



## CONTENTS

3. INTRODUCTION
4. IMPORTANT NOTES ( WARNING !)
5. POWER INPUT CONNECTION
6. CONNECTING SPEAKERS
7. SERVICING THE AMPLIFIER
8. LOCATION AND VENTILATION
9. TOP VIEW VALVE LOCATION
10. REAR VIEW DIAGRAM
11. FRONT VIEW DIAGRAM
12. OPERATIONAL NOTES
13. SPECIFICATIONS
14. ALTITUDE 3500 PICTURE

## INTRODUCTION

Thank you for purchasing the Fountek Electronics Altitude 3500 Integrated valve amplifier. The circuit design lay out and component quality used has been chosen carefully after years of development and refinement for reliability to ensure the highest quality of musical reproduction with accurate and emotional delivery of the sound stage .

The Altitude 3500 Integrated valve amplifier features only the best available components with the shortest and cleanest signal paths possible with direct coupling used on the input stages to improve signal transit response .

High quality electrolytic and non electrolytic capacitors have been used throughout the Altitude 3500 amplifier in critical signal areas to ensure instant energy for fast dynamic midrange and top end transients with tight very dynamic bass performance normally not found on valve amplifiers.

## IMPORTANT NOTES ( WARNING !)

### CHILDREN & PETS

If you have small children or pets, you should consider placing the amplifiers out of reach to prevent damage to the amplifier or damage to your small children or pets by the amplifier as the valves do get hot during operation.

### WATER & MOISTURE

As with any electrical equipment, these amplifiers should not be used near water or moisture.

Keep clear of open windows

### CLEANING THE AMPLIFIER

Turn off the power on the front panel of the amplifier and remove the power cable from the mains wall socket completely before cleaning the panels.

## Use a soft cotton cloth or cotton gloves only

## Do not use any water, alcohol, chemicals, or cleaning sprays on any part of the amplifier chassis or valves

Valves may become loose during transit straighten and press down each tube firmly before into its appropriate valve socket before plugging the amplifier into the AC mains socket.

### HEAT FROM THE AMPLIFIER

Do not touch the valves after the amplifier has been switched on, as the valves become very hot during operation and should only be handled after the power has been turned off and the valves have cooled. Allow at least 15 to 20 minutes for the amplifier to cool down. Your amplifier has been factory set to the correct mains voltage for your country.

The voltage setting is marked on the serial badge, located on the rear panel near the IEC mains input socket.

Check that this complies with your local main supply.

### SHOCK HAZZARD #####

High voltages are contained inside the amplifier

DO Not remove the metal base cover of the amplifier.

DO Not Operate the amplifier with the valves removed from the valve sockets

## POWER INPUT CONNECTION



### **POWER INPUT \_ IEC 240V SOCKET/FUSE HOLDER**

Your amplifier has been factory set to the correct mains voltage for your country. The voltage setting is marked on the serial badge, located on the rear panel. Check that this complies with your local supply. Please use the IEC power cord supplied with the unit and ensure it is firmly pushed into the IEC 240V AC socket at the rear of the amplifier and the amplifier installation and connections have been double-checked before connecting the amplifier to the 240V AC power outlet before switching on the power

### **REPLACING FUSE**

First be sure the unit is turned off and remove the 240V IEC mains cable before replacing the fuse. The fuse is mounted in the top IEC 240V AC socket at the rear of the amplifier under a plastic panel. Replace the fuse only with the recommended type (# see Specifications for type)

## CONNECTING SPEAKERS



### CONNECTING THE SPEAKERS

#### IMPORTANT (NOTE)

**Never run the amplifier with the speakers disconnected!**

Connect 8-OHM speakers to the terminals marked (8 OHM)

Connect 4-OHM speakers to the terminals marked (4 OHM)

Connect the RIGHT CHANNEL speaker cable +Ve to the RED speaker terminal  
Connect the RIGHT CHANNEL speaker cable -Ve to the BLACK speaker terminal

Connect the LEFT CHANNEL speaker cable +Ve to the RED speaker terminal  
Connect the LEFT CHANNEL speaker cable -Ve to the BLACK speaker terminal

#### SPEAKER CABLE WITH FITTED BANANA PLUGS

Connect the ends of the speaker cables either buy 4mm banana plugs buy inserting them into the holes provided in the back of the amplifier speaker terminals

#### SPEAKER CABLE WITH BARE WIRE

Clamp the bare end of the speaker cable into the 4mm entry hole provided in the back of the speaker terminal.

Unscrew the speaker terminal cover anti clockwise to allow enough room for the bare end of the speaker cable then insert the cable and tighten down the speaker terminal cover clockwise until it is secured firmly buy hand only .

Do not use a wrench to tighten the speaker terminals or you will cause damage

## SERVICING THE AMPLIFIER

The user should not attempt to service the amplifier beyond that described in the owner's manual.

Refer all servicing other than valve replacement to a qualified Service Technician at an Authorized Fountek Service Center.

### REPLACING VALVES

Switch off the AC 240V power on the front panel of the amplifier.

Switch off wall AC 240V wall power socket and remove the amplifier power cord from wall socket.

Allow around 20 minutes for the amplifier to cool down before replacing any valves

Remove and replace valves using a pair of white cotton cloths that are supplied as an accessory with the amplifier.

Gently wiggle the valve whilst lifting it up vertically out of the valve socket,

When fitting the new valve make sure the pins on the new valve are straight and orientated in the correct direction so they line up with the holes in the valve sockets.

Ensure the valves are fitted into the valve socket firmly

Fit only the designated valve into sockets labeled (V1 V2 V3 V4 EL34, 12AU7 12AT7)

### BIASING THE OUTPUT VALVES

By using high voltages on the plates of the output valves, we are able to run them at lower currents, which will result in longer life for the output valves and less reliance on bias adjustment with age.

The output valve biasing procedure is normally only required when the valves are faulty or need replacing due to a loss of sound performance.

Each output valve has its own bias adjustment, the procedure for adjusting the bias is described in the Altitude 3500 Integrated Service manual.

We recommend that the re biasing of the output valves be attempted by a qualified Service Technician at an Authorized Fountek Service center..

## LOCATION AND VENTILATION



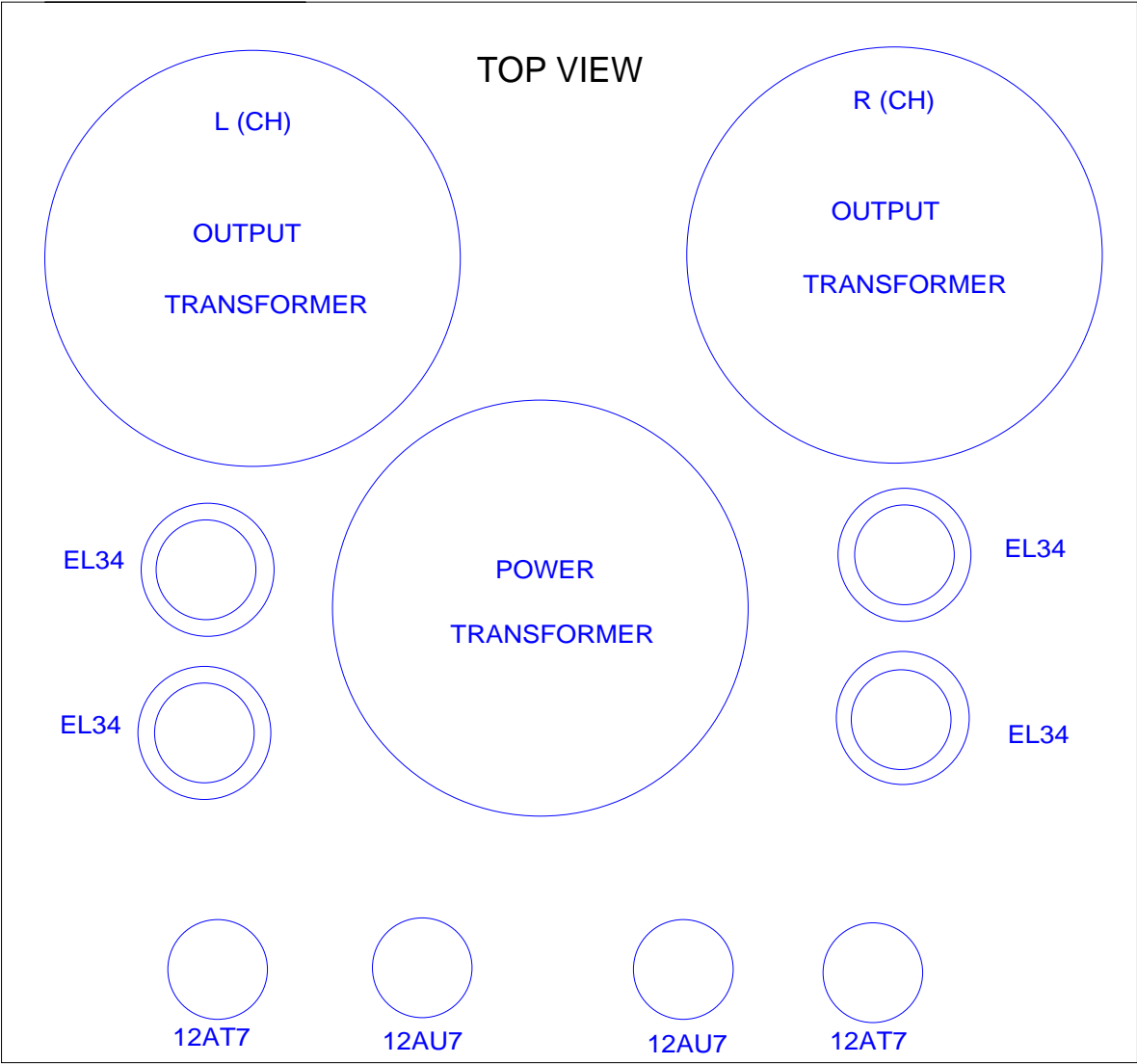
Installation of the Altitude 3500 Integrated valve amplifier must be into in a stable location with ample ventilation. Place the amplifier at least 600mm (24") above any floor and allow plenty of clearance around the unit between it and other equipment and cabinet walls or panels.

## Do not install the valve amplifier into a cupboard behind closed doors

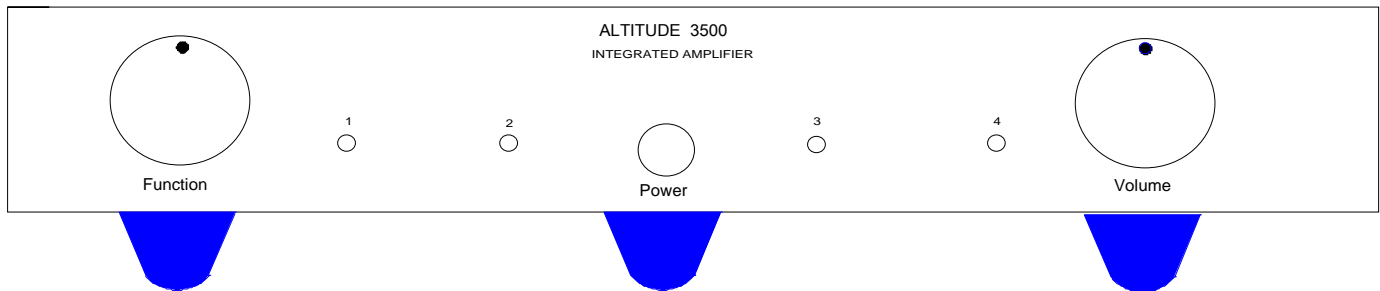
Allow a minimum 100mm (4") of clearance on the top and sides of the amplifier to allow a constant airflow.

Do not place amplifiers directly on high pile (thick) carpet, mats, towels or any other surface that will block the ventilation vents underneath the amplifier

TOP VIEW VALVE LOCATION



## FRONT VIEW DIAGRAM



## FRONT VIEW

### FUNCTION SWITCH

Selects audio inputs (1,2,3,4 ) ( CD /TUNER /AUX /1 AUX2)  
"Blue" lamp will indicate the selected input (1,2,3,4 )

### POWER

ON/ OFF

Press power switch in to turn power and out to turn OFF

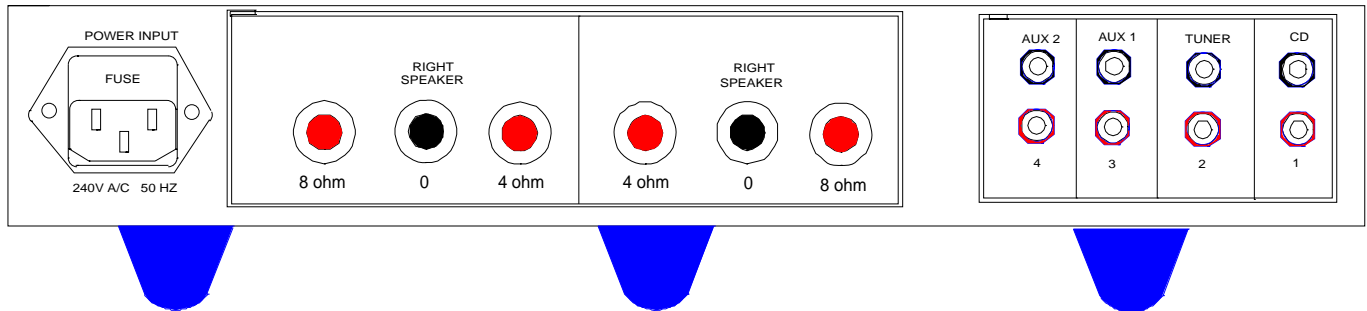
## Blue indicator lamp and valve (tubes) will light when Power is **ON**

### VOLUME

Turn Clockwise to set volume to your required listening level to suit the room and program material.

Turn down the Volume fully anti -clockwise before switching of the amplifier

## REAR VIEW DIAGRAM



## REAR VIEW

**POWER INPUT (IEC Socket) :** IEC 240 V mains cord power input socket

**FUSE:** Mains fuse is located under the plastic cover in the top the (IEC socket)  
Use only the manufactures recommended type.

**SPEAKER :** for 4 or 8 Ohm Speakers - speaker terminal post for speaker cables with banana plugs or plain wire cable SEE ( Page 8) **CONNECTING THE SPEAKERS**

### INPUTS

Any of the input jacks can be used with any hi-fi system RCA outputs.

All 4 inputs are electrically identical and only differ in how they are labeled

- 1 **CD :** CD / DVD /SACD players
- 2 **TUNER :** AM / FM Stereo or digital Radio Receivers
- 3 **AUX 1 :** For external Phono Pre amplifier or Home Theatre Pre amplifier Out (L &R)
- 4 **AUX 2:** For VCR or Laser Disc or Computer Sound playback

## OPERATIONAL NOTES

### **POWER**

The power switch is located on the lower left hand corner of the front panel. Push the top of the rocker switch (1) to turn on the amplifier and the bottom of the rocker to turn off the amplifier. The (Blue) indicator lamp on the front panel will illuminate indicating that the amplifier is on operating. Allow around 30 seconds to 1 minute for the valves to warm up before using

### **RUNNING**

It is not recommended that you leave your amplifier permanently switched on as this reduces valve life and wastes electricity.

Your amplifier has solid state rectification and reaches peak operating condition in approximately 30 to 60 minutes.

### **VALVE (Tube) LIFE**

As with all valves, their quality degrades with age. This is due to cathode emission, a natural process found in all valves.

We recommend that you have your amplifier services every 3to4 years usually the amplifier

A full set of new valves(tubes) is recommend every 3-4 years

### **POWER REGULATOR (FILTER)**

In locations where mains and power fluctuates an optional 240 V regulator/ power filter unit between the 240V wall outlet and the power cord feed to the amplifier is advisable

### **SPEAKER POSITION**

Position the left and right speakers at least 2.7 to 3.5 metres apart to achieve the best sound stage and depth of field. Depending on whether you have floor standing or Stand mounted speaker's bookshelf toe both speakers in towards the centre listening position around 5 degs.

Avoid positioning the speakers too close to any adjacent or back wall .A minimum distance of (0.25 to 0.75) M is recommended. Fine-tune the speaker's position to suit your room acoustics using your favorite recordings

Note all rooms are different so you will have to experiment with the position of your speakers until you are happy with the sound.

Use high quality speaker leads remember the better the leads the more detail you will hear from your speakers.

### **AMPLIFIER VALVE RUN IN TIME**

The valves supplied with the amplifier are pre run in at the factory. It is normal practice though that you allow a week or so of normal listening to further run in the valves especially if you have changed them during a dealer service.

## SPECIFICATIONS

CHANNELS: 2 channel

INPUTS : 4 CD/ TUNER / AUX1 / AUX2 (1,2,3,4)

INPUT IMPEDANCE =100K ohms

INPUT SENSITIVITY = 350mV rms @ 1Khz

OUTPUT POWER per channel = 32 Watts @ 1 KHz into 8ohm

OUTPUT CLASS: AB push pull

OUTPUT: 4 or 8 ohm speaker load 0-4-8 ohms

T.H.D. less than 1%

FREQUENCY RESPONSE: 15Hz- 50 KHz +- 0.5 dB

S/N Ratio : 89dB/A

VALVES :

2 x 12AT7 Twin triode

2 x 12AU7 Twin triode

4 x EL34 Pentode

EL34 Output Valves are matched pairs

FUSE: 240V 3.15A

CHASSIS: Silver Brushed Aluminum

DIMENSIONS : 350mm\*190mm\*320mm

NET WEIGHT : 18Kgs

GROSS WEIGHT: 21Kgs

**FOUNTEK ELECTRONICS**  
**ALTITUDE 3500 VALVE AMPLIFIER**



Altitude 3500 amplifier in a High Definition Sound System

Thank you again, and please enjoy your new dimension in sound