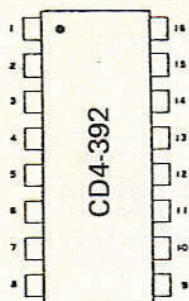


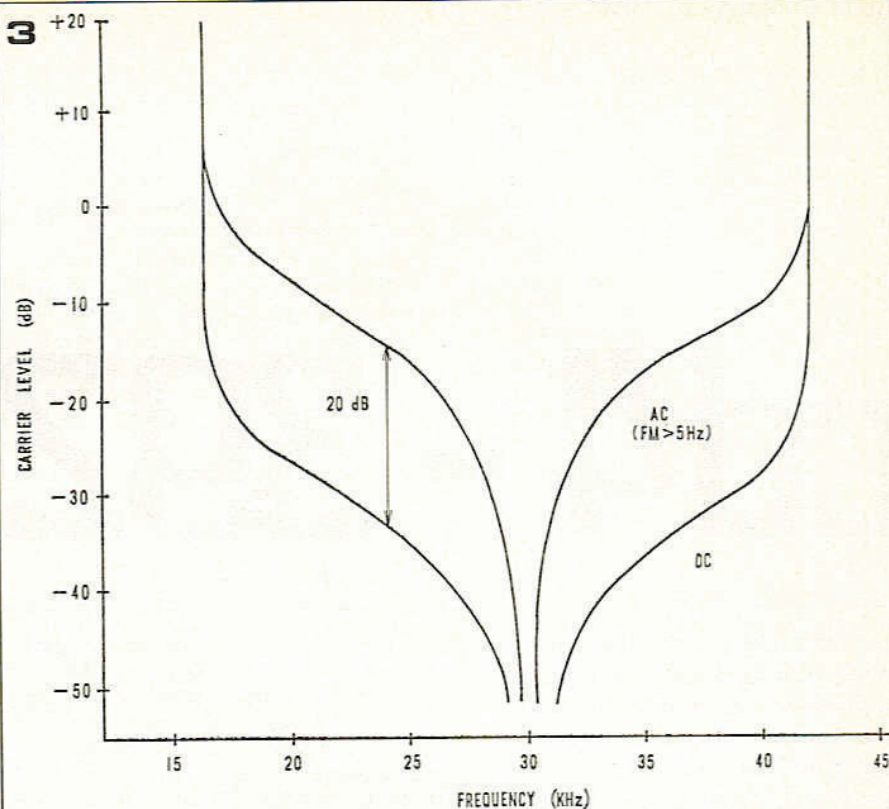
1

(TOP VIEW)

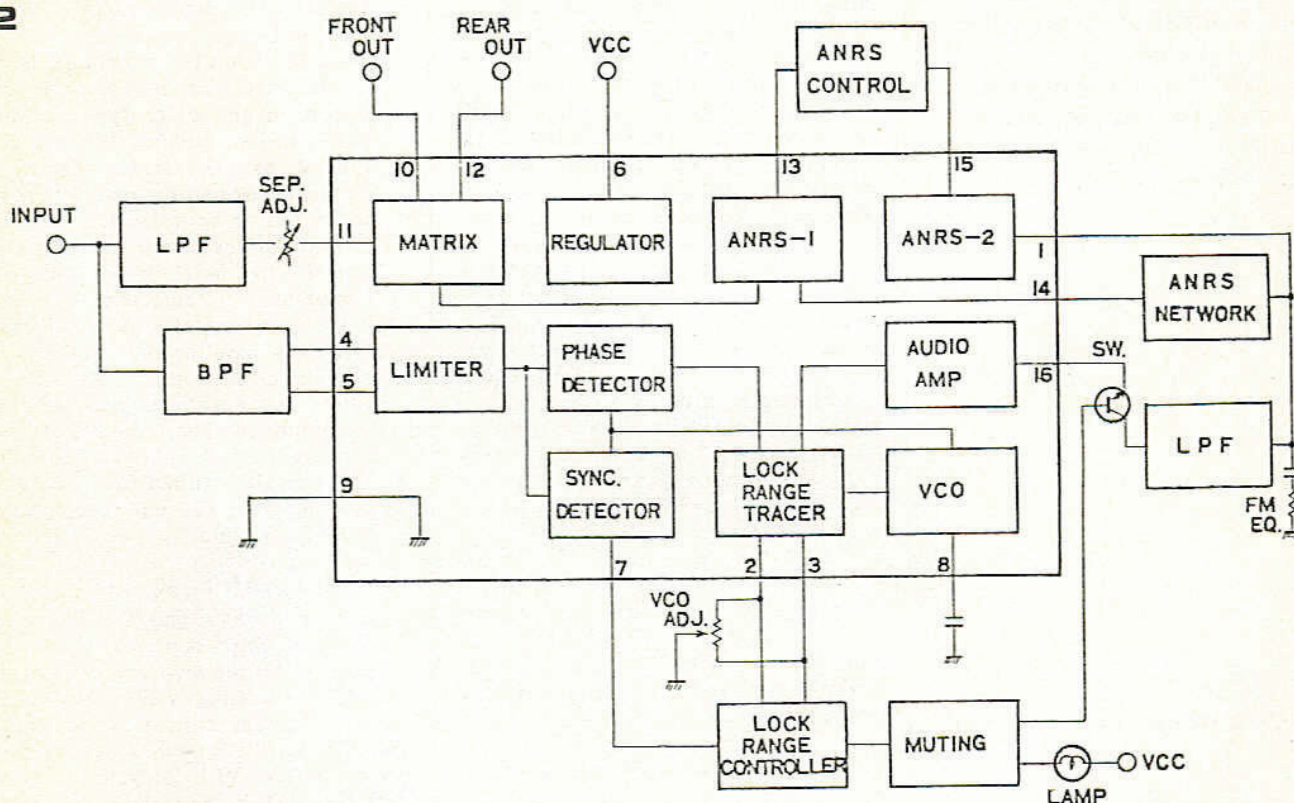


1. ANRS-2 INPUT
2. LOCK RANGE CONTROL
3. LOCK RANGE CONTROL
4. LIMITER INPUT
5. LIMITER OUTPUT
6. +VCC
7. SYNC. DET. OUTPUT
8. VCO CAPACITOR
9. GROUND
10. FRONT OUTPUT
11. MAIN INPUT
12. REAR OUTPUT
13. ANRS CONTROL
14. ANRS-1 INPUT
15. ANRS-2 OUTPUT
16. DEMODULATED OUTPUT

3



2



ditions which could occur in practice. Even if a CD-4 disc is inadvertently played back at 45 rpm, the resultant transposed carrier (40.5 kHz) will be within the locking range of the system. Figure 4 shows the quieting curve of the carrier recovery system. There is an S/N of 72 dB from 6 kHz deviation and ANRS improves this ratio by 13 dB for a total S/N of 85 dB, sufficient for professional use.

To prevent interference between the carrier recovery system and audio processing system which are integrated in the single CD4-392 chip, a VCO circuit which oscillates with low current and voltage and which is highly stable was adopted. Figure 5 is a block diagram of this circuit. The VCO consists of a pair of transistors, Q2 and Q3, the emitters of which are common. The transistors switch ON and OFF alternately and

repeatedly. The drive circuit connected to a common point between the emitters of these transistors operates in response to a control signal controlling current i_1 , thereby driving the transistors. The output is taken from the base potential of transistor Q3. This base potential varies between two values in accordance with the alternating ON and OFF states of the pair of transistors. The charging and discharging currents