



# Cobra MARINE®

## CLASS-D FIXED MOUNT VHF RADIO

The latest in Class-D Digital Selective Calling (DSC) Technology.

### **Built in GPS Receiver**

Simply connect the radio to power and the radio will know your location.

### **Rewind-Say-Again®**

Replay missed VHF calls. Automatically records the last 20 seconds with a digital voice recorder.

### **Large LCD screen**

Large and bright LCD screen for easy viewing.

### **PA Output**

PA function for public address to external speaker.

### **Submersible**

Designed to IPX7 (JIS7) standards.

### **All NOAA weather channels**

Instant access to national All Hazards and weather information, 24 hours a day.

### **Softkey Operation**

Easily make calls, activate advance features and navigate through menus.

### **Automatic Radio Check**

Checks battery voltage when transmitting, RF power output, and antenna output.





# MR F77W GPS

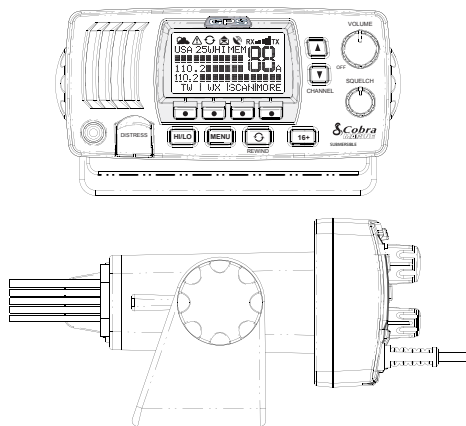
## Features

## Benefits

<b>DSC (Digital Selective Calling)</b>	Compliant with the latest FCC specifications for Class-D VHF Radios. Digital Selective Calling allows you to send a distress signal at the touch of a button or exchange position information with other boats or stations. DSC features on this Class-D radio include; A Dedicated Channel 70 (DSC Channel) Receiver, GPS Position Display Capability, Illuminated Distress Button, Easy MMSI Entry, Position Send and Request, Position Input Reminder, Coast Guard DSC Check Capability, etc.
<b>1 or 25 Watts</b>	Dual output power for short and long communication.
<b>U.S.A., Canada &amp; International Channels</b>	Allows operation on any of the three (3) different channel maps established for these areas.
<b>Rewind-Say-Again®</b>	Replay missed calls. Automatically records the last 20 seconds of incoming radio transmissions. Handy when in noisy conditions.
<b>10 NOAA Weather Channels</b>	Instant access to national all hazards and weather information, 24 hours a day.
<b>Weather Alert</b>	Alerts with an audible tone and visual alarm if threatening weather is nearby.
<b>Automatic Radio Check</b>	Checks battery voltage when transmitting, RF power output, and antenna output.
<b>Instant Channel 16/9</b>	Instant access to channel 16 and channel 9 for emergency situations.
<b>GPS Inside</b>	Simply connect the radio to power and the radio will know your location. You can send your position information in case of emergency, or exchange position information with other boats.
<b>Tri-Watch</b>	Monitors three (3) channels at once – Channel 16, Channel 9 and one (1) user selected channel.
<b>Scan / Memory Scan</b>	Scan all channels to find conversations in progress, or scan channels placed into memory.
<b>Channel Names</b>	Friendly VHF channel names under the channel number.
<b>Signal Strength Meter</b>	Shows the strength of incoming signal.
<b>Illuminated Keys</b>	Allows high visibility of keys.
<b>Illuminated LCD Display: Super Large</b>	See radio settings from practically anywhere with the largest LCD available on a fixed radio.
<b>Noise Canceling Microphone</b>	Blocks background noise.
<b>External Speaker and PA Speaker</b>	Connect an external speaker and a PA (Public Address) speaker.
<b>NMEA In and Out</b>	NMEA in for GPS input. NMEA output to display other vessels and their information transmitted by DSC on your chartplotter.
<b>Submersible</b>	Meets JIS7 standards; Submersible for 30 minutes in one meter deep water.
<b>External Alarm Input</b>	Senses the alarm from your chartplotter and uses the speaker on the radio to amplify the alarm for waypoint arrival, MOB, etc.
<b>3 Year Warranty (on radio)</b>	For products sold in the U.S.A.

## Included Accessories

<b>Flush Mount Kit &amp; Surface Mount Kit</b>	Easy installation of radio in or on almost any flat surface with supplied hardware.
<b>NMEA Input Cable</b>	Allows input from NMEA 0183 devices.



## Unit Specifications

### General

Number of Channels	All: U.S.A., Canadian, International 10 NOAA Weather Channels
Channel Spacing	25 kHz
Modulation	5 kHz Max.
Input Voltage	13.8 VDC
Current Drain:	
Stand-by	200 mA
Receive	300 mA
Transmit	5 A @ High Power 1 A @ Low Power
Temperature Range	-20°C to 60°C
Unit Dimensions	6.25" x 2.25" x 7.125" (159 mm x 57 mm x 180 mm)
Unit Weight (Lbs)	2 lbs., 6.8 oz. (1100 g)

### Receiver

Frequency Range	156.050 to 163.275 MHz
Receiver Type	Double Conversion Super-Heterodyne
Sensitivity:	
20 dB Quieting	0.35 uV
12 dB Sinad	0.30 uV
AF Output	4 Watts @ 8 Ohms

### Transmitter

Frequency Range	156.025 to 157.425 MHz
RF Output Power	1 or 25 Watts
Spurious Emissions	-75 dB @ High Power -72 dB @ Low Power
Microphone Type	Electret
Microphone Impedance	2000 Ohms
Frequency Stability	+/- 10 ppm
FM Hum & Noise	50 dB

### GPS

Receiver	56 channels
<b>Acquisition Times:</b>	
Hot	Nominal: < 1 second, Limit: +/- 5 seconds
Warm	Nominal: < 33 second, Limit: +/- 5 seconds
Cold	Nominal: < 35 second, Limit: +/- 10 seconds
Update Rate	Up to 5 Hz
Antenna Type	Internal patch antenna
GPS receiver first lock sensitivity	Nominal: -144dBm, Limit: 142dBm
GPS receiver tracking sensitivity	Nominal: -160dBm, Limit: 155dBm
Differential System Compatibility	WAAS (United States), EGNOS (Europe), MSAS (Japan), GAGAN (India)
<b>NMEA Info:</b>	
Output Specification	NMEA 0183- ASCII serial output
Electrical Standard	EIA-422
NMEA Sentences	DTM, GGA, GLL, GRS, GSA, GSV, RMC, VTG

### Packaging Specifications

Individual Clam/Box Dimensions	3.70"H x 13.10"W x 9.10"H
Individual Clam/Box Weight	3.7 lbs.
Master Pack Qty.	2
Master Pack Dimensions	9.80"H x 13.80"W x 8.10"D
Master Pack Weight	9.40 lbs.
SKU # (White)	MR F77W GPS
UPC #	0 28377 20183 7
Master Pack Barcode	5 0028377 20183 2
SKU # (Black)	MR F77B GPS
UPC #	0 28377 20187 5
Master Pack Barcode	5 0028377 20187 0

Specifications subject to change without notice.

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