

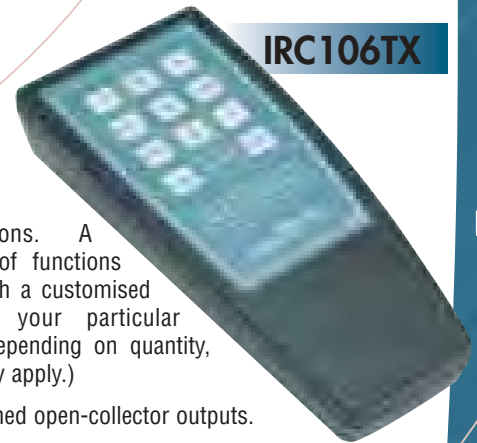
**IRC106RX**



**IRC106RLY**



**IRC106TX**



The IRC106 Industrial remote control system utilises the latest in European miniature radio technology to provide operators the freedom of movement from fixed equipment installations.

Operators requiring remote control have traditionally been tied to equipment using an umbilical cord. This has restricted movement and has made operation cumbersome, unproductive and in some cases, unsafe.

With the IRC106, operators can control up to 16 individual functions with a range of 50 metres\*. Switch functions can be momentary or latching to an open collector or optional relay output module. Diagnostic LED's provide the operator with transmit and relay output status indication. Each transmitter / receiver pair are addressed so systems can be co-located without inadvertent operation. In addition, two frequencies settings are provided for further operational isolation. #

The standard software gives a one-for-one push-button operation from the hand-held transmitter. Various failsafe options can be implemented using customised software. Charges may apply depending on the quantities and complexity required.

The in-built micro controller is capable of being customised, with specific software. The boards may be supplied unpackaged for OEM applications. The industrial communications protocol includes CRC ensuring reliable data transfer, thus preventing unauthorised operation.

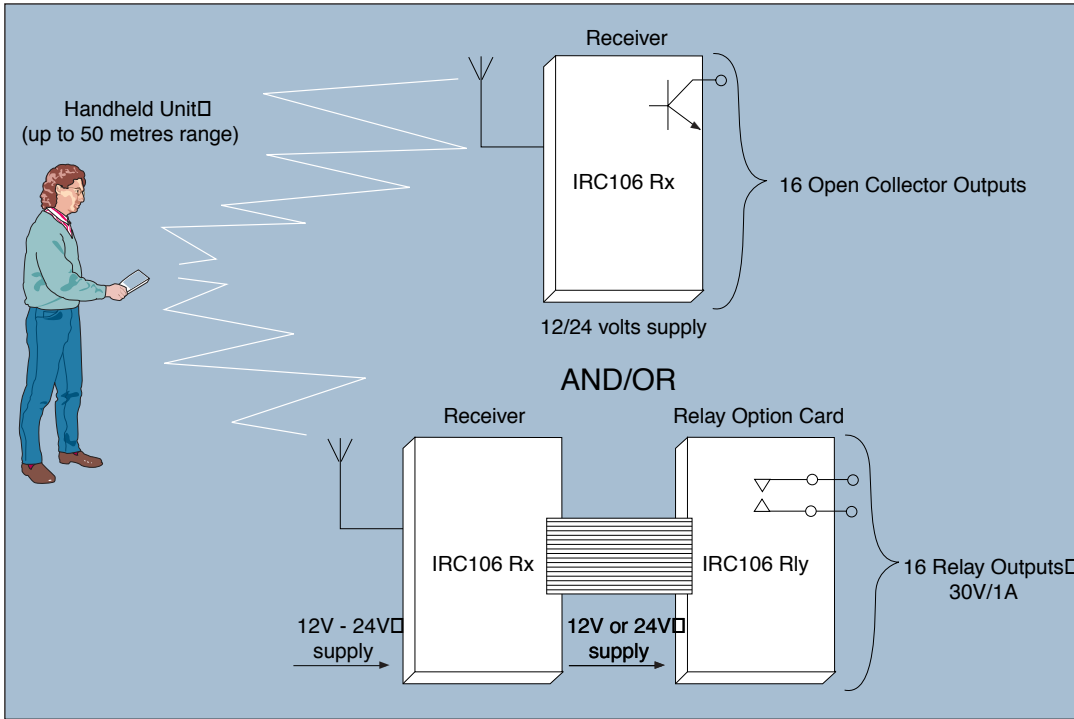
\* Control range is dependent on local RF conditions.

# Co-location of systems will be subject to RF environment of equipment.

**IRC106 features:**

- 16 digital functions. A reduced number of functions can be offered with a customised overlay to suit your particular requirements. (Depending on quantity, set-up charges may apply.)
- Momentary or latched open-collector outputs.
- Bare boards available for OEMs.
- Optional relay board.
- DIN rail mounting hardware for receiver and relay cards.
- Ergonomically designed transmitter easily operated with one hand.
- Typically 50metre range. \*
- Long transmitter battery life due to "sleep" mode when not sending information.
- 2 x AA standard batteries for transmitter.
- 64 addresses, switch selectable.
- Licence free 433MHz. Operation. 2 x frequencies selectable to reduce interference.
- Rugged industrial data communications protocol to ensure the highest communications integrity.
- Easy to integrate into existing systems.

## BASIC OPERATION OF THE IRC106 RADIO CONTROL SYSTEM



### “IRC106 TX” Hand-held Transmitter Specification:

- Up to 16 digital functions.
- Standard batteries, 2 x AA cells. Alkaline only.
- Operating period: 40 hours continuous, or 50 days at 10% usage for 8 hours per day.
- Free optional software for latching or non-latching operation.
- Licence free 433MHz operation with two TX frequencies, switch selectable.
- 64 addresses, switch selectable.
- Super bright LED to indicate TX operation.
- Dimensions, 168 x 74 x 35 mm.
- Built-in belt clip.
- Clip-in holster (optional).



### “IRC106 RX” Receiver Card Specification:

- 16 open collector outputs, each capable of 500mA @ 24Vdc.
- Power supply, 12-24 volts DC at 350 mA.
- Diagnostic LED to confirm correct decoding.
- Board mounted BNC connector for direct mounting - wave whip antenna. (Optional antenna lead can be supplied to order.)
- Dimensions, 72 x 80 mm PCB card.
- DIN rail mounting hardware included.

### “IRC106 RLY” Relay Board:

- Connects to the IRC106 RX board to provide 16 voltage free relay outputs.
- Two versions are available, IRC106 RLY/12 for 12 volt operation and the IRC106 RLY/24 for 24 volts.
- Contacts are rated at 30VDC or AC at 1 amp resistive.
- Dimensions, 72 x 80 mm PCB card.
- DIN rail mounting hardware included.

## APPLICATIONS FOR THE IRC106 RADIO CONTROLLER

**Cordless Machine Control:** Easier and safer working environment since no umbilical cable needed.

**Remote Testing:** Temporary connection to reticulation systems allows remote testing of solenoids etc.

**Hydraulic Lift Control:** Remote controlling hydraulic lifters in industrial environments allowing higher productivity and safer working conditions.

**Farm Applications:** Radio control of pumps, gates, sluices and shed doors. All these tasks can be achieved without leaving the vehicle.

**Marine Environment:** Control of winches, lights and pumps for convenient and safer locations.

**Hotel, Educational and Entertainment Applications:** Remote control of lights, air conditioning, projectors, screens etc.

**Building Industry:** The IRC 106 can be used to control lights, air conditioners, access doors, escalators, building hoists etc where additional wiring is difficult.