

HEADPHONE ADAPTOR

Unit restores damping and natural stereo separation.

HEADPHONES have impedances which range from 8 ohms to 2 k ohms or more and handle a typical maximum power of 500 mW. To limit the power that may be delivered into the 8 ohm types, commercial amplifiers generally supply the headphones from the amplifier output via series resistors of around 220 ohms.

Although this technique allows the use of practically any type of headphones without fear of damage

the series resistor drastically reduces the amount of damping the amplifier can apply to the phones.

A further problem with headphone listening is that the stereo separation is unnatural in that there is little right channel information fed to the left ear and vice versa.

This simple little adaptor is inserted between the amplifier and the leads to the speakers. It restores damping, by supplying the phones from a 10 ohm

eiproject 23



source, and has a blend control by which the separation between channels can be varied to obtain a more natural sound.

CONSTRUCTION

We mounted the two four-way terminal strips onto the lid of a small box and the headphone socket and potentiometer through one side. The stereo-headphone socket should be the type which incorporates double-pole break contacts. This type is generally of sealed construction and has 8 pins on the back. Such a socket is necessary so that normal speaker operation is obtained until the headphones are plugged in whereupon the speakers are automatically disconnected.

Wire the unit as shown in the interconnection diagram, and, if the amplifier has DIN connectors, attach short leads, with DIN plugs and sockets, to the unit as shown in the main photograph.



