

CHECKING

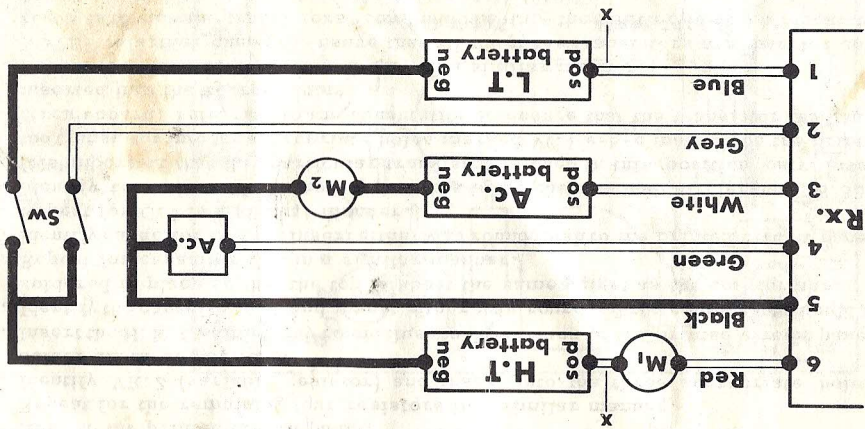
The basic receiver unit is now complete and ready for wiring up and testing. Before doing so however, thoroughly re-check that every component is in the correct position and has been properly soldered. A friend will often locate an error that you, yourself have constantly overlooked. Check that no soldered joint is shorting out to a different conductor, or that a piece of surplus solder or wire is not doing likewise. Make certain that the soldered ends of the component wires have also been removed so that none of these could be accidentally bent and cause a similar short-circuit.

WIRING

This receiver must be connected up as shown in the wiring diagram, strictly adhering to the coloured flexible leads stated to avoid any possible mistakes. All the wiring shown as heavy black lines in the diagram are negative and may be carried out in black coloured wire. It will be noted, however, that to avoid confusion, the common H. T. / L. T. negative from tag 2 is grey coloured wire. On no account, must this grey wire be connected to the black negative wiring of the actuator circuit from tag 5. On the other hand, as seen by the diagram the H. T. and L. T. negatives are common and may be joined.

The coloured leads and tag connections are therefore as follows:-

Tag 1.	Blue	L. T. pos.
Tag 2.	Grey	H. T./L. T. neg.
Tag 3.	White	Actuator Battery pos.
Tag 4.	Green	Receiver output to Actuator.
Tag 5.	Black	Actuator neg.
Tag 6.	Red	H. T. Battery pos.



Wiring Diagram.

METERS

The use of a meter for tuning is a must with this type of receiver. As with all electronic equipment, however simple, the insertion of a meter into the circuit for testing or tuning purposes is the only positive way of seeing what is actually happening.

Before the Constructor despairs that we are suggesting the purchase of expensive test equipment, we hasten to reassure him that all that is necessary for this receiver is the purchase of a 0-5 m/a panel meter which can be obtained at the cost of a few shillings from most suppliers of surplus radio equipment. This meter can be inserted in the H. T. line at position M. 1 shown in the wiring diagram and used for tuning the receiver.

The same meter, by use of a shunt can also be used for position M. 2 to allow reading of the actuator current. This shunt can be made quite easily by connecting a piece of domestic 5 amp fuse wire across the meter terminals. The length should be about 1" which is the approximate centre of the terminals on a 2" diameter panel meter. This shunt will extend the meter range to read approximately 500 m/a over the full scale.

The connection of all leads to the components, especially to solder tags, should be carried out as follows:-
Remove 1/4" of the plastic covering from the ends of the lead, twist the wires together if they have become separated and lightly tin. Insert this tinned end into the appropriate hole up to the plastic covering and solder in place. It is then advisable to wrap the flexible lead once round the tag in the form of a loose knot to give firm anchorage to the wire.

If it is desired to have the facility of meter reading a permanency of the model, then 2-pin sockets should be inserted in the wiring at positions M. 1 and M. 2. It should be remembered however, that when the meter is disconnected both of these sockets must be 'shorted out' with an appropriate 2-pin plug on which the pins are joined together, thus continuing the circuit.

A double pole switch is also recommended to break both the H. T. and L. T. circuit. If not, then all six wires should be fitted with a plug and socket as indicated across the line, X-X. (A B7G valveholder and plug are ideal for this purpose).

In either case however there is no need to switch the actuator circuit.