#### LIST OF AVAILABLE MODELS AND COMPONENTS

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Model	Description	Specifications	
RC613	Single Channel Receiver 3-way switching module	15 Amp Resistive, 10 Amp (1200 Watt) Tungsten, 1 HP Motor Load - 120 Volt	
RC613L	Single Channel Receiver with 36 in. Lead	15 Amp Resistive, 10 AMp (1200 Watt) Tungsten, 1 HP - 120 Volt, Single Pole Single Throw Contacts.	
RC613R	Heavy-Duty Receiver and Relay Assembly	30 Amp Resistive - 120/240 Volt, 12.5 Amp (1500 Watt) Tungsten - 120 Volt, 1.5 HP - 120 Volt, 3 HP - 240 Volt Double Pole Single Throw Contacts	
RC615	Single Channel Receiver Timer Override Module	15 Amp Resistive, 10 Amp (1200 Watt) Tungsten 1 HP Motor Load - 120 Volt	
RC939	3 Channel Transmitter	Operates on 9 Volt Battery	
P1103ME	24 hr. Timer Mechanism Only	20A. Resistive, 120-240V; 10A. Tungsten 120V; 1.5 HP-120V, 3HP-240V; 50/60 Hz; DPST  Note: Remove and discard leads between clock terminals 1 and 3 (jumper only) and 5 and relay. Connect BLUE leads from Receiver to clock terminals 3 and 5. Connect RED lead from Receiver to Relay coil. Connect BLACK and WHITE from Receiver to BLACK and WHITE of Timer and to 120 volt supply. Connect 120V. load to BLUE and WHITE, cap unused leads. For 240V. connections follow instructions supplied with timer.	

TROUBLESHOOTING			
Symptom	Possible Cause(s)	Corrective Action	
No response to transmitter signal at anytime	No power Loose connection(s) at receiver and/or load Transmitter battery dead Receiver and transmitter are on two different codes Faulty transmitter Faulty receiver	<ul> <li>.Check connections</li> <li>.Replace battery</li> <li>.Change code settings (see page 3)</li> <li>.Check battery connections, replace transmitter</li> </ul>	
No response to transmitter signal some of the time	Weak Battery Appliance with brush type motor is in use Other radio transmitter (police, etc) is operating nearby Receiver is at edge of range	. Relocate appliance and/or connect to another circuit     . Change master code of transmitter (See page 3)	
Insufficient Range	Weak battery Antenna too close to ground Transmitter is held too close to ground Weak signal due to obstruction	. Relocate Receiver Module . Hold transmitter at least 3 ft. above ground	
Nuisance operation	Other radio transmitter (police, etc) is operating nearby	If frequent - install surge suppressor	

#### **LIMITED ONE YEAR WARRANTY**

If within the warranty period specified, this product fails due to a defect in material or workmanship, Intermatic Incorporated will repair or replace it, at its sole option, the unit free of charge. This warranty applies only to the original purchaser and is not transferable. This warranty does not apply to: (a) damage caused by accident, abuse, mishandling, dropping, acts of God, or any negligent use; (b) units which have been subject to unauthorized repair, opened, taken apart, or otherwise modified; (c) units not used in accordance with instructions; (d) damages exceeding the cost of the product. Some states do not allow a limitation of damages, so the foregoing limitation may not apply to you. This warranty gives you specific legal rights and you may have other rights that vary from state to state.

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This warranty service is available by either (a) returning the product to the dealer from whom the unit was purchased, or (b) mailing the product, along with proof of purchase, postage prepaid to the authorized service center listed below. This warranty is made by: Intermatic Incorporated/After Sales Service, 7777 Winn Rd., Spring Grove, IL 60081-9698/815-675-7000 http://www/intermatic.com Please be sure to wrap the product securely when mailing to avoid shipping damage.

Because of our commitment to continuing research and improvements, Intermatic Incorporated reserves the right to make changes, without notice, in the specifications and material contained herein and shall not be responsible for any damages, direct or consequential, caused by reliance on the material presented.

## INTERMATIC INCORPORATED, SPRING GROVE, IL 60081-9698

http://www.intermatic.com



INSTALLATION OPERATION & SERVICE MANUAL

# SINGLE CHANNEL RADIO RECEIVERS

Model: RC613, RC613L Switching Module / Model: RC615 Timer Override Module

For indoor and outdoor use, suitable for Pool/Spa equipment control

ELECTRICAL RATING: 15 Amp Resistive, 1200 Watt Tungsten, 1 HP Motor Load - 120 Volt.

**THIS DEVICE COMPLIES WITH FCC RULES PART 15.** Operation of this device is subject to the following two conditions 1. This device may not cause harmful interference. 2. This device must accept any interference that may be received, including interference that may cause undesired operation. FCC rules prohibit adjustments to or modification of receiver and transmitter circuitry except for replacing the remote control battery. THERE ARE NO OTHER USER SERVICEABLE PARTS.

### IMPORTANT SAFETY INSTRUCTIONS

- 1. This Control must be installed by a qualified electrician, according to National and Local Electrical Codes.
- 2. USE COPPER CONDUCTORS ONLY. If applicable, install this Control not less than 5 feet (3 meters for Canadian installations) of inside edge of pool or spa.
- 3. Do not exceed the maximum ratings of individual components, wiring devices, and current carrying capacity of conductors.
- 4. For grounding of the installation, refer to section 250 and 680 of the National Electrical Code.
- 5. This Control should not operate any equipment which would cause bodily injury or property damage should it be activated unexpectedly.
- 6. Always disconnect electricity at main panel before servicing this Control or the equipment(s) connected to it. THIS CONTROL IS NOT TO BE USED AS A POWER DISCONNECT.

READ. FOLLOW AND SAVE THIS INSTRUCTION MANUAL

## **GENERAL INFORMATION**

These Modular Radio Receivers are one half of a two part remote control system. They operate as ordinary ON/OFF switches but they also respond to the signals of a hand held transmitter - the other half of the system. The modules are designed for indoor or outdoor use, and can handle a variety of switching applications, typical around the house or farm. By the push of a button on the face of the transmitter, the user is able to turn ON/OFF the connected load (lights, pump, etc.) from any remote location\*, safely and conveniently. In addition, a single transmitter can operate up to four Receivers and is able to "teach" each Module a different code. (Transmitters are sold separately).

**Model RC613 Receiver Module** comes with its own manual ON/OFF button and it is intended to be installed at the location of the load. The connected load may be turned ON/OFF using the hand-held transmitter or turned ON/OFF by pushing the red button on the face of the Receiver.

**Model RC613L Receiver Module** is the same as RC613 except that it comes with extra long (36 in.) leads.

**Model RC615 Receiver Module** is the same as the RC613L Module above, except it has no manual ON/OFF button on its face. This Module is designed to be connected to a timer and will override its pre-set program, without affecting the next automatic operation. At-site control of the load is possible by the ON/OFF switch of the timer.

\* The open field range is 200 feet but depends on many factors like the age of the battery, proximity of large metal objects, the location of the receiver and environmental conditions at the time of transmission.



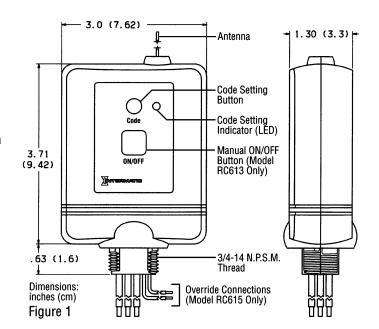
158RC12810

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### SPECIFICATIONS AND OTHER INFORMATION

#### **USEFUL INFORMATION**

- 1. Radio Receivers are sensitive to heat. Avoid mounting them above heater, air conditioner or exposed to afternoon sun.
- 2. The higher the Receiver Module, the longer its range. For good range and reliable reception, install modules as high as practical above ground level with **antenna at top**.
- 3. Large metal objects divert radio signals. Avoid mounting Receiver Modules on metal wall, fence or near large metal objects.
- 4. Environmental conditions could effect the operation of the remote control system. For example, in rain the range may be less than normal.
- 5. Certain electric equipment like brush type motors or electronic gas heater igniters emit radio signals and can effect the function of the Receiver Module. Avoid mounting modules near such equipment.
- 6. To prevent electronic interference, install Receiver Modules at least 3 feet apart.

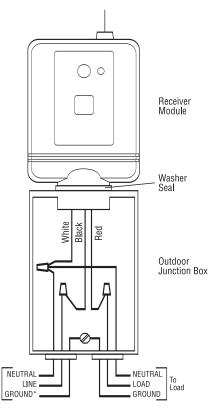


## INSTALLATION

# A. ON/OFF Switching Application - use Model RC613 or RC613L

Make sure the intended load is within the capacity of the Module, see ratings on page 1 and other choices on page 4.

- 1. Attach Receiver Module to the top of an outdoor grade junction box. Make sure the assembly is raintight.
- 2. Select the proper location (see Useful Information above) and install Receiver assembly on a vertical surface or other support, using hardware, suitable for the purpose.
- 3. Prepare the necessary conduit runs as required by the installation layout and pull-in the specified conductors.
- 4. Follow wiring diagram A on the right, make wire connections as shown.
- 5. Turn ON power and test installation, using the ON/OFF button on face of the Receiver Module. Replace junction box cover, make sure the installation is secure and raintight.
- 6. Set code, see Operating Instructions on page 3.



\*Ground connections may or may not be as shown. **Diagram A** 

# B. Timer Override Application - use Model RC615

An existing timer can only be upgraded if the load connected to the timer is within the capacity of the Receiver Module, see page 4. Otherwise, the timer mechanism must be replaced with Intermatic Model P1103ME, see also note on page 4.

- 1. Select the proper location (see Useful Information on page 2) and install a radio compatible timer on a vertical surface or other support, using hardware, suitable for the purpose.
- 2. Prepare the necessary conduit runs as required by the installation layout and pull-in the specified conductors.
- 3. Use one of the side knock-outs and a suitable conduit-L, attach Model RC615 Receiver Module to timer enclosure.
- 4. Follow wiring diagram B on the right, make wire connections as shown.
- 5. Turn ON power, and test installation, using the ON/OFF control of the timer.
- 6. Set code, see operating instructions on page 3.

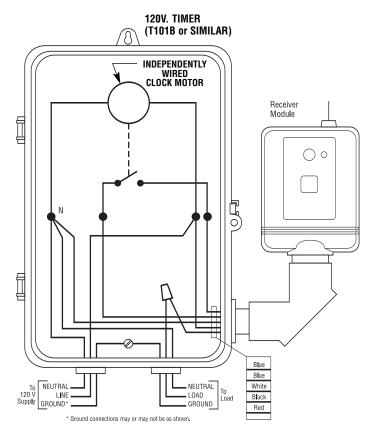


Diagram B

### **OPERATION**

In case this device is used to operate pool/spa equipment...

## **DANGER!** To Reduce the Risk of Injury:

... do not permit children to operate the Control Unit or use the Pool/Spa unless they are closely supervised at all times. ... test GROUND FAULT protection regularly. If it fails to reset, DO NOT USE THE POOL or SPA! Contact a gualified service technician.

#### A. To Set Code

Receiver Modules have the capacity to "learn" and remember a unique code, generated by a transmitter. The transmitter will operate only the designated one or more receivers simultaneously. In addition, each transmitter can "teach" and operate up to three different sets of Receivers. Also, more than one transmitter can be assigned to operate the same Receivers.

- 1. Turn ON the main power and manually operate the load a few times, then turn load OFF.
- 2. Holding the Transmitter close to the Receiver Module, press and hold the push button you choose to operate that particular Module. The red LED indicator should now be lit.
- 3. Press the "CODE SET" button on the face of the Receiver Module until the green light next to the button flashes ONCE (about one second).

- 4. Code setting is now complete. Release the transmitter button and test installation by pressing repeatedly on the chosen transmitter button. The load should cycle ON/OFF, if not, repeat steps 2 and 3 above.
- 5. If more than one Receiver Module is in use, repeat above procedure on the next Receiver Module and hold down the SAME transmitter button in step 2 if the Module is supposed to function TOGETHER with the first or a DIFFERENT button if it is supposed to operate INDEPENDENTLY.

**To erase all memorized codes,** press and hold CODE SET button on Receiver Module, until the green indicator light alongside goes out (in about 6 seconds).

To operate a Receiver Module with more than one transmitter, set master code switch, next to the battery in transmitters to the same setting.

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