

## User Manual



# ULTRACOUSTIC AT108

Ultra-Compact 15-Watt Acoustic Instrument Amplifier with VTC-Technology and Original 8" BUGERA Speaker

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## Thank you

Congratulations! By purchasing the AT108, you have obtained a first-class instrument amplifier that offers you the authentic tube-like sound in an amazingly compact housing. The ULTRACOUSTIC AT108 amplifier was designed specifically for practicing. An additional XLR microphone connector lets you mike up an acoustic guitar or use your AT108 as a vocal amplifier, thus giving you extra flexibility.

**EN Important Safety Instructions**

Terminals marked with this symbol carry electrical current of sufficient magnitude to constitute risk of electric shock.

Use only high-quality professional speaker cables with ¼" TS or twist-locking 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 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.



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**LIMITED WARRANTY**

For the applicable warranty terms and conditions and additional information regarding MUSIC Group's Limited Warranty, please see complete details online at [www.music-group.com/warranty](http://www.music-group.com/warranty).

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# 1. Introduction

## VTC Virtual Tube Circuitry

The VTC Virtual Tube Circuitry was specially developed to lend the instrument the unique character of classical tube amps.

### Jam it up!

With its CD player input, your AT108 is the ultimate practice amp, because it couldn't be easier to play along to your favorite music. If you don't want anybody listening to what you're playing, or simply wish to avoid disturbing the neighbors, just use your headphones. The BEHRINGER HPS3000 is ideal just for that.

### A companion for life!

The electronic components in your ULTRACOUSTIC AT108 have been built into a robust metal enclosure for maximum protection. The cabinet is made of high-grade wood covered with durable vinyl. The AT108 will never let you down, even when the going gets tough.

- ◆ Please read the manual carefully and keep it around for future reference.

### ATTENTION!

- ◆ High volume levels can damage your hearing or your headphones. Please turn down all volume controls to zero (all the way to the left) before you power up the amp. Always make sure you use appropriate volume levels.

## 1.1 Before you get started

### 1.1.1 Shipment

Your AT108 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 packing carton to prevent damage during storage or transport.
- ◆ Make sure that no children are left unsupervised with the AT108 or its packaging.
- ◆ Please ensure proper disposal of all packing materials.

### 1.1.2 Initial operation

Be sure that there is enough space around the unit for cooling. To avoid overheating, please do not place the ULTRACOUSTIC near radiators and other equipment emanating heat.

- ◆ Please keep in mind that all the 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 shall always be connected to the mains socket outlet with a protective earthing connection.

### 1.1.3 Online registration

Please register your new BEHRINGER equipment right after your purchase by visiting <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>).

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

Thank you for your cooperation!

## 2. Wiring Tips

Fig. 2.1 and 2.2 show you how to connect your guitar and your microphone to the amplifier.

If you want to use an effects pedal (for example, the BEHRINGER X V-AMP) to experiment with some out-of-the-ordinary sounds, you can connect your guitar directly to the input of the effects processor. Then, connect a second cable from the effects output to the input on your amp.

If you have an electronic tuner, please be sure to insert it pre effects device, so that the tuner only receives a dry signal without effects components.

X V-AMP: no additional tuner required.

◆ **The built-in loudspeaker is disabled automatically when you plug in the headphones** 9. Fig. 2.1: Setup example using the ULTRACOUSTIC AT108

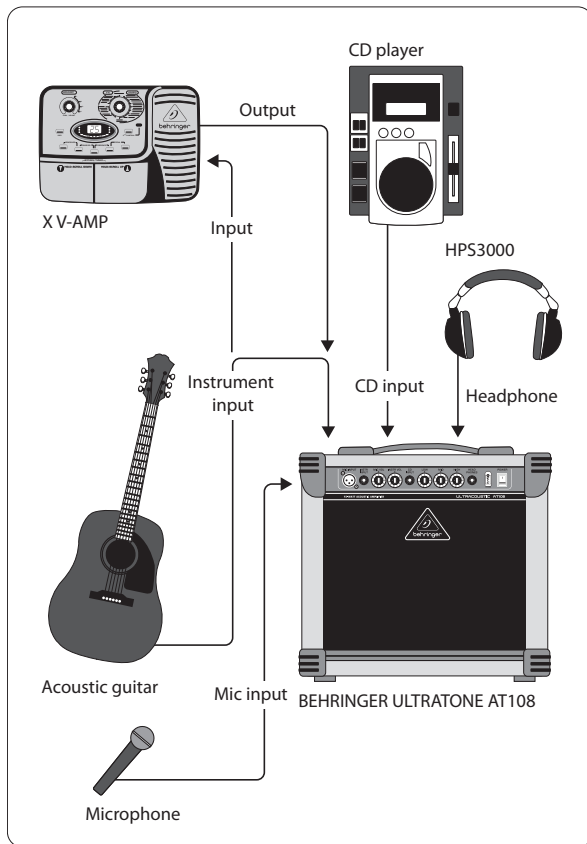


Fig. 2.1: Setup example using the ULTRACOUSTIC AT108

Fig. 2.2 shows a recommended setup for amplifying the sound of your AT108 using a sound reinforcement system of any size. This way, you can also use your amp for playing live or for rehearsals with your band.

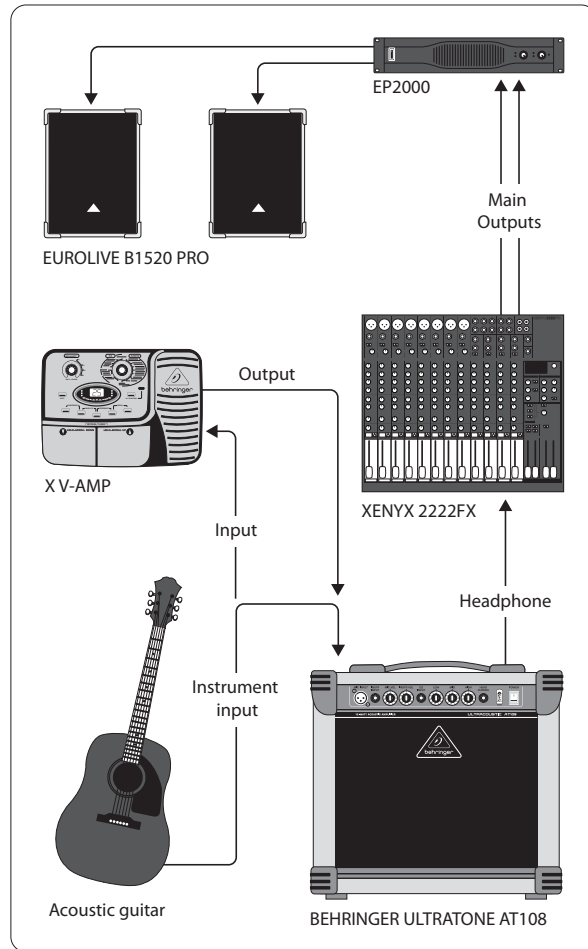


Fig. 2.2: Live setup

### 3. Control Elements

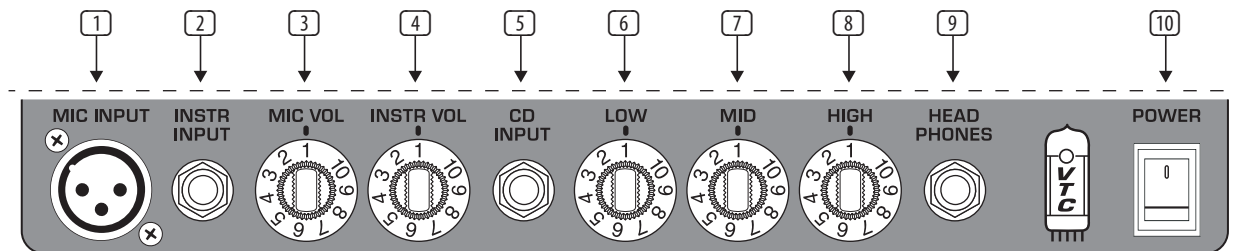


Fig. 3.1: Control elements

- 1 The **MIC INPUT** connector is a balanced XLR microphone input.
- 2 Connect your instrument to the **INSTR(UMENT) INPUT** jack, using a standard instrument cable equipped with ¼" TS connectors.
- 3 The **MIC VOL(UME)** control determines the volume level of the microphone channel.
- 4 The **INSTR(UMENT) VOL(UME)** control determines the volume level of the instrument channel.
- 5 Use the **CD INPUT** to connect the output of your CD player, tape deck, CD or MD walkman. This way you can play along to music or guitar tutorial CDs.

This connector is a ¼" TRS jack. If your CD player is equipped with cinch outputs, you'll need an adapter cable, which you can buy at your local music shop. Illustration 4.4 in chapter 4. "Audio Connections" shows you what kind of adapter to buy. You can also use a mono cable (fig. 4.5). This will not damage your CD player or amp.

- 6 The **LOW** control allows you to boost or cut the low-frequency range.
  - 7 With the **MID** control you can boost/cut the mid-range frequencies.
  - 8 The **HIGH** control adjusts the high-frequency range to give your instrument a more "cutting" sound.
  - 9 The **HEADPHONES** jack is for headphones. When you plug in your headphones, the built-in loudspeaker is muted.
- ◆ The headphone signal can also be routed to a mixing console or sound reinforcement system. Connect the headphone output on your AT108 to the line input (LINE IN) on the console (for example, BEHRINGER EURORACK UB1222FX-PRO). Please use a mono cable for this application.
  - ◆ Some headphones produce distortion if the volume level is too high. Please cut back the volume control until the distortion disappears.

- 10 Use the **POWER** switch to switch on your AT108. The POWER switch should be set to "Off" before you connect your amp to the mains.

◆ **Please note: The POWER switch does not disconnect the unit from the mains. Unplug the power cord when you don't want to use the unit for some time.**

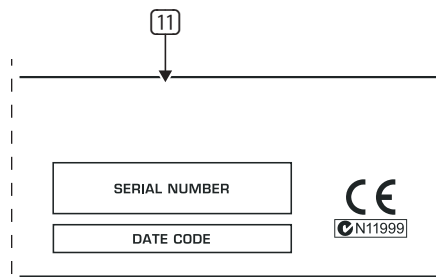


Fig. 3.2 Serial number

- 11 **SERIAL NUMBER.**

No matter which way you adjust the controls on your amp: the sound of your instrument or microphone also has some influence on the overall sound. We would therefore like to give you a few tips to get you started.

◆ **Most guitars sound best when their tone and volume controls are turned up as much as possible.**

Experiment with the controls to find out how you can modify the sound to your liking. Experienced guitarists write down their favorite settings or attach stickies underneath the controls.

## 4. Audio Connections

Except for the microphone input, the inputs and outputs are laid out as 1/4" connectors. More information about the connectors can be found in chapter 5, "Specifications." Please refer to Fig. 2.1 and 2.2 to learn about hooking up your amp.

◆ Please keep in mind that all the 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 shall always be connected to the mains socket outlet with a protective earthing connection.

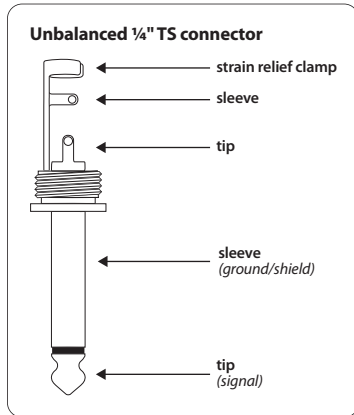


Fig. 4.1: 1/4" TS plug for the INSTRUMENT INPUT (mono)

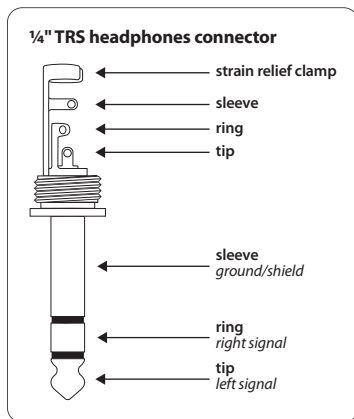


Fig. 4.2: 1/4" TRS for headphones or CD input

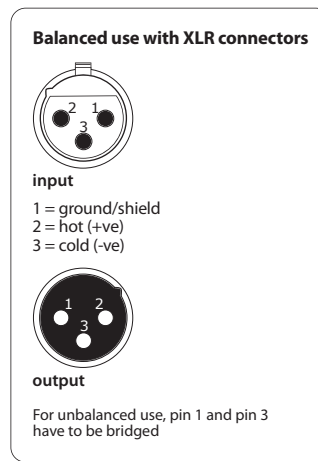


Fig. 4.3: XLR connections

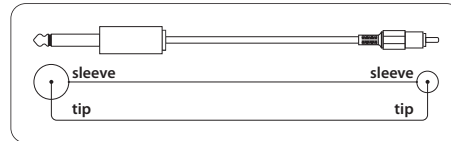


Fig. 4.4: Stereo adapter cable

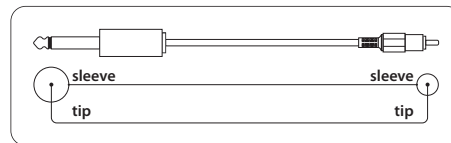


Fig. 4.5: Mono adapter cable

## 5. Specifications

### Audio Inputs

|                            |                      |
|----------------------------|----------------------|
| Instrument input Connector | ¼" TS mono connector |
|----------------------------|----------------------|

|                      |              |
|----------------------|--------------|
| Microphone Connector | balanced XLR |
|----------------------|--------------|

|                    |                         |
|--------------------|-------------------------|
| CD input Connector | ¼" TRS stereo connector |
|--------------------|-------------------------|

### Audio Output

|                            |                         |
|----------------------------|-------------------------|
| Headphone output Connector | ¼" TRS stereo connector |
|----------------------------|-------------------------|

### System Specifications

|                  |          |
|------------------|----------|
| Power amp output | 15 Watts |
|------------------|----------|

### Loudspeaker

|      |                                     |
|------|-------------------------------------|
| Type | 8" dual-cone full-range loudspeaker |
|------|-------------------------------------|

|           |     |
|-----------|-----|
| Impedance | 4 Ω |
|-----------|-----|

|              |          |
|--------------|----------|
| Power rating | 20 Watts |
|--------------|----------|

### Power Supply

#### Mains Voltage

|            |               |
|------------|---------------|
| USA/Canada | 120 V~, 60 Hz |
|------------|---------------|

|                |               |
|----------------|---------------|
| U.K./Australia | 230 V~, 50 Hz |
|----------------|---------------|

|        |               |
|--------|---------------|
| Europe | 230 V~, 50 Hz |
|--------|---------------|

|       |                    |
|-------|--------------------|
| Japan | 100 V~, 50 - 60 Hz |
|-------|--------------------|

### Dimensions/Weight

|                        |                                                            |
|------------------------|------------------------------------------------------------|
| Dimensions (H x W x D) | approx. 322 x 357 x 162 mm<br>(approx. 13 ⅛ x 14 ¼ x 6 ⅜") |
|------------------------|------------------------------------------------------------|

|        |                                   |
|--------|-----------------------------------|
| Weight | approx. 5.3 kg (approx. 11.7 lbs) |
|--------|-----------------------------------|

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We Hear You