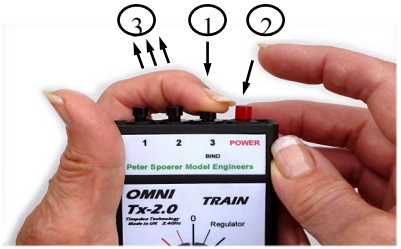
Binding Procedure. OMNI V1



As simple as 1. 2. 3. Read the binding instructions below fully before you begin. You do not need a binding plug on the receiver. The transmitter must be turned off to start the procedure

First power up the Rx-2 or FRx22 receiver then:

1. Take hold of the OMNI transmitter with two hands, then press and hold the No. 3 button to start the binding procedure.

2. Keep pressing button 3 as you now turn the Transmitter on by pressing the red power button down, and then releasing it.

3. You must now immediately release button 3 and then press and release button 3 two more times. When you release the button a third time, the power light will stay on steady, and the binding procedure is complete. Stages 2 and 3 together should take 2 – 3 seconds. Watch this video to see how it's done:
https://www.youtube.com/watch?v=gPKrD2tHvUE

Binding Procedure. OMNI V2

Now simpler than ever!

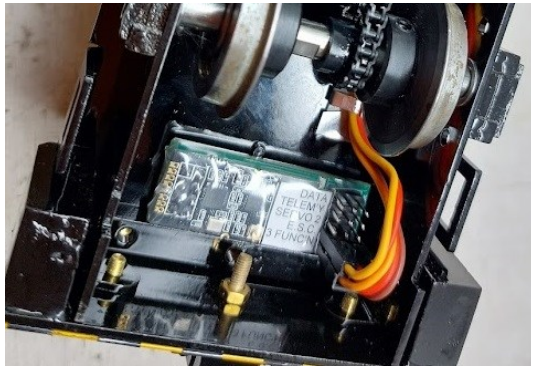
1. Power up the Receiver (or the model, if it's already fitted inside) then….
2. Hold down function buttons 1 and 3, then turn on the transmitter
3. Completion of binding is indicated by LED 2 going fully ON.
4. Release the two buttons and the job is done. LED 1 goes solid and the receiver led illuminates with a fast flicker.

Features of the OMNI Rx22 receiver:

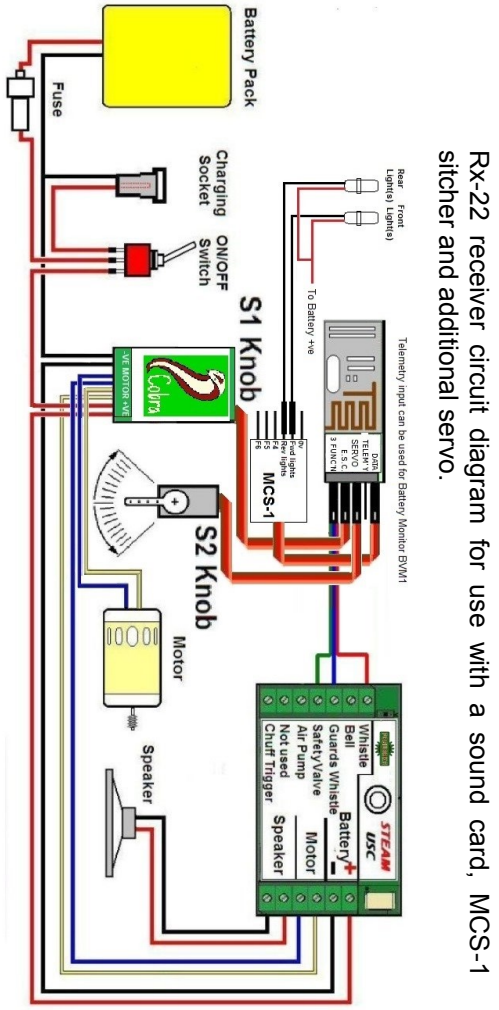
3 function outputs - operated by the three buttons on top of the handset. Each can be programmed as momentary or latching by using the calibration routine on the OMNI transmitter handset. See the Tx instructions for details. The Rx switches each of these outputs to negative (-ve) so if you are switching lights, a positive (+ve) feed of the appropriate voltage should be provided to the other side of the light. These switches are limited to 20mA so are only suitable for LED's or sound card inputs. For higher current demands such as smoke units, use an SND-441 relay module driven by one of the functions outputs. (SND-442 and 443 are also available)
ESC output - operated by the regulator knob on the handset. Compatible with any R/C ESC using standard servo protocol and can be used for regulator servo on live steam locos.
SERVO output - operated by the second knob on TX3.1 handsets, use for couplings or doors or can be used fo reverser or gas valve on live steam locos.
DATA output - this provides a data stream for add on units such as the MCS1 and MCS2 switcher units. With these both linked up, the FRx22 can provide directional lighting and 11 function outputs.
Telemetry Input - for example a battery voltage monitor can be attached which indicates on the handset when the loco battery is getting low, or a low water level indicator unit for live steam.

The OMNI R/C system is unique, in that when you program it to suit the special needs for a particular loco, it is not the transmitter you are re-programming, but the receiver in the loco. In this way, one OMNI transmitter can control many different types of locos, each with its own very different requirements and locos can be rebound to different handsets without affecting the settings in the receiver.

Installation notes: keep dry, install as far away from power lines and motors as possible, especially the printed aerial on the pcb. If installed in a metal model alongside a motor, use a long aerial, with the exposed tip as far from the motor and power cables as possible.



FRx22V Installed in Roundhouse Hercules Shunter



Rx-22 receiver circuit diagram for use with a sound card, MCS-1 sitcher and additional servo.

For details of how to program this this receiver please go to your OMNI transmitter instructions
or contact us by email: sales@fosworks.co.uk
or send us a Stamped Address Envelope for a printed copy of the instructions.

Up to 800 metre range
2.4GHz
Data output
Telemetry input
3 Function Outputs
Servo Output
ESC Output

For use with
OMNI Transmitters

43x14x9 mm plus servo plug

Receiver

H,V and LA versions

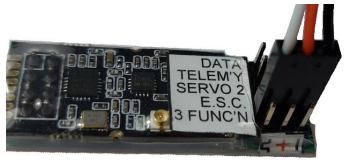
OMNI FRx-22

Technology by Timpdon Electronics

FOSWORKS
P.O.Box 675,
Blackburn, Lancs.
BB2 9QJ
Tel/Fax. 0(44)1254 814675

OMNI FRx-22

Programmable 2.4GHz Receiver for Electric models
Three switch functions, ESC output, Servo output, output for expansion modules and telemetry for sending information back to handset



Vertical Pins

Horizontal Pins