STAVELEY ENGINEERING AND RESEARCH CENTRE.

RADIO CONTROL DEPARTMENT.

INSTRUCTION MANUAL.

Staveley "Tone Lock" Single Channel System.

System Concept.

This equipment is designed to be flown in areas of high interference such as adjacent to high power multi proportional systems. Unlike other equipments, the Staveley "Tone Lock" system will not respond to very strong adjacent channel signals. Even a modulated carrier on your own frequency will not activate the actuator. Because of this feature you may safely fly to within a very few feet of an adjacent multi transmitter in complete safety. The very worst that can happen is that the actuator will not respond to your command if adjacent channel signals are too strong.

System Operation.

This system features "Auto Coding" wherein the operator does not have to remember a sequence or generate proper timing himself. Merely press the lever left, to turn left, and right, to turn right. The TX does the rest for you. On the left you will see a push button. Pushing this button automatically generates a "Quick Blip" for actuation of the motor control escapement. If you wish a "third position" control such as for "up" elevator pushing the lever to the left then immediately to the right will give this position.

Transmitter.

The transmitter operates from a 9 volt dry battery (PP-9 or equivalent). Removing the four screws that retain the back will allow access to the battery compartment and leads. Clip the press-studs onto the proper terminals of the battery. (Red for positive, black for negative). Replace the back of the transmitter and it is now ready for use. Ground range tests should be made with the TX aerial completely removed, but at no other time should the TX be operated without the aerial.

The TX timing has been set to operate an "Elmic Compact" Escapement. If, however, you should choose to operate a different escapement and the timing is too slow or fast to obtain reliable left command, the timing may be adjusted to suit the requirements of any escapement. Remove the back of the TX and note the adjustment potentiometer soldered to the back of the board. This control adjusts the "blip speed". Rotating the control clockwise slows the speed, conversely anti-clockwise rotation speeds up the blip sequence. If, for instance your escapement was going to third position instead of left the speed should be increased (counter clockwise); or if you were getting engine control or right instead of left the control should be rotated clockwise to slow up the sequence. Before re-installing the back cover, after adjustment, make sure the escapement performs properly over the usable range of rubber turns, Some erratic operation

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will be noted if the escapement rubber is wound too tight or has run down. Under no circumstance should any other control be tampered with.

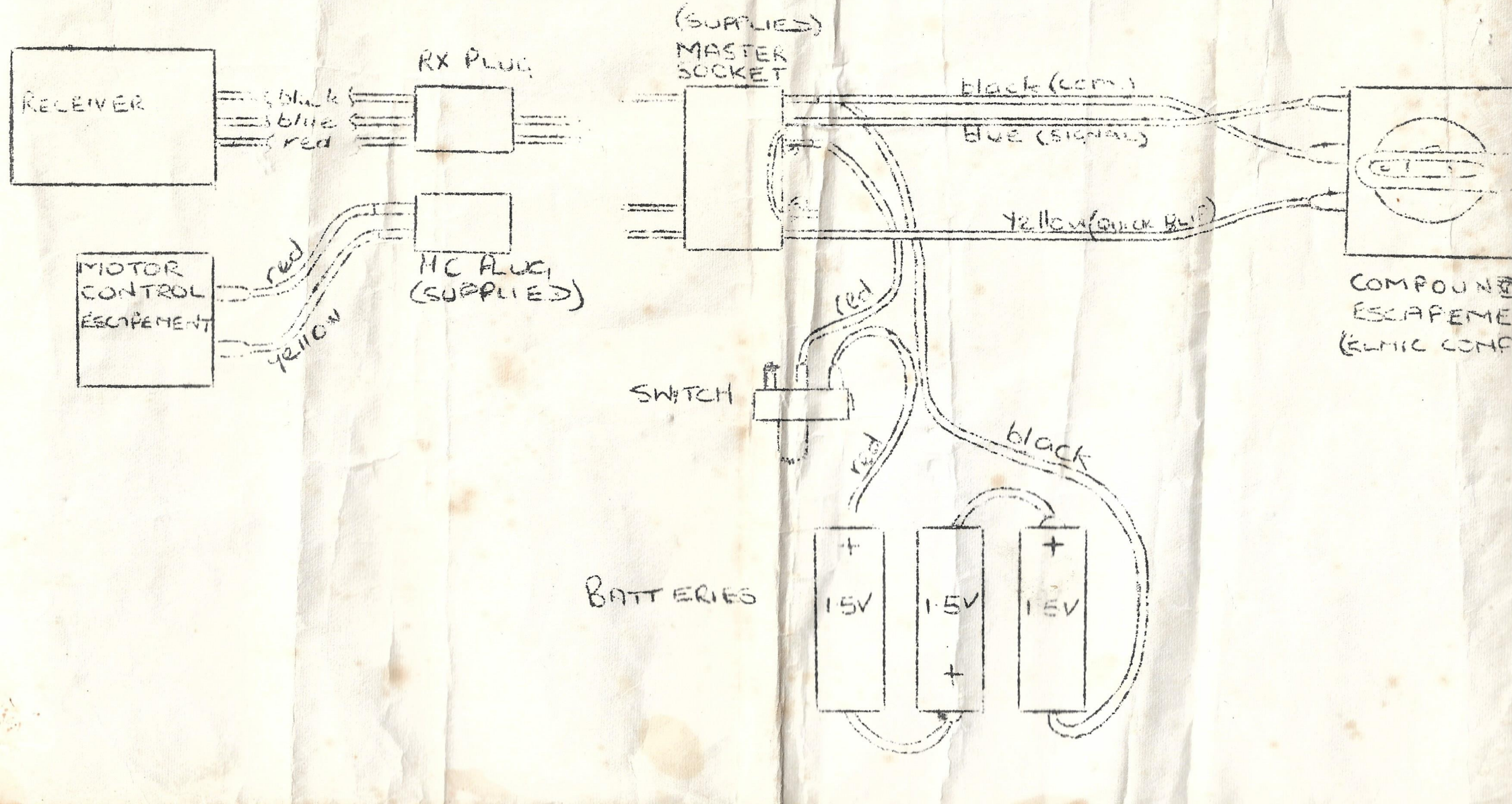
Receiver.

There are no adjustments to be made to the receiver. It is tuned up to it's accompanying transmitter and should not be adjusted in any way.

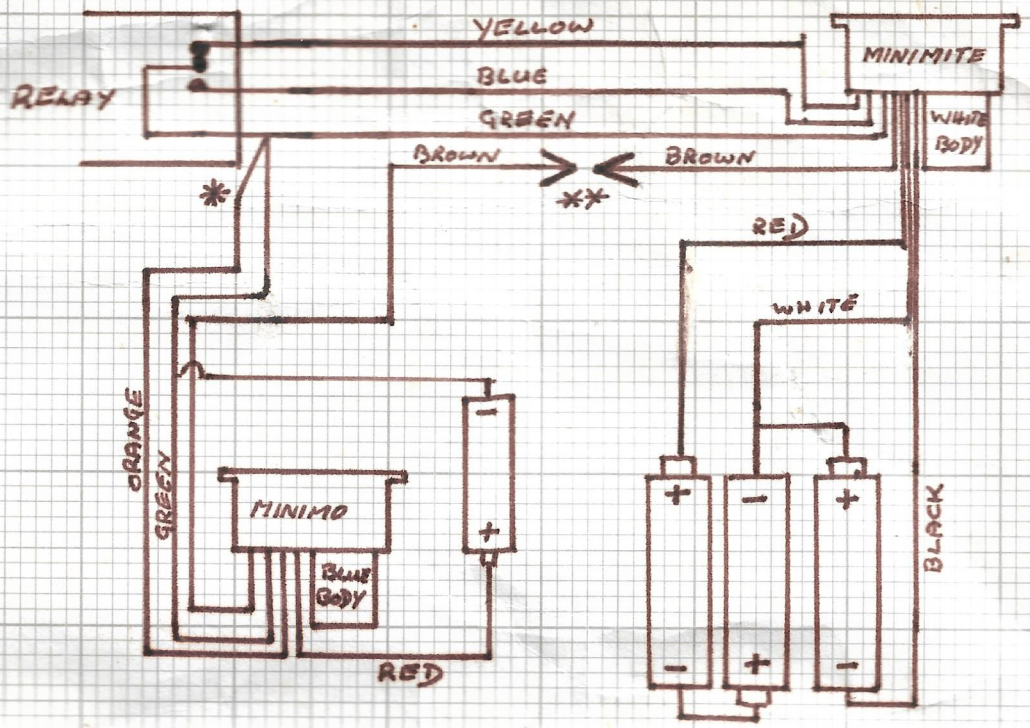
The receiver is supplied wired to a plug that will plug into either the RCS Guidance System, or Navigator, wiring harness. A Staveley wiring harness is also available as an optional accessory. For those who wish to construct their own harness a wiring diagram and socket are supplied. RX operates from three pen-cells (4.5v) or a three cell Deac (.225 or .500 MAH).

Pre-Flight Checks.

Certain tests should be carried out before first flights are attempted. After the equipment is fully installed first test is ground range without TX aerial. Assemble model as if for flight. Place model on ground away from buildings etc., Remove TX aerial. With model facing you and TX aerial socket pointing at model back away from model while continuosly operating rudder until control is lost. Distance at which control is lost should be greater than 10 feet. This test should be made with no other transmitters on in the near vicinity. Next, start the engine and do the same test. There should be no significant loss of range and no evidence of escapement skipping or run-through. These tests completed, model may be flown. You will now experience the ease and joy of multi control at single channel price. Don't forget to wind the escapement rubber.


RECEIVER
RX PLUG
black
blue
red
MOTOR CONTROL ESCAPEMENT
red
yellow
MC PLUG (SUPPLIED)
(SUPPLIED)
MASTER SOCKET
black (com.)
blue (signal)
yellow (quick blip)
COMPOUND ESCAPEME
(ELMIC CONT
SWITCH
red
red
black
BATTERIES
+
1·5V
+
1·5V
+
1·5V
+

WIRING DIAGRAM

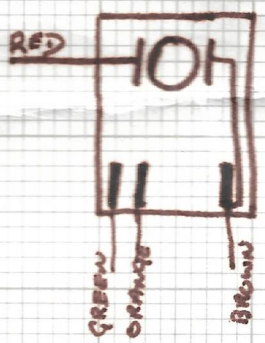


* Orange from Minimow - leave off for 3 positions, connect as shown for 2 position

** Connect brown to brown when Minimow is used.

MINIMOW





MINIMITE

