



# Hybrid Stereo Pre-amplifier

## TU - 875 Assembly Instruction Manual

### Features

This is a simple preamplifier without tone control. The pre-amplifier has a volume and balance control, a phono equalizer and a MC head amp. It is also compatible with / a MM/MC cartridge.

A hybrid construction using J-FET with a MC head amp and equalizer to give a low noise effect without compensating the quality of music produced by the tubes. An AC adapter (DC 7V stabilized power outlet) is separate and is used as a power supply. A secondary power for the vacuum tubes is supplied by a steady DC 200V from the DC-DC converter of a sealed box. With the main body and power supply separated, the electromagnetic hum-noise is reduced.

The pop noise muting circuit uses a relay method rather than an analog switch to prevent sudden large amplitude response of the tubes. The LED light, which indicates power input, will blink from power on to muting cancellation.

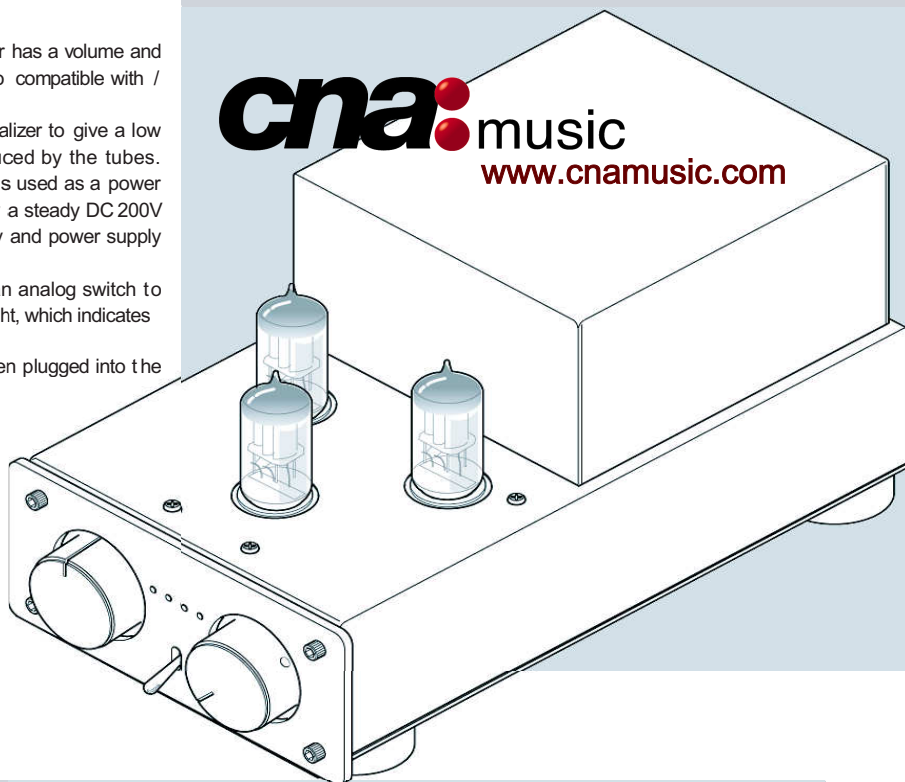
LINE-1 and LINE-2 are compatible with monophonic sources. When plugged into the L-side alone, the R-side will be automatically turned on.

A printed circuit board is included for easy assembly

### Content

Cautions-----	1
Necessary Tools-----	1
1.Parts List-----	2
2.Circuit board assembly-----	3
3.Wiring, assembly, operation check, -----	6
and usage	
4. Technical Data-----	14
5. Warranty-----	16

**cna**music  
www.cnamusic.com



## CAUTIONS

For your own safety, please read the "Assembly Instruction Manual" carefully before you begin assembling this preamp kit. Please follow the instruction 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 the instructions 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

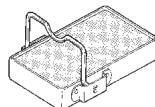
Soldering iron(15~30W)



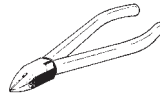
Solder  
( 0.8~1.0mm)



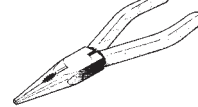
Solder Stand



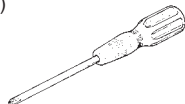
Diagonal-Cutter



Long Nose Pliers



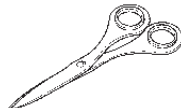
⊕Screwdriver  
(No.2)



Pen Knife



Scissors



Hexagonal wrench (1.5mm 2.5mm)



Multimeter



## 2. Circuit Board Assembly

\* The double-sided circuit board is a through-hole circuit board. be very careful when assembling the parts and make sure they are in the correct marked position. Once a component has been soldered, it is very difficult to remove. If it is necessary to remove a soldered component, be sure to use a solder wick or a solder sucker.

### A. Circuit Board Assembly

\* The side with white printing faces upwards. The soldered side faces downwards.

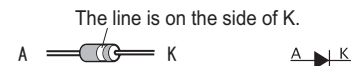
Part List	Value	Part Number
Diode	15 $\Omega$ (Brown Green Black Gold) 220 $\Omega$ (Red Red Brown Gold) 1k $\Omega$ (brown Black Red Gold)  2 2k $\Omega$ (Red Red Red gold) 3k $\Omega$ (Orange Black Red Gold) 6 8k $\Omega$ (Blue Gray Red Gold) 22k $\Omega$ (Red Red Orange Gold) 33k $\Omega$ (Orange Orange Orange Gold) 68k $\Omega$ (Blue Gray Orange Gold) 120k $\Omega$ (Brown Red Yellow Gold) 200k $\Omega$ (Red Black Yellow Gold) 680k $\Omega$ (Blue Gray Yellow Gold) 0.47 $\Omega$ (1W/R47)	R81, 82 R1, 2, 7, 8, 66 R57, 58, 59, 60, 61, 62, 67, 68, 69, 70, 75 R63 R11, 12, 65 R9, 10, 76 R15, 16 R79 R64, 71, 77, 78 R3, 4, 5, 6, 73 R13, 14, 17, 18, 41, 42, 72 R74 R83
Diode (small)	Red with a white line	*1
IC	74HC04 74HC4017	*2
Push lock switch		*3
Base pin	Marked as $\bigcirc$ (3 locations)	
Transistor	A1015 (or A733) C2120 (or C2001)	
FET	K170	*4
Film capacitor	0.68 $\mu$ F (684)	*5
Myler capacitor	0.1 $\mu$ F (104)	
Nonpolar electrolytic capacitor	10 $\mu$ F / 16V	
Electrolytic capacitor	100 $\mu$ F / 16V 33 $\mu$ F / 100V 22 $\mu$ F / 350V 2200 $\mu$ F / 16V	*6
Relay		
Toggle switch		
GND bracket		*7
Screw	M3x8 (black) 2pcs	
Tube		
Shaft		
DC Jack		
4P RCA Jack		



\* Warning! Electrolytic capacitor has a negative end and positive end. It is dangerous if the electrolytic capacitor is not installed properly.

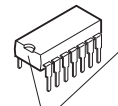
#### Parts with polarity

##### \*1 Diode (small)



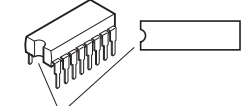
##### \*2 IC

74HC04



Match the mark

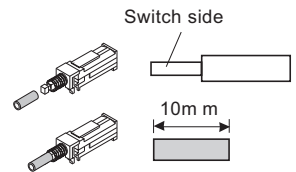
74HC4017



Match the mark

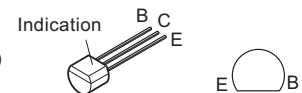
##### \*3 Push lock switch

Set it in the direction indicated on the PCB and solder. Cut the tube to 10mm and set to the switch.



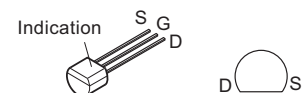
##### \*4 Transistor

A1015(A733)  
C2120(C2001)



##### \*5 FET

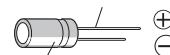
K170



\* Try to have the toggle switch /DC Jack / 4 pin RCA Jack to sit straight when soldering.

##### \*6 Electrolytic capacitor

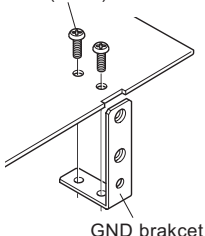
The side with longer lead is positive.



The side with shorter lead is negative. \* Place the capacitor vertically.

##### \*7 GND bracket

1 PHONO GND  
Fix the bracket with black M3x8 screws on the marked position.  
M3x8 (black)



2

Insert the shaft into the push lock switch.

