

## MC 610 MARINE RADIOTELEPHONE OWNER'S MANUAL

## **UNIDEN MC610**

The UNIDEN MC610 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 MC610 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 MC610 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 splash proof housing for protection of the electronics.

## INSTALLATION

**CAUTION:** The MC610 will operate only with nominal 12 volt negative ground battery systems.

It is important to carefully determine the most suitable location for your MC610 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 MC610 so that you can most conveniently use your radio. Features which should be considered are:

 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.
- 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.

## 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 MC610 are:

- Select a location is free from spray and splash.
- 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.
- Keep the antenna lead as short as possible. Long antenna leads can cause substantial loss of performance for both receiving and transmitting.
- Locate your antenna as high as possible and clear from metal objects. The reliable range of coverage is a direct function of antenna height.
- Select a location that does not allow the radio to be subjected to direct sunlight (including that coming through windows).
- Select a location that allows free air flow around the heat sink on the rear of the radio.

 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. Mark 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



- Channel Selector . . . Selects the desired channel. LED display shows 01 through 88. All channels are displayed by two digits, including "0" on the first digit.
- ② Microphone Connector . . . Receptacle for microphone connection.
- ③ ON/OFF VOLUME . . . Turns power on and adjust the listening level. Whenever the power is turned on, the unit automatically goes to Channel 16.
- ④ SOUELCH . . . Used to silence the background noise when no signal is being received. Turn the knob just past the point where background noise stops.
- (5) DIM/BRIT Selector . . . Adjusts the brightness of the display.
- (6) 1W/25W Selector . . . Controls transmitter output power. Use the 1W (WATT) position for in-port or short range communications.

- CH16 Selector . . . Provides instant tuning to CH16 overriding Rotary Channel selector. LED indicator and Channel display will indicate when unit is on Channel 16. When you press "OFF", the channel will go back to the channel tuned just before you pressed "CH16". The Channel display will go back to that channel.
- Indicator . . . Glows red in the transmit mode.
- ③ CH16 LED Indicator . . . Lights when CH16 SELECTOR is activated.
- 1 WATT LED Indicator . . . Shows when unit is switched to Low power (1 WATT).
- 1 LED Channel Display . . . Indicates channel in use.

**COUTION:** When CH87A is used, **LED** channel display shows as 87, 8 (bigger than 7) and 7 (smaller than 8) by comparison.

## **REAR PANEL CONNECTORS**



- REMOTE Speaker Connector . . . If you want to use another speaker in addition to the one in the unit, a four or eight ohm speaker equipped with a miniature phone plug may be connected to this jack. To operate, connect external speaker (not supplied) with this phone plug into jack located on back of unit. Note that both speakers built-in and external can be used simultaneously.
- ② DC Power Connector . . . Make the battery connections with the cable supplied. Remember, red is +, black is -. The power cord is equipped with a fuse to protect the radio. Use only a 6A fast blow fuse for replacement. This fuse is supplied with the unit as an accessory.
- ③ ANT Connector . . . Connect the antenna here. A type PL259 connector is required to make proper connection.

## **REVERSING THE FRONT PANEL**



- (8) CAREFULLY REPLACE COVER CABINET ON BOTTOM OF RADIO. INSERT UNDER FRONT PANEL FIRST AND THEN LOWER AT REAR OF RADIO.
- (9) TURN RADIO OVER AND RECONNECT SPEAKER WIRE LEADS.
- (10) REPOSITION SPEAKER CABINET ON TOP OF RADIO AND REPLACE FOUR SCREWS TO SECURE THE HOUSING.
- (11) RETIGHTEN FOUR APPEARANCE COVER SCREWS.

## **CHANNELS AND FUNCTIONS**

#### VHF FM MARINE RADIOTELEPHONE (INTERNATIONAL CHANNELS)

DESIGN	FREQUENCY (MHz)		TYPE	SHIP	SHIP	PERMANENT
	SHIP	SHORE	TRAFFIC	TO SHIP	TO SHORE	SCAN LIST
01	156.050	160.650	VTS	Yes	Yes	
02	156,100	160.700	Port Ops	Yes	Yes	
03	156.150	160.750	Port Ops	Yes	Yes	
04	156.200	160.800	Port Ops	Yes	Yes	
05	156.250	160.850	VTS	Yes	Yes	
06	156.300	156.300				
			Safety	Yes	No	
07	156.350	160.950	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	Fish
10	156.500	156.500	Com'l	Yes	Yes	
11	156.550	156.550	Com'l	Yes	Yes	
12	156.600	156.600	Port Ops	Yes	Yes	
13	156.650	156.650	Navigational	Yes	Yes	
14	156.700	156.700	Port Ops	Yes	Yes	
15	156.750	156.750	Environmental	Yes	Yes	Environmental
16	156.800	156.800	Safety Calling	Yes	Yes	Environmental
17	156.850	156.850	State Control			
18			Com'l	Yes	Yes	
	156.900	161.500		Yes	Yes	
19	156.950	161.550	Com'l	Yes	Yes	
20	157.000	161.600	Port Ops	Yes	Yes	
21	157.050	161.650	Coast Guard	Yes	Yes	
22	157.100	161.700	Coast Guard	Yes	Yes	
23	157.150	161.750	Coast Guard	Yes	Yes	
24	157.200	161.800	Public Corresp.	No	Yes	Busy Tel.
25	157.250	161.850	Public Corresp.	No	Yes	Busy Tel.
26	157.300	161.900	Public Corresp.	No	Yes	Busy Tel.
27	157.350	161.950	Public Corresp.	No	Yes	Busy Tel.
28	157.400	162.000	Public Corresp.	No	Yes	
60	156.025	160.625	rubiic corresp.	140	162	Busy Tel.
61	156.075	160.675	4			
62						
	156.125	160.725				
63	156.175	160.775				
64	156.225	160.825		00.5470	1	
65	156.275	160.875	Port Ops	Yes	Yes	
66	156.325	160.925	Port Ops	Yes	Yes	
67	156.375	156.375	Com'l	Yes	No	
68	156.425	156.425	Non Com'l	Yes	Yes	Fish
69	156.475	156.475	Non Com'l	Yes	Yes	Fish
71	156.575	156.575	Non Com'l	Yes	Yes	Fish
72	156.625	156.625	Non Com'l	Yes	No	Fish
73	156.675	156.675	Port Ops	Yes	Yes	1 1311
74	156.725	156.725	Port Ops	Yes	Yes	
77	156.875	156.875	Port Ops			
78				Yes	No	
78	156.925	161.525	Non Com'l	Yes	Yes	
	156.975	161.575	Com'l	Yes	Yes	
80	157.025	161.625	Com'l	Yes	Yes	la agrico conserva da conserva
81	157.075	161.675	Coast Guard	Yes	Yes	Coast Guard
82	157.125	161.725	US Gov Only	Yes	Yes	
83	157.175	161.775	Coast Guard	Yes	Yes	Coast Guard
84	157.225	161.825	Public Corresp.	No	Yes	Busy Tel.
85	157.275	161.875	Public Corresp.	No	Yes	Busy Tel.
86	157.325	161.925	Public Corresp.	No	Yes	Busy Tel.
87	157.375	161.975	Public Corresp.	No	Yes	Busy Tel.
87A	157.375	157.375	and concept			5059 101
88	157.425	162.025	Com'l	Yes	No	Busy Tel.
					E	

**CAUTION:** OPERATION ON CHANNELS 15 AND 17 HAS BEEN ELECTRONICALLY RESTRICTED TO LOW POWER TO PROTECT CH.16, THE DISTRESS FREQUENCY.

#### ENGINE NOISE SUPPRESSION

Interference from the impulse noise generated by the electrical systems of engines is sometimes a problem with radios. The MC610 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.

#### CARE AND MAINTENANCE

Your MC610 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 you 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



## TWO YEAR LIMITED WARRANTY

WARRANTOR. SANTRONIC AGENCIES PTY. LTD. 13 Garema Circuit, Kingsgrove NSW 2208 ("SANTRONIC").

**ELEMENTS OF WARRANTY.** SAN-TRONIC warrants, for the duration of this warranty, its UNIDEN Product to be free from defects in materials and craftsmanship with only the limitation or exclusions set out below.

**WARRANTY DURATION.** This Warranty shall terminate and be of no further effect Two (2) years after the date of original purchase of the Product or at the time the Products is (a) damaged or not maintained as reasonable and necessary, (b) modified, (c) improperly installed, (d) is repaired by someone other Warrantor for a defect or malfunction covered by this Warranty, or (e) used in a manner or purpose for which the Product was not intended.

**PARTS COVERED.** This Warranty covers all components of the Products.

**STATEMENT OF REMEDY.** In the event that the Product does not conform to this Warranty at any time while this Warranty is effective, Warrantor will repair the defect and return it to you prepaid, without charge for parts, service, or any other costs incurred

by Warrantor or its representatives in connection with the performance of this Warranty. In addition, if the Product contains a defect or malfunction which is not repaired after a reasonable number of attempts by Warrantor to repair the Product, the Product or defective component will at our discretion, be replaced without charge, when the defective product is delivered to the warrantor at 13 Garema Circuit Kingsgrove NSW 2208 free and clear of all liens and encumbrances. Please note that while the Product will be remedied under this Warranty without charge, THIS WARRANTY DOÉS NOT COVER OR PROVIDE FOR THE REIMBURSEMENT OR PAYMENT OF IN-CIDENTAL OR CONSEQUENTIAL DA-MAGES.

**PROCEDURE FOR OBTAINING PER-FORMANCE OF WARRANTY.** In the event that the Product does not conform to this Warranty, the Product should be shipped prepaid to Warrantor at 13 Garema Circuits Kingsgrove NSW 2208. THE ORIGINAL OR COPY OF THE SALES RE-CEIPT OR OTHER VALID EVIDENCE OF THE DATE OF THE ORIGINAL PURCHASE MUST ACCOMPANY THIS PRODUCT.

### Sanfronic)

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