10Km Range Rugged Remote Control

Features

- FSK/FHSS Spread Spectrum
- FSK upto 2Km Range
- FHSS (LoRa) upto 10Km 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)
- 868 / 918MHz versions

Transmitter

- IP65 Rated
- Powered from 3 x AAA Batteries
- LED Acknowledgment back from RX
- Continuous / State change Transmit

Receiver

- 6-32V ac/dc supply
- Waterproof Receiver (IP68)
- Outputs Momentary or Latching
- Optional RX Acknowledge back to Transmitter
- Maximum 30 Button Pairings
- Systems supplied 'ready to go'

Intended Use

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

Description

A versatile general purpose Remote Control System for many different applications.

Housed in rugged IP65 enclosures, the TRAP system is ideally suited to any outside Remote switching. Receivers have 4 relay outputs; using the 'easy-learn' process, each output can be controlled from one or many switches for one or many transmitters.

TRAP Remote Control

Ordering Information

Description	Receiver Power Supply	868MHz Version	918Hz Version
System 1 channel	6-32V ac or dc	TRAP-8S1	TRAP-9S1
System 4 channel		TRAP-8S4	TRAP-9S4

Additional Transmitters:

Transmitter	868MHz Version	918MHz Version
1 Switch	TRAP-8T1	TRAP-9T1
2 Switch	TRAP-8T2	
4 Switch	TRAP-8T4	TRAP-9T4
6 Switch	TRAP-8T6	
8 Switch	TRAP-8T8	
16 Switch (8Sw+Shift Key)	TRAP-8T16	TRAP-9T16

Transmitters ship with Lanyard

Additional Receivers

Description	Receiver Power Supply	868MHz Version	918MHz Version
Receiver 4 channel	6-32Vac or dc	TRAP-8R4	TRAP-9R4

Compatible Systems

TRAP products are compatible with other RF Solutions Remote Control Products and RF Modules operating on the same Carrier Frequency (868/918)

Custom Systems

To create a custom transmitter can be as simple as just a custom Sticker!

Please contact Sales for further info.

Technical specifications

TRAP-Transmitter

Enclosure Rating: IP65
Battery Life: 2 years @ approx. 50 1/2second presses per day
Dimensions: 90 x 65 x 27 mm (without overboot) 100 x 75 x 32 mm (with overboot)
Measured at widest point and not including antenna (Antenna = 85mm)

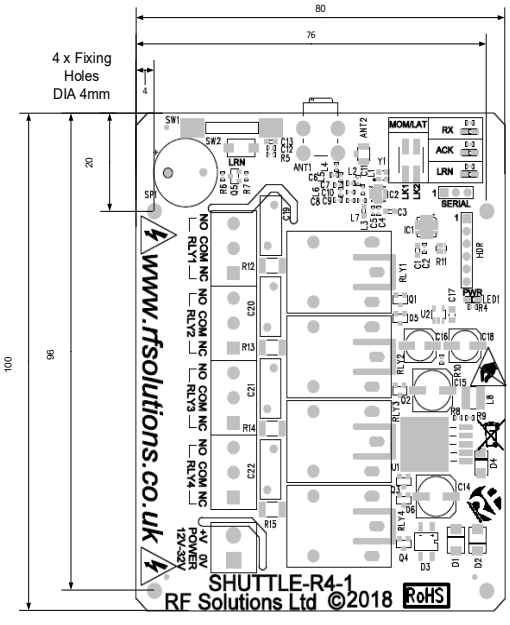
Electrical Characteristics	Min	Typical	Max	Units
Supply Voltage	3.3	4.5	6	V
Frequency		869.500 918.000		MHz
FSK Deviation 868MHz Only FHSS(868 and 918)		60 250		KHz
RF Output Power (ERP)			22	dBm

TRAP-Receiver

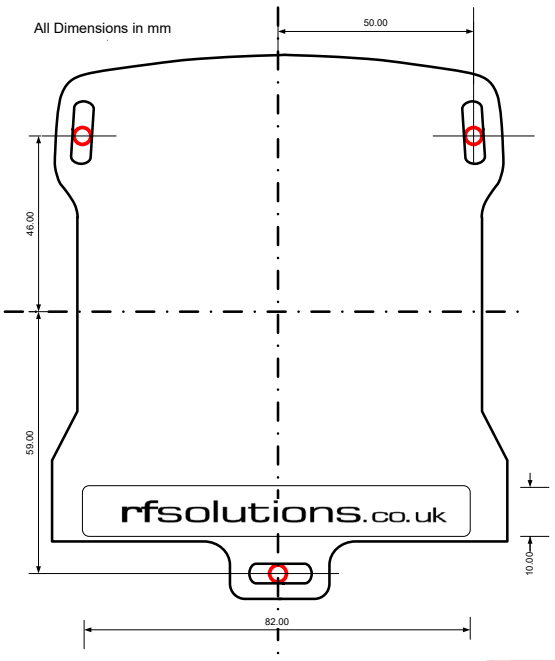
Enclosure Rating: IP68
Dimensions: 130 x 112 x 42 mm (not including antenna)
Weight: 400grams (Transmitter and Receiver)
Operating Temperature: -10 to +50° C

Electrical Characteristics	Min	Typical	Max	Units
Supply Voltage	7		32	Vdc or ac
Relay Rating* (230Vac)		5	12	A
Supply Current at Vsupply 12V Quiescent All relays operating*		 15 175		mA
Time delay: (FM / LORA Mode1) Tx Switch ON to Rx Relay operation Tx Switch OFF to Rx Relay Relax		 ~26		mS

Mechanical Dimensions



Measurements in mm drawing not to scale

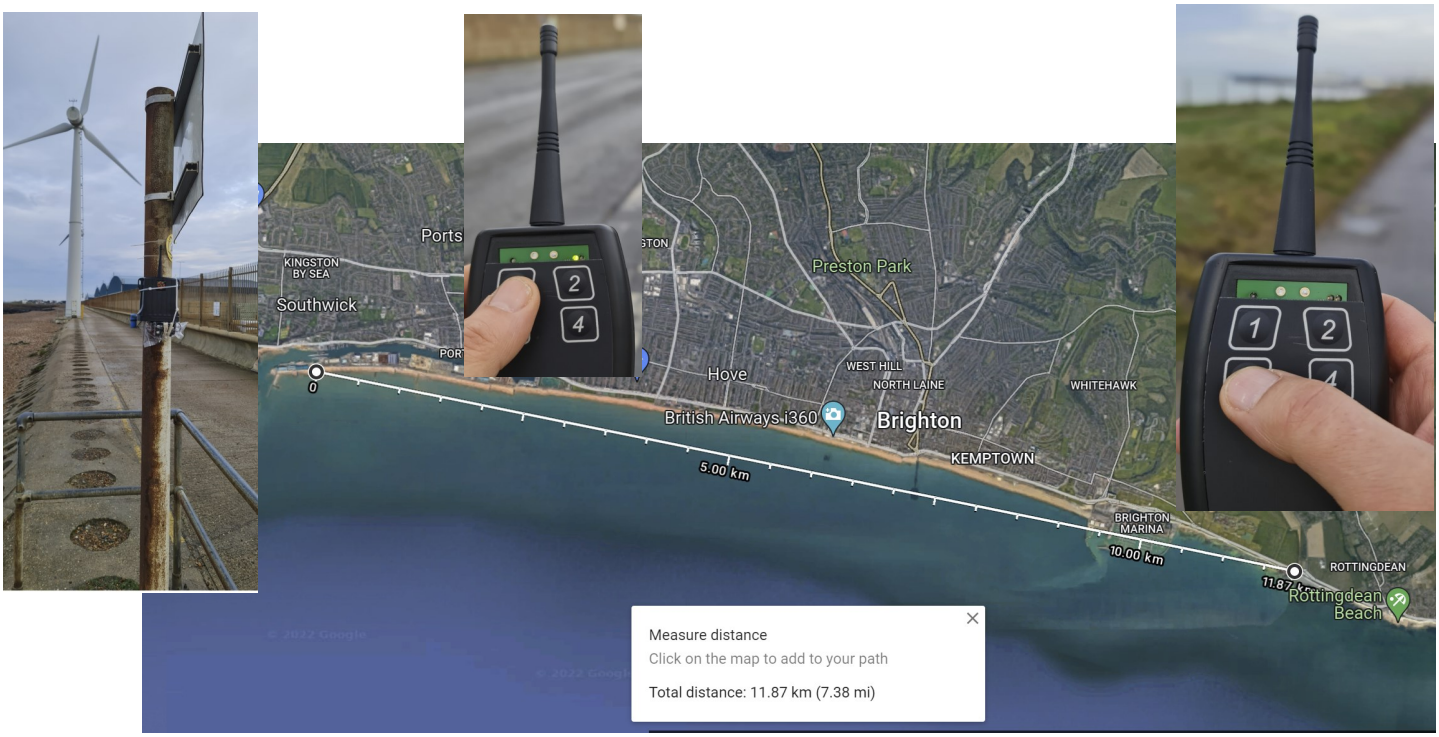


TRAP Remote Control

Range Test Notes

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

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.
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 under 12KM range was achieved, the system was working 100% however testing ceased because we could go no further in “line of sight”. So the system would have operated over a longer distance if we could have done so.



RF Solutions Ltd. Recycling Notice
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 equipment. 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.

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