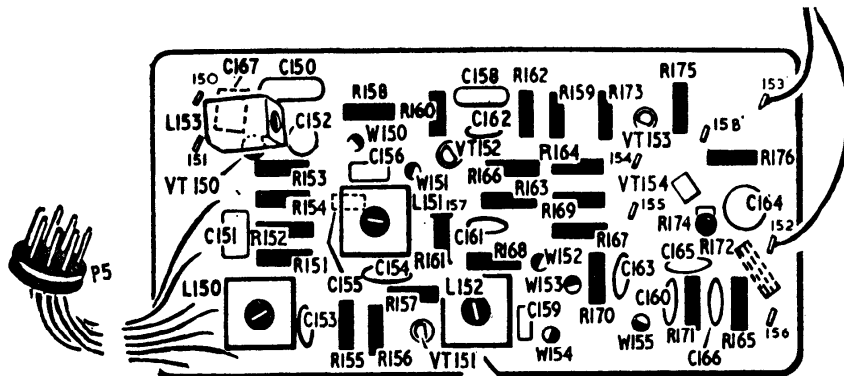


General Description: A sub-panel assembly for inclusion in many B.R.C. models to enable them to reproduce the stereo-multiplex broadcasts transmitted on the Radio Three network of the B.B.C. Power supplies are obtained from the receiver to which it is connected by a 7-pin plug.

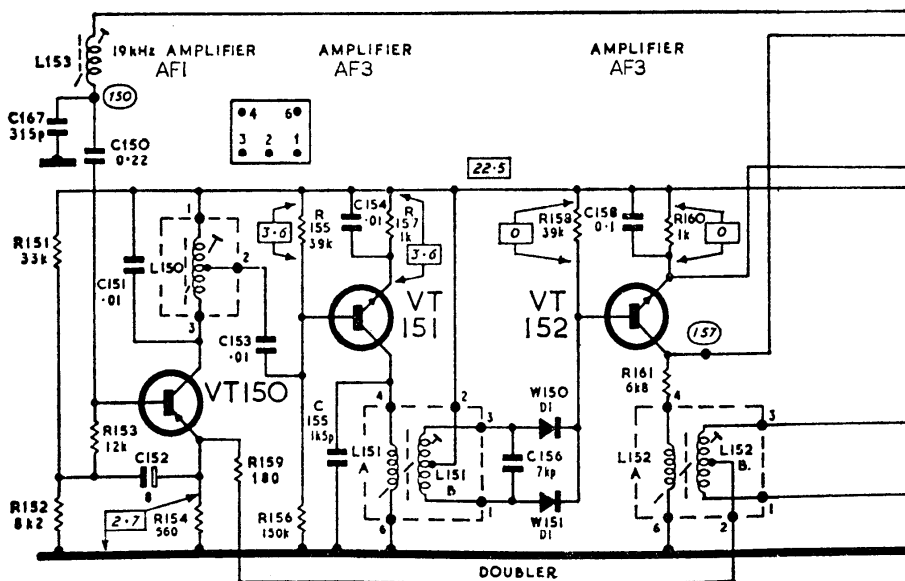


(W313) COMPONENT LAYOUT—STEREO DECODER

W313

Alignment

General Although alignment of the Decoder panel is quite straightforward, no attempt should be made at realignment unless suitable equipment is available. This should consist of an Encoder providing a crystal controlled 19kHz pilot signal and also a *Composite* signal that may be switched to provide a *Difference* signal, a *Sum* signal, and an easily identified left- and right-hand signal (or preferably separate left-hand and right-hand signals). These signals should be available as a multiplex audio output and also as modulation of a V.H.F. signal.



W312a

(W312a) CIRCUIT DIAGRAM—STEREO DECODER (Part)

Procedure: First check I.F. and R.F. alignment. Connect Avometer, on 2.5V D.C. range, across R160, i.e. to read emitter volts of VT152.

If cores have been seriously mistuned or coils replaced, a preliminary alignment of L150 and L151 should be made as follows:

Inject a 19kHz pilot signal to pin 2 of P5 and tune L150 and L151 for maximum reading on Avometer. This reading will be approximately 0.8V when cores are peaked and 19kHz input level is 7mV.

For alignment check, when it may be assumed that L150 and L151 are near correct tuning point, this first operation may be omitted, and procedure will be as follows:

Connect Avometer as above. Connect output meters to each channel (it is assumed that audio checks have been made to ensure correct operation of audio circuits).

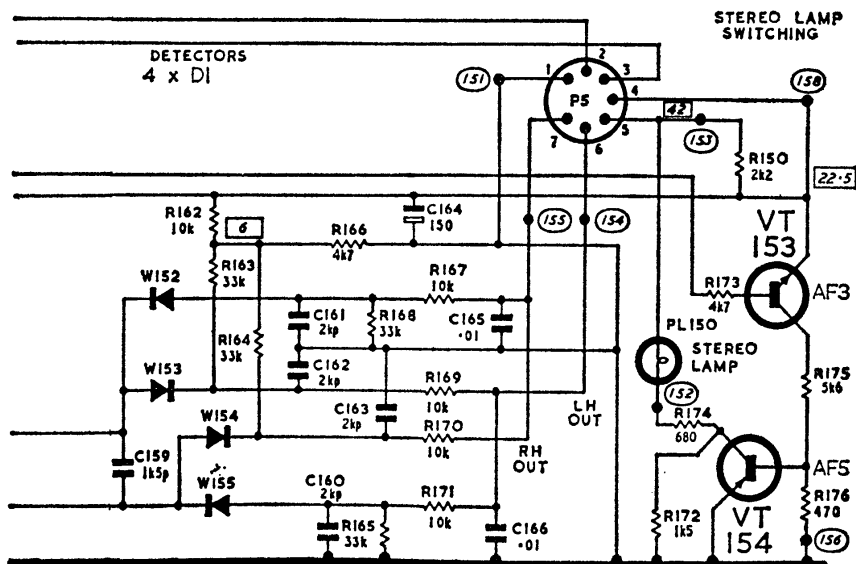
Set Encoder to V.H.F. output (1mV) with composite Sum signal modulation. This signal is to be used to ensure accurate tuning of the receiver to the test signal; it is therefore injected into aerial sockets and receiver carefully tuned with A.F.C. "off". When tuning is accomplished, A.F.C. may be switched "on" to ensure that signal remains in I.F. pass band during Decoder alignment.

Peak L150 and L151 for maximum meter reading—this will be approximately 0.8V.

Switch Encoder modulation to Difference signal and peak L152 for maximum audio output.

Switch Encoder modulation to left-hand signal. Tune L153 to minimum right-hand output, i.e. minimum cross-talk.

Check right-hand signal and cross-talk and also that outputs are balanced ± 1 dB with Difference signal modulation.



W312b

(W312b) CIRCUIT DIAGRAM—STEREO DECODER (Continued)