

# TUBES INTEGRATED AMPLIFIER POWER AMP



#### **USER MANUAL**

Congratulations on your purchase of a **Listen & Co.** product. This product expresses our passion for building unique and valuable pieces of audio equipment in which passion for the music and attention to the functional design join together in harmony. Our products are built using the finest components and materials. Please read and observe all warnings and instructions in this user manual and all those marked on the unit to get the best performances from your new LC-IPA60 for many years to come.

#### 1. Unpackaging

Please make sure that the packaging is undamaged and the product has not suffered from rough handling during transportation, otherwise we highly recommend to contact your Authorised Dealer for advice before proceeding to install the unit. Carefully remove your amplifier and all the accessories from the carton.

Inside the package you'll find:

- 1 LC-IPA60 tubes integrated amplifier power amp
- 1 power supply cable

#### Important!

After unpacking please allow some hours before operating the device in order to let it adapt to the room temperature. This time period is needed to prevent any possible damage due to the condensation which can eventually form during transportation. Please note that condensation can form every time the amplifier is moved from a cold to a warm place. Please keep all the original purpose-designed packing materials which will be needed to transport the unit as it provides the safest packing.

#### 2. Installation

The LC-IPA60 should be positioned in a safe place on a plane surface. Adequate clearance must be left above and around the device to guarantee a correct ventilation. We also suggest to leave enough free space behind your LC-IPA60 to allow the connecting cables sufficient room to bend without crimping or strain, and we strongly recommend not to place the device directly on a power amplifier top surface or, in general, close to a heat source.

#### 3. Connections to the main

The LC-IPA60 is set at the factory to the appropriate mains voltage of the country it will be shipped to.

**Warning!** Never connect the LC-IPA60 to AC mains if the local voltage doesn't match the value indicated on the rear panel! The mains fuse is located in the fuse-holder integrated in the IEC mains socket. Always replace fuses with new ones of the same type and value.

#### 4. Operation

SWITCHING-ON AND WARM-UP

## Warning! Switch on the LC-IPA60 only after all the connections have been made and checked.

Before switching on, ensure that the volume control is at zero (fully anti-clockwise), and allow it to remain in that position until the initial automatic start-up phase is complete.

Just after switching on the LC-IPA60 automatically starts a warmup phase.

The working temperature for the tubes is reached less than 30 seconds after switching on but best results will be obtained after approximately 10 minutes from switch-on.

#### 5. Bias instructions

It's very important to maintain the stability and accuracy of the operating points of the tube amplifier, especially of the power amplifier tube. The bias current changes when the tube gets ageing, or replacing the tube. Break away of the required operating points will influence sound resolution and the stability of the machine. So, please check and adjust the bias current after a certain time of use, and it is the same when changing the tube.

#### 6. Adjustment methods of the tube bias current

When replacing the tube, use a multi-meter to see whether there is a deviation from the bias current. It should be about 0.55V~0.6V in every local standard voltage. If you find out a deviation, please use tools to adjust the variable resistance in each hole V1 bias adj , V2 bias adj, V3 bias adj, V4 bias adj. The variable resistance increases clockwise, and decreases anti-clockwise. Make sure that the Bias measurement is about 0.55V~0.6V with the standard supply voltage. Measure and adjust it once again when the tube is hot enough.

#### 7. Advise

The manufacturer has set up the bias of this unit well before delivery, and mark V1, V2, V3, V4 on the valves. Therefore, insert the valves correctly as per the numbers respectively marked on the valves and the casings (V1, V2, V3, V4). Take care not to make any wrong insertion, for the bias difference between the valves may cause the over-current of a given valve, burn it and result in the unnecessary damage. This function is not allowed to Non-professional staff.

#### 8. Rear panel

**Right Channel** (R.CH) output terminals (+ , -) they should be connected with the positive pole and negative pole of the speaker terminals respectively; and the output impedances are  $4\Omega - 8\Omega$ . **Left Channel** (L.CH) output terminals (+, -) they should be connected with the positive pole and negative pole of the speaker terminals respectively; and the output impedances are  $4\Omega - 8\Omega$ .

LC-IPA60 by Listen & Co.

#### Front panel



- 2) vu meters
- 3) Triode switch
- 4) Main switch5) Ultra linear switch
- 6) selector knob

#### **Rear panel**



1) line level input
2) output connector
3) ground connection

#### SAFETY AND MAINTENANCE

### Never operate the device with either the bottom or top covers removed.

**Do not open the amplifier!** There are no user serviceable parts inside. For technical assistance or product service please refer to your Authorised Dealer. Do not spill liquid into the amplifier. If liquid is accidentally spilled into the amplifier remove the mains plug from the wall socket immediately and seek assistance from an authorised Service Centre before attempting to operate it again.

## Before inserting the mains plug into the wall socket ensure that the switch on the amplifier is in the "OFF" position.

Valve replacement should be carried out using only valves of the same type and matched in pairs. The LC-IPA60 uses valves type 12AU7 (ECC82/ECC802 equivalent), type 12AX7 (ECC83/ECC803 equivalent) and type KT88.

Important! Before attempting valve replacement make sure that the amplifier is switched off and remove the mains power cord from the amplifier. If in doubt your Authorised Dealer or Service Centre will be able to assist with this operation.

#### Cleaning the LC-IPA60.

Cleaning has to be done after switching off the device and allowing the amplifier to cool down. Use a soft dry cloth. Do not use solvents or alcohol-based detergents. Do not rub hard on the screen-printed legends.

#### Never operate the amplifier when covered! Adequate ventilation is essential at all times!

#### Warning.

The machine should be placed in ventilated and dry places. Non professional staff is not allowed to open the cover of the machine. To avoid short-circuits of the machine and electric shock, make sure that there are not any metal materials and sundries inside the machine.

# To avoid fire and electric shock hazard do not place the machine in the rain or humid environment.

#### **SPECIFICATIONS**

#### LC-IPA60

Output connectors: Power output:	2 + 2 30W RMS on 8 Ohms channels driven Triode (TR) connection 55W RMS on 8 Ohms channels driven Ultralinear (UL) connection
Inputs:	4 lines RCA (CD, TU, A1, PRE)
Input stage:	12AU7 /ECC82 (x2)
	and 12AX7 /ECC83 (x2)
Power stage:	KT88 (x4)
Frequency response:	-2dB @ 10Hz / -2dB @ 50kHz
Input sensibility:	360mV RMS
SNR:	≥91dB
THD:	< 0,8% @ 1kHz, 10W
Power consumption:	≤410W
Power input socket and fuse	Fuse should be F2.5AL250V
	(AC220V / 230V / 240V±10% 50Hz/60Hz)
Fuse Base	The fuse should be in F0.5AL250V.

# LISTEN & CO.

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