Features, specifications and appearance are subject to change without notice. Part No. ML512LIT 5/09

www.marklevinson.com

Harman International

No512

CD/SACD™ PLAYER

mark levinson®

A New Level of Realism

The №512 is both the ultimate CD player and the first Mark Levinson® device capable of Super Audio CD (SACD™) playback, taking recorded audio to a new level of realism for heightened listening enjoyment. It reproduces stereo SACD tracks, the stereo CD track on so-called "hybrid" Super Audio CDs and traditional CDs.

Designed to be the primary disc player in any ultrahigh-quality music system, the №512 can be connected directly to one or more power amplifiers, or to a preamplifier in a multisource system. Like all Mark Levinson products, the №512 has been painstakingly engineered to provide exceptional sound quality.

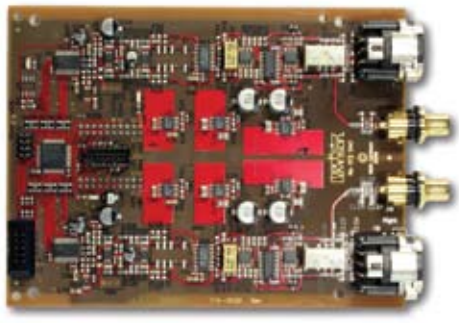

time
repeat
display
power
cd/sacd
drawer
disc repeat
track repeat
volume fixed
sacd
time on disc
time remaining
OPEN
stop
play
pause
previous
next
mark levinson
SACD PLAYER No 512
standby

№512

CD/SACD™ PLAYER

Rediscover Your CD Collection

Building upon their legacy of cutting-edge disc transports, digital-to-analog (DAC) converters and analog audio design, Mark Levinson engineers have created a CD player that brings new life and enjoyment to your CD collection. The №512 represents the state of the art in CD playback. Its breathtaking transparency and detail reveal more than you ever imagined was contained on your CDs. Further, the №512 offers the finest in SACD playback, for even greater dynamic range and natural sound. Thousands of SACD titles have been released, allowing audiophiles an even greater musical experience. The №512 extracts the most from *both* CDs and SACDs, allowing you to rediscover your CD collection, and to discover even greater musical fidelity on SACD.



DAC PCB on six-layer, high-speed Nelco® N4000-13 SI laminate. The intricate, mirror-image PCB design shows the care that was taken to place every component and trace.

Timing Is Critical

Audio engineers know that jitter – time-based errors in a digital signal – can have significant detrimental effects on sound quality. In severe cases, jitter can cause players to output loud clicks during the music, immediately ending any illusion of a live performance. But even small amounts of jitter are audible, and jitter is present to at least some degree in every digital device. How it is managed or minimized varies widely. In the №512, Mark Levinson engineers devised a proprietary (and quite clever) anti-jitter technique employing a memory buffer and a Direct Digital Synthesis (DDS) circuit. After the digital stream is read and decoded by the transport, it is sent to a memory bank that stores it temporarily. The DDS circuit then accurately reclocks the output of the memory bank. By placing a buffer between the player's transport and the rest of the digital circuitry and reclocking the signal, any jitter introduced by the transport itself is effectively removed, and the remainder of the digital path is slaved to the master clock. This ensures that jitter is kept to a minimum, and that there is only one clock controlling the internal timing of digital signals.

The D/A Conversion Process

A critical design element in any digital device is the digital-to-analog (D/A) conversion process. In the №512, extremely high-quality 24-bit D/A converters in differential or dual mode are used. In other words, each channel utilizes two D/A converters instead of one. This is a more costly design solution, but it yields significantly better signal-to-noise ratio and dynamic range, revealing more of the music playing through the device. In addition, the D/A converters themselves are equipped to convert audio with Direct Stream Digital™ (DSD) encoding from Super Audio CDs in the native format, avoiding any degradation that could be caused by converting the signal to accommodate D/A converters that are not DSD-capable. By avoiding this conversion step, the analog output much more closely matches the original signal on the disc.

Design Details

To preserve the purity of audio output, the №512 has two separate power supplies with independent, custom-designed, high-quality, toroidal transformers. One power supply is dedicated to the digital circuitry and the other to the analog circuitry. Having completely independent power supplies safely isolates the delicate analog circuits from any potential noise or interference generated by the digital circuits, which would be detrimental to audio quality. Mark Levinson engineers have also completely enclosed the analog output board in a separate metal subenclosure, and physically placed inherently noisy components as far away from it as possible. The analog signal is available on balanced or unbalanced outputs. There are also AES and S/PDIF digital outputs for sending PCM digital signals from conventional CDs to other devices. In addition, the №512 features a metal loader assembly, for greater durability.

Control and System Options

The №512 was designed for use in systems in which it can be connected to a preamplifier, or directly to the power amplifier(s) if it is the only system source. Although a direct connection precludes the convenience of the source switching that is offered by most preamplifiers, it eliminates one component (and the possible degradation it can cause) from the audio path. A heavy-duty metal remote control that provides a full complement of controls is included. The №512 also includes several other options for control, including RS-232, Link2 and MLNet. RS-232 is compatible with third-party controllers, such as those available from Crestron Electronics, Inc. And the Link2 and MLNet protocols facilitate communication with other compatible Mark Levinson products.

Another Mark Levinson First

The №512 is the first dedicated high-resolution playback source device to carry the Mark Levinson name. In addition to unlocking the impressive dynamics of the SACD format, the №512 is designed to extract the very best from your existing CD collection. There's no doubt that the №512 will open a new world of listening enjoyment.

№512 CD/SACD™ PLAYER

Output connectors	Two balanced XLR analog outputs
	Two single-ended RCA analog outputs
	Two digital outputs – one AES (XLR) and one S/PDIF (RCA)
Control connectors	One Ethernet port
	One RS-232 port
	One IR port, 3.5mm mono mini plug
	One 3.5mm mono (tip/sleeve) mini plug trigger input, 12V
	One 3.5mm mono (tip/sleeve) mini plug trigger output, 12V
	Three-pin IEC standard power connector
Frequency response	+0.0dB/–0.2dB PCM/CD
	+0.0dB/–0.5dB DSD/SACD
Signal-to-noise ratio	108dB
Dynamic range	108dB
Total harmonic distortion	92dB PCM/CD
	99dB DSD/SACD
Decodable formats	CD and SACD
Fixed output level	4V (balanced), 2V (single-ended)
Max. output level	16V (balanced), 8V (single-ended)
Output impedance	10 Ohms
Power requirements	100/120/220/230 – 240V~, 100W, 50/60Hz,
	factory set for destination country
Dimensions (H x W x D)	4-9/16" x 17-3/8" x 17-5/8"
	(116mm x 442mm x 448mm)
Weight	Net weight: 32.5 lb (14.7kg)
Operating environment	Operating temperature: +5° to +35°C (41° to 95°F)
	Storage temperature: -20° to 55°C (-4° to 131°F)
	Operating humidity: 5% to 80% noncondensing

Main PCB, featuring separate analog and digital toroidal power transformers. Oversized, extruded heatsinks for each individual voltage allow the system to run cool.