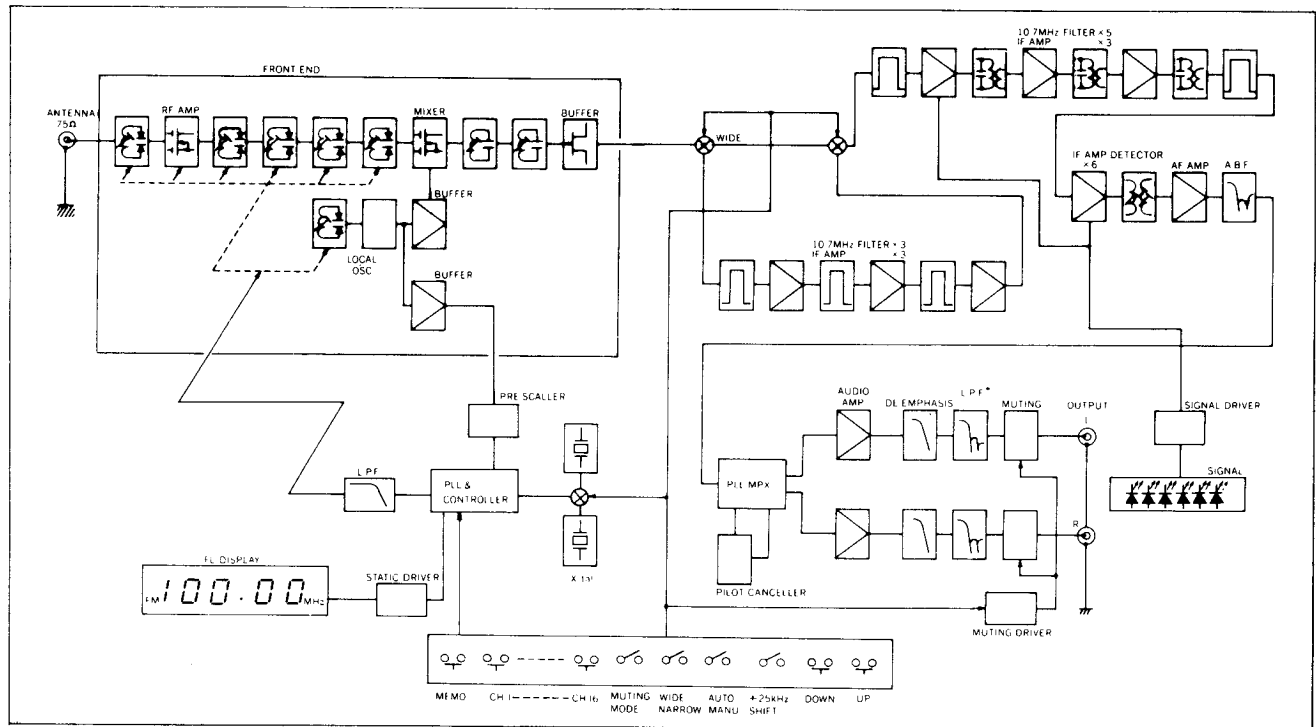


BLOCK DIAGRAM



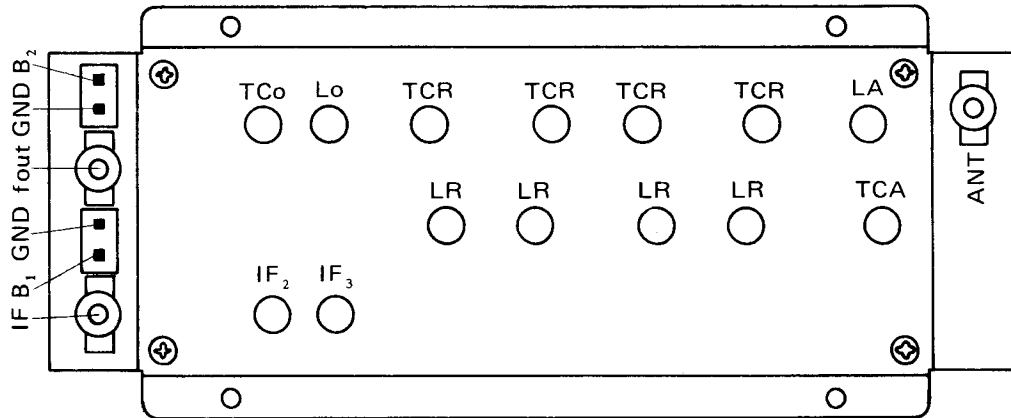
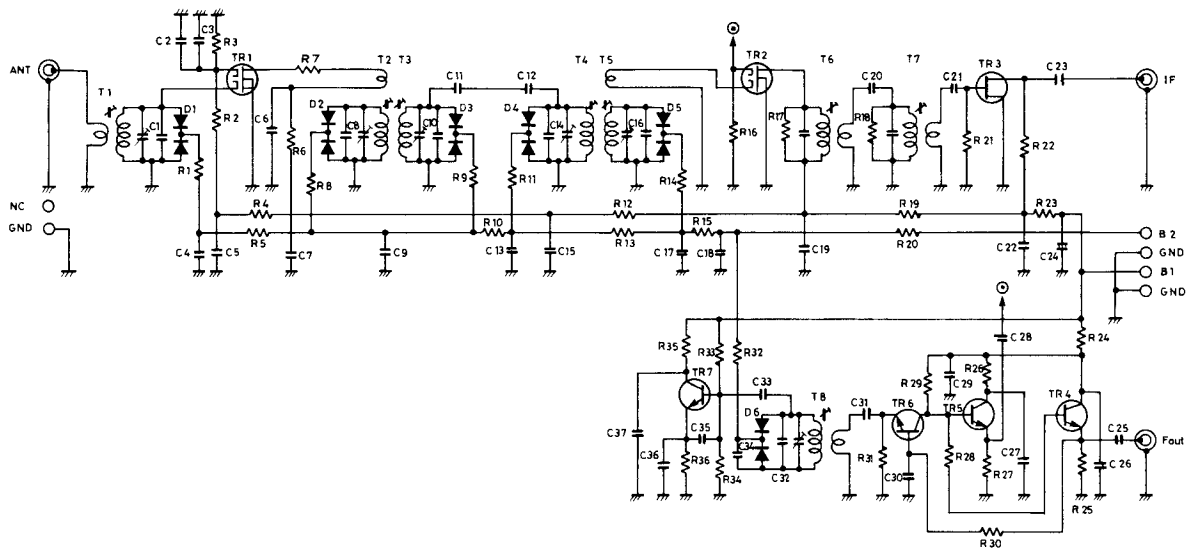
SPECIFICATIONS

- **Tuning range** 87.5 – 108MHz
- **IHF usable sensitivity** 13.2dBf
Output: THD 3%
98MHz
- **50dB quieting (mono)** less than 22.1dBf
- **Signal to noise ratio** more than 75dB
Input : 65dBf 98MHz
- **Audio frequency response (De-emphasis 50μs)**
Input : 65dBf 98MHz
1000Hz 40–15000Hz (+0.5, –1.5dB)
- **THD** { Wide 0.1%
Input : 65dBf 98MHz { Narrow 0.6%
- **Capture ratio (Wide)** 1.5dB
Input : 65dBf 98MHz
- **IHF alternate selectivity** . . { Wide 35dB
Input : 45dBf 98MHz { Narrow 90dB
±400kHz
- **Spurious response** more than 110dB
Input : 65dBf 98MHz
Frequency 10MHz–200MHz (except generator harmonics)
- **IF rejection** more than 110dB
at 90MHz
- **Image rejection** more than 110dB
at 106MHz
- **AM suppression**
Fm : 1000Hz 75kHz dev.
Am : 400Hz 30% modulation
Input : 65dBf 98MHz more than 50dB
- **FM muting sensitivity** 34dBf
Input : 98MHz
Output: 20dB attenuation
- **Output voltage** 220mV
Input : 65dBf 98MHz 22.5kHz dev.
- **50dB quieting (stereo)** less than 39.2dBf
- **Stereo distortion (without 19kHz, 38kHz)**
Input : 65dBf 98MHz { Wide less than 0.3%
{ Narrow less than 0.8%
- **Mono-stereo switching sensitivity** less than 32.2dBf
Input : 98MHz
- **Separation (without 19kHz 38kHz)**
Input : 65dBf 98MHz
1000Hz { Narrow more than 32dB
{ Wide 45dB
100–10000Hz . . { Narrow 25dB
{ Wide 36dB
- **Subcarrier product ratio** more than 60dB
Input : 65dBf 98MHz
- **SCA suppression** more than 55dB
- **Stereo S/N** more than 72dB
- **Output Impedance** 2kohms
- **Maximum power consumption** 15watts
- **AC power supply** 110/220V, 50/60Hz
- **Net weight** 5.2kg
- **Dimensions** W = 440 H = 98 D = 333mm

Specifications and design are subject to change without notice.

FRONTEND

• FD812U13



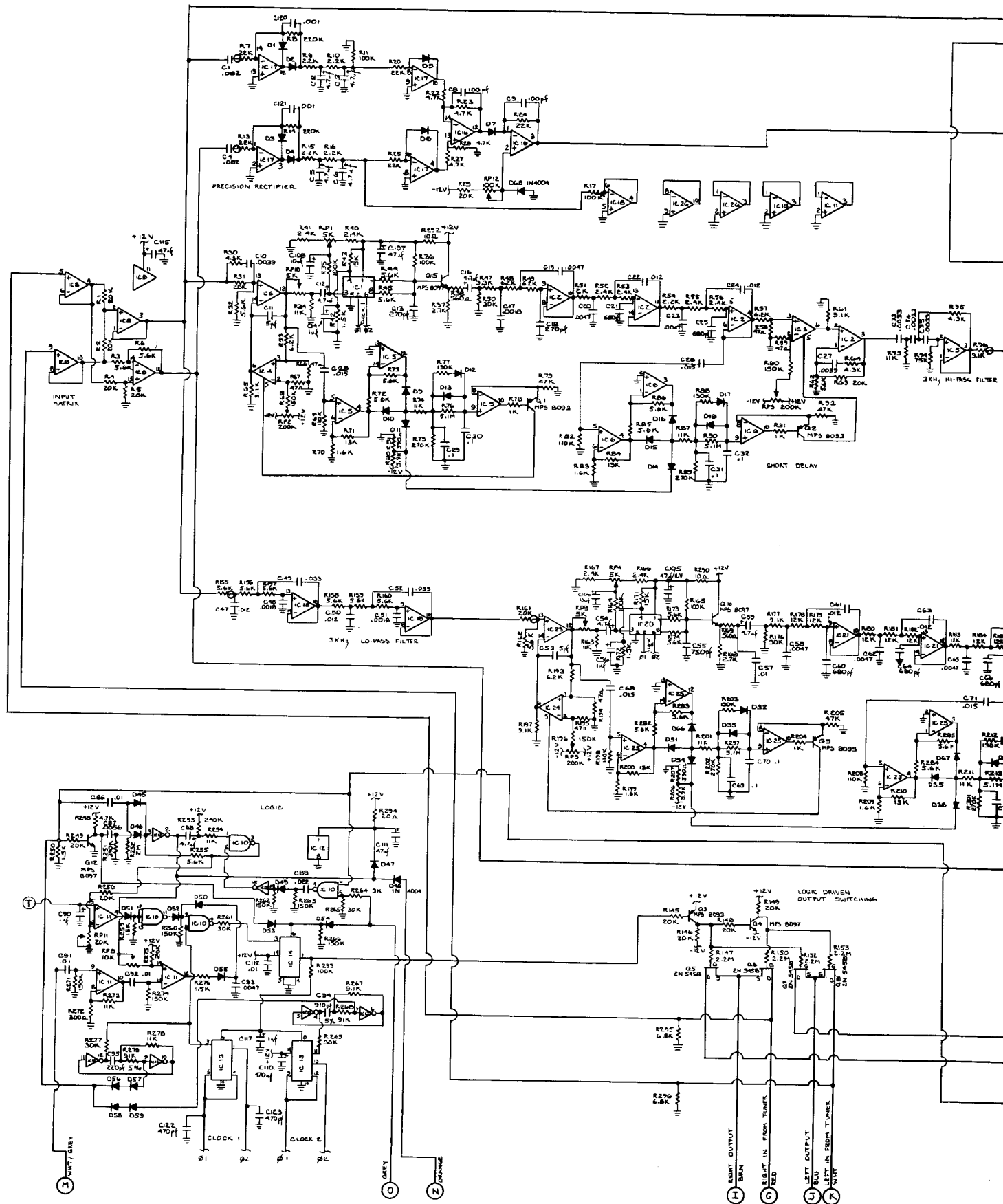
C1	Capacitor	3pF	C32	Capacitor	5pF	R22	Resistor	330Ω
C2	Capacitor	100pF	C33	Capacitor	6pF	R23, R24	Resistor	10Ω
C3	Capacitor	22000pF	C34	Capacitor	22pF	R25	Resistor	1kΩ
C4	Capacitor	1000pF	C35, C36	Capacitor	15pF	R26	Resistor	10Ω
C5, C6, C7	Capacitor	22000pF	C37	Capacitor	22000pF	R27	Resistor	680Ω
C8	Capacitor	6pF	R1, R2	Resistor	100kΩ	R28, R29	Resistor	1kΩ
C9	Capacitor	1000pF	R3	Resistor	33kΩ	R30	Resistor	10kΩ
C10	Capacitor	6pF	R4	Resistor	10Ω	R31	Resistor	560Ω
C11, C12	Capacitor	2pF	R5	Resistor	2Ω	R32	Resistor	10kΩ
C13	Capacitor	1000pF	R6	Resistor	10Ω	R33	Resistor	8.2kΩ
C14	Capacitor	6pF	R7	Resistor	47Ω	R34	Resistor	10kΩ
C15	Capacitor	22000pF	R8, R9	Resistor	100kΩ	R35	Resistor	10Ω
C16	Capacitor	8pF	R10	Resistor	2Ω	R36	Resistor	2.2kΩ
C17, C18	Capacitor	1000pF	R11	Resistor	100kΩ	TR1, TR2	Transistor	3SK74
C19	Capacitor	22000pF	R12	Resistor	10Ω	TR3	Transistor	2SK61
C20	Capacitor	8pF	R13	Resistor	2Ω	TR4, TR5, TR6	Transistor	2SC1215
C21, C22, C23	Capacitor	22000pF	R14	Resistor	100kΩ	TR7	Transistor	2SC930
C24	Capacitor	3.3μF	R15	Resistor	2Ω	D1 ~ D6	Diode	1SV55
C25	Capacitor	22000pF	R16	Resistor	560Ω	T1	Ant. Trnas.	
C26, C27	Capacitor	1000pF	R17	Resistor	10kΩ	T2 ~ T5	RF Trans.	
C28	Capacitor	47pF	R18	Resistor	6.8kΩ	T6, T7	IF Trans.	
C29	Capacitor	1000pF	R19	Resistor	10Ω	T8	OSC Trans.	
C30	Capacitor	22000pF	R20	Resistor	2Ω	TC1 ~ TC6	Trimmer	
C31	Capacitor	47pF	R21	Resistor	100kΩ			

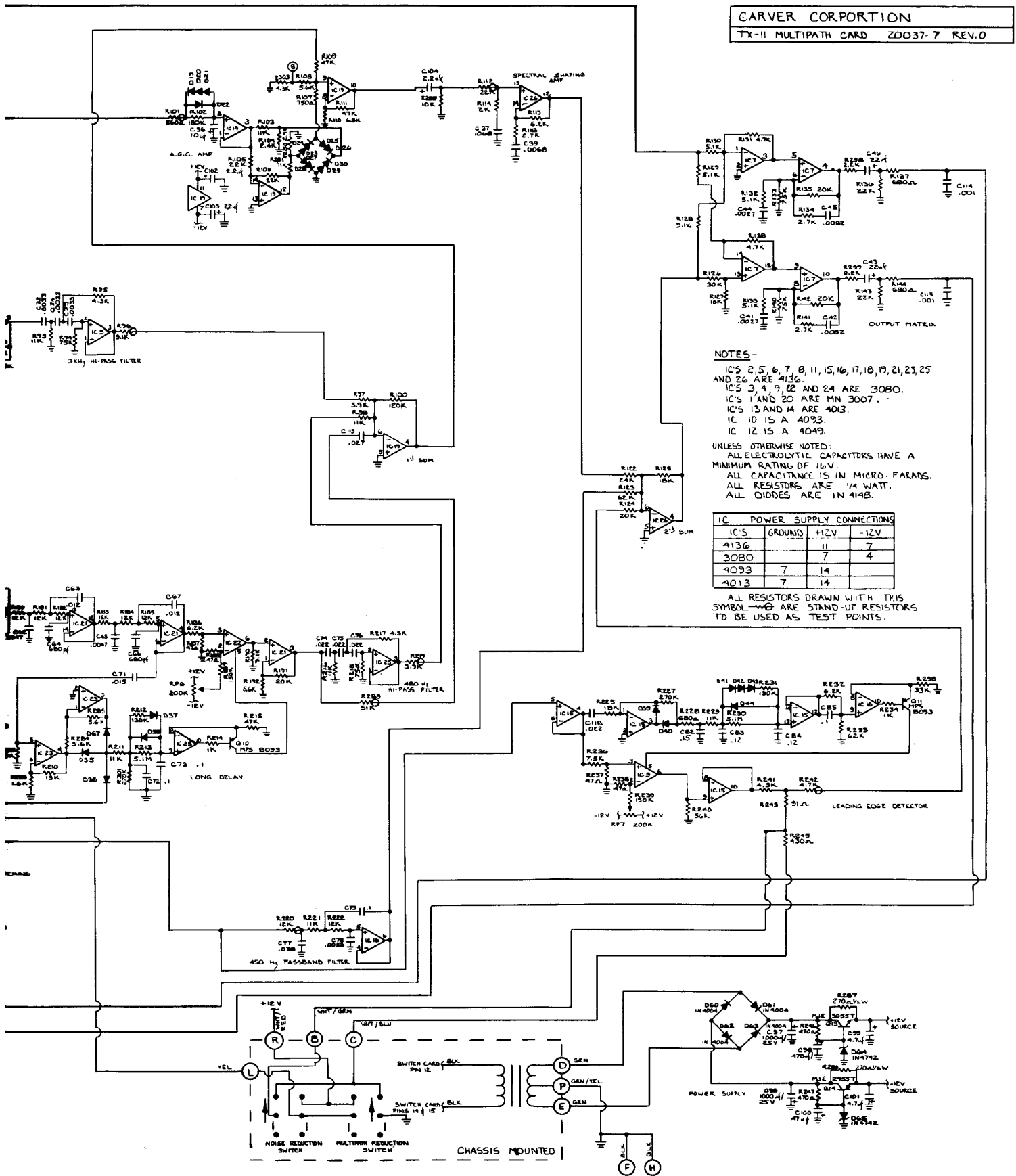
50 dB
80 dB

+25kHz MUTE INPUT
+25kHz AUTO INPUT
+25kHz MANUAL INPUT
GND

PIN NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	
CONNECTION	F	NP	AB	MZ	FM	MS	G	A	E	D	C	B	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	aa	ab	ac	ad	ae

MULTIPATH CARD





NOTES-

IC'S 2, 5, 6, 7, 8, 11, 15, 16, 17, 18, 19, 21, 23, 25 AND 26 ARE 4136.
IC'S 3, 4, 9, 12 AND 24 ARE 3080.
IC'S 1 AND 20 ARE MN 3007.
IC'S 13 AND 14 ARE 4013.
IC 10 IS A 4093.
IC 12 IS A 4049.

UNLESS OTHERWISE NOTED:
ALL ELECTROLYTIC CAPACITORS HAVE A MINIMUM RATING OF 16V.
ALL CAPACITANCE IS IN MICRO-FARADS.
ALL RESISTORS ARE 1/4 WATT.
ALL DIODES ARE IN 4148.

POWER SUPPLY CONNECTIONS			
IC'S	GROUND	+12V	-12V
4136		11	7
3080		7	4
4093	7	14	
4013	7	14	

ALL RESISTORS DRAWN WITH THIS SYMBOL ARE STAND-UP RESISTORS TO BE USED AS TEST POINTS.