

These boards provide the basis for many different configurations of low cost radio remote control systems. Standard 1/2/3/4 button transmitters and matching relay output receivers are available 'off-the-shelf' in low to medium volumes. The boards can also be 'tailored' to a customers specific requirement. Up to date microprocessor technology is used to minimise cost and provide reliable operation and proven Radiometrix transmitter and receiver modules are used for all FM versions.

Applications

Industrial Remote Control
Radio Alarm Systems
Nurse/Warden Call
Lighting Control

Specifications & Options

Transmitter

Frequency VHF Operation on 173MHz FM
UHF Operation on 418/433/868MHz FM or AM

Antenna Integrated internal PCB loop

Buttons 1/2/3/4 option. Momentary positive 'click' action

Encoding 8 bit address (256 differs), 4 bit data. Holtek HT-12 compatible

Address selection Internal DIL switch accessible from battery compartment

Transmit Indication Red LED

Power 9V PP3 battery in battery compartment with clip on cover

Case Black ABS

Size 100 x 65 x 24mm

Environment Case sealed to IP40 for Industrial use

Front Panel Overlay 250 micron Polycarbonate – splash proof – wipe clean. Custom overlays available

Receiver

Frequency To match Transmitter supplied. FM/AM Superhet

Antenna External Whip standard or 50R BNC option

Decoding 'Learning' with address saved in non volatile EEPROM
Custom to match other manufacturers transmitters

Status On board LEDs for Valid Code and Learn function

Power External 12V –16V DC only. 20mA quiescent current 160mA max (4 relays on)

Outputs Volt-Free Changeover Relay. 250V AC 5 Amps max current
Momentary action to match transmitter button pressed. Simultaneous operation
Fitted with 1-4 relays to match transmitter supplied

Option 2 Power MOSFET 5A DC max. Open Drain Non-isolated

Connection Screw connectors for relays and power input via cable gland

Board Size 100 x 80 x 30mm

Case Grey ABS (The board can be supplied without case)

Case Size 115 x 90 x 55mm (excluding Antenna)

Mounting Lid removes to reveal mounting holes

Environment Case sealed to IP65 for Industrial use

Range 200 metres typical for 433MHz combination

Approvals When operating on 433MHz or 868MHz the units can be used anywhere within the European Union and are compliant with the requirements of the RTT&E directive.
418MHz versions for USA. (Require FCC Approval)

Part No TxRx5 Series. Customer Options have specific Part Numbers

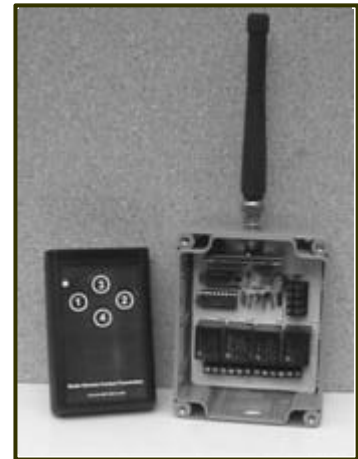


Photo shows 4 button Transmitter and 4 relay output Receiver in case with BNC Antenna

The transmitter utilises a simple encoder that provides adequate security for most applications. There are no special 'set ups' required and coding can be carried out by non-technical personnel. Transmitters can therefore be easily be replaced in the field. In addition multiple transmitters can be used with one receiver. More sophisticated transmitters can be supplied for more secure applications. The receiver software can be customised to match many industry standard protocols including Microchip 'Keeloq'. In addition special functions such as latching, timed outputs or interlocking can be incorporated. Please contact the Sales/Technical department to discuss your specific application.

nikam electronics

West End
Fairford
Gloucestershire
GL7 4JB
Tel: +44 (0)1285 713862
Email: Info@nikamelectronics.co.uk
Web: www.nikamelectronics.co.uk