

Note: POT VR1 is a later addition and adjusts input gain. It is best set just off the 'full gain' position, but setting too low will kill the stereo beacon. Experiment - no harm can be done. But if all sounds well, leave alone!

9) PERFORMANCE OF DECODER.

SEPARATION: The MPX 1 decoder is capable of a separation in excess of 40db, but this assumes that the tuner with which it is partnered is reasonably within specification and accurately aligned. It is often implied in articles on vintage valve tuners that alignment 'drifts off' over the years, but this is most unlikely: what does happen is that components change value after many years' service so that the original accurate alignment is no longer effective. If stereo separation seems acceptable, it is probably best to leave well alone, but for those who wish to experiment a slight improvement may be obtained by careful adjustment of VR3 (SEE ILLUSTRATION). This will match the decoder more accurately to the tuner's IF stage. Use a good pair of headphones for this adjustment and wait for a signal with good left/right information. Swing the pot slowly to left and right until you feel you have the best sound and satisfactory separation. But please remember, depending on the way the tuner is performing, the 'best sound' will not necessarily be the sound with the widest separation. Use your judgement here. Gramophone pickups have poor separation compared to most FM tuners and CD players, but we know how good an LP can sound.

- 10) PRESET VR2: This control locks the decoder's internal oscillator onto the 19kHz pilot tone. If out of adjustment, the stereo beacon will not light and the signal will be heard in mono only. Although this control is factory adjusted, a small adjustment to left or right may be attempted if the tuner fails to 'trigger' the stereo beacon. If this fails, however, a problem with the tuner's 'multiplex out' signal may exist. Your supplier will be able offer advice and / or a servicing facility should this be the case (See section 3).

- 11) NOISE: The decoder's inherent noise figure is in the region of 76db. If excessive background hiss is experienced when the decoder is switched to stereo (but is acceptable when switched to mono) the likeliest cause is an inadequate FM aerial. FM aerial requirements will, obviously, differ with location; but even in areas of good signal strength an outdoor aerial with a minimum of 3 elements will be required. Also remember that a 'low-loss' down cable may be anything but low-loss if it has weathered the storms for a decade or more. If there is any doubt, renew it. If the terminals of the FM array are corroded, change the array, and this time fill the terminal block with high melting-point grease. Also make sure that the array's front element (in most designs, the shortest element) is 'aimed' at the best transmitter for your area. If in doubt, engage the services of a good aerial installer.

NOTE: A competent aerial installer will possess, as an indispensable 'tool' of his trade, an accurate Field Strength Meter. Worth checking!

- 12) DISTORTION: The MPX 1 decoder is a very low distortion design. However, it must again be pointed out that a level of distortion which would be subjectively acceptable in a mono tuner working 'blow par' might be far from acceptable once it is passed through a decoder. If distortion seems excessive in a tuner operating in stereo which otherwise performs acceptably in mono, the tuner may be badly in need of an overhaul or realignment (See section 3).

13) QUALITY OF BROADCAST.

Current transmission practices have resulted in a 'swing' of broadcasting quality that sometimes beggars belief. This ranges from the breathtakingly superb to the excruciatingly awful. At best, with dynamic processing avoided or at least kept to a minimum, a 'live' broadcast can be very good indeed, if variable. Our own opinion, for what it is worth, is that the best of modern