Installation Tips for Best Performance

To ensure best performance from this product DO NOT install the receiver on or next to a metallic surface. If this is unavoidable then the antenna will need to be brought clear of the metal via a coaxial cable. The Antenna BNC connector should be wrapped in self amalgamating tape or the internal pin coated with silicone grease if installed near SALT WATER.
If range is poor and interference from another source has been eliminated try moving or re-orientating the receiver.

Specifications

Operating Voltage	9 to 24VDC, 9 to 18VAC
Current Consumption @ 12VDC	Standby 14mA, All relays 56mA
@ 24VDC	Standby 28mA, All relays 75mA
@ 16VAC	Standby 28mA, All relays 73mA
Physical Dimensions	IP65 Case 160mm x 90mm x 55mm Antenna 200mm Bulkhead case 108x70x34
Case Material	ABS plastic
Output Channels	4
Output Ratings	SPDT relay 1 Amp switching maximum @ 24VDC. Contacts are voltage free.
Reverse Polarity Protection	Yes (diode)
RF Operating Frequency	433.92mhz
RF Signal Type (Data Transfer)	On Off Keying (OOK) Keeloq™ Code Hopping
Coding Combinations	4.2 billion
Learning Capacity (RF Devices)	170 fobs
Country of Manufacture	Australia

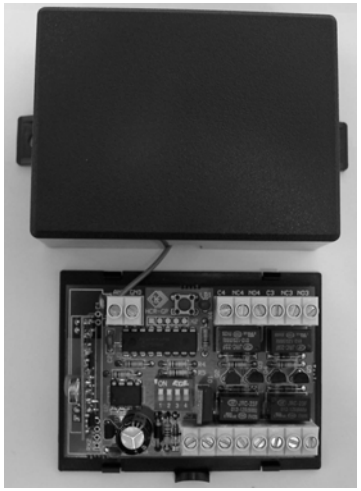
Warranty

Microlatch Pty Ltd warrants this product to be free from defects in materials and workmanship for a period of **1 Year** from date of purchase. We will in the event of failure repair or replace the product at our sole discretion. This warranty does not apply in the event of accidental damage, abuse, misuse, non approved purpose or act of God. This warranty is given in addition to any rights allowed by Australian law.

Made in Australia
for
Microlatch Pty Ltd

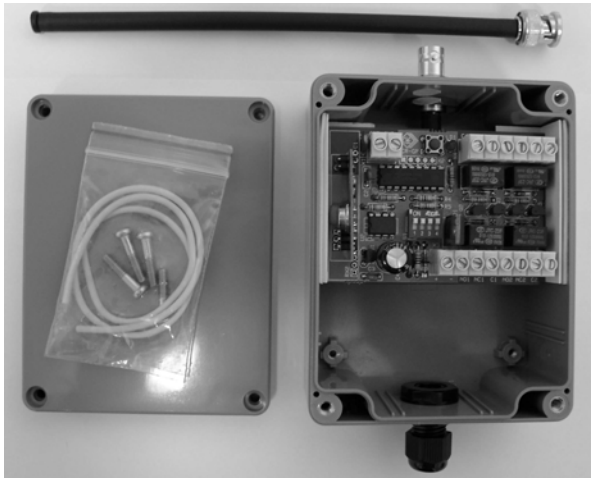
N14528

REC-14
4 Channel RF Receiver Controller



Standard Version
(Indoor) REC-14

IP65 Version
(Outdoor) REC-14IP65

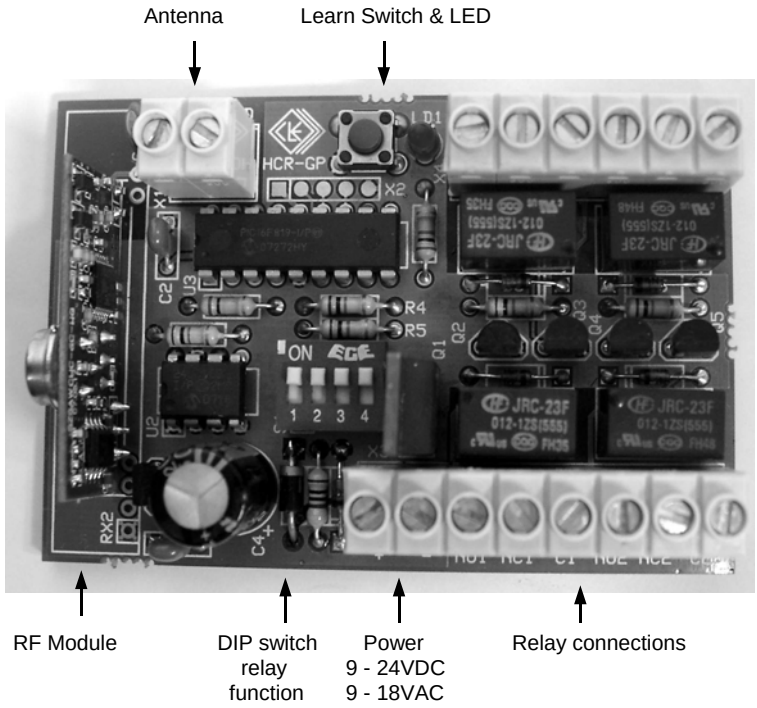


Overview

The REC-14 is a general purpose UHF receiver operating on 433.92mhz. Four single pole double throw (SPDT) outputs are available to control external devices. The receiver is designed for use with 4 channel keyfobs. This system uses code hopping technology for secure RF transmissions.

The REC-14IP65 version of the product is supplied in an IP65 rated ABS plastic enclosure which allows installation of the receiver in an external environment with water resistance. Cable entry is via a cable gland at the bottom of the case. The antenna is weatherproof and detachable.

PCB Layout



Installation (Outdoor)

The REC-14IP65 case should be wall mounted using the four (4) holes in the bottom of the case. These are outside the sealed area of the box so water ingress is minimised. The unit MUST be installed with the cable gland facing the ground for water resistance. The product is supplied with a seal for the lid of the case. This should be installed into the groove in the lid. Cut any excess off.

For installations such as electric gates the unit should be mounted next to or near the gate control box. If using a different antenna, this may be connected either to the terminals on the receiver PCB or preferably via the BNC socket on the top of the case. The REC-14 should be mounted as high as possible for best reception.

Learning Fobs

This receiver is code learning therefore making the addition of extra transmitters an easy task. Fobs supplied in kits are already learned to the receiver. In this case skip Step 1. The REC-14 can learn up to 170 fobs.

1. If the receiver is being set up for the first time it is advisable to clear the EEPROM memory. To do this hold down the LEARN/DELETE switch on the PCB. The LED will light and then extinguish after 4 seconds. The EEPROM is now empty.

2. Press the LEARN/DELETE switch briefly. The LED will flash rapidly.

3. LEARN a fob to the receiver by pressing a button on the fob. The LED will stop flashing whilst a signal is received and then give ONE flash after you let go the button to indicate successful learning of the fob.

4. Learn additional transmitters or exit by pressing the LEARN/DELETE switch once. LED off. If you forget to exit learn mode (flashing LED) the receiver will do so automatically after 20 seconds of no activity.

Deleting Fobs

Press and Hold the Learn/Delete switch. The LED will come on. When the LED extinguishes (approx 4 seconds) all codes stored in the EEPROM memory have been erased. It is not possible to delete individual fobs.

Relay Setup

Each of the four relays can operate as either **momentary** (operates whilst a transmission is received) or **latching** (changes state with each transmission). The 4 way DIP switch is used to set operation. With the switch corresponding to the relay set to the ON position the relay will LATCH. With the switch in the OFF position (default) the relay will operate in momentary mode.

Power

The REC-14 is designed to operate from 9 to 24VDC and 9 to 18VAC. The on board transistor regulator will get quite HOT when operating from 18VAC or 24VDC. This is normal. DO NOT EXCEED THESE MAXIMUM VOLTAGES.