

# RadioTrap FIRETRAP' Radio Release



## Features:

- Rugged Radio Remote Control
- One Transmitter can control Many Receivers
- Waterproof Receiver to IP68
- Transmitters Available with 1, 2, 4, 8, 16 Switches

## Description

Supplied ready to operate the FIRE-TRAP 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.

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## System and Receiver Part Numbers

Part Number	Description	Frequency (MHz)	Range** (Metres)
FIRETRAP-S1	System 1 channel	433.92	250
FIRETRAP-RX	Receiver Unit only	433.92	250

\*\*Range stated is optimum, direct line of sight. In worst conditions this can be reduced by over 50%

## Additional Transmitters



Part Number	Description
FIREFLY-TX1	Transmitter 1 switch
FIREFLY-TX2	Transmitter 2 switch
FIREFLY-TX4	Transmitter 4 switch
FIREFLY-TX8	Transmitter 8 switch
FIREFLY-TX16	Transmitter 16 switch (8Sw + Shift Key)
FIREFLY -TX-IPKIT	'O' Ring, Seals Transmitter to IP68

Transmitters ship with;  
Wall Mounting Cradle, and Lanyard



## Additional Rugged Transmitters



Part Number	Description
205C16-433F	Transmitter 16 Switch

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## PLEASE READ BEFORE ATTEMPTING INSTALLATION:

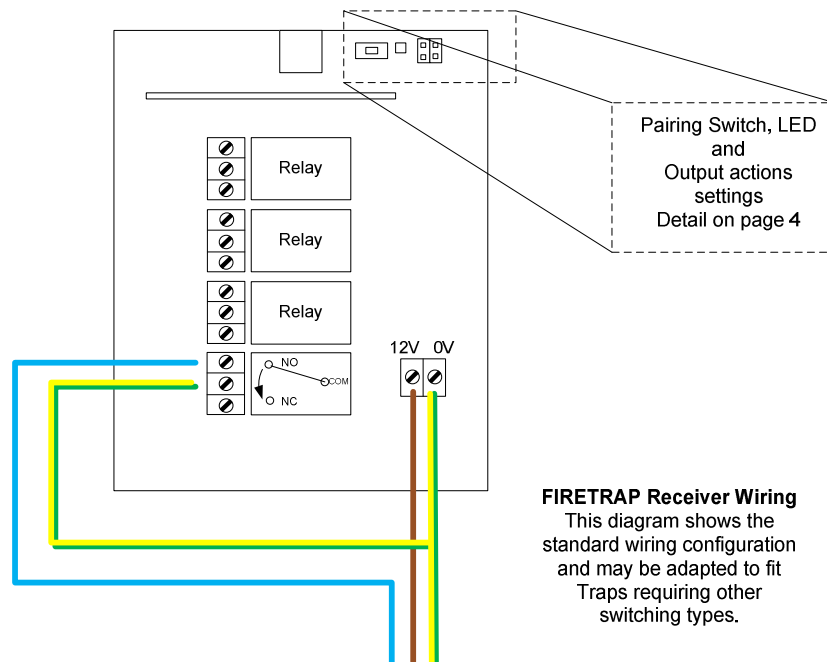
This system is supplied complete with cable in order to connect to the Clay Trap Release.

### 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)
- 0V 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 ie. 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.

### 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.

### Alternative Wiring :

The switched output may be connected in several ways, please see the 'Relay Output Connections' section. If in doubt consult a qualified electrician.

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## 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.

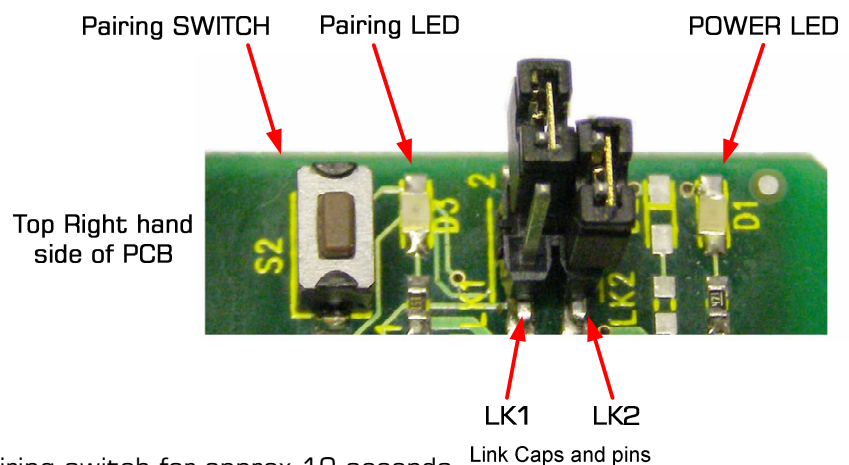
### To pair a New Transmitter switch follow this procedure:

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

1. Press and hold the receiver pairing switch for approx 10 seconds.
2. Release the switch and watch for the receiver LED to flash to confirm erasing.
3. Press a button on the transmitter and ensure no relay activates

**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	-	-	-	-

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## Technical Specifications

### Transmitters: FIRETRAP-TXn

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

Electrical Characteristics	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° Celsius.  
Operating Temperature: -10 to +50° 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		10		
All relays operating*		140		mA
Time delay from Tx on switch to Rx Relay op-			100	mS
Time delay from Tx sw relax to Rx Relay re-			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.,

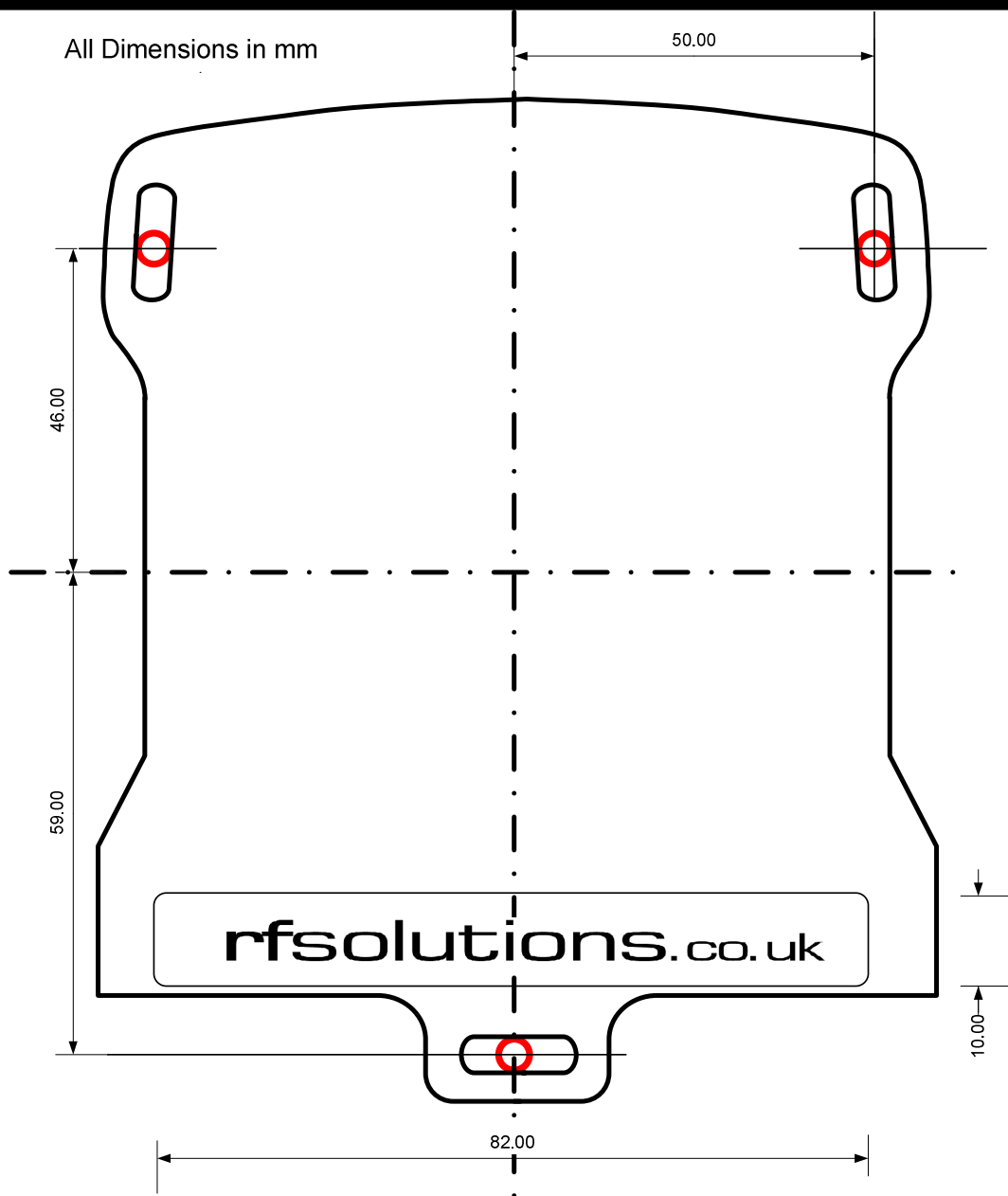


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# RadioTrap FIRETRAP' Radio Release



## 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 of an approved compliance scheme.

## 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.