REFERENCE AMPLIFIER A500

Professional 600-Watt Reference-Class Studio Power Amplifier
Thank you

By purchasing an A500, you have obtained a high-end reference amplifier. It was developed for professional use in recording studios, but at the same time it offers enough power reserves to be used in smaller live setups as well. Its rich list of features will make it a dependable part of your equipment with a broad spectrum of possible uses.

The A500 features special circuitry that protects your speakers from transients during start-up and your amp from overheating. The amp is not put at any risk even if there is a short on its outputs.

Various operating modes, such as parallel and mono mode, open up different possibilities for effective implementation with the rest of your audio equipment, leaving little to be desired.
Important Safety Instructions

Terminals marked with this symbol carry electrical current of sufficient magnitude to constitute risk of electric shock. Use only high-quality commercially-available speaker cables with ¼” TS plugs pre-installed. All other installation or modification should be performed only by qualified personnel.

This symbol, wherever it appears, alerts you to the presence of uninsulated dangerous voltage inside the enclosure - voltage that may be sufficient to constitute a risk of shock.

This symbol, wherever it appears, alerts you to important operating and maintenance instructions in the accompanying literature.

Please read the manual.

Caution
To reduce the risk of fire or electric shock, do not remove the top cover (or the rear section).

No user serviceable parts inside. Refer servicing to qualified personnel.

Caution
To reduce the risk of fire or electric shock, do not expose this appliance to rain and moisture. The apparatus shall not be exposed to dripping or splashing liquids and no objects filled with liquids, such as vases, shall be placed on the apparatus.

Caution
These service instructions are for use by qualified service personnel only. To reduce the risk of electric shock do not perform any servicing other than that contained in the operation instructions. Repairs have to be performed by qualified service personnel.

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer’s instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding-type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Use only attachments/accessories specified by the manufacturer.
12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
15. The apparatus shall be connected to a MAINS socket outlet with a protective earthing connection.
16. Where the MAINS plug or an appliance coupler is used as the disconnect device, the disconnect device shall remain readily operable.

Legal Disclaimer

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Trident Chambers, Wickhams Cay, P.O. Box 146, Road Town, Tortola, British Virgin Islands.

Online registration

Please do remember to register your new BEHRINGER equipment right after your purchase at behringer.com under “Support” and kindly read the terms and conditions of our limited warranty carefully. Registering your purchase and equipment with us helps us process your repair claims quicker and more efficiently. Thank you for your cooperation!

Limited Warranty

§ 1 Warranty

☐ This limited warranty is valid only if you purchased the product from a BEHRINGER authorized dealer in the country of purchase. A list of authorized dealers can be found on BEHRINGER’s website behringer.com under “Where to Buy”, or you can contact the BEHRINGER office closest to you.

☐ MUSIC Group warrants the mechanical and electronic components of this product to be free of defects in material and workmanship if used under normal operating conditions for a period of one (1) year from the original date of purchase (see the Limited Warranty terms in § 4 below), unless a longer minimum warranty period is mandated by applicable local laws. If the product shows any defects within the specified warranty period and that defect is not excluded under § 4, MUSIC Group shall, at its discretion, either replace or repair the product using suitable new or reconditioned product or parts. In case MUSIC Group decides to replace the entire product, this limited warranty shall apply to the replacement product for the remaining initial warranty period, i.e., one (1) year (or otherwise applicable minimum warranty period) from the date of purchase of the original product.

☐ Upon validation of the warranty claim, the repaired or replacement product will be returned to the user freight prepaid by MUSIC Group.

☐ Warranty claims other than those indicated above are expressly excluded.

PLEASE RETAIN YOUR SALES RECEIPT. IT IS YOUR PROOF OF PURCHASE COVERING YOUR LIMITED WARRANTY. THIS LIMITED WARRANTY IS VOID WITHOUT SUCH PROOF OF PURCHASE.

§ 2 Online registration

To obtain warranty service, please contact the retailer from whom the equipment was purchased. Should your BEHRINGER dealer not be located in your vicinity, you may contact the BEHRINGER distributor for your country listed under “Support” at behringer.com. If your country is not listed, please check if your problem can be dealt with by our “Online Support” which may also be found under “Support” at behringer.com. Alternatively, please submit an online warranty claim at behringer.com BEFORE returning the product. All inquiries must be accompanied by a description of the problem and the serial number of the product. After verifying the product’s warranty eligibility with the original sales receipt, MUSIC Group will then issue a Return Materials Authorization (“RMA”) number.

§ 3 Return materials authorization

☐ To obtain warranty service, please contact the retailer from whom the equipment was purchased. Should your BEHRINGER dealer not be located in your vicinity, you may contact the BEHRINGER distributor for your country listed under “Support” at behringer.com. If your country is not listed, please check if your problem can be dealt with by our “Online Support” which may also be found under “Support” at behringer.com. Alternatively, please submit an online warranty claim at behringer.com BEFORE returning the product. All inquiries must be accompanied by a description of the problem and the serial number of the product. After verifying the product’s warranty eligibility with the original sales receipt, MUSIC Group will then issue a Return Materials Authorization (“RMA”) number.

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Subsequently, the product must be returned in its original shipping carton, together with the return authorization number to the address indicated by MUSIC Group.

Shipments without freight prepaid will not be accepted.

§ 4 Warranty Exclusions

This limited warranty does not cover consumable parts including, but not limited to, fuses and batteries. Where applicable, MUSIC Group warrants the valves or meters contained in the product to be free from defects in material and workmanship for a period of ninety (90) days from date of purchase.

This limited warranty does not cover the product if it has been electronically or mechanically modified in any way. If the product needs to be modified or adapted in order to comply with applicable technical or safety standards on a national or local level, in any country which is not the country for which the product was originally developed and manufactured, this modification/adaptation shall not be considered a defect in materials or workmanship. This limited warranty does not cover any such modification/adaptation, regardless of whether it was carried out properly or not. Under the terms of this limited warranty, MUSIC Group shall not be held responsible for any cost resulting from such modification/adaptation.

This limited warranty covers only the product hardware. It does not cover technical assistance for hardware or software usage and it does not cover any software products whether or not contained in the product. Any such software is provided “AS IS” unless expressly provided for in any enclosed software limited warranty.

This limited warranty is invalid if the factory-applied serial number has been altered or removed from the product.

Free inspections and maintenance/repair work are expressly excluded from this limited warranty, in particular, if caused by improper handling of the product by the user. This also applies to defects caused by normal wear and tear, in particular, of faders, crossfaders, potentiometers, keys/buttons, guitar strings, illuminants and similar parts.

Damage/defects caused by the following conditions are not covered by this limited warranty:

- improper handling, neglect or failure to operate the unit in compliance with the instructions given in BEHRINGER user or service manuals;
- connection or operation of the unit in any way that does not comply with the technical or safety regulations applicable in the country where the product is used;
- damage/defects caused by acts of God/Nature (accident, fire, flood, etc) or any other condition that is beyond the control of MUSIC Group.

Any repair or opening of the unit carried out by unauthorized personnel (user included) will void the limited warranty.

If an inspection of the product by MUSIC Group shows that the defect in question is not covered by the limited warranty, the inspection costs are payable by the customer.

Products which do not meet the terms of this limited warranty will be repaired exclusively at the buyer’s expense. MUSIC Group or its authorized service center will inform the buyer of any such circumstance. If the buyer fails to submit a written repair order within 6 weeks after notification, MUSIC Group will return the unit C.O.D. with a separate invoice for freight and packing. Such costs will also be invoiced separately when the buyer has sent in a written repair order.

Authorized BEHRINGER dealers do not sell new products directly in online auctions. Purchases made through an online auction are on a “buyer beware” basis. Online auction confirmations or sales receipts are not accepted for warranty verification and MUSIC Group will not repair or replace any product purchased through an online auction.

§ 5 Warranty transferability

This limited warranty is extended exclusively to the original buyer (customer of authorized retail dealer) and is not transferable to anyone who may subsequently purchase this product. No other person (retail dealer, etc.) shall be entitled to give any warranty promise on behalf of MUSIC Group.

§ 6 Claim for damage

Subject only to the operation of mandatory applicable local laws, MUSIC Group shall have no liability to the buyer under this warranty for any consequential or indirect loss or damage of any kind. In no event shall the liability of MUSIC Group under this limited warranty exceed the invoiced value of the product.

§ 7 Limitation of liability

This limited warranty is the complete and exclusive warranty between you and MUSIC Group. It supersedes all other written or oral communications related to this product. MUSIC Group provides no other warranties for this product.

§ 8 Other warranty rights and national law

This limited warranty does not exclude or limit the buyer's statutory rights as a consumer in any way.

The limited warranty regulations mentioned herein are applicable unless they constitute an infringement of applicable mandatory local laws.

This warranty does not detract from the seller’s obligations in regard to any lack of conformity of the product and any hidden defect.

Warranty service conditions are subject to change without notice. For the latest warranty terms and conditions and additional information regarding MUSIC Group’s limited warranty, please see complete details online at behringer.com.

* MUSIC Group Macao Commercial Offshore Limited of Rue de Pequim No. 202-A, Macau Finance Centre 9/J, Macau, including all MUSIC Group companies
1. **Introduction**

**Balanced inputs and outputs**

Your BEHRINGER A500 features electronically servo-balanced inputs (exception: RCA connectors [6] and [7] are intended only for unbalanced connections). The automatic servo function recognizes when unbalanced jacks are connected and internally adjusts the nominal signal level so that no difference in the signal level between inputs and outputs exists (6 dB correction).

◊ This manual first describes the terminology used, so that you fully understand the A500 and its functions. Please read the manual carefully and keep it for future reference.

1.1 **Before you get started**

1.1.1 **Shipment**

Your A500 was carefully packed at the factory, and the packaging was designed to protect the unit from rough handling. Nevertheless, we recommend that you carefully examine the packaging and its contents for any signs of physical damage that may have occurred during transit.

◊ If the unit is damaged, please do NOT return it to BEHRINGER. Instead, notify your dealer and the shipping company immediately. Otherwise, claims for damage or replacement may not be honored.

◊ Always use the original packaging to prevent damage during storage or transport.

◊ Make sure that no children are left unsupervised with the A500 or its packaging.

◊ Please ensure proper disposal of all packing materials.

1.1.2 **Initial operation**

Make sure there is enough space around the unit for cooling. To avoid overheating, please do not place your amplifier near radiators and other equipment emitting heat.

◊ Before plugging the unit into a power socket, please make sure you have selected the correct voltage!

The fuse compartment near the power plug socket contains three triangular markings. Two of these triangles are opposite one another. The voltage indicated adjacent to these markings is the voltage to which your unit has been set up, and can be altered by rotating the fuse compartment by 180°. **ATTENTION: This does not apply to export models that were manufactured only for use with 120 V, for example!**

◊ If you alter the unit’s voltage, you must change the fuse accordingly. The correct value of the fuse needed can be found in the chapter “SPECIFICATIONS.”

◊ Faulty fuses must be replaced with fuses of appropriate rating only! The correct value of the fuses needed can be found in the chapter “SPECIFICATIONS.”

Power is delivered via the cable enclosed with the unit. All required safety precautions have been adhered to.

◊ Please keep in mind that all your equipment has to be grounded at all times. For your own protection, never change or disable the grounding on your equipment or on the cables! The unit should always be connected to the mains socket outlet with a protective earthing connection.

⚠️ **Attention!**

◊ High volume levels can damage your hearing and your speakers. Please turn down both volume controls to the minimum (all the way to the left) before you power up the amp. Always make sure you use appropriate volume levels.

1.1.3 **Online registration**

Please register your new BEHRINGER equipment right after your purchase by visiting [http://behringer.com](http://behringer.com) and read the terms and conditions of our warranty carefully.

Should your BEHRINGER product malfunction, it is our intention to have it repaired as quickly as possible. To arrange for warranty service, please contact the BEHRINGER retailer from whom the equipment was purchased. Should your BEHRINGER dealer not be located in your vicinity, you may directly contact one of our subsidiaries. Corresponding contact information is included in the original equipment packaging (Global Contact Information/European Contact Information). Should your country not be listed, please contact the distributor nearest you. A list of distributors can be found in the support area of our website [http://behringer.com](http://behringer.com).

Registering your purchase and equipment with us helps us process your repair claims more quickly and efficiently.

Thank you for your cooperation!
2. Control Elements

2.1 The front

![Control elements in the front](image)

- The **POWER** switch is used to power up the A500. The POWER switch should always be in its “Off” position when you connect the unit to the mains. The **POWER** LED lights up as soon as you power up the A500.
- Please note: Merely switching the unit off does not mean that it is fully disconnected from the mains. When not using the unit for prolonged periods of time, please unplug the unit’s power cord from the power outlet.
- Your power amp should always be the last device you power up, since some equipment in the signal path creates strong impulses which are then amplified in the amp and are passed onto the loudspeakers, possibly damaging them. Consequently, always let your power amp be the first device you power down.

Each channel features a volume control. Use it to adjust gain on your A500. Both volume controls should be turned all the way to the left whenever you power the unit up or down. If an active signal is present on the input, turning the volume down will protect your speakers and your ears from unwanted “pops” or transients.

- The **PROT** LED lights up whenever the protective circuitry mutes the speaker output. Please turn your A500 off immediately whenever this LED is lit.
- The protective circuitry is activated if the amp gets too hot. Let your A500 cool down a little before you turn it on again. Besides, check if the heat sink has enough space around it to perform its job.
- The high-precision power indicator gives out current signal strength.
- The **CLIP** LED lights up when the signal is distorted. Should distortion occur, reduce the input level, so that the CLIP LED no longer lights up.
- If the CLIP LED remains being lit, check the cable connection to the speakers because there might be a short on the speaker output.

2.2 The back

![Control elements and connections in the back](image)
**CHANNEL INPUT 1 (MONO).** Connect the signal source whose output needs to be amplified.

◊ Please use only one of the three input connectors per channel at any one time!

Here you will connect an output of your mixing console, your HiFi preamp or another signal source.

Our rack mixing console EURORACK PRO RX1602, with its eight mono-usable balanced stereo channels, is an ideal choice for signal processing and source selection.

The connections for both channels are laid out as RCA, XLR and ¼" TRS stereo connectors. The cinch inputs are intended for use with outputs laid out as unbalanced signals with a -10 dBV line signal level. Because these inputs are more sensitive than others, you can directly connect a CD player or a DAT recorder. Of course this input can also be used for connecting mixing consoles and similar equipment.

The XLR and ¼" TRS stereo connectors are laid out balanced, but they too can of course be used to connect unbalanced signals. Their sensitivity is +4 dBu (also see ch. 4).

Generally speaking, you should choose balanced over unbalanced signals in order to guarantee the highest noise protection.

Due to safety considerations, the inputs can not be used in parallel. However, if you are using cinch and XLR or ¼" TRS connectors simultaneously, the cinch input is given preference, and the other signal is muted.

◊ **If you wish to use the A500 in mono-bridged mode, please only use one of the channel 1 inputs!**

**CHANNEL INPUT 2.** These are the inputs for channel 2.

◊ The STEREO/BRIDGED MONO switch is used to toggle between the two operating modes of your A500.

◊ Please power the A500 down using the POWER switch each time you change the operating mode. Similarly, only connect/disconnect speaker connectors if the A500 has first been powered off!

**OUTPUT 1, OUTPUT 2 and BRIDGED MONO:** These are the speaker connectors of your A500 laid out as ¼" TS mono connectors. When in mono-bridged mode, only use the BRIDGED MONO output.

◊ Keep in mind the minimum load impedance of 4 Ohms per channel in stereo mode. When in mono-bridged mode, a loudspeaker whose impedance is at least 8 Ohms must be used.

◊ In addition to XLR or ¼" TRS connectors, you can also use binding posts for connecting speaker cables. When in mono-bridged mode, make sure to connect your cables to both middle connectors—as shown on the unit itself.

◊ **FUSE SWITCH/VOLTAGE SELECTION.** Before connecting the unit to the mains, please check if the voltage selector corresponds to your local voltage. When replacing fuses, you should only use fuses of the same type and rating. With some units, the fuse switch can be put into two different positions in order to select between 230 V and 120 V operation. Please bear in mind: If you wish to use your equipment outside of Europe running on 120 V, you will have to use a fuse with a higher Ampere value.

◊ The mains connection is made via a standard IEC RECEPTACLE. A matching cable is enclosed.

◊ **SERIAL NUMBER.**

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### 3. Application Examples

#### 3.1 Stereo mode

In this mode, both channels run independently with a separate input signal. Connect passive loudspeakers, preferably high-quality studio monitors, such as the BEHRINGER TRUTH B2031P. Set the STEREO/BRIDGED MONO switch to “STEREO” to enable stereo mode.

◊ Please use the POWER switch to power down your A500 before making any changes to the operating mode settings.

◊ Keep in mind the minimum load impedance of 4 Ohms per channel in stereo mode.

Fig. 3.1: A500 in stereo operation

**Additional examples:**

- Two independent mono signals, e.g. instrument signal and monitor mix
- Bi-amp operation, with the bass signal on channel 1 and the treble signal on channel 2

#### 3.2 Mono-bridged mode

In this mode, the voltages of both channels are added up and routed to just one loudspeaker. This results in a doubling of voltage, quadrupling of the peak power value and roughly tripling of the continuous power output on a single channel. The input and the gain control on channel 1 are used in mono-bridged mode. The channel 2 control elements are not used. **ATTENTION: To avoid cancellations due to internal phase inversion, the GAIN control on channel 2 must be turned all the way to the left!**

Use this operating mode to feed the output of both channels into a single 4-Ohm load. Set the STEREO/BRIDGED MONO switch to “BRIDGED MONO.”

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XENYX 2222FX

CTRL. Room out

Input

Channel 1

REFERENCE AMPLIFIER A500

Input

Channel 2

TRUTH B2031P

Fig. 3.1: A500 in stereo operation

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Please only connect the speaker using the BRIDGED MONO connector or by using both of the middle binding posts.

- Always power the A500 down using the POWER switch whenever you make any changes to the operating mode settings.
- Keep in mind the minimum load impedance of 8 Ohms in mono-bridged mode.

Always power the A500 down using the POWER switch whenever you make any changes to the operating mode settings. Keep in mind the minimum load impedance of 8 Ohms in mono-bridged mode.

Fig. 3.2: Mono-bridged operation

- If your amp is overdriving for a longer period of time, it may become muted for several seconds at a time. Always select appropriate volume values to avoid overdriving.

Safety precautions for mono-bridged operation

A voltage of up to 60 V RMS is present between the output connectors of the A500. Always adhere to all appropriate safety precautions when connecting your speakers to avoid the risk of electric shock.

Running your amp in mono-bridged mode puts both the amp and your loudspeakers under additional strain. Excessive overdriving can result in premature shutting down of the unit itself or permanent damage to the speakers. Make sure that your speaker (impedance at least 8 Ohms) and the cables you use can indeed handle the power load fed into/through them.

4. Installation

4.1 Installation in a rack

Your A500 can be installed into a 19” rack and requires two rack spaces. Please use four attaching screws and washers for installation. Reinforce the back end, especially for on-the-road use. Please ensure that enough cool air reaches the rack, especially if other rack equipment generates a lot of heat. Due to its weight, we recommend installing the A500 in the lower portion of your rack. If you are installing several amps in a single rack, you should leave some space between individual amps (approx. 1 height unit) to allow for sufficient cooling.

- The A500 has massive heat sinks on its side frame that guarantee reliable operation. Never block air supply to these heat sinks because excessive heat may damage the components inside your amp.

Even though the protective circuitry guards the inside components from damage caused by excessive internal temperatures, you should still double-check where the amp is placed and inspect cable connections if you are experiencing thermal protection dropouts.

4.2 Connections

Inputs

If you wish to use XLR connections for unbalanced input signals, connect the unused pin on the XLR connector (pin 3) with the ground. No modification is needed if using mono jacks (also see ch. 4.3).

- Should you register distractive signals such as noise or hissing, we recommend separating the amp input from the signal source. This way, you can quickly determine if the noise originates in the equipment connected to the amp. Always make sure to completely lower amplification of both channels before powering up the amp (GAIN control turned all the way to the left). Otherwise, permanent damage to your speakers may occur.

Outputs

Your A500 offers several output connection possibilities: two ¼” TS mono connectors and two pairs of touch-safe binding posts. In addition to both ¼” TS mono connectors for individual channels, the A500 also features an extra ¼” connector for use in mono-bridged mode.

- Whenever possible, use thick and short speaker cables to minimize power losses. Never route output cables near input cables.

When using binding posts, make sure that the wire insulation is not stripped more than what is necessary, and that wires are completely inserted into the binding post so that no bare wire is visible. Cable clamps must be isolated to avoid the possibility of electric shock. When running the amp in mono-bridged mode, always use the middle two binding post connectors, paying attention to correct polarity.

- ATTENTION! If you notice bare cable endings on the binding post connectors, disconnect the AC mains and remedy the improper output connection before powering the amplifier on again.

Connecting to the mains

Always connect your power amplifier to the voltage specified on the rear of the unit. Connecting the amp to incorrect voltage can permanently damage it (also see ch. 2, under FUSE SWITCH/VOLTAGE SELECTION).

Before powering up the amplifier, double-check all connections and fully lower the gain settings.
4.3 Audio connections

Various cables are needed for different types of applications. The following illustrations show the correct wiring. Always use high-grade cables.

Balanced use with XLR connectors

- **input**
  - 1 = ground/shield
  - 2 = hot (+ve)
  - 3 = cold (-ve)

- **output**
  - For unbalanced use, pin 1 and pin 3 have to be bridged

**Fig. 4.1: XLR connections**

Unbalanced ¼" TS connector

- **Strain relief clamp**
- **Sleeve**
- **Tip**

- **Sleeve** (ground/shield)
- **Tip** (signal)

**Fig. 4.2: ¼" TS connector**

Balanced ¼" TRS connector

- **strain relief clamp**
- **sleeve**
- **ring**
- **tip**

- **sleeve** (ground/shield)
- **ring** (cold (-ve))
- **tip** (hot (+ve))

For connection of balanced and unbalanced plugs, ring and sleeve have to be bridged at the stereo plug.

**Fig. 4.3: ¼" TRS connector**

Unbalanced connection using a cinch cable

- **tip**
- **sleeve**
- **shield**
- **sleeve**

**Fig. 4.4: Unbalanced connection using a cinch cable**
## 5. Specifications

### OUTPUT POWER

<p>| | |</p>
<table>
<thead>
<tr>
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<tbody>
<tr>
<td><strong>RMS Power</strong></td>
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<tr>
<td><strong>Stereo Mode (both channels driven)</strong></td>
<td></td>
</tr>
<tr>
<td>8 Ω / 1 kHz @ 1 % THD</td>
<td>125 W</td>
</tr>
<tr>
<td>4 Ω / 1 kHz @ 1 % THD</td>
<td>185 W</td>
</tr>
<tr>
<td><strong>Bridged Mono</strong></td>
<td></td>
</tr>
<tr>
<td>8 Ω / 1 kHz @ 1 % THD</td>
<td>375 W</td>
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</table>

<table>
<thead>
<tr>
<th>Peak Power</th>
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<tr>
<td><strong>Stereo Mode (both channels driven)</strong></td>
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<td>8 Ω / 1 kHz</td>
<td>175 W</td>
</tr>
<tr>
<td>4 Ω / 1 kHz</td>
<td>300 W</td>
</tr>
<tr>
<td><strong>Bridged Mono</strong></td>
<td></td>
</tr>
<tr>
<td>8 Ω / 1 kHz</td>
<td>600 W</td>
</tr>
</tbody>
</table>

| **Input Sensitivity** | 1.64 V |
| **Distortion** | <0.01 % |
| **Frequency Response** | 20 Hz - 20 kHz, +0/-1 dB |
| **Voltage Gain:** | 26 dB |
| **Damping Factor** | > 220 @ 8 Ω |
| **Input impedance** | 10 kΩ unbalanced, 20 kΩ balanced |
| **Signal-to-Noise** | >100 dBA |

### Controls

| Front | POWER switch  
GAIN control (channel 1 and 2) |
| Rear | MODE switch |

### Indicators

| POWER | Blue LEDs |
| CLIP (per channel) | Red LEDs |
| PROT (per channel) | Yellow LEDs |
| SIGNAL (per channel) |  |
| -30 dB | -6 dB | Green LEDs |
| SIGNAL (per channel) |  |
| -3 dB, 0 dB | Yellow LEDs |

### Connectors

| Inputs | Balanced XLR, 1/4” TRS, RCA |
| Outputs | 1/4” TS connectors and “touch-proof” binding posts |

### Circuit protection

| Cooling | Convection-type |
| Amplifier protection | Short circuit and overload |
| Output circuit type | Class AB |

### Power supply / Voltage (Fuses)

<table>
<thead>
<tr>
<th>Country/Region</th>
<th>Voltage</th>
<th>Fuses</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA / Canada</td>
<td>120 V~, 60 Hz</td>
<td>T 10 A  H 250 V</td>
</tr>
<tr>
<td>UK / Australia</td>
<td>240 V~, 50 Hz</td>
<td>T 5 A  H 250 V</td>
</tr>
<tr>
<td>Europe</td>
<td>230 V~, 50 Hz</td>
<td>T 5 A  H 250 V</td>
</tr>
<tr>
<td>Japan</td>
<td>100 V~, 50-60 Hz</td>
<td>T 10 A  H 250 V</td>
</tr>
<tr>
<td>Power consumption</td>
<td>660 W</td>
<td></td>
</tr>
<tr>
<td>Mains connector</td>
<td>Standard IEC receptacle</td>
<td></td>
</tr>
</tbody>
</table>

### Dimensions/weight

| Dimensions (H x W x D) | 19 x 10.85 x 4” |
| Weight | 18.5 lbs / 8.4 kg |

(1) BEHRINGER is constantly striving to maintain the highest professional standards. As a result of these efforts, modifications may be made from time to time to existing products without prior notice. Specifications and appearance may differ from those listed or illustrated.)

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FEDERAL COMMUNICATIONS COMMISSION COMPLIANCE INFORMATION

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REFERENCE AMPLIFIER A500

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions:
(1) this device may not cause harmful interference, and
(2) this device must accept any interference received, including interference that may cause undesired operation.

Important information:
Changes or modifications to the equipment not expressly approved by BEHRINGER USA can void the user’s authority to use the equipment.