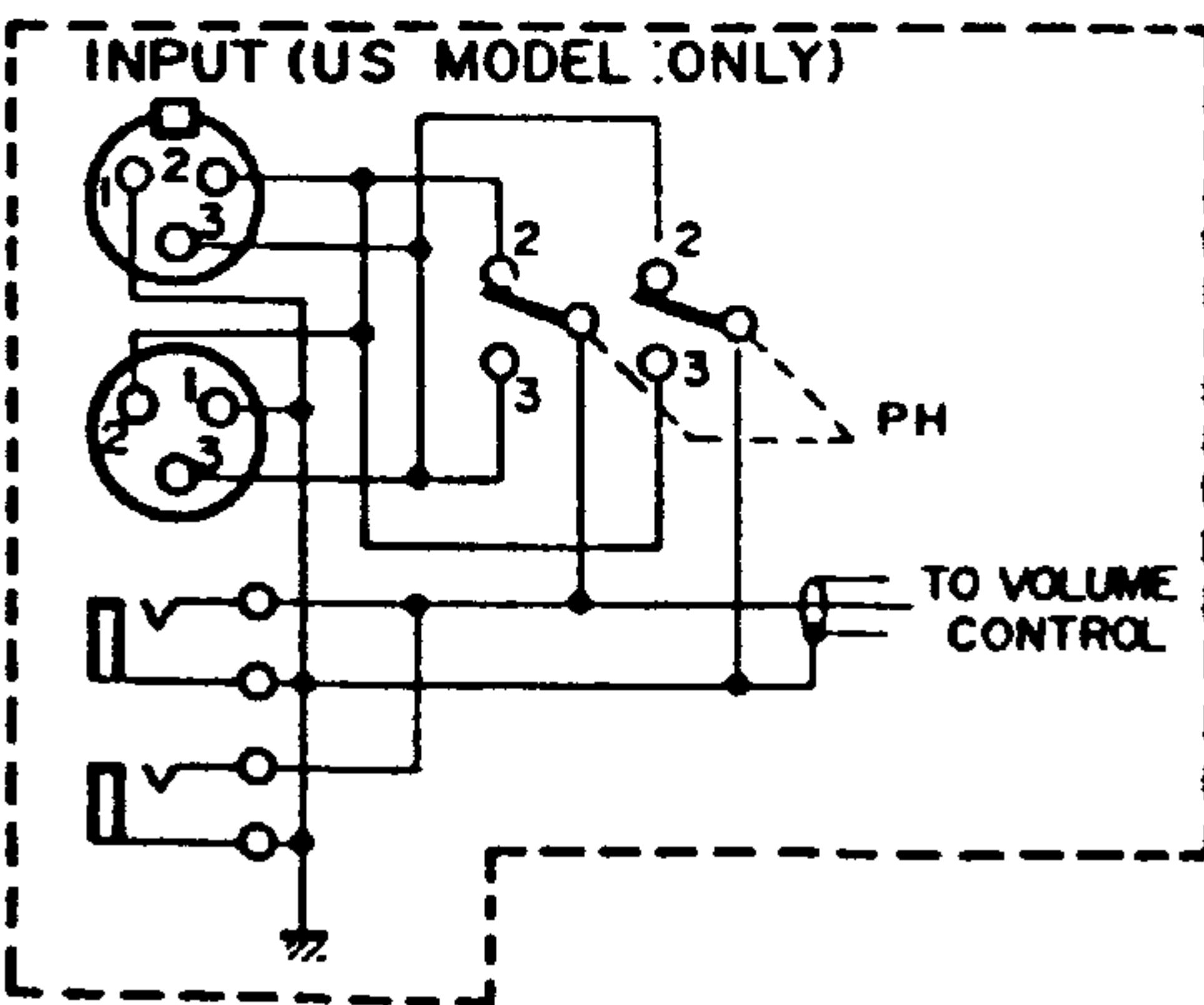
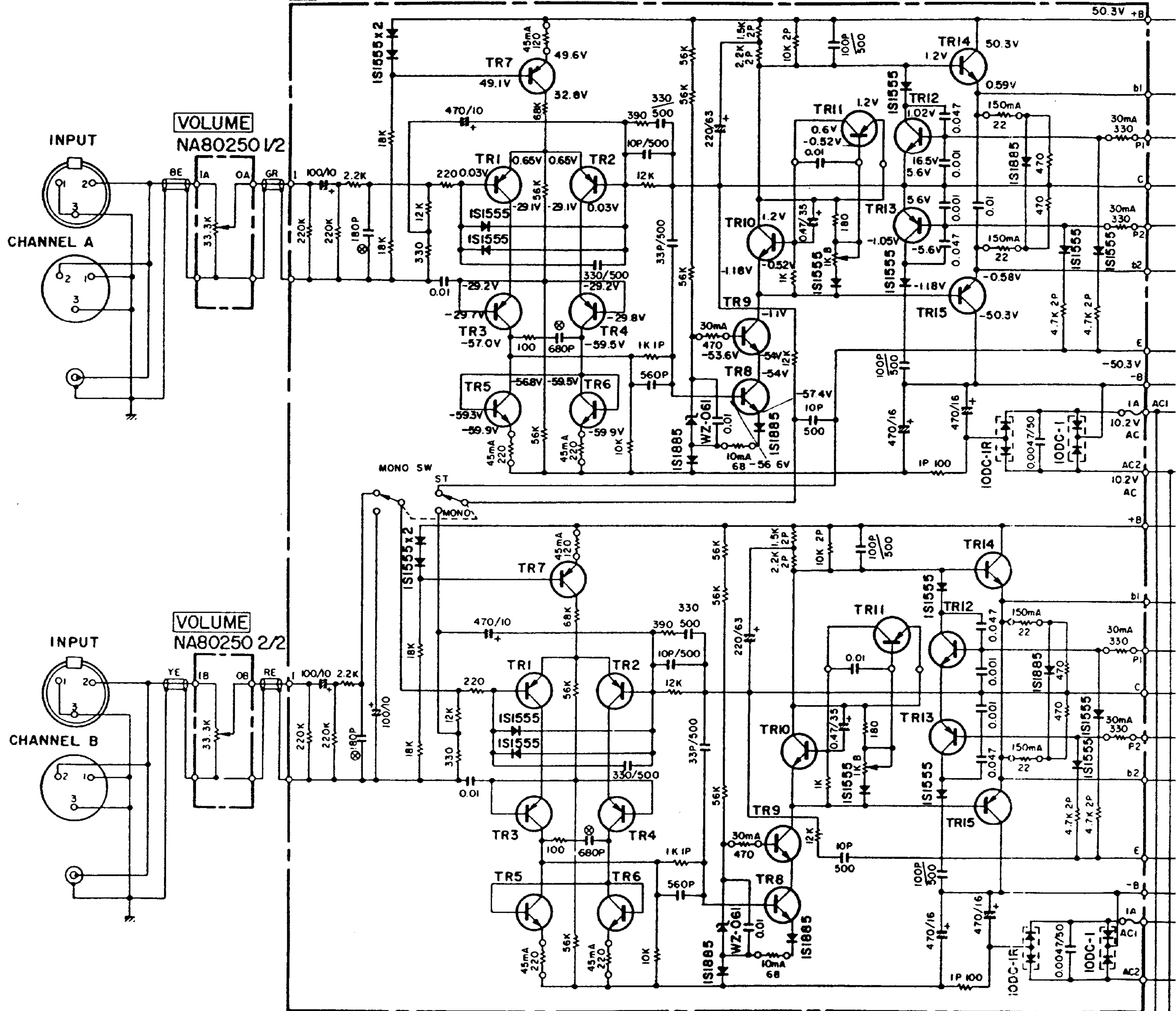


SCHEMATIC DIAGRAM 総回路図

DA NA80251



WIRE COLOR ABBREVIATIONS

- BL ▶ Black
- BR ▶ Brown
- RE ▶ Red
- OR ▶ Orange
- YE ▶ Yellow
- GR ▶ Green
- BE ▶ Blue
- VI ▶ Violet
- GY ▶ Gray
- WH ▶ White
- GG ▶ Light Green
- SB ▶ Light Blue
- PK ▶ Pink

CAPACITOR		RESISTOR	
⊗	POLYSTYRENE	▲	FIRE PROOFING
△	TANTALUM	⬮	FUSE RESISTOR

- TR1~4 : 2SA872A
- TR5,6,8,10,12 : 2SC1213A
- TR7 : 2SA810
- TR9,14 : 2SC1624
- TR11 : 2SA682
- TR13 : 2SA673
- TR15 : 2SA814
- TR16,18 : 2SC1116A
- TR17,19 : 2SA747A

ADJUSTMENT AND INSPECTIONS

- The output impedance of the low-frequency signal generator should be less than 600Ω , and the distortion should be less than 0.005%.
- Use an syncroscope, level meter, distortion meter or other instruments with an input impedance of over $100K\Omega$.
- Discharge the electrolytic capacitors in the power rectifier circuit when the top cover has been removed.
- Turn the semi-fixed variable resistor ($1K\Omega$) on the DA circuit board to its leftmost position (min.) before switching the power on.

1. Idling current adjustment

- Switch the power on, turn the semi-fixed resistor ($1K\Omega$) on the DA circuit board so that the voltage across the TR circuit board test points PE and E is $13mV \pm 1mV$ within 30 seconds, and set. (Fig. 1)
- Perform the same adjustment for the other channel.
- The voltage across test points PE and E fluctuates with ageing (see Table 1) and so check that the voltage across these test points after the tests is $22mV \pm 5mV$ ($45mA$). (When the ambient temperature is $10^\circ C - 30^\circ C$ and the temperature of the Heat Sink is $20^\circ C - 40^\circ C$.)

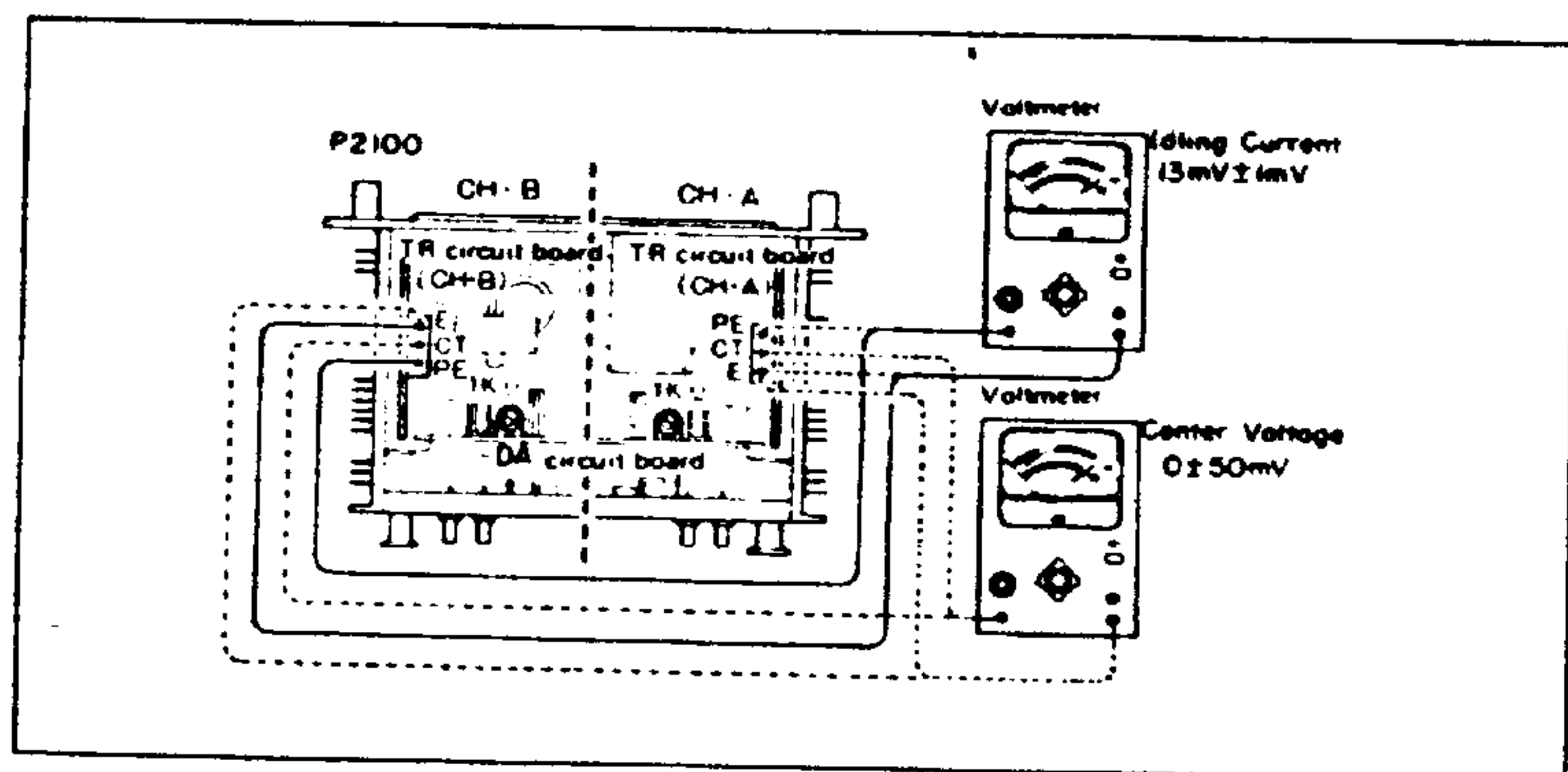


Fig. 1

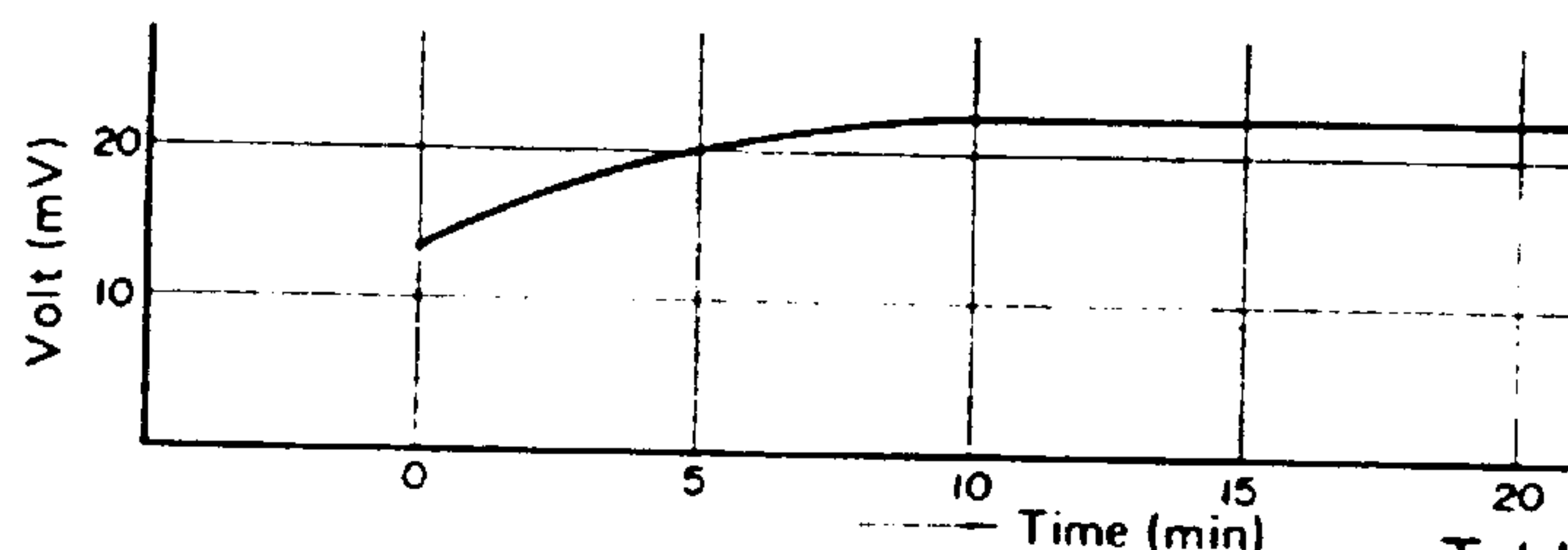


Table 1

2. Center voltage adjustment

Check that the voltage across TR circuit board CT and E terminals and across the speaker output terminals is within $0 \pm 50mV$. (Fig. 1)

3. Amplifying characteristics (stereo)

3-1. Conditions

Input terminal	XLR-3-31
Output terminal	Connect a 4Ω load impedance
Volume	Maximum
DR circuit board MONO switch	Set to stereo (ST)

3-2. Gain

- Connect the equipment as shown in Fig. 2.
- Check that the output at both ends of the load impedance is $+26.5 \pm 1dBm$ when a $-5dBm$ $1KHz$ signal is applied to the input terminal.

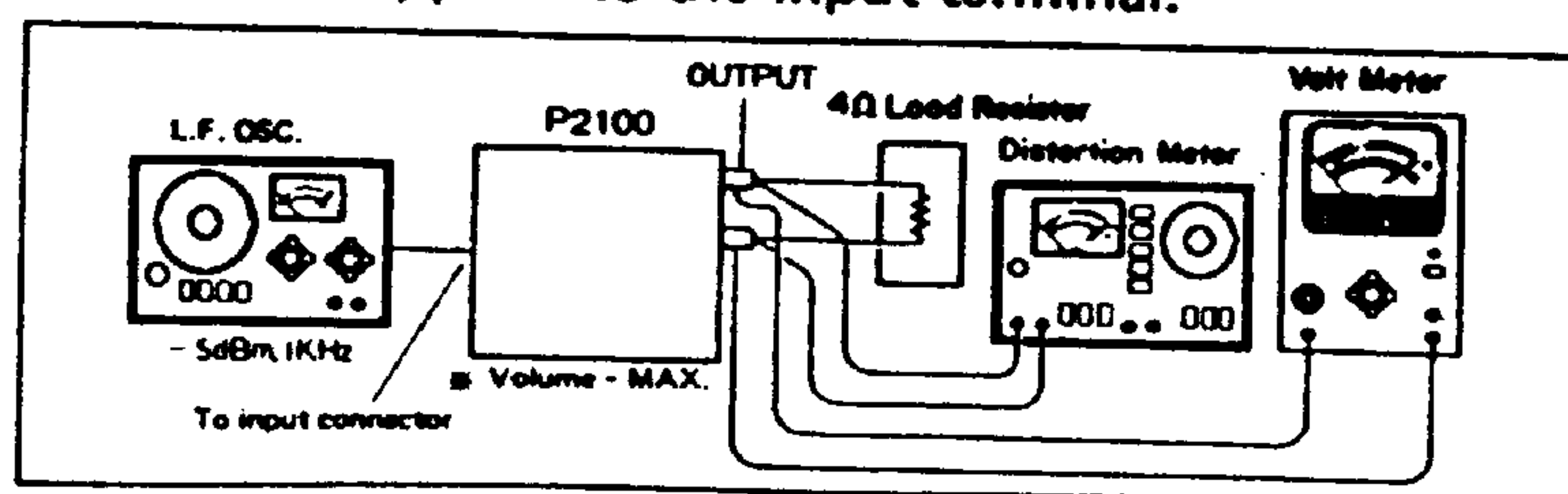


Fig. 2

3-3. Distortion

- Connections are the same as those in Fig. 2, but in addition, connect a distortion meter to the output terminals.
- Check that the distortion is less than 0.03% when $20Hz$, $1KHz$ and $20KHz$ signals are applied to the input and when an output is provided of $\pm 67W$ ($+26.5dBm$).

3-4. Frequency response

- The connections are the same as those in Fig. 2 but the waveform can be observed when an syncroscope is connected.
- Apply $10Hz$, $50KHz$ signals to the input, and based on $1KHz$ across the output terminals, check that the frequency response is within $10Hz$ $+0 -0.5 dB$, $50KHz$ $+0 -0.5 dB$.

3-5. maximum output

- The connections are the same as those shown in Fig. 2. In addition, connect a distortion meter to the output terminals.
- Apply $20Hz \sim 20KHz$ signals to the input and check that the $140W/4\Omega$ ($+29.7dBm$) output is provided at the output terminals at a distortion of less than 0.05%. Furthermore, connect an 8Ω resistor to the load and check that an $85W$ ($+30.5dBm$) output is obtained at a distortion of less than 0.02%. (Single channel drive for this test).

3-6. Noise level and residual noise

- The connections are the same as those in Fig. 2.
- Check that the noise level is less than $-67dBm$ when the input terminals are shorted with a 600Ω resistance.
- Check that the residual noise is less than $-70dBm$ when the volume is set to its leftmost (min.) position.

3-7. Crosstalk

Check that the output of one channel to the output terminals of the other channel is less than $-44dBm$ when a $-5dBm$, $20KHz$ signal is applied to the input terminal. Connect a 600Ω resistance to the input terminal to which the signal is not applied, and set the volume to maximum.

4. Stability

4-1. The P2100 should operate stably even if the power voltage is fluctuated as much as $\pm 10\%$ of its specified value.

4-2. There should be no abnormal oscillation under the conditions listed below when the input terminals are open or shorted with a 600Ω resistance.

- $4 - 100\Omega$ impedance load
- $100pF - 0.47\mu F$ capacitive load
- $10\mu H - 1H$ L load

4-3. Check that the overshoot is less than 0.7 under the conditions listed below with a $10KHz$ square wave signal and a $40Vp-p$ output.

- $10\mu H - 1H$ L load
- $100pF - 0.47\mu F$ capacitive load

* Disassembly Procedure