Radiometrix

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KFX2

UHF FM CODE HOPPING REMOTE CONTROL KEYFOB TRANSMITTER

The KFX2 is a UHF code hopping 5 button keyfob transmitter for use with the matching KDEC decoder or KRX-416-000-DIL decoder IC to provide a remote controlled link in excess of 100 metres over open ground.


Features

Figure 1: KFX2

- Designed to comply with harmonised radio standard EN 300 220-3, EMC standard EN 301 489-3 and low voltage directive.
- Usable range typically >100 m
- Versions available on 433.92MHz and 434.42MHz (others by request, please contact sales)
- Available in 1 to 5 button formats
- Led indication of transmission
- Lithium batteries for long life (6V)

Available for operation at 433.92MHz or 434.42MHz in the UK and Europe, they combine full internal filtering to ensure EMC compliance by minimising spurious radiations and susceptibilities. The KFX2 will suit one-to-one wireless remote control links in applications including car and building security and remote home/industrial control.

Technical Summary

- Crystal-locked PLL, FM modulated
- Operation using 2x CR1220 replaceable coin cells
- Code hopping secure data format
- Manchester encoding
- Led transmit indicator
- Low battery detector
- 14mA tx current
- <2uA standby current
- Battery life typically >20000 operations

Block Diagram
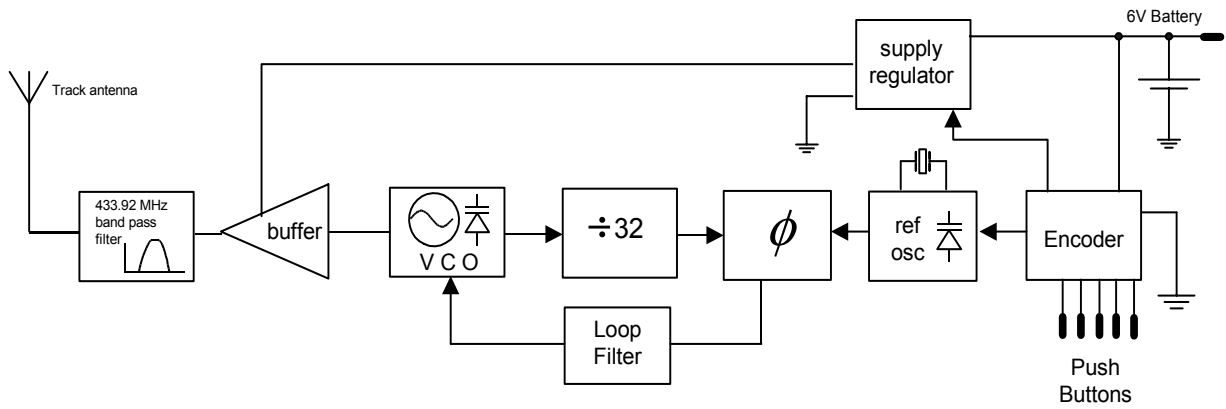
DIMENSIONS

NOTE: Keypad numbers are for illustration only, actual keypads are left blank.

Side view

Front view
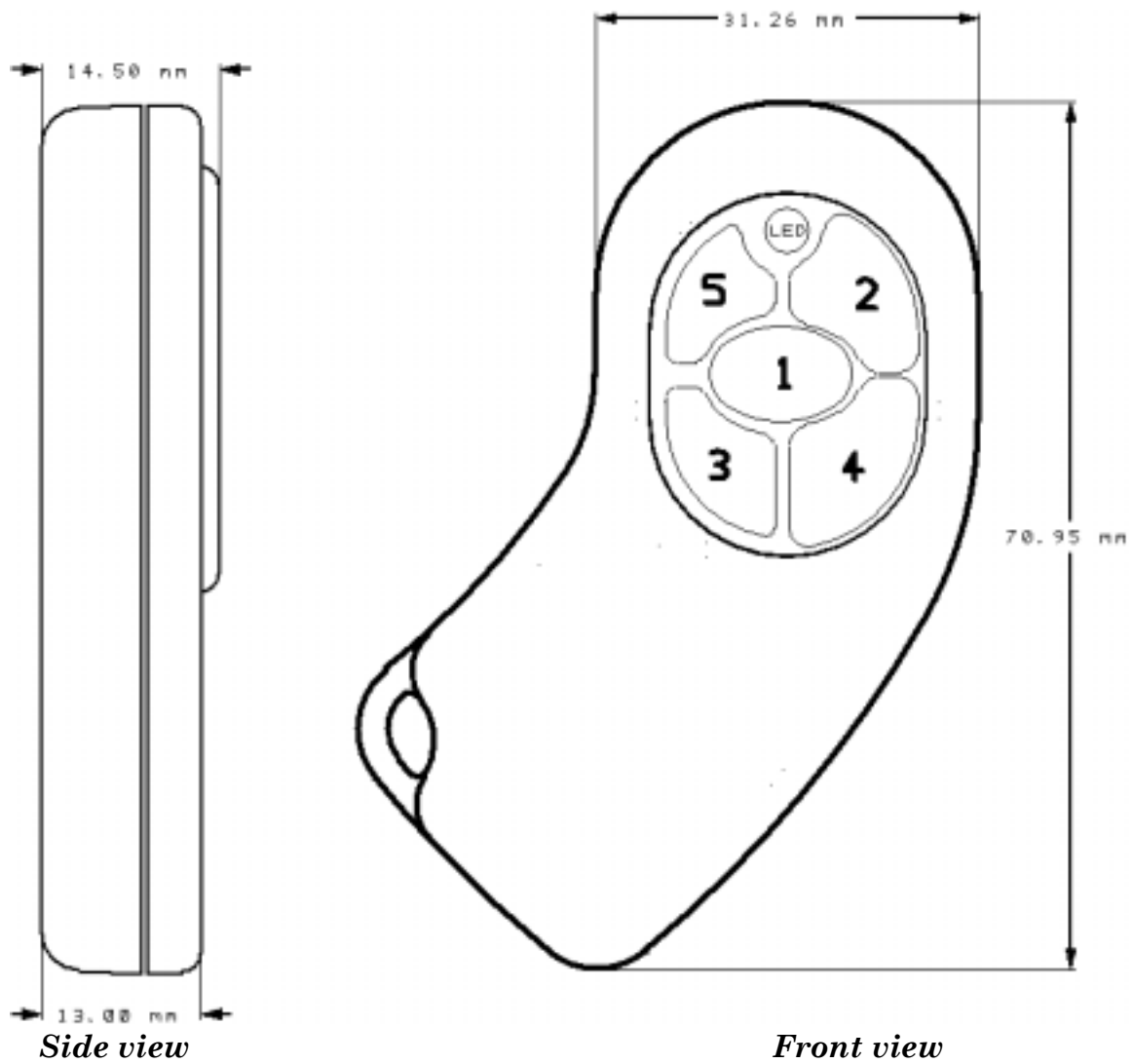
Functional description

Keypad numbers refer to relay outputs of the KDEC decoder board (refer to KDEC data sheet).

The led is illuminated each time any of the buttons are pressed to indicate transmission, either momentary or, continuous transmission up to a maximum of 30 seconds.

Battery voltage is monitored and will give a low battery indication at the receiving end when the voltage drops to 4v +/- 5%.

Power is supplied by the use of 2 CR1220 3V (6V total) Lithium button cells to achieve long battery life over extended periods.

Battery Replacement

The KFX uses 2 CR1220 lithium button cells, these are stacked into the holder one on top of the other with the (–) terminal facing down and the (+) sign uppermost for both cells.
Reverse polarity protection is built into the KFX to prevent damage to the circuitry.

To open the case care should be taken not to damage the casing, the best method is to use a "flat" headed screwdriver inserted into the key ring holder area where shown, and then, a gentle twisting action to "pop" the casing apart.
The case is re assembled by simply aligning the two halves together and then firmly snapping them together by hand.

Battery location
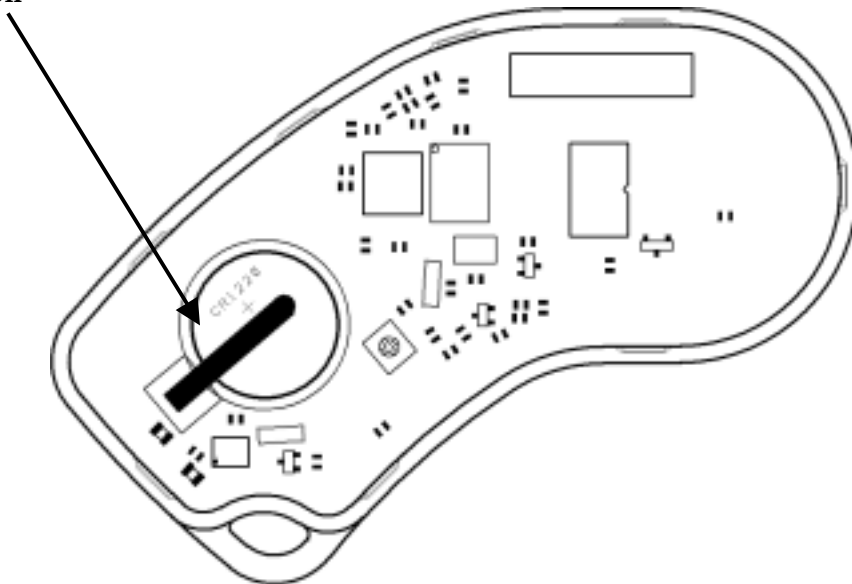
Screwdriver
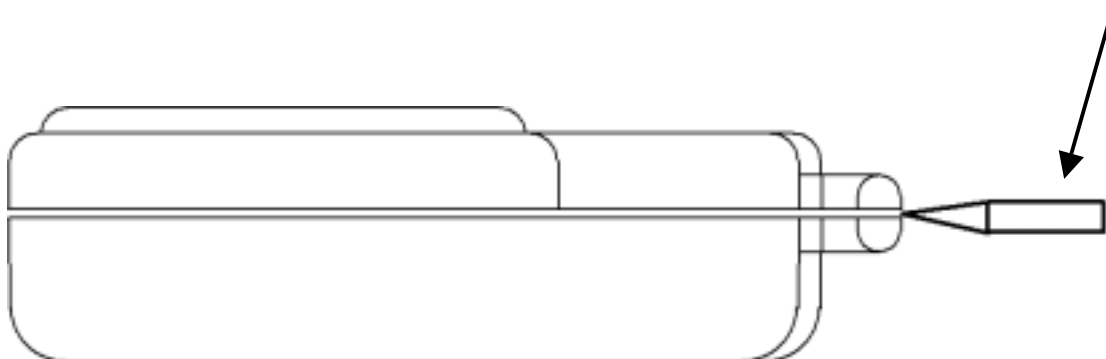
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Limitation of liability

R&TTE Directive

After 7 April 2001 the manufacturer can only place finished product on the market under the provisions of the R&TTE Directive. Equipment within the scope of the R&TTE Directive may demonstrate compliance to the essential requirements specified in Article 3 of the Directive, as appropriate to the particular equipment.
Further details are available on The Office of Communications (Ofcom) web site:

http://www.ofcom.org.uk/radiocomms/ifi/

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