

# User's Manual

**A500.2 DRAGONFLY**

DIGITAL POWER AMPLIFIER



  
www.altoproaudio.com  
Version 1.5 February 2006  
— English —

## SAFETY RELATED SYMBOLS



This symbol, wherever used, alerts you to the presence of un-insulated and dangerous voltages within the product enclosure. These are voltages that may be sufficient to constitute the risk of electric shock or death.



This symbol, wherever used, alerts you to important operating and maintenance instructions. Please read.



Protective Ground Terminal



AC mains (Alternating Current)



Hazardous Live Terminal

**ON:** Denotes the product is turned on.

**OFF:** Denotes the product is turned off.

### WARNING

Describes precautions that should be observed to prevent the possibility of death or injury to the user.

### CAUTION

Describes precautions that should be observed to prevent damage to the product.



Disposing of this product should not be placed in municipal waste and should be separate collection.

### WARNING

#### • Power Supply

Ensure that the mains source voltage (AC outlet) matches the voltage rating of the product. Failure to do so could result in damage to the product and possibly the user.

Unplug the product before electrical storms occur and when unused for long periods of time to reduce the risk of electric shock or fire.

#### • External Connection

Always use proper ready-made insulated mains cabling (power cord). Failure to do so could result in shock/death or fire. If in doubt, seek advice, from a registered electrician.

#### • Do not Remove any Covers

Within the product are areas where high voltages may present. To reduce the risk of electric shock do not remove any covers unless the AC mains power cord is removed.

**Covers should be removed by qualified service personnel only.**

No user serviceable parts inside.

#### • Fuse

To prevent fire and damage to the product, use only the recommended fuse type as indicated in this manual. Do not short-circuit the fuse holder. Before replacing the fuse, make sure that the product is OFF and disconnected from the AC outlet.

#### • Protective Ground

Before turning the product ON, make sure that it is connected to Ground. This is to prevent the risk of electric shock.

Never cut internal or external Ground wires. Likewise, never remove Ground wiring from the Protective Ground Terminal.

#### • Operating Conditions

Always install in accordance with the manufacturer's instructions.

To avoid the risk of electric shock and damage, do not subject this product to any liquid/rain or moisture. Do not use this product when in close proximity to water.

Do not install this product near any direct heat source.

Do not block areas of ventilation. Failure to do so could result in fire.

Keep product away from naked flames.

## **IMPORTANT SAFETY INSTRUCTIONS**

Read these instructions

Follow all instructions

Keep these instructions. Do not discard.

Heed all warnings.

Only use attachments/accessories specified by the manufacturer.

### **• Power Cord and Plug**

Do not tamper with the power cord or plug.

These are designed for your safety.

Do not remove Ground connections!

If the plug does not fit your AC outlet seek advice from a qualified electrician.

Protect the power cord and plug from any physical stress to avoid risk of electric shock.

Do not place heavy objects on the power cord. This could cause electric shock or fire.

### **• Cleaning**

When required, either blow off dust from the product or use a dry cloth.

Do not use any solvents such as Benzol or Alcohol.

For safety, keep product clean and free from dust.

### **• Servicing**

Refer all servicing to qualified service personnel only.

Do not perform any servicing other than those instructions contained within the User's Manual.

## **Preface**

Dear Customer,

Thanks for choosing ▲LTO A500.2 Amplifier and thanks for choosing one of the results Of ▲LTO AUDIO TEAM job and researches.

For our ▲LTO AUDIO TEAM, music and sound are more than a job...are first of all passion and let us say...our obsession!

We have been designing professional audio products for a number of years in cooperation with many of the world's major brands in audio field.

The ▲LTO line presents unparalleled analogue and digital products made by Musicians for Musicians in our R&D centers in Italy, Netherlands, United Kingdom and Taiwan. We provide you with world -class designs, while our software development teams continue to develop and impressive range of audio specific algorithms.

Because we are convinced you are the most important member of ▲LTO AUDIO TEAM and the one confirming the quality of our job, we would like to share with you our work and our dreams, pay attention to your suggestions and your comments. Following this idea we create our products and we will create the new ones! From our side, we guarantee you and we will supply you also in future the best quality, and the best fruits of our continuous researches and the best prices.

Our A500.2 Amplifier is the result of many hours of listening and tests involving ComMon people, area experts, musicians and technicians.

Nothing else to add, but that we would like to thank all the people that made the ▲LTO Amplifier a reality available to our customers, thank our designers and all the ▲LTO Staff, there to make possible the realization of products containing our idea of music And sound and there to support you, our customers, in the best way, conscious that You are our best richness.

Thank you very much.  
▲LTO AUDIO TEAM

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## 1. INTRODUCTION

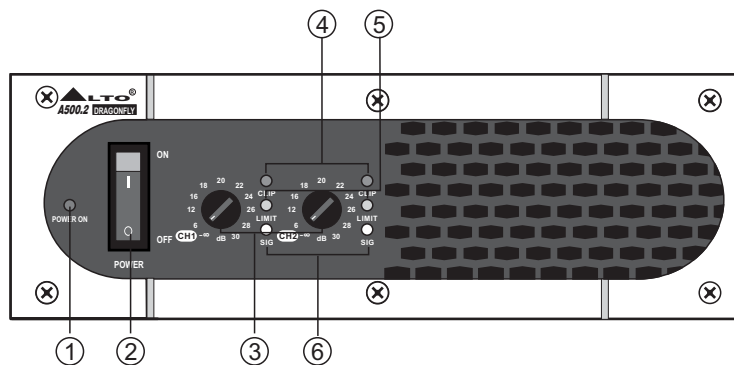
The ▲LTO A500.2 DRAGONFLY is D-class digital Power Amplifier with advanced features and great efficiency. It delivers tremendous power in a small space, providing high level performance even under the most demanding conditions. The amplifier contains two independent channels with separate AC transformer, power supplies and protection system. Each channel has independent protective circuitry against open circuit, short circuit, mismatched loads and over temperature. Thanks to the use of selected and expensive components, the performance of A500.2 DRAGONFLY is worth much more than its price.

## 2. FEATURES

- 1.5U height and 1/2 rack space, stereo high power amplifier
- Fantastic audio quality even with extremely high volume levels
- Solid and durable, can be mounted into a cabinet
- User-controllable limiter
- 2x480 Watts on 4 ohms (EIAJ)
- 2x260 Watts on 8 ohms (EIAJ)
- 2x245 Watts on 4 ohms (RMS)
- 2 COMBO input connectors are compatible with balanced XLR and JACK
- Neutrik Speak-on connectors for outputs
- Front panel LED indicators for clip, limit, power on and signal
- Accurate level control
- Manufactured under QS9000, VDA 6.1 certified management system

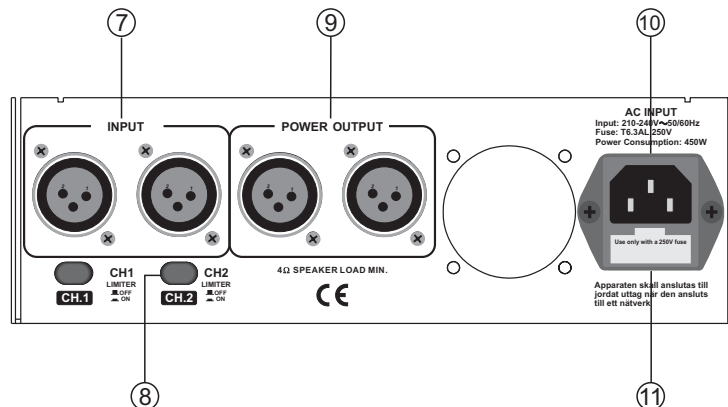
## 3. CONTROL ELEMENTS

### 3.1 Front Panel:



- ① **Power LED**  
This LED lights up when the unit is powered on.
- ② **Power Switch**  
Turn the unit on or off.
- ③ **Level Control for Channels 1 & 2**  
Adjust the output signal level of respective channel.
- ④ **Clip LED**  
When the LED lights up, it means the output level of signal is too high and it is time to reduce the signal level until clip LED turns off.
- ⑤ **Limit LED**  
While the unit is limiting the output signal, the LED lights up.
- ⑥ **Signal LED**  
When there are signals present in this unit, the LED lights up, or it will be off.

### 3.2 Rear Panel:



- ⑦ **Input Connector**  
These connectors connect the input signal of channel1 and channel 2 separately.
- ⑧ **Limiter Switch**  
Set this switch of CH1 or CH2 at "ON" position, once the output level is above maximum output level, the limiter begins, thus keeping consistent output level of respective channel to protect apparatus. If the switch is set at "OFF", the limiter doesn't work.

⑨ **Output Connector**

These NEUTRIK connectors are used to connect with your speakers.

⑩ **AC Input**

Use it to connect your A500.2 DRAGONFLY to the supplied AC cord only. Please check the voltage in your country before attempting to connect the unit with the main AC.

⑪ **Fuse Holder**

The fuse can protect the AC supplies circuit of the equipment.

**CAUTION:** if there is something wrong with the fuse or the fuse needs to change, use only the recommended fuse type as indicated in this unit. If the fuse continues to blow after replacing, discontinue using this unit before being repaired.

#### 4. TECHNICAL SPECIFICATION

<b>MODEL</b>	<b>A500.2 DRAGONFLY</b>
	20Hz 20KHz@0.1%THD, Stereo Mode
<b>8 ohms per channel(EIAJ)</b>	260W
<b>4 ohms per channel(EIAJ)</b>	480W
<b>4 ohms per channel(RMS)</b>	245W (at THD 1%)
<b>Input Sensitivity @4 ohms</b>	+3dBu
<b>Controls</b>	FRONT: Power switch, CH1 & CH2 LEVEL knobs REAR: CH1 & CH2 LIMITER
<b>Indicators (per channel)</b>	Power-On: Green LED Clip: Red LED Limit: Yellow LED Signal: Green LED
<b>Connectors of each channel</b>	Input: COMBO connector Output: NEUTRIK Speak-on connector
<b>Power Supply</b>	190-240 Vac~50Hz / 95-120Vac~60Hz
<b>Dimension</b>	314W x 208.5D x 66.6H mm / 12.4" x 8.2" x 2.6"
<b>Net Weight</b>	3.85 kg (8.49lb)

#### 5. WARRANTY

##### 1. WARRANTY REGISTRATION CARD

To obtain Warranty Service, the buyer should first fill out and return the enclosed Warranty Registration Card within 10 days of the Purchase Date.



All the information presented in this Warranty Registration Card gives the manufacturer a better understanding of the sales status, so as to purport a more effective and efficient after-sales warranty service. Please fill out all the information carefully and genuinely, miswriting or absence of this card will void your warranty service.

## **2. RETURN NOTICE**

- 2.1 In case of return for any warranty service, please make sure that the product is well packed in its original shipping carton, and it can protect your unit from any other extra damage.
- 2.2 Please provide a copy of your sales receipt or other proof of purchase with the returned machine, and give detail information about your return address and contact telephone number.
- 2.3 A brief description of the defect will be appreciated.
- 2.4 Please prepay all the costs involved in the return shipping, handling and insurance.

## **3. TERMS AND CONDITIONS**

- 3.1 ▲LTO warrants that this product will be free from any defects in materials and/or workmanship for a period of 1 year from the purchase date if you have completed the Warranty Registration Card in time.
- 3.2 The warranty service is only available to the original consumer, who purchased this product directly from the retail dealer, and it can not be transferred.
- 3.3 During the warranty service, ▲LTO may repair or replace this product at its own option at no charge to you for parts or for labor in accordance with the right side of this limited warranty.
- 3.4 This warranty does not apply to the damages to this product that occurred as the following conditions:
  - Instead of operating in accordance with the user's manual thoroughly, any abuse or misuse of this product.
  - Normal tear and wear.
  - The product has been altered or modified in any way.
  - Damage which may have been caused either directly or indirectly by another product / force / etc.
  - Abnormal service or repairing by anyone other than the qualified personnel or technician.And in such cases, all the expenses will be charged to the buyer.
- 3.5 In no event shall ▲LTO be liable for any incidental or consequential damages. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above exclusion or limitation may not apply to you.
- 3.6 This warranty gives you the specific rights, and these rights are compatible with the state laws, you may also have other statutory rights that may vary from state to state.

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