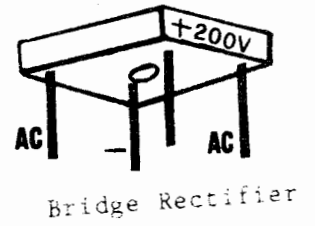
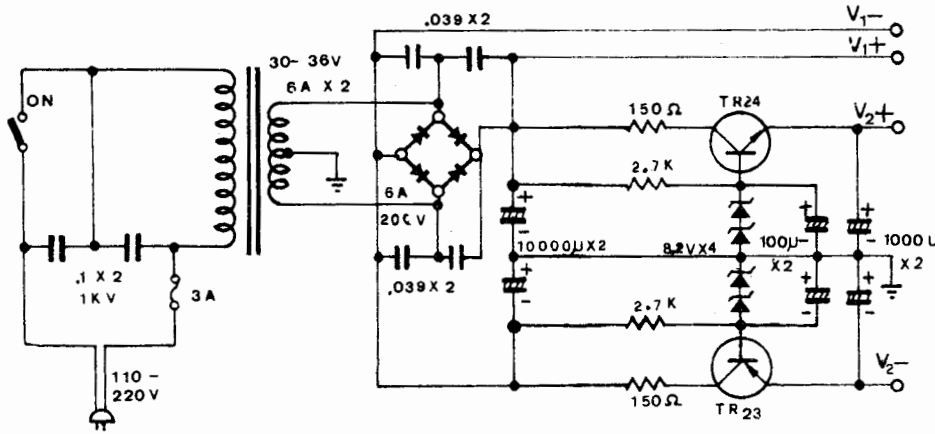




ME SING ELECTRONIC CO.

93, 3/F, Bk G, Yuen Chow Street, Sham Shui Po, Kowloon, H.K.
(Tel : 3-873683 , 3-708507)

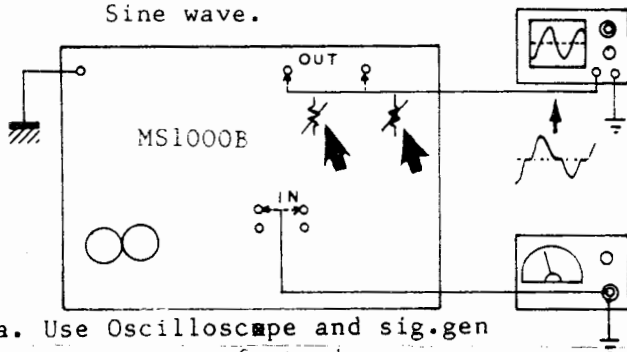


V1 for Main Amp.
V2 for Preamp.

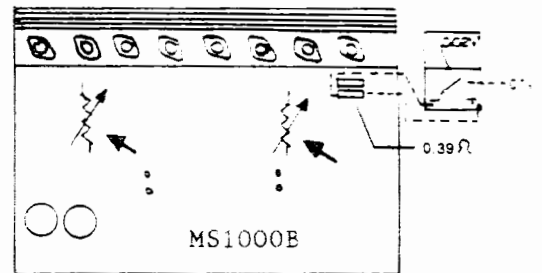
Circuit of onboard power supply (excluding transformer and it's associates.)

Tune here to get perfect Sine wave.

Oscilloscope



Tune VR to get a voltage drop of 0.02V across either resistor 0.39Ω.

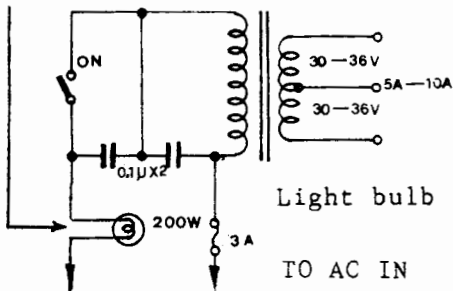


a. Use Oscilloscope and sig.gen to get a perfect sine wave.

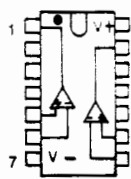
Reverse the poles of the voltmeter needle turns to the opposite direction.

Method of calibrating idle current.

Remove it after calibration.



RC4739
Top View

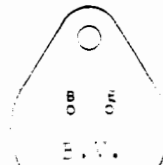
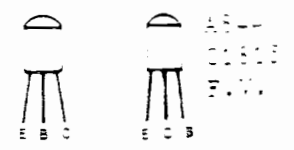


MS4923
MS4924
MS4919
MS4922
F.V.

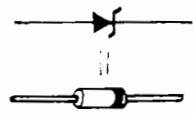


CS901-

NPN
F.V.



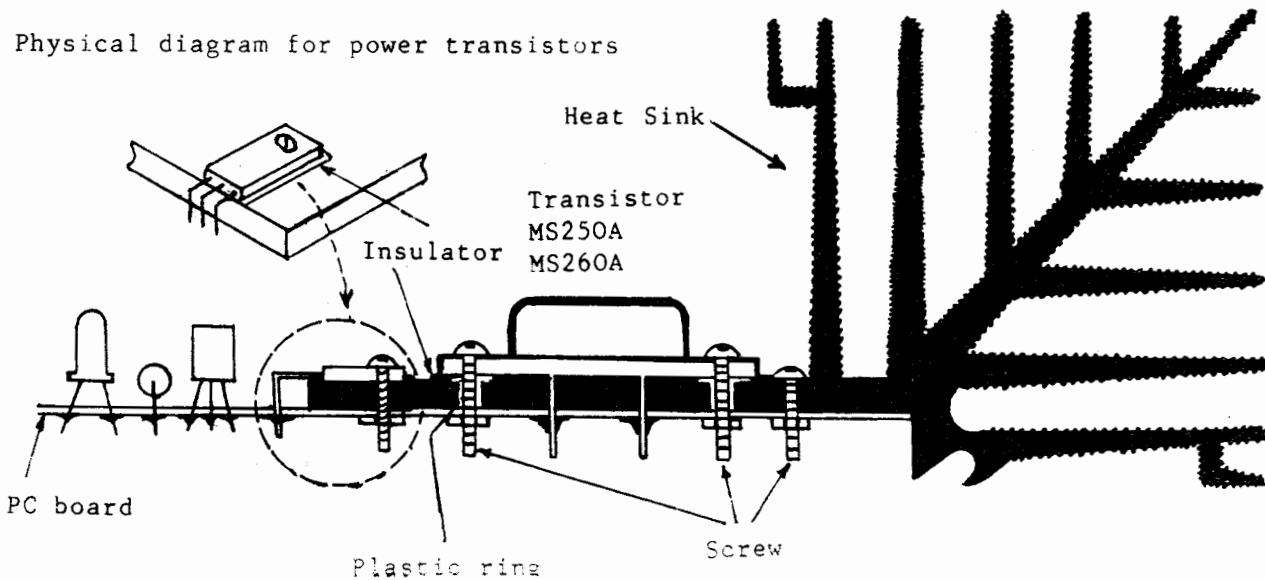
MS250A
MS260A



Protective device for testing.
(Use only when in testing)

Pins diagram for IC & transistors.

Physical diagram for power transistors



Technical Data :

Input Sensit	: 2.0mV (Mag)	Damping Factor	: 100 at 8 ohms.
	10 mV (Mic)	Tone Control	: 3 ranges.
	100mV (Aux)	Treble	: 18 dB
	1.0 V (Main)	Bass	: 18 dB
Imped	: 50K (Mag)	Mid Rang	: 10 dB.
	10K (Mic)	S/N Ratio	: Better than 110 dB
	100K (Aux)	Freq. Response	: 0 to 100KHz Main
	33K (Main)		1 dB
Voltage	: 30 to 36V AC X2		0 to 100KHz Tone
	40 to 52 DC		1 dB
Current	: 10A AC 10A DC		100 to 5KHz Mic
Output Power	: 150mV (Mag)		20 to 20KHz Mag
	120mV (Mic)		RIAA 1 dB
	1.2 V (Aux)	Power Bandwid	: 0 to 100KHz. 3 dB
	250 W (Main)	THD.	: 0.005 % (1KHz 1 W)
Imped	: 4 to 16 ohms		
	(Main Amp)		

Testing Procedures :

1. Make sure everything is right and ready for test.
2. Insert a 100 to 200 watts light bulb in series with the primary of the transformer to the AC inlet, and connect it to the PC board.
3. Connect it to the AC inlet (110/220V) light bulb should glow dimly. If it glows bright, un-plug it and recheck wiring.
4. If everything all right, the LED on board should dim out. It means that the speaker protector is working and the idle current is under control as well as the output DC on the speaker terminal is below 1 V DC.
5. Use either method to calibrate idle current :
 - a. Use signal generator and Oscilloscope :-
Connect it as shown, adjust the 5K VR such that the sine wave appeared to be in perfect shape.
 - b. Use voltmeter :-
Use a voltmeter with 0.1V DC range and tune the 5K VR to have a reading of 0.02V across each 0.39 Ohm resistor.
6. Unplug power and connect speaker to output, connect preamp out to main in, then apply a signal in to AUX IN (e.g. signal generator, tuner, Cassette etc).
7. If all done, connect AUX IN to a selector switch and magnetic preamp out to the switch, then test it with a magnetic cartridge with a record.
8. If all set, remove the 100/200W light bulb.

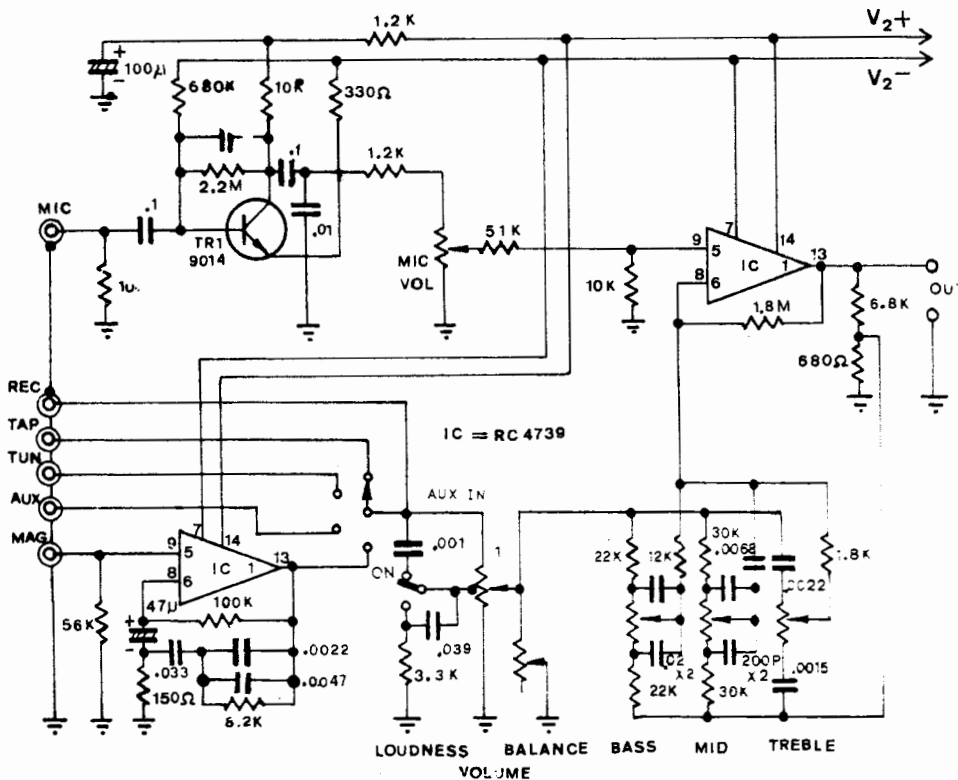
Note : In the testing procedures above, no precaution is made in against any 'HUM' noise pick-up. For testing propose, it is resommended to use a metal plate insulated, and put it under the PC board with a heavy duty cable grounded.

** If any problem comes up, recheck circuit and process testing procedures.
If all failed, consult ME SING ELECTRONIC CO.

Transistors table for MS1000B

TR1	CS9014	TR7	MS4923	TR13	MS260A	TR19	C1815
TR2	C1815	TR8	A844	TR14	MS250A	TR20	A844
TR3	C1815	TR9	MS372	TR15	MS250A	TR21	C1815
TR4	A844	TR10	MS4924	TR16	C1815	TR22	MS4922
TR5	A844	TR11	MS4923	TR17	C1815	TR23	MS4919 or N4898
TR6	MS4924	TR12	MS260A	TR18	C1815	TR24	MS4922

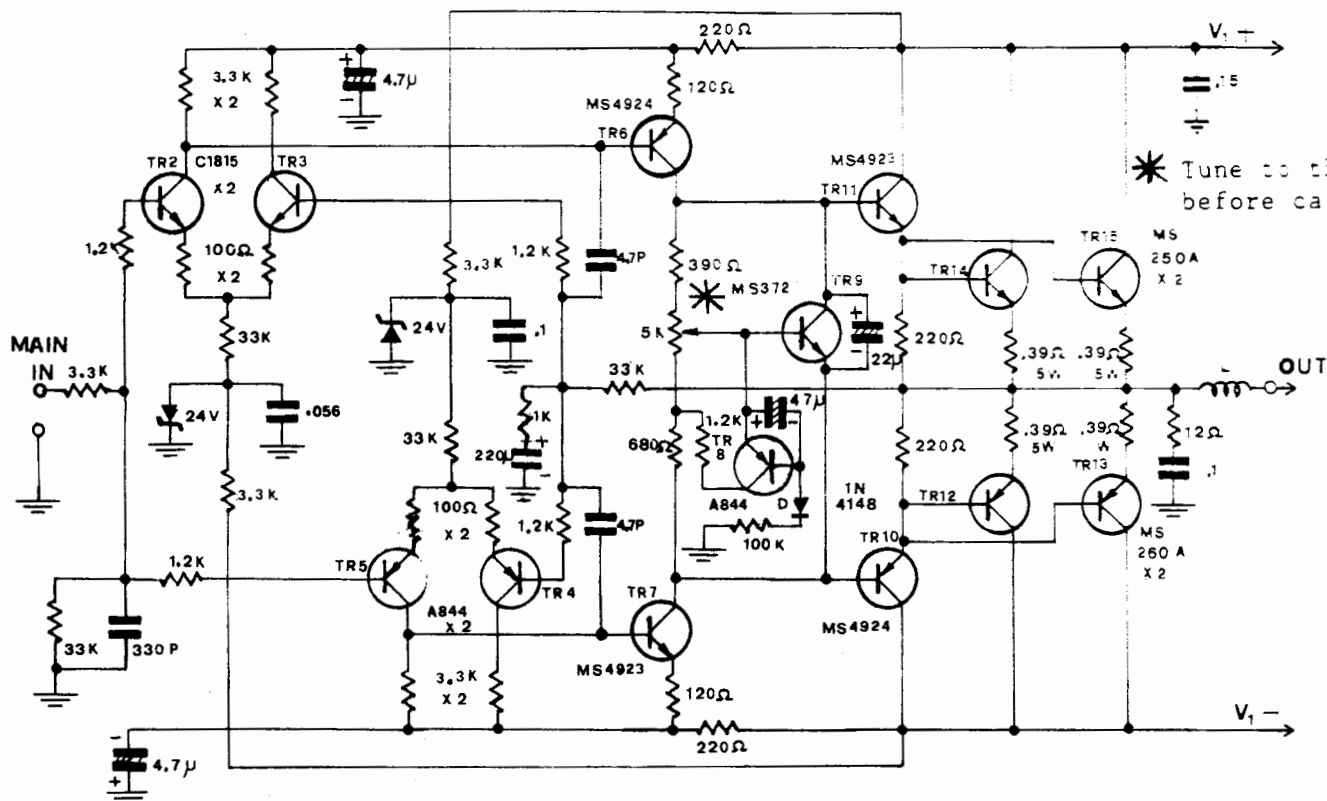
250W 全DC化立體聲前後級放大器



Capacitor Conversion Table :

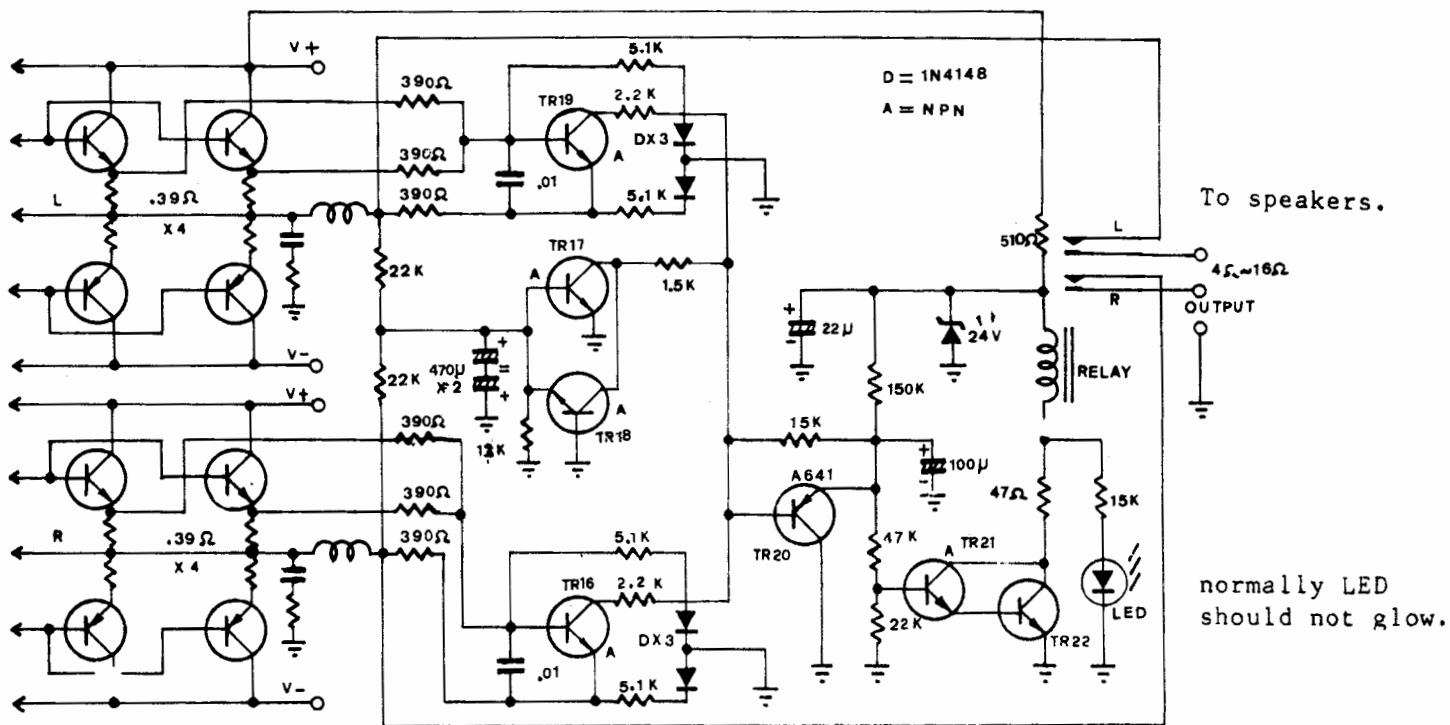
0.1	uF	=	104
0.068	uF	=	683
0.022	uF	=	223
0.01	uF	=	103
0.0068	uF	=	682
0.0022	uF	=	222
0.001	uF	=	102
330	pF	=	330/331
100	pF	=	100/101
20	pF	=	20/21
6	pF	=	6

Circuit of magnetic preamp, microphone preamp, tone control and mixer for MS1000B.

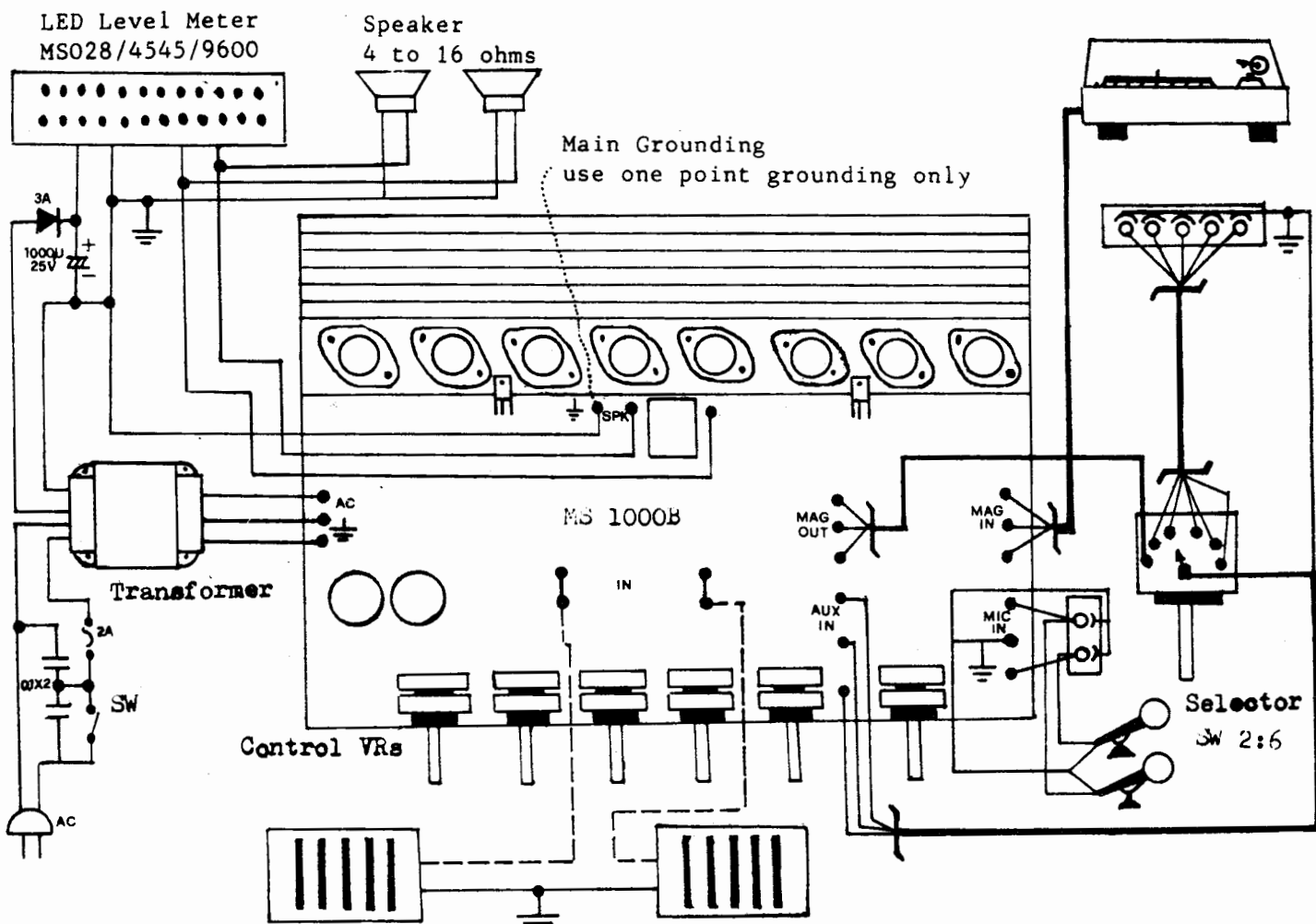


雙差動式後級放大器圖

Circuit of main amplifier for MS1000B.



Circuit of professional speaker protector for MS1000B.



SEA Level Display MS9600

Symbolic circuit of MS1000B in connection with other associates.

Features :

- * Unique, consolidated PC board for completeness of whole set; including magnetic preamp, microphone preamp, mixer, tone control, main amplifier, voltage regulator, as well as power supply and control VRs.
- * LED indicator indicates working states of speaker protector, normally LED should be in OFF state.

SEA Level Display MS9600

Symbolic circuit of MS1000B in connection with other associates.

Features :

- * Unique, consolidated PC board for completeness of whole set; including magnetic preamp, microphone preamp, mixer, tone control, main amplifier, voltage regulator, as well as power supply and control VRs.
- * LED indicator indicates working states of speaker protector, normally LED should be in OFF state.
- * Large heat sink desired for on board cooling outside main case for best effect.
- * High quality IC (RC4739) simplified assemble procedures in the best cost-perfor-mance position.
- * Easy idle current calibration just by turning one VR onboard to get best reproduction of signal.
- * Seperated block design for independency of different usages.
- * Clear and clean design of PC board for easy assemble.