

lumenwhite

mystere



superlative limited edition turntable

featuring unprecedented ultra-precision engineering, true balanced spectrum materials, design and construction, for ultimate signal fidelity, overtone presence and harmonic integrity in lp playback.

drive train

proprietary, direct coupled drive train and air bearing technology, developed in cooperation with a leading technical university research laboratory.

cogging free, multiple pole, high torque motor, designed and built to molecular-mechanics research standards. exhibits zero disperse magnetic flux effects.

motor spin capacity of up to 1.2 tons eliminates all groove tracing "brake" effects on the platter, providing dynamic signal tracing fidelity and timing precision well beyond conventional belt drive, direct drive and idler wheel drive technologies.

re-programmable, "soft" algorithm, logic drive controller with 16 million times per rotation (320000 x 4096) resolution adjusted for speed ripple < 0,08.

electronic speed selection, 33 and 45 rpm (78 rpm & other formats on request).

bearing

custom aerostatic platter bearing, designed and built to molecular-mechanics research standards for the lowest, technically possible, bearing friction in all climate conditions.

maintains the platter fully air suspended with zero mechanical contact to the rest of the turntable. provides ultimate immunity of the groove reading process from environmental mechanical impacts and chassis-to-platter energy feedback and feed through effects.

platter radial run out (spindle centering) and axial run out (planarity) < 1 micron.

platter

high inertia, resonance optimized, variable curve and angle geometry platter, manufactured from proprietary "balanced spectrum alloy"tm.

dramatically reduces parasitic resonances, energy storage and delayed release (memory) effects without signal altering and annihilating damping technologies.

enables superior groove decoding precision without time-smear, overtone obfuscation and loss of emotionally crucial subtle musical content.

chassis

modular chassis construction. proprietary, "balanced spectrum"tm alloy core with optimized mechanical grounding and vibration energy evacuation design. selected, musical instrument grade materials and assembling technics.

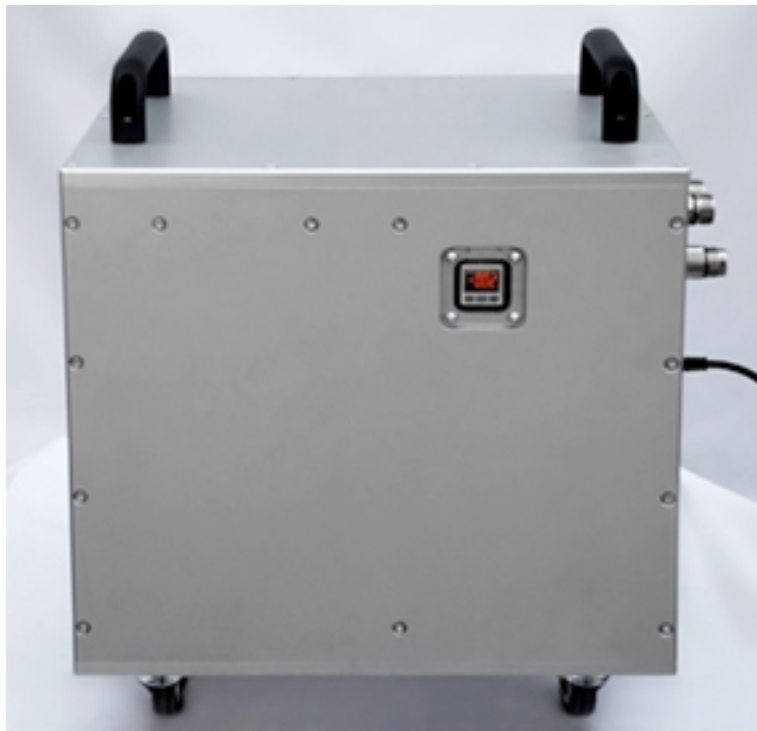
design free of damping compounds, aggressive synthesis- and unnatural spectrum materials, results in unprecedented preservation of natural voicing and overtone harmonics, subtle transients and time-structure information.

proprietary, patented, "mechanical diode" decoupling system, provides a predominantly one-directional vibration evacuation pathway - out of the turntable - via precision machined, controlled crystallization vector materials.

interchangeable, solid wood frame, available in ebony, palisander and rosewood. additional woods and black piano lacquer available on request.

air-supply

self contained, laboratory quality compressor unit with integrated air-filter and reservoir, cooling and moisture extraction facilities. logic controller with comprehensive safe-run and protection routines. digital air pressure and status display.



dimensions

all metal parts laser cut to sub micron precision.
outboard compressor / controller unit contained in silver
anodized, solid metal casing.

turntable: 50 cm wide and 40 cm deep, weight 45 kg,

outboard compressor & controller unit: 54 cm long, 40 cm wide,
40 cm deep, weight 45 kg,

integrated air supply and drive control interlink cable 2 m
(additional lengths up to 10 m on request)

universal voltage design

certified
CE, RAEE, ROHS

designed by
lumen white research group
in switzerland

manufactured in the eu

mystere

selected technology comments

controlled energy design

the core elements of the mystere turntable apply multiple, variable curve and angle geometries and selective asymmetric element design to counteract the creation and amplification of parasitic resonances. they allow for fastest settling times with regards to excitation energies caused by the record playing process and environmental impacts affecting the turntable.

resonance tuned components and design

systematic mapping of the specific sonic signatures and resonance patterns of numerous materials and geometries, allows for their specific implementation in order to achieve local tuning effects and resonance neutrality of the overall design.

this approach avoids a multitude of parasitic sonic effects from arising in the first place and provides for an efficient neutralization of others without the application of traditional damping, avoiding damping inherent signal altering, annihilation- and time smear effects.

sonically optimized platter

the platter's balanced spectrum alloy and variable curve and angle design minimize parasitic energy storage, -reflection, -amplification and delayed release (memory) effects, resulting in refined natural sonics. testimony to its advanced design, no mat has been found yet to improve its sound.

immunity to airborne agitation energy

the turntable's elegant chassis and platter design not only provides for elegance, the multiple, variable angle profiles also minimize the turntable's sensitivity to excitation by air transmitted sound waves when compared to conventional, right angle, constant surface designs. airborne agitation is a widely ignored source of signal degradation in turntables, and omnipresent in listening rooms due to loudspeaker generated air motion.

musical instrument grade materials and construction

and avoidance of aggressive synthesis and unfavorable spectrum materials. the mystere turntable is assembled from selected instrument grade tone woods selected for their psycho-acoustically benign sonic signatures which avoid perceptual stress and listening fatigue.

modular design and upgradability

all core components of the "mystere" turntable can be easily removed, providing for easy upgrades and superior longterm value.

correcting record production artifacts

the mystere's clean spectral signature and superb transparency make it a superbly tunable acoustic device, ideally suited for the application of tuning accessories for compensating equalization effects caused by the record production process.

a first set of such accessories currently in pre-production phase are minute and can be applied and removed within seconds by the user without any special expertise. they permit for overtone-robbed, highly processed recordings to be played back with improved naturalness, overtone splendor and emotional depth.

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