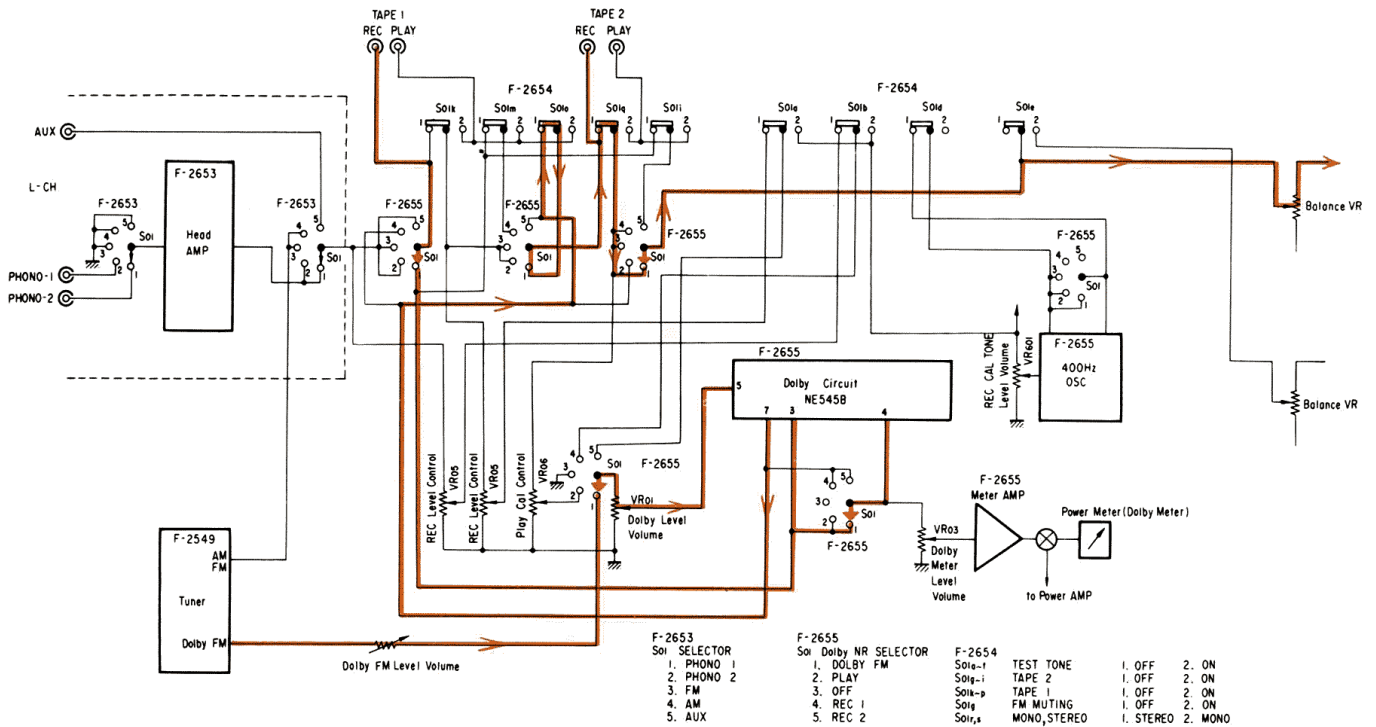
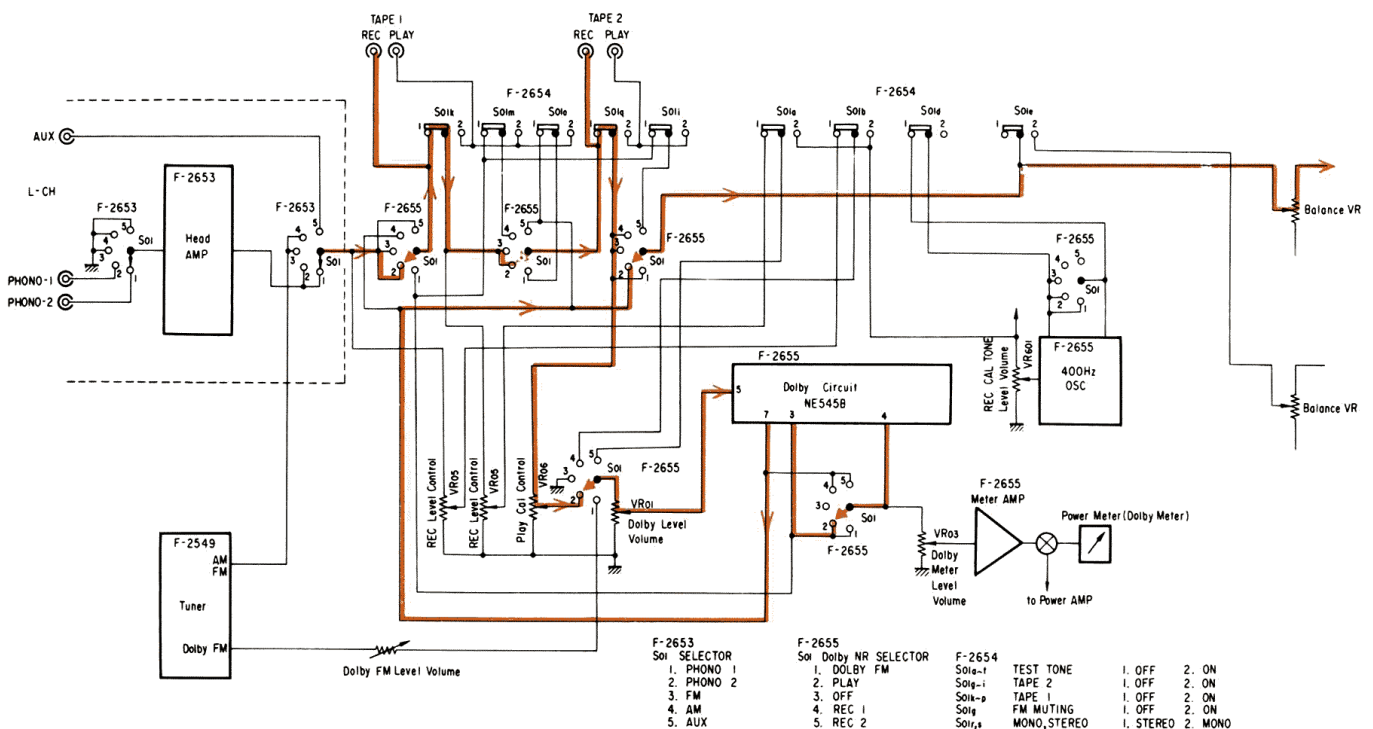


2-3. Dolby Mode Section

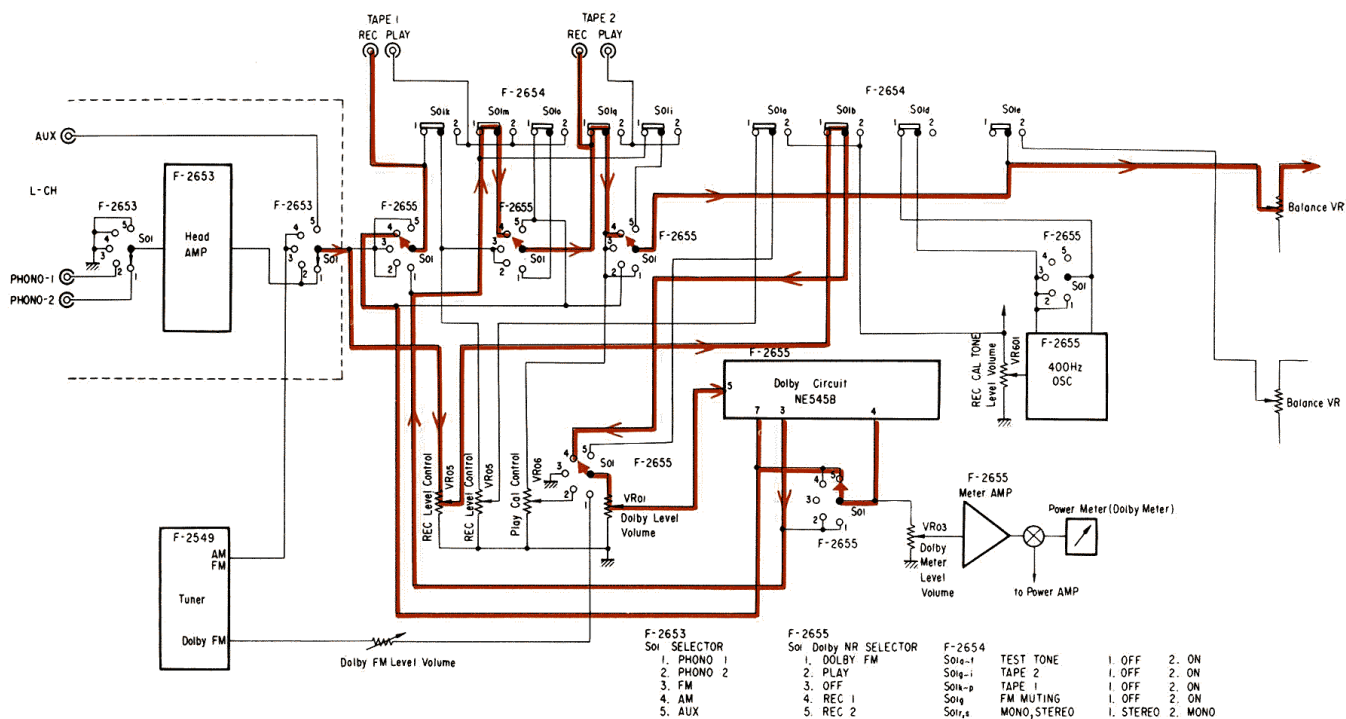
2-3-1. Dolby FM (Dolby NR Selector)



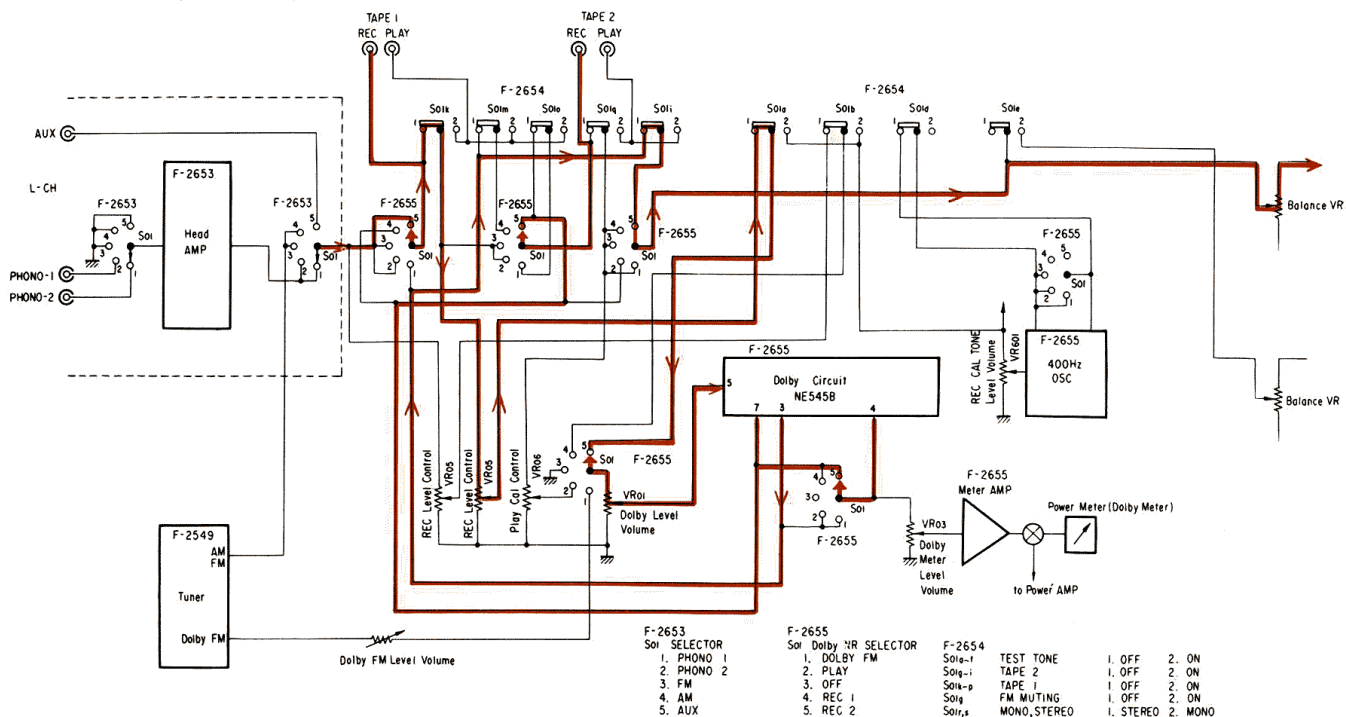
2-3-2. Play (Dolby NR Selector)



2-3-3. Rec (1) (Dolby NR Selector)



2-3-4. Rec (2) (Dolby NR Selector)



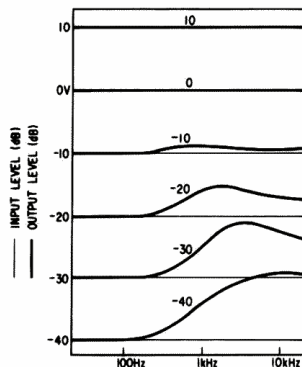
3. OPERATION OF DOLBY FM SYSTEM

This Dolby Noise Reduction System Type B used in this unit is not only available for encoding of the FM dolbyized signal but also useful for encoding and decoding of other signals. Therefore it is possible and effective to combine with other products such as a cassette deck without Dolby system.

Dolby FM System

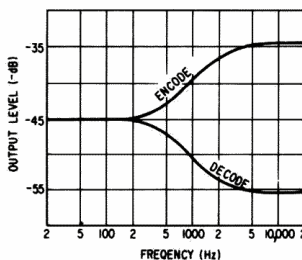
FM broadcasting system is originally able to produce a very high quality audio performance; however, FM stereophonic broadcasting system incurs a 20dB Signal-Noise ratio decrease. When Dolby B Type Noise Reduction system is used for a FM stereo, Signal-Noise ratio (S/N) is conspicuously improved and this ratio is at about 10dB.

Fig. 3-1



Whole range output Frequency Response characteristics against input level.

Fig. 3-2



Low level Frequency Response characteristics of encode and decode processors.

4. ADJUSTMENTS

4-1. Dolby Circuit Adjustment

4-1-1. Input Level Adjustment of Dolby IC (NE545B) (See Fig. 4-2)

Note: 1. Speaker Selector.....A
2. Master VolumeMinimam
3. Balance Volume.....Center
4. SelectorAUX
5. Accessory SwitchOFF
6. REC Level VolumeMAX
7. Dolby Selector SwitchREC 1

STEP	SUBJECT	FEED SIGNAL		MEASURE OUTPUT	ADJUST	ADJUST FOR
		FROM	TO			
1.	L-CH	400Hz 80mV Audio OSC.	AUX Terminal	REC Terminal TAPE I VTVM	VR01 F-2655	Output 270mV
2.	R-CH	Same as above	AUX Terminal	REC Terminal TAPE I VTVM	VR02 F-2655	Same as above

Principles

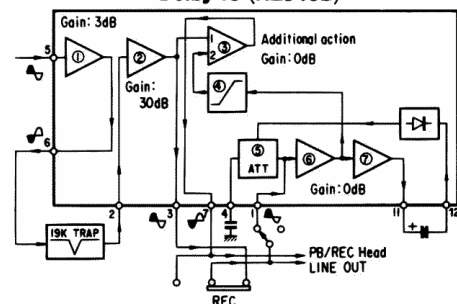
The S/N of the FM becomes worse when the frequency is high and the level is low. Because of this reason, the middle and high range of the low level signal is expanded by a FM station. Then the signal will be compressed proportionally along the expanded level by a receiving side. (See Fig. 1, 2)

This unit employs a IC NE545B for a main Dolby circuit. The Operating diagram is shown in the Fig. 3-3.

Complementary items

1. When Dolby FM system is being used, the de-emphasis of FM-out is 25 μ s.
2. The input level of Dolby FM is at 50% modulation and ± 37.5 kHz.
3. This unit has an own 400Hz Oscillator for Dolby Tone in order to adjust itself to the Dolby level.

Fig. 3-3 REC Dolby IC (NE545B)



PLAY Dolby IC (NE545B)

