Epic 55

Mid-field Studio Monitor

User Guide

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Welcome!

Thank you for purchasing the Epic 55 two-way professional mid-field monitor speaker! We hope you enjoy setting up and using this amazing mid-field monitoring solution.

This guide will give you some important safety tips and suggestions to get the best perfomance from your Epic 55 monitor(s)!

We get excited each time someone opens, unwraps, and installs their new Epic monitors, please feel free to share your studio shots with us!

The Concept Behind Epic 55

Following the release of the Epic 55's smaller sibling, the Epic 5 near-field monitor, it was a natural step for our next product to be something... Bigger!

In the tradition of creating uncompromising products, we continued the effort to develop all relevant parts in-house for the most accurate sound performance.

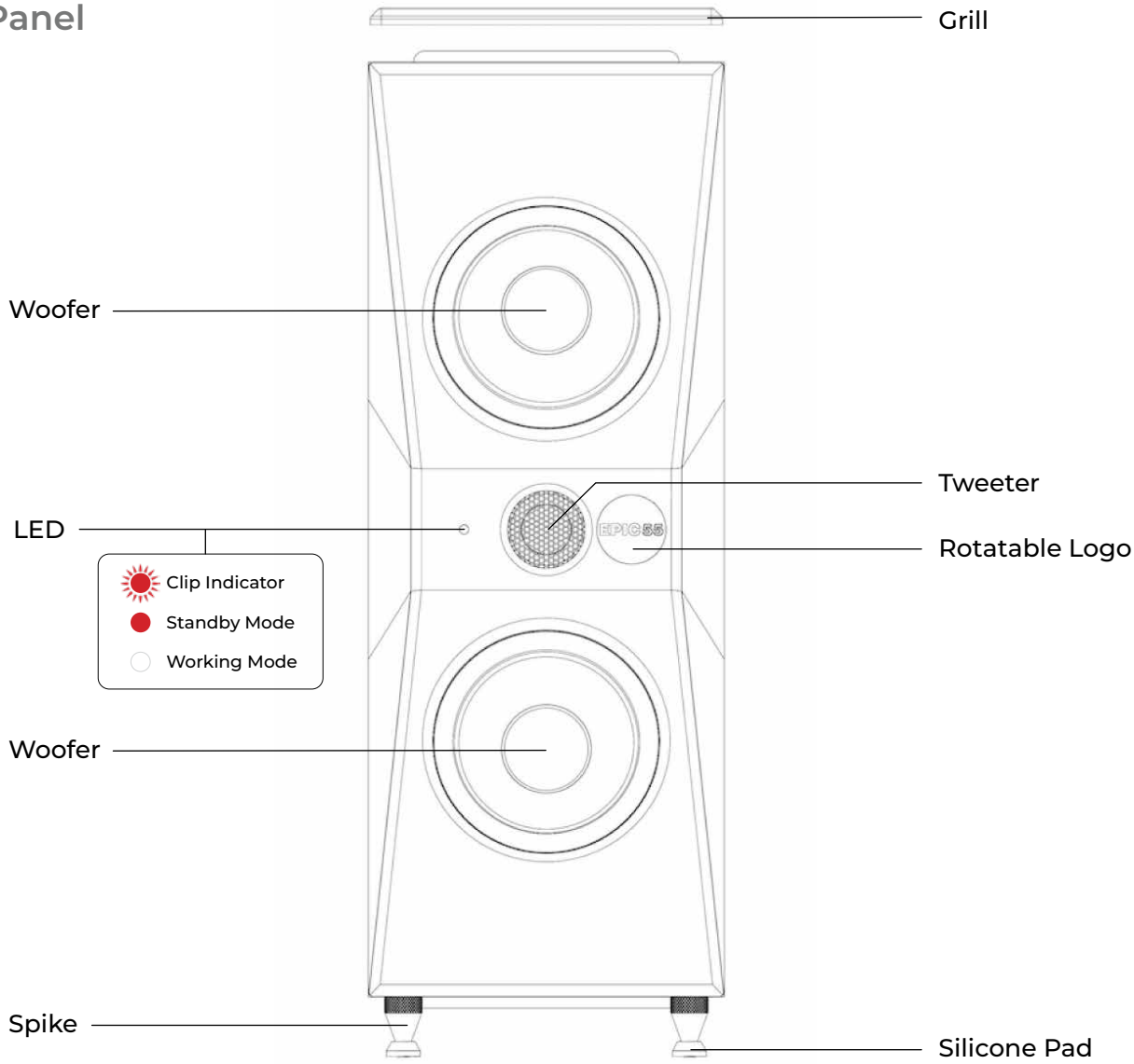
After nearly three years of development, we proudly present the Epic 55 – which achieves all our goals:

To design reliable, sonically uncompromising, and visually stunning studio monitors with flat and wide frequency response, fast transient response at all frequencies, high and natural dynamic range, low noise and low distortion – that allow audio engineers to make sound decisions quickly in professional working environments and project studios alike.

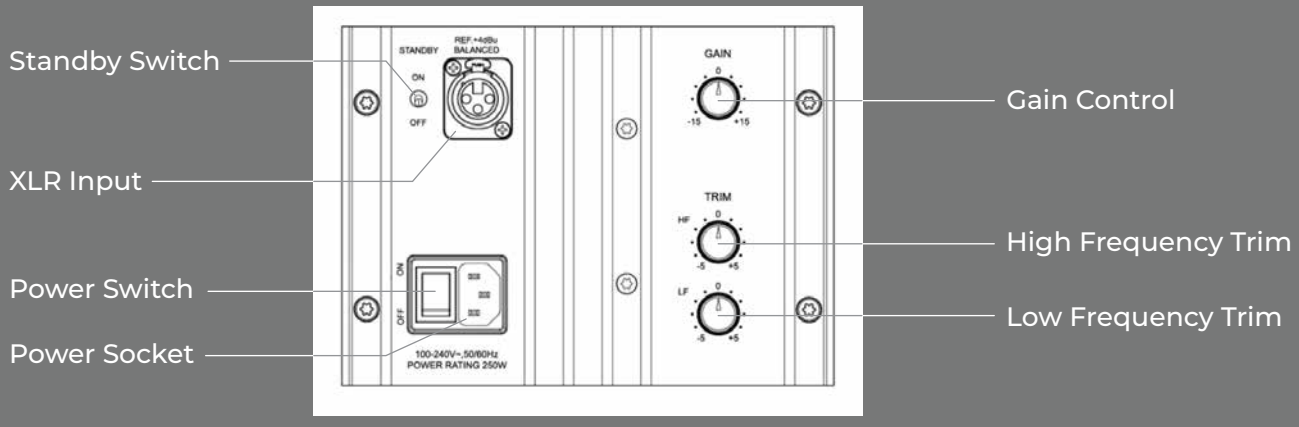
- High sound pressure level can DAMAGE your hearing permanently! Especially at short distances the Epic 55 is able to generate a significantly higher SPL than the recommended limit for ear protection!
- To prevent compression effects we decided not to use any dynamic limitation. Please make sure to reduce the levels if you became aware of any DISTORTION!
- Please do NOT expose the speakers to heat, direct sunlight or moisture! Please only use a lightly moistened cloth to clean the surface of the cabinet.
- Please do NOT attempt to open the cabinet! There are no user serviceable parts inside and you risk getting an electric SHOCK!

Epic 55 Quick Reference

Front Panel



Back Panel



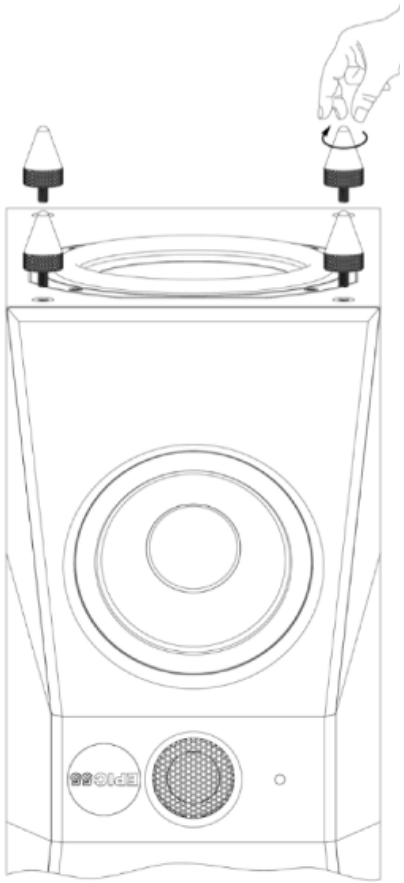
Setup Recommendations

In order to achieve the best possible sound is highly recommended to not only consider the interaction between the loudspeakers and the surrounding acoustical environment but also the position of the listener as relating to the loudspeakers. Here are some pertinent suggestions.

When removing your Epic 55, from the fabric bag, be sure not touch or damage the passive radiator in the process.

Unboxing

- Remove the Epic 55 from its carrying case, and from the protective cloth bag, being sure not to touch the passive radiator within the bag.
- If you plan you use the speaker in an upright position, be sure to insert the included spikes tightly as shown in the figure.



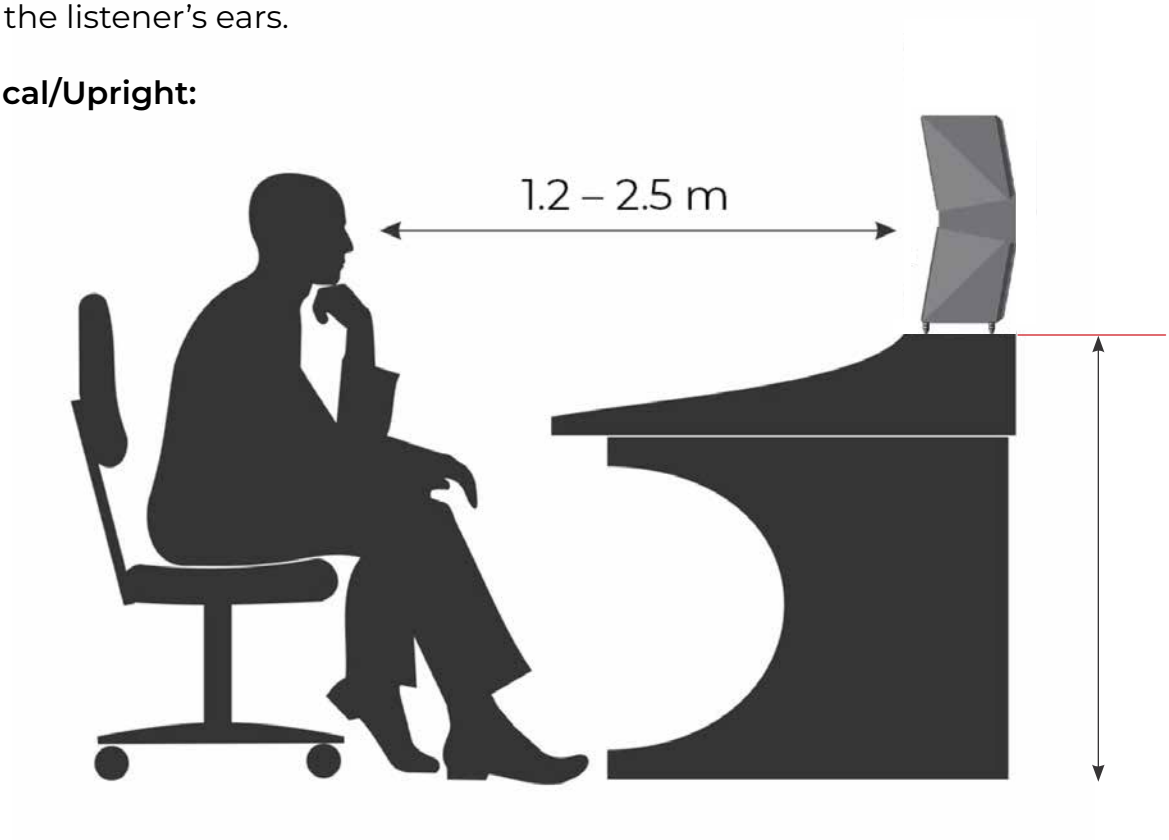
Distance & Position

Epic 55 is a “mid-field” monitor, designed with more low-end power, and intended for larger spaces than our Epic 5 “near-field” monitor. Depending on your studio size, you may need to install Epic 55 in an upright or horizontal position – with each position having unique characteristics.

Ideal Listening Distance & Height:

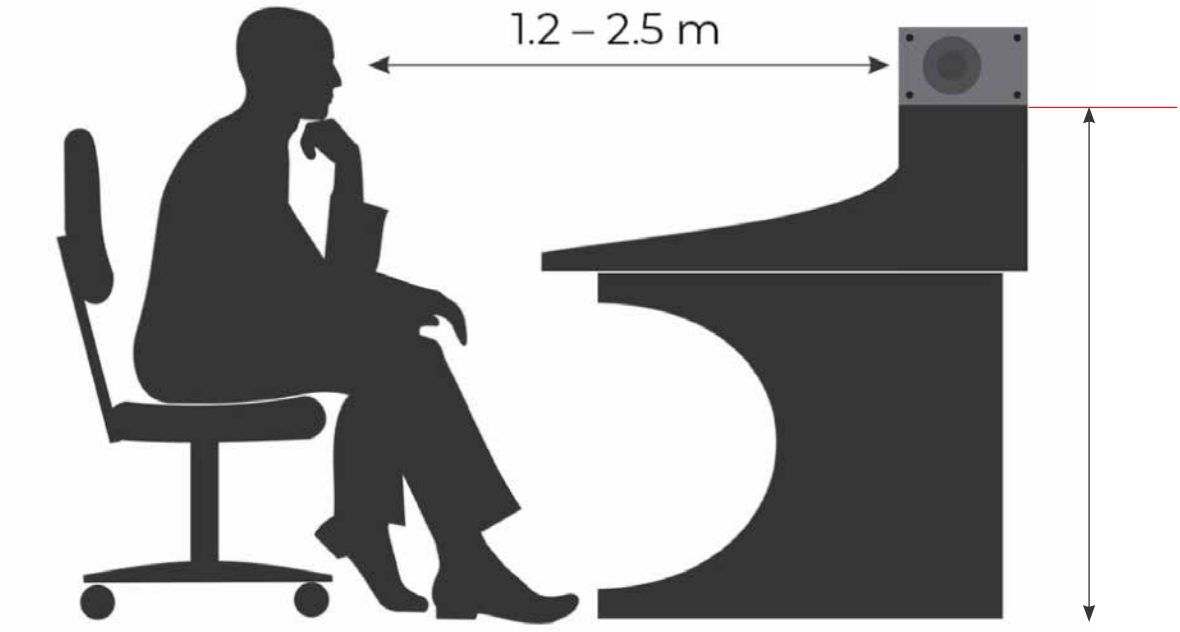
Epic 55 is optimized for a listening distance of 1.2 m to 2.5 m, with the tweeter level with the listener's ears.

Vertical/Upright:



Horizontal/Flat:

Note that when used in a horizontal/flat orientation, the entire speaker cabinet must be in a higher position.



Projection Field Width

The audio projection field varies depending on the orientation in which the speaker is used.

- **Vertical/Upright:** (Recommended where possible) Projection field is wider horizontally (i.e., side-to-side), and narrower vertically (i.e., up and down).

Side View

Top View

- **Horizontal/Flat:** Projection field is wider vertically (i.e., up and down), and narrower horizontally (i.e., side-to-side). The optimal projection angle is significantly smaller than in the vertical setup, and introduces the potential issue of reflections from the ceiling and the work surface being stronger in horizontal operation than in vertical operation.

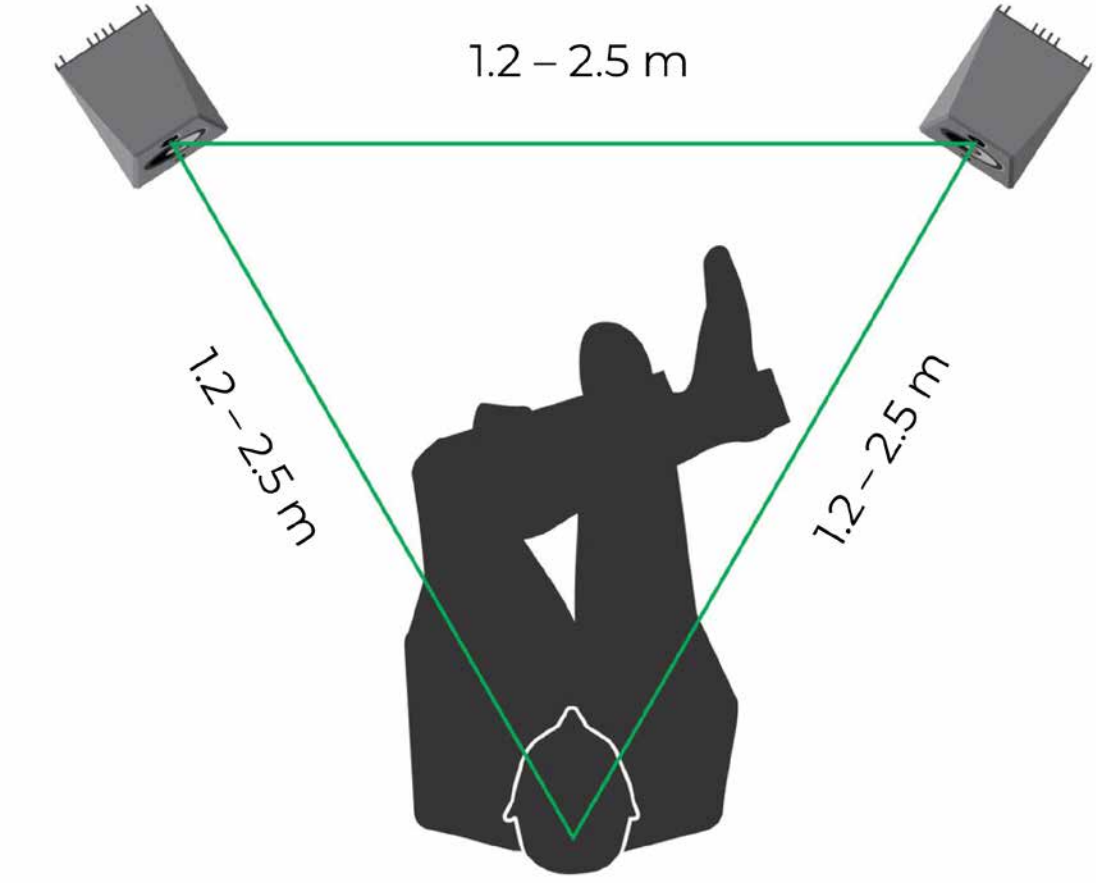
Stereo Image

To achieve perfect stereo imaging please make sure that the position of the speakers – and the listener of course – are located symmetrically in the room, so the distance from left speaker to left wall and right speaker to right wall should be (approximately) similar. The farther away the walls are the more leeway you have as the reflected sound will be delayed more.

Please make sure there are no obstacles between the speakers and your ears. Nothing that will obstruct or break the sound waves, like monitor screens, large-leafed plants, etc... Acoustically transparent elements can be placed there, but we can't think of any qualifying items currently. Please let us know if you find exceptions to the rule!

The often quoted equilateral triangle is a practical recommendation, but depending on the spatial configuration of the listening room and the amount and quality of any reflections (primarily from the walls, ceiling and floor) it might be preferable to move the listening position to a spot slightly inside the triangle.

An easy way to find the optimal listening position is to play a mono signal over both speakers, moving slowly back and forth until a solid phantom source is discernible in the middle.



Fine Tuning and Room Adjustment

The listening environment usually has a big influence on the perceived sound quality. Depending on the position of the speakers in the room and the properties of the space a correction may be needed, and what do you know? We have just the thing!

On the back side of the cabinet you will find two knobs that allow you to optimize the tuning of the Epic 55. Both Trims cut or boost in a range of ±5 dB in 1 dB steps. The HF-Trim starts above 2.5 kHz, the LF-Trim below 250 Hz.

In a bright sounding room, with many flat and solid surfaces, you may need less treble. Use the HF-Trim-Knob (“HighFrequency-Tune”) to attenuate the HF range. In a dark or boomy sounding environment, or if the listening distance is higher than recommended, you can increase the HF component proportionally.

The LF-Trim (“Low-Frequency-Tune”) works in a similar fashion. It will usually be the distance between the cabinets and the walls that necessitates a LF adjustment. The original tuning was determined in a free (4Pi), anechoic environment with the knobs in the middle position. Close to any wall this will change to a kind of boundary, 2Pi arrangement with a LF boost. You can reduce this effect using the LF-Trim.

All the while maintaining excellent phase response!

Overload

When the white LED on the front plate turns red it indicates that your level is nearing the clipping point. Temporary red flashing is acceptable, especially when working with audio containing a disproportionate amount of LF content. But when the LED is more on than off you should grab the precision gain attenuator (not a simple volume control!) and back down.

Sound Level

The linearity of human auditory perception is highly dependent of the sound pressure level, and the range for optimal linearity is limited!

We recommend a use of 83-86 dB Sound Pressure Level / SPL at the listening position. Staying in this range will ensure you are able to make the right mixing decision for a long period of time.

Please do not exaggerate the level as this can possibly damage your ears permanently!

With these values you can't go wrong! Mastering engineer Bob Katz recommends working at 83 dB SPL (C-weighted, slow meter setting), calibrated using pink noise for a single channel, 86 dB SPL for stereo (stereo combined using uncorrelated pink noise).

And account for listening fatigue! Take a break when you feel the need to raise the overall level. Rest assured, this the right thing to do.

Technical Specifications

Frequency Response (Tweeter)	+/- 3dB 40 — 30,000 Hz
Frequency Response (Woofer)	+/-10dB 35 — 33,000 Hz
Amplifier Power	120W RMS X 2, Tweeter 75W RMS
Amplifier Technology	115dB dynamic range, high current, high damping, range over 100KHz, ultra low no noise
Max SPL per pair in 1m	112 dB (C) SPL
Mains Power Supply worldwide	100 - 240V~, 50/60Hz
Power Consumption(max.)	200 VA
Woofer	5.25”, own design, fast transient, free of parasitic resonance
Tweeter	1”, own design, metal dome with rear chamber
Crossover Frequency	2.5KHz, 24dB/octave
Input Impedance Balanced	12 kOhm
Input Sensitivity Balanced	+ 4dBu
Room Correction EQ High Frequency	+/- 5dB in 1dB steps from 2,5 kHz
Room Correction EQ Low Frequency	+/- 5dB in 1dB steps below 250 Hz
Standby	On/Off Switchable
Dimension Without Spikes	515(H) x 190(W) x 320 (D) mm
Dimension With Spikes	535(H) x 190(W) x 320 (D) mm
Weight Per Unit (Net)	14.1 Kgs

Technical Support

If you need help with your Epic 55s, please don't hesitate to contact us!

support@reproduceraudiolabs.com

reProducer Audio Labs distributors can also provide support in the native language of their territories.

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