



433MHz LoRa Remote Control

Features

- FSK/ FHSS LoRa Spread Spectrum
- FSK upto 500m Range
- FHSS LoRa upto 5Km Range
- Long Range **LoRa** Mode 1 to 4
- Map any Tx Switch to Any RX O/P
- 4 x Relay Changeover Contacts Rated 4A @ 230Vac (1KW)

Transmitter

- Waterproof to IP65
- Powered from 3 x AAA Batteries
- LED Acknowledgment Back from Rx
- Continuous / State change Transmit

Receiver

- 6-32Vac/dc Supply
- Waterproof Receiver (IP65)
- Outputs Momentary or Latching
- Optional Rx Acknowledge back to Transmitter
- Systems supplied 'ready to Go'



Intended Use

- Clay Pigeon Releases
- Industrial Lighting
- Gates / Roller Shutter Doors

Description:

RADIOTRAP system is designed for continuous operation 365 days of the year. This Transmitter is rate IP65 and the receiver IP65.

Each receiver has four independent changeover relay outputs which can easily be paired with individual switches from one or many transmitters. Building a bespoke control system is easy with any of the transmitters.

RADIOTRAP LoRa Remote Control



Part Numbers



Part Number	Description
RADIOTRAP-4S1	1 Channel System (Tx and Rx)
RADIOTRAP-4S4	4 Channel System (Tx and Rx)
RADIOTRAP-4R4	4 Channel Receiver only

Additional Transmitters



Part Number	Description
RADIOTRAP-4T1	1 Switch
RADIOTRAP-4T2	2 Switch
RADIOTRAP-4T3	3 Switch A, B, PAIR
RADIOTRAP-4T4	4 Switch
RADIOTRAP-4T16	8 + Shift Key / 16 Function

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Part Numbers for Clay Release Systems



Part Number	Description
RADIOTRAP-4S1	1 channel System
RADIOTRAP-4S1PRM	1ch System Prewired for Promatic (Hirschman)
RADIOTRAP-4S1LAP	1ch System Prewired for Laporte



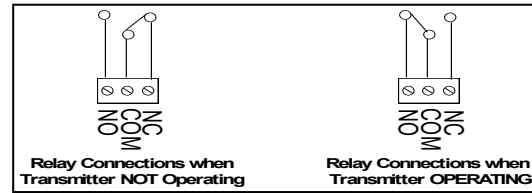
Part Number	Description
RADIOTRAP-4S3SPORT	Sporting System (TX & 2 x RX's)

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Relay Outputs:

The receiver provides 4 changeover relay contacts each capable of switching up to 1.2KW (5A @ 230V). Each relay is independent controlled and an isolated switch. Connections are Common (COM), Normally Open (NO) and Normally Closed (NC).



Technical specifications

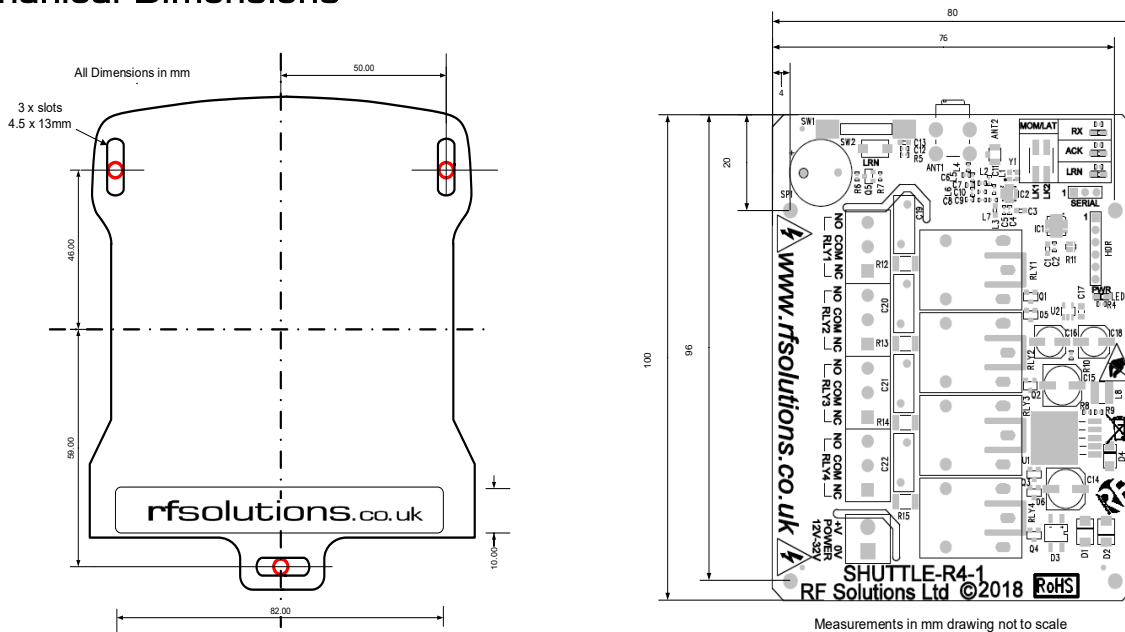
Transmitter	Enclosure Rating:	Standard IP65
	Battery Type:	3 x AAA (supplied)
	Battery Life:	2 years @ approx. 50 1/2second presses p/day
	Dimensions:	90 x 54 x 27 mm

Electrical Characteristics	Min	Typical	Max	Units
Supply Voltage		4.5		V
Supply Current		17		mA
Frequency:		433.92		MHz
RF Output Power (ERP)	-		+10	dBm

Receiver	Enclosure Rating:	IP65 (Tested against low pressure jets of water)
	Dimensions:	130 x 112 x 42 mm (not including antenna)
	Operating Temp	-10 to +50° Celsius

Electrical Characteristics	Min	Typical	Max	Units
Supply Voltage for Low Voltage version	6		32	Vdc or ac
Relay Rating		5	12	A
Supply Current : Quiescent All (4) relays operating*		25 140		mA
Time delay from Tx on Switch to Rx Relay operation		22		mS
Time delay from Tx sw relax to Rx Relay release		25		mS

Mechanical Dimensions



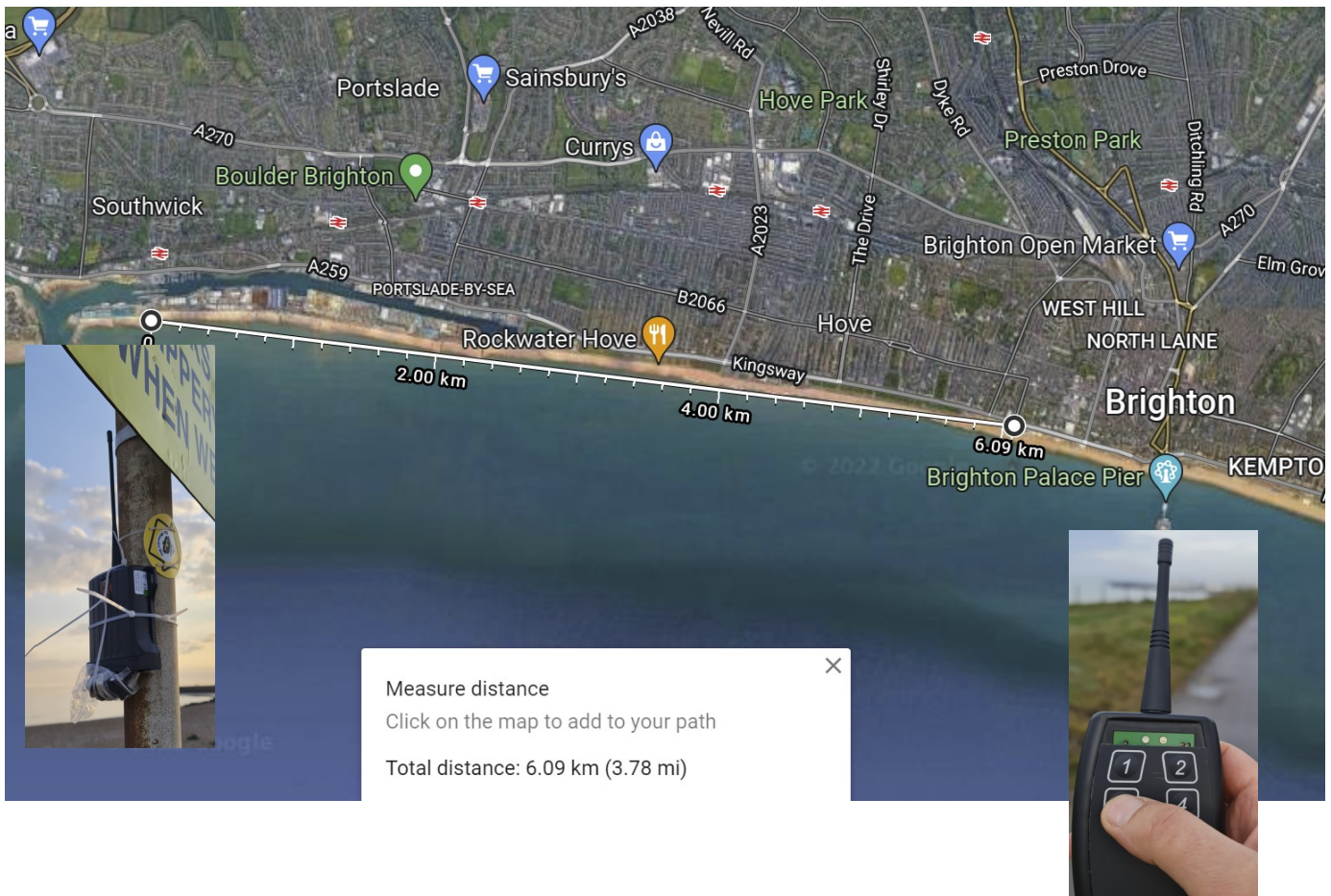
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Range Test Notes

Our Range Testing was conducted on the seafront of Brighton, East Sussex. providing an open Line of

1. The System was set to LoRa Mode 4 with "Acknowledgment Activated"
2. The Receiver was attached to a Pole ~1.7metres from the Ground (see photo).
3. Weather Conditions Warm, Damp, Cloudy, 10°C (typical England!)
4. The transmitter was carried along the seafront whilst repeatedly operated.
5. After the "Transmit Signal" was activated the "Acknowledgment Signal" back from the Receiver was monitored to confirm a successful two way signal.
6. The system exhibited some signal failures along the test in particular when not in line of sight
7. Just over 6KM range was achieved, the system was becoming reliant on holding the transmitter above head height and vertically upwards



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Meets the following EC Directives:

DO NOT Discard with normal waste, please recycle.

ROHS Directive 2011/65/EU and amendment 2015/863/EU

Specifies certain limits for hazardous substances.

WEEE Directive 2012/19/EU Waste electrical & electronic

This product must be disposed of through a licensed WEEE collection point. RF Solutions Ltd., fulfils its WEEE obligations by membership of an approved compliance scheme.

Environment Agency Producer Registration Number: WEE/JB0104WV.



equipment.

Waste Batteries and Accumulators Directive 2006/66/EC

Where batteries are fitted, before recycling the product, the batteries must be removed and disposed of at a licensed collection point.

RF Solutions Battery Producer Number: BPRN00060

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