

uniden®



**MC 615 (AUS) AUSTRALIAN EDITION
MARINE RADIOTELEPHONE
OWNER'S MANUAL**

UNIDEN MC615

The **UNIDEN MC 615 VHF** marine radio transceiver has been designed to give you a rugged reliable instrument that will provide you with years of trouble-free service.

You are encouraged to thoroughly read this manual to acquaint yourself with the characteristics and operation of your transceiver so that you can contribute to the longevity of your investment.

With proper care and maintenance, your **UNIDEN MC 615** will outlast your present vessel and serve you well on board several more. The full features and flexibility designed into this quality transceiver will prevent it from becoming obsolete regardless of changes in craft or geographic locations. The unit may be mounted in any number of convenient locations by utilizing the universal mounting bracket.

The **UNIDEN MC 615** is of all solid state design with conservatively rated rugged components and materials compatible with the marine environment. The transceiver utilizes a number of gaskets, sealing rings, waterproof membranes, and other sealants to effect a splashproof housing for protection of the electronics.

INSTALLATION

CAUTION: The MC 615 will operate only with nominal 12 volt negative ground battery systems.

It is important to carefully determine the most suitable location for your MC 615 on your vessel. Electrical, mechanical, and environmental considerations must all be taken into account. You must select the optimum relationship among these considerations.

Keep in mind the flexibility designed into the MC 615 so that you can most conveniently use your radio. Features which should be considered are:

1. Universal mounting bracket may be installed on either top or bottom of shelf, bulkhead, or overhead mounting.
2. The microphone connector faces forward allowing convenient in-dash or "built-in" installations.
3. The front panel can be fully reversed to provide for optimum viewing and operating for any mounting position.
4. The REMOTE speaker jack may be used with an auxiliary speaker.

All connections are "plug-in" type for easy removal of the radio.

ENGINE NOISE SUPPRESSION

Interference from the impulse noise generated by the electrical systems of engines is sometimes a problem with radios. The MC 615 has been designed to be essentially impervious to ignition impulse noise and alternator noise. However, in some installations it may be necessary to take measures to further reduce the effect of noise interference. All DC battery wires, antenna lead, and accessory cables should be routed away from the engine and engine compartment and from power cabling carrying particularly high currents.

In severe cases of impulse noise interference, it may be necessary to install a noise suppression kit that is available from your Marine Dealer.

ANTENNA CONSIDERATIONS

A variety of antennas is available from a number of quality suppliers. It is recommended you draw upon the advice of your Marine Dealer in determining a suitable antenna for your vessel and range requirements.

The general rules for antennas are: The more gain the greater the range and, the higher above the water line the greater the range. Antennas should be located so as not to be in proximity to metal objects. Antennas should not have excessively long coaxial feed cables.

CHOOSING A LOCATION

Some of the more important external factors to consider in selecting the location of your MC 615 are:

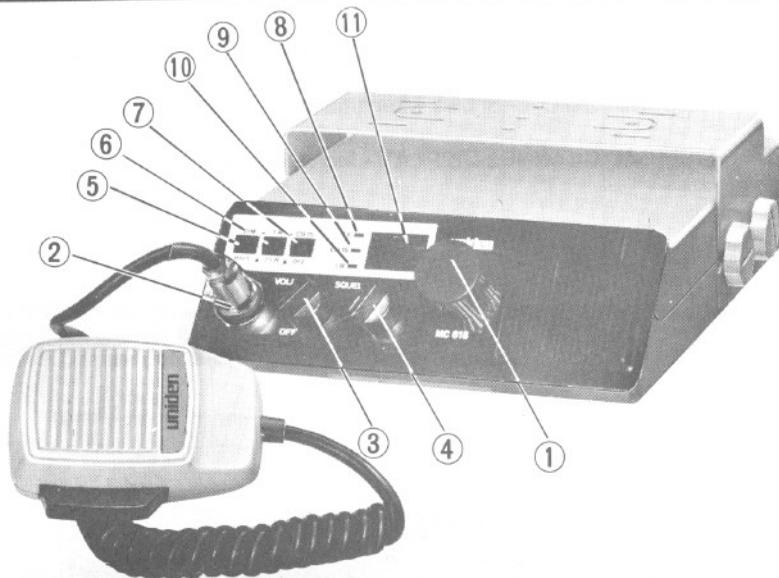
1. Select a location that is free from spray and splash.
2. Keep the battery leads as short as possible. Connection directly to the battery is most desirable. If direct connection cannot be made with the supplied power lead, any extension should be made with #10 AWG wire. Long extensions should use larger wire.
3. Keep the antenna lead as short as possible. Long antenna leads can cause substantial loss of performance for both receiving and transmitting.
4. Locate your antenna as high as possible and clear from metal objects. The reliable range of coverage is a direct function of antenna height.
5. Select a location that does not allow the radio to be subjected to direct sunlight (including that coming through windows).
6. Select a location that allows free air flow around the heat sink on the rear of the radio.
7. Select a location well away from the ship's compass. Auxiliary speakers also should be located away from the compass.

After you have carefully considered the various factors affecting your choice of location, position the radio (with the bracket, microphone, power plug, antenna plug and any auxiliary plugs installed) into the selected location to assure, there is no interference with surrounding items. Make the location of the mounting bracket.

Remove the bracket from the radio and use it as a template to mark the holes to be drilled for the mounting hardware. Drill the holes and mount the bracket with hardware compatible with the material of the mounting surface. Install the power cable (red is +, black is -), antenna and all other auxiliary cables and accessories.

Install the radio into the mounting bracket and connect all cables and accessories to the appropriate jacks and connectors.

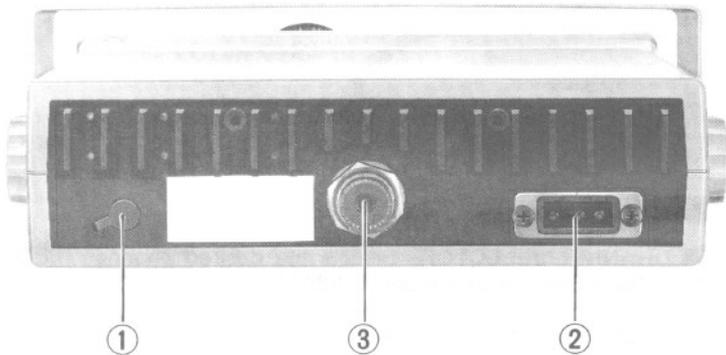
FRONT PANEL CONTROLS AND INDICATORS



- 1 ROTARY CHANNEL SELECTOR** - Selects the desired channel. LED Numerical channel display shows CH-01 through CH-88.
- 2 MICROPHONE CONNECTOR** - Receptacle for microphone connection.
- 3 ON/OFF VOLUME** - Turns power on to radio and allows adjustment to the desired listening level with clockwise rotation. Whenever the power is turned on, radio automatically goes to Channel 16.
- 4 SQUELCH** - is used to quiet background noise when no signal is being received. Turn the knob just past the point at which background noise is quieted.
- 5 DIM/BRT SELECTOR** - This control is used to adjust the brightness of the display.
- 6 1W/25W SELECTOR** - Controls transmitter output power. The 1W (WATT) position should always be used for in-port or short range communications.
- 7 CH16 SELECTOR** - Provides instant CH16 by overriding Rotary Channel selector. LED indicator and Channel display will indicate when unit is on Channel 16. But if you press "OFF", the channel will go back to the one which had been selected with Rotary Channel. (That is, the channel just before you pressed "CH16".) And also Channel Display will go back to that channel.
- 8 TX LED INDICATOR** - Glows red in the transmit mode. The transmit lamp is operated from the actual presence of power transmitted to the antenna.

- 9 CH 16 LED INDICATOR - Lights when CH 16 SELECTOR is activated.
- 10 1 WATT LED INDICATOR - Shows when unit is switched to Low power (1 WATT).
- 11 LED NUMERICAL CHANNEL DISPLAY - Indicates channel in use.

REAR PANEL CONNECTORS



- 1 **REMOTE SPEAKER CONNECTOR** - If it is desired to use another speaker in addition to the one in the radio, a four or eight ohm speaker equipped with a miniature phone plug may be connected to this jack.
- 2 **DC POWER CONNECTOR** - Battery connections are to be made with the cable supplied to mate with this connector. Remember, red is +, black is -. The power cord is equipped with a fuse to protect the radio. Use only a Six (6) AMPERE fast blow fuse for replacement.
- 3 **ANT CONNECTOR** - This connector is for connection of the antenna. A type PL259 connector is required to make proper connection.

CHANNELS AND FUNCTIONS

CHANNEL DESIG	FREQUENCY (MHz)		TYPE TRAFFIC	SHIP TO SHIP	SHIP TO SHORE	PERMANENT SCAN LIST
	SHIP	SHORE				
01	156.050	160.650	Public Corresp	NO	YES	TEL
02	156.100	160.700	Public Corresp	NO	YES	TEL
03	156.150	160.750	Public Corresp	NO	YES	TEL
04	156.200	160.800		YES	YES	
05	156.250	160.850	Public Corresp	NO	YES	TEL
06	156.300	156.300	SAR/Port OPs/Corr'l	YES	YES	
07	156.350	160.950	Public Corresp	NO	YES	TEL
08	156.400	156.400	Port Ops	YES	YES	
09	156.450	156.450	Port Ops	YES	YES	
10	156.500	156.500	Port Ops	YES	YES	
11	156.550	156.550	Port OPs	YES	YES	
12	156.600	156.600	Ship Navigation/Port OPs	YES	YES	
13	156.650	156.650	Port OPs	YES	YES	
14	156.700	156.700		YES	YES	
15	156.750	156.750		YES	YES	
16	156.800	156.800	DISTRESS, Safety, Calling	YES	YES	
17	156.850	156.850		YES	YES	
18	156.900	161.500		YES	YES	
19	156.950	161.550		YES	YES	
20	157.000	161.600		NO	YES	
21	157.050	161.650	VHF MM Repeaters/Port OPs	YES	YES	
22	157.100	161.700	VHF MM Repeaters	YES	YES	
23	157.150	161.750	Public Corresp	NO	YES	TEL
24	157.200	161.800	Public Corresp	NO	YES	TEL
25	157.250	161.850	Public Corresp	NO	YES	TEL
26	157.300	161.900	Public Corresp	NO	YES	TEL
27	157.350	161.950	Public Corresp	NO	YES	TEL
28	157.400	162.000	Public Corresp	NO	YES	TEL
60	156.025	160.625		NO	YES	
61	156.075	160.675	Public Corresp	NO	YES	TEL
62	156.125	160.725	Public Corresp	NO	YES	TEL
63	156.175	160.775	Public Corresp	NO	YES	TEL
64	156.225	160.825	Public Corresp	NO	YES	TEL
65	156.275	160.875		NO	YES	
66	156.325	160.925	Public Corresp	NO	YES	TEL
67	156.375	156.375	DISTRESS, Safety	YES	YES	
68	156.425	156.425	Port Ops	NO	YES	
69	156.475	156.475		YES	YES	
71	156.525	156.575		YES	YES	
72	156.575	156.625	Non Com'l/com'l/Port OPs	YES	NO	FISH FISH
73	156.625	156.675	Non Com'l	YES	YES	
74	156.675	156.725	Commercial	YES	YES	
77	156.725	156.875	Non Com'l	YES	NO	FISH
78	156.875	161.525	Commercial	YES	YES	
79	156.925	161.575	Port Ops	NO	YES	
80	156.975	161.625	VHF MM Repeaters	YES	YES	
81	157.025	161.675	Coast Guard	YES	YES	CG
82	157.075	161.725	VHF MM Repeaters	YES	YES	
83	157.125	161.775	Coast Guard	YES	YES	CG
84	157.175	161.825	Public Corresp	NO	YES	TEL
85	157.225	161.875	Public Corresp	NO	YES	TEL
86	157.275	161.925	Public Corresp	NO	YES	TEL
87	157.325	161.975	Public Corresp	NO	YES	TEL
87 A	157.375	157.375				
88	157.425	162.025	Public Corresp	NO	YES	TEL

SPECIFICATIONS

GENERAL

Channels	: Transmit 55 Receive 55
Frequency Control Method	: PLL synthesizer
Antenna Impedance	: 50 ohms, nominal
Speaker	: 1.82 Inch, 8 ohms
Microphone	: Rugged 600 ohms dynamic element with coiled cord and plug-in connector
Channel Display	: L.E.D
Frequency Stability	: + 0.001%
Operating Temperature Range	: 0°C to 55°C
Shock and Vibration	: Meets or exceeds EIA standards
Size	: 7-1/4"W (185m/m) x 9-5/8"L (245m/m) x 2-1/4"H (58m/m)
Weight	: 3.1 Lbs (1.4 Kg)
Controls	: On-Off/Volume, Squelch
Connectors	: Antenna, microphone, remote speaker, DC power
Frequency Range	: 156 to 158 MHz transmit 156 to 163 MHz receive
Selector Switches	: 1W/25W power, DIM/BRIT, CH16 & main channel selector switches
Lights and Indicators	: Red (Transmit, 1 Watt & CH16 LED), Green (7 segment LED-Channel Readout)
Standard Accessories	: Plug-in microphone, mounting bracket and hardware, DC power cord, mike hanger, spare fuse, owner's manual.
Supply Voltage	: 13.8V DC negative ground

TRANSMITTER

Power Output	: 25 or 1 watt (switch selectable)
Power Requirement	: 25 watts output: 5.0A @13.8V DC 1 watt output: 1.0A @13.8V DC
Modulation	: FM, ±5kHz deviation

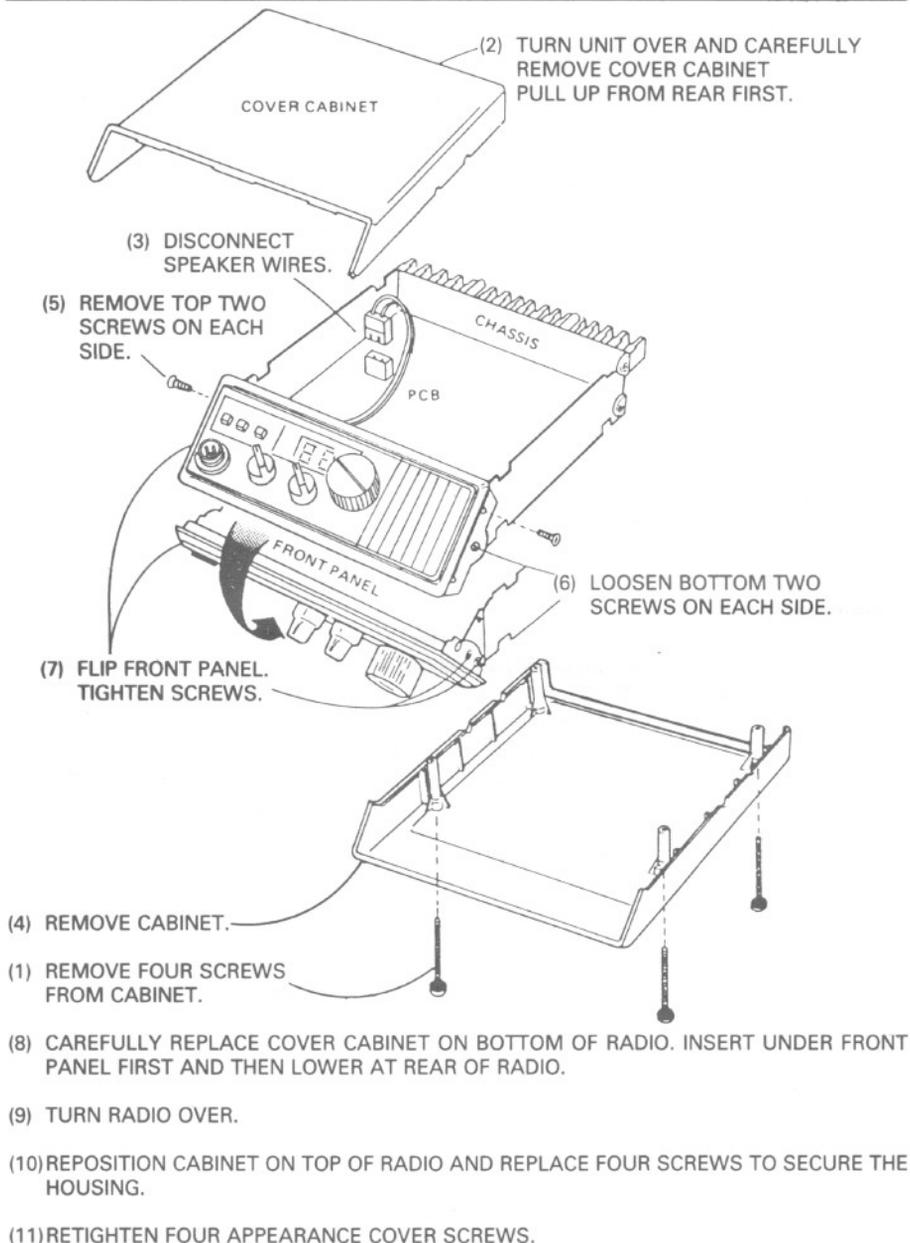
Hum and Noise : 45 dB
Attenuation
Audio Distortion : Less than 5% at 3 kHz deviation with 1000 Hz modulating frequency
Spurious Suppression : -65 dB
Output Transistor : Built-in
Protection
Output Power : Built-in automatic level control (ALC)
Stabilization

RECEIVER

Sensitivity : 0.30 μ V for 12 dB SINAD
0.50 μ V for 20 dB S/N
Threshold Squelch : 0.18 μ V
Sensitivity
Tight Squelch : 1.0 μ V
Sensitivity
Spurious Response : 90 dB
Attenuation
Image Response : 75 dB
Attenuation
Intermodulation : 70 dB @ 0.3 μ V desired
Attenuation : 50 dB @ 30 μ V desired
35 dB @ 300 μ V desired
Adjacent Channel : 75 dB
Rejection Selectivity : + 7.5 kHz @ 6 dB down
+ 15 kHz @ 60 dB down
Audio Output Power : 3.5 watts minimum at 10% distortion at 1 kHz modulation and 3.0 kHz deviation (4 ohm speaker)
Power Requirement : 0.2A @ 13.8V DC squelched
0.6A @ 13.8V DC at rated audio output
IF Frequencies : 1st - 16.9 MHz
2nd - 455 kHz
Hum and Noise Level : 50 dB

NOTE: All specifications comply with the ministerial STD 274 (MS274)

REVERSING THE FRONT PANEL



CARE AND MAINTENANCE

Your MC 615 is a precision piece of electronic equipment and you should treat it accordingly. Due to the rugged design, very little maintenance is required, however, a few precautions should be observed.

If your radio has been accidentally subjected to spray or splash you should immediately wipe it down with a soft cloth dampened with fresh water.

If the antenna has been damaged, you should not transmit except in case of emergency. A defective antenna may cause damage to your radio.

You are urged to arrange for periodic performance checks with your Marine Dealer.

MEMO

WARRANTY

Uniden MC 615 VHF Marine Radio Australian 1 Year Warranty. (Accessories are covered for 90 Days only).

Note: Please keep your sales docket as it provides evidence of warranty.

WARRANTOR: Uniden Australia Pty. Ltd. ACN 001 865 498

ELEMENTS OF WARRANTY: Uniden warrants to the original retail owner for the duration of this warranty, its MC 615 VHF Marine Radio (hereinafter referred to as the 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 user shall terminate and be of no further effect One (1) Year after the date of original retail sale. This warranty will be deemed invalid if the product is (A) Damaged or not maintained as reasonable and necessary, (B) Modified, altered, or used as part of any conversion kits, subassemblies, or any configurations not sold by Uniden, (C) Improperly installed, (D) Repaired by someone other than an authorised Uniden Repair Agent for a defect or malfunction covered by this warranty, (E) Used in conjunction with any equipment or parts or as part of a system not manufactured by uniden, (f) Installed, or serviced by anyone other than an authorised Uniden Repair Agent, (G) Where the Serial Number label of the product has been removed or damaged beyond recognition.

PARTS COVERED: This warranty covers for 1 year; the Transceiver and Microphone only. All accessories, (Leads, brackets, Clips, Screws etc), are covered for 90 days only.

STATEMENT OF REMEDY: In the event that the product does not conform to this warranty at any time while this warranty is in effect, the warrantor will at its discretion, repair the defect or replace the product and return it to you without charge for parts or service. THIS WARRANTY DOES NOT COVER OR PROVIDE FOR THE REIMBURSEMENT OR PAYMENT OF INCIDENTAL OR CONSEQUENTIAL DAMAGES.

WARRANTY CARD: If a warranty card had been included with this product then please fill it in and return it to us within 14 days of purchase. Your name and the serial number of the product will then be registered in our database and this will help us to process your claim with greater speed and efficiency should you require warranty service.

PROCEDURE FOR OBTAINING PERFORMANCE OF WARRANTY. In the event that the Product does not conform to this warranty, the Product should be shipped or delivered, freight pre-paid, with evidence of original purchase, (eg/ a copy of the sales docket), to the warrantor at:

UNIDEN AUSTRALIA PTY. LTD. SERVICE DIVISION
345 Princes Highway, Rockdale, Sydney N.S.W. 2216
Ph (02) 599 3100 Fx (02) 599 3278

Customers in other States should ship or deliver the Product
freight pre-paid to their nearest Uniden Authorised Repair Centre.
(Contact Uniden for the nearest Warranty Agent to you).