

# **INTERMATIC®**

RC SERIES  
REMOTE CONTROLS

## **INSTALLATION OPERATION & SERVICE MANUAL**

### **SINGLE CHANNEL RADIO RECEIVERS**

#### **Model: RC713 Switching Module**

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

**ELECTRICAL RATING: 10 Amp Resistive, 600 Watt Tungsten, 1/3 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 and 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**

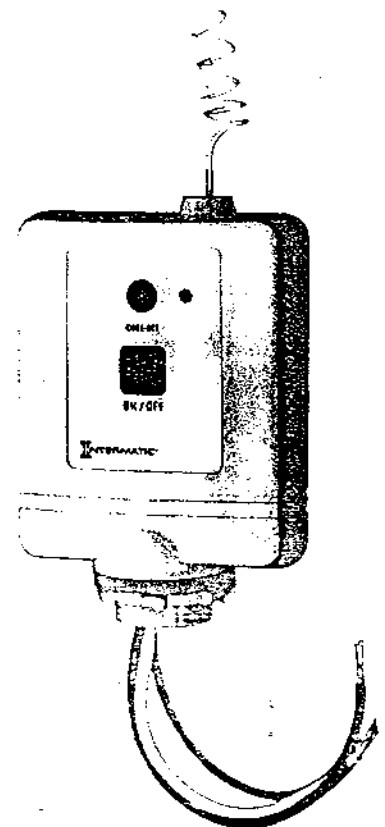
1. This Control must be installed by a qualified electrician, according to National and Local Electrical Codes.
  2. **USE COPPER CONDUCTORS ONLY.** If applicable, install this Control not less than 5 feet of inside edge of pool or spa.
  3. Do not exceed the maximum ratings of individual components, 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\*, inside or outside of the house, safely and conveniently. In addition, a single transmitter can operate up to three Receivers and is able to "teach" each Module a different code. (Transmitters are sold separately).

**Model RC713 Receiver Module** comes with its own manual ON/OFF button and it is intended to be used as a three-way switch, one at the location and the other being the transmitter. The connected load will respond to either of the two controls or may be turned ON using the hand-held transmitter and turned OFF by pushing the red button on the face of the Receiver or vice versa.

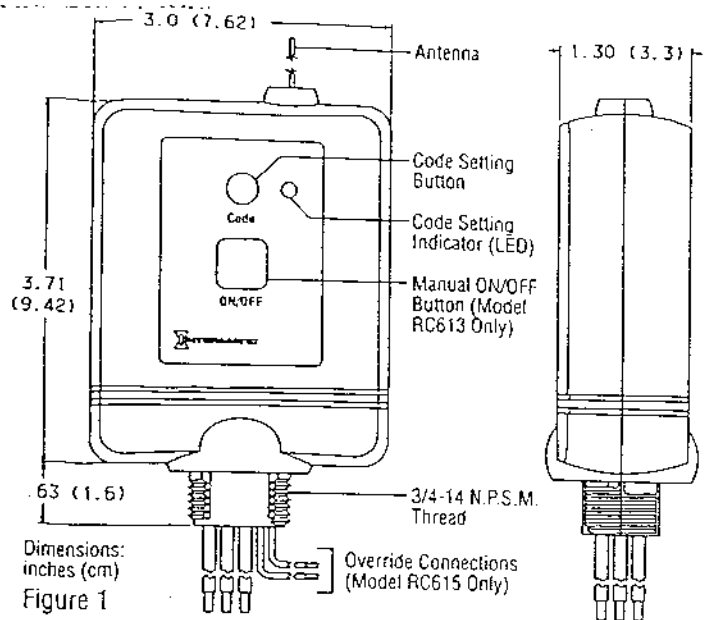


\* The range is 200 feet but depends on many factors like the age of the battery, proximity of large metal objects, the location of the receiver and environmental conditions at the time of transmission.

## 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.

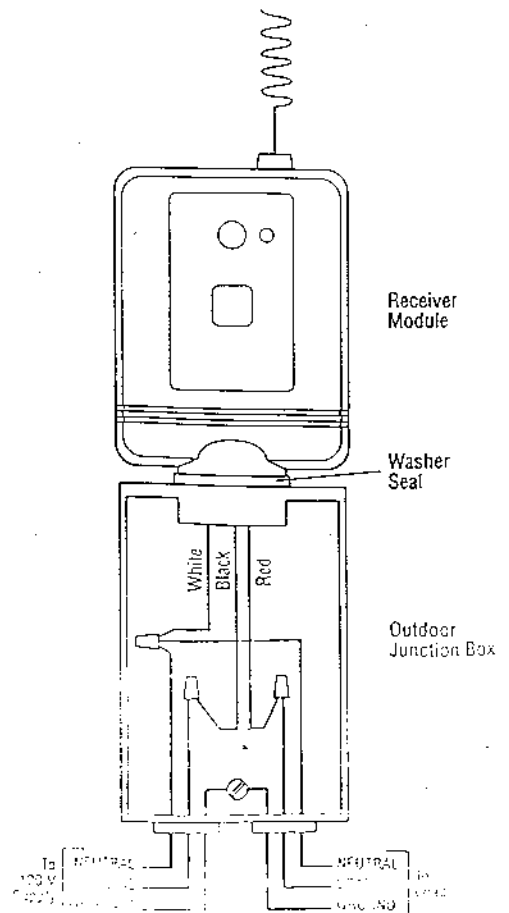


## INSTALLATION

### A. 3-Way Switching Application - use Model RC713

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 RC713 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 installation is secure and raintight.
6. Set code, see Operating Instructions on page 3.



## WARNING

Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

In addition, for a Class B digital device or peripheral or cordless phone, the user manual shall include the following or similar statement, placed in a prominent location in the text of the manual:

## NOTE

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:

Reorient or relocate the receiving antenna.

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 needed.

Consult the dealer or an experienced radio/TV technician for help.

## 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 qualified 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 chose 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.

## LIST OF AVAILABLE MODELS AND COMPONENTS

| Model  | Description                                       | Specifications  |
|--------|---|---|
| RC613  | Single Channel Receiver<br>3-way Switching Module | 10 Amp Resistive, 5 Amp (600 Watt) Tungsten, -<br>1/3 HP Motor Load - 120 Volt.   |
| RC613H | Single Channel Receiver<br>Heavy-Duty Module      | 15 Amp Resistive, 10 Amp (1200 Watt) Tungsten,<br>1 HP - 120 Volt, 2 HP - 240 Volt<br>Single Pole Single Throw Contacts.  |
| RC613R | Heavy-Duty Receiver<br>and Relay Assembly         | 20 Amp Resistive - 120/240 Volt, 12.5 Amp (1500 Watt)<br>Tungsten - 120 Volt, 1.5 HP - 120 Volt, 3 HP - 240 Volt<br>Double Pole Single Throw Contacts.  |
| RC615  | Single Channel Receiver<br>Timer Override Module  | 10 Amp Resistive, 5 Amp (600 Watt) Tungsten<br>1/3 HP Motor Load - 120 Volt.  |
| RC615T | Receiver and 24 hr. Timer<br>Assembly             | Mechanical Timer and Receiver in Outdoor Enclosure<br>Double Pole Single Throw Contacts. 20 Amp Resistive<br>- 120/240 Volt, 12.5 Amp (1500 Watt) Tungsten<br>- 120 Volt, 1.5 HP - 120 Volt, 3 HP - 240 Volt. |
| RC939  | 3 Channel Transmitter                             | Operates on 9 Volt Battery  |
| P1103M | 24 hr. Timer<br>Mechanism Only                    | Mechanical Timer Mechanism -<br>replaces Intermatic T100 Series timers and compatible<br>with RC615 Receiver. Same rating as RC615T   |

## TROUBLESHOOTING

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

## WARRANTY

If within one (1) year from the date of installation, this product fails due to a defect in material or workmanship, Intermatic Incorporated will repair or replace it free of charge.

The warranty does not cover labor for removal or reinstallation and does not apply to: (a) damage caused by accident, abuse, mishandling, or dropping; (b) a unit which has been subject to unauthorized repair; (c) units not used in accordance with directions; (d) damages exceeding the cost of the product. Some states do not allow a limitation of damages so the foregoing warranty may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

This warranty service is available, if the defective product or its defective component is returned with proof of purchase and date of installation, either (a) to the dealer from whom the unit was purchased or (b) by shipping prepaid to the Intermatic Service Center, Intermatic Incorporated, Intermatic Plaza, Spring Grove IL 60081-9698

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.

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