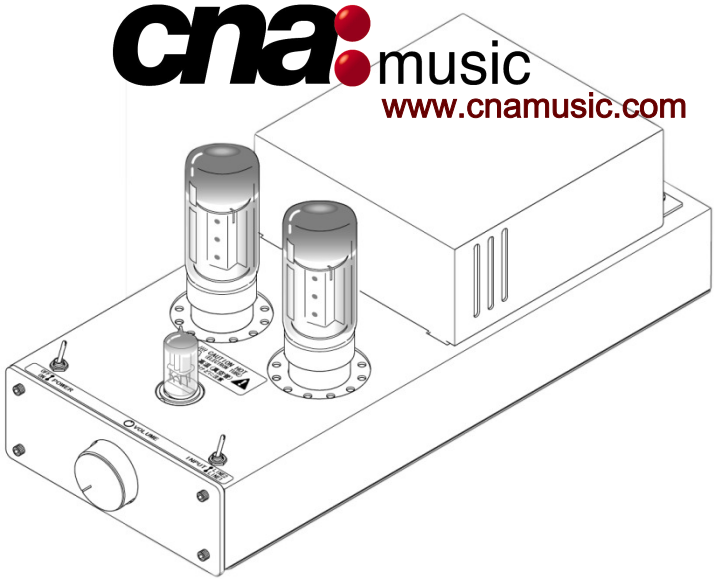
6L6GC Single Stereo Tube Power Amp

TU-879S Assembly Instruction Manual



Features:

This is a single stereo power amplifier using the powerful 6L6GC. Assembly is easy. Anyone can follow the printed circuit board and obtain the same result. For this reason, you do not need to know the details of wiring and other technical details to assemble this vacuum tube amplifier kit.

This amplifier is compact and powerful enough to surpass the capacity of output transformers in other models under the same class of our company (TU-877, 874, etc.). This amplifier includes premium capacitors which enhance sound quality.

This amplifier uses improved MOS FET regulated ripple filtering. The driver tube heater is powered from a DC supply with a 2mm thick shielded panel added to effectively reduce hum noise to a minimum. Additionally, a number of other components have also been upgraded.

● Content

CAUTIONS

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For your own safety, please read the "Assembly Instruction Manual" carefully before you begin assembling the Power Amplifier Kit. Please follow the instructions step by step for correct assembly.

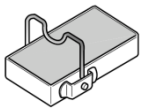
- ♦ Do not work near any source of water or allow any components to get wet which may cause fire and electric shock.
- ♦ Do not put containers with water on the work table such as vases, cups, cosmetics, and drugs. Spilling water on components will cause fire and electric shock.
- ♦ Keep out of reach of small children during assembly, usage and storage. Please discard packing waste and any waste from assembling the kit according to social standard for safety and protection of the environment.
- Read the "Assembly Instruction Manual" carefully and be sure to fully understand them before assembling.
- Be careful when handling tools; diagonal cutters, pen knives, and other sharp tools in particular.
- Do not work near young children due to safety concerns. Children must not play with tools, plastic bags and electronic parts as they may cause harm.
- Some essential pieces in this kit include small and sharp objects that are made of glass or metal. Be extremely careful. If by any chance a child has swallowed any of these items, immediately consult a medical doctor.
- This product and its components may differ without notice.

❖ Please keep this instruction manual handy at all times.

NECESSARY TOOLS


Soldering Iron (15-30W)


Solder (φ0.8-1.0mm)


Solder Stand


Diagonal Cutter


Long Nose Pliers


⊕ Screw Driver (No. 1 and No.2)

Nut Driver (5.5mm)

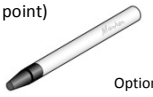

It is handy but not necessary


Hexagonal Wrench (1.5mm-2.5mm)

Pen Knife

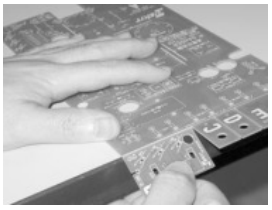
Scissors

Oil based marker (fine point)



Multimeter


Optional-voltage and connection check is suggested

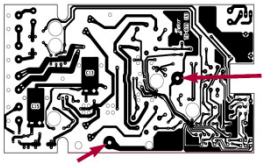


Before you solder

●Before you solder, follow the cut line (grooved line) to break the circuit boards TU-879R A-E into individual pieces. There are grooved lines on both sides of the circuit board. Gently use the edge of a table to break them.

2. Circuit Board Assembly

❖Follow the instructions step-by-step. Check off the box after you have soldered each component.
❖When soldering, be sure to read "The Key to Soldering."

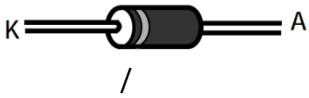


A Circuit Board Assembly

● Preparations before you begin

On the soldering side (side with copper foil) of circuit board **A**, there are 3 holes with arrows indicated. Solder plate the 2 holes with copper foils. ☐SG (2 places)

1. Diode (direction specific)



The line is on the side of K

☐ D1

Marked on PCB

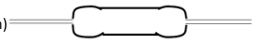
How to install

2. Resistor (non-direction

Resistor (Carbon)

☐ R1,9,10,11,12	330kΩ (Orange, Orange, Yellow, Gold)
☐ R3,4,25,25	2kΩ (Red, Black, Red, Gold)
☐R5,6,23	3.3Ω (Orange, Orange, Gold, Gold)
☐R7,8,15	120Ω (Brown, Red, Brown, Gold)
☐R20,21,22	2.2MΩ (Red, Red, Green, Gold)

Resistor (metal oxide film)



☐R16,18,19	15kΩ(2W)
☐R13,14	330Ω(3W)
☐R17	3.3kΩ(5W)

❖ Install the metal oxide film resistor 2-3mm above the PCB to diffuse heat.

Marked on PCB How to install

Carbon resistor

3. Jumper wire (non-direction specific)

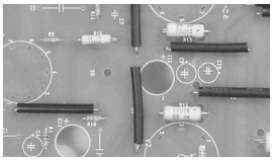
☐ J1-7

Marked on PCB

How to install

(1) Cut 7 strands of tin-coated wire 6-7cm in length.
(2) Put a strand of tin-coated wire into a plastic tube and bend to the shape in the image below. The total length of the product should be 35mm. Use long nose pliers to bend.

(not actual size)



(3) Solder the jumper wires onto the PCB the same way as the resistors

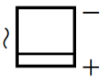
4. Bridge Rectifier (direction specific)

+,- indication

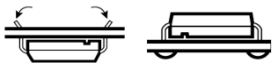
❖Please pay attention! It is dangerous if the rectifier is not installed properly.

☐ D2, 3

Marked on PCB How to install



Bend the legs on the back of the PCB to prevent it from falling out when soldering on the copper foil.



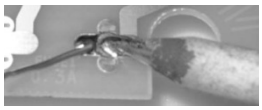
5. Fuse holder (direction specific)

☐ FUSE 1, 2

Marked on PCB

How to install

①Where the fuse holder (metal fitting) is placed, please pre-apply a thick layer of solder plate on the oval shaped copper foil.

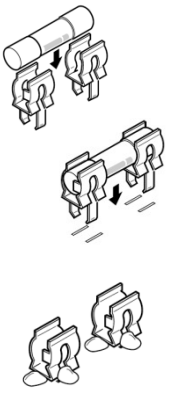


②Set the 5x20 GMA fuse to two fuse holders and put the legs through the holes on the PCB from the solder side.

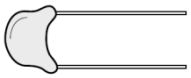
③Bend the legs using long nose pliers to station it on the PCB. Take the 5X20 GMA fuse from the fuse holder and solder the fuse holders onto the copper foil.

④Reinstall the 5X20 GMA fuse after soldering.

FUSE1 →0.3A FUSE2 → 2A



6. Ceramic Capacitor (non direction specific)

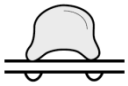


☐ C7, 8

220pF (with indication of 221)

Marked on PCB

How to install



7. Base pin

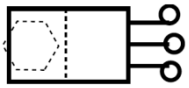
Install from solder side (reverse side), total of 12

☐ OPT1(L) P 3 pcs
☐ OPT1(L) B 3 pcs
☐ OPT2(R) P 3 pcs
☐ OPT2(R) B 3 pcs

Install from the side with white printing, total of 3

☐ FET G, D, S

Marked on PCB (FET only)



Caution: 12 pins are installed from the solder side (with copper foil) and 3 pins are installed from the side with white printing.

Marked on PCB

①Insert the pin perpendicularly into the hole on the PCB.

❖Put the PCB on a piece of cardboard when installing the pins. Use long nose pliers to insert the pin.

②Always solder on the solder side (reverse side) regardless of which side the pin is inserted from.

❖Do not cut the protruding base pin after soldering.