The Super Junior (Radio) Claymate.

Using tried and tested radio technology from RF Solutions, BLN offers superior performance without having to re invent the wheel... In this case, the radio link.

The Super Junior Claymate offers outstanding trap control of one or two traps.

The basic kit includes a Claymate Transmitter Handset and a single Receiver.

Additional receivers can be added at any time.

An optional rubber boot is available.

Any 'RF Solutions' single button transmitter can be upgraded to a Super Junior.

Super Junior Features...

- Singles, Doubles or Following Pairs from one or 2 traps.
- "Third trap" feature.
- Control one, two or three traps from one receiver if desired.
- Solo Shooter Delay for one man operation.
- "Tuition feature" sends a report target using one button.
- Safety feature allows cancelling of a delayed launch.
- Stuck button indication.
- Waterproof enclosure.
- Rubber protective boot as an optional extra.
- No on/off switch; Sleep mode increases battery life.
- Radio range in excess of 200 metres.

The Buttons Explained...

Solo Delay ON/OFF...Press 'A' & 'B' buttons together To toggle delay.
Long beep is delay ON, short beep is delay OFF.

DELAY

OFF	ON
A sends Trap A	'A' sends Trap 'A'
B sends Trap B	'B' sends Trap 'B'
Pair sends a pair	Pair sends a pair
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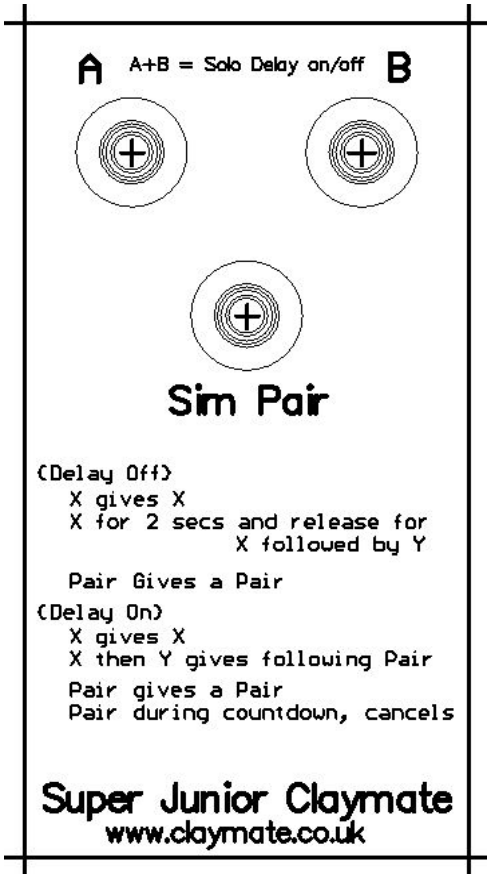
Holding A(B) for more than 2 seconds will send A(B) immediately and then send B(A) when button released.	During Countdown Press Pair to cancel launch. or Press A or B to send following pair of 1st & 2nd button presses

Holding any button for 8 seconds will sound 'Stuck button' warning.



Receiver Placement notes.

Placing the receiver and transmitter such that there is a direct line of sight will ensure the best operating range. Fixing the receiver to the trap is not recommended and is to be discouraged.

An ideal solution is to fix the receiver to a stake in the ground positioned away or above the trap metalwork and out of the path of targets or the throwing arm.

Remember that wire<u>less</u> does not mean wire <u>free</u> and that it *<u>Is</u>*** allowed to use some cable between the receiver and the trap. Whatever it takes to provide trouble free operation.**

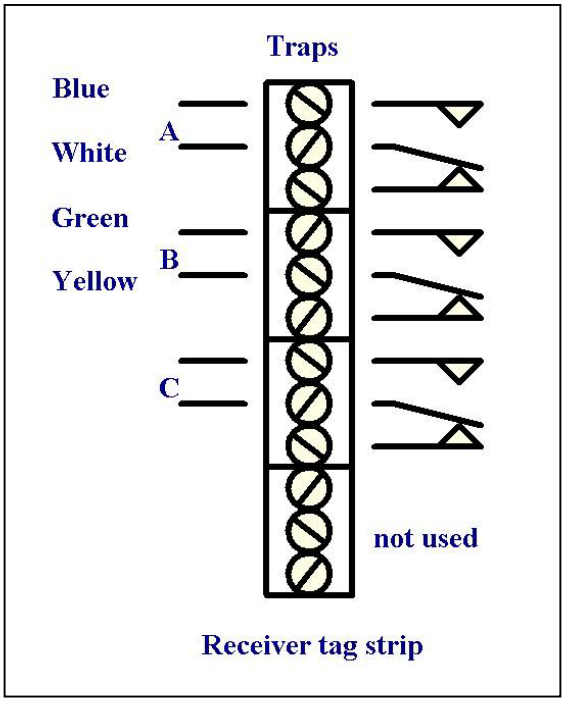
If you wouldn't leave your shotgun there... don't leave the receiver there either.

Connecting your Super Junior Claymate 6 core cable option.

- **The Super Junior comes supplied with either a white 6 core cable for connection to 1 or 2 traps or can be supplied as from the RF Solutions factory with a black 3 core cable and a connector, typically a 3 pin duraplug wired for Promatic traps.**

  If you order a second receiver or wish to change a receiver from Trap A to Trap B single trap operation, the wiring to the receiver tags will require adjustment.
  To prevent unwanted trap operation and subsequent risk of injury, do not make adjustments to the wiring with traps connected to the receiver

- **If ordered for connection to 2 traps, the Super Junior will be factory fitted with a white, 6 core cable.**



The connection details for 6 core cable is as follows.

RED	**Connects to 12 volts. (for 24 volts, this wire needs repositioning within the Receiver.)**
BLACK	**Connects to ground or battery 0 volts.**

The above connections are electrically isolated from the trap release wiring.

6 Core ... For a Single Trap.

Join the Blue and Green wires together. This is called a Blue/Green pair.
Join the Yellow and White wires together. This is called a Yellow/White pair.
The two pairs are connected to the single trap release.
When either of the A or B relays within the receiver activate, the single trap will launch.

6 core ... For Two Traps.

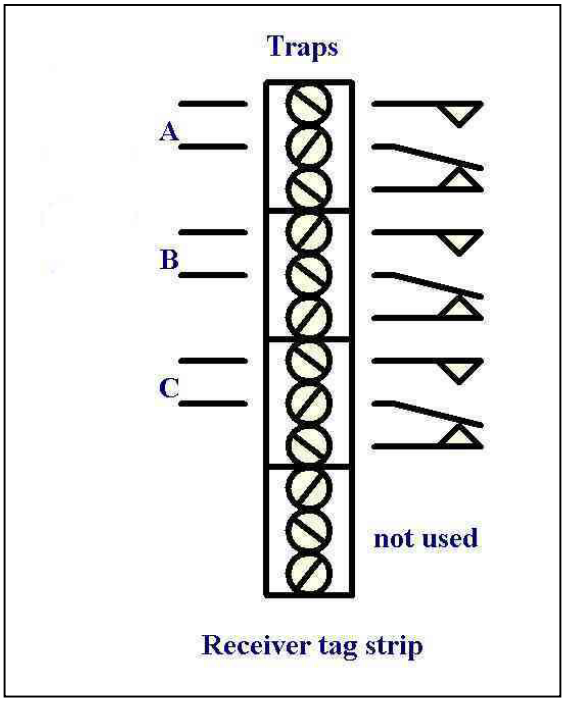
Blue/White	**Connects to the A trap release. Polarity is not important.**
Green/Yellow	**Connects to the B trap release. Polarity is not important.**

6 core ... For A Trio of Traps!

This configuration requires an 8 core cable and is not a typically supplied option.
The third trap is connected to relay 3 within the receiver.
Relay three operates when ANY of either trap A or B is launched.
Operation of a third trap this way can only provide simultaneous pairs from trap A & C using button A, simultaneous pairs from trap B & C using button B or a 'simultaneous triple' from all three traps using the PAIR button.
An A-B following pair will send A&C followed by B&C.
A B-A following pair will send B&C followed by A&C.

Connecting your Super Junior Claymate 3 core cable option.

- **RF Solutions supply receivers from their factory with a black 3 core cable and a connector, typically a 3 pin duraplug wired for Promatic traps.**



To prevent unwanted trap operation and subsequent risk of injury, do not make adjustments to the wiring with traps connected to the receiver

The connection details for 3 core cable is as follows.

BROWN	**Connects to 12 volts.** **(for 24 volts, this wire needs repositioning within the Receiver.)**
GREEN/YELLOW	**Connects to ground or battery 0 volts.**
A Link wire	**Connects the 0v wire to one of the terminals marked A in the diagram.**
BLUE	**Connects to the other A terminal.**

The A terminal activates when the A Claymate button is pressed.
The B terminal activates when the B Claymate button is pressed
A and B activate when the PAIR button is pressed.

Terminal C is a special case and this activates whenever any Claymate button is pressed.

Terminal C can be used when single trap operation is required if you do not want to worry about which button is pressed.

Multiple Transmitter / Receiver operation.

Within the transmitter and receiver are a set of 8 'Dual-in-line' switches.
These are typically set to all ON.
When several transmitters are required to operate several traps and these need to be kept independent of each other, it is necessary to adjust these switches to enable each transmitter and receiver set to communicate only with their identically coded partners.

Adjustment of these switches is very easy.
All that is required is to make a SINGLE switch change in order to keep the process simple.
If a second transmitter and receiver are required to operate in proximity to the first, nominate a set to have the code changed and change, for instance, switch 2 ONLY in both the transmitter and receiver.
If a third set is required to operate in isolation, nominate and change, say, switch 3.

Using this simple method, up to 8 independent transmitters can be operated in close proximity.

The permutation of switches is actually 255. This is far in excess of any actual requirement.
You can, if you wish, make a change that involves several switches.

It is important, (if you operate more than one code), to identify transmitters and their matching receivers.
It is practically impossible to hit upon a forgotten code by chance without dismantling the sets to examine the switches.

SECURITY NOTE.

If you leave your radio connected to a trap be aware that the operating frequency employed by these units is a general 'licence exempt' channel and is not reserved for Clay Trap Control.
In some geographic locations, there can be a high level of licence exempt radio data traffic and in some cases a data set may include the coding as laid out in your receiver.

This 'interference' can affect your receiver in 2 ways.
The trap can be operated without warning and in extreme cases, emptied of targets, or...
The receiver can be 'deafened' by the interfering signal and may be unable to distinguish the correct signal from the interfering one.
This will lead to an apparent failure of the receiver or a much reduced operating range.

These scenarios are not a fault of the receiver. It is the price of licence exemption!

Custom Software Options...

BLN can provide custom software to cover any aspect of receiver / transmitter operation.

A typical requirement is to remove the PAIRS option and replace this is TRAP C to allow for control of 3 independent traps.
The transmitter receiver combination is actually a 4 channel device where channel 4 is currently not employed for Claymate operations.

Another option has been to accommodate oscillating trap bases where button A fires and oscillates the trap.
Button B fires without oscillating and button C just oscillates the trap.

In some cases additional software changes are required to allow for, in case 1 above, for a delayed C trap which, using the standard software delay operations, would cancel the delayed launch and not, as wanted, provide a delayed trap C launch.

These options are offered primarily for Trap Manufacturers who wish to offer the Radio Super Junior as an alternative radio control to simple single button devices.

Front panels design changes to reflect the alternative uses for the buttons may be required. Contact BLN for costs of design work and order quantities for a design.

Single custom changes can be accommodated but these will rarely be accompanied by a production, silk screened front panel.

GUARANTEE & POLICY STATEMENT

The company Claymate Trap Control Systems is wholly owned and operated by BLN Technical Services.

BLN Technical Services guarantees the Claymate product described to be free of manufacturing defects for the purpose of clay trap launcher control for a period of one year from date of purchase.

This guarantee specifically does not cover wear and tear to cables or enclosures, faults caused by wear and tear, misuse, abuse or application of excessive or inappropriate voltages, including lightening strikes.

The owner shall at all times be responsible for the care of the product and shall take steps to ensure that the product is protected from the damaging effects of wind, rain or snow.

BLN Technical Services reserve the right to amend the specification or software without notice.
Software changes as requested by customers become the copyright of BLN technical Services and such changes may be included in future software releases, or may be offered to customers as an upgrade.

The software has been thoroughly tested and is believed to be free from bugs or anomalies.

Software upgrades may or not be chargeable at the discretion of BLN.

Neither Claymate Trap Control Systems, BLN Technical Services or agents of BLN will be responsible for accidents or injury or loss caused by operation of traps or associated equipment under the control of any Claymate System whether the operation of such equipment is desirable or not; is caused by operation of any equipment when it is unsafe to do so, or under any fault condition of any equipment howsoever caused.

Repair policy, and care of the Equipment

Suspected problems can usually be rectified or explained after a few minutes on the telephone.
If in doubt… Read the instructions.

If the Claymate is returned for warranty work, a copy of the invoice may be required.

The printed board has no user serviceable parts apart from the processor, which can be changed to implement a software upgrade or special change. The code switches on the receiver module require a matching change within the mating transmitter otherwise the unit will appear to stop working.

If the unit becomes damp or there is evidence of condensation within the box, time by a radiator or an hour standing in the sun will usually return the Claymate to operation. Leave the case open to allow air to circulate.
The Transmitter will stand some rain but not being left out in torrential rain over night.
The sounder element is not waterproof. The grille is to keep insects out and is not a water barrier.

Treating the unit with some respect will pay dividends in a long life

Do not dry the unit out in a microwave oven.
If you are intelligent enough to own a shotgun then you must surely know that placing the Claymate in a microwave oven will destroy the unit completely and BLN will not entertain anything other than a complete replacement at your expense.

In all cases, BLN reserves the right to repair or replace boards at the discretion of BLN.
Replacement parts may be new or 'reworked' at the discretion of BLN.
The design of mechanical or electronic components may change without notice.

Super Junior (Radio) Claymate Technical Specification.

Trap release voltage range.

12 to 110 volts AC/DC

Power requirements.

Receiver… 12 volts (24 with a jumper change) at 8 mA quiescent.

Transmitter…9 volt battery. Replace battery when terminal voltage drops to 8 volts OR The transmitter stops working.

Sleep mode reduces current consumption after some 2 minutes inactivity.

Operating range.

In excess of 200 metres.

This is a conservative figure and is a fraction of the manufacturers quoted figures.

This distance will be severely reduced if the receiver is positioned lying on the ground

All Claymate products have been tested and certified to exceed European EMC regulations and specifications including conducted and radiated emissions and susceptibility to external electromagnetic fields.

BLN Technical Services reserve the right to change specifications in the pursuance of product improvement without notice.
Such changes are, however, usually announced on the web site.

If you have any good experiences whilst using the Claymate product, tell your friends.

If you have any bad experiences… Tell me!

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