

B2092A

TRUTH

User's manual

GB

Version 1.2 September 2006



www.behringer.com



TRUTH B2092A

IMPORTANT SAFETY INSTRUCTIONS



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 only.

WARNING: To reduce the risk of fire or electric shock, do not expose this appliance to rain and moisture. The apparatus should never be exposed to dripping or splashing fluids, and no objects filled with liquids, such as vases, should 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.

- 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) The apparatus shall be connected to a MAINS socket outlet with a protective earthing connection.
- 12) Where the MAINS plug or an appliance coupler is used as the disconnect device, the disconnect device shall remain readily operable.

13) Only use attachments/accessories specified by the manufacturer.

14) 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.



15) Unplug this apparatus during lightning storms or when unused for long periods of time.

16) 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.

17) 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.

WARNING
THIS EQUIPMENT IS CAPABLE
OF DELIVERING SOUND
PRESSURE LEVELS IN EXCESS
OF 90 dB, WHICH
MAY CAUSE PERMANENT
HEARING DAMAGE.



TRUTH

High-Performance Active 360-Watt Studio Subwoofer for Mono, Stereo and Surround Applications

GB

- ▲ High-power 360-Watt amplifier delivers extreme dynamic range, with linear bass reproduction down to 32 Hz
- ▲ 2 long-excursion 8" loudspeakers with deformation-resistant aluminum die-cast chassis for minimal distortion even at highest volume levels
- ▲ Dedicated Left, Right and Center XLR inputs and outputs for all stereo and surround applications
- ▲ Incredible low-frequency enhancement for BEHRINGER TRUTH studio monitors or any other professional monitoring system
- ▲ Innovative band-pass filter enclosure design yields excellent dynamic response and linearity
- ▲ Active crossovers at 80 Hz provide precise frequency band separation and minimal phase shift
- ▲ Overload-protection circuitry ensures optimal speaker protection
- ▲ Flexible adaptation to virtually every acoustic environment via Phase and Room Compensation controls
- ▲ Footswitch connector for remotely controllable A/B comparison (footswitch not included)
- ▲ High-performance toroidal transformer for highest power handling and lowest noise
- ▲ High-quality components and exceptionally rugged construction ensure long life
- ▲ Conceived and designed by BEHRINGER Germany

B2092A

FOREWORD



Dear customer,

Welcome to the team of BEHRINGER users, and thank you very much for expressing your confidence in us by purchasing this studio subwoofer.

Writing this foreword for you gives me great pleasure, because it represents the culmination of many months of hard work delivered by our engineering team to achieve a very ambitious goal: to present a compact subwoofer that perfectly complements every loud-

speaker system with its enormous acoustic pressure and well-defined reproduction of the lowest frequencies. The task of designing our new TRUTH B2092A certainly meant a great deal of responsibility, which we assumed by focusing on you, the discerning user and musician. Meeting your expectations also meant a lot of work and night shifts. But it was fun, too. Developing a product usually brings a lot of people together, and what a great feeling it is when all who participated in such a project can be proud of what they've achieved.

It is our philosophy to share our enjoyment with you, because you are the most important member of the BEHRINGER team. With your highly competent suggestions for new products you've made a significant contribution to shaping our company and making it successful. In return, we guarantee you uncompromising quality as well as excellent technical and audio properties at an extremely reasonable price. All of this will enable you to give free rein to your creativity without being hampered by budget constraints.

We are often asked how we manage to produce such high-quality devices at such unbelievably low prices. The answer is quite simple: it's you, our customers! Many satisfied customers mean large sales volumes enabling us to get better purchasing terms for components, etc. Isn't it only fair to pass this benefit on to you? Because we know that your success is our success too!

I would like to thank all of you who have made the TRUTH possible. You have all made your own personal contributions, from the developers to the many other employees at this company, and to you, the BEHRINGER user.

My friends, it's been worth the effort!

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. CONTROL ELEMENTS AND CONNECTIONS	5
3. APPLICATIONS	6
3.1 Connection	6
3.1.1 Stereo setup with subwoofer	6
3.1.2 Multichannel surround setup	7
3.2 Input signal level adjustment	7
3.3 Correct placement	7
3.3.1 Adjusting room compensation	8
3.3.2 Phase adjustment	8
4. AUDIO CONNECTIONS	8
5. SPECIFICATIONS	9
6. WARRANTY	10

1. INTRODUCTION

Congratulations! By purchasing the TRUTH B2092A, you have obtained a powerful active subwoofer that effectively expands the transmission range of your stereo or surround system. You now own a tool that lets you reproduce the deepest bass frequencies with outstanding clarity.

The TRUTH B2092A is a compact subwoofer capable of reproducing bass frequencies down to 32 Hz. The band pass enclosure design with two long-stroke 8" loudspeakers guarantees the highest signal level with the lowest non-linear distortion possible. The integrated electronics include active crossovers, an overload-protection circuit and a powerful 360-Watt amplifier that delivers clearly defined bass even at high volumes. The B2092A features 3 signal inputs and outputs (left/center/right) as well as a separate subwoofer input. They assure flexible connectivity options for existing monitoring systems, regardless of whether they are in stereo or surround sound. The input sensitivity can be adjusted; and you can optimally adjust the B2092A to the main speakers and the acoustic surroundings by using the multistage room and phase compensation.

 The following user's manual is intended to familiarize you with the unit's control elements, so that you can master all the functions. After having thoroughly read the user's manual, store it in a safe place for future reference.

ATTENTION!

 The B2092A is capable of producing extreme volumes. Please bear in mind that high sound pressures do not only temporarily damage your hearing, but can also cause permanent damage. Always make sure to select an appropriate volume.

1.1 Before you get started

1.1.1 Shipment

Your B2092A was carefully packed in the factory to guarantee safe transport. 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 us; instead, notify your dealer and the shipping company immediately, otherwise claims for damage or replacement may not be granted.
- 👉 To assure optimal protection of your B2092A during use or transport, we recommend utilizing a carrying case.
- 👉 Please always use the original packaging to avoid damage due to storage or shipping.
- 👉 Never let unsupervised children play with the B2092A or with its packaging.
- 👉 Please dispose of all packaging materials in an environmentally friendly fashion.

1.1.2 Initial operation

Please make sure the unit is provided with sufficient ventilation, and never place the B2092A on top of an amplifier or in the vicinity of a heater to avoid the risk of overheating.

- 👉 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 without exception! 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 make sure that all units have a proper ground connection. For your own safety, never remove or disable the ground conductor from the unit or on the AC power cord. The unit should always be connected to a mains socket outlet with a protective earthing connection.
- 👉 When installing the product, ensure the appliance coupler or power cord is easily accessible for disconnecting the unit from mains.
- 👉 Important notes concerning installation: The sound quality may diminish within the range of powerful broadcasting stations and high-frequency sources. Increase the distance between the transmitter and the device and use shielded cables for all connections.

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).

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

Thank you for your cooperation!



2. CONTROL ELEMENTS AND CONNECTIONS

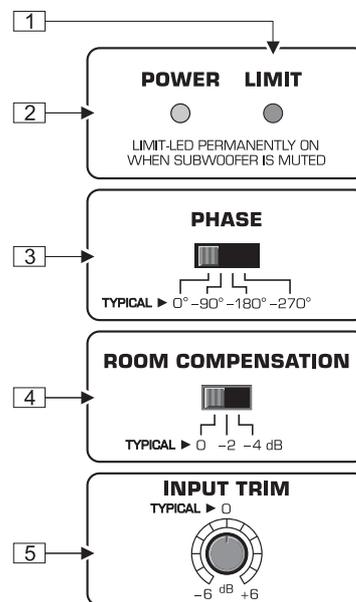


Fig. 2.1: Control elements in the back

- 1 The *LIMIT* LED lights up as soon as one of the built-in overload circuits becomes engaged. If the B2092A is muted using a footswitch, this LED is permanently lit.
- 2 *POWER*. This LED indicates that the loudspeaker is turned on.
- 3 Use the *PHASE* switch to modify the B2092A's phasing (0°/-90°/-180°/-270°) in respect to the main speakers (also see ch. 3.3.2).
- 4 *ROOM COMPENSATION* (function for compensating for different room characteristics). Using this switch, you can optimize your B2092A for each installation location (ch. 3.3.1).
- 5 Use the *INPUT TRIM* control to adjust the input sensitivity.

TRUTH B2092A

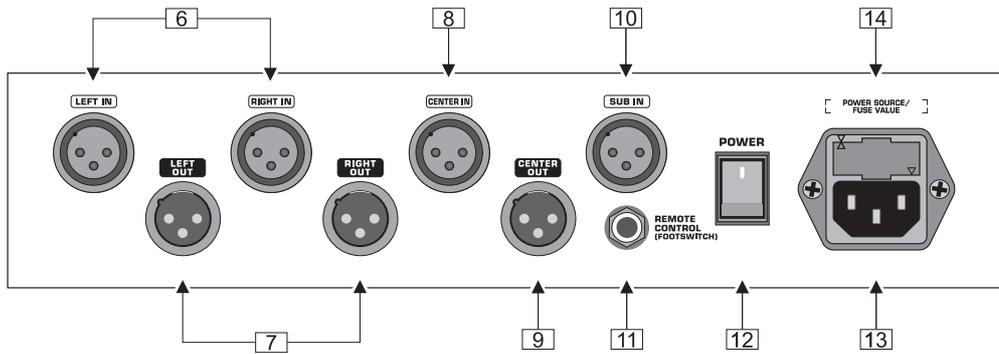


Fig. 2.2: The B2092A connector panel

- 6 LEFT IN and RIGHT IN. These are the balanced inputs on your B2092A. They are laid out as XLR connectors. Connect them to the outputs on your mixing console or with your preamplifier (see ch. 3.1).
 - 7 LEFT OUT and RIGHT OUT. These outputs carry the signals for the main left and right loudspeakers. The signal is tapped into post-crossover, i.e. without the bass segment used for the subwoofer. Connect your active main speakers here (with passive speakers, connect the power amplifier inputs).
 - 8 CENTER IN. Connect the center output of your surround decoder or amplifier to this connector.
 - 9 CENTER OUT. This output carries the signal for the central loudspeaker of a surround system. If the SUB input is being used, CENTER OUT also carries segments of the SUB signal with frequencies higher than 80 Hz.
 - 10 Connect the non-amplified subwoofer or the LFE output of your surround decoder/preamplifier to SUB IN. Frequencies above 80 Hz are reproduced on the CENTER output, while the B2092A reproduces the frequencies under 80 Hz.
 - 11 REMOTE CONTROL. The B2092A can be deactivated using a footswitch. This way, you can perform an A/B comparison with and without the subwoofer. If the B2092A is deactivated, the crossover is also bypassed, so that the main speaker now reproduce the entire frequency range.
 - 12 Use the POWER switch to power up your B2092A. The POWER switch should always be in the "Off" position when you are about to connect the unit to the mains.
- Please note:** The POWER switch does not fully disconnect the unit from the mains. To disconnect the unit from the mains, pull out the main cord plug or appliance coupler. When installing the product, make sure the plug or appliance coupler is readily operable. Unplug the power cord when the unit is not used for prolonged periods of time.
- Your B2092A and the corresponding loudspeaker system should always be the last ones to be turned on and the first ones to be turned off. This way, you avoid speaker damage caused by loud crackling noises during turning other equipment in your studio on or off.**
- 13 The mains connection is achieved via the standard IEC connector. A matching power cord is included.
 - 14 FUSE COMPARTMENT/VOLTAGE SELECTION: Before plugging the unit into a power socket, please make sure you have selected the correct voltage. Faulty fuses must be replaced with fuses of appropriate rating without exception. Some units feature a fuse compartment that can be operated in two different positions, allowing alternating between 230 V and 120 V. Attention: when using the unit outside of Europe (running on 120 V), you have to install a fuse with a higher rating.

3. APPLICATIONS

3.1 Connection

Using the mains cable included in the delivery, connect the B2092A to the mains. To avoid hum noise, your loudspeakers and your mixing console should all be connected to the same AC circuit. Connect your loudspeaker system to the Monitor/Control Room outputs of your mixing console. This way, you can adjust the listening volume independently from your mixing console's main mix signal. The B2092A is an active loudspeaker. Therefore, you will require no speaker cables. Instead, you will need to use standard, commercially available two-core shielded XLR microphone cables.

Be sure to mute the signal sources before you power the B2092A on.

There are different ways to integrate your B2092A into a loudspeaker system. Some examples are shown here:

3.1.1 Stereo setup with subwoofer

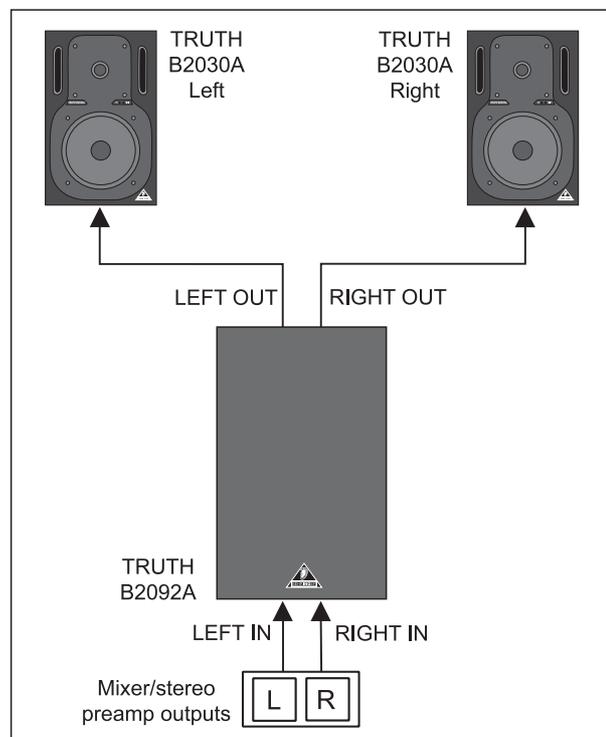


Fig. 3.1: Use in a stereo system

Connect the mixing console outputs to the B2092A inputs marked LEFT and RIGHT [6]. If you are using active monitors as main loudspeakers (e.g. B2030A or B2031A), connect the left loudspeaker to LEFT OUT, and connect the right loudspeaker to RIGHT OUT. If using passive loudspeakers, connect LEFT OUT and RIGHT OUT connectors to the power amplifier inputs. The B2092A separates the bass segment of the audio signal for the subwoofer and sends all frequencies above the 80-Hz mark to the outputs for the main loudspeakers.

3.1.2 Multichannel surround setup

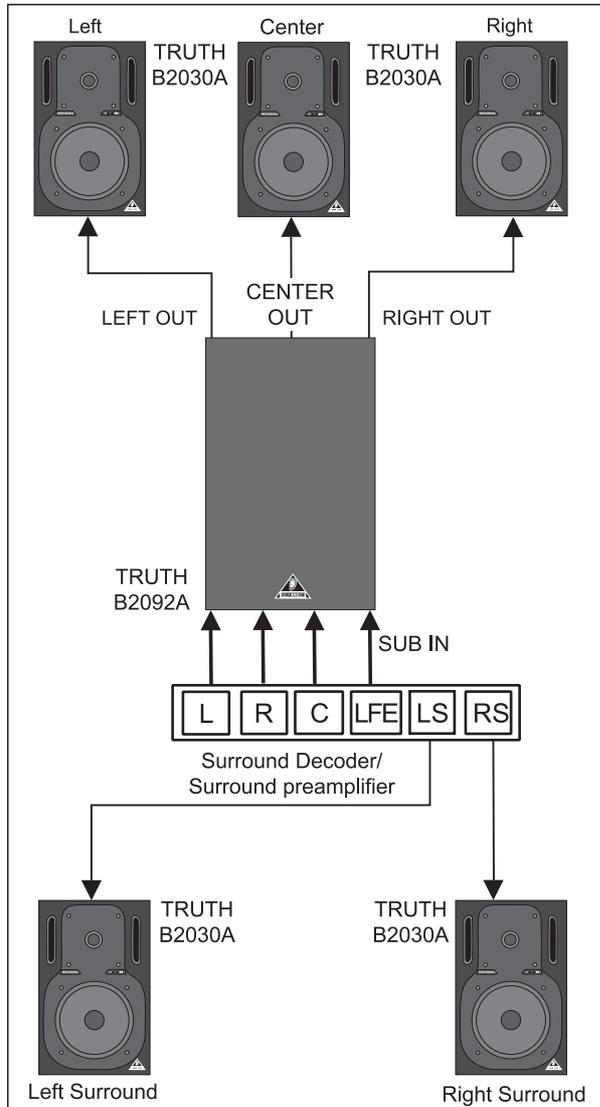


Fig. 3.2: Wiring example for a surround system

Surround system with a decoder:

If you want to integrate the B2092A into a 5.1 loudspeaker system that is coupled to a surround decoder (DTS® or Dolby Digital®), connect the decoder LFE output to the SUB IN input on your B2092A. The signals of a LFE channel (LFE = Low Frequency Effect or Low Frequency Enhanced) may contain frequencies of up to 120 Hz. However, since the B2092A does not reproduce signals above the 80-Hz mark, the LFE signals are passed onto the CENTER output and are then reproduced on the center loudspeaker. This way, these important signal segments are not lost. This is of particularly high value when using the B2092A as a studio monitor, because this way undesirable noise and distortion in this frequency range can be kept under control. Wire the remaining active loudspeakers as shown in the illustration.

Surround system without decoder:

You can create a surround system even without using a surround decoder, for example as a multichannel monitor system at your sound studio or for specific surround installations. The surround channels are reproduced using a single output of a mixing console, a surround monitor controller or using the separately recorded channels of a multitrack recorder.

Connect the output of the front left channel to the LEFT IN connector on the B2092A; connect the output of the front right channel to the RIGHT IN connector. Connect the center channel output to CENTER IN. If the surround mix has no separate subwoofer channel, the signal for this channel is created using the bass segments of the left, center and right channels.

Now, connect the left (active) front loudspeaker to LEFT OUT. Connect CENTER OUT to the center speaker and RIGHT OUT to the right speaker. All additional surround speakers (Left Surround = LS, Right Surround = RS) are connected directly to the corresponding outputs on your system.

If you wish to use passive loudspeakers, connect the individual surround channels of your system to the power amp inputs of the corresponding surround speakers.

3.2 Input signal level adjustment

If the loudspeaker system is correctly wired and powered on, you can bring up the control room output of your mixing console or the volume controls of your decoder. If a signal source is connected, you can hear your B2092A for the first time. To obtain well-balanced sound, you only have to adjust the input sensitivity of your subwoofer. The default INPUT TRIM control [5] setting is 0 dB. To adjust the signal level to the main speakers, values from -6 dB to +6 dB can be selected using this control.

LIMIT LED [1] lights up as soon as one of the internal overload circuits springs into action. By the way, no damage is caused to your B2092A if the LIMIT LED briefly lights up during operation (when signal peaks occur). However, you should try to avoid the LIMIT LED lighting up for prolonged periods of time (in that case, after a while the thermal fuse is activated, and the internal power amplifier is switched off for a while). This is a sure sign that your B2092A is overloading. Lower the input signal level either on your mixing console or by using the INPUT TRIM control.

The B2092A is capable of producing high volume levels. You should mix your recordings at moderate levels to avoid listening fatigue and hearing impairment.

3.3 Correct placement

Bass frequencies, due to their long wavelengths and undirected (spherical) dispersion pattern, can not be physically located as a sound source. Many people take this to mean that you can place the subwoofer wherever you want. However, this is not true. Placement of the subwoofer in a room has an important influence on the overall loudspeaker sound. Even minor changes in the placement of the subwoofer can make a big difference.

Each room has its own sonic characteristics, which differ based on room volume and the length ratio of the walls to the ceiling. Even the material and the composition of surfaces play a big role. Specific acoustic characteristic result from these influences, and they must be taken into consideration.

Certain frequencies sometimes create stationary waves between parallel room walls. The frequencies of these stationary walls correspond to the room's resonance, and are determined by the room's dimensions. If the room resonance is influenced by the subwoofer, this frequency gets especially loud in certain places in the room, while it cannot be heard at all in others—this is caused by stationary increases and cancellations. This phenomenon is especially pronounced with low frequencies, and can be rather unpleasant. We recommend first finding the position in which the subwoofer achieves the best results without

TRUTH B2092A

making any changes, and then using the controls to finetune the settings, creating the best results possible. Therefore, first set the controls to the neutral position labeled TYPICAL, i.e. set PHASE to 0° and ROOM COMPENSATION to 0 dB.

Start by placing the subwoofer roughly in the stereo center of your loudspeaker system. If the frequency response is not well-balanced, move the subwoofer to the left or to the right, so that it excites different room modes. Also, experiment with different distances to the wall and to the room's corners. If you place the subwoofer in a corner, the bass level will be increased, changing the overall settings. When selecting a location for your subwoofer, make sure that the openings in the back of your B2092A are not covered.

The stereo/front loudspeakers should be placed symmetrically with the same distance to the listening position. Correct placement of near-field monitors is explained in detail in the TRUTH B2030A/B2031A user's manual and in the TRUTH B2030P/B2031P handbook.

3.3.1 Adjusting room compensation

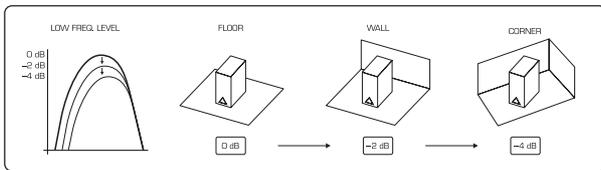


Fig. 3.3: Room compensation

After you have found an optimal physical location for your B2092A speakers, use the switches in the back to finetune your settings.

The ROOM COMPENSATION switch [4] lets you lower the bass range in 2-dB increments. If your B2092A is located near a wall or in a room corner, the sound is reflected back from the boundary and superimposed on the directly dispersed sound. This results in a higher volume, which can be neutralized using the ROOM COMPENSATION function.

3.3.2 Phase adjustment

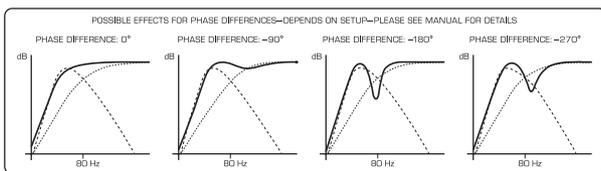


Fig. 3.4: Effect of phase differences on the frequency response

When installing the B2092A, a phasing deviation between the subwoofer and main speaker signals may occur. This deviation (phase difference) is easily audible in the sound. Improper phasing causes a dip at the crossover point. Phasing differences occur when the distance between the subwoofer and the audience varies from the distance between the main speakers and the audience—hence having a varying delay time. This can not always be avoided. Using the PHASE function, your B2092A can perform a phase adjustment electronically. Figure 3.5 shows the possible results of phasing differences on the frequency-response curve.

For optimal system calibration, we recommend using a Real Time Analyzer, e.g. the BEHRINGER ULTRACURVE PRO DEQ2496 coupled to a ECM8000 measurement microphone. If no such equipment is available, you can try making an adjustment using an 80-Hz sinus tone:

Run the sinus tone simultaneously on the subwoofer and the front loudspeakers. Set the PHASE switch to the position in which the sound with the highest volume is being reproduced.

If you are working with the DEQ2496, place the measurement microphone in your audience at the height of a human ear. Run pink noise through the speakers. Keep an eye on the 80-Hz range on the frequency display. If you notice a dip in this frequency range, put the PHASE switch into a position that causes a straight frequency response curve, as shown in fig. 3.4 (the graphic on the left).

4. AUDIO CONNECTIONS

The audio connectors of your B2092A are electronically balanced and ensure automatic hum and noise reduction.

Of course, you can also connect equipment featuring unbalanced outputs. To this end, use either mono jacks or connect ring and sleeve of the stereo jack (bridge pin 1 and pin 3 when using XLR connectors).

⚠ Please ensure that only qualified personnel install and operate the B2092A. During installation and operation the user must have sufficient electrical contact to earth. Electrostatic charges might affect the operation of the unit.

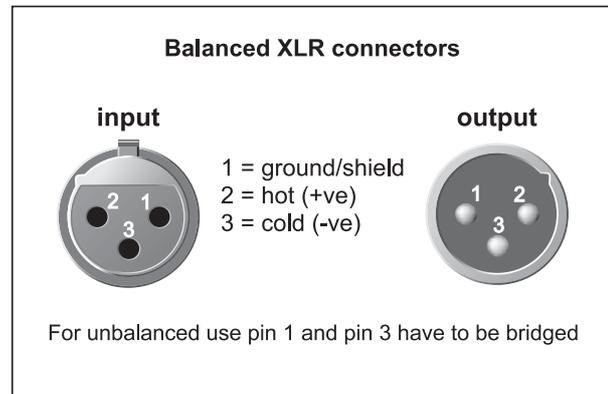


Fig. 4.1: XLR connections

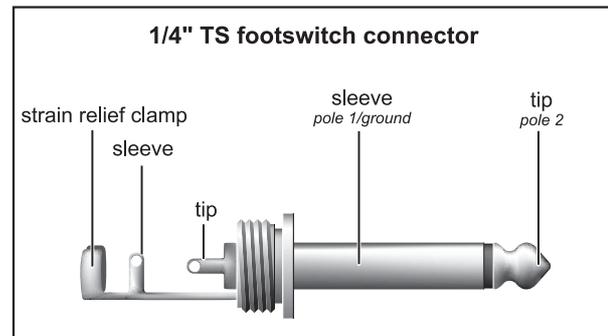


Fig. 4.2: 1/4" TS connector for the footswitch



5. SPECIFICATIONS

AUDIO INPUTS

Inputs	Left, Center, Right, Sub
Connectors	XLR connector, balanced inputs
Input Trim	±6 dB
Input impedance	10 kΩ (balanced)

AUDIO OUTPUTS

Outputs	Left, Center, Right
Connectors	XLR, balanced
Output impedance	100 Ω

COMPONENTS

2 Woofers	Ø 8" (210 mm)
Nominal impedance	8 Ω

AMPLIFIERS

Power rating	max. 360 Watt (63 Hz / 0,3 % THD)
Noise	>100 dB

CROSSOVER

Subsonic filter	33 Hz (18 dB/Oct.)
High-cut filter	85 Hz (24 dB/Oct.)
PHASE switch	0°/90°/180°/270° @ 80 Hz

SYSTEM SPECIFICATION

Frequency response	32 Hz to 80 Hz (+/-3 dB)
Frequency range	28 to 100 Hz (-10 dB)
Sound pressure level	max. 117 dB SPL @ 1 m

POWER SUPPLY

Voltage	USA/Canada 120 V~, 60 Hz Europe/U.K./Australia 230 V~, 50 Hz China/Korea 220 V~, 50 Hz Japan 100 V~, 50/60 Hz General export model 120/230 V~, 50/60 Hz
Power consumption	5 A @ 120 V, 3 A @ 230 V 100 - 120 V~: T 6.3 A H 250 V 200 - 240 V~: T 3.15 A H 250 V
Mains connection	Standard IEC connector

DIMENSIONS/WEIGHT

Dimensions (H x W x D)	24.4" x 12.8" x 22.9" (620 mm x 325 mm x 582 mm)
Weight	73 lbs (33.1 kg)

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.

6. WARRANTY

§ 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 International GmbH. BEHRINGER® is a registered trademark.

ALL RIGHTS RESERVED. © 2006 BEHRINGER International GmbH,
Hanns-Martin-Schleyer-Str. 36-38, 47877 Willich-Muenchheide II, Germany.
Tel. +49 2154 9206 0, Fax +49 2154 9206 4903