

Unitronics

UA 350 MANUAL

**35 watt (r.m.s.) Complementary symmetry
Audio power amplifier**

Unitronics model UA350 specifications

Power Output:

Continuous Power: 45 watt (r.m.s.) at 4 ohm
35 watt (r.m.s.) at 8 ohm
25 watt (r.m.s.) at 16 ohm

Music Power (IHF): 65 watt at 4 ohm load
(P30A supply) 52 watt at 8 ohm load
36 watt at 16 ohm load

Total Harmonic Distortion:

Less than 0.15% at 20W from 20-20000Hz (type A)
Less than 0.06% at 20W from 20-20000Hz (type B)

Intermodulation Distortion:

Less than 0.06% up to full rated output

Frequency Response:

10Hz to 100000Hz (-3db, -1db) type A (see text)
3Hz to 100000Hz (-3db, - $\frac{1}{2}$ db) type B

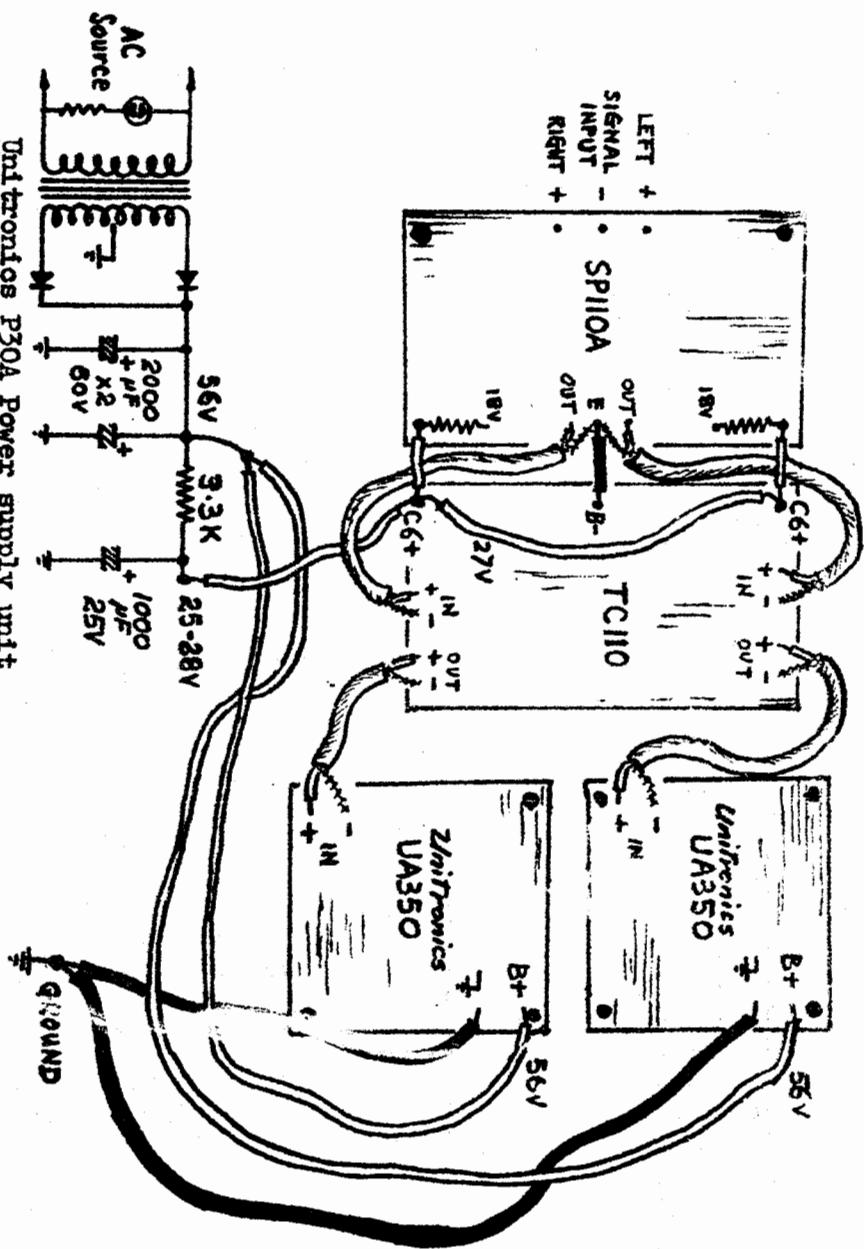
Signal to Noise Ratio: (below rated output)

-102db

Input Impedance: 68K ohm

Output Impedance: 0.066 ohm

Damping Factor: over 120 at 1 KHz (8 ohm load)



UniTronics P30A Power supply unit

How to obtain correct supply voltage for SPI10A, TC110 & UA350 x 2

P A R T S L I S T

Please check the content of this kit against the parts list, in case of damage or shortage, please notify us immediately for replacement.

Transistors:

- Q1 Fairchild C99015 PNP ✓
- Q2 Fairchild 2N3563 NPN ✓
- Q3 Fairchild 2N3569 NPN ✓
- Q4 Fairchild 2N4355 PNP ✓
- Q5 Motorola MJE105 PNP ✓
- Q6 Motorola MJE3055 NPN ✓
- Q7 Fairchild CS9013 NPN ✓
- Q8 Fairchild CS9012 PNP ✓

Resistors:

- R1 180K ✓
- R2 100 ohm ✓
- R3 100K ✓
- R4 1.5K ✓
- R5 33K ✓
- R6 6.8K ✓
- R7 330 ohm ✓
- R8 2.7K ✓
- R9 2.7K ✓
- R10 150K ✓
- R11 270 ohm ✓
- R12 270 ohm ✓
- R13 10 ohm ✓
- R14 1 ohm ✓
- R15 1 ohm ✓
- R16 1 ohm ✓
- R17 1 ohm ✓
- R18 3.3K ✓
- R19 100 ohm ✓
- R20 47 ohm ✓
- R21 47 ohm ✓
- R22 100 ohm ✓
- R23 3.3K ✓
- R24 47 ohm ✓
- R25 47 ohm ✓

Diodes:

- D1 Fairchild CD0014 ✓
- D2 Fairchild CDC014 ✓

Capacitors:

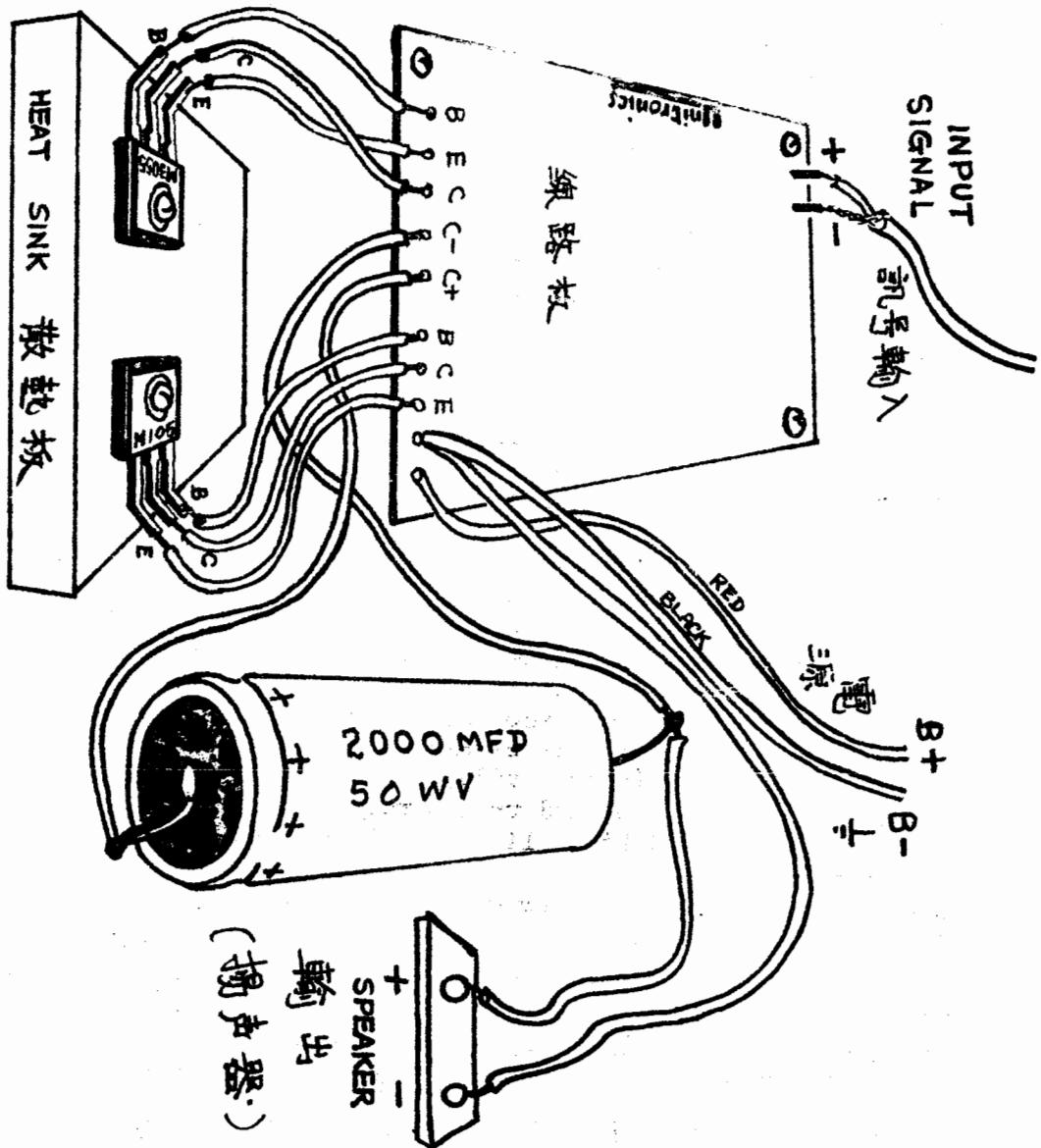
- C1 15uF 25V Electrolytic ✓
- C2 50uF 25V Electrolytic ✓
- C3 50uF 25V Electrolytic ✓
- C4 1uF 25V Electrolytic ✓
- C5 100pF 50V Polystrene ✓
- C6 0.1uF 50V Mylar ✓
- C7 0.1uF 50V Mylar ✓
- C8 2000uF 50V Electrolytic ✓

Miscellaneous:

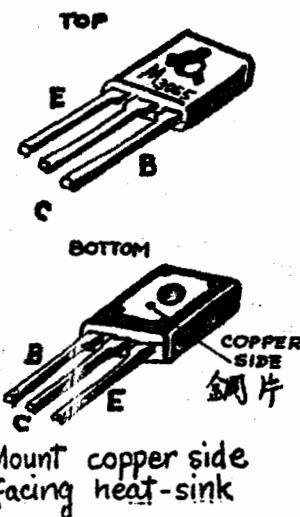
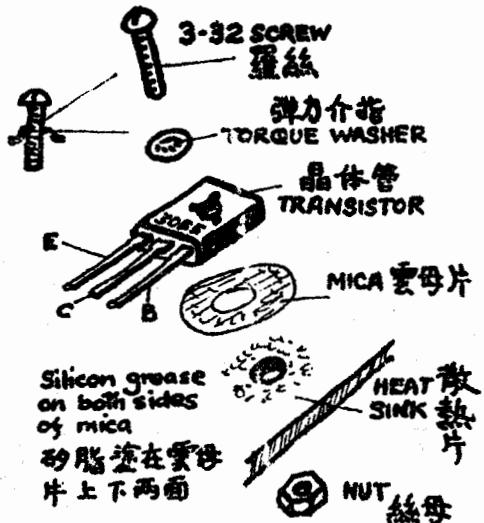
- Printed circuit board ✓
- heat sink ✓
- silicone grease ✓
- mica washers ✓
- torque washers ✓
- transistor mounting screws ✓
- PC mounting screws ✓
- assorted nuts for above ✓
- lead out pins ✓
- power tr. connecting wires ✓
- solder wires ✓
- instruction manual ✓

Note: Observe polarity of electrolytic capacitors.
Observe leads connections of transistor, diodes.
Test all transistors before soldering onto circuit.

Any change to this parts list shall be accompanied with an amendment note.



POWER Transistor



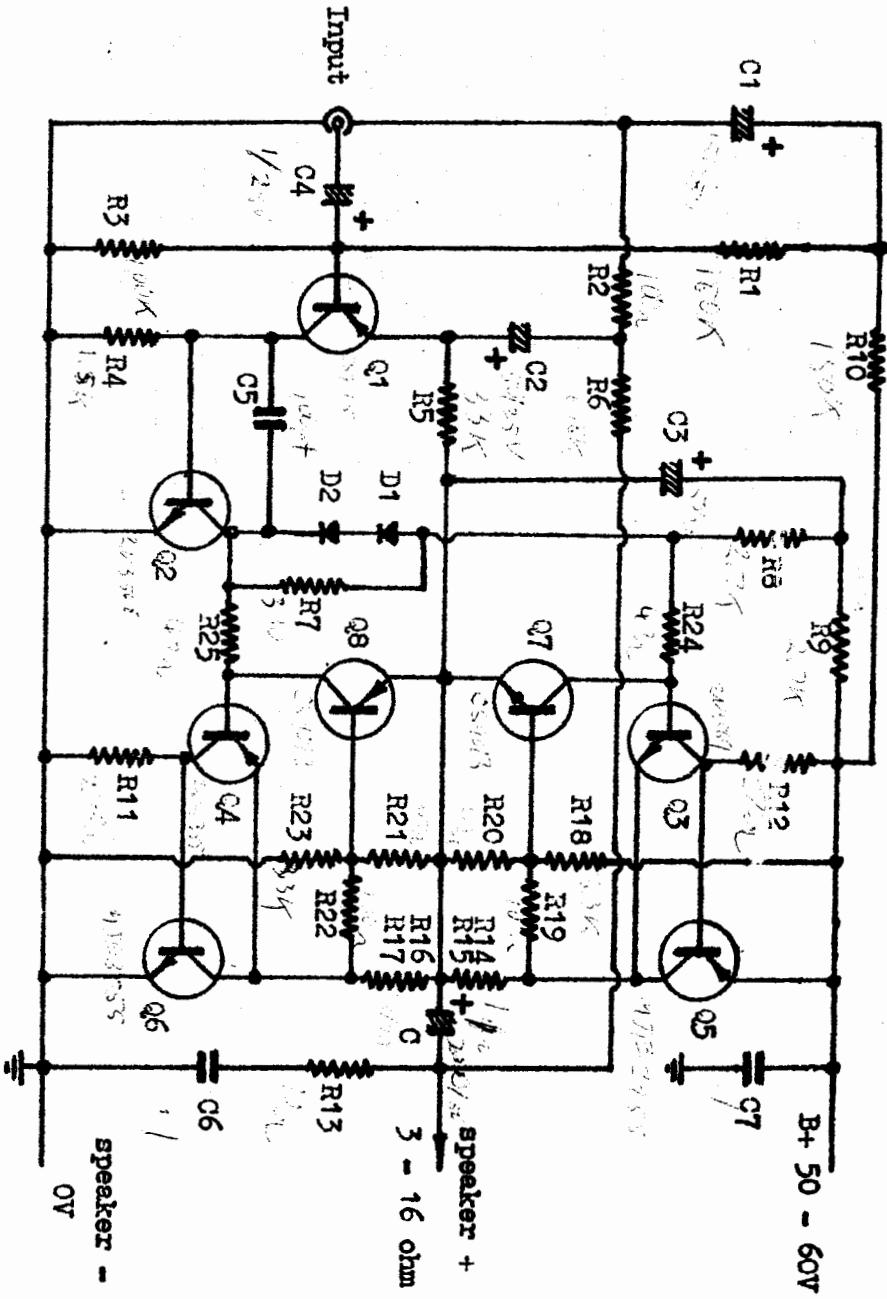
POWER TRANSISTOR MOUNTING PROCEDURE

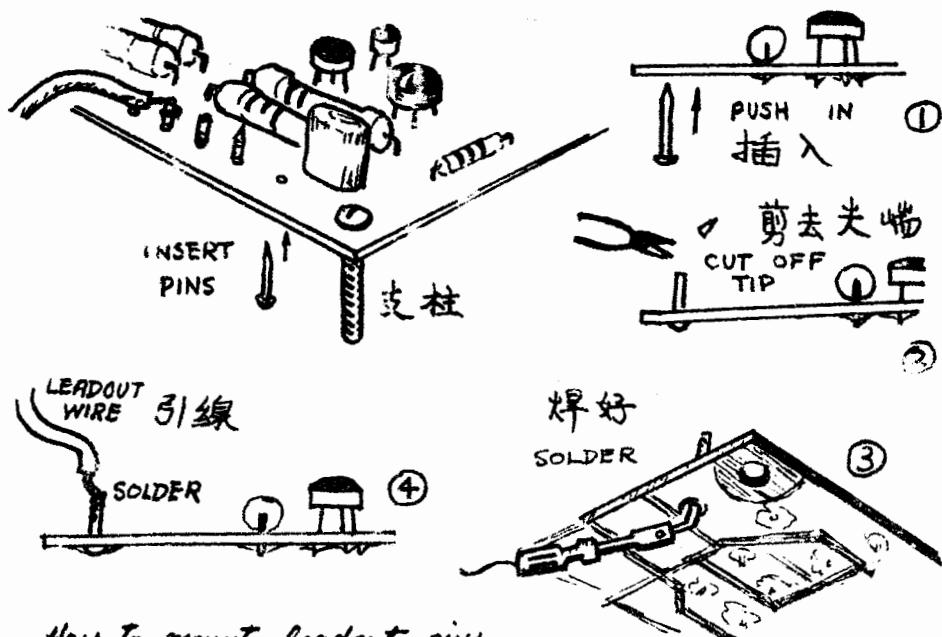
1. Drill a 5/32 hole in the heat sink, remove all blurs of drilling.
2. Insert the torque washer; with the torque cup shape facing the head of the screw.
3. Insert the screw etc. into the mounting hole of the power transistor, note carefully the top and bottom of the transistor.
4. smear the mica with silicon grease on both sides. and insert it so that it sticks on the bottom of power transistor (copper side).
5. pass the whole assembled unit through the hole in the heat sink, tighten slightly with the nut on the other side.

WARNING: Do not tighten over 8in-lb, or damage to the transistor may occur.

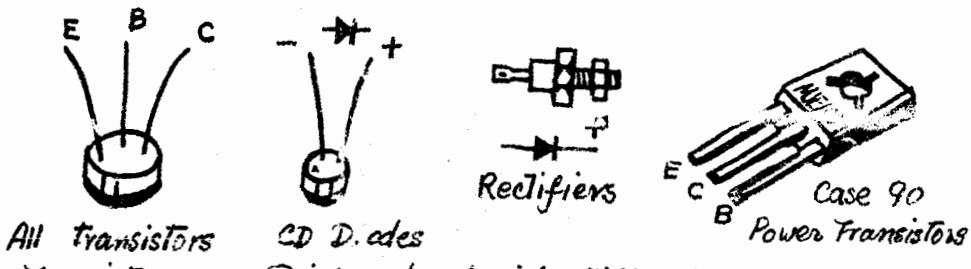
安裝說明：先在散熱板上鑽一 $\frac{5}{32}$ 孔，小心除去金屬之利邊，再將彈力介指穿入螺絲上，留意該介指之正反面，然後把螺絲等穿入晶体管之安裝孔內，把脂狀散熱劑塗在雲母片之兩面，把它貼在晶体管之底面(銅片面)，然後用絲母在另一面把整套上緊；但小心不要太大力，不然可能壓壞晶体管。

UNIMTRONICS model UA350 35 watt (r.m.s.) complementary amplifier





How To mount leadout pins



Transistor or Diode Lead identification

