

**Beta Three**

**Professional Amplifier**

**T-1000    T-2000    T-3000**

SPECIFICATIONS .....	2
TECHNICAL PARAMETERS .....	3
INSTALLATION .....	4
FRONT & REAR PANEL .....	5
1. POWER ON .....	6
2. LEVEL .....	6
3. BRIDGE .....	6
4. PROTEC .....	6
5. CLIP .....	6
6. SIGNAL .....	6
7. AIR VENTS .....	6
8. OUTPUTS .....	6
9. GROUND ON/FLOATING .....	6
10. INPUTS .....	6

# SPECIFICATIONS

## Professional Audio Works

### CAUTION

RISK OF ELECTRIC SHOCK  
DO NOT OPEN

TO PREVENT ELECTRIC SHOCK DO NOT REMOVE TOP OR BOTTOM COVERS. NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL. DISCONNECT POWER CORD BEFORE REMOVING REAR INPUT MODULE TO ACCESS GAIN SWITCH.

### AVIS

RISQUE DE CHOC ELECTRIQUE  
N'OUVREZ PAS

À PREVENIR LE CHOC ÉLECTRIQUE LE N'ENLEVEZ PAS LES COUVERTURES. RIEN DES PARTIES UTILES À L'INTÉRIEUR. DÉBRANCHER LA BORNE AVANT D'OUVRIR LA MODULE EN ARRIÈRE.

### Magnetic Field

**CAUTION!** Do not locate sensitive high-gain equipment such as preamplifiers or tape decks directly above or below the unit, because this amplifier has a high power density, it has a strong magnetic field which can induce hum into unshielded devices that are located nearby. The field is strongest just above and below the unit.

If an equipment rack is used, we recommend locating the amplifier(s) in the bottom of the rack and the preamplifier or other sensitive equipment at the top.

### WATCH FOR THESE SYMBOLS:



The lightning bolt triangle is used to alert the user to the risk of electric shock.



The exclamation point triangle is used to alert the user to important operating or maintenance instructions.



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# Introduction

## TECHNICAL PARAMETERS

Output power:	Stereo(W/Ch)	Bridged-Mono
<i>T-1000:</i>	300W/8ohm 450W/4ohm	1000W/8ohm 1200W/4ohm
<i>T-2000:</i>	400W/8ohm 600W/4ohm	1200W/8ohm 1400W/4ohm
<i>T-3000:</i>	550W/8ohm 900W/4ohm	1800W/8ohm 2000W/4ohm

Frequency Response: 20Hz-50KHz(+/-0.1).

Phase Response: +/-5 degree from 20Hz-50KHz.

Signal to noise ratio: 105dB(A-weighted)at full output and 28 dB GAIN.

Total harmonic distortion(THD): <0.03% from 20Hz-50KHz to 1KHz increasing linearly to 0.1% at 50KHz.

Intermodulation distortion(IMD): <0.03% from 10mW to 300W,400W,550W,1000W at 28dB gain.

Slew Rate: >26V per microsecond.

Damping factor: >200 from 20Hz-400Hz.

Load impedance: rated for 16,8,4,2ohm use. Safe with all types of loads,even reactive ones.

Required AC mains: 50Hz,220V-240V.

AC line connector: standard three-wire grounded connector.

L\*W\*H: 485mm\*445mm\*130mm

Weight: T-1000: \_\_\_\_\_ 20 Kg  
 T-2000: \_\_\_\_\_ 26 Kg  
 T-3000: \_\_\_\_\_ 27 Kg

# Installation

## **1. MAINS POWER CONNECTION.**

Before connecting the amplifier to the mains power socket, make certain that the voltage corresponds with that indicated on the rear of the unit (an allowance of  $\pm 10\%$  is acceptable).

Before connecting the power cable to the mains, always make certain that is not damaged and that there are no bare wires, always connect the power cable to the amplifier before switching it on and only remove the cable after switching it off.

## **2. SWITCHING ON AND OFF.**

In an audio system, it's always better to switch power amplifiers on last and off first.

Remember to switch off the amplifier before connecting it to or disconnecting it from other units and to switch always on first the mixer and then the amplifier: in this manner, peaks which are annoying and sometimes dangerous particularly for the loudspeakers enclosures are avoided.

It is normal for the LEDs to light up for a few moments when switching on.

## **3. HANDLING**

Do not force knobs and connectors, as they could be damaged if treated with excessive force.

## **4. CONNECTIONS AND PREVENTION OF POSSIBLE INTERFERENCE.**

Avoid installing your equipment near radios, televisions, etc., since they could cause noisy disturbance.

When connecting the other units in your sound system, watch out for so-called earth-loops, which can cause hum: in the event of interference, try using the EARTH switch on the amplifier's rear panel.

## **5. CONNECTOR CABLES.**

To connect the amplifier to the mixer, always make certain to use only signal cables (screened cables made up to two wires plus a braid screen), not power cables (speaker cables, normally made up of two wires, usually with a greater cross-section) to connect the amplifier to the loudspeaker enclosures, always use power cables, not signal cables, as in the latter case in fact, the power from the amplifiers would be partially disperse because of the cable's smaller cross-section.

Take care of the connector cables. Always hold them by the connectors, avoiding pulling the wire and avoid knots and twists when coiling them: this gives the advantage of increasing their life and reliability.

## **6. AIR CIRCULATION FOR COOLING.**

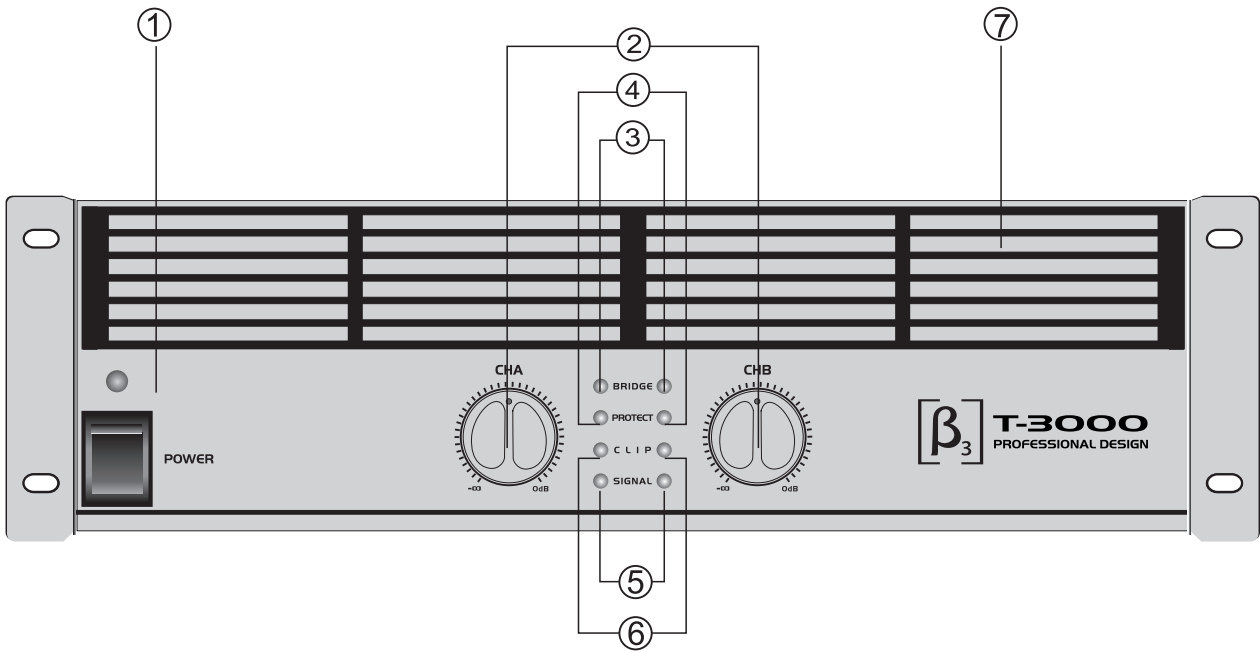
Amplifier's correct cooling is ensured by an internal fan, the speed of which is controlled by a special sensor (the speed is proportional to output power and therefore the temperature generated): remember never to block the air vents located on the unit's sides in any way: the air necessary for cooling passes through these. If the amplifier is kept in a flight-case during use, make certain that it has sufficient openings at both the amplifier's air vents. Avoid locating it very small spaces which don't allow correct air circulation.

## **7. PROTECTION AND MAINTENANCE.**

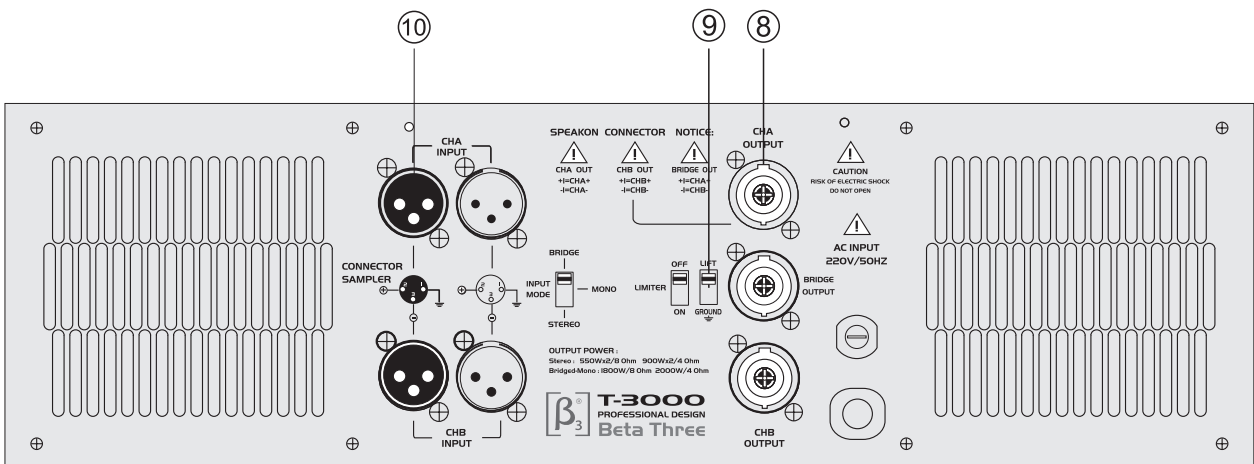
Avoid exposing the amplifier to direct sun, strong heat, intense vibrations, very dusty or damp surroundings or even worse, rain: this will avoid eventual malfunction, deterioration or even electric shocks and fires, in the event of a breakdown, do not open the amplifier contact the nearest service centre.

## **8. CONSERVATION OF DOCUMENTS AND PACKING.**

Keep this manual for future consultation. On this subject, remember that equipment always gets a better price on the secondhand market if it has all its original documentation and packing as well as being well-kept.



FRONT PANEL



REAR PANEL

### **1. POWER ON**

ON/OFF switch with indication LED.

### **2.LEVEL**

Control of the input level of the external signal: operates with continual values which vary from "fully closed"(position "0"-the signal is not fed to the amplifier sections) to "fully open"(position "0dB")-the signal is sent to the amplifier sections at the same level as that with which it arrives at the input).

### **3. BRIDGE**

This LED will be light up when you choose "BRIDGE" mode on the back panel of this unit. There's only output in CHA.

### **4.PROTEC**

If this LED light up, this indicates that one of the various safeguarding the different sections of the amplifier and the loudspeaker enclosure has tripped due to an operating fault.

### **5. CLIP**

Display the status of the signal is when it has already been regulated by the input level controls.

### **6.SIGNAL**

Signal "STATUS" indicators: these are LEDs able to indicate, for Channels A and B, a signal presence in the inputs of the amplifier.

### **7. AIR VENTS**

Amplifier cooling system air vents.

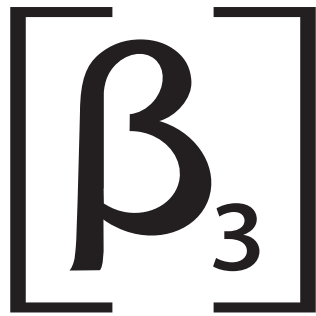
### **8. OUTPUTS**

Power out: outs should be connected to the loudspeaker enclosures. All amplifier's A,B and BRIDGED outputs have a NL4 connector. Only loudspeaker(or loud speaker enclosure systems) within the amplifier's declared power and impedance load range should be connected to the amplifier's outputs(see technical specification).

### **9.GROUND ON/FLOATING**

Controls the separation of the electrical earth from that of the chassis.

### **10.INPUTS**



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