

Communications Receiver (M.C.R.1.)

A. INSTALLATION INSTRUCTIONS.

1. Erect the aerial as high as possible, using the bakelite card as an insulator if necessary. Never attempt to use less than 6ft. of aerial wire. If the full 30ft. cannot be run out, leave the unused wire on the card. Do not cut it off. Plug into socket A.
2. Use the 10ft. length of wire provided to make an Earth connection, or use it as a counterpoise Earth. Plug into socket E.
3. Select a Coil Unit to cover the frequency range required and fit it to the receiver.
4. Plug the telephone lead into the sockets marked PH.
5. When ready to receive, plug the power lead into a battery.

B. TUNING THE RECEIVER.

1. Turn the SENSITIVITY control fully CLOCKWISE.
2. Adjust the TUNING CONTROL until any station somewhere near the frequency required is tuned in.
3. Adjust the AERIAL TRIMMER for the loudest reception.
4. Adjust the REACTION control to the position either just BEFORE or just AFTER the point of oscillation according to whether R.T. or C.W. signals are to be received.
5. Refer to the calibration scale on the Coil Unit and move the TUNING CONTROL to the setting given for the desired frequency. If the Station is not heard at once, search to and fro around the setting given.
6. If necessary, readjust the SENSITIVITY control to get comfortable volume.

NOTES.

- (a) Always disconnect the Battery Plug when the receiver is not being used.
- (b) Always leave one Coil Unit on the receiver in order to protect the pin contacts.
- (c) When changing Coil Units care should be taken to keep the Unit straight and in line with the receiver, in order to avoid bending and straining the pins.
- (d) It is desirable, although not essential, that the battery be disconnected when changing Coil Units.
- (e) About 30 hours operation can be expected from each battery.
- (f) If the REACTION control has to be turned almost fully clockwise before the set oscillates as indicated by the "plop and hiss" it is an indication that the battery is becoming run down.
- (g) An Earth connection is not essential if a good aerial is available, but it may be useful when signals are weak.

C. THE POWER PACK.

With some sets a Power Pack is provided instead of the third battery. This should be used instead of a battery when mains are available.

This Power Pack may be used when correctly adjusted on either A.C. or D.C. Mains of any voltage between 97 and 140 or 190 and 250. Proceed as follows:—

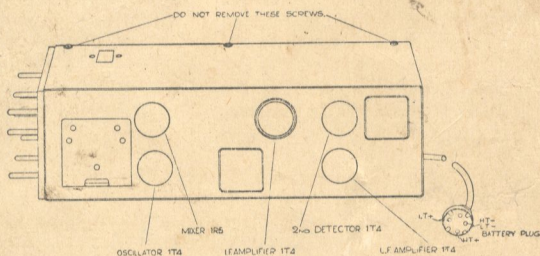
1. Ascertain the type of current (A.C. or D.C.) and the voltage by reference to the electric meter.
2. For D.C. mains, use the Selector Screw in one of the top row of sockets marked "Input Volts D.C." and for A.C. mains use the bottom row marked "Input Volts A.C."
3. For voltages between—

97	and	115	use	Socket	107.
116	„	140	„	„	127
190	„	220	„	„	205
221	„	250	„	„	235
4. The Voltage Selector Screw must not be changed without first switching off the mains.
5. Plug the power lead from the set into the Power Pack.
6. Connect the Power Pack to the mains and switch on.

NOTES.

If there is any doubt as to whether the mains are A.C. or D.C. proceed as follows:—

- (a) Set the voltage selector screw into the D.C. range at the correct voltage.
- (b) If the receiver fails to operate reverse the mains plug in its socket. If now the receiver gives results then the mains are D.C.
- (c) If stations can be received faintly in either position of the mains plug then the mains are A.C. In this case—switch off the power—set the Voltage Selector Screw into the correct number socket on the "Input Volts A.C." row and switch on again.
- (d) If, when on A.C. mains, hum is troublesome, some improvement may be effected by reversing the mains plug



CONVERSION TABLE.

Range 1.		Range 2.		Range 3.		Range 4.	
kc/s.	Metres	Mc/s.	Metres	Mc/s.	Metres	Mc/s.	Metres
100	3000	2.5	120	4.5	67	8.0	38
150	2000	2.6	115	4.6	65	8.5	35
200	1500	2.7	111	4.7	64	9.0	33
250	1200	2.8	107	4.8	63	9.5	31
300	1000	2.9	103	4.9	61	10.0	30
350	856	3.0	100	5.0	60	10.5	29
400	750	3.1	97	5.1	59	11.0	27
450	666	3.2	94	5.2	58	11.5	26
500	600	3.3	91	5.3	57	12.0	25
550	545	3.4	88	5.4	56	12.5	24
600	500	3.5	86	5.5	55	13.0	23
650	462	3.6	83	5.6	54	13.5	22
700	429	3.7	81	5.7	53	14.0	21
750	400	3.8	79	5.8	52	15.0	20
800	375	3.9	77	5.9	51		
850	353	4.0	75	6.0	50		
900	333	4.1	73	6.2	48		
950	316	4.2	71	6.4	47		
1000	300	4.3	70	6.6	45		
1100	273	4.4	67	6.8	44		
1200	250	4.5	65	7.0	43		
1300	231	4.6	63	7.2	42		
1400	214	4.7	61	7.4	41		
1500	200	4.8	60	7.6	39		
1600	188	4.9	60	8.0	38		