ULTIMATE POINT SOURCE

THE ONES

GENELEC®

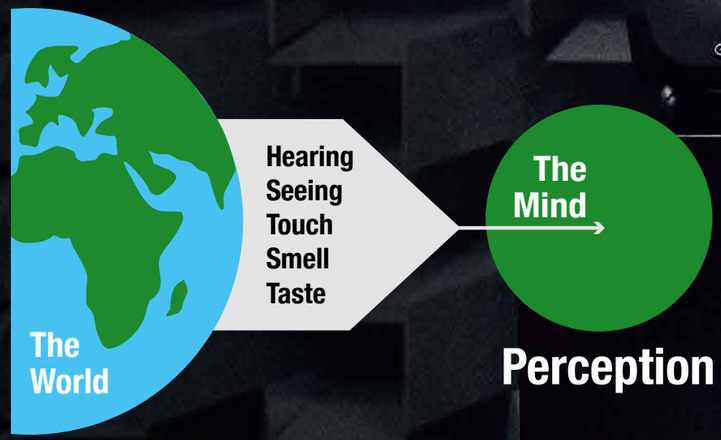
HEARING WITH THE BRAIN

Our ears receive vastly more information than we perceive. All our senses are filtered this way, and bring conscious awareness of only a tiny fraction of the data registered by the body. Our most precise sense, timing-wise, is hearing, which also involves substantial “pre-processing” and several reflexes ahead of conscious recognition.

The outer ears are sophisticated entry points that are needed to discriminate sound direction, but we’re not just carrying around two very personal, directional microphones. Our ears and brain work together in a continuous feedback loop with an abundance of nerve impulses going back and forth to fine-tune reception in the middle and inner ear, over a range of 60 dB. We use head movements to stabilize localization, and the brain’s L/R ear comparisons rely on the most energy-consuming nerve synapses of the body.

However, only a trained listener (or viewer) can perceive the finer nuances of a sensory experience. Musicians and audio professionals learn to attain a heightened awareness of imaging, pitch, spectral balance, transients and many other qualities. The acuity of a trained listener should not be underestimated, and that is the kind of user THE ONES have been designed for.

The Funnels of Perception.



ULTIMATE POINT SOURCE MONITORS

Positioning of microphones determines the outcome of a recording, and movements less than a finger’s width can mean a significant difference. Microphone placement, understandably, is based on listening, which in turn requires an equal amount of accuracy. Audio mixing and mastering are other critical phases where trust in what you hear is essential for setting level, pan, EQ, effects, depth and balance. These are fundamental aspects of how well a track or program translates to other rooms and playback conditions.

Traditional loudspeakers have displaced drivers that generate crossover colouration off-axis – forcing a critical listener to sit at a specific spot, not moving the head. A point source monitor has therefore long been regarded the holy grail of loudspeaker design. However, if not properly designed, point source came with disadvantages; for instance limited frequency range, low SPL, uneven dispersion or discontinuities causing distortion, to name a few.

THE ONES are uncompromised 3-way point source monitors that not only promote faster and more consistent production decision making, but also longer listening time than a traditional loudspeaker, because unnatural imaging, a main contributor to listener fatigue, is minimized. Dispersion is controlled over an unusually wide frequency range thanks to the large integrated waveguide and the hidden dual woofer design.

For all applications calling for precision imaging, extended frequency response, short to medium listening distance or long, fatigue-free working hours, these compact three-way monitors are in an elite league of their own.

BUILD AND CALIBRATE SYSTEMS

Loudspeakers change spectral balance depending on placement in a room, and therefore need to be aligned and calibrated after positioning to ensure proper and reliable listening conditions. Genelec monitors have long featured DIP switches to compensate for placement, but new Smart Active Monitors (SAM™) enable automated, more accurate and objective adjustments allowing true reference listening under previously intolerable conditions.

Use the GLM (Genelec Loudspeaker Manager™) application on a PC or Mac to build and calibrate a monitor system consisting of THE ONES and other Smart Active Monitors. When setting up, the same physical monitors may be used in more than one system. Select monitors and position them on the GLM Grid shown here. In this example, you could switch between six calibrated systems: Mono, stereo, 5.1, 7.1, 7+2.1 and 7+4.1. If you're working in stereo only, switch between several such systems with or without sub and bass management.

Systems can be level calibrated in compliance with the latest broadcast and film standards, and delay is inserted per monitor to compensate for differences in distance to the listening position. Finally, one or more subwoofers can be added, and the entire audio system quickly adjusted for personal spectral preferences if required.

Drawn from decades' worth of data gathered from thousands of studios, Genelec's current GLM 2.0 is combined with AutoCal™, a proprietary and continuously developed expert algorithm that aligns level, distance and frequency response for all monitors on the control network.

IDEAL FOR SMALL SPACES

Demanding audio productions are created in ever shrinking monitoring spaces. These constrained environments have uneven low frequency responses, increased sound colouration and large acoustical differences between rooms. In-situ calibration and ultra near-field capability are two reasons why THE ONES cope extraordinarily well with these challenges.

Furthermore, their maximum size waveguide covering the entire front, and maximum internal volume due to a rib-damped aluminium enclosure make the most of limited space, regardless of whether these monitors are used in horizontal or vertical mode.

THE ONES' design will satisfy your eyes and ears no matter how you orientate them.

FULL-SIZE WAVEGUIDE

Integrated waveguide without discontinuities for excellent directivity and imaging.

POINT SOURCE

Separate midrange and tweeter drivers in the centre of a diffraction-free aluminium enclosure. Concealed dual woofers complete a unique coaxial design.

HORIZONTAL OR VERTICAL

Free orientation. No sonic compromise in either direction. Isopods for flexible tilt (included).

THREE-WAY COMPACT

The most compact three-way monitors with spectacular industrial design by Harri Koskinen. Woofers behind the waveguide extend directivity to low frequencies.

LIGHT FOOTPRINT

Sustainable production and use: Made in Finland using renewable energy and recycled aluminium. Low power consumption and long life.

SETUP & CALIBRATE

Network connectors for system building and GLM auto-calibration. Analog and digital inputs, universal power supply. Standard fixing points for flexible mounting.

MEASUREMENTS THAT MATTER

Specifications can be of help to understand a monitor's performance, but what are the reasons behind our data?

The frequency response explains which frequencies are audible and contain output at the same level, i.e. if the sound character is neutral under anechoic conditions. The response is given on the acoustical axis. Off-axis responses indicate the sound behaviour in other directions.

The directivity in the horizontal and vertical planes provides further data on the neutrality of the sound for off-axis directions, and the sound colour radiated into the room. Smooth responses give low colouration independent of the room's reverberation. A natural benefit of THE ONES' stable directivity is faster workflow and more accurate decision making.

Max SPL numbers explain the dynamic range of the monitor. Short-term max SPL describes its capacity to convey peaks undistorted. Long-term max SPL indicates the highest sound pressure that can be output for a constant level signal for an extended period of time.

The other extreme of dynamic range is indicated by the monitor's self-generated noise level. Short-term max SPL and the self-generated noise together define available dynamic range.

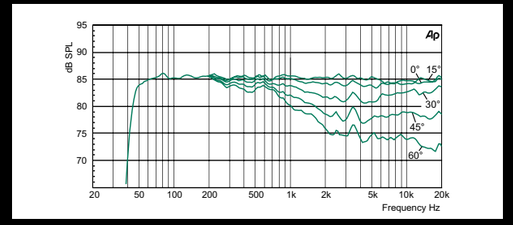
In an active monitor, each amplifier directly connects to a driver, without any intermediate passive crossover components to degrade the sound. The amplifier power shown in the specification is available per driver.

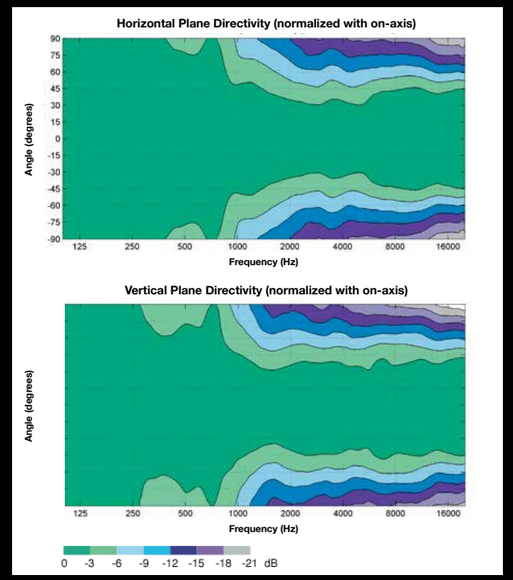
Low distortion implies that the output pressure variation faithfully and accurately follows the input signal. Please visit www.genelec.com for more details.

Dark Grey Black White

8331

SPL max short-term	104/110 dB (1/0.5 m)
Frequency Response	45 Hz - 37 kHz (-6 dB)
Accuracy of Freq Resp.	± 1.5 dB (58 Hz - 20 kHz)
Self generated noise	< 0 dB (A weighted, 1 m)
Bass drivers, dual	130 x 65 mm oval 5 1/8 x 2 5/8 in
Mid driver	90 mm, 3 1/2 in. Coaxial
Treble driver	19 mm, 3/4 in. Coaxial
Amplifier Power	72 + 36 + 36 W
Audio inputs	Analog, AES/EBU
GLM Network	Dual RJ45 (CAT5 cable)
In-situ Calibration	DIP switches or AutoCal
Dimensions H x W x D	305 x 189 x 212 mm 11 3/4 x 7 1/2 x 8 3/8 in
Weight	6.7 kg, 15 lb

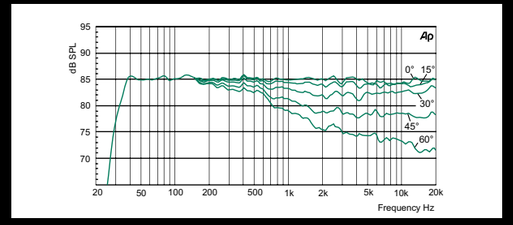


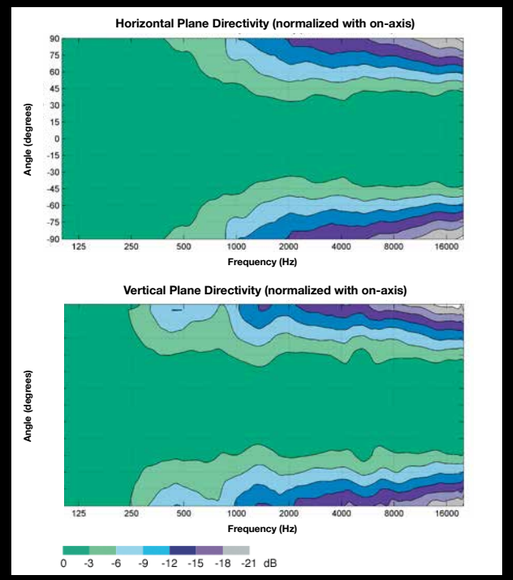


Dark Grey Black White

8341

SPL max short-term	110/116 dB (1/0.5 m)
Frequency Response	38 Hz - 37 kHz (-6 dB)
Accuracy of Freq Resp.	± 1.5 dB (45 Hz - 20 kHz)
Self generated noise	< 3 dB (A weighted, 1 m)
Bass drivers, dual	170 x 90 mm oval 6 5/8 x 3 1/2 in
Mid driver	90 mm, 3 1/2 in. Coaxial
Treble driver	19 mm, 3/4 in. Coaxial
Amplifier Power	250 + 150 + 150 W
Audio inputs	Analog, AES/EBU
GLM Network	Dual RJ45 (CAT5 cable)
In-situ Calibration	DIP switches or AutoCal
Dimensions H x W x D	370 x 237 x 243 mm 13 3/4 x 9 3/8 x 9 1/2 in
Weight	9.8 kg, 22 lb

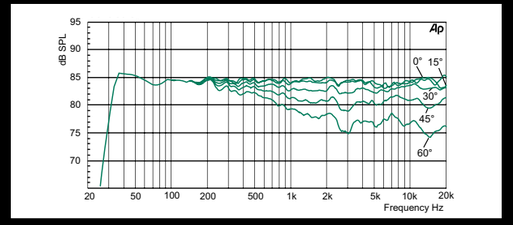


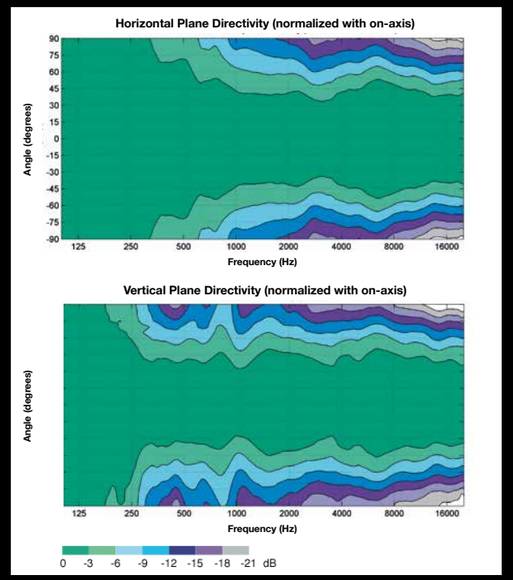


Dark Grey Black White

8351

SPL max short-term	111/117 dB (1/0.5 m)
Frequency Response	32 Hz - 35 kHz (-6 dB)
Accuracy of Freq Resp.	± 1.5 dB (38 Hz - 20 kHz)
Self generated noise	< 5 dB (A weighted, 1 m)
Bass drivers, dual	200 x 100 mm oval 8 1/2 x 4 in
Mid driver	130 mm, 5 in. Coaxial
Treble driver	19 mm, 3/4 in. Coaxial
Amplifier Power	150+120+90 W
Audio inputs	Analog, AES/EBU
GLM Network	Dual RJ45 (CAT5 cable)
In-situ Calibration	DIP switches or AutoCal
Dimensions H x W x D	433 x 286 x 278 mm 17 3/4 x 11 1/3 x 11 in
Weight	19.0 kg, 42 lb





THE ONES: A QUEST FOR EXCELLENCE

Genelec's history forms a 39-year continuum of remarkable inventions, with one pioneering and cutting edge design following another.

Performance has been driven up time after time, with THE ONES being the latest additions to this chain of breakthroughs.

All sub-systems of THE ONES including electronics, amplifier circuitry, drivers and system configuration are entirely designed, handmade and individually tested by craftsmen at our factory in Iisalmi, Finland.

MADE IN FINLAND

Genelec offers a huge range of monitors for the most professional and challenging audio applications. Truthful sound, reliability, long product life, long lasting spare part support, low energy consumption and sustainable production methods come as standard with all of our monitors.

Visit **WWW.GENELEC.COM** to view our full and comprehensive monitor selection guide, mounting accessories, technical papers, training programs and much more.

THE ONES WHO KNOW WHERE THEY COME FROM. THE ONES WHO KNOW WHAT THEY WANT. THE ONES WHO DELIVER. WE ARE THE ONES.

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Detailed Datasheets and Operating Manuals of all Genelec models and other useful information can be downloaded at genelec.com