# FIRETRAP


## Features

- Rugged radio remote control
- One Transmitter can control many receivers
- Waterproof receiver to IP68
- Transmitters available with 1, 2, 3, 4, 16 Switches

Description

Supplied ready to operate the FIRETRAP system is designed for continuous operation 365 days of the year. This system incorporates IP68 rated enclosures with 'resin dipped' circuit boards for protection against condensation.

Each receiver has four independent outputs which can easily be paired with individual switches from one or many transmitters. Building a bespoke control system is easy with transmitters containing up to 16 switches.

# FIRETRAP

## System and Receiver Part Numbers

| Part Number | Description | Frequency (MHz) | Range** (Metres) |
|---|---|---|---|
| FIRETRAP-S1PRM | System 1 ch Prewired for Promatic (Duraplug) | 433.92 | 250 |
| FIRETRAP-S1LAP | System 1 ch Prewired for Laporte | 433.92 | 250 |
| FIRETRAP-S1AS1 | System 1 ch Prewired for Au-toSporter | 433.92 | 250 |
| FIRETRAP-S1 | System 1 channel | 433.92 | 250 |
| FIRETRAP-RX | Receiver Unit only | 433.92 | 250 |

## Skeet Systems

| Part Number | Description | Frequency (MHz) | Range** (Metres) |
|---|---|---|---|
| FIRETRAP-SKEET | Skeet System (TX & 2 x RX's) | 433.92 | 250 |

| Part Number | Description |
|---|---|
| FIRETRAP-TX1 | Transmitter 1 switch |
| FIRETRAP-TX3 | Skeet Transmitter 3 switch |
| FIRETRAP-TX4 | Transmitter 4 switch |
| FIRETRAP-TX16 | Transmitter 16 switch (8Sw + Shift Key) |
| FIREFLY -TX-IPKIT | 'O' Ring, Seals Transmitter to IP68 |

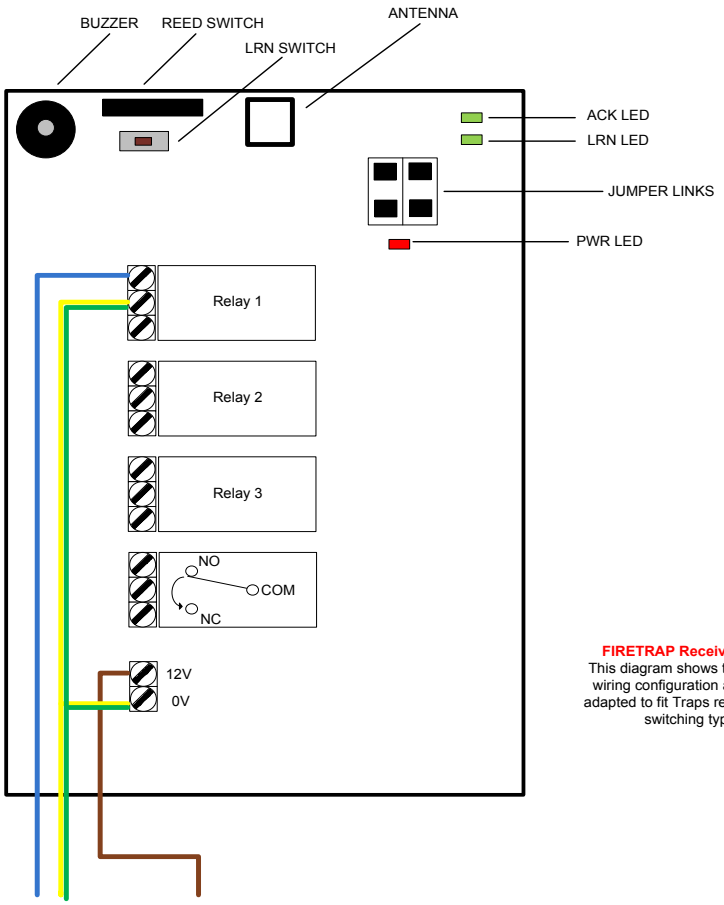
Transmitters ship with; Wall Mounting Cradle, and Lanyard

PLEASE READ BEFORE ATTEMPTING INSTALLATION:
This system is supplied complete with cable in order to connect to the Clay Trap Release.
Warning : Not all Clay Traps have the same wiring convention!
The system is pre-wired (as diagram below) to operate with most trap releases, before connecting, CHECK YOUR CONNECTIONS. (using a voltmeter) if you are in any doubt, DO NOT CONNECT THE SYSTEM, consult a qualified Electrician. Although the system operates on 12-30V DC damage may occur to the receiver unit if wrong connections are made.

Installation Notes
An ideal installation would be to firmly fix the FIRETRAP-RX approx. 2 metres from the ground, in direct sight of the transmitter. Lowering the height or having obstacles between transmitter and receiver will reduce range!

**Connecting Power to the Receiver unit**
The receiver unit requires the following connections to operate:
- 12V supply (Brown wire as supplied)
- OV Supply (Yell/GRN wire as supplied)
When the Receiver unit has power connected the Power LED will illuminate. This must be 'on' for the system to operate.

Note:
If you are pairing multiple transmitter i.e. If you have purchased receivers and transmitters separately. Follow the procedure detailed on page 4 to configure your chosen system. FIRETRAP-S1 systems are sold pre-paired.




**FIRETRAP Receiver Wiring**
This diagram shows the standard wiring configuration and may be adapted to fit Traps requiring other switching types.

Check the Wiring required for your Trap:
The FIRETRAP is capable of switching nearly any trap type, however wiring conventions vary between manufacturers. The relays on the FIRETRAP can switch up to 24V DC or 230V AC @ 5A.

## Additional Transmitters

Each transmitter has a unique identity. Each time a transmitter switch is operated, it transmits a secure RF signal. The Receiver can to set learn this signal and pair it to any of its outputs.

To pair a New Transmitter switch follow this procedure:
Any transmitter button can be paired to one or many of the receiver output relays.
Each button must be paired to each relay individually by following this procedure:
Select the receiver output relay to pair:

1. Briefly press the receiver pairing switch (S2) once.
2. The Receiver pairing LED will flash once to indicate output relay 1 is selected.
3. After the Receiver pairing LED stops flashing, press the receiver pairing switch again to select the next relay.
4. Repeat step 2 until the required output relay is selected.
5. Press the button on the transmitter you want to pair to the selected relay.
6. The receiver pairing LED will Flash once to confirm pairing is complete.

Erasing Receivers Memory
Press and hold the receiver pairing switch for approx 10 seconds.
Release the switch and watch for the receiver LED to flash to confirm erasing.
Press a button on the transmitter and ensure no relay actives
NOTE: You cannot erase individual transmitters or buttons

Configuring Receiver Relays
The link caps (shown above) configure the outputs operation. The these links are connected/broken using the small link cap placed over the pins. To “store” the setting turn power off then back on.

| Link Positions | | Relay Outputs | | | |
|---|---|---|---|---|---|
| LK1 | LK2 | RLY 1 | RLY 2 | RLY 3 | RLY 4 |
| Open | Open | $^1/_2$ sec Mom | $^1/_2$ sec Mom | $^1/_2$ sec Mom | $^1/_2$ sec Mom |
| Closed | Open | $^1/_2$ sec Mom | Mom | Mom | Mom |
| Open | Closed | Mom | Mom | Mom | Mom |
| Closed | Closed | - | - | - | - |

## Technical Specifications

Transmitters: FIRETRAP-TXn
Enclosure Rating: Standard IPx8
Battery Type: CR2032 (supplied)
Dimensions: 90 x 54 x 27 mm

| ELECTRICAL CHARACTERISICS | MIN | TYPICAL | MAX | UNITS |
|---|---|---|---|---|
| Supply Voltage | | 3V | | V |
| Supply Current | | | | mA |
| Frequency: FIREFLY: Wideband | 433.10 | 433.920 | 434.70 | MHz |
| RF Output Power (ERP) @ 433 MHz | - | 3 | 10 | mW |

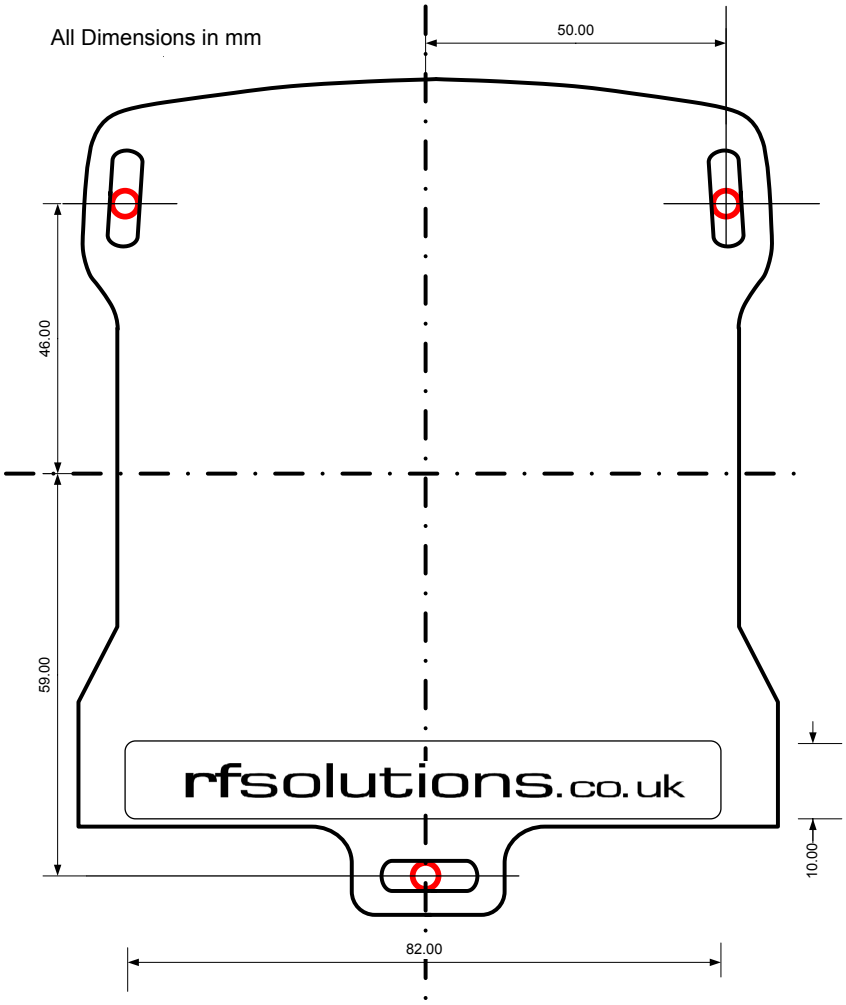
Receiver: FIRETRAP-RX
Enclosure Rating: IP68
Dimensions: 130 x 112 x 42 mm (not including antenna)
Storage Temperature: -10 to +70$^{o}$ Celsius.
Operating Temperature: -10 to +50$^{o}$ Celsius.

| ELECTRICAL CHARACTERISTICS | MIN | TYPICAL | MAX | DIMENSION |
|---|---|---|---|---|
| Supply Voltage for +12 v | 10.5 | | 30 | Vdc |
| Relay Rating* (230Vac) RLY1-4 | | 5 | 12 | A |
| Supply Current : Quiescent<br>All relays operating* | | 10<br>140 | | mA |
| Time delay from Tx on switch to Rx Relay operation | | | 100 | mS |
| Time delay from Tx sw relax to Rx Relay release | | | 300 | MS |

*The relay contacts in this unit are for functional use only and must not be used for isolation purposes

RadioTrap
Is a trade name of R F Solutions Ltd,
William alexander house, William way,
Burgess Hill, West Sussex,
RH15 9AQ
Email : sales@rfsolutions.co.uk http://www.rfsolutions.co.uk
Tel: +44 (0)1444 227909 Fax: +44 (0)1444 227898

## Mechanical Dimensions




RF Solutions Ltd. Recycling Notice
Meets the following EC Directives:

DO NOT
Discard with normal waste, please recycle.

ROHS Directive 2002/95/EC
Specifies certain limits for hazardous substances.

WEEE Directive 2002/96/EC
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

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.

Environment Agency producer registration number:
WEE/JB0104WV.





**RF Solutions Ltd**
William Alexander House, William Way, Burgess Hill, West Sussex, RH15 9AG
Sales: +44(0)1444 227 910 Tech Support: +44(0)1444 227909