

CONNECTING STEREO TAPE HEADS

18. Tape heads can be connected directly to the 'STEREO 30' 'TAPE HEAD' input sockets for the *reproduction* of tapes. For recording purposes it is necessary for you to have a bias and erase oscillator and recording amplifier. Each coil of a high impedance stereo tape head should be connected via a screened co-axial cable to the co-axial plugs fitting the sockets marked 'TAPE HEAD'. When using low impedance stereo tape heads it is, of course, necessary to use matching transformers, the secondaries of which should be connected via screened co-axial cables to the sockets marked 'TAPE HEAD'.
The screening of the co-axial cables should not touch the metal parts of the deck if minimum hum levels are to be obtained. The deck and motors should be earthed to the 'EARTH' terminal below the 'SUPPLY POWER' grommet on the rear of the 'STEREO 30'.

As regards the various replay characteristics the same instructions apply as to record characteristics (see para. 15 (a)). As an approximation we suggest the following:

NAB 7½ i.p.s.	with the tone controls at 12 o'clock	
CCIR 7½ i.p.s.	'BASS' at 12 o'clock	'TREBLE' at 2 o'clock
NAB 3¾ i.p.s.	'BASS' at 11 o'clock	'TREBLE' at 3 o'clock
European 3¾ i.p.s.	'BASS' at 10 o'clock	'TREBLE' at 3 o'clock

CONNECTING MICROPHONES

19. Any dynamic (moving-coil or ribbon) microphones, together with their associated grid-matching transformers, may be plugged into the sockets marked 'MIC'. For stereo operation you must follow the maker's recommendations on the positioning of the microphones.

CONNECTING MONO TUNERS, PICKUPS, TAPE HEADS & MICROPHONES

20. These input devices may be connected via a screened co-axial cable to either the right or left-hand socket of the appropriate input. The unwanted channel can then be muted by full rotation of the 'BALANCE' control. If, however, mono reproduction is required through both channels then the function switch should be turned to 'INPUT R' or 'INPUT L' when the appropriate input socket will feed both channels simultaneously. When a tuner is used a separate earth (ground) connection should NOT be made to the tuner as this will be effected by the screening of the co-axial input cable.

CONNECTING TAPE RECORDERS

21. In general, any normally designed tape system can be connected, using the shortest possible lengths of screened cables, to the co-axial sockets marked 'TAPE AMP' on the rear of the 'STEREO 30' for replay purposes, or to the sockets marked 'RECORD' for recording purposes.

The following points should be noted:

- An earth (ground) connection should not be made to the tape recorder, as this may cause an 'earth loop' and hum. The recorder will be earthed automatically through the 'STEREO 30' amplifier.
- For replay purposes the input switch should be set to 'TAPE AMP'.
- For recording purposes the input switch should be turned to the input from which it is desired to record.
- The function, 'BASS', 'TREBLE' and 'FILTER' controls are operative when recording or replaying.
- The output level (which is unaffected by the 'BALANCE' or 'VOLUME' controls) from the 'RECORD' sockets on the 'STEREO 30' will be approximately 125 mV and normally these sockets should be connected to the low sensitivity inputs on the tape recorder, which should have an input impedance of at least 50,000 ohms.

With some tape recorders the output from the 'STEREO 30' power amplifier may not fully modulate the tape; in this case the high sensitivity inputs on the tape recorder should be used. To avoid overloading the high sensitivity tape recorder inputs, the output from the 'RECORD' sockets can be reduced to 12.5 mV by setting the 'OUTPUT' switch to 'LO'. This switch is situated below the 'RECORD' sockets.

(f) TAPE MONITOR SWITCH

If you use a tape recorder having a separate replay head and separate record and replay amplifiers, it is possible for you to compare instantaneously the original signals being fed to the tape recorder with the recorded signals taken from the tape immediately after recording.

With the 'TAPE MONITOR' switch set to 'OFF' the loudspeakers will reproduce the signals being fed to the tape recorder. With the 'TAPE MONITOR' switch set to 'ON' the signals from the tape replay amplifier will be fed via the 'VOLUME' control and the power amplifier sections of the 'STEREO 30' to the loudspeakers. The 'RECORD' sockets will continue to feed steady recording signals (unaffected by the 'VOLUME' or 'BALANCE' controls) to the tape recorder.

N.B. THIS SWITCH MUST BE SET TO 'OFF' IN ORDER THAT THE PRE-AMPLIFIER MAY FUNCTION NORMALLY. ONLY SWITCH TO 'ON' FOR MONITORING PURPOSES WHILST MAKING A TAPE RECORDING AS DETAILED ABOVE.