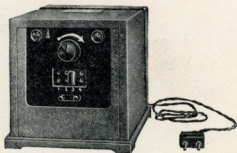


PHILIPS

RECEIVING SET

TYPE No. 2515



OPERATING INSTRUCTIONS



OPERATING INSTRUCTIONS

FOR

PHILIPS RECEIVING SET, TYPE No. 2515

PHILIPS receiving set, type 2515, which has been specially designed for reception of the local station is a two valve set.

Very satisfactory results can be obtained by using a single wire inverted "L" type aerial, but in many cases it will be found that good reception can be obtained by using a small indoor aerial. Often it is even possible to receive without any aerial at all (when the set is adjusted for reception with the aid of the mains wires); this however depends on local circumstances.

The set is specially constructed for operating from alternating current mains, a supply unit has been incorporated for filament voltage, anode voltage and negative grid bias. Batteries or any external auxiliary apparatus are therefore unnecessary.

The set can be used with a gramophone pick-up to reproduce gramophone music through the loudspeaker.

Philips A. C. detector valve E 415, Philips last stage valve B 443 and Philips rectifying valve No. 506 are used.

GENERAL INFORMATION CONCERNING INSTALLATION OF AERIAL AND EARTH SYSTEM

Aerial

A single wire inverted "L" type aerial about 70 feet long (total length) erected as high as possible is recommended as an outdoor aerial.

This must be perfectly insulated and the lead-in wire should not be in close proximity of or parallel to high trees, buildings etc.

It is recommended that 7/22 hard drawn copper wire be used for the aerial. All joints must be properly soldered. It is strongly

recommended that Philips aerial over-voltage protector No. 4382 be used to protect the receiver against heavy discharges, due to atmospheric influences. Otherwise such discharges may damage one of the aerial series condensers inside the receiving set. The aerial over-voltage protector should be connected as shown in fig. 1.

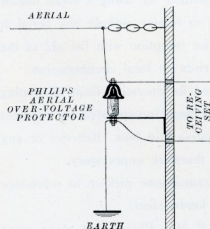


Fig. 1.

Earth Connection

As a rule a good connection to a main water pipe will be sufficient. In some cases good results can be obtained where a connection is made to a central heating installation. The earth connection of a lightning conductor can also be used as an efficient earth. We would particularly emphasize that gas mains must **not** be used as an earth.

Where no water pipes are available or an even more efficient earth is required, a metal pipe can, if circumstances permit, be driven into damp soil or better still a metal plate can be buried in a vertical position at a depth where damp soil is found.

The earth connection must be as short and as direct as possible.

SWITCHING ON THE RECEIVER

The cover is first removed by pushing it backwards and then lifting it out. The earth terminal indicated by the sign "⏏" is connected to earth. The diagram below (fig. 2) shows how the valves packed with the set are to be installed, after which the cover is replaced.

The aerial must be connected to socket A (fig. 2) with the aid of the plug which is supplied with the set. The loudspeaker is plugged into the 2 sockets on the right hand side marked "L"

(fig. 2). The two pin mains plug is then inserted into a mains socket.

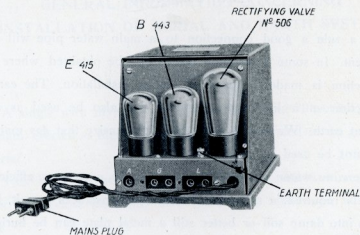


Fig. 2.

The set should only be connected to a supply having the voltage and periodicity for which it is intended (see underside of apparatus). If this is not observed, serious damage may result.

OPERATING THE SET

Controls

The set has the following controls:

S = operates tuning condenser;

T = controls reaction;

V = plug for adjustment of volume and selectivity and for reception on mains wires:

Position 1 = highest selectivity;

Position 3 = largest volume;

Position 4 = reception on the mains wires only to be used when aerial is dispensed with;

O = wavelength switch:

Position I = 200—400 m;

Position II = 300—600 m;

Position III = 1000—2000 m.

D = on and off switch:

Black button depressed = set switched off;

Red button depressed = set switched on.

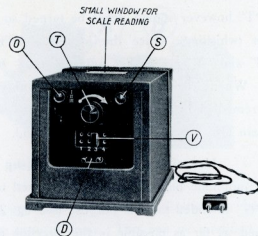


Fig. 3.

The rotating scale of the tuning condenser can be read through the small window in the top side of the receiver.

Tuning

When the apparatus has been connected as directed plug "V" is inserted in position 3 or when receiving without an aerial (reception on mains wires which, however, depends on local conditions), in position 4. Knob "O" is adjusted to the waveband in which the local station operates. Knob "T" is then completely rotated in opposite direction to arrow and switch "D" is set to "on" position.

Tuning condenser "S" is then adjusted until the local station is heard. If nothing is heard knob "T" is turned a little in direction of arrow and further adjustments are made as described above.

Knob "T" however should never be turned so far as to cause oscillation (whistling). Once the local station has been found knobs "S" and "T" are further adjusted until best results are obtained. When interference is caused by other stations it can often be remedied by inserting plug "V" into sockets 2 or 1. Volume can also be controlled by this method.

Use of a gramophone Pick-up

The gramophone pick-up must be connected to the 2 sockets marked "G" intended for this purpose (see fig. 2). Knob "T" is then turned as far as possible in the direction opposite to that of arrow and plug "V" inserted into position 1. The aerial should be disconnected.

It is recommended that the flexibles to loudspeaker and

gramophone pick-up respectively are well spaced from each other.

When reverting to radio reception break connection of gramophone pick-up with receiving set.

Switching off receiver

To switch off the apparatus it is only necessary to depress black button "D".

TONE FILTER TYPE No. 4004

The last stage valve B 443 which is used in Philips receiving set No. 2515 not only gives a high degree of amplification, but unlike usual last stage valves gives a faithful reproduction of high

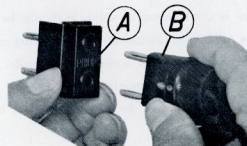


Fig. 4.

notes. It may occur that the tone character may become too shrill to suit the taste of some. This can be modified by using tone filter No. 4004 which reduces the strenght of reproduction of the high tones.

The tone filter (A) is connected between loudspeaker and

receiving set by plugging it into the sockets "L" (see fig. 2). The loudspeaker plug (B) in its turn is plugged into the tone filter.

DEFECTS

If, when the receiving set is connected up no sound is heard, the following points should be considered:

1. Have operating instructions been faithfully followed?
2. Do the valves make good contact?
3. Is the socket connection to light supply live? (Can be tested with a lamp.)
4. Where an aerial-earth switch is used, make sure that it is in the correct position.

Where there is doubt about a valve it should be replaced by another of the same type. Removal without jarring can be effected by levering the valve from its socket with a knife.

Important

The receiver should only be opened after it has been disconnected from mains.

GUARANTEE

Philips Radio guarantee the good working of the set. Should the receiver develop a fault, consult your dealer, who, if necessary, will communicate with us.

We cannot guarantee apparatus once the seals have been broken.

Use with this Receiving Set a Philips Loudspeaker

