



BaseTwo25 System

Reference Manual



Table of contents

Introduction	3
Safety warnings	4
Front panel controls	6
Back panel connections	8
Connectivity diagram	9
Technical specifications	10
Notes	11



BaseTwo25 delivery contains:

- 1 pc** Amphion BaseTwo25 2U Amplifier & Crossover
- 2 pcs** Amphion BaseTwo25 Tower
- 2 pcs** Neutrik Speakon/Speakon (NL2FX) 2-pole speaker cable for connecting. Length 3.5 meters
- 1 pc** BaseTwo25 Reference manual
- 4 pcs** BaseTwo25 Tower feet
- 8 pcs** Screws for fastening feet
- 1 pc** Hex key
- 8 pcs** Sorbothane pucks



Introduction

Welcome

Thank you for choosing BaseTwo25. Making correct decisions regarding the low frequencies is fundamental and often the hardest part of sound making. BaseTwo25 delivers clear, accurate and dependable low frequency information for making fast, well translating decisions. The system's extreme resolution, speed and control make it easy to pack the maximum energy into your low-end or spot potential problems before they turn into headaches.



Anssi Hyvönen
Founder, CEO
Amphion Loudspeakers Ltd.

The System

BaseTwo25 bass extension system consists of BaseAmp1200, and a pair of double-sided bass extenders. Each extender has a pair of back-to-back long-throw 10" woofers at the top and matching passive radiator below. Due to the benefits of force cancellation, the extenders remain stable even during the most demanding bass tracks.

The rack mountable 2U enclosure of BaseAmp1200 houses 2 x 700 watt amplifier and an active crossover with selectable discrete crossover settings of 40 Hz, 60 Hz, 80 Hz, or 100 Hz. The best crossover-setting depends on the monitor used and listening level.

BaseTwo25 transforms your 2-way monitor into a cohesive and totally integrated 3-way full-range system. In addition to sub bass information, the system increases the power-handling and improves midrange resolution by reducing the intermodulation distortion of the mid-woofers. The system has a by-pass option for those moments, when the matching monitor is used for a narrower midrange view. The by-pass can be activated via foot-switch or a push button on the front plate of the BaseAmp1200.

The selectable crossover improves integration even when monitors are not placed on top of the extenders. Often with large format consoles, the monitors work best when placed on the meter bridge. Using a lower crossover point helps integration even Base extenders are placed behind a console. BaseTwo25 works with all Amphion products, as well as with other monitors that have sufficient speed and resolution in the critical upper-bass/lower-mid frequencies.



Safety warnings

1. Please read and follow these instructions before using the amplifier.

2. Do not use this apparatus near water.

3. Clean only with a dry cloth.

4. Do not block any ventilation openings.

5. Install in accordance with the manufacturer's instructions.

6. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.

7. The unit generates heat especially during prolonged operation at intensive levels. Please do not cover or place objects on top. When rack mounting it is recommended to leave space above the unit to allow free circulation of air.

8. 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.

9. Protect the power cord from being walked on or pinched, particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.



10. 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.



11. Any terminals marked with the preceding symbol are HAZARDOUS LIVE and any wiring connected to these terminals must be installed by an INSTRUCTED PERSON or with ready-made leads or cords.

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

13. 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.

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE. DO NOT EXPOSE THIS EQUIPMENT TO DRIPPING OR SPLASHING AND ENSURE THAT NO OBJECTS FILLED WITH LIQUIDS, SUCH AS VASES, ARE PLACED ON THE EQUIPMENT. TO COMPLETELY DISCONNECT THIS EQUIPMENT FROM THE AC MAINS, DISCONNECT THE POWER SUPPLY CORD PLUG FROM THE AC RECEPTACLE. THE MAINS PLUG OF THE POWER SUPPLY CORD SHALL REMAIN READILY OPERABLE.



This symbol indicates that there are important operating and maintenance instructions in the literature accompanying this unit.



This symbol indicates that dangerous voltage constituting a risk of electric shock is present within this unit.



Service and warranty



We make sure you can enjoy your Amphon products for a long time

Amphon Create products come with a two-year warranty against defects in materials and our workmanship. For warranty or out-of-warranty service, in the first instance please contact your original dealer and provide a copy of the original sales receipt. If you require additional assistance, please contact your local sales representative or distributor. If you have difficulty making contact with either of the above, please contact our headquarters. Please do not return or ship any product to Amphon Loudspeakers Ltd. nor its resellers without prior authorisation.

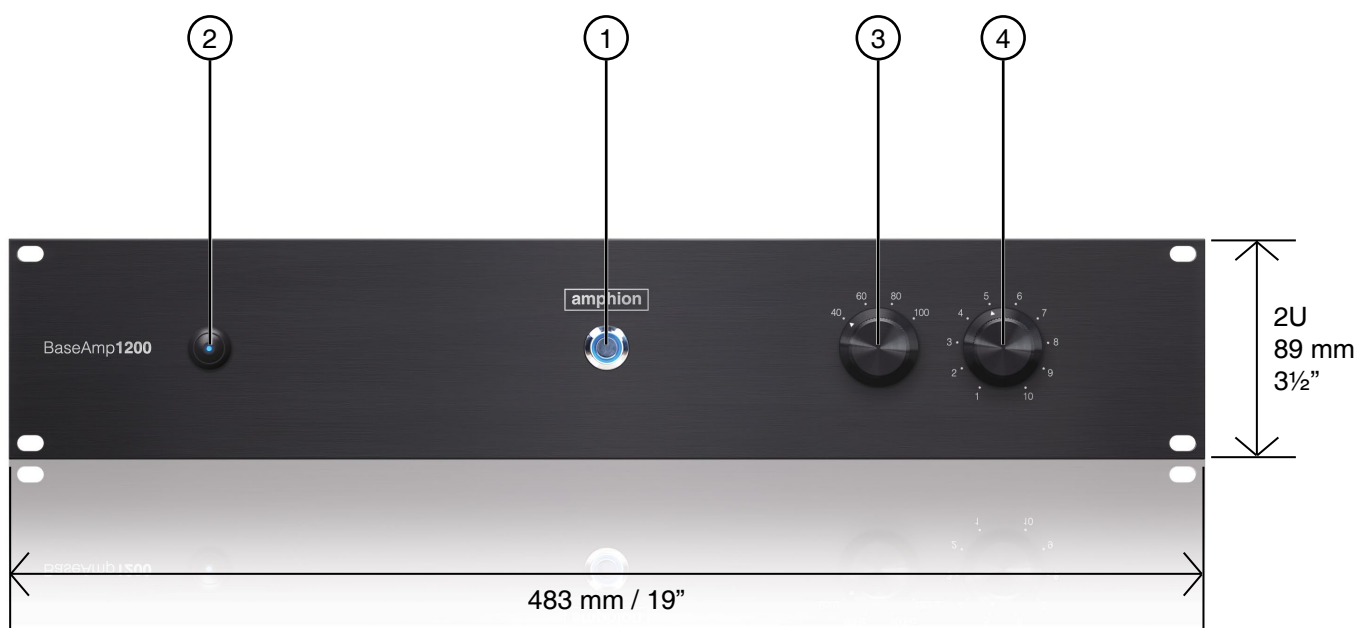
For proper unpacking, installation, positioning, and maintenance instructions, please first check the manual thoroughly.



Front panel controls



PLEASE NOTE! When rack mounting it is recommended to leave at least 1U space above the unit to allow free air circulation.



1 Power button

Power button turns on the power of the unit. Please note that hard bypass is enabled also when power is off, and that the unit always switches to active mode after power is switched on.



PLEASE NOTE! Turn on power before feeding signal into the amplifier.



PLEASE NOTE! If power of the amplifier switches off after a few seconds when turned on, please make sure that you push the power button all the way in.

2 Active button

Active button switches the unit between hard bypass and active mode. The BaseTwo25 is active when the light is on.



PLEASE NOTE! BaseTwo25 improves the headroom of the monitor connected to the system, by transforming a 2-way monitor into a cohesive 3-way full range system. In order to prevent damage to the monitors, please exercise caution and reduce the listening volume before engaging the by-pass function.



Front panel controls

③ Crossover Frequency

Crossover Frequency control allows you to choose how much of the low frequency range you want the BaseTwo25 to handle. The higher the frequency, the less heavy lifting is required from your main pair of speakers. This will help to keep the midrange clean, especially at higher SPL levels. A lower crossover frequency setting allows a subtle add-on of the missing lowest octave(s) to your main speaker without changing the sound character you are familiar with. As a general rule, the smaller the main speaker, the higher the crossover frequency.

Choosing the right crossover frequency can greatly help in achieving the smoothest low frequency response in your room. In order to achieve the purest possible signal path, the variable crossover is implemented by switching between 4 discrete filter configurations. (40 Hz, 60 Hz, 80 Hz and 100 Hz).



PLEASE NOTE! The effects of the crossover setting are easily seen in the travel of the mid woofer. The lower the setting, the more bass information is fed to the mid woofer. Higher settings decrease intermodulation distortion as the mid woofer is freed from the frequencies it struggles most to reproduce.

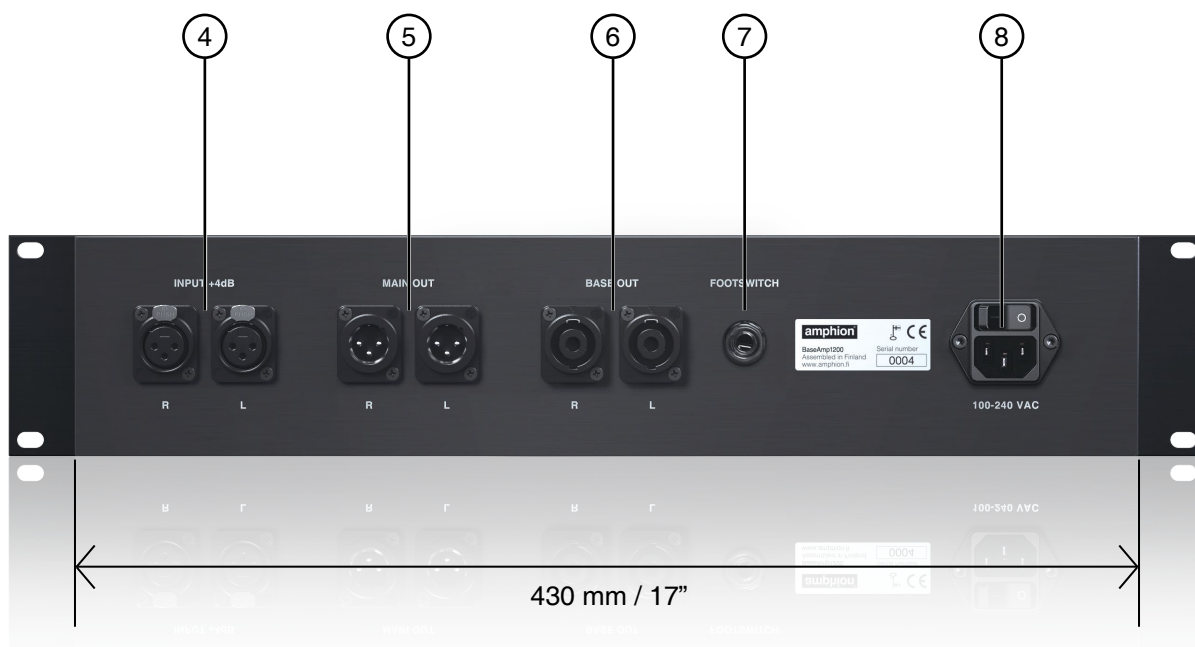
④ Level

The volume level of the low frequency extension provided by the BaseTwo25 is adjusted with the dial on the front panel of the BaseAmp1200. The right setting depends on your speaker model sensitivity, your room low frequency absorption, and your personal preference and application. Unlike many other bass systems, the BaseTwo25 can be run “hot” without it losing its footing due to its precise nature. It is therefore advisable to experiment with bass level to gain understanding on the level, which leads to good translation.

Tip for finding a balanced setting: Use the Active Button to switch between active and bypass mode to find a (neutral) setting where the low frequency response is extended, but not exaggerated by the Base system. Tweak to taste as needed.



Back panel connections



④ Input +4dB (L and R)

These are the balanced inputs for your stereo signal. If you are using an unbalanced source, it is recommended to connect XLR pin 3 to pin 1.

⑤ Main out (L and R)

These are the outputs for your main power amp and speakers. If you are using an unbalanced destination, it is recommended to leave XLR pin 3 unconnected.

⑥ Base out

Neutrik Speakon (NL2FX) 2-pole speaker outputs for the BaseTwo25 towers.

⑦ Footswitch

Possibility of using a foot-switch in addition to the by-pass button on the front of the device. This allows using a foot pedal to activate the by-pass model in cases, where the controller is located further away from the user. If you choose to use a foot switch, we recommend to use a non-latching / momentary model.

⑧ IEC power connector

Power input, auto switching in the 100-240V range, internally fused.

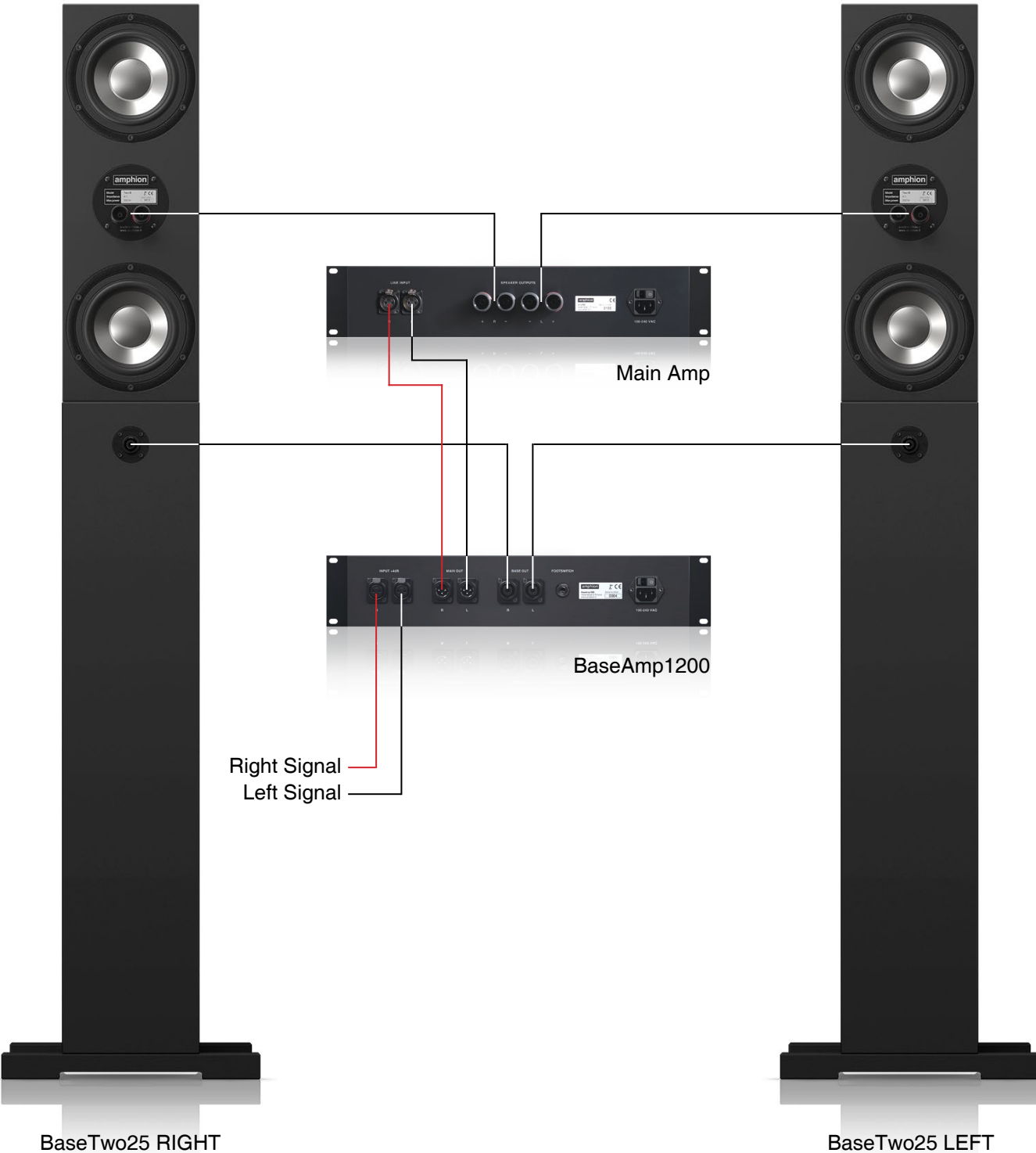


Connectivity diagram

Main Speaker RIGHT

! Rear view

Main Speaker LEFT



Technical specifications

BaseTwo25

Operating principle

One way with passive radiator, stereo

Drivers

4 x 25 cm / 10" aluminum driver
4 x 25 cm / 10" aluminum radiator

Crossover

Active 4th-order,
selectable @ 40, 60, 80, 100 Hz

Max SPL

127dB

Frequency Response

20 - 100 Hz +/-3dB (low pass)
100 Hz - 200 kHz +/-3dB (high pass)

Weight

2 x 32 kg / 2 x 93 lb



BaseAmp1200

Output power

2 x 700W @ 1% THD, 4 Ohm

THD + noise

@ 10W: 0,0025%
@ 100W: 0,0015%

Dynamic range

127dB (A)

Efficiency

230V / 50 Hz-700W

Weight

6 kg / 13 lb



Notes





Reference Manual

Version: 2.0 / 01.01.2022

Amphion Loudspeakers Ltd.

Factory & Headquarters
Telkkistentie 2
70460 Kuopio
Finland
Tel. +358 17 2882 100
info@amphion.fi
amphion.fi

