



SABRE PROFESSIONAL CLUB SYSTEMS

Features

- Rugged radio remote control
- One transmitter can control Many receivers
- Waterproof receiver to IP68
- Transmitters available with 1, 3, 4 and 8 Switches

Description

Supplied ready to operate the SABRETRAP system is designed for continuous operation 365 days of the year. This rugged professional use 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 transmitters. Building a bespoke control system is easy with transmitters containing up to 8 switches.

| Part Number | Description | Frequency (MHz) | Range** |
|--------------|--------------------|-----------------|---------|
| SABRETRAP-S1 | System 1 channel | 869.5 | 2Km |
| SABRE-SKEET3 | System 3 channel | 869.5 | 2Km |
| TRAP-RX | Receiver Unit only | 869.5 | 2Km |

DS-SABRETRAP-1

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

Systems

SABRE Trap is available as a pre-configured system or as individual parts as required by your club:

| Part Number | Description |
|--------------|------------------------------|
| SABRETRAP-S1 | SABRETRAP single trap system |



| Part Number | Description |
|-------------|--|
| SABRESKEET3 | SABRESKEET System Includes: 1 x SABRE-T3 2 x SABRETRAP-RX |



Additional Transmitters

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

| Part Number | Description |
|-------------|----------------------|
| SABRE-T1 | Transmitter 1 switch |
| SABRE-T3 | Transmitter 3 switch |
| SABRE-T4 | Transmitter 4 switch |
| SABRE-T8 | Transmitter 8 switch |



Additional receivers

Additional receivers are available complete with standard wiring, these can be used with any existing SABRE transmitter - see pairing instructions on Pages 4-5

| Part Number | Description |
|--------------|---|
| SABRETRAP-RX | Receiver Unit Supplied with cable connection to traps. |



Notes for clay pigeon release applications

PLEASE READ BEFORE ATTEMPTING INSTALLATION:

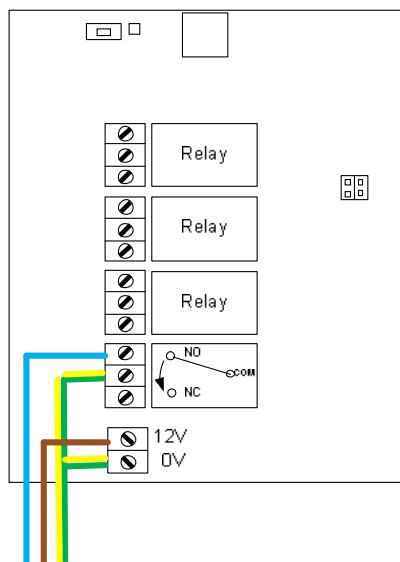
This system is supplied complete with cable in order to connect to the clay trap release.

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 voltmeter) 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.

Installation Notes

An ideal installation would be to firmly fix the SABRE-RX approx. 2 metres from the ground, in direct sight of the transmitter.



SABRE Receiver Wiring
This diagram shows the wiring configuration as supplied. Some Traps may require other wiring!

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 transmitters ie. If you have purchased receivers and transmitters separately. Follow the Pairing procedure to configure your chosen system.

Check the wiring required for your trap:

The SABRE is capable of switching nearly any trap type, however wiring conventions vary between manufacturers.

The relays on the SABRE can switch 24Vdc or 230Vac @ 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.

Advanced Operation

To pair a new transmitter using a magnet externally

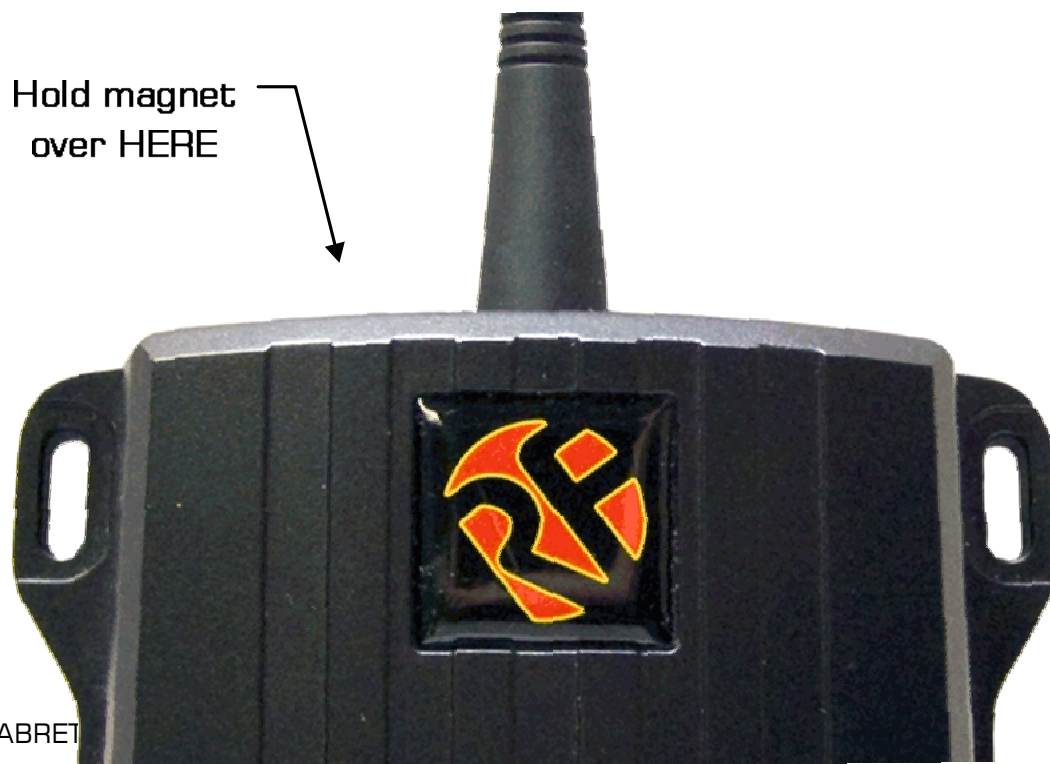
In order to learn a new Transmitter, a magnet may be used, this means that new transmitters can be paired WITHOUT opening the enclosure

1. Briefly hold a magnet next in the position shown
2. The receiver unit buzzer will sound one beep
3. One beep means the receiver unit is ready to allocate a transmitter switch to Relay output 1
4. Briefly hold the magnet again the receiver buzzer will beep twice (selecting the next relay 2).
5. Repeat steps 2-5 until the required output relay is selected.
6. Press the button on the transmitter which you want to pair
7. The buzzer will sound one beep to confirm pairing
8. Repeat for all transmitters buttons that you wish to pair

NOTE: each receiver has a maximum memory for up to 40 pairings, these can be from the same or any number of transmitters.

Erasing receivers memory

1. Hold a magnet in position for 10 seconds.



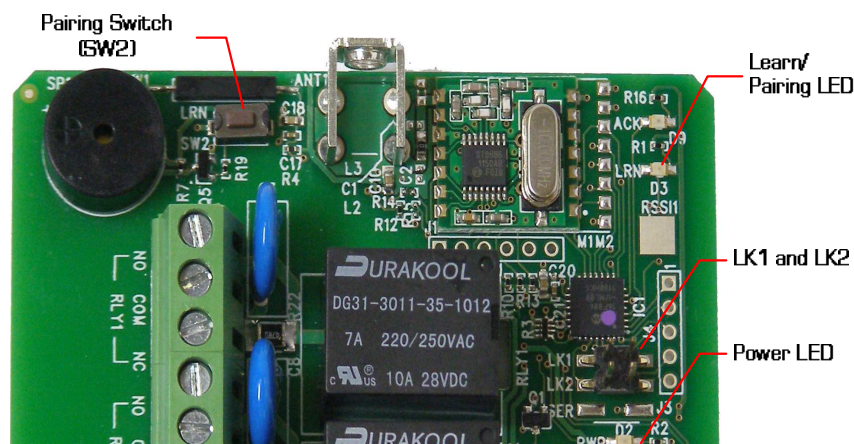
To pair a new transmitter using the on board Switch

1. Open the Receiver unit and extract the circuit board
2. Briefly press the receiver pairing switch (SW2)
3. The pairing LED will flash once to indicate relay output 1 is selected
4. After the LED stops flashing, press the switch again to select the next relay channel
5. The pairing LED will flash twice to show channel 2 is selected... and so on
6. Repeat steps 2-5 until the required output relay is selected.
7. With your relay selected press the button on the transmitter that you want to pair with it
8. The learn LED will flash to indicate pairing is complete

Erasing receivers memory

1. Press and hold the receiver learn switch for approx 10 seconds.
2. When the Learn LED turns ON all memory is erased

NOTE: You cannot erase individual Tx encoders



Configuring Receivers (advanced)

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

- $\frac{1}{2}$ sec Mom = Relay will operate for $\frac{1}{2}$ sec
- Mom = Relay will operate for as long as transmitter switch operated

| Link Positions | | Relay Outputs | | | |
|----------------|--------|-----------------------|-----------------------|-----------------------|-----------------------|
| LK1 | LK2 | RLY 1 | RLY 2 | RLY 3 | RLY 4 |
| Open | Open | $\frac{1}{2}$ sec Mom | $\frac{1}{2}$ sec Mom | $\frac{1}{2}$ sec Mom | $\frac{1}{2}$ sec Mom |
| Closed | Open | Mom | Mom | Latch | Latch |
| Open | Closed | Mom | Mom | Mom | Mom |
| Closed | Closed | Latch | Latch | Latch | Latch |

Technical Specifications

Transmitters: SABRE-Tn

Enclosure Rating: Standard IPx8
 Battery Type: 4 x AAA (supplied)
 Battery Life: 5 years @ approx 100 1/2second presses p/day
 Dimensions: 154 x 85 x 48mm

Changing the Battery: Remove the six fixing screws, remove battery and replace note polarity

| Electrical Characteristics | Min | Typical | Max | Units |
|---------------------------------|-----|---------|-----|-------|
| Supply Voltage | | 6V | | V |
| Frequency: | | 869.500 | | MHz |
| RF Output Power (ERP) @ 868 MHz | - | | 20 | dBm |

Receiver Decoder: SABRETRAP-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.

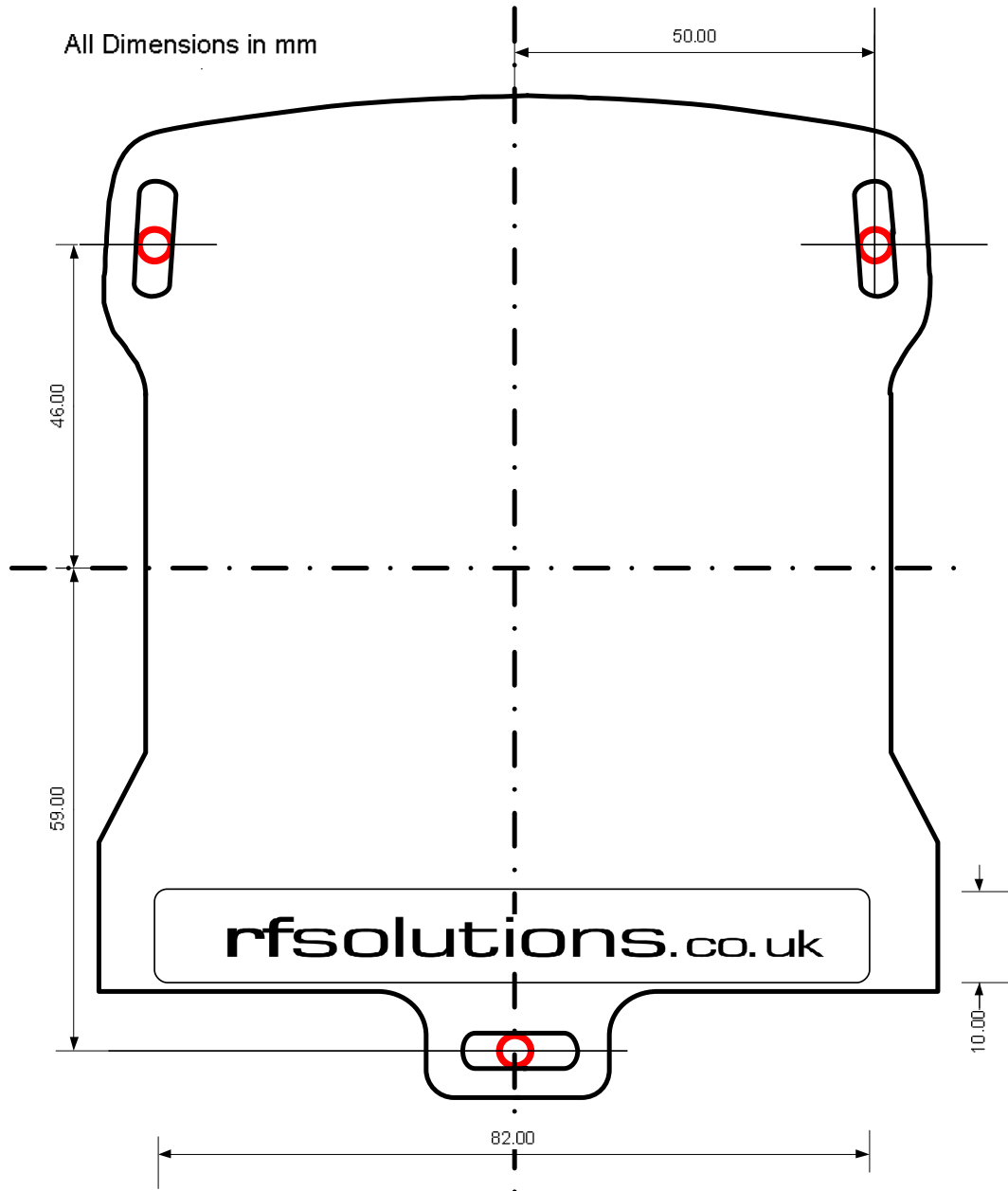
| ELECTRICAL CHARACTERISTICS | MIN | TYPICAL | MAX | DIMENSION |
|--|-----|---------|-----|-----------|
| Supply Voltage for +230 VAC | 10 | 12 | 32 | Vdc |
| Relay Rating* (230Vac) RLY1-4 | | 5 | 12 | A |
| Supply Current : Quiescent | | 40 | | |
| All relays operating* | | 140 | | mA |
| Time delay from Tx on Switch to Rx Relay operation | | 20 | | mS |
| Time delay from Tx sw relax to Rx Relay release | | 20 | | 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
- SABRE Systems are manufactured to CE standards
- Further information available on request.

SABRE Remote control System



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.

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