

Limited, as pioneers of D.C.- and A.C.-mains units, have, we understand, found it difficult to cope with orders for their SGP₃ sets, which are made for either A.C. or D.C. supplies. We have only recently been able to test the latter.

Housed in a distinctive cabinet, designed on modernistic lines, the Ekco SGP₃ is an interesting example of an all-D.C.-mains set. From an examination of its exterior, the set certainly does not lack in variety of controls. To one side of the escutcheon plate is what might be termed the main control, this being the knob that rotates the gang condenser and dial.

To the left and right of this are two subsidiary control knobs. That on the left is a "compensator" for the main tuning and has not always to be operated. The reaction knob on the right is more frequently used, especially when the incoming signals are weak. Beneath the escutcheon plate is a fourth knob, but as this is for changing the wavelength band, here, again, it is not a real complication.

On the left of the cabinet is fitted a sturdy make-and-break switch, which is used for connecting or disconnecting the mains supply. Close to this is still another knob, which serves the dual purpose of controlling the volume and selectivity obtained from the set.

In considering the control of the SGP₃, it is obvious that the makers have not sacrificed efficiency by eliminat-

EKCO-LECTRIC SGP₃ (D.C.)

Name of Set: Ekco-Lectric SGP₃.

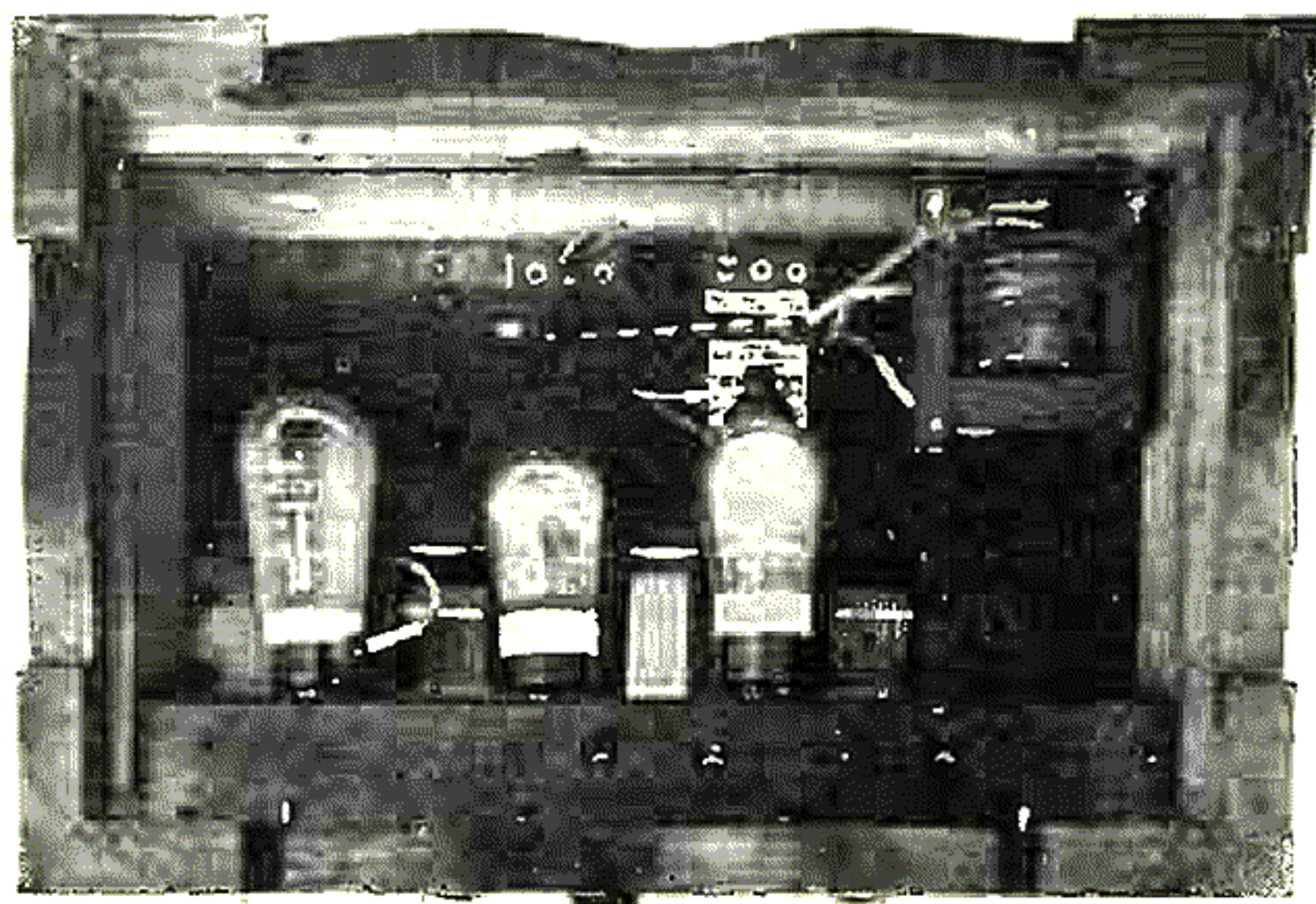
Maker: E. K. Cole, Ltd.

Price: £21.

Valve Combination: Screened-grid high-frequency amplifier, detector, and pentode (five-electrode) output valve.

AS we said last month, the large proportion of D.C.-mains supplies in this country appears to have been neglected by some makers of all-mains sets. In fact, the concentration on all-A.C. sets has been one of the few concerted actions on the part of radio manufacturers.

As a result the comparatively few firms offering reliable D.C.-mains sets are now experiencing a big demand for their products. E. K. Cole,



Underneath view of the Ekco-Lectric SGP₃, showing the horizontal mounting of the valves

Tests of the New Season's Best Sets—Continued

ing controls that are really desirable. They have given the listener what is practically one-dial tuning; but because aerials differ so greatly, the additional compensating control of tuning has been fitted. Sensitivity should be equally good on all aerials. As this is only a three-valve set, reaction, even though the valves are extraordinarily sensitive, is still a necessity. And no set without dual-range-wavelength facilities can be considered complete to-day.

Important Asset

The advent of Brookman's Park and the near possibility of further regional stations makes selectivity an important asset of a set. We are, therefore, glad to see that the makers have made provision for increasing the selectivity, should it be necessary.

The bottom of the set can be removed in a second or so to expose part of the neat layout. The three valve holders are conveniently placed in this sub-section of the set. The makers recommend a batch of three Mullard valves, these being the PM14 screened-grid valve, PM4DX detector valve, and PM24 pentode valve. All these are 4-volters. In inserting these valves into the valve holders flexible leads for the screened-grid and pentode valves have also to be connected to the auxiliary terminals.

A plug and socket arrangement provides for a wide variation in the D.C.-supply voltage. The three tappings are marked "200/210," "220/230," and "240/250." As our voltage of supply is 205 volts, we inserted the wander-plug in the first socket. Next to this socket arrangement is a similar one, whereby three alternative smoothing connections may be made, according to the characteristics of the mains used.

In our tests, using the specified valves, we could not detect any difference in performance when each of these alternative smoothing connections were tried in turn. Rotation of the main tuning knob soon brought in Brookman's Park and 5GB. We were impressed with the good quality of reproduction, as delivered by a number of our standard test loud-speakers. No background of hum was audible, except when the oscillation point was approached, when a slight, but not objectionable, noise developed. The set appears to be extremely sensitive, and in the evening a number of stations were brought in at good loud-speaker strength, with a minimum of tuning difficulty. We found the tuning compensator, when carefully adjusted, brought up the strength of some of the distant stations very appreciably.

Reaction was not required for the more powerful stations. Its smoothness made it a pleasure to use on the weaker stations, the strength of which it greatly increased.

These remarks apply to both wavelength bands. The performance appears to be about equal on both.

Good Selectivity Control

The selectivity control on the side of the receiver was tried with interest. We found that by first tuning in a fairly weak station at its maximum volume, we could reduce the interference from Brookman's Park without altering the tuning. A slight diminution in the signal strength of the distant station was then noted. We are of opinion that this selectivity control will prove valuable to those residing within the "wipe-out" areas of regional stations. As a volume control we are not so impressed with the knob at the side of the set. We found it better to reduce reaction to a minimum, and slightly to detune with the compensator.

Provision is made for the use of a gramophone pick-up. The leads from the pick-up, when plugged into two clearly-marked sockets, are connected to the last two valves of the receiver. The electrical reproduction of gramophone records in this way was good. An external volume control must be used with the pick-up. The volume of sound without this additional control is too great. As when used as a radio set, the quality of the reproduction when the



Note the neat case of the Ekco-Lectric SGP3.

SGP3 is a gramophone amplifier is very good.

Apart from very infrequent renewals of valves, the maintenance of this set is not likely to be troublesome. The makers give some interesting figures for the power consumption of their set. The running cost for 1,000 hours at, say, sixpence per unit, works out at 20s. In view of the convenience and efficiency of mains operation, this cannot be considered excessive.

A.C. Model Also

The SGP3 is also available for A.C. mains at the same price; in the near future we hope to be able to review it. Meanwhile, to those with D.C. mains, we heartily recommend the D.C. model, which has given a good account of itself in our tests.