Features:

- Waterproof Receiver IP68
- One Transmitter to Many receivers
- Robust and reliable

Technologically Advanced:

- 2Km Range
- Protective Rubber Boot
- 1, 4 and 16 Switch versions

Description

The TRAP system delivers reliable operation 365 days of the year. This rugged professional system is designed to meet the heavy usage needs associated with club traps. Each receiver has four independent outputs which can easily be paired with individual switches from one or many different transmitters. Building a bespoke control system is easy with transmitters containing up to 16 switches.

System part numbers

Part Number	Description
TRAP-S1	Single channel system

Part Number	Description
TRAP-S4	Four channel system

Additional transmitters

SABRE Transmitters are available individually with 1, 3 or 8 buttons and can be configured to work any

Part Number	Description
TRAP-T1	Transmitter 1 switch
TRAP-T2	Transmitter 2 switch
TRAP-T4	Transmitter 4 switch
TRAP-T16	Transmitter 16 switch

Additional receivers

These can be used with any existing TRAP transmitter or SABRE transmitter

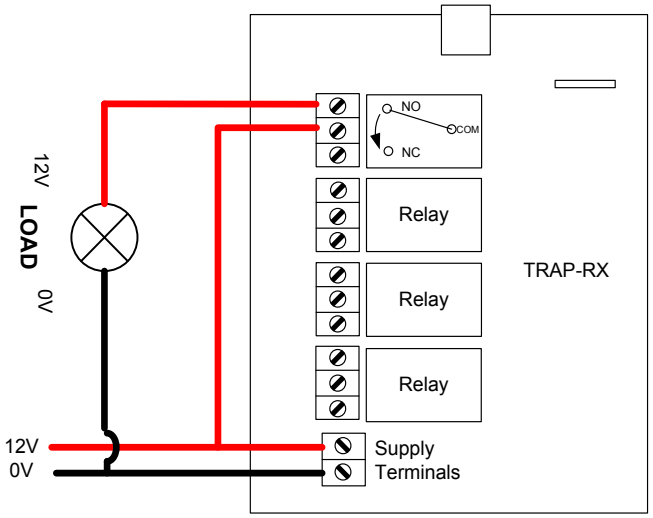
Part Number	Description
TRAP-RX	Receiver Unit.

Connecting the receiver unit.

The TRAP system provides 4 Relay switches each capable of switching up to 1.2KW (5A @ 230V). Each relay is independent and separately controlled. The TRAP series remote control system provides switched contacts and can therefore be used to switch most voltages either AC or DC.

1. Open the enclosure by removing fixing screws from the enclosure front and then removing the front from the enclosure.
2. Connect the power supply screw terminals 12-32V ac or dc to the low voltage terminals.
3. Wire your desired connections to the relay switches
4. Once all required wiring is complete, use the handheld TRAP transmitter to switch the outputs on and off.
5. As supplied, the handheld will operate the outputs - Button 1 to output 1, Button 2 to output 2 etc.
6. For additional functions including operation such as adding extra transmitters, different button map ping options, changing the outputs to latching, see advanced operation section.

Application Circuit.



Notes for clay pigeon release applications

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) before connecting, CHECK YOUR CONNECTIONS. (using a multi-meter) if you are in any doubt, DO NOT CONNECT THE SYSTEM, consult a qualified Electrician. Although the system operates on 12-32V DC damage may occur to the receiver unit if wrong connections are made.

For easy installation we offer the following prewired Systems

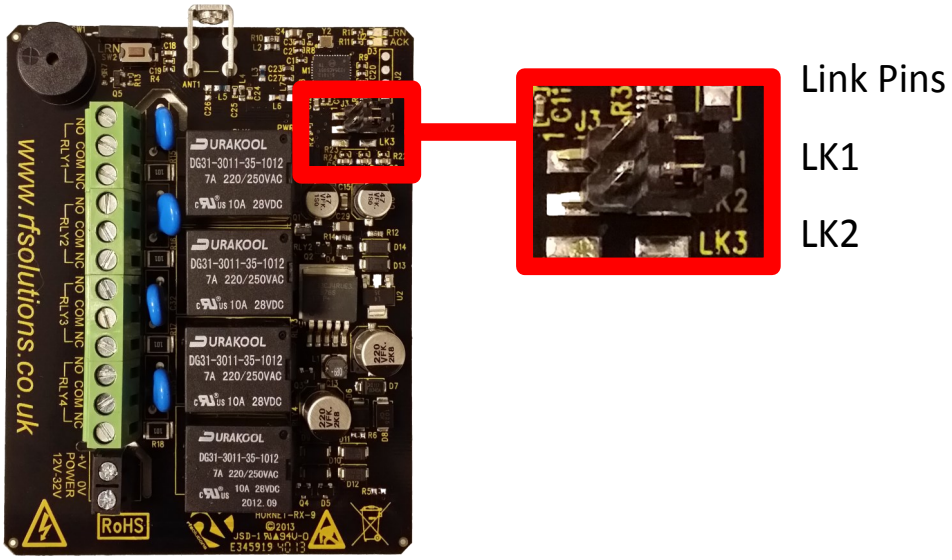
Promatic	**TRAP-S1PROM**
Laporte	**TRAP-S1LAP**
Acorn	**TRAP-S1ACORN**
Autosporter	**TRAP-S1AUTO**

Advanced Operation

Configuring receivers

Receivers can be used for many applications. The Link Pins LK1 and LK2 set the action of the relays

$^1/_2$ sec Mom = Relay will operate for $^1/_2$ sec
Mom = Relay will operate for as long as transmitter switch operated
Latch = Relay will toggle ON/OFF on each transmitter button press



Link Positions		Switched 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	Mom	Mom	Latch	Latch
Open	Closed	Mom	Mom	Mom	Mom
Closed	Closed	Latch	Latch	Latch	Latch

Advanced operation - Pairing a transmitter button

With this system, you can pair together any individual transmitter switch with any receiver output relay. Without opening either box.

1. Remove the green transmitter rubber overboot
2. Briefly (for less than 1 second) place the transmitter next to the receiver in the position shown and then remove it.
3. The receiver will Buzz **once** (One Buzz means the receiver unit is ready to allocate a transmitter to Relay switch 1)
4. Press the switch on the transmitter which you wish to pair
5. The receiver will buzz twice to confirm pairing
6. Repeat for any additional transmitter switches

NOTE: *each receiver has a maximum memory for up to 28 pairings, these can be from any Switches on any transmitters!*

Advanced Note: *It is possible to select relay output switches 2-4, by repeating step 3 and counting the number of buzzes. 2 buzzes for relay 2 3 for 3 etc.*

Advanced operation - Erasing receiver memory

1. Hold the transmitter in the position shown in position for ~5 seconds.
2. The receiver will sound a long buzz to confirm erased

Technical specifications

Transmitters: TRAP-Transmitter

Enclosure Rating: Standard IP67 (upgradeable to IP68)

Battery Type: 3 x AAA (supplied)

Battery Life: 5 years @ approx. 50 1/2second presses p/day

Dimensions: 90 x 54 x 27 mm

Changing the Battery: Remove the six enclosure screws. Remove 2 battery compartment screws and replace batteries, taking care of cables and battery polarity

Electrical Characteristics	Min	Typical	Max	Units
Supply Voltage		4.5		V
Frequency:		869.500		MHz
RF Output Power (ERP) @ 869.50 MHz	-	100		mW

Receiver Decoder: TRAP-Receiver

Enclosure Rating: IP68

Dimensions: 130 x 112 x 42 mm (not including antenna)

Operating Temperature: -10 to +50^{o} Celsius.

ELECTRICAL CHARACTERISTICS	MIN	TYPICAL	MAX	DIMENSION
Supply Voltage	12	12	32	V ac or dc
Relay Rating* (230Vac) RLY1-4		5	12	A
Supply Current : Quiescent All relays operating*		40 140		mA
Time delay from Tx on Switch to Rx Relay operation		30		mS
Time delay from Tx sw relax to Rx Relay release		30		mS

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

Approvals Information:

- All RF Solutions products are manufactured in accordance with our ISO:9001 Quality System
- Further information available on request.

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.

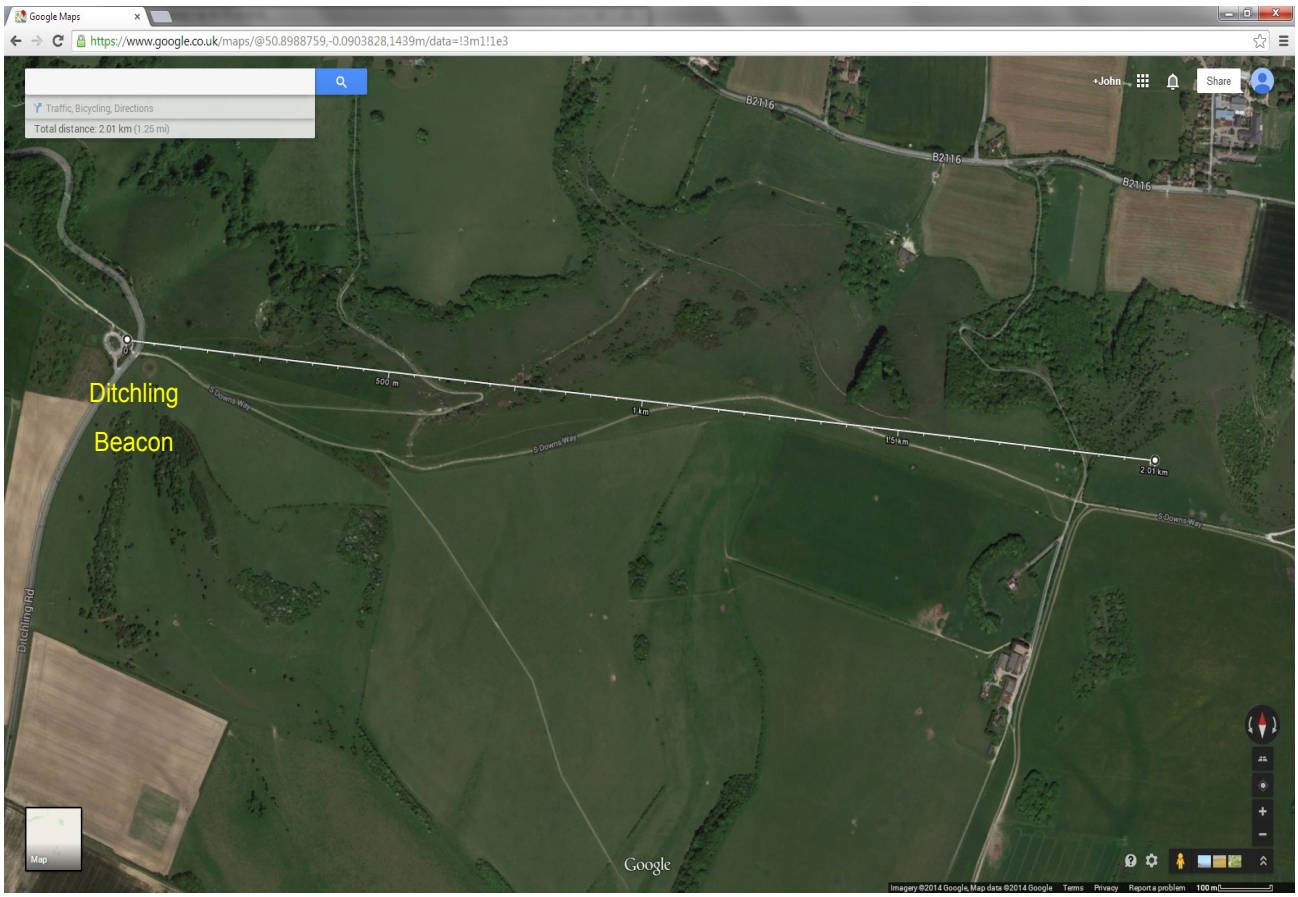
Waste Batteries and Accumulators
Directive 2006/66/EC
Where batteries are fitted, before recycling the product, the batteries must be
removed and disposed of at a licensed
collection point.

Environment Agency producer registration number: WEE/

Range Test Notes

Our Range Testing was conducted on Ditchling Beacon providing an open Line of Sight Test.

1. Receiver was mounted on the Bonnet of our vehicle in the Beacon Car park
2. The transmitter was carried along the beacon whilst being repeatedly operated
3. 2KM range was achieved, the system was working 100% however testing ceased as we ran out of land.
4. Weather Conditions
5. Warm, Dry, Sunny, Broken Cloud, 22degC



R F Solutions Ltd.,
William Way, Burgess Hill,
West. Sussex. RH15 9AG. England.
Email : sales@rfsolutions.co.uk http://www.rfsolutions.co.uk
Tel Sales: 01444 227900