Manuals+ — User Manuals Simplified.

Amphion FlexAmp1200 Ansata Computer Systems User Manual

Contents

Amphion FlexAmp1200 Ansata Computer Systems

Product Information

The FlexBase25 System is a handmade product manufactured in Finland. It consists of the Amphion FlexAmp1200 2U Amplifier & Crossover and the Amphion FlexBase25 Tower. The system is designed for audio purposes and delivers high-quality sound.

The system comes with a Neutrik Speakon/Speakon (NL4FX) 4-pole speaker cable for connecting the components. The cable has a length of 3.5 meters. Additionally, a FlexBase25 Reference manual is included, which provides detailed instructions on how to set up and use the system.

Product Usage Instructions

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 one wider than the other. A grounding-type plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for the 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.

14. **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.

Front Panel Controls

When rack mounting the FlexBase25 System, it is recommended to leave at least 1U space above the unit to allow free air circulation. This ensures proper cooling and prevents overheating of the system.

FlexBase25 delivery contains:

- **1 pc** Amphion FlexAmp1200 2U Amplifier & Crossover
- **1 pc** Amphion FlexBase25 Tower
- **1 pc** Neutrik Speakon/Speakon (NL4FX) 4-pole speaker cable for connecting. Length 3.5 meters
- **1 pc** FlexBase25 Reference manual

Introduction

Welcome

Thank you for choosing FlexBase25. The music-making environment continues to change, and the demands for monitoring evolve accordingly. As modern music becomes more bass-intensive, the need to hear clearly into the lowest octaves becomes crucial. Ever tightening deadlines, last minute changes, and an increasing need to be able to have control over multiple segments of the project mean that monitoring must adapt to different demands. FlexBase25 looks simple, but it houses a lot of new thinking. It is easy to set-up and intuitive to use. It can be easily adapted to whatever task the modern sound engineer may encounter. We hope that it help you finish your project more quickly, while contributing positively to the creative process.

Anssi Hyvönen

Founder, CEO

Amphion Loudspeakers Ltd.

The System

- The FlexBase25 is an unconventional yet easy-to-place and simple-to-set-up approach to subwoofer design. For correct, well-translating decisions an engineer needs to have access to the stereo information throughout the whole frequency band. Mono subwoofers stem from a movie format and tend not to be sufficiently resolving for music use.

- FlexBase25 is a single box, stereo subwoofer, which is placed in the centre line between the main speakers. Wide adjustment possibilities over crossover frequency (35-260 Hz), subwoofer level, as well as the mono-stereo spread allow FlexBase25 to address the needs of a rapidly changing landscape of modern music-making. With a turn of a few dials, the system can be adapted to what best works for the project an engineer is working on.

- FlexBase25 can be fat, fun, and vibey when writing and producing. It will be precise, correct, and analytical when putting the finishing touches on a song or a film score. The system will allow you to continue to use your monitors for a narrower midrange view, as FlexBase25 can be bypassed. FlexBase 25 works with all Amphion products. Pair it with One12, One15, Two15 or One18 for a smaller room full range system or place it with behind the console while keeping your One18, Two15 or Two18 on the meter bridge.

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.

Amphion 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 Amphion 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 FlexBase25 is active when the light is on.
   - **PLEASE NOTE!** FlexBase25 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.
3. **Level**
   - Level dial controls the level of the low frequency extension provided by the FlexBase25. The right setting depends on your speaker model sensitivity, your room low frequency absorption, and your personal preference and application. During song-writing, fun and vibey settings might be preferred over more

"correct" ones. FlexBase25 allows easy adjustment as work progresses. While it is common practice to write or start the mix with a slightly elevated low frequency for mastering use as well as for optimal mix translation, a more neutral setting tends to be more beneficial.

- 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 FlexBase25. Tweak your setting to taste as needed.

4. **Crossover Frequency**

- Crossover Frequency control allows you to choose how much of the low frequency range you want the FlexBase25 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 high 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. As speaker placement greatly affects the upper bass / low mid response, adjusting the placement of the problematic frequency range between the monitors or the FlexBase25 can be surprisingly efficient when battling room modes (a certain frequency which is either exaggerated or almost lost, especially in smaller rooms). 60-300 Hz is typically an area where rooms present their biggest problems. It is therefore worth experimenting if the room response can be improved with the crossover adjustments.
  In order to achieve the purest possible signal path, the variable crossover is implemented by switching between 16 discrete filter configurations. Depending on your input signal and monitor setup, you might hear this switching between steps as a faint "click" for each step. This is normal behaviour and similar to stepped high-end level attenuators.

- **Note:** The higher the crossover frequency, the more important it becomes to run the FlexBase25 in stereo mode (please see Adjusting the stereo spread).

5. **Adjusting the stereo spread**

- This control allows you to gradually move from a more traditional mono response to a full stereo image. The best setting depends on several aspects such as how wide your main pair stereo image is as well as on your personal preference.
  Please note that although it is true that localizing the sound direction becomes increasingly difficult as frequency decreases, polarity and phase differences between left and right channels are certainly detected all the way down to the human hearing limits. This is one reason why traditional subwoofers can deceive you and ruin mix translation to other systems.

- **Back panel connections**

430 mm / 17"

6. **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.

7. **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.

8. **LFE input**
   - This is a direct input for a separate LFE signal (such as the .1 in a 5.1 monitoring setup). Sensitivity is +10dB compared to the main inputs, and there is no built-in low pass filtering applied. In other words, the crossover frequency does not affect this signal. The LFE level is also not affected by the front panel level setting.

9. **LFE link out**
   - This connector is provided for chaining the LFE signal across several BaseAmp units (typically in a multichannel setup).

10. **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.
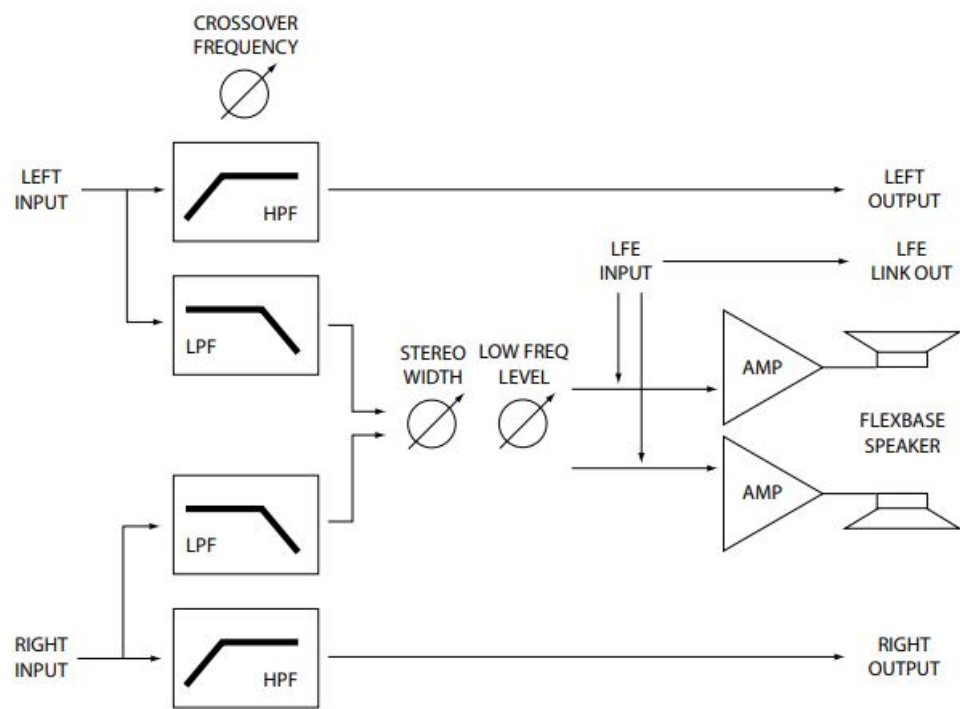
11. **Base out**
   - Neutrik Speakon (NL4FX) 4-pole speaker output for the FlexBase25 tower.

12. **IEC power connector**
   - Power input, auto switching in the 100-240V range, internally fused.
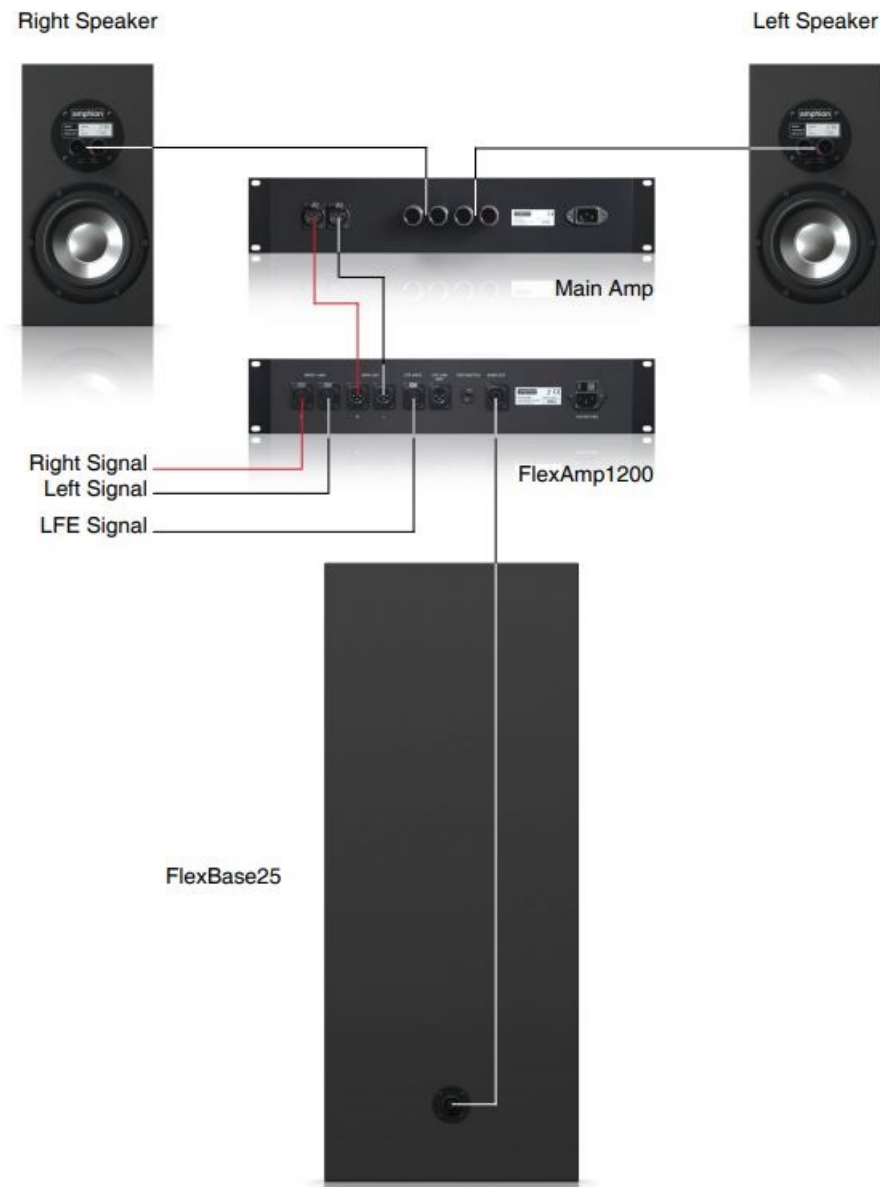   - **PLEASE NOTE!** Always turn power off before inserting or removing cables.

Block diagram

CROSSOVER
FREQUENCY

LEFT
INPUT
HPF

LEFT
OUTPUT

LPF

LFE
INPUT
LFE
LINK OUT

STEREO
WIDTH
LOW FREQ
LEVEL

AMP

FLEXBASE
SPEAKER

LPF

AMP

RIGHT
INPUT
HPF

RIGHT
OUTPUT

Connectivity diagram

Rearview

Right Speaker

Left Speaker

Main Amp

FlexAmp1200

Right Signal
Left Signal
LFE Signal

FlexBase25

Set-up Tip: For Use With Consoles

While FlexBase25 performs well positioned directly on the floor, when used with large format consoles – where monitors are placed on the meter bridge it is advisable to raise the FlexBase25 to be more in line with the monitors by lifting the unit from the floor using solid, non-resonating material (eg. bricks or slabs). A good starting point is to raise the FlexBase so that the top of the woofers can be seen over the console edge.

Technical specifications

- **Operating principle:** One-way closed box, stereo
- **Drivers:** 2 x 25 cm / 10" aluminum driver
- **Crossover:** Active 4th-order @ 35-260 Hz
- **Max SPL:** 117dB
- **Frequency Response**: 20 – 260 Hz +/-3dB (low pass)
    - 35 Hz – 200 kHz +/-3dB (high pass)
- **Weight:** 50 kg / 110 lb

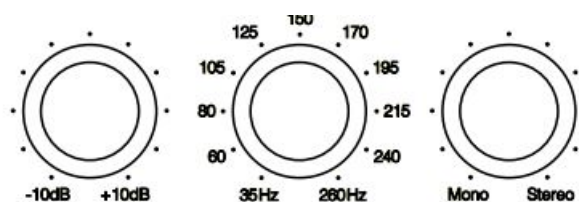|	
Output power	2 x 700W RMS into 4Ω @ 1% THD
THD + noise	@ 10W: 0,0025% (100 Hz) @ 100W: 0,0015% (100 Hz)
Dynamic range	127dB (A) weighted
Efficiency	79% @ full power (230 V operation)
Mains	Universal mains including Power Factor Correction (100-240 V, 50-60 Hz)
Stand-by mode	ErP (1275/2008/EC), Energy Star® v3.0 compliant
Weight	6 kg / 13 lb
	Made in Finland

Settings – recall sheet
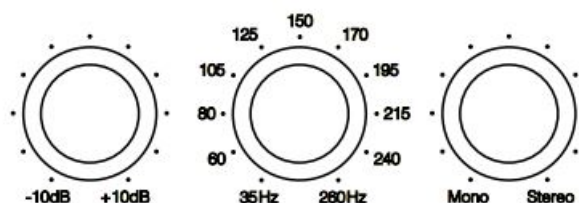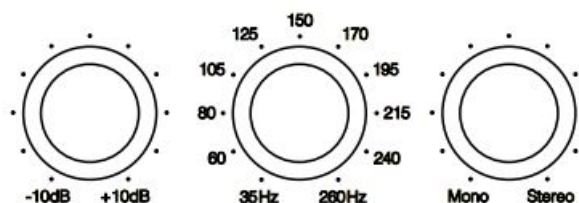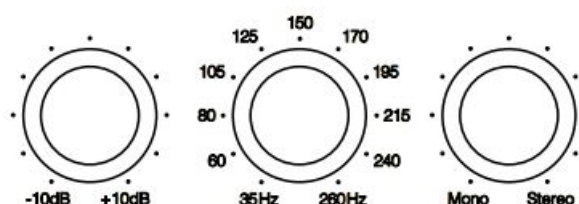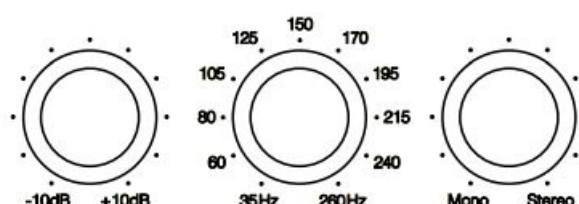
- **Amphion Loudspeakers Ltd.**
- **Factory & Headquarters**
- **Telkkistentie 2**
- **70460 Kuopio**

- **Finland**
- **Tel. +358 17 2882 100**
- info@amphion.fi
- Amphion.fi

Documents / Resources

	Amphion FlexAmp1200 Ansata Computer Systems [pdf] User Manual FlexAmp1200 Ansata Computer Systems, FlexAmp1200, Ansata Computer Systems, Computer Systems

References

- **a** **Speakers for your home – monitors for your studio | Amphion**
- **User Manual**