAN), Channel, TX Power, Key Lock, Squelch Level, etc. are restored.

2. Adjusting the Volume

Turn the Volume Knob clockwise to increase volume and counterclockwise to decrease volume.

3. Receive Mode

When the radio is receiving a signal, the **BUSY** indicator will be displayed. (Fig. 3) This is an indication that you should not transmit until the **BUSY** indicator is not showing.
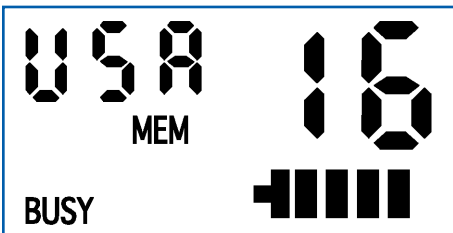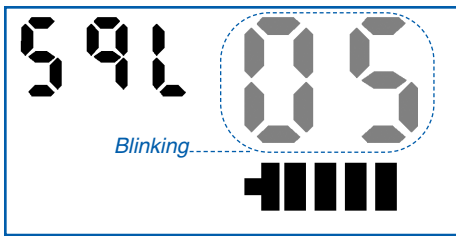

Fig. 3: Busy Display

Fig. 4: Squelch Control Display

4. Squelch Control

The Squelch Control reduces the static and noise heard on the radio, but allows strong signals to be heard clearly. To adjust the squelch setting, press the SQL/UIC key quickly. The radio's display will show **SQL - 0X**, where **X** is the current squelch setting. (Fig. 4) Press the ▲ or ▼ keys to adjust the squelch setting from 00 to 08. Higher settings allow only stronger signals will be heard, while lower settings allow weak signals to be received (and possibly annoying static). Generally, the squelch control should be set for the lowest setting that eliminates unwanted static.

• Level 00 allows all signals to be heard.
• After there have been no keys pressed for three seconds, the radio will return to normal receiving mode.
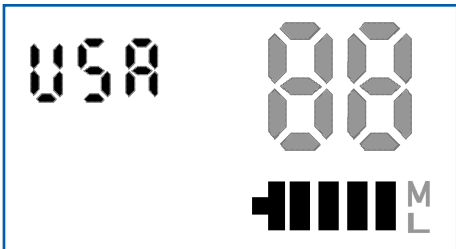
5. Changing Channels

To change channels, press the ▲ or ▼ keys.

• If the ▲ or ▼ keys are pressed for more than one second, the channel will change rapidly.
• The radio displays the channel number, memory status (**MEM**) and TX power status of the channel as you change the channels. (Fig. 5)
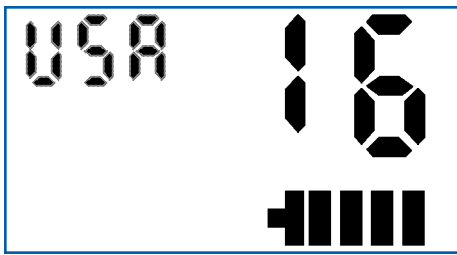

Fig. 5 Channel Change Display
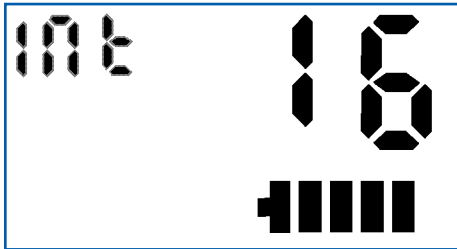
Fig. 6a: USA Mode Display

Fig. 6b: International Mode Display
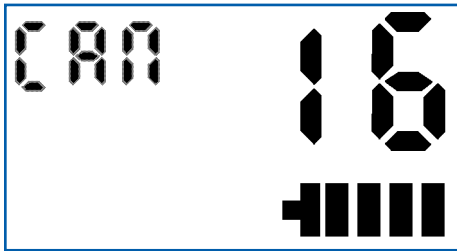
Fig. 6c: Canadian Mode Display
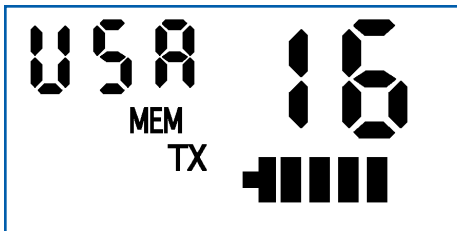
Fig. 7a: TX Display
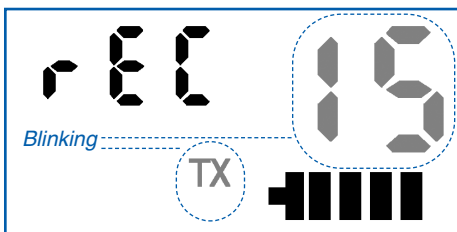
Fig. 7b: Weather Channel Mode Error Display

6. Changing Between USA, International, and Canadian Modes

Different areas of the world use different VHF frequencies, although the channel designation (1-88) may be the same. There are three modes: USA, International, and Canadian. Press and hold the SQL/UIC key for two seconds to change from USA to International to Canadian Modes in turn.

- When Country Mode is changed, Channel 16 is automatically selected, not the last channel used. (Figs. 6a–6c)

- If for some reason you find that you cannot communicate with another radio use on a predetermined channel, insure that both radios are set the correct Channel Mode. This can be very confusing if different modes are being used.

7. Transmitting a Signal

To transmit a signal, press the Push-To-Talk (PTT) key on the side of the radio. While transmitting, the **TX** indicator will appear. (Fig. 7a) When PTT key is released, the radio returns to Receive Mode.

- You cannot transmit on receive-only channels like the Weather Channels or Channels 15 and 70. If you try, an error tone will sound and the channel number and TX indicator will blink three times (Fig. 7b) and then go back to the normal display.

- If PTT key is pressed when the battery condition is low, one last transmission will be allowed, then an error tone will sound with **BAT LO** displayed. No further transmission will be allowed. See page 7.
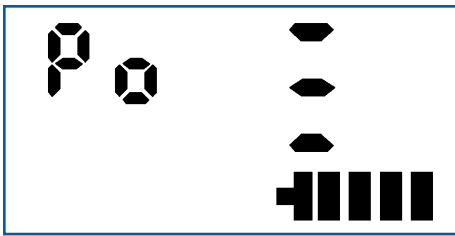
Fig. 8a: High Power Display
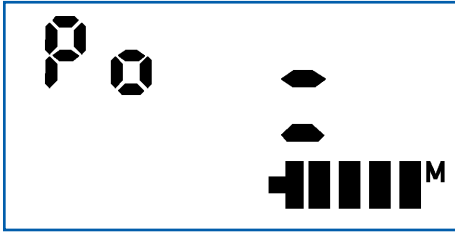
Fig. 8b: Medium Power Display
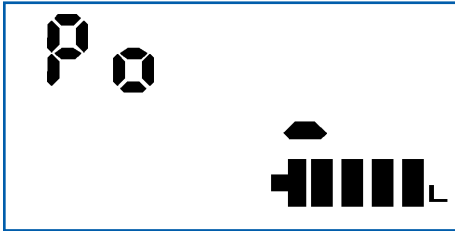
Fig. 8c: Low Power Display

8. Selecting the Transmit Power

By law, marine VHF radios must be able to transmit at 1 watt output power as well as the radio's maximum transmit power. The West Marine VHF100 radio has three transmission powers: 5 watts, 1 watt, and 0.5 watts.

The general rule is to use the lowest transmit power that results in clear communications with whomever you are communicating. At distances less than a mile, 0.5 watts will result in clear and consistent communications, and will have the benefit of greatly extended battery life.

Pressing the H/L key will change the transmit power from 5 watts to 1 watt to 0.5 watts and back to 5 watts with each press. (Fig 8a–8c.) Note the Medium power indicator **M** on Fig. 8b next to the battery display, and the Low power indicator **L** on Fig. 8c next to the battery indicator. There is no indicator for High power. (Fig. 8a)

- After two seconds of **P0** display, the radio will return to channel number display.

Restricted Channels

Certain channels are limited by law to 1 watt transmit power (USA Mode Channel 13, 17, 67, 77; INT Mode Channel 15, 17; CAN Mode Channel 13, 15, 17, 20, 66, 77). These channels will always transmit on medium (1 watt) power.

- You cannot change the transmit power setting on receive-only channels (all weather channels, USA Mode Channel 15, 70, INT Mode Channel 70, CAN Mode Channel 70)
- Pressing the H/L key while scanning or while on a receive-only channel will sound the error tone and the transmit power setting will not change.
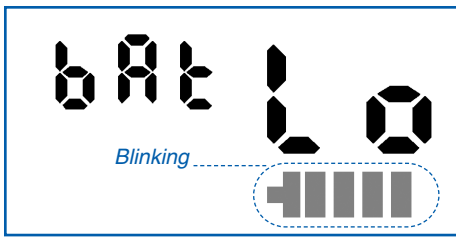
Fig. 9: Low Battery Error Display

9. Battery Level and Low Battery Displays

The Battery Level is shown using the Battery Level indicator (1–5 bars). More bars mean more battery capacity is left. When the battery condition is very low, the entire battery indicator will blink. (Fig. 9)

- The **BAT LO** message will show when the battery condition is very low. (Fig 9.)
- If the battery condition is very low and the PTT key is pressed, the radio will sound the error tone and allow one final transmission.
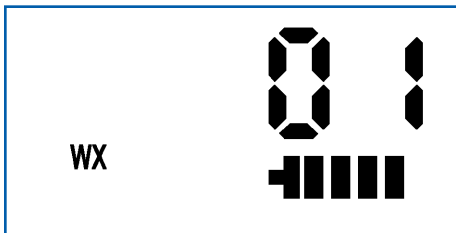
Fig. 10a: Weather Mode Display

10. Listening to the Weather

To listen to the weather channels, press the Weather (WX) key. (Fig. 10a) Press the ▲ or ▼ keys to select the weather channel of interest for your area (generally Channel 01, 02, or 03.) To return to Marine Channel (normal) Mode, press the WX key again. (Fig. 10b)

- Pressing several keys (SCAN, MEM, H/L, and UIC) while in the Weather Mode won't have any effect, but will cause the error tone to sound.
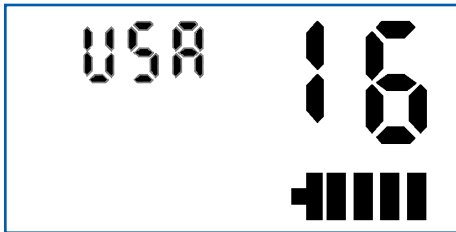
Fig. 10b: Marine Mode Display

- Pressing the 16 key will cause the radio to monitor Channel 16 and the **WX** indicator will blink. A second press will monitor Channel 9. A third press will return to Weather Mode. (Fig. 10c)
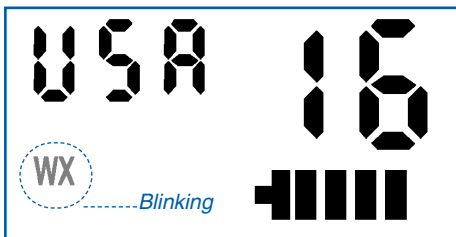
Fig. 10c: WX Mode Temporarily Stopped Display
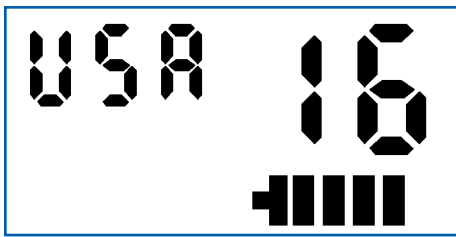
Fig. 11a: Channel 16 Display
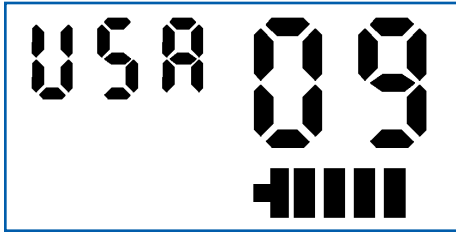
Fig. 11b: Channel 9 Display
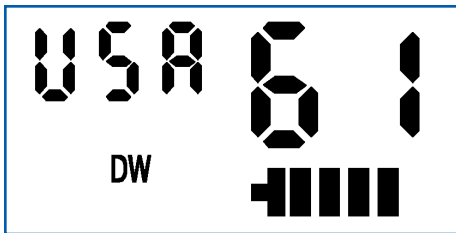
Fig. 12a: Main Channel Display
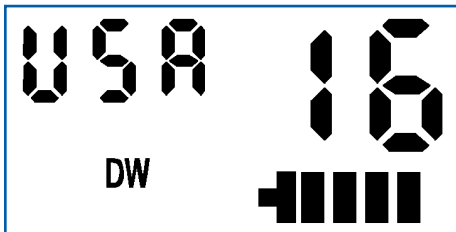
Fig. 12b: Dual Watch Channel 16 Display
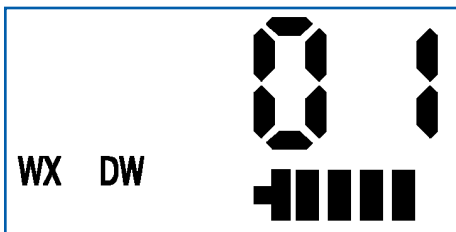
Fig. 12c: Dual Watch/Weather Mode Display

11. Channel 16/DUAL Key

Each time the 16/DUAL key is pressed briefly, the radio will change from Channel 16 to Channel 9 and back to the starting channel. For example, if the starting channel is Channel 61, pressing the 16/DUAL will change the channel from 61 to 16 to 9 and back to 61. (Figs. 11a and 11b)

• If the radio is scanning, it will change to Channel 16 after the first press, Channel 9 after the second press, and will continue scanning after the third press.

• If the radio is in Dual Watch Mode, it will switch to Channel 16 or Channel 9, then return to Dual Watch after the third press.

12. Dual Watch Mode

Dual Watch Mode allows you to monitor a desired channel (e.g. Channel 61) as well as Channel 16. To activate Dual Watch Mode, first select the channel you'd like to monitor using the ▲ or ▼ keys, and then press and hold 16/DUAL key for over two seconds. Dual Watch Mode will be selected and the **DW** indicator will be displayed. (Fig. 12a) Every two seconds, the radio will check Channel 16 for traffic. If the radio detects traffic, it will remain on Channel 16 (Fig. 12b) for three seconds after the last transmission (called the Dual Watch Delay), then return to Channel 61.

Dual Watch Mode also operates when you're listening to a weather channel. Every two seconds, the radio will briefly check Channel 16 for traffic, then return to the Weather Channel. (Fig. 12c)
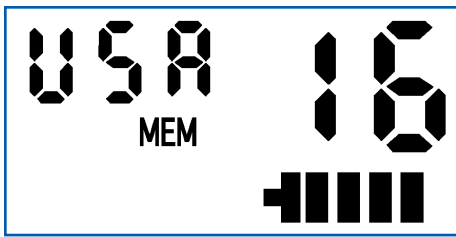
Fig. 13a: Memory Function On Display
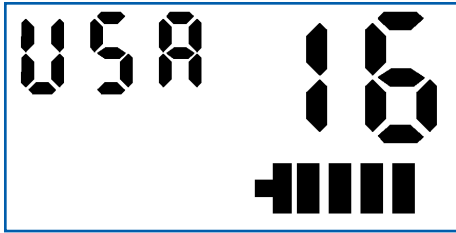
Fig. 13b: Memory Function Off Display
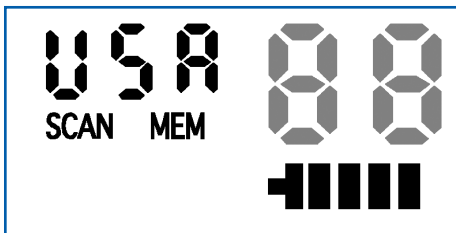
Fig. 13c: Normal Scan Display

13. Scanning Channels

Scanning allows you to monitor the traffic or conversations on several channels in quick succession. This can be helpful if you're trying to listen to fishing traffic on several channels, or need to monitor Race Committee traffic on Channels 68, 69, and 71.

As the radio detects traffic on any channel in its scan list, it will pause until three seconds after the last transmission, then continue scanning.

Before you can scan channels, you need to place two or more channels into the radio's scan memory.

Adding and removing channels from memory

Press the MEM key to enter the displayed channel into scan memory or, if the channel is currently in scan memory, remove it from scan memory. (Figs. 13 and 13b) If the displayed channel is in scan memory, the **MEM** indicator will be shown.

- Pressing MEM in WX Mode doesn't store the Weather Channel in memory and will result in the error tone.
- Pressing the MEM key while scanning will result in the error tone.

Normal Scan

Normal Scan scans the memorized channels in ascending (or descending) order. To enter Normal Scan Mode, press and release the SCAN key. (Fig. 13c) If Channels 6, 12, 68, 69, and 72 have been entered into memory, the scan sequence will go from Channel 6 to 12 to 68 to 69 to 72 to 6 to 12 and so on. The **SCAN** indicator will be shown.
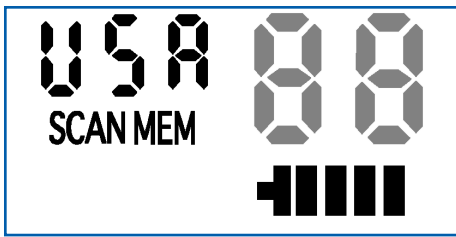
Fig. 13d: Priority Scan Display
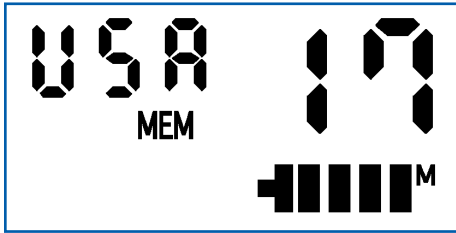
Fig. 13e: One Memorized Channel Display

Priority Scan

Priority Scan scans the memory channels in ascending (or descending) order, but checks for traffic on Channel 16 between each memory channel. This makes it more difficult to miss important traffic on Channel 16.

To enter Priority Scan Mode, press and hold the SCAN key for two seconds. (Fig. 13d)

If Channels 6, 22, and 72 are entered into memory, the scan sequence will go from Channel 6 to 16 to 22 to 16 to 72 to 16 to 6 to 16 and so on.

Notes on Scanning

- Pressing the SCAN key while scanning will stop scanning and revert to the Start Channel.
- You cannot scan channels while in Weather Mode.
- If you have not entered any channels into scan memory, the radio will sound the error tone when the SCAN key is pressed.
- If there is only one channel in scan memory, the radio will sound the error tone and change to that channel. (Fig. 13e)
- If the PTT key is pressed while in Scanning Mode, but while the radio is stopped to receive traffic, the radio will transmit on the current channel before the continuing to scan.
- If the PTT key is pressed while scanning and the radio is not stopped for traffic, the radio will transmit on the Start Channel. This is defined as the channel which was shown on the radio's display prior to pressing the SCAN key.
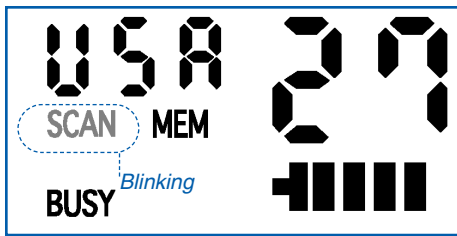
- The SCAN indicator will flash when the radio is either receiving, or pausing before continuing to scan. (Fig. 13f)
- You can change the order in which the channels are scanned (increasing or decreasing) by pressing the ▲ or ▼ keys.
- If the 16/DUAL key is pressed briefly (less than one second) the radio will switch from Channel 16 to Channel 9 and back to Scan Mode in turn. If the ▲ or ▼ keys are pressed while on Channel 16 or Channel 9, the radio will continue to scan in ascending or descending order.
- Pressing the WX key while scanning will change to Weather Mode.
- Pressing the SQL/UIC key briefly (less than one second) while scanning, will change to Squelch Change Mode. The LCD display will show the squelch level (which can be changed with the ▲ or ▼ keys) and the radio will continue to scan.
- If SQL/UIC key is pressed for over two seconds while scanning, the radio will stop scanning and change to Change Country Mode. (Page 5)
- If the MEM key or the H/L key is pressed while scanning, the radio will make an error tone and the key press will be ignored.

14. Display Back-Light

If any key is pressed,the display and keypad light will turn on and remain on for 10 seconds after the last key press.
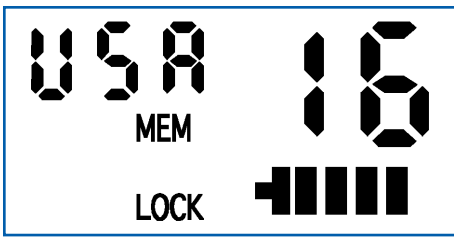
Fig. 15: Keypad Lock Display

15. Keypad Lock

If the 🔒 key (located below the PTT key) is pressed for over two seconds the keypad lock indicator **LOCK** will show on the display, (Fig. 15) and the keypad will not respond to key presses. Press the 🔒 key for another two seconds to unlock the keypad.

• When keys are locked, only the PTT key and the 🔒 key function.

• Locking the keypad can cause confusion. If the radio doesn't seem to be operating properly, look to see if the **LOCK** indicator is on.

16. Restoring Factory Settings

If you wish to reset all of the customized settings to the original factory settings, hold the 16/DUAL key down while turning on the radio. Please note that the your customized settings and channels stored in memory will be lost when factory settings are restored.

Factory Settings

Country Mode ……………………USA

Last Used Channel ……………………16

WX Mode ……………………Disabled

WX Last Used Channel ………………01

Key Lock ……………………Disabled

Dual Watch ……………………Disabled

All Channel Memory …………Disabled

Squelch Level …………………………4

17. Battery Options for the VHF100

The VHF100 comes with both the BP200 NiMH (Nickel Metal Hydride) rechargeable battery back as well as an BT200 alkaline battery tray. For most use, the BP200 battery pack will provide convenient, long life service, and will operate

your radio for approximately 12 hours on a charge. The length of service depends largely on how much time you spend transmitting, and what transmit power you use.

Charging the BP200

A feature of the NiMH pack is that you can recharge at any time. The standard charger SC200 will completely recharge the BP200 battery pack in approximately 12 hours. If you need the radio prior to a full charge, you can remove it from the charger base at any state of charge. The BP200 will not be damaged by extended charge time. The best way to use the battery pack is to detach the battery pack after full charge.

In SC200, when the radio and BP200 are placed in the SC200 charger base and power is present, the LED on the front of the charger base will be red.

The VHF100 also includes the DC200 Cigarette Lighter Cord. The DC200 can power the SC200 charger base from any cigarette lighter socket. The DC200 plugs into the charger base in the same socket as the AC power supply.

Use of the Optional RSC200 Rapid Smart Charger

For faster charging of the BP200 battery pack, the optional RSC200 Rapid Smart Charger can be used. It will completely recharge the BP200 in 90 minutes or less, depending on state of discharge. The RSC200 is a "smart charger" and will not damage the BP200 even if the radio is left in the charger base for long periods. The best way to use the battery pack is to detach the battery pack after full charge. The RSC200 can only be powered by AC current.

When the radio and BP200 are placed in the RSC200 charger base and power is present, the LED on the front of the

charger base will be red if the power is on but the radio is being charged, or green if the radio is fully charged.

BT200 Alkaline Battery Pack

The BT200 alkaline battery pack can be used as a backup to the BP200 battery pack when charging may not be possible or convenient. It holds 6 AA batteries. When the alkaline batteries have discharged, dispose of them safely. They cannot be recharged using the supplied chargers.

Make sure to observe the polarity shown on the inside of the alkaline battery tray when installing the batteries.

Alkaline batteries have excellent shelf life when kept in a cool environment, but they can leak under certain circumstances. If you store your radio for extended periods, we recommend that you remove the alkaline battery tray from the radio.

18. Maintenance

- The VHF100 is designed to provide years of trouble free operation with virtually no maintenance. Follow these simple procedures to ensure that the VHF100 continues to deliver top performance.

- Rinse the VHF100 thoroughly with fresh water after exposure to salt water. Otherwise the radio's keys, switches, and controllers may become inoperable due to salt crystallization.

- Be Careful! Extreme shock (dropping, etc.) may crack the case or dislodge or damage the seals. Additionally, wear or improper battery pack installation can damage the battery compartment seal.

- Keep your battery contacts clean! Wipe frequently. If visible corrosion appears, polish with an emery cloth or similar fine abrasive.

- Never transmit without an antenna attached to avoid damage to the radio.

- Avoid using or placing the VHF100 in areas with temperatures below -20ºC (-4ºF) or above +60ºC (+140ºF). Do not place in windshields, etc.

19. Troubleshooting Guide

Symptom:	The radio does not respond to key presses. The channel cannot be changed.
Probable Cause:	Key Lock is on.
Remedy:	Press the ⌂ key (on the left side of the case, below the PTT key) for three seconds to unlock the key pad.
Symptom:	You have arranged to communicate with another VHF radio user on a specific channel, and you can't hear them.
Probable Cause:	You and the other user are on different Country Codes.
Remedy:	Make sure that you are both using the same Country Mode (USA, International, or Canadian). Several channels have the same numeric designation, but are either on different frequencies or the channels are used for different purposes. Channel 16, the Distress, Safety, and Calling channel, is the same on all three bands.
Symptom:	You cannot change the transmit power setting.
Probable Cause:	You are on a channel which is limited to 1 watt transmit power (e.g. Ch. 13) or you are on a "receive only" channel (e.g. WX).
Remedy:	Change to an unrestricted TX/RX channel.
Symptom:	The SCAN key does not start the scan function.
Probable Cause 1:	No channels are in the SCAN memory.
Remedy 1:	Use the MEM key to enter desired channels into the SCAN memory.
Probable Cause 2:	Squelch is not adjusted correctly.
Remedy 2:	Adjust the squelch to the point that background noise just disappears.
Symptom:	Radio just does not seem to be operating correctly.
Probable Cause:	The radio has become "confused" by an unusual pattern of key presses.
Remedy:	Turn off the radio. Hold down the 16/DUAL key while turning the radio on. This process will reset the radio to the original factory settings.
Symptom:	Radio will not power up.
Probable Cause:	The battery is exhausted.
Remedy:	Recharge the battery pack or use the BT200 alkaline battery tray with fresh alkaline batteries.
Symptom:	You can hear transmissions, but the other radio cannot hear you.
Probable Cause:	The transmit power is set to low.
Remedy:	Use the H/L key to select a higher transmit power setting.

USA Mode Frequency Chart

Ch.	Rx Freq	Tx Freq	Status	Name	Full Name
1	156.0500	156.0500	Simplex	VTS/COML	VESSEL TRAFFIC SYSTEM/COMMERCIAL
3	156.1500	156.1500	Simplex	CG ONLY	COAST GUARD,GOVT ONLY
5	156.2500	156.2500	Simplex	VTS/COML	VESSEL TRAFFIC SYSTEM/COMMERCIAL
6	156.3000	156.3000	Simplex	SAFETY	INTER-SHIP SAFETY
7	156.3500	156.3500	Simplex	COMMERCL	COMMERCIAL
8	156.4000	156.4000	Simplex	COMMERCL	COMMERCIAL
9	156.4500	156.4500	Simplex	NON COML	NON COMMERCIAL
10	156.5000	156.5000	Simplex	COMMERCL	COMMERCIAL
11	156.5500	156.5500	Simplex	VTS	VESSEL TRAFFIC SYSTEM
12	156.6000	156.6000	Simplex	VTS	VESSEL TRAFFIC SYSTEM
13	156.6500	156.6500	Simplex, 1 W	BRG-BRG	BRIDGE TO BRIDGE
14	156.7000	156.7000	Simplex	VTS	VESSEL TRAFFIC SYSTEM
15	156.7500	Inhibit	Receive Only	ENVIRON	ENVIRONMENTAL
16	156.8000	156.8000	Simplex	DISTRESS	DISTRESS,SAFETY,CALLING
17	156.8500	156.8500	Simplex, 1 W	GOVT	GOVT MARITIME CONTROL
18	156.9000	156.9000	Simplex	COMMERCL	COMMERCIAL
19	156.9500	156.9500	Simplex	COMMERCL	COMMERCIAL
20	157.0000	157.0000	Simplex	PORT OPR	PORT OPERATION
21	157.0500	157.0500	Simplex	CG ONLY	COAST GUARD ONLY
22	157.1000	157.1000	Simplex	CG	COAST GUARD
23	157.1500	157.1500	Simplex	CG ONLY	COAST GUARD ONLY
24	161.8000	157.2000	Duplex	MAR OPER	MARINE OPERATOR
25	161.8500	157.2500	Duplex	MAR OPER	MARINE OPERATOR
26	161.9000	157.3000	Duplex	MAR OPER	MARINE OPERATOR
27	161.9500	157.3500	Duplex	MAR OPER	MARINE OPERATOR
28	162.0000	157.4000	Duplex	MAR OPER	MARINE OPERATOR
61	156.0750	156.0750	Simplex	CG	COAST GUARD
63	156.1750	156.1750	Simplex	VTS	VESSEL TRAFFIC SYSTEM
64	156.2250	156.2250	Simplex	COMMERCL	COMMERCIAL
65	156.2750	156.2750	Simplex	PORT OPR	PORT OPERATION
66	156.3250	156.3250	Simplex	PORT OPR	PORT OPERATION
67	156.3750	156.3750	Simplex, 1 W	BRG-BRG	BRIDGE TO BRIDGE
68	156.4250	156.4250	Simplex	NON COML	NON COMMERCIAL
69	156.4750	156.4750	Simplex	NON COML	NON COMMERCIAL
70	156.5250	Inhibit	Receive Only	DSC	DIGITAL SELECTIVE CALLING
71	156.5750	156.5750	Simplex	NON COML	NON COMMERCIAL
72	156.6250	156.6250	Simplex	NON COML	NON COMMERCIAL (SHIP-SHIP)
73	156.6750	156.6750	Simplex	PORT OPR	PORT OPERATION
74	156.7250	156.7250	Simplex	PORT OPR	PORT OPERATION
77	156.8750	156.8750	Simplex, 1 W	PORT OPR	PORT OPERATION (SHIP-SHIP)
78	156.9250	156.9250	Simplex	NON COML	NON COMMERCIAL
79	156.9750	156.9750	Simplex	COMMERCL	COMMERCIAL
80	157.0250	157.0250	Simplex	COMMERCL	COMMERCIAL
81	157.0750	157.0750	Simplex	USCG	COAST GUARD
82	157.1250	157.1250	Simplex	USCG	COAST GUARD
83	157.1750	157.1750	Simplex	USCG	GOVERNMENT
84	161.8250	157.2250	Duplex	MAR OPER	MARINE OPERATOR
85	161.8750	157.2750	Duplex	MAR OPER	MARINE OPERATOR
86	161.9250	157.3250	Duplex	MAR OPER	MARINE OPERATOR
87	161.9750	157.3750	Duplex	MAR OPER	MARINE OPERATOR
88	157.4250	157.4250	Simplex	COMMERCL	COMMERCIAL (SHIP-SHIP)

International Mode Frequency Chart

Ch.	Rx Freq	Tx Freq	Status	Name	Full Name
1	160.6500	156.0500	Duplex	MAR OPER	MARINE OPERATOR
2	160.7000	156.1000	Duplex	MAR OPER	MARINE OPERATOR
3	160.7500	156.1500	Duplex	MAR OPER	MARINE OPERATOR
4	160.8000	156.2000	Duplex	MAR OPER	MARINE OPERATOR
5	160.8500	156.2500	Duplex	MAR OPER	MARINE OPERATOR
6	156.3000	156.3000	Simplex	SAFETY	INTER-SHIP SAFETY
7	160.9500	156.3500	Duplex	MAR OPER	MARINE OPERATOR
8	156.4000	156.4000	Simplex	COMMERCL	COMMERCIAL (SHIP-SHIP)
9	156.4500	156.4500	Simplex	CALLING	BOATER CALLING CHANNEL
10	156.5000	156.5000	Simplex	COMMERCL	COMMERCIAL
11	156.5500	156.5500	Simplex	VTS	VESSEL TRAFFIC SYSTEM
12	156.6000	156.6000	Simplex	VTS	VESSEL TRAFFIC SYSTEM
13	156.6500	156.6500	Simplex	BRG-BRG	BRIDGE TO BRIDGE
14	156.7000	156.7000	Simplex	VTS	VESSEL TRAFFIC SYSTEM
15	156.7500	156.7500	Simplex, 1 W	ENVIRON	ENVIRONMENTAL
16	156.8000	156.8000	Simplex	DISTRESS	DISTRESS,SAFETY,CALLING
17	156.8500	156.8500	Simplex, 1 W	GOVT	GOVT MARITIME CONTROL
18	161.5000	156.9000	Duplex	PORT OPR	PORT OPERATION
19	161.5500	156.9500	Duplex	COMMERCL	COMMERCIAL
20	161.6000	157.0000	Duplex	PORT OPR	PORT OPERATION
21	161.6500	157.0500	Duplex	PORT OPR	PORT OPERATION
22	161.7000	157.1000	Duplex	PORT OPR	PORT OPERATION
23	161.7500	157.1500	Duplex	MAR OPER	MARINE OPERATOR
24	161.8000	157.2000	Duplex	MAR OPER	MARINE OPERATOR
25	161.8500	157.2500	Duplex	MAR OPER	MARINE OPERATOR
26	161.9000	157.3000	Duplex	MAR OPER	MARINE OPERATOR
27	161.9500	157.3500	Duplex	MAR OPER	MARINE OPERATOR
28	162.0000	157.4000	Duplex	MAR OPER	MARINE OPERATOR
60	160.6250	156.0250	Duplex	MAR OPER	MARINE OPERATOR
61	160.6750	156.0750	Duplex	MAR OPER	MARINE OPERATOR
62	160.7250	156.1250	Duplex	MAR OPER	MARINE OPERATOR
63	160.7750	156.1750	Duplex	MAR OPER	MARINE OPERATOR
64	160.8250	156.2250	Duplex	MAR OPER	MARINE OPERATOR
65	160.8750	156.2750	Duplex	MAR OPER	MARINE OPERATOR
66	160.9250	156.3250	Duplex	MAR OPER	MARINE OPERATOR
67	156.3750	156.3750	Simplex	BRG-BRG	BRIDGE TO BRIDGE
68	156.4250	156.4250	Simplex	NON COML	NON COMMERCIAL
69	156.4750	156.4750	Simplex	NON COML	NON COMMERCIAL
70	156.5250	Inhibit	Receive Only	DSC	DIGITAL SELECTIVE CALLING
71	156.5750	156.5750	Simplex	NON COML	NON COMMERCIAL
72	156.6250	156.6250	Simplex	NON COML	NON COMMERCIAL
73	156.6750	156.6750	Simplex	PORT OPR	PORT OPERATION
74	156.7250	156.7250	Simplex	PORT OPR	PORT OPERATION
77	156.8750	156.8750	Simplex	PORT OPR	PORT OPERATION (SHIP-SHIP)
78	161.5250	156.9250	Duplex	PORT OPR	PORT OPERATION
79	161.5750	156.9750	Duplex	PORT OPR	PORT OPERATION
80	161.6250	157.0250	Duplex	PORT OPR	PORT OPERATION
81	161.6750	157.0750	Duplex	PORT OPR	PORT OPERATION
82	161.7250	157.1250	Duplex	PORT OPR	PORT OPERATION
83	161.7750	157.1750	Duplex	PORT OPR	PORT OPERATION
84	161.8250	157.2250	Duplex	MAR OPER	MARINE OPERATOR
85	161.8750	157.2750	Duplex	MAR OPER	MARINE OPERATOR
86	161.9250	157.3250	Duplex	MAR OPER	MARINE OPERATOR
87	161.9750	157.3750	Duplex	MAR OPER	MARINE OPERATOR
88	162.0250	157.4250	Duplex	MAR OPER	MARINE OPERATOR

Canadian Mode Frequency Chart

Ch.	Rx Freq	Tx Freq	Status	Name	Full Name
1	160.6500	156.0500	Duplex	MAR OPER	MARINE OPERATOR
2	160.7000	156.1000	Duplex	MAR OPER	MARINE OPERATOR
3	160.7500	156.1500	Duplex	MAR OPER	MARINE OPERATOR
4	156.2000	156.2000	Simplex	CCG	COAST GUARD
5	156.2500	156.2500	Simplex	VTS	VESSEL TRAFFIC SYSTEM
6	156.3000	156.3000	Simplex	SAFETY	INTER-SHIP SAFETY
7	156.3500	156.3500	Simplex	COMMERCL	COMMERCIAL
8	156.4000	156.4000	Simplex	COMMERCL	COMMERCIAL
9	156.4500	156.4500	Simplex	CALLING	BOATER CALLING CHANNEL
10	156.5000	156.5000	Simplex	COMMERCL	COMMERCIAL
11	156.5500	156.5500	Simplex	VTS	VESSEL TRAFFIC SYSTEM
12	156.6000	156.6000	Simplex	VTS	VESSEL TRAFFIC SYSTEM
13	156.6500	156.6500	Simplex, 1 W	BRG-BRG	BRIDGE TO BRIDGE
14	156.7000	156.7000	Simplex	VTS	VESSEL TRAFFIC SYSTEM
15	156.7500	156.7500	Simplex, 1 W	ENVIRON	ENVIRONMENTAL
16	156.8000	156.8000	Simplex	DISTRESS	DISTRESS,SAFETY,CALLING
17	156.8500	156.8500	Simplex, 1 W	SAR	STATE CONTROL
18	156.9000	156.9000	Simplex	COMMERCL	COMMERCIAL
19	156.9500	156.9500	Simplex	CCG	CANADIAN COAST GUARD
20	161.6000	157.0000	Duplex, 1 W	PORT OPR	PORT OPERATION
21	157.0500	157.0500	Simplex	CCG	COAST GUARD
22	157.1000	157.1000	Simplex	CCG	COAST GUARD
23	161.7500	157.1500	Duplex	CCG	COAST GUARD
24	161.8000	157.2000	Duplex	MAR OPER	MARINE OPERATOR
25	161.8500	157.2500	Duplex	MAR OPER	MARINE OPERATOR
26	161.9000	157.3000	Duplex	MAR OPER	MARINE OPERATOR
27	161.9500	157.3500	Duplex	MAR OPER	MARINE OPERATOR
28	162.0000	157.4000	Duplex	MAR OPER	MARINE OPERATOR
60	160.6250	156.0250	Duplex	MAR OPER	MARINE OPERATOR
61	156.0750	156.0750	Simplex	CCG	COAST GUARD
62	156.1250	156.1250	Simplex	CCG	COAST GUARD
64	156.2250	156.2250	Simplex	MAR OPER	MARINE OPERATOR
65	156.2750	156.2750	Simplex	RESCUE	SEARCH AND RESCUE
66	156.3250	156.3250	Simplex, 1 W	PORT OPR	PORT OPERATION
67	156.3750	156.3750	Simplex	BRG-BRG	BRIDGE TO BRIDGE
68	156.4250	156.4250	Simplex	NON COML	NON COMMERCIAL
69	156.4750	156.4750	Simplex	NON COML	NON COMMERCIAL
70	156.5250	Inhibit	Receive Only	DSC	DIGITAL SELECTIVE CALLING
71	156.5750	156.5750	Simplex	NON COML	NON COMMERCIAL
72	156.6250	156.6250	Simplex	NON COML	NON COMMERCIAL
73	156.6750	156.6750	Simplex	PORT OPR	PORT OPERATION
74	156.7250	156.7250	Simplex	PORT OPR	PORT OPERATION
77	156.8750	156.8750	Simplex, 1 W	PORT OPR	PORT OPERATION
78	156.9250	156.9250	Simplex	SHP-SHP	INTER SHIP
79	156.9750	156.9750	Simplex	SHP-SHP	INTER SHIP
80	157.0250	157.0250	Simplex	SHP-SHP	INTER SHIP
81	157.0750	157.0750	Simplex	CCG	COAST GUARD
82	157.1250	157.1250	Simplex	CCG	COAST GUARD
83	157.1750	157.1750	Simplex	CCG	COAST GUARD
84	161.8250	157.2250	Duplex	MAR OPER	MARINE OPERATOR
85	161.8750	157.2750	Duplex	MAR OPER	MARINE OPERATOR
86	161.9250	157.3250	Duplex	MAR OPER	MARINE OPERATOR
87	161.9750	157.3750	Duplex	MAR OPER	MARINE OPERATOR
88	162.0250	157.4250	Duplex	MAR OPER	MARINE OPERATOR

WX Frequency Chart

Channel No.	(MHz)	Name
WX01	162.5500	WEATHER1
WX02	162.4000	WEATHER2
WX03	162.4750	WEATHER3
WX04	162.4250	WEATHER4
WX05	162.4500	WEATHER5
WX06	162.5000	WEATHER6
WX07	162.5250	WEATHER7
WX08	161.6500	WEATHER8
WX09	161.7750	WEATHER9
WX10	163.2750	WEATHR10

Accessories

Model	Description	Order #
SWIV200	Swivel Belt Clip with Button and Mounting Screw	3895638
SC200	12 Hr. Std. Charger with Bucket and AC power supply	3895463
DC200	DC Cigarette Lighter power supply for Std. Charger	3895554
CLIP200	Fixed Belt Clip with Mounting Screws	3895687
BT200	Alkaline Battery Tray	3895562
BP200	Nickel Metal Hydride Rechargeable Battery Pack	3895497
ANT200	Flexible Rubber Antenna	3895547

Optional Rapid Smart Charger:

RSC200	90 Min. Rapid Smart Charger with AC power supply	3895489

West Marine VHF 100 Radio Specifications

Dimensions
Operating Voltage	7.2Vdc
Battery Capacity	1350mAH Ni-mH

Transmitter
Frequency Range	156.025-157.425
Output Power	5W /1W/ 0.5
Spurious Emission	65@5W/ 55@1W
AF Distortion	< 5%
Max Deviation	< 5KHz
Frequency Stability	< 5ppm
FM Hum & Noise	> 40dB
Microphone Type	Condenser
Adjacent Channel Power	> 70dBc
Current Drain	1.5A / 0.7A

Receiver
Frequency Range	156.050-163.275
Sensitivity	0.2uV
Adjacent Channel Selectivity	> 70dBc
Intermodulation Distortion	> 65dBc
Spurious Response	> 70dBc
AF Output	0.5W
Speaker Impedance	8 Ohm

Performance specifications are nominal value, unless otherwise indicated, and are subject to change without notice.

Warning: Your West Marine VHF100 generates RF electromagnetic energy when transmitting. This radio was designed to meet the FCC's rules and regulations for the maximum permissible exposure to radio frequency energy. This design was tested and found to be compliant to the strict requirements established by the FCC.

This radio was designed for and is 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. It's use is restricted to work related operations only where the radio operator must have the knowledge to control his or her exposure conditions for satisfying the higher exposure limit allowed for Occupational Users.

Caution: It is up to the user to properly operate this transmitter to ensure safe operation. Please adhere to the following to ensure that your exposure to RF electromagnetic energy is within the FCC allowable limits:

- DO NOT operate the radio without a proper antenna attached, as this may damage 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 an antenna specifically authorized by the manufacturer to use with this radio.
- DO NOT transmit for more than 50% of the total radio use time. 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" is displayed on the screen. You can cause the radio to transmit by pressing the "PTT" switch.
- ALWAYS maintain at least a 1-inch (2.5 cm) separation distance between your body (including the face and eyes) and any surface of the radio.
- NEVER allow the antenna to touch the human body or to come within 1 inch when the transmitter is active.
- NEVER allow children to operate the radio without adult supervision and the knowledge of the following safety guidelines.

This radio is approved for use with the specific belt-clip tested for body-worn SAR compliance. Other belt clips or body-worn accessories may not comply and should be avoided.

Notice: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

— Increase the separation between the equipment and receiver.
— Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
— Consult the dealer or an experienced marine electronics technician for help.

Three-Year Limited Warranty

IMPORTANT: Evidence of original purchase, such as the original receipt, a cancelled check, or a credit card receipt is required for warranty service.

WARRANTOR: WEST MARINE PRODUCTS, INC. ("WEST MARINE")

ELEMENTS OF WARRANTY: WEST MARINE warrants for three years, to the original retail owner and user, this product to be free from defects in materials and craftsmanship with only the limitations or exclusions set out below.

WARRANTY DURATION: This warranty to the original retail owner and user shall terminate and be of no further effect 36 months after the date of original retail sale (battery pack warranty duration is 12 months or one year). The warranty is invalid if the Product is (A) damaged or not maintained as reasonable or necessary, (B) modified, altered, or used as part of any conversion kits, subassemblies, or any configurations not sold by WEST MARINE, (C) improperly installed or programmed, (D) serviced or repaired by someone other than an authorized WEST MARINE service center, as provided below, for a defect or malfunction covered by this warranty, (E) used in any conjunction with equipment or parts or as part of any system or subsystem not manufactured by WEST MARINE, or (F) installed or programmed by anyone other than as detailed by the Owner's Manual for this product. THIS WARRANTY IS NON-TRANSFERRABLE.

STATEMENT OF REMEDY: In the event that the product does not conform to this warranty at any time while this warranty is in effect, warrantor will either, at its option, repair or replace the defective unit and return it to you without charge for parts, service, or any other cost (except shipping and handling) incurred by warrantor or its representatives in connection with the performance of this warranty. Warrantor, at its option, may replace the unit with a new or refurbished unit. THE LIMITED WARRANTY SET FORTH ABOVE IS THE SOLE AND ENTIRE WARRANTY PERTAINING TO THE PRODUCT AND IS IN LIEU OF AND EXCLUDES ALL OTHER WARRANTIES OF ANY NATURE WHATSOEVER, WHETHER EXPRESS, IMPLIED OR ARISING BY OPERATION OF LAW, INCLUDING, BUT NOT LIMITED TO ANY IMPLIED WARRANTIES OF MERCHANTIBILITY OR FITNESS FOR A PARTICULAR PURPOSE. THIS WARRANTY DOES NOT COVER OR PROVIDE FOR THE REIMBURSEMENT OR PAYMENT OF INCIDENTAL OR CONSEQUENTIAL DAMAGES. Some states do not allow this exclusion or limitation of incidental or consequential damages so the above limitation or exclusion may not apply to you.

LEGAL REMEDIES: This warranty gives you specific legal rights, and you may also have other rights, which vary form state to state. This warranty is void outside the United States of America.

PROCEDURE FOR OBTAINING PERFORMANCE OF WARRANTY: If, after following the instructions in Owner's Manual you are certain that the Product is defective, pack the Product carefully (preferably in its original packaging). The product should include all parts and accessories originally packaged with the Product, include evidence of original purchase and a note describing the defect that has caused you to return it. The Product should be shipped freight prepaid, by traceable means, to WEST MARINE's Authorized Service Center at:

<div align="center">

West Marine Authorized Service Center
2395 Bert Court
Hollister, CA 95023

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