



Technical Specifications



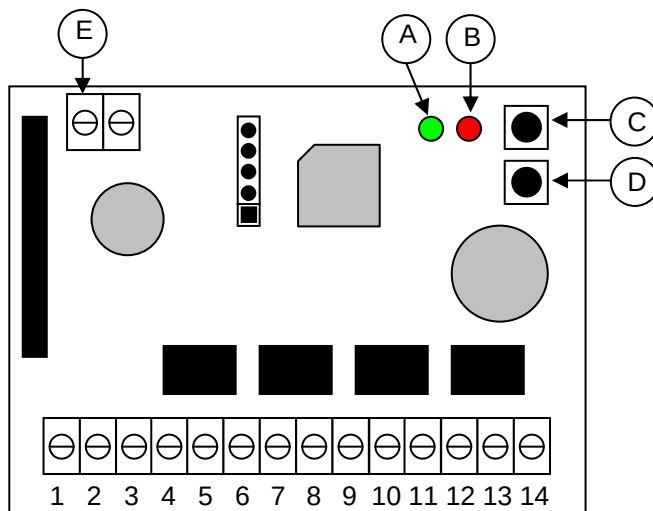
MICROLATCH™ REC-30 4-CHANNEL UNIVERSAL RECEIVER

1. Overview

The Microlatch REC-30 Universal Receiver is a multi purpose UHF receiver which supports a series of optional programmable serial interfaces. Apart from the standard 4 Single Pole Double Throw (SPDT) outputs controlling external devices, the receiver is designed for integration to any alarm panel interface. The on-board RS232 and RS485 interfaces provide full implementation to direct PC, camera network, alarm networks, multiple receiver over IP.

This system uses code hopping technology for secure RF transmissions.

2. Connection Diagram



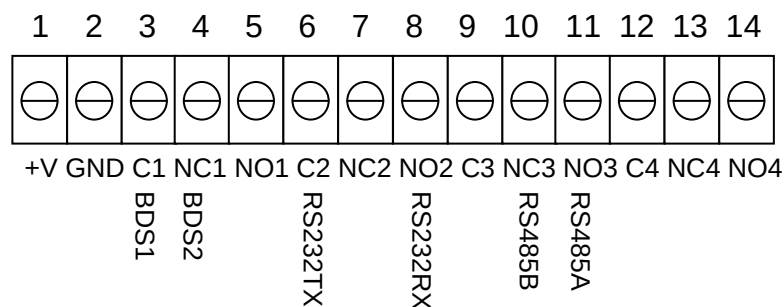
User Interface

- (A) Data Transmission Indicator (GREEN LED)
- (B) Learn Mode Indicator (RED LED)
- (C) DELETE Button
- (D) LEARN Button
- (E) ANTENNA In

REC-30 PCB Layout

3. Terminal Connections

1	Power
2	Ground
3	Relay 1 Common (Custom bi-directional serial interface 1)
4	Relay 1 Normally Closed (Custom bi-directional Serial interface 2)
5	Relay 1 Normally Open
6	Relay 2 Common (RS232TX)
7	Relay 2 Normally Closed
8	Relay 2 Normally Open (RS232RX)
9	Relay 3 Common
10	Relay 3 Normally Closed (RS485B)
11	Relay 3 Normally Open (RS485A)
12	Relay 4 Common
13	Relay 4 Normally Closed
14	Relay 4 Normally Open



REC-30 On-Board I/O Terminals

INSTALLATION AND SETUP

1. Learning Microlatch Remote Transmitters –

This receiver is code learning therefore making the addition of extra transmitters (such as Biometric Fingerprint Wireless Readers and Remote Keyfobs) an easy task.

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 DELETE Button (C) on the PCB for 5 seconds until the RED LED (B) starts flashing. The memory is now empty.
2. Press the LEARN Button (D) briefly. The LED will flash rapidly.
3. LEARN any Microlatch branded transmitters to the receiver by pressing any buttons on the remote devices.
4. Repeat Step 3 if learning additional transmitters are required or to exit learn mode (flashing LED) the REC-30 will automatically time out after a short period of time with no activity.

2. Setting operation modes on Channels 1 to 4 (Relay Outputs 1 - 4)

REC-30's 4 independent relay outputs can be configured to operate in multiple modes by setting the on-board dipswitches:

Mode 1 – Momentary (Output remains active while remote button is pressed.)

Mode 2 – Timed Operation

Mode 3 – Latching Relays

Mode 4 – Special Functions (TBA)

3. Deleting Remote Transmitter Devices

Any learned transmitters (BIO readers and remote keyfobs) can be erased altogether by following step 1 in the LEARN procedure above.

ADDITIONAL INFORMATION

Install the receiver as high as possible for best signal reception and clear of metallic surfaces, keep the aerial wire vertical and power the receiver from a regulated DC power supply.

PRODUCT SPECIFICATIONS

Microlatch™ REC-30 4-Channel Low Current Universal Receiver

Power supply	9V – 15VDC
Current consumption	Standby: 10mA Four channels activated: 250mA
Memory	250 rolling code remote devices (expanded memory optional*)
Outputs	4 buttons are mapped to the four relays. Functions are software programmable (Delay, transmission timeout) RS232* RS485* Custom serial/clock panel interface (Paradox, DSC, Vista)* 3.3V SPI Interface*
RF Operating Frequency (transceiver optional)	433.925MHz AM (-120dbm @ 3Khz) 304Mhz AM* 315Mhz AM* 868Mhz AM*
RF Signal Type	Rolling Code / Code Hopping Custom Protocols*
Outputs	4 relays – 500mA each. Normally open, Normally closed and common. Output active while button held (Within 200mS) Output programmable to momentary (default setting), timed, latched and special functions*
Design & Manufacture	Designed and made in Australia / (China for some markets)*
Compliance	EMC Tested and Approved. CE* and C-Tick Compliance Complies with AS/NZS 4268:2003, AS/NZS 4251.1:1999 FCC*

All specifications subject to change without notice in the interest of ongoing product development

* Indicates features not available on test sample units. Implementation dates to be advised.

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