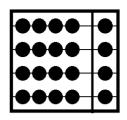
### **ABACUS** electronics

Bahnhofstr. 39 a D-26954 Nordenham +49 4731 5088 Fax +49 4731 5080



# Operating manual ABACUS® Ampino Mini stereo power amplifier and stereo linear amplifier



**ABACUS AMPINO** 

Email: info@abacus-electronics.de

electronics.de

Homepage: www.ABACUS-

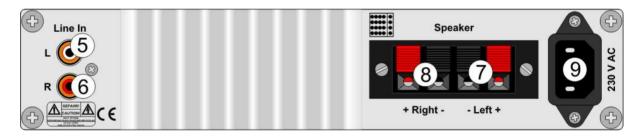


## Operating manual ABACUS<sup>®</sup> Ampino Solid state stereo power amplifier and stereo linear amplifier



#### **Front panel:**

- (1) Main switch
- (2) Volume control
- (3) Operating control (blue)
- (4) Loudspeaker protection (red) left and right



#### Rückwand:

- (5) Cinch input left
- (6) Cinch input right
- (7) Loudspeaker left (+ red, black)
- (8) Loudspeaker right (+ red, black)
- (9) IEC plug line 230V AC (not grounded!)

**ABACUS®** amplifiers guide loudspeakers like on a piston rod. Loudspeakers will gleam in new splendor. A very special circuit design combines the advantages of tube amplifiers with the modernity of solid state technology.

ABACUS electronics hope you will enjoy your Rieder AMPINO!

**Important notice:** Follow the steps in this manual when you put the **ABACUS**<sup>®</sup> amplifier into operation!



#### 1. Unpacking

Unpack your **ABACUS**® amplifier carefully and keep the packing for possible further shipping. Please report any damages to your **ABACUS** dealer immediately.

#### 2. Installation

Before starting operation of the **ABACUS**<sup>®</sup> Rieder 60-120B turn the main switch *ON* (1) into off-position (left) and the volume knob (2) to the minimum position (also left). The heat sink should be kept free for a sufficient circulation of air.

#### 3. Connection to a pre amplifier or other line source (5), (6)

The **ABACUS**® power amplifier can be connected to variable outputs of receivers, amplifiers, preamplifiers, CD-players etc.. In principle the connection to preamp, headphone or loudspeaker outputs is equivalent. The necessary cables and adapters can be purchased from **ABACUS** or your **ABACUS** dealer. The Rieder AMPINO acts as a linear integrated amp and can also be used directly with a line source.

#### 4. Connection of the loudspeakers (7), (8)

The loudspeakers are connected with open cable ends. Push the terminals to open them. Thick cables have to be thinned before.

#### 5. Connection to preamp or line source

- ◆ The Rieder AMPINO has an excellent preamplifier with a precise volume control (ALPS) on board.
- ♦ Because of this the direct connection to a line source like a CD-player, receiver, tape, computer, TV-set etc. is possible without additional preamp. (This is often even better)

Connect the outputs of the source according to the left-right-label of the cinch connectors. Until the first turning of the main switch (1) you should again make sure, that the volume (2) is turned to the left.

#### 6. Start of operation

#### Please follow these steps:

- ◆ Connect a line source like written above, e.g. CD directly or with a (pre)amp (5), (6) and start the program.
- ◆ Connect the IEC plug (9) to line (230V AC).
- Switch on the amplifier (1). The ON-LED (3) should glow now.
- ♦ If the source is connected directly to the **ABACUS**® Rieder AMPINO simply choose the volume with the knob (2).
- ◆ If you operate the **ABACUS**® amplifier with a (pre)amp turn its volume knob (2) to app. the top ("12 o'clock position"). This is then the basic volume and you can choose the actual volume with the preamp.

#### 7. Loudspeaker protection

The loudspeaker protection circuit of the **ABACUS**<sup>®</sup> Rieder AMPINO can protect both, the amp and the loudspeakers, independent of their power rating. When overloaded the amp is switched to mute and the red *LSP* LED (4) of that channel glows. To reset switch the amp off with the line switch (1), wait a few seconds until



the red LED is off again and switch the amp back on. It is recommended to reduce the volume, particularly if the LSP is activated several times.

**Warning:** We advise against extreme equalizer settings in the source components. And please keep in mind: when loudspeakers sound distorted or when the heat sink gets very hot, this means danger for amplifier and loudspeaker.

#### 8. Accesory:

You can purchase various items from ABACUS electronics:

- ◆ Liner preamplifiers with "Linetreiber"-output, 6 inputs, infrared remote control
- "Linetreiber" with or without volume control
- Cables and adapters for line and loudspeaker connection in various lengths

#### 9. Specifications:

Mains Voltage: 230V AC

Power: total RMS power app. 50W.

**Dimensions:** 

Including knobs and heat sink: width x depth x height app. 250 x 210 x 54mm.

Weight: 2.17kg.

Nordenham, August 2008

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