ULTRACOUSTIC AT108

User's manual

GB

Version 1.0 March 2005

www.behringer.com

BEHRINGER®
JUST LISTEN.

IMPORTANT SAFETY INSTRUCTIONS

GB

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.

WARNING: 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 and no objects filled with liquids, such as vases, shall be placed on the apparatus.

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.

DETAILED SAFETY INSTRUCTIONS:

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) Only use 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) 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 unless you are qualified to do so.

ULTRACOUSTIC

Ultracompact 15-Watt Acoustic Instrument Amplifier with VTC Technology

- Extremely versatile 2-channel acoustic instrument amplifier
- Powerful 20-Watt, 8" dual-cone speaker for wide frequency response
- Additional microphone input with separate volume control
- VTC Virtual Tube Circuitry for tube-like sound
- Ultramusical 3-band EQ for both mic and instrument channel
- CD input allows you to play along to your favorite music
- Separate headphone output—perfect for quiet practicing
- Rugged construction for years of trouble-free use
- Conceived and designed by BEHRINGER Germany

FOREWORD

Dear musician,

Congratulations and thank you very much for purchasing the AT108, BEHRINGER's newest addition to the acoustic instrument amp family.

The ULTRACOUSTIC AT108 offers the latest in acoustic instrument amps, and is guaranteed to be an inspiring companion wherever music takes you.

Had anybody told you a few years ago that one day you'd be able to buy an instrument amp with authentic tube sound at such an unbeatable price, you would have probably called him nuts. But I wanted this amp to become reality, and now we've actually made it! With our ULTRACOUSTIC AT108 you can now follow in the footsteps of all the big guitar legends. Simply unpack it, plug it in and you're ready to go! The ULTRACOUSTIC AT108 gives you everything your heart desires.

What we really wanted was to give you a truly high-quality guitar amp. Believe me: With all those years of experience under our belt, we know what an amp needs to put up with. No matter how often you practice or how many sessions you have with your friends: when it comes to quality and sound, your ULTRACOUSTIC AT108 will give you years and years of pure enjoyment.

Now, just in case you're wondering how we can offer such a high-quality guitar amp at such an unbelievably low price... the answer is totally simple: it's thanks to you! Many satisfied customers means large volumes of units sold. Many units sold means better purchase prices for components, and so on. So, we just passed this price advantage on to you. It's only fair, isn't it?

Enough talk now. One day, when you're one of those legendary guitarists yourself, we hope you'll say that your first real guitar amp was a BEHRINGER. In that case, you have made a dream come true for us, too.

We wish you lots of success!

Thank you very much,

Uli Behringer

TABLE OF CONTENTS

1. INTRODUCTION 4

1.1 Before you get started 5
1.1.1 Shipment 5
1.1.2 Initial operation 5
1.1.3 Online registration 5

2. WIRING TIPS 5

3. CONTROL ELEMENTS 6

4. AUDIO CONNECTIONS 7

5. SPECIFICATIONS 7

6. WARRANTY 8

1. INTRODUCTION

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.

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 do remember to register your new BEHRINGER equipment right after your purchase by visiting www.behringer.com (alternatively www.behringer.de) and kindly read the terms and conditions of our warranty carefully.

Should your BEHRINGER product malfunction, our goal is to have it repaired as quickly as possible. To arrange for warranty service, please contact the 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 (www.behringer.com/support).

Registering your purchase and equipment with us helps us process your repair claims quicker and more 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]**.**

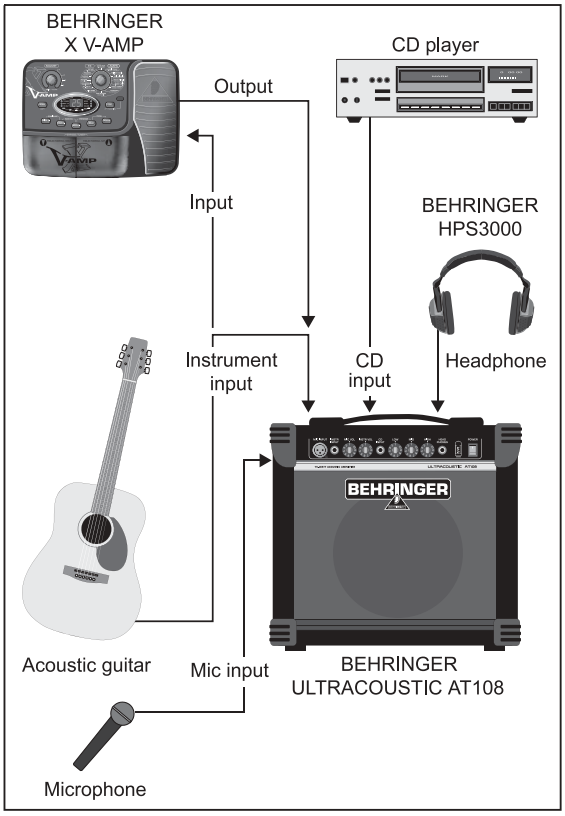

Fig. 2.1: Setup example using the ULTRACOUSTIC AT108

Fig. 2.2 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.

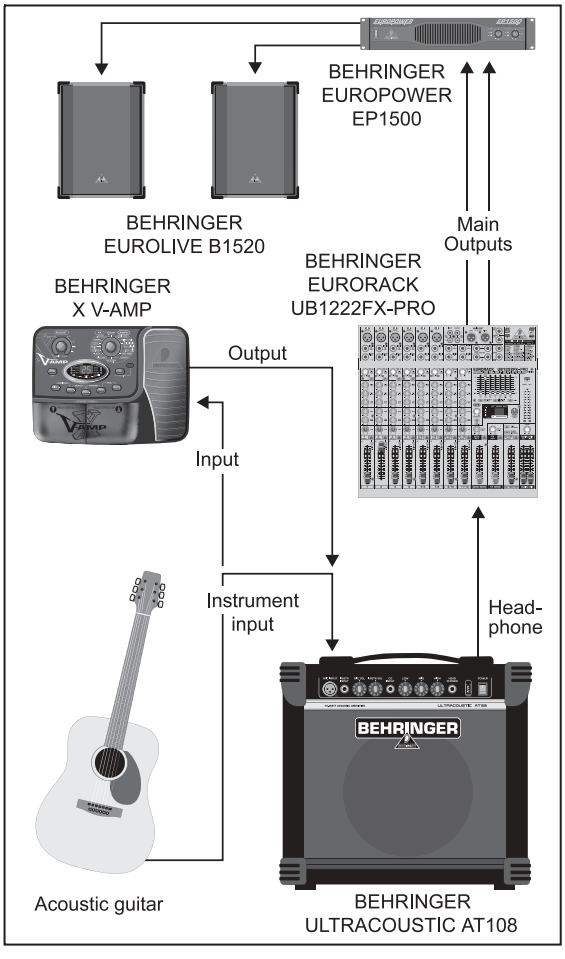

Fig. 2.2: Live setup

3. CONTROL ELEMENTS

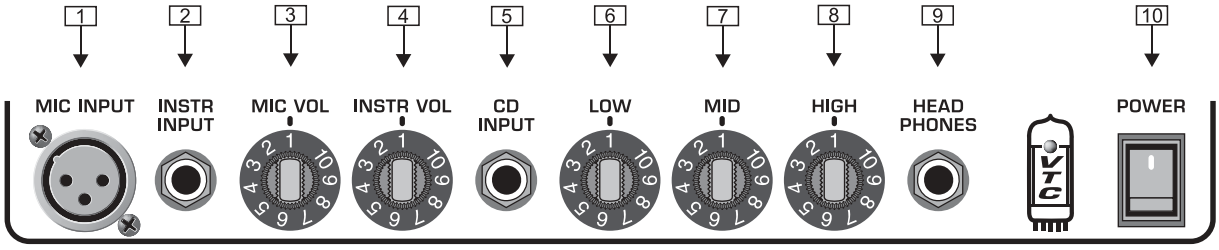

Fig. 3.1: Control elements

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 1/4" 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 1/4" 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.**

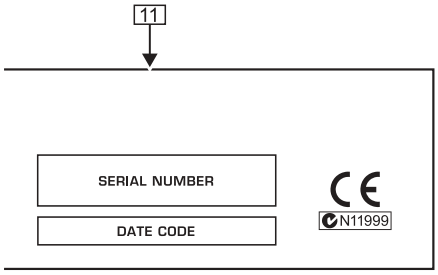

Fig. 3.2 Serial number

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.**

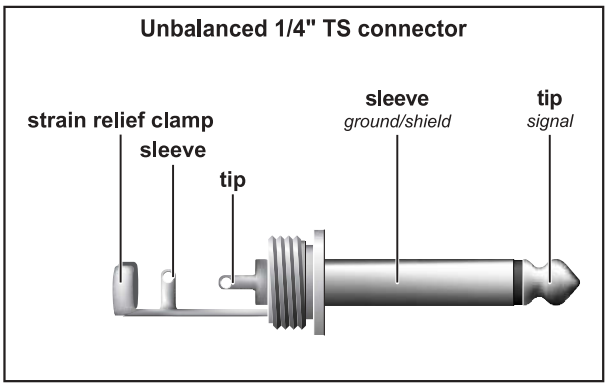

Fig. 4.1: 1/4" TS plug for the INSTRUMENT INPUT (mono)

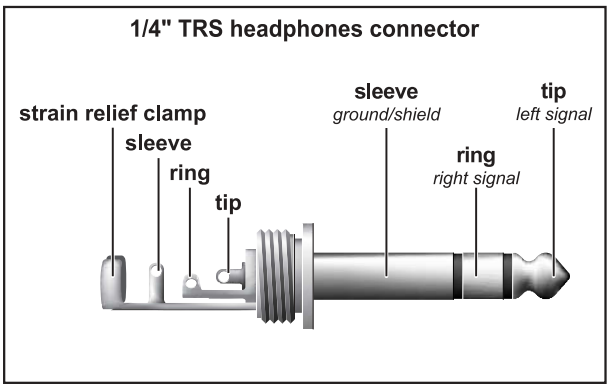

Fig. 4.2: 1/4" TRS for headphones or CD input

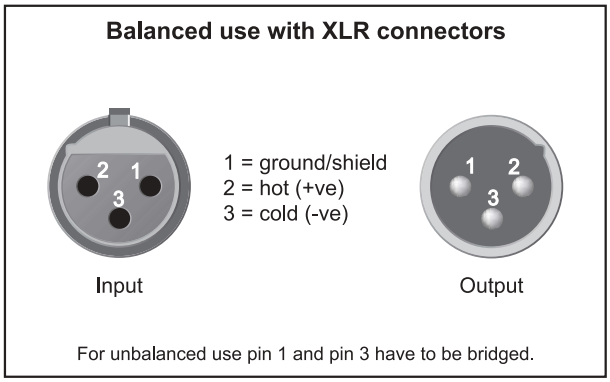

Fig. 4.3: XLR connections

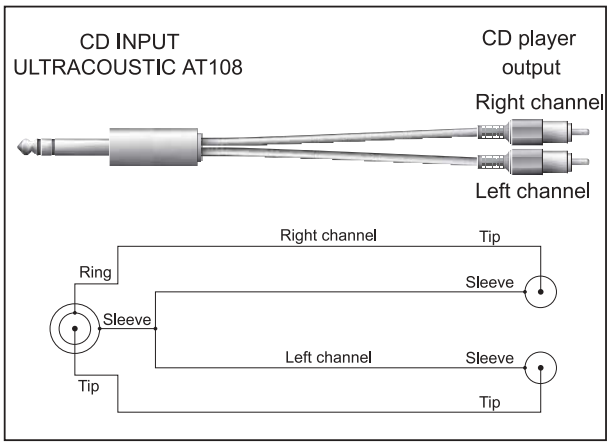

Fig. 4.4: Stereo adapter cable

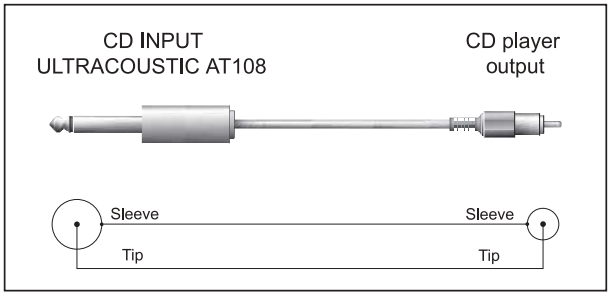

Fig. 4.5: Mono adapter cable

5. SPECIFICATIONS

AUDIO INPUTS

Instrument input	
Connector	1/4" TS mono connector
Microphone	
Connector	balanced XLR
CD input	
Connector	1/4" TRS stereo connector

AUDIO OUTPUT

Headphone output	
Connector	1/4" 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 mm (13 1/8") x 357 mm (14 1/16") x 162 mm (6 3/8")
Weight	approx. 5.6 kg (11 lbs. 3 oz.)

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 shown.

6. WARRANTY

GB

§ 1 OTHER WARRANTY RIGHTS AND NATIONAL LAW

1. This warranty does not exclude or limit the buyer's statutory rights provided by national law, in particular, any such rights against the seller that arise from a legally effective purchase contract.

2. The warranty regulations mentioned herein are applicable unless they constitute an infringement of national warranty law.

§ 2 ONLINE REGISTRATION

Please do remember to register your new BEHRINGER equipment right after your purchase by visiting www.behringer.com (alternatively www.behringer.de) and kindly read the terms and conditions of our warranty carefully. Registering your purchase and equipment with us helps us process your repair claims quicker and more efficiently. Thank you for your cooperation!

§ 3 WARRANTY

1. BEHRINGER (BEHRINGER International GmbH including all BEHRINGER subsidiaries listed on the enclosed page, except BEHRINGER Japan) warrants the mechanical and electronic components of this product to be free of defects in material and workmanship for a period of one (1) year* from the original date of purchase, in accordance with the warranty regulations described below. If the product shows any defects within the specified warranty period that are not excluded from this warranty as described under § 5, BEHRINGER shall, at its discretion, either replace or repair the product using suitable new or reconditioned parts. In the case that other parts are used which constitute an improvement, BEHRINGER may, at its discretion, charge the customer for the additional cost of these parts.

2. If the warranty claim proves to be justified, the product will be returned to the user freight prepaid.

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

§ 4 RETURN AUTHORIZATION NUMBER

1. To obtain warranty service, the buyer (or his authorized dealer) must call BEHRINGER (see enclosed list) during normal business hours **BEFORE** returning the product. All inquiries must be accompanied by a description of the problem. BEHRINGER will then issue a return authorization number.

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

3. Shipments without freight prepaid will not be accepted.

§ 5 WARRANTY REGULATIONS

1. Warranty services will be furnished only if the product is accompanied by a copy of the original retail dealer's invoice. Any product deemed eligible for repair or replacement under the terms of this warranty will be repaired or replaced.

2. 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. The warranty does not cover any such modification/adaptation, irrespective of whether it was carried out properly or not. Under the terms of this warranty, BEHRINGER shall not be held responsible for any cost resulting from such a modification/adaptation.

3. Free inspections and maintenance/repair work are expressly excluded from this 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, tubes, guitar strings, illuminants and similar parts.

4. Damages/defects caused by the following conditions are not covered by this 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.
- ▲ damages/defects caused by force majeure or any other condition that is beyond the control of BEHRINGER.

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

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

7. Products which do not meet the terms of this warranty will be repaired exclusively at the buyer's expense. BEHRINGER will inform the buyer of any such circumstance. If the buyer fails to submit a written repair order within 6 weeks after notification, BEHRINGER 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.

§ 6 WARRANTY TRANSFERABILITY

This warranty is extended exclusively to the original buyer (customer of 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 BEHRINGER.

§ 7 CLAIM FOR DAMAGES

Failure of BEHRINGER to provide proper warranty service shall not entitle the buyer to claim (consequential) damages. In no event shall the liability of BEHRINGER exceed the invoiced value of the product.

* Customers in the European Union please contact BEHRINGER Germany Support for further details.

Technical specifications and appearance subject to change without notice. The information contained herein is correct at the time of printing. The names of companies, institutions or publications pictured or mentioned and their respective logos are registered trademarks of their respective owners. Their use neither constitutes a claim of the trademarks by BEHRINGER® nor affiliation of the trademark owners with BEHRINGER®. BEHRINGER® accepts no liability for any loss which may be suffered by any person who relies either wholly or in part upon any description, photograph or statement contained herein. Colours and specification may vary slightly from product. Products are sold through our authorised dealers only. Distributors and dealers are not agents of BEHRINGER® and have absolutely no authority to bind BEHRINGER® by any express or implied undertaking or representation. No part of this manual may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying and recording of any kind, for any purpose, without the express written permission of BEHRINGER Spezielle Studiotechnik GmbH. BEHRINGER® is a registered trademark.

ALL RIGHTS RESERVED. © 2005 BEHRINGER Spezielle Studiotechnik GmbH,
Hanns-Martin-Schleyer-Str. 36-38, 47877 Willich-Münchheide II, Germany.
Tel. +49 2154 9206 0, Fax +49 2154 9206 4903