AUDIONET

Scientific magic.

PLANCK

The Quantum Leap

This is a scientific paper.
For holographic images and optimal resolution please do visit your audionet expert dealer.
Thanks very much. We're glad you are with us.

AUDIONET

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SCIENTIST SERIES – ULTRA MACHINE PLANCK

The Machine

PLANCK is Audionet's final statement re. the classical compact disc. No other machine on the market plays with such utmost precision, formidable ease and deep-rooted musicality. PLANCK even surpasses our worldwide successes VIP and ART.

Want to hear the music breathe? Here's the best available lung on this planet:

The body construction completely made of non-ferromagnetic materials combined with a massive slate board optimizes the resonance characteristics of PLANCK. The new design with non-visible fixation screws and with a massive and solid aluminium cover pleases both eyes and ears alike.

Converting from digital to analog, newly developed discrete output modules with extremely fast, wide-band high-performance class A output drivers ensure the perfect sonic experience. The current-voltage converter comprises absolutely temperature stable and sonically neutral high-precision resistors.

Massive aluminium body and resonance-optimized fixation with invisible screws.

Newest chassis generation with aluminium and slate body construction.

Our high-precision clock generator eliminates the infamous jitter: PLANCK gets all music data at the right time and with its correct value. And the internal frequency compensation equipped with custom made mica capacitors of highest grade guarantees absolute precision in the analog domain.

Also, we gave the digital input section a completely new design. PLANCK uses the same outstanding USB Audio 2.0 technology as Audionet's famous DNx machines:

- USB Audio 2.0 support up to 192 kHz / 24 bits.
- Asynchronous data connection and re-clocking ensuring a clean digital music signal.
- The USB Audio circuitry is completely galvanically isolated from the rest of the PLANCK. Therefore no harmful reactions apply from the PC and its "dirty" power supply.
- Separate and user-selectable electrical and optical digital inputs (SPDIF) – also using DNx technology and up to 192 kHz / 24 bit for enhanced playback of other digital sources.

In short: In PLANCK we tuned all relevant parts with scientific meticulousness and musical passion to achieve the ultimately possible sonic quantum leap.

Reference drive unit CD-PRO 2LF on aluminium base.

Finish

Front:
Brushed aluminium, 12 mm, anodised, text & symbols engraved

Top/Cover:
Brushed aluminium, 20 mm, anodised

Disc drawer:
Brushed aluminium, 10 mm, anodised

Chassis:
Slate, aluminium, anodised, text printed

Colors

Ultra:
C-32 light bronze with white display

Classic:
Silver with blue display

Silver with red display

Black with blue display

Black with red display

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High precision puck and mounting made of POM.

The Science

- Top loader, decoupling aluminium and slate body construction.
- Massive aluminium body, resonance-optimized fixation with invisible screws and Teflon bedded massive disc drawer cover made of 10 mm aluminium.
- Additional decoupling of the drive unit, PCBs and high precision clock generator by Audionet Aligned Resonance Technology.
- Reference drive unit CD-PRO 2LF on 8 mm aluminium base.
- Adaptive high precision puck and puck mounting made of POM, toroid Neodym magnet.
- Completely separated power supplies for pickup and converter unit, digital and analog section.
- Completely DC-coupled, no capacitor in the signal path.
- Newly developed discrete output modules with extremely fast, wide-band high-performance Class A output drivers.
- Current-Voltage converter with absolutely temperature stable and sound neutral high-precision resistors and with custom made mica capacitors of highest grade for internal frequency compensation.
- D/A converter function with separate and user-selectable digital inputs:
  SPDIF electrical (Cinch) and optical (Toslink) as well as USB Audio 2.0 (USB type B socket).
- All digital inputs up to 192 kHz / 24 bit.
- Digital outputs SPDIF (electrical and optical) and AES/EBU output 44.1 KHz / 16 bit (for CD).
- Disengageable digital outputs.
- Professional concept of operations.
- Remote power on/off via Audionet Link (optical cable).
- Rhodium fuse.
- Dedicated WATT/PLANCK Audionet metal remote control in matching color.

Option:
Ultra stable external power supply AMPERE

Absolute load stable external power supply for the analog sections of Audionet CD player PLANCK.

What's the scientific progress in external power supply? Ask AMPERE. Providing you with hitherto unheard-of stability, calmness, spatiality and tonal pureness. AMPERE is what will make the decisive difference regarding the performance of all your devices in the future.

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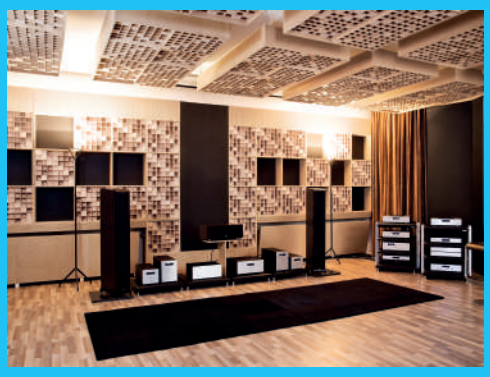
Audionet Listening Room

Listen and be enlightened!
In Audionet's quite incomparable listening room.



In- and Outputs

Audio inputs: (digital)	1 USB Type B socket, (USB Audio 2.0)
	1 RCA, electrical digital (SPDIF)
	1 TosLink, optical digital (SPIDF)
	(All digital audio inputs up to 192 kHz / 24 bit)
Audio outputs: (analog)	1 pair RCA analog (Furutech), gold plated, teflon insulated
	1 pair XLR analog, gold plated
Audio outputs: (digital)	2 RCA digital (SPDIF), gold plated, 600 mV_{ss} in 75 Ω
	1 AES/EBU digital, 110 Ω, gold plated
	1 SPDIF optical digital (TosLink)
	(All digital outputs disengageable!)
Remote activation:	1 Audionet Link IN, optical (TosLink)
	2 Audionet Link OUT, optical (TosLink)
Ext. power supply:	5-pin input (AMPERE)
Mains:	IEC male power insert connector with Rhodium fuse

Function

Reference Compact Disc Player.
D/A converter for audio data via USB by a computer or via SPDIF.

Laser System

Semiconductor laser, 780 nm wave length.

Norms

CD / CD-R / CD-RW (finalized and non finalized discs).
Disc sizes 80 and 120 mm, IEC 908 conform.

Converter

Stereo channels:	192 kHz / 24 bit, Dual-Mono-DAC, Multibit-Delta-Sigma method
Sample rate:	44.1 kHz

Technical Data

Audio bandwidth:	0 - 75,000 Hz (- 3 dB) (reconstruction filter)
THD + N:	typ. < -107 dB (A-weighted) @ -6 dBFS
SNR:	> 111 dB
Channel separation:	> 134 dB @ 10 kHz
Output impedance:	33 Ω real (analog)
Output level:	3.5 V_{RMS} (analog)
Mains:	220..240 V oder 110..120 V, 50..60 Hz
Power consumption:	< 1 W Stand by, max. 40 W
Dimensions:	Width 430 mm Height 120 mm Depth 370 mm
Weight:	23 kg

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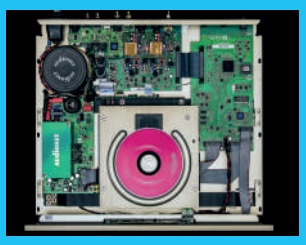

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Sources
PLANCK
ART G3

Integrated Amplifiers
WATT
SAM G2

Preamplifiers
STERN
PRE G2
PRE I G3
PAM G2

Power Amplifiers
HEISENBERG
MAX
AMP
AMP I V2

Network Components
DNP
DNA I
DNC

Power Supplies
AMPERE
EPX
EPS G2

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ART G3

The Mother of all CD Players

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The Mother of all CD Players

For all of you aficionados who waited for this to happen: here's the third generation of Audionet's famed high performance CD player. The new ART G3 (Generation 3) is nothing less than Audionet's final statement on the perfect transmogrification of the classical compact disc. At the same time, it also represents a thoroughbred high-end D/A converter. Its marvelous sound capabilities can thus be used for all your digital systems, especially computers, via optical and electrical digital inputs.

> " ... the new reference player ... "
>
> (av-magazin.de)

The new ART G3 redefines the hitherto undreamt-of potential of CDs to produce a really involving and fascinating listening experience. It literally conquers unexplored sound dimensions, transforming your music into an unprecedented, wholly satisfying experience for the senses. The very best hifi critics have "built a virtual pedestal for this top-notch instrument in (their) editorial office", as have our very own scientists for their own use at home.

> " ... the best CD player ever to have presented itself at i-fidelity.net ... "
>
> (i-fidelity.net)

Our development team has re-engineered both the housing and circuitry, subjecting every detail of the machine to stringent checks. The new ART G3 combines an innovative construction and circuitry with the insights gained from the development of the new Audionet pre- and power amplifier generation.

Our 20 years of experience at the forefront of audiophile science bring you an authentic reproduction so good almost nobody would actually suppose a cd as the source. For critical praise and acclaim, please refer to the Reference section.

Architecture

ART G3 is an entirely new construction, based on an uncompromising concept and implemented with maximum attention to detail. Every phase of retrieval and playback was subjected to rigorous testing and optimisation.

Aligned Resonance Technology

The new ART G3 houses the silver disks with the precision and safety of – a safe, away from all external influences. The housing is an elaborate mixture of amorphous granite, steel, aluminium and low-resonance MDF. The ART G3 is also fitted with an ingenious noise-free ventilation concept.

Audionet Aligned Resonance Technology (ART) decouples the read-out unit and the control board from the housing. A mounting system ensures that damaging movement energy is dissipated in a targeted fashion and that the read-out process is subject to a minimum of disturbance. The reading module is a solid tape deck fitted in full aluminium, dampened with heavy foil, sitting on acoustically friendly brass pins. Developed for professional use, the new drive has an exceptionally robust mechanical and electronical construction. It guarantees the highest read-out quality and stability as well as excellent CD acceptance both in terms of surface quality as well as copy protection procedures. Further innovations are the puck and its cylindrical receiver. These two precision rotation parts fit together exactly without any play.

The reduced contact surface and the low revolution impulse work together with an exceptionally strong, ring-formed magnet to produce a strong and even contact pressure. The pre-load guarantees an exceptionally stable and smooth disc run.

A solid slider plate isolates the drive from external influences. The slide runs equally and deeply in strong aluminium rails. Together with the machined aluminium ventilation lid of the MDF cover bowl this provides additional stability.

Sound Data Processing

Only the use of the best-quality materials enables the hih performance quality of reproduction achieved by the new ART G3. The first sound-relevant point is the current flowing through a special fuse at the network entrance of the ART G3, made of rhodium and copper. We use exclusively pure silver for the current feed to the separately structured analogue and digital network components. This produces a significantly calmer and more spacious sound. A generously-sized network filter and push-pull I-core coils strengthen the ART G3 in the mid and subwoofer area.

The newly-developed, multiple-layer, impedance-linearized circuit board layout makes the ART G3 even more broad-band and low-resistance. The energy flow is homogenous and unlimited over the entire frequency spectrum.

Audionet's intelligent sampling technology ensures an entirely clean analogue signal recovery from the digital data flow. In doing so, PCM data is run through an elaborate, two-stage filtering and decoupling procedure. The output data is filtered and upsampled simultaneously in a high-performance signal processor using Audionet software. The filters are set for optimal impulse and frequency faithfulness under audiophile criteria. Optimized in this manner, the data is then unlocked with an asynchronous 192 kHz/24 bit upsampling procedure and decoupled from its input cycle. The PCM data is then transferred to two high-performance converters and processed to an analogue signal in separate channels.

Jitter

Since the presentation of the first source drive 13 years ago, we have worked continually to reduce jitter, i.e. tremors in digital signal flanks. Jitter errors restrict the sound reproduction in every possible manner, affecting the reproducibility, stage and depth of performance.

In developing the new ART G3 we were able to reduce the jitter of the individual circuitry elements to an almost immeasurable minimum, using a unique structural achievement. For example, our engineers have effectively reduced the jitter of the D/A convertor to a unique 60 picoseconds sigma. To deflect sound-impairing oscillations, the dampened precision tact generator for the sampling convertor and the DACs are located in the read-out unit swinging in the Z direction.

There is no information loss, and all data is processed at the correct time. This enables a unique clarity, depth offset and platform lighting.

Analogue preparation is effected via a differential current/-voltage converter and an extremely complicated filter/amplification circuit. The switches are set on an extremely impulse faithful and high border frequency and thus established on the best individual components. The newly-developed Audionet operational amplifier employed here uses the finest tolerated, high audiograde film capacitors. The decoupling stage works internally with a triple degenerative feedback mechanism and an even higher current drive capacity. Overall distortion and internal malfunctions in the new ART G3 have been reduced to an absolute minimum.

Finish

Front panel:
Brushed aluminium, black anodized, light grey printing
Brushed aluminium, silver anodized, black printing

Display:
Red or blue

Cover:
MDF, Nextel coated, grey

Slider:
Aluminium, 10 mm, black anodised

Chassis:
Granite, sheet steel, black

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Data Transmission

The digital audio data transmission also represents a unique development: Audonet's intelligent sampling technology prepares and decouples the PCM information, transmitting it to a high-performance output transmitter via a low-jitter LVDS data transmission system absolutely resistant to interspersion. In its HighBit mode, all data is made available on Audionet's proprietary HighBit interface with 192kHz/24 bit, on the AES/EBU output with 96 kHz/24 bit and on the optical output with 44.1 kHz/16 bit. In its LowBit mode, the digital outputs are provided with 44.1 kHz/16 bit. Thus in digital mode, the best possible PCM output data is always available.

User-Friendly

The ART G3 can be controlled simply and easily with the ergonomically-formed Audionet system remote control Harmony One included in the scope of delivery. All functions can be accessed easily and can be read-off from the well-illuminated colour display. An attractive row of hard keys and the background illumination enable easy control even in dimmed rooms. The remote control is preprogrammed for all Audionet components and can be programmed for up to 15 devices. A recharging cradle and a lithium ion battery are also included in the scope of delivery.

Special Features

- Top loader with damping MDF, aluminium and granite casing construction, solid aluminium cover (10mm), run on Teflon bearings
- Audionet "Aligned Resonance Technology", decouples transport unit, boards and the clock generator
- Reference CD drive VAU 1254/31LF
- Disc stabilizer (puck) and its cylindrical receiver made of POM
- Separate power supplies for read-out and converter unit
- Completely DC-coupled, no capacitors in the signal path
- Discrete, extremely fast and stable filter and output stages
- D/A converter function with USB/SPDIF digital input and optical TosLink input
- Audionet HighBit-Interface with 192 kHz/24 bit output
- AES-EBU output with 96 kHz/24 bit
- Digital outputs can be switched off
- Professional operating concept
- Audionet system remote control RC1

Function

Compact Disc Player and D/A converter function for audio- and pc-data.

In- and Outputs

Analogue audio outputs:	1 pair RCA line, gold-plated 2 XLR balanced, gold-plated
Digital audio outputs:	2 RCA, 600 mVs into 75 ohms, gold-plated 1 AES/EBU, 110 Ohm, gold-plated 1 optical (TosLink)
Digital audio inputs:	1 USB, as USB-Audio (44,1 kHz/16 bit or 48 kHz/16 bit) or SPDIF (32 kHz-96 kHz/24 bit) 1 SPDIF optical TosLink (32 kHz-96 kHz/24 bit)
Remote activation:	1 Audionet-Link in, optical (TosLink) 2 Audionet-Link out, optical (TosLink)
External power supply:	5-pin input

Standards

CD, CD-R, CD-RW (finalized and non finalized disks)
Disc sizes 80 und 120 mm according to IEC 908

Conversion

Stereo channels:	192kHz/24 bits, Dual-Mono-DAC, Multibit-Delta-Sigma
Sampling rates:	44.1kHz

Technical Data

Laser system:	Semiconductor laser, 780 nm wave length
Bandwidth:	0 – 90,000 Hz (-3 dB) analog
THD + N:	typ. 100 dB; (A weighted) @ -60 dBFs
SNR:	>110 dB
Channel separation:	> 130 dB @ 10 kHz
Output impedance:	33 Ohm real
Max. output voltage:	3.5 Veff.
Power consumption:	< 1 W stand-by, max. 40 W
Mains connection:	120 or 230 V, 50…60Hz
Dimensions:	width 430 mm height 120 mm depth 360 mm
Weight:	22 kg

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Scientific Breakthroughs: Audionet Key Technologies

Audionet-Ultra-Linear-Amplifier ULA

Audionet's worldwide respected and award-winning ULA (Ultra Linear Amplifier) technology is of fundamental importance for our outstanding technology. This highly complex circuit topology, initially conceived with medical engineering in mind, delivers metrological results which mark a limit of feasibility. Even under the most severe strain or in other stress situations signal impurities are barely traceable, and the high return loss guarantees that even the most demanding loudspeakers will perform faultlessly up to their utmost limits.

Audionet Operational Amplifier

Audionet operational amplifiers (OP) are used in our devices at most sound-critical parts of the circuit design to deliver the very best tonal results. Usual operational amplifiers, available in different quality and price ranges on the global market, can't satisfy our core demands for perfect sound quality. Even the most expensive ones with the best results on paper aren't perfect. That's why we have designed our own operational amplifier technology. Any single Audionet OP contains at least 86 parts and components, and our topology ensures an impressive gain-bandwidth-product of 1 GHz.

Asynchronous Upsampling

With the D/A conversion we've focused our highest attention on eliminating jitter, the wobbling of digital signal slopes. Jitter faults curtail the sound reproduction in every respect: imaging, stage and depth rendition will be impaired. The conversion is done using Audionet's Intelligent Sampling Technology which guarantees an absolutely flawless recovery of the analogue signal from the digital bit stream. For this purpose the data are sent through a sophisticated, two-stage filtering and decoupling procedure. First the input data are filtered with Audionet's proprietary software using a powerful signal processor and upsampled synchronously. The filters have been designed under audiophile aspects with regard to an optimised transient and frequency response. The thus optimised data are then resolved through an asynchronous upsampling procedure at 192kHz/24bit. Hereby the bit stream is completely isolated from its input clock and its associated jitter. The data are then fed to high-performance converters, which are clocked by special ultra-precision quartz crystals, and individually processed per channel into analogue signals. This method ensures that jitter faults are almost entirely eliminated in the analogue signal. No information gets lost and every bit of information will be processed at the right time, bringing forth an unmatched clarity, room depth and stage imaging.

Double-Precision-Bassmanager and Parametric Equalizer

The digital signal processing is accomplished with efficient signal processors and our proprietary Audionet software which was developed and continuously improved exclusively under audiophile aspects in more than 15 years of painstaking scientific labour.

Audionet Listening Room

Listen and be enlightened!
In Audionet's quite incomparable listening room.

The double precision bass management uses a 48bit resolution at all sampling frequencies. Even the very lowest frequencies are therefore precisely reproduced and accurately processed. The bass manager offers freely selectable cutoff frequencies, filter Q factors and subwoofer phases. Thus you can perfectly integrate your subwoofers into the system and into the room.

The digital parametric equalizer uses Minimum Phase Equalizers (MPE) both for the main channels and subwoofer channels. For each MPE the filter type, frequency, gain and Q factor can be selected within an unusually wide adjustment range and disturbing room interference and tonal annoyances efficiently compensated. In combination with CARMA, our computer aided room acoustics measurement system, it is possible even for non-professionals to reach nearly professional results.

The delay manager has an adjustment range of up to 7 m and automatically calculates the delay times from the distances.

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Reference

AV-Magazin.de:

"As we have come to expect from Audionet, the ART G3 presents itself in an immaculate, elaborate form leaving nothing to be desired. It's reproduction quality unearths previously hidden pearls in the music, releasing previously unimagined potential from the common or garden CD. With its convincing quality, the ART G3 significantly exceeds the sound produced by its predecessor. The Bochum manufacturers have once again defended their position at the top of the audiophile tree. The new reference player for us at av-magazin.de is called Audionet ART G3."

i-fidelity.net

"Over the last few weeks, our colleague Olaf Sturm enthused our readers for the new Audionet integrated amplifier SAM G2, establishing a virtual pedestal for this top-notch instrument in our editorial office. Having heard its output, I understand fully what moved him to do so. The clarity and precision produced by the ART G3 matched only by the almost quaffable yet lucid tonal substance makes it into the best CD player ever to have presented itself at i-fidelity.net. The immense musical competence with which this new ART G3 draws us into the world of sound only serves to underscore our decision to declare the Audionet ART G3 as our new reference point."

Pro High End Russia

"Magnificent player. Such designs do not appear as a result of the development budget or as a planned pro-program to update the lineup. This is a consequence of sleepless nights in a creative workshop. Splash engineering and design potency. […] Audionet ART G3 – clearly the work of a true master. […] And a fine selection of not only those who love and appreciate the real music, but also those who love and hears music in itself."

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Sources
PLANCK
VIP G3
ART G3

Integrated Amplifiers
WATT
SAM G2

Preamplifiers
STERN
PRE G2
PRE I G3
PAM G2

Power Amplifiers
HEISENBERG
MAX
AMP
AMP I V2

Network Components
DNP
DNA 2.0
DNA I
DNC

Power Supplies
AMPERE
EPX
EPS G2

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DNP

The Birth of a New Reference

This is a scientific paper.
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Thanks very much. We're glad you are with us.

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The Birth of a New Reference

Audionet's new DNP (Digital Network Preamplifier) offers a new standard in combining world class tone, dynamics and reference class sound staging with access to a multitude of digital formats, turning digital music data into a captivating listening experiences. The Audionet DNP is a high potential preamplifier that competes favorably with the world's best, including our own, all analog Audionet PRE G2. The Audionet DNP is capable of handling both coarse and fine dynamic with outstanding musical exactness and finesse while paying special attention to imaging as well as room correction. In combination with Audionet's new reference external power supply, the EPX, the DNP reaches new levels of performance, featuring the usual Audionet qualities of presenting music as realistic as possible and free from grain, distortion or coloration, while offering also rarely found level of convenience and customization in integrating signals from computers, servers, HDD, USB sticks and streaming from the internet.

The Audionet DNP is the first preamplifier which can be fully integrated into a network and controlled completely by Windows, Linux or Mac computers. Users worldwide noticed the outstanding ease of use, making programming the DNP a breeze. Our in-house developed software RCP (Audionet RCP – Audionet Remote Control Point) allows the user to organize complex functions and settings effortlessly through a GUI (graphic user interface).

> "... The Twin-Turbo preamplifier ..."
>
> (HiFi & Records, Germany)

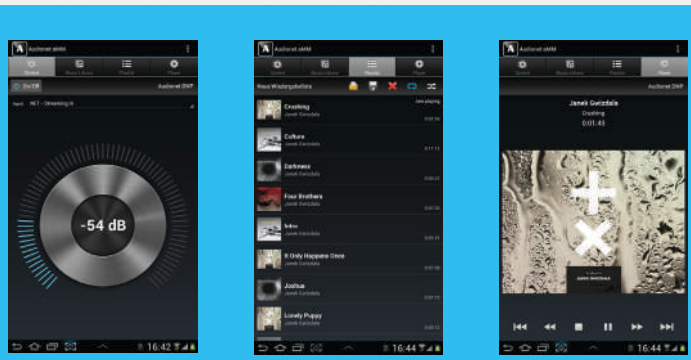
Additionally intuitive and powerful apps are available, which interfaces with all tablet PCs and smart phones, including all members of the Android and iOS operating

> "... really a ground breaking component, redefining what a 'full function preamp' means today ..."
>
> (HiFi & Records)

systems (Audionet aMM – Audionet Music Manager for Android, Audionet iMM – Audionet Music Manager for iOS). The RS-232 interface allows in addition for professional integration into home automation systems. At long last it can also be controlled in the classic way with the Audionet System Remote Control.

The Audionet DNP is the very first stereo preamplifier that is equipped with an ultra precise delay, bass, and equalization management, allowing for very nuanced balance adjustment while preserving the coherence of the music. The Audionet DNP allows near unlimited options to adjust the music reproduction, setting a new standard in high quality customizable music reproduction systems. To accomplish this, we have further enhanced our proven and acclaimed digital filter technology and integrated it into the DNP. A pair of subwoofers may be integrated, which are separately adjustable in all parameters. Room influences and tonal challenges and problems can be efficiently corrected. Speaker arrangements can be optimized for every possible listening situation. Joined with Audionet's room analysis software, CARMA, which captures and analyzes the acoustical behavior and properties of the room, the Audionet DNP is now able to perform professional grade room compensation and correction for the passionate amateur and expert.

The Audionet DNP offers a wealth of features. It receives internet and FM radio, has a USB audio and a digital USB-A interface, can be upgraded with a high-class phono preamp, may be integrated into any home cinema due to its bypass mode and has an excellent onboard A/D converter which can be used for the high-class digitalisation of all analogue sound sources. The inputs can be named freely and different input levels matched. Connected via Audionet Link, other Audionet devices can also benefit from a remote turn-on. A trigger output can be used to control active speakers. And it has even an automatic mains phase recognition.



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Maximal connectivity is provided by thirteen (13!) digital inputs, and five analogue inputs; digital ports include WLAN, LAN, USB Audio, and S/PDIF, electrical and optical. In analogue, the DNP features five stereo inputs, four coaxial, and one balanced. In total, the Audionet DNP is capable of powering up to two subwoofers and six power amplifiers.

Optionally, the DNP can be extended with our high-quality phono preamplifier board. Audionets DNP is compatible with the external precision mains adaptor EPX.

Construction

The DNP's development and realization combines cutting edge circuit design with Audionet's eighteen years of experience in digital and analogue technology. More than 5000 individual components ensure accurate signal processing. Isolated and autonomous power supplies for digital and analogue sections further reduce power source-related imperfections. High-performance processors working in combination with Audionet's proprietary software for digital signal processing manage the digital signal processing of the Audionet DNP.

Equalizer, Delay- and Bass-Management

The DNP's double precision bass management uses 48-bit resolution at all sampling frequencies, enabling the most accurate reproduction of even the lowest frequencies. The bass manager offers freely selectable cutoff frequencies, filter Q factors, and subwoofer phases; thus enabling integration of up to two subwoofers into the network, and are configurable into multi-room outputs.

The digital parametric equalizer uses 5 Minimum Phase Equalizers (MPE), for main channel and subwoofer outputs. Each MPE is configurable in filter type, frequency, gain, and Q factor within an unusually wide adjustment range, allowing the effective optimization of all parameters and compensation of less than ideal room characteristics or acoustical problems.

The delay manager allows for a range of up to 7 meters, automatically calculating delay times in relationship to the setup and speaker distances while allowing phase control of each subwoofer.

Finish

Front panel:
Brushed aluminium, black anodized, light grey printing
Brushed aluminium, silver anodized, black printing

Display:
Red or blue

Cover:
Aluminium, 6 mm, black anodised

Sides:
Aluminium, 8 mm, black anodised

Chassis:
Sheet steel, 2mm, black varnished

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Signal Processing

In order to optimize the D/A conversion, Audionet's engineers pursued the uncompromising reduction and elimination of jitter, resulting in a highly exact, musical and solid sound image, stage and depth. To this end, we have developed Audionet's Intelligent Sampling Technology, which performs with stellar results the analogue signal recovery from the digital bit stream. Audio data is routed through a two-stage filtering and decoupling procedure.

First, the input data is filtered with Audionet's proprietary software using a powerful signal processor and up sampled synchronously, through filters designed for optimal transient and frequency response. At the next stage, the optimized data is then resolved through an asynchronous up sampling procedure at 192kHz/24bit, allowing the complete isolation from any potential jitter originating from the input clock. The resulting audio data is then passed to two high-performance converters, which are clocked by dedicated ultra high precision quartz crystals and individually processed per channel into analogue signals. This method ensures that jitter faults are eliminated – completely lossless – in the analogue signal to the highest degree, resulting in unmatched clarity, room depth, and stage imaging. In addition, power flux interferences are avoided by powering the digital section of the Audionet DNP entirely separately from the analogue section.

Architecture

No compromise is made in craftsmanship of the analogue signal processing as well. Circuit construction has been designed for maximum performance using only the finest components. At each point, we use the highest quality parts the world has to offer, many of them custom made. For example, filter caps are designed to our specifications using Japanese silk dielectrics, custom mica caps, and selected high-current foil caps from Germany, manufactured for an ultra low loss angle. Internal wiring is done with top-grade silver/gold alloy.

In order to meet our own standards of performance, operational amplifiers used in the Audionet DNP are manufactured in-house. Each contains more than 86 discrete components, for a unique gain-bandwidth product. The volume level is set by an electronically switched, real time linearized precision resistor network, for unmatched accuracy. To optimize the high frequency properties, the circuits have been miniaturized, and signal paths reduced to a minimum. The circuit layout eliminates sound marring components such as coils, chokes, and capacitors in the signal path.

The analogue section operates on a separate power supply with a 100VA toroidal mains transformer, and 62,000 µF of filtering capacitance, and dual stabilization provide d by discrete, instantaneous voltage regulators. In addition, local voltage at each op amp is filtered again with an extra total capacitance of 8,000 µF filtering capacitance. Noise, distortions, and crosstalk are a thing of the past, setting the stage for Audionet DNP's to redefine today's state of the art. The Audionet DNP defines today's metrological state of the art. Noise, distortions and crosstalk have been reduced to a minimum to deliver a maximum of energy, dynamics and sonic purity.

AUDIONET

Scientific magic.

Function

Network-compatible 2.2 channel stereo preamplifier.

Special Features

- Streaming client for internet radio playback (vTuner Internet Radio Service), network devices (UPnP mediaserver) and music data from USB memory sticks
- Supported streaming client formats: WAV (up to 192kHz/24bit), FLAC (up to 192kHz/24bit), ALAC (up to 96kHz/24bit), AIFF (uncompressed, up to 192kHz/24bit), AAC, WMA, OGG-Vorbis
- USB 2.0 (USB-A) for external media control and USB Audio 2.0 (up to 192kHz/24bit)
- 2.0 to 2.2 stereo operation mode (2 analogue subwoofer outputs or usable as multiroom outputs)
- Parametric equaliser and delay manager for all outputs
- Double-precision bass manager with 48bit resolution and freely adjustable crossover frequencies and filter properties
- Audionet Intelligent Sampling Technology with asynchronous upsampling up to 192kHz/24bit
- Precise clock generator for the elimination of clock flank deviations (jitter)
- Sampling frequencies and resolution of the digital inputs: 32 kHz to 192kHz/24bit
- Audionet HighBit interface for all audio data including DVD-A and SACD
- FM radio receiver with RDS function
- Audionet ULA technology (Ultra Linear Amplifier)
- Fully DC-coupled, no capacitors in the signal path
- One 100 VA toroidal mains transformer for analogue signal processing
- 62,000 µF total filtering capacitance
- Separate power supplies for digital and analogue section
- Gold-doped, pure silver, solid core signal cabling
- Microprocessor with dedicated power supply controls and handles all functions
- Remote activation of other Audionet component via Audionet Link (optical fiber)
- Headphones output electronically switchable
- Automatic mains phase detection

Bass Manager

- Management of one (mixed-mono) or two subwoofer (mixed-mono or stereo)
- Data processing with 48bit resolution (double precision)
- Channels/channel-groups can selectively be driven with the full signal or across the digital frequency crossover with adjustable crossover frequencies and filter qualities.
- X-Bass: Subwoofer can be configured as additional active bass
- Filter quality adjustable from 0.3 to 2.00 in 12 logarithmic steps
- Crossover frequencies adjustable from 20 Hz to 303 Hz in 51 logarithmic steps
- Subwoofer phase switchable

Delay Manager

- Adjustment range: Distance Listening position <-> loudspeaker 0m to 7m
- Automatic calculation of the delays resulting from the distance settings

Equalizer

- 5 MPE (Minimum Phase Equalizer) for each main channel and Sub
- Adjustment range for each MPE: Filter type Peak-Filter, High-Shelve, Low-Shelve, high-order filter,low-order filter
- Frequency (f): 20 Hz to 20 kHz, 128 logarithmic steps
- Gain: -12 dB to +6 dB, 0.5 dB-steps
- Quality (Q): 0.3 bis 8.0, in 20 logarithmic steps
- Import of CARMA equalizer settings

Connectors

- WLAN 802.11b/g/n – WEP, WPA, WPA2
- LAN/Ethernet (RJ 45)
- USB 2.0 for external media control
- RS232 (control input)

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In- and Outputs

Analogue audio inputs:	4 pairs RCA Line, gold plated, Teflon insulated 1 pair Neutrik XLR balanced, gold plated
Digital audio inputs:	4 RCA, 75 Ohm, gold plated, Teflon insulated 4 optical (TosLink) 1 Neutrik XLR AES/EBU, 110 ohms, gold-plated, teflon insulated 1 USB Audio type B
Audio outputs:	2 pairs RCA, gold-plated, Teflon insulated 2 RCA sub out (multiroom), gold-plated, Teflon insulated 1 pair Neutrik XLR balanced, gold-plated 6.3 mm socket (headphones), electronically switchable
Additional connectors:	1 USB 2.0 1 Ethernet (RJ 45) WLAN antenna (SMA) FM-antenna, 75 Ohm RS232 Screw connector for turntable earth connection Screw connector for additional earth connection, gold plated
Remote activation:	2 Audionet Link OUT, optical (TosLink) 3.5mm-jack plug as trigger output with 12V-switching voltage
External power supply EPX:	5-pin socket
Mains:	IEC male power insert connector

Technical Data

Frequency response:	0 – 1,000,000 Hz (-3 dB), DC-coupled 2 – 1,000,000 Hz (-3 dB), AC-coupled, DC servo 1st order
Slew Rate:	10 V/µsec
Channel separation:	between channels: > 100 dB at 20 kHz between inputs: > 108 dB at 20 kHz
Input voltage:	max. 5 Vrms
Input impedance:	Line: 50 kOhm real XLR: 7 kOhm real
Output voltage:	Line: max. 6 Vrms XLR: max. 12 Vrms Headphones: max. 6 Vrms (max. gain 6 dB)
Output impedance:	Line: 24 Ohm real XLR: 48 Ohm real Headphones: 24 Ohm real
Filtering capacity:	> 62,000 µF

Analogue inputs

THD+N:	< -108 dB from 20 Hz up to 20 kHz at Vin 3 Vrms
SNR:	> 120 dB at 1kHz referred to Vin, max

Digital inputs

Sample frequency:	32 up to 192 kHz
THD+N:	Front: < -104 dB
Mains connection:	220...240 V / 50...60 Hz or 100...120 V / 50...60 Hz
Power consumption:	< 1 W stand by, max. 150 W
Dimensions:	width 430 mm height 110 mm depth 360 mm
Weight:	12 kg

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Scientific Breakthroughs: Audionet Key Technologies

Audionet-Ultra-Linear-Amplifier ULA

Audionet's worldwide respected and award-winning ULA (Ultra Linear Amplifier) technology is of fundamental importance for our outstanding technology. This highly complex circuit topology, initially conceived with medical engineering in mind, delivers metrological results which mark a limit of feasibility. Even under the most severe strain or in other stress situations signal impurities are barely traceable, and the high return loss guarantees that even the most demanding loudspeakers will perform faultlessly up to their utmost limits.

Audionet Operational Amplifier

Audionet operational amplifiers (OP) are used in our devices at most sound-critical parts of the circuit design to deliver the very best tonal results. Usual operational amplifiers, available in different quality and price ranges on the global market, can't satisfy our core demands for perfect sound quality. Even the most expensive ones with the best results on paper aren't perfect. That's why we have designed our own operational amplifier technology. Any single Audionet OP contains at least 86 parts and components, and our topology ensures an impressive gain-bandwidth-product of 1 GHz.

Asynchronous Upsampling

With the D/A conversion we've focused our highest attention on eliminating jitter, the wobbling of digital signal slopes. Jitter faults curtail the sound reproduction in every respect: imaging, stage and depth rendition will be impaired. The conversion is done using Audionet's Intelligent Sampling Technology which guarantees an absolutely flawless recovery of the analogue signal from the digital bit stream. For this purpose the data are sent through a sophisticated, two-stage filtering and decoupling procedure. First the input data are filtered with Audionet's proprietary software using a powerful signal processor and upsampled synchronously. The filters have been designed under audiophile aspects with regard to an optimised transient and frequency response. The thus optimised data are then resolved through an asynchronous upsampling procedure at 192kHz/24bit. Hereby the bit stream is completely isolated from its input clock and its associated jitter. The data are then fed to high-performance converters, which are clocked by special ultra-precision quartz crystals, and individually processed per channel into analogue signals. This method ensures that jitter faults are almost entirely eliminated in the analogue signal. No information gets lost and every bit of information will be processed at the right time, bringing forth an unmatched clarity, room depth and stage imaging.

Double-Precision-Bassmanager and Parametric Equalizer

The digital signal processing is accomplished with efficient signal processors and our proprietary Audionet software which was developed and continuously improved exclusively under audiophile aspects in more than 15 years of painstaking scientific labour.

Audionet Listening Room

Listen and be enlightened!
In Audionet's quite incomparable listening room.

The double precision bass management uses a 48bit resolution at all sampling frequencies. Even the very lowest frequencies are therefore precisely reproduced and accurately processed. The bass manager offers freely selectable cutoff frequencies, filter Q factors and subwoofer phases. Thus you can perfectly integrate your subwoofers into the system and into the room.

The digital parametric equalizer uses Minimum Phase Equalizers (MPE) both for the main channels and subwoofer channels. For each MPE the filter type, frequency, gain and Q factor can be selected within an unusually wide adjustment range and disturbing room interference and tonal annoyances efficiently compensated. In combination with CARMA, our computer aided room acoustics measurement system, it is possible even for non-professionals to reach nearly professional results.

The delay manager has an adjustment range of up to 7 m and automatically calculates the delay times from the distances.

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Reference

Positive Feedback:

"It is really a ground breaking component, redefining what a 'full function preamp' means today. Hopefully, I will get more time down the road to explore some of these."

HiFi & Records Germany:

"Already today the Audionet DNP gives the answer to the question how a future high-end command centre must look like. The symbiosis of analogue, digital and USB/network components in one enclosure is simply a perfect success. In combination with the EPX precision power supply we have an audiophile twin-turbo, which to me seems to be without any alternative right now."

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Audionet

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Sources
PLANCK
VIP G3
ART G3

Integrated Amplifiers
WATT
SAM G2

Preamplifiers
STERN
PRE G2
PRE I G3
PAM G2

Power Amplifiers
HEISENBERG
MAX
AMP
AMP I V2

Network Components
DNP
DNA 2.0
DNA I
DNC

Power Supplies
AMPERE
EPX
EPS G2

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DNA I

Merging of the Digital and Analogue World

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Thanks very much. We're glad you are with us.

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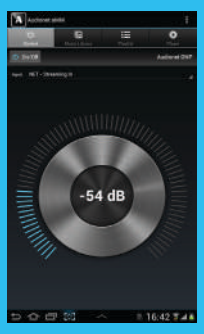
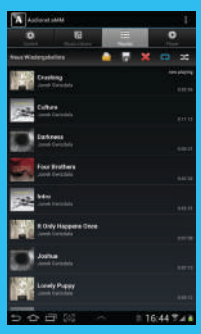
Merging of the Digital and Analogue World

The Audionet DNA I combines extraordinary performance and peerless sound quality with compact dimensions. With its universal interface to access your digitally stored music, it's an audiophile powerhouse for bits and bytes. The Audionet DNA I changes all kinds of binary music data into an exhilarating and intoxicating listening event. The sound is rock-solid and powerful, comprehensive and rich in contour, natural and finessed. It turns bits and bytes to a tremendous and vigorous experience for the senses.

Audionet's DNA I allows an ease of use that is uncommon in the high-end audio world. With intuitive and powerful apps, it interfaces with all tablet PCs and smart phones, including all members of the Android and iOS operating systems (Audionet aMM – Audionet Music Manager for Android, Audionet iMM – Audionet Music Manager for iOS).





The Audionet DNA is able to be fully integrated into a network and operated entirely by a PC or Mac. Our in-house developed software RCP (Audionet Remote Control Point) allows the user to organize complex functions and settings effortlessly through a GUI (graphic user interface). The RS-232 interface allows in addition for professional integration into home automation systems. At long last it can also be controlled in the classic way with the Audionet System Remote Control.

The DNA I is capable of receiving its data from the Internet radio, USB Audio interfaces, HDD, USB-sticks/drives, analogue sources and can be fitted with a first-class phono preamp. The DNA's optical link output allows for remote switching of other Audionet components, and it offers a network phase detector.

The Audionet DNA I offers universal connectivity. For digital signals we have provided 5 digital inputs altogether, from WLAN, LAN to USB and USB Audio to electrical and optical S/PDIF. For the analogue signals it offers 3 pairs of gold-plated RCA inputs.

Construction

The circuit design is elaborate, technically unique and rigorously implemented. The power supply is strong and fast: a 700 VA toroid transformer, dedicated capacitors with a large total smoothing capacity of 96,000 µF; incorporating low ESR, a special highly effective power input filter, and – last but not least – an optimized circuit design with short paths and low intrinsic capacitance ensuring the powerful and fast-acting characteristics needed for pure, clean power – and sound – delivery.

Signal Processing

The digital section of DNA I is separated from the analogue base board to reduce effectively disturbances caused by the digital high frequency signals. The digital to analogue converter supports digitals signals up to 192 kHz / 24 bit.

The ultra-linear circuitry is designed for exemplary distortion-free, high-speed and stable sound. Sound-damaging influences have been almost entirely eliminated, exemplary reproduction stability is guaranteed. We use only the best materials; carefully selected high-grade components such as audio-grade capacitors with a silk / hemp dielectric; high quality, close-tolerance film impulse capacitors and highest-quality rhodium speaker terminals.

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Function

Network-compatible stereo integrated amplifier.

Special Features

- Streaming client for internet radio playback (vTuner Internet Radio Service) and network devices (UPnP mediaserver) and music data from USB memory sticks
- Supported streaming client formats: WAV (up to 192 kHz / 24 bit), FLAC (up to 192 kHz / 24 bit), ALAC (up to 96 kHz / 24 bit), AIFF (uncompressed, up to 192 kHz / 24 bit), AAC, WMA, OGG-Vorbis, USB 2.0 (USB-A) for external media control and USB Audio 2.0 (up to 192 kHz / 24 bit);
- Supports Gapless-Playback by Audionet Apps
- Audionet Intelligent Sampling Technology with asynchronous upsampling up to 192 kHz / 24bit
- Precise clockgenerator for the elimination of clock flank deviations (jitter)
- Sampling frequencies and resolution of the digital inputs: 32 kHz to 192 kHz / 24 bit
- Audionet ULA-technology (Ultra Linear Amplifier)
- Fully DC-coupled, no capacitors in the signal path
- One toroid transformer with 700 VA
- Filtering capacity in total of 96,000µF
- Separate power supplies for digital and analogue section
- Signal wiring by monolithic super-clean copper cable
- Bypassmode for home-cinema integration
- Microprocessor with dedicated powersupply controls and handles all functions
- Remote activation of other Audionet components via Audionet Link (optical fiber)
- Headphones output electronically switchable
- Automatic mains phase detection

Technical Data

Output Power:	2 x 110 Watt into 8 Ohm 2 x 220 Watt into 4 Ohm
Damping factor:	typ. > 1,000 at 100 Hz
Filtering capacitance:	> 96,000 µF
THD + N:	< -93 dB, for 20 Hz to 20 kHz

Analogue Inputs

Bandwidth:	1 – 500,000 Hz
SNR:	> 100 dB at 1kHz

Digital Inputs

Bandwidth:	1 – 96,000 Hz, depending on fs
Sample frequency fs:	32 up to 192 kHz

Mains:	220...240 volts / 50...60 Hz or 100...120 volts / 50...60 Hz
Power consumption:	< 1 W stand by, 12 W quick start, max. 750 W
Dimensions:	width 430 mm height 110 mm depth 360 mm
Weight:	16 kg

Finish

Front panel:
Brushed aluminium, 10mm, black anodized, light grey printing
Brushed aluminium, 10mm, silver anodized, black printing

Display:
Red or blue

Cover:
Aluminium, 4 mm, black anodised

Sides:
Aluminium, 8 mm, black anodised

Chassis:
Sheet steel, 2mm, black varnished

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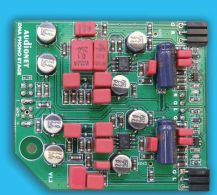
In- and Outputs

Analogue audio inputs:	3 pair RCA Line, gold plated, Teflon insulated
Digital audio inputs:	1 RCA, 75 Ohm, gold plated, teflon insulated 1 optical (TosLink)
Audio outputs:	1 pair RCA Pre-Out, gold plated, teflon insulated 6.3 mm socket (headphones), electronically switchable
Loudspeaker outputs:	2 pair Furutech Rhodium pole terminals
Additional connectors:	1 Ethernet (RJ 45) 1 USB Audio type B 1 USB 2.0 type A RS232 Screw connector for turntable earth connection
Remote activation:	1 Audionet Link OUT, optical (TosLink)
Mains:	EC male power insert connector

Option: Phono Module

We do offer an ultra-compact phono module for our integrated network amplifier DNA I. This phono module is compatible with Moving Magnet (MM) and Moving Coil (MC) cartridge types, and it includes adjustable load. The configuration of the phono stage can easily be done by the amplifiers setup menu or by the control software RCP.



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Sources
PLANCK
VIP G3
ART G3

Integrated Amplifiers
WATT
SAM G2

Preamplifiers
STERN
PRE G2
PRE I G3
PAM G2

Power Amplifiers
HEISENBERG
MAX
AMP
AMP I V2

Network Components
DNP
DNA 2.0
DNA I
DNC

Power Supplies
AMPERE
EPX
EPS G2

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DNC

The Interface that Excels

This is a scientific paper.
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Thanks very much. We're glad you are with us.

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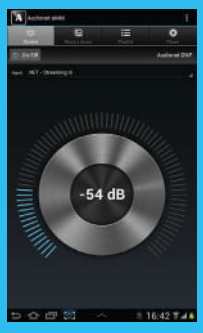
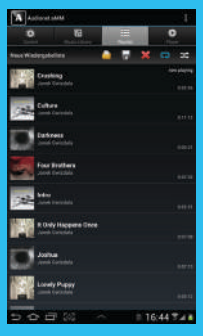
The Interface that Excels

The creation of the DNC (Digital Network Client) began with a single aim: to build the best sounding and most versatile network client and digital/analogue converter possible, capable of interacting with all current music reproduction sources. R&D was allowed to operate with uncompromising rigor and dedication at all phases, leading to the DNC's astonishing, powerful performance, innovative analogue signal processing and circuit design. It is a truly universal interface for digital music. Reading from computers, servers, HDD, USB sticks and streaming from the internet – via cable or wireless – the Audionet DNC will turn any digital music data into a captivating musical experience.





Audionet's DNC, considered a premium choice among elite network clients, allows an ease of use that is uncommon in the high-end audio world. With intuitive and powerful apps, it interfaces with all tablet PCs and smart phones, including all members of the Android and iOS operating systems (Audionet aMM – Audionet Music Manager for Android, Audionet iMM – Audionet Music Manager for iOS). The Audionet DNC is the first network client and Digital to Analog converter able to be fully integrated into a network and operated entirely by a PC or Mac. Our in-house developed software RCP (Audionet Remote Control Point) allows the user to organize complex functions and settings effortlessly through a GUI (graphic user interface). The RS-232 interface allows in addition for professional integration into home automation systems. At long last it can also be controlled in the classic way with the Audionet RC2 Remote Control.

The Audionet DNC's unique functions provide for a cutting-edge music experience. Our engineering team has refined our digital filter technology and integrated it into the Audionet DNC. It is the first network client and Digital/Analogue converter with such powerful delay and EQ management. Such precision allows for first time syncronised balance setting and effective correction for

> "... enhances the status of all digital sources ... to High-End devices ... "
>
> (Einsnull)

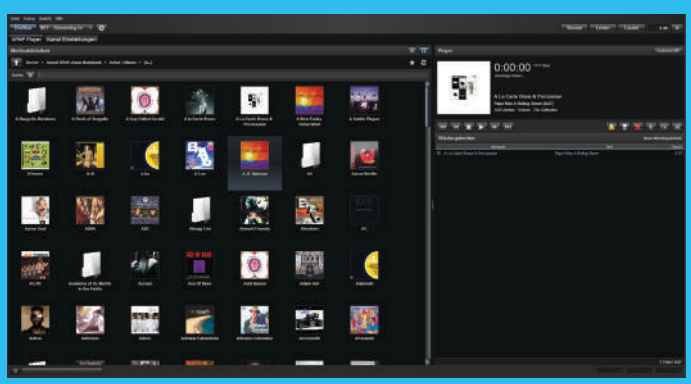
room acoustics and tonal disturbances. Each speaker ensemble can be adapted to it's listening environment. Joined with Audionet's analysis and correction software, CARMA, the spatial data is captured, analyzed for perfect correction, and automatically transferred to the DNC. Professional room acoustics, all the time.

The Audionet DNC is fully equipped. It can receive internet and FM radio, offers an USB 2.0 (USB Audio) and a digital USB-A interface. Each input is independently namable and can have input levels matched. The DNC features an optical Audionet input and output for remote switching between components, and utilizes a network phase monitor. The DNC is capable of using an external power supply (Audionet EPS G2 or EPX), for clean power.

The Audionet DNC offers universal digital connectivity. Nine digital inputs, including WLAN, LAN, USB, S/PDIF, electrical and optical make any network interface possible. A pair of gold-plated RCA and XLR outputs cover all analogue applications.

Construction

Over eighteen years of research and development into improvement of our components, proprietary software and the feedback of audiophiles at all stages allow the Audionet DNC to feature a sound that is rarely experienced in a streaming client. The digital and analogue sections and the correspondending power supplies are both electrically and physically strictly separated from each other and function independentely.



The digital parametric equalizer uses 5 Minimum Phase Equalizers (MPE), for main channels. Each MPE is configurable in filter type, frequency, gain, and Q factor within an unusually wide adjustment range, allowing the effective optimization of all parameters and compensation of less than ideal room characteristics or acoustical problems.

Signal Processing

In order to optimize the D/A conversion, Audionet's engineers pursued the uncompromising reduction and elimination of jitter, resulting in a highly exact, musical and solid sound image, stage and depth. To this end, we have developed Audionet's Intelligent Sampling Technology, which performs with stellar results the analogue signal recovery from the digital bit stream. Audio data is routed through a two-stage filtering and decoupling procedure.

First, the input data is filtered with Audionet's proprietary software using a powerful signal processor and up sampled synchronously, through filters designed for optimal transient and frequency response. At the next stage, the optimized data is then resolved through an asynchronous up sampling procedure at 192kHz/24bit, allowing the complete isolation from any potential jitter originating from the input clock. The resulting audio data is then passed to two high-performance converters, which are clocked by dedicated ultra high precision quartz crystals and individually processed per channel into analogue signals. This method ensures that jitter faults are eliminated – completely lossless – in the analogue signal to the highest degree, resulting in unmatched clarity, room depth, and stage imaging. In addition, power flux interferences are avoided by powering the digital section of the DNC entirely separately from the analogue section.

Architecture

Neither did we make any compromises with the analogue signal processing of the Audionet DNC. In a lavish research and development phase every detail has been reconsidered and tested. The circuit design and the construction are designed for maximum performance. Audionet researches, pursues and acquires exclusively only highest quality components worldwide, requiring in many cases custom design and production. For example, filter caps are designed to our specifications using Japanese silk dielectrics, custom mica caps, and selected high-current foil caps from Germany, manufactured for an ultra low loss angle. Internal wiring is done with top-grade silver/gold alloy, and the best available connection systems.

Finish

Front panel:
Brushed aluminium, 10mm, black anodized, light grey printing
Brushed aluminium, 10mm, silver anodized, black printing

Display:
Red or blue

Cover:
Aluminium, 6 mm, black anodised

Sides:
Aluminium, 8 mm, black anodised

Chassis:
Sheet steel, 2mm, black varnished

AUDIONET

Scientific magic.

As part of our quest to use only the highest-grade components available, Audionet manufactures the DNC's operational amplifiers in house. Each Audionet op-amp contains more than 86 discrete components, and is characterized as a unique gain-bandwidth product. Signal flow and ground routing are implemented consistently in dual mono, in order to achieve maximum channel separation for high frequency characteristics, as well as circuit miniaturization and the shortest possible signal paths. The DNC's signal flow is completely unimpeded by coils, inductors, or capacitors in the path, contributing to the DNC's outstanding performance as an interface that excels in options and sound.

An independent power supply is included for the analogue hardware, with a 50VA toroidal transformer, 26,000 µF of filter capacitance, and a dual voltage stabilization by discrete and instantaneous voltage regulators. In addition, local voltage at each op amp is filtered again with an extra capacitance for a total of 8,000 µF.

Noise, distortions and crosstalk are reduced to a minimum and ensure a high level of energy, dynamics and purity of sound.

Audionet Listening Room

Listen and be enlightened!
In Audionet's quite incomparable listening room.

Function

Network-compatible streaming client and D/A converter.

Special Features

- Streaming client for internet radio playback (vTuner Internet Radio Service), network devices (UPnP media-server) and music data from USB memory sticks
- Supported streaming client formats: WAV (up to 192kHz/24bit), FLAC (up to 192kHz/24bit), ALAC (up to 96kHz/24bit), AIFF (uncompressed, up to 192kHz/24bit), AAC, WMA, OGG-Vorbis
- USB 2.0 for external media control and USB Audio 2.0 (up to 192kHz/24bit)
- Analogue stereo outputs
- Parametric equalizer and delay manager for all outputs
- Audionet Intelligent Sampling Technology with asynchronous upsampling up to 192kHz/24bit
- Precise clock generator for the elimination of clock flank deviations (jitter)
- Sampling frequencies and resolution of the digital inputs: 32 kHz to 192kHz/24bit
- Audionet HighBit interface for all audio data including DVD-A and SACD
- FM radio receiver with RDS function
- Audionet ULA technology (Ultra Linear Amplifier)
- Fully DC-coupled, no capacitors in the signal path
- One 50 VA toroidal mains transformer for analogue signal processing
- 44.000 µF total filtering capacitance
- Separate power supplies for digital and analogue section
- Gold-doped, pure silver, solid core signal cabling
- Microprocessor with dedicated power supply controls and handles all functions
- Remote activation of other Audionet component via Audionet Link (optical fiber)
- Automatic mains phase detection

AUDIONET

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Delay Manager

- Adjustment range: Distance Listening position <-> loudspeaker 0m to 7m
- Automatic calculation of the delays resulting from the distance settings

Equalizer

- 5 MPE (Minimum Phase Equalizer) for each main channel
- Adjustment range for each MPE: Filter type Peak-Filter, High-Shelve, Low-Shelve, high-order filter, low-order filter
- Frequency (f): 20 Hz to 20 kHz, 128 logarithmic steps
- Gain: -12 dB to +6 dB, 0.5 dB-steps
- Quality (Q): 0.3 to 8.0, in 20 logarithmic steps
- Import of CARMA equalizer settings

In- and Outputs

Digital audio inputs:	2 RCA, 75 Ohm, gold plated, Teflon insulated 2 optical (TosLink) 1 Neutrik XLR AES/EBU, 110 ohms, gold-plated, teflon insulated 1 USB Audio type B
Audio outputs:	1 pair RCA, gold-plated, teflon insulated 1 pair Neutrik XLR balanced, gold-plated
Additional connectors:	1 USB 2.0 1 Ethernet (RJ 45) WLAN antenna (SMA) FM-antenna, 75 Ohm RS232 Screw connector for additional earth connection, gold plated
Remote activation:	1 Audionet Link OUT, optical (TosLink) 1 Audionet Link IN, optical (TosLink) 3.5mm-jack plug as trigger output with 12V-switching voltage
External power supply:	5-pin socket for EPS G2/EPX
Mains:	IEC male power insert connector

Technical Data

Frequency response:	0 – 96,000 Hz (-3 dB), DC-coupled
Slew Rate:	10 V/µsec
Channel separation:	between channels: >100 dB at 20 kHz
Output voltage:	Line: max. 3.2 Vrms XLR: max. 6.4 Vrms
Output impedance:	Line: 24 Ohm real XLR: 48 Ohm real

Digital inputs

Sample frequency:	32 to192 kHz
THD + N:	< -104 dB
Mains:	220…240 volts / 50…60 Hz or 100…120 volts / 50…60 Hz
Power consumption:	< 1 W stand by, max. 85 W
Dimensions:	width 430 mm height 70 mm depth 310 mm
Weight:	8 kg

Optional: External precision-power supply EPS G2 or EPX

Our high performance external precision-power supplies EPS G2 or EPX are improving the qualities of connected equipment tremendously indeed.

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Audionet

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12103 Berlin
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Sources
PLANCK
VIP G3
ART G3

Integrated Amplifiers
WATT
SAM G2

Preamplifiers
STERN
PRE G2
PRE I G3
PAM G2

Power Amplifiers
HEISENBERG
MAX
AMP
AMP I V2

Network Components
DNP
DNA 2.0
DNA I
DNC

Power Supplies
AMPERE
EPX
EPS G2

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WATT

The Power and the Glory

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SCIENTIST SERIES – ULTRA MACHINE WATT

The Machine

Even more subtle. Even more transparent. With an even bigger soundstage and a force beyond equal.

WATT makes another quantum leap from the celebrated performance of our audiophile amplifier SAM onto another level. Whoever wants the ultimate in a single machine – WATT's your choice. From this day on.

The Science

- Massive aluminium body and resonance-optimized fixation with invisible screws.
- Magnetically and capactively optimized circuit and device design, shortest signal paths.
- Double-mono design for maximum channel separation.
- Electronic volume control with high audio grade components.
- Non-disengageable DC servo, no sound degrading capacitors or coils in the signal path.
- ULA technology (Ultra Linear Amplifier).
- Separated power supply for control and analog sections.
- Two separated power supplies for driver stage and power stage of amplifiers.
- One encapsulated 50 VA toroid transformer with separated windings for input and driver stage.
- Two encapsulated 700 VA toroid transformers for the power stage.
- Total capacitance more than 200,000 µF.
- Consequent double-mono design of phono module for MM and MC pickups, setup by user menu.
- Internal wiring with gold-doped pure silver cables.

- Rhodium speaker terminals by Furutech.
- Rhodium fuse.
- By-pass mode for integration into home cinema systems.
- Microprocessor with separate power supply – controls and monitors all functions and informs the user via dimmable display.
- 2 Audionet Link outputs to control further Audionet devices remotely.
- Switchable headphones output driven by power stage.
- Dedicated WATT/PLANCK Audionet metal remote control in matching color.

Function

Analog integrated stereo amplifier.

In- and Outputs

Inputs:	3 pairs RCA line, gold plated, Teflon insulted
	1 pair XLR balanced, gold plated (Neutrik)
Outputs:	2 pair Furutech 4 mm-jacks, Rhodium
	1 pair RCA, gold-plated, Teflon insulated (Pre Out)
	2 Audionet Link, optical (Toslink)
	1 headphones socket (6.3 mm, stereo)

Technical Data

Output power:	2 x 167 W into 8 Ω 2 x 284 W into 4 Ω 2 x 443 W into 2 Ω
Damping factor:	typ. 1,000 at 100 Hz
Frequency response:	0.3 - 650,000 Hz (-3 dB)
Harmonic distortion:	k2 typ. -101 dB, k3 typ. -107 dB @1 kHz, 25 W / 4 Ω
THD + N:	< -98 dB @1 kHz, 100 W / 4 Ω
SNR:	> 106 dB (weighted)
Channel separation:	> 103 dB @ 1 kHz
Filtering capacitance:	200,000 µF
Input impedance:	Line input 50 kΩ XLR input 7 kΩ
Mains:	220..240 V or 110..120 V, 50..60 Hz
Power consumption:	< 1 W Stand by, typ. 900 W
Dimensions:	Width 430 mm Height 130 mm Depth 450 mm
Weight:	25 kg

Option

MM and MC phono module.

Finish

Front:
Brushed aluminium, 12 mm, anodized, text and icons engraved

Cover:
Brushed aluminium, 6 mm, anodized

Plates:
Brushed aluminium, 12 mm, anodized

Chassis:
Brushed aluminium, anodized, text printed

Colors

Ultra:
C-32 light bronze with white display

Classic:
Silver with blue display

Silver with red display

Black with blue display

Black with red display

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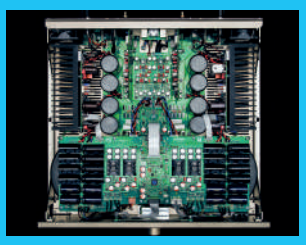

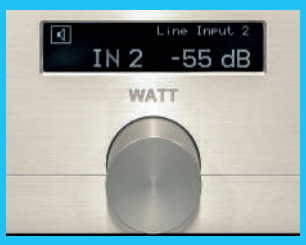

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Managing directors: Thomas Gessler, Robert Hagemann.

Sources
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Preamplifiers
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Power Amplifiers
HEISENBERG
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DNC

Power Supplies
AMPERE
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SAM 20 SE

Limited Edition

Play it again, SAM

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SAM 20 SE

Limited Edition

Celebrating Audionet's legendary integrated amp's 20 years anniversary we present the best SAM ever: the strictly limited SPECIAL EDITION SAM 20 SE (20th Anniversary).

A milestone in German amplifier construction:

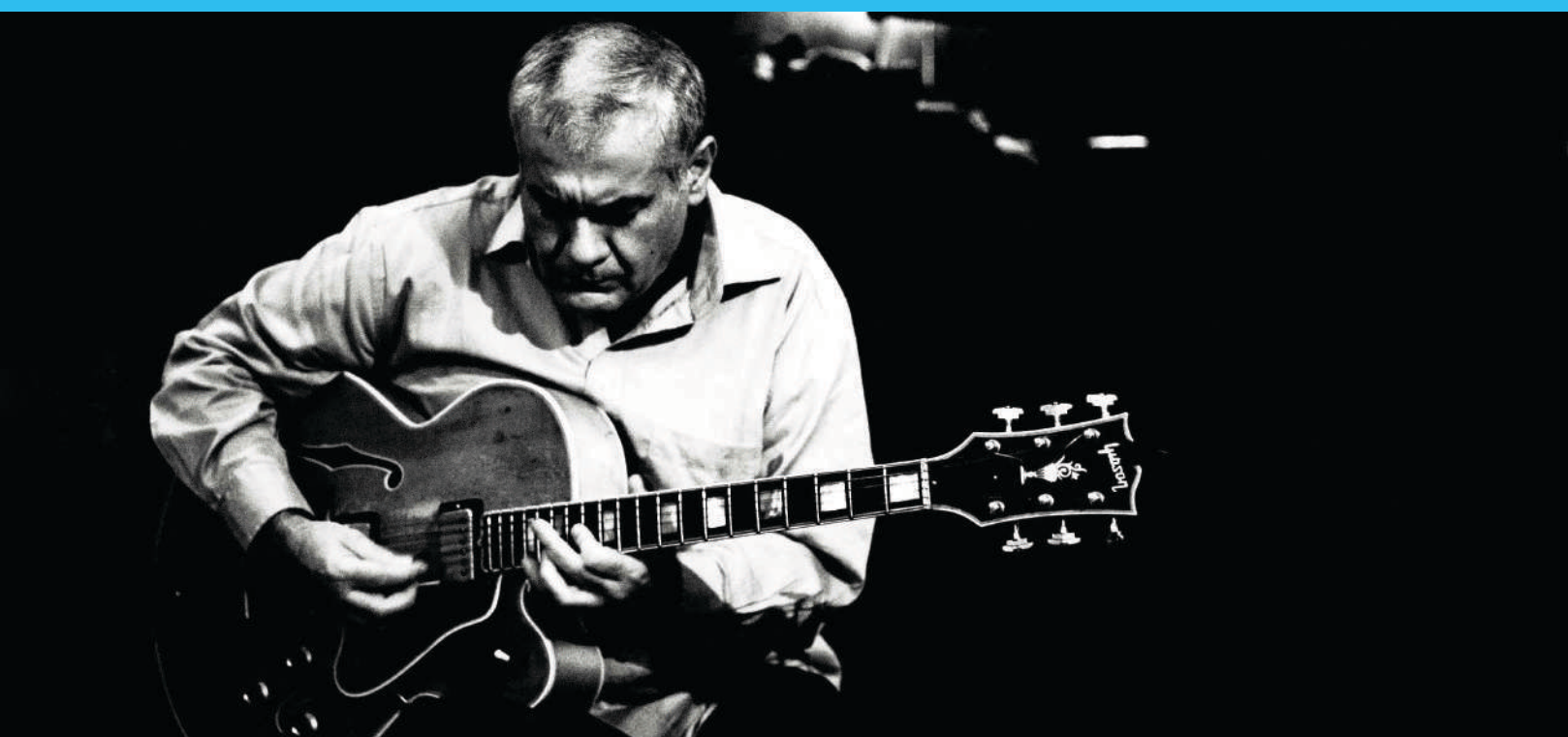
- New MOSFET power transistors with extremely low series resistance for a higher and more detailed fidelity in transient response (as used in the new worldwide benchmark WATT)
- Extremely potent and acutely fast power supply, guaranteed by an encapsulated and cast-in 700 VA toroid transformer and new extremely low impedance and exceedingly fast audio-grade main capacitors with a 25% higher capacitance of 15,000 µF instead of 12,000 µF as before (total sum of 120,000 µF instead of 96,000 µF).
- Further optimized inner wiring, all signal cables are made of silver and gold providing highest resolution and finest details.
- New high grade mica capacitors in all places with crucial affect on sound. Their natural materials ensure a unique neutrality of sound.
- Engraved front panel and re-designed back panel.
- Dedicated SAM 20 SE Audionet metal remote control.
- Inbuilt Phono card with the following improvements:
  - New integrated OpAmps of highest grade with extremely low-noise and fast FET inputs.
  - Optimized mica capacitors throughout. Their natural materials ensure a unique neutrality of sound.

"Highly neutral, full of unbelievable energy and at all times of an amazing naturalness."

"SAM alone is the best integrated I've heard so far." (IMAGE Hifi 2/2000)

"The SAM G2 ist the full monty - a total audiophile heavyweight beyond all price categories." (STEREO 2/2011)

"New SAM G2 defines his class for sure ... dynamics, spatial abilities and a level of musicality far above his price point ... Audionet SAM G2 hereby gets the most important badge of honour: Reference for integrated amplifiers!" (Olaf Sturm, hifi&records/i-fidelity.net)



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SAM G2

One for All

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One for All

Since 1997, the predecessor model, the multi-award-winning SAM was held by those in the know as a true exception amongst audiophile integrated amplifiers. To improve the already good, we have now bundled all the insights and experience gained from over 10 years of audiophile development work in the new High Performance SAM G2. Everything came under scrutiny, from the concept to the last detail.

> "... SAM G2 is top notch heavyweight; champion of all the price classes ..."
>
> (Stereo, Germany)

Words can hardly convey what the new SAM G2 is capable of achieving. With a spacious yet subtle sound, it plays transparently and spatially, sleekly and most powerfully. Reproducing every single note naturally and effortlessly. The new SAM G2 is even more committed and passionate than its predecessor. Indeed, its richness of information and tone, power and authority as well as its musical coherence has audiophile critics clapping their writing hands everywhere on the globe.

> "... one of the best constructed amplifier we have ever seen ... Audionet's SAM is a deeply impressing main amplifier ..."
>
> (What HiFi, England)

The new SAM G2 combines excellent performance and unmatchable sound properties with exceptionally compact dimensions. Such quality is scarce on the market, making our device ideally suited for domestic use and tonally convincing musical reproduction. The SAM G2 masters all the tasks set to it with dedication, captivating its listeners with breathtaking authenticity. Its sound is characterized by speed, purpose and honesty, yet at the same time is full of charm, finesse and the utmost care to detail. With its catching enthusiasm, this lively device produces a surprisingly realistic sound experience.

New Design

Entirely new is the design, with the clear, unflappable and classical form of the Audionet 4-key medium format with high-quality materials and finely detailed features. SAM G2 comes either with a silver or black front panel and a red or blue display. Additionally, you can extend the SAM G2 with our high-quality phono preamplifier board for MM and MC pick-ups.

Six inputs, one of which is symmetrical, two switchable pre-stage outputs for end stages, subwoofers or recording devices etc, of which one is controlled, the other a fixed by-pass module for integration in a home cinema system. A switchable headphone output, automatic mains phase recognition and Audionet Link remote switching as well as its large display make the new SAM G2 a comfortable allrounder leaving no wishes unfulfilled.

Architecture

The complex SAM G2 circuitry is complex, technically unique and radically realized. The input signals are received from gilded, Teflon isolated cinch jacks and then led further via gold-doped pure silver solid core signal cabling and gold-contacted double anchor precision relays, which switch the input signals. The symmetrical input signals are divided into channels beforehand.

The mains supply is extremely potent and very fast. This is guaranteed by a capped and fused 700 VA toroidal transformer, selected main capacitors with a total of 96,000 µF filtering capacity, a specially developed input filter and highly pure silver cabling as well as a capacitively optimized layout with the shortest of supply routes. Working stress is smoothed and stabilized by fast-working, discreet, local degenerated pre-regulators.

As with all our mono and stereo end stages, we have also developed our ultra-linear amplifier concepts further in the new SAM G2. The circuitry is designed for exemplary distortion-freedom, speed and stability. The SAM G2 is conceived so that the two channels can work as independently of each other as is possible. Influences from the amplifier which could damage the sound have been almost entirely excluded, guaranteeing exemplary reproduction stability.

We use only the best materials, carefully selected, high-grade components such as High Audiograde electrolytic capacitors, with a silk dielectric; high-quality, close-tolerance film impulse capacitors and high-quality silver / gold yaw for internal cabling.

Control

The SAM G2 is controlled via a high-performance flash microcontroller. Software upgrades are very easy. The controller makes for simple operation, comfortable functions and reassuring stability. The control programme enables operator-friendly access to comprehensive and practice-oriented functions. For example, the two pre-stage outputs and headphones output can be switched electronically. A by-pass mode is available for smart integration of the new SAM G2 into a home cinema system.

The inputs are freely nameable and the controller even verifies that the mains connection is phase correct. Moreover, the controller monitors all operating states and deactivates the device as soon as a critical state has been identified. A large graphical-capable display with max. 4 x 26 characters informs the operator of all operating states and settings. The SAM G2 is equipped with AudionetLink as a matter of course. This enables the isolated activation of other Audionet devices via fibre-optics.

Finish

Front panel:
Brushed aluminium, black anodized, light grey printing
Brushed aluminium, silver anodized, black printing

Display:
Red or blue

Cover:
Brushed aluminium, 4 mm, black anodised

Sides:
Brushed aluminium, 8 mm, black anodised

Chassis:
Sheet steel, black varnished

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> "...The performance of the SAM G2 leaves no-one untouched ..."
>
> (i-fidelity.net)

Function

Microprocessor controlled integrated amplifier.

Special Features

- Audionet ULA-Technologie (Ultra-Linear-Amplifier)
- Completely DC-coupled, no capacitors in the signal path
- Toroid transformer with 700 VA
- 8 impulse-stable high-current capacitors with filtering capacitance totalling 96,000 µF
- Separate power supplies for digital and analog section
- Gold-doped, pure silver, solid core signal cabling
- Home cinema mode for home cinema integration
- Microprocessor with its own power supply controls and handles all functions
- Remote activation of other Audionet component via Audionet Link (optical fiber)
- Headphones output electronically switchable
- Automatic mains phase detection

In- and Outputs

Audio inputs:	5 pair RCA line, gold-plated, teflon insulated 1 pair XLR balanced, gold-plated
Audio outputs:	1 pair RCA, gold-plated, teflon insulated (Pre-Out) 1 pair RCA , gold-plated, teflon insulated (Rec-Out) 6.3 mm jack plug for headphone (switchable)
Loudspeaker outputs:	2 pair Furutech Rhodium 4mm-jacks
Remote activation:	1 Audionet Link (out), optical

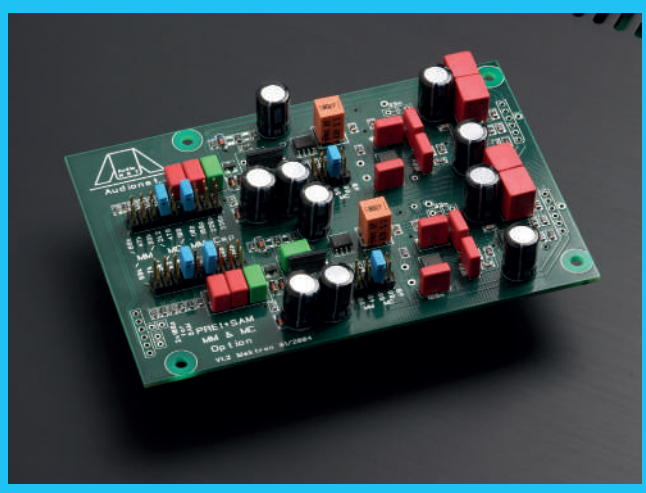
Technical Data

Output:	110 Watt into 8 Ohm 200 Watt into 4 Ohm
Filtering capacity:	96,000 µF
Frequency Response:	0 – 500,000 Hz (- 3 dB)
Damping Factor:	> 1,000 at 100 Hz
Channel Separation:	> 93 dB @ 1 kHz
Harmonic Spectrum:	k2 typ. -101 dB, @1kHz, 25 W/4 Ohm k3 typ. -106 dB, @1kHz, 25 W/4 Ohm
THD + N:	< -100 dB @1kHz, 25 W/4 Ohm
SNR:	> 103 dB (A-weighted)
Input Impedance:	Line-input: 10 kOhm, 150 pF XLR-input: 3 kOhm, 170 pF
Mains connection:	220...240 V / 50...60 Hz or 110...120 V / 50...60 Hz
Power Consumption:	< 1 W stand by, max. 700 W
Dimensions:	width 430 mm height 110 mm depth 360 mm
Weight:	15 kg

SAM G2 Option: Phono Module

We do offer an excellent phono module for MM and MC cartridges for our integrated stereo amplifier SAM G2.

It is possible to setup load resistance, load capacitance and gain on the phono module to achieve the best match to your phono cartridge based on output and electrical impedance.



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Scientific Breakthroughs: Audionet Key Technologies

Audionet-Ultra-Linear-Amplifier ULA

Audionet's worldwide respected and award-winning ULA (Ultra Linear Amplifier) technology is of fundamental importance for our outstanding technology. This highly complex circuit topology, initially conceived with medical engineering in mind, delivers metrological results which mark a limit of feasibility. Even under the most severe strain or in other stress situations signal impurities are barely traceable, and the high return loss guarantees that even the most demanding loudspeakers will perform faultlessly up to their utmost limits.

Audionet Operational Amplifier

Audionet operational amplifiers (OP) are used in our devices at most sound-critical parts of the circuit design to deliver the very best tonal results. Usual operational amplifiers, available in different quality and price ranges on the global market, can't satisfy our core demands for perfect sound quality. Even the most expensive ones with the best results on paper aren't perfect. That's why we have designed our own operational amplifier technology. Any single Audionet OP contains at least 86 parts and components, and our topology ensures an impressive gain-bandwidth-product of 1 GHz.

Asynchronous Upsampling

With the D/A conversion we've focused our highest attention on eliminating jitter, the wobbling of digital signal slopes. Jitter faults curtail the sound reproduction in every respect: imaging, stage and depth rendition will be impaired. The conversion is done using Audionet's Intelligent Sampling Technology which guarantees an absolutely flawless recovery of the analogue signal from the digital bit stream. For this purpose the data are sent through a sophisticated, two-stage filtering and decoupling procedure. First the input data are filtered with Audionet's proprietary software using a powerful signal processor and upsampled synchronously. The filters have been designed under audiophile aspects with regard to an optimised transient and frequency response. The thus optimised data are then resolved through an asynchronous upsampling procedure at 192kHz/24bit. Hereby the bit stream is completely isolated from its input clock and its associated jitter. The data are then fed to high-performance converters, which are clocked by special ultra-precision quartz crystals, and individually processed per channel into analogue signals. This method ensures that jitter faults are almost entirely eliminated in the analogue signal. No information gets lost and every bit of information will be processed at the right time, bringing forth an unmatched clarity, room depth and stage imaging.

Double-Precision-Bassmanager and Parametric Equalizer

The digital signal processing is accomplished with efficient signal processors and our proprietary Audionet software which was developed and continuously improved exclusively under audiophile aspects in more than 15 years of painstaking scientific labour.

Audionet Listening Room

Listen and be enlightened!
In Audionet's quite incomparable listening room.

The double precision bass management uses a 48bit resolution at all sampling frequencies. Even the very lowest frequencies are therefore precisely reproduced and accurately processed. The bass manager offers freely selectable cutoff frequencies, filter Q factors and subwoofer phases. Thus you can perfectly integrate your subwoofers into the system and into the room.

The digital parametric equalizer uses Minimum Phase Equalizers (MPE) both for the main channels and subwoofer channels. For each MPE the filter type, frequency, gain and Q factor can be selected within an unusually wide adjustment range and disturbing room interference and tonal annoyances efficiently compensated. In combination with CARMA, our computer aided room acoustics measurement system, it is possible even for non-professionals to reach nearly professional results.

The delay manager has an adjustment range of up to 7 m and automatically calculates the delay times from the distances.

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Reference

Stereo, Germany:

"And then something very rare happens: the composition begins to 'float', the music comes alive and can truly be experienced. The high-technology of the unit is forgotten, disappearing in a mist of pure naturality. ... There is no question about it: the SAM G2 is top notch heavyweight; champion of all the price classes."

What HiFi, England:

"This is an impressing product, one of the best constructed amplifier we have ever seen. ... Only few rivals can reproduce deep frequencies with such control and resolution. ... it is the articulation and the rapidness, that points out the SAM in this section. ... Audionet's SAM is a deeply impressing main amplifier."

i-fidelity.net

"With the addition G2 to its name, this unit numbers amongst the most tonal amplifiers on the market. ... Above all good characteristics is its impressive tonal quality, especially the enormous degree of musicality. The performance of the SAM G2 leaves no-one untouched; its strength of expression reminds us of significantly more expensive amplifiers. The SAM G2 is i-fidelity.net's must-beat unit."

Video, Domácí, Kino, Czech Republic

"The integrated amplifier Audionet SAM G2 is a consequently build analogue hifi-amplifier, with contemporary design and a perfect sound reproduction."

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Audionet

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STERN

The Nuclear Option

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The Machine

Designed by German design legend Hartmut Esslinger of Cupertino fame, our new über-performance preamp STERN combines Audionet's unique electronics, stratosphere version, with a design quality that has not been seen in the realms of highenddom before.

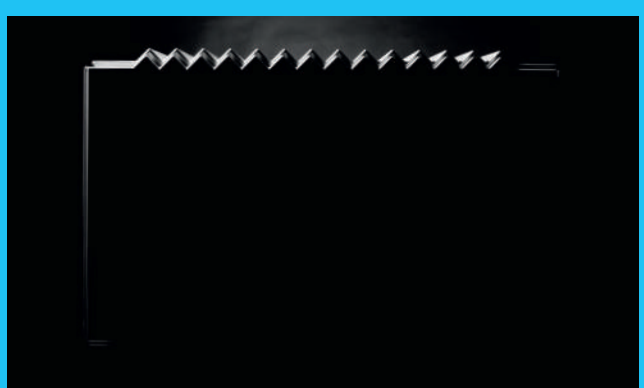
The patented Floating Pane Design encorporates the ultimate audiophile qualities.

The Science

- Magnetically and capactively optimized circuit and device design without any ferro-magnetic materials.
- Floating Pane Design for optimal resistance against microphonic effects and temperature stability.
- The floating panels of the body are resonance-optimized by pads on an aluminum frame.

One amp to rule them all – STERN rises high above anything, anywhere – even our serial show winner PRE G2 (2015 "best sound" at RMAF, AXPONA, T.H.E.SHOW and HIGHEND).

- Mounting and bolted assembly of transformers made of stainless steel.
- Double mono layout of circuitry and power supply for maximum channel separation.
- Air Flow Design circuit boards for an optimum of cooling and stable quiescent currents.
- Galvanic separation of all analog circuits by opto couplers.



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- The input and output sections as well as the volume control are implemented using enhanced, discrete Audionet operational amplifier modules with state-of-the-art mica capacitors.
- Rhodium Cinch jacks by Furutech.
- Volume controller on a double ball-bearing axis and with magnetic ratchet and optical sensing.
- Volume controlled by electronic switches and real-time linearized precision resistor network.
- DC coupled with no sound diminishing capacitors or coils, shortest signal paths.
- One separate transformer per channel for the positive and negative half wave, leading to the perfect power supply.
- Four encapsulated and decoupled 50 VA toroid transformers.
- Main power supply capacitors 22,000 µF, optimized for very low impedance and made with silk dielectric.
- Total capacitance of 176,000 µF.
- Microprocessor control with separate power supply monitor and control of all functions, informing the user on a high resolution display.
- By-Pass mode for integration into home cinema systems.
- Audionet Link outputs for the remote control of further Audionet devices.
- User definable names for each input, input levels adjustable for each input.
- User selectable function to remove DC levels from signal sources.
- Rhodium fuse.

Function

Microprocessor controlled Ultimate Linear Preamplifier.

Technical Data

Frequency response:	0 – 2,200,000 Hz (-3 dB), DC coupled 0.3 – 2,200,000 Hz (-3 dB), AC coupled
THD + N:	<-104 dB @ 20 kHz <-116 dB @ 1 kHz
SNR:	> 123 dB, 4 V_{RMS} input
Channel separation:	> 144 dB, 20 – 20,000 Hz
Output impedance:	24 Ω real (Cinch line) 48 Ω real (XLR)
Output current:	max. 60 mA
Mains:	220..240 V / 50..60 Hz or 110..120 V / 50..60 Hz
Power consumption:	< 0.5 W stand by, typ. 100 W
Dimensions vertical:	width 270 mm height 500 mm depth 505 mm
Dimensions horizontal:	width 450 mm height 320 mm depth 505 mm
Weight:	38 kg

Finish

Colours:
Silver or black

Display:
Light or dark color TFT

Orientation:
Vertical or horizontal


audionet
3 - Line Input
Volume
-45 dB
Menu
Options
Mute
Input
Info


3 - Line Input
Volume
-45 dB
Input
Info
Mute
Menu
Options

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In- and Outputs

Inputs:	4 pair Cinch line, Rhodium (Furutech) 2 pair XLR balanced, gold plated (Neutrik) 1 D Sub 9 serial port (control only) 1 SMA for WLAN (control only)
Outputs:	2 pair Cinch line, Rhodium (Furutech) 1 pair Cinch inverted, Rhodium (Furutech) 2 pair XLR balanced, gold plated (Neutrik) 2 Audionet Link, optical 1 connector, gold plated, for additional earth connection

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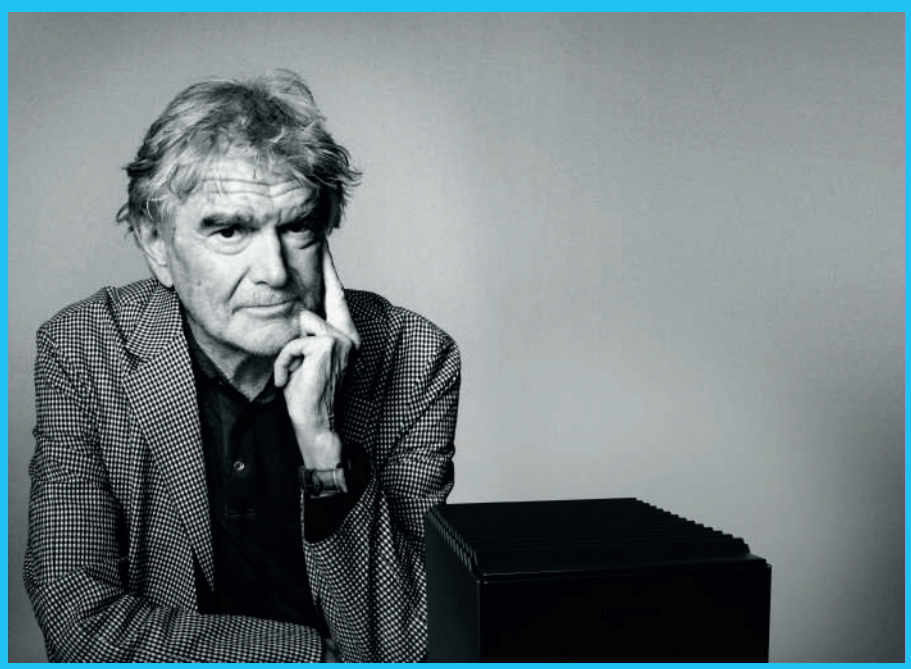

Designed by Hartmut Esslinger.

HANDMADE
IN BERLIN,
GERMANY

Sources
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ART G3

Integrated Amplifiers
WATT
SAM G2

Preamplifiers
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PRE I G3
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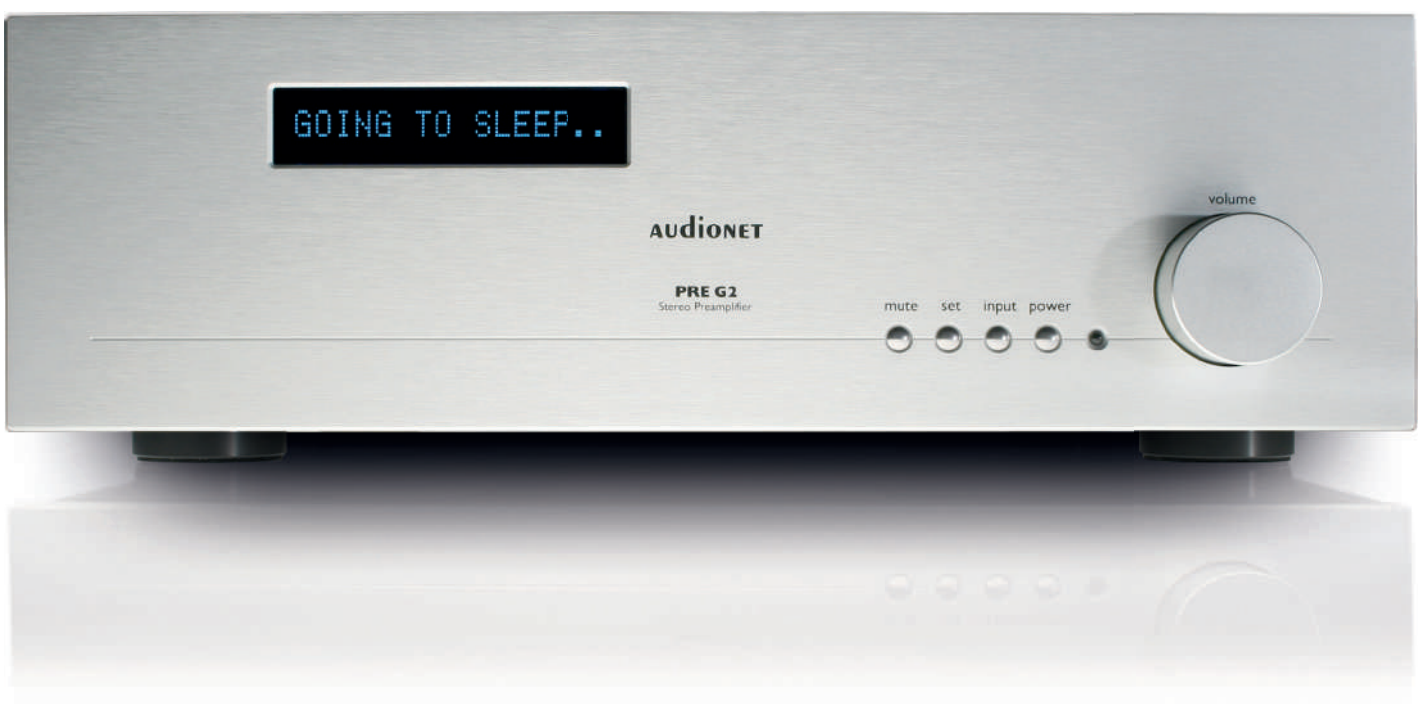
PRE G2

Revolutionary Resolution



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Scientific magic.

Revolutionary Resolution

You would be hard pressed to find a more competent preamplifier anyplace on this planet. This pretty much sums up the PRE G2 in a nutshell. As for what it is capable to do to and with music – words fail us. But fortunately not the knowing members of the press.

> "... real world-class performance without compromise ..."
>
> (Positive Feedback)

There are not that many things in this world you could justly qualify as being the optimum of their respective category. The epitome of what human beings can achieve with maximal effort at a given moment in time and space. To listen to or even own something falling in this category ranks among the more memorable experiences we can have on this earth. One can very well exist outside of the reality distortion field these things project. But there are many people who – once they had an epiphany like this – understandably prefer not to.

> "... More soul! Top to bottom. ..."
>
> (AVShowrooms)

No Compromise Whatsoever

The PRE G2, our uber-reference preamplifier, is simply the richest source of pure sound imaginable. With maximum resolution and total freedom from coloration, rough- and fine-dynamical precision and stunning spatial accentuation, the PRE G2 reproduces music in all its natural texture and abundance.

Compromise is a concept foreign to the PRE G2. Benefitting from the fruits of our cutting-edge research and development, the Audionet engineers devised and tested every detail with painstaking accuracy. The circuitry concept is state-of-the-art, the standard of assembly is flawless, and every component was selected meticulously. As nothing else satisfies our requirements, we manufacture our own operation amplifiers, pulse transmitters and signal cables for the PRE G2.

The Volume is regulated with an electronic precision resistance network that linearizes in real time. Signal-carrying and controlling functions are optically separated. Input and output circuits are immune to negative influences from connected equipment. Thus the PRE G2 has re-defined the bounds of the possible. Noise, distortion and crosstalk are practically eliminated. All information is presented on a large display, every function is remotely controllable.

PRE G2, the definitive answer to the pre-amplifier question. Or, to say it in the words of Lukretius: Man can understand the nature of things.

Cream of the Crop

Every sound-critical point in the Pre G2 is fitted exclusively with the finest components available worldwide, many of which are custom-made for Audionet. The selected filter capacitors, for example, or the bulk of our high-audiograde electrolyte capacitors with a dielectric made of silk. We fit mica capacitors, insert selected high-voltage foil capacitors and use high-quality silver-gold alloys for our internal wiring.

Architecture

The double mono set-up guarantees complete channel separation. SMD miniature technology optimizes the high frequency properties, and the magnetically and capacity-optimized chassis and circuit prevents interference. Controlling and signal processing units are optically decoupled to prevent feedback on the source signal. That no electromechanical elements were used underlines the pains taken to leave the music signal as untouched as possible. The volume is regulated by electronically switched precision resistors. The chassis is non-sensitive to microphonic effects.

Every channel has a dedicated encased 100 VA toroid core transformer, two special audio capacitors with 41,000 µF and fast, discrete regulators to ensure a stable supply voltage. Additionally the voltage is smoothed locally by 12 discrete regulators to each channel. The control unit has its own power supply.

All operational amplifiers in the signal path are discrete and optimized. The 10 operational amplifier modules have a gain-bandwidth product of 1.5 GHz. The input operational amplifiers have almost infinite input impedance and a constant capacity. As a result, they do not load the signal source.

The signal and ground of the inputs are switched via gold-coated precision relays. The output operational amplifiers are class-A amplifiers with high bias current and are non-sensitive to power amplifier reflux.

Comfort

A microprocessor controls and regulates all functions and informs the user via a dimmable display. The inputs can be named, and different input signal levels corrected. Other devices can be switched on via Audionet link. All functions can be controlled remotely. Source signals containing DC components can be compensated for.

Finish

Front panel:
Brushed aluminium, black anodized, light grey printing
Brushed aluminium, silver anodized, black printing

Display:
Red or blue

Cover and sides:
Brushed aluminum, black anodized

Chassis:
Sheet-steel, black varnished

AUDIONET

Scientific magic.

Function

Microprocessor-controlled reference preamplifier.

Special Features

- Chassis and circuit design magnetically and capacitively optimized
- Double mono construction
- Controlling and signal processing units are optically decoupled
- Electronically switched, real time linearised high precision resistor network for volume and balance
- Completely DC-coupled, no capacitors in the signal path
- Two individual encapsulated 100 VA toroid core transformer
- Special audio capacitors with together 164,000 µF capacity
- Input buffer with a virtual infinite input impedance
- Extra power supply for the control unit
- Discrete realized Audionet output drivers
- Home cinema mode for home cinema integration
- Chassis insensitive against microphonic effects (made of massive aluminium)
- Remote activation over Audionet Link (optical waveguide)
- Mains phase recognition
- Audionet Remote Control RC1

In- and Outputs

Inputs:	5 pair Furutech RCA line, gold-plated 1 pair XLR symmetric, gold-plated
Outputs:	1 pair Furutech RCA line, gold-plated 1 pair Furutech RCA inverting, gold-plated 2 pair XLR symmetric, gold-plated 1 pair Furutech RCA Monitor, gold-plated
Additional earth connection:	1 screw, gold-plated

Technical Data

Frequency range:	0 – 2,000,000 Hz (- 3 dB), DC-coupled 2 – 2,000,000 Hz (-3 dB), AC-coupled
SNR:	> 120 dB
THD + N:	< -102 dB for 20 kHz (df: 0-80 kHz) < -114 dB for 1 kHz (df: 0-20 kHz)
Output impedance:	22 ohms
Output current:	max. 60 mA
Power consumption:	max. 50 W
Mains:	120 V or 230 V, 50...60 Hz
Dimensions:	width 430 mm height 140 mm depth 420 mm
Weight:	15 kg

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Scientific magic.

Scientific Breakthroughs: Audionet Key Technologies

Audionet-Ultra-Linear-Amplifier ULA

Audionet's worldwide respected and award-winning ULA (Ultra Linear Amplifier) technology is of fundamental importance for our outstanding technology. This highly complex circuit topology, initially conceived with medical engineering in mind, delivers metrological results which mark a limit of feasibility. Even under the most severe strain or in other stress situations signal impurities are barely traceable, and the high return loss guarantees that even the most demanding loudspeakers will perform faultlessly up to their utmost limits.

Audionet Operational Amplifier

Audionet operational amplifiers (OP) are used in our devices at most sound-critical parts of the circuit design to deliver the very best tonal results. Usual operational amplifiers, available in different quality and price ranges on the global market, can't satisfy our core demands for perfect sound quality. Even the most expensive ones with the best results on paper aren't perfect. That's why we have designed our own operational amplifier technology. Any single Audionet OP contains at least 86 parts and components, and our topology ensures an impressive gain-bandwidth-product of 1 GHz.

Asynchronous Upsampling

With the D/A conversion we've focused our highest attention on eliminating jitter, the wobbling of digital signal slopes. Jitter faults curtail the sound reproduction in every respect: imaging, stage and depth rendition will be impaired. The conversion is done using Audionet's Intelligent Sampling Technology which guarantees an absolutely flawless recovery of the analogue signal from the digital bit stream. For this purpose the data are sent through a sophisticated, two-stage filtering and decoupling procedure. First the input data are filtered with Audionet's proprietary software using a powerful signal processor and upsampled synchronously. The filters have been designed under audiophile aspects with regard to an optimised transient and frequency response. The thus optimised data are then resolved through an asynchronous upsampling procedure at 192kHz/24bit. Hereby the bit stream is completely isolated from its input clock and its associated jitter. The data are then fed to high-performance converters, which are clocked by special ultra-precision quartz crystals, and individually processed per channel into analogue signals. This method ensures that jitter faults are almost entirely eliminated in the analogue signal. No information gets lost and every bit of information will be processed at the right time, bringing forth an unmatched clarity, room depth and stage imaging.

Double-Precision-Bassmanager and Parametric Equalizer

The digital signal processing is accomplished with efficient signal processors and our proprietary Audionet software which was developed and continuously improved exclusively under audiophile aspects in more than 15 years of painstaking scientific labour.

Audionet Listening Room

Listen and be enlightened!
In Audionet's quite incomparable listening room.

The double precision bass management uses a 48bit resolution at all sampling frequencies. Even the very lowest frequencies are therefore precisely reproduced and accurately processed. The bass manager offers freely selectable cutoff frequencies, filter Q factors and subwoofer phases. Thus you can perfectly integrate your subwoofers into the system and into the room.

The digital parametric equalizer uses Minimum Phase Equalizers (MPE) both for the main channels and subwoofer channels. For each MPE the filter type, frequency, gain and Q factor can be selected within an unusually wide adjustment range and disturbing room interference and tonal annoyances efficiently compensated. In combination with CARMA, our computer aided room acoustics measurement system, it is possible even for non-professionals to reach nearly professional results.

The delay manager has an adjustment range of up to 7 m and automatically calculates the delay times from the distances.

AUDIONET

Scientific magic.

Reference

AVShowrooms

"More soul! Top to bottom. This is the first time I've ever heard a KEF Blade – disappear. Any given day I would chose one."

Area DVD:

"The three adjectives 'easy', 'airy' and 'fleet-footed' don't describe a new pizza dough, but characterize the high frequency reproduction of the test equipment in the best way. ... Although the required clarity, fine design as well as sound transparency provide best performances and bring unimaginable musical details to life, no inappropriate aggressiveness disturbs the connection between men and technology. Even in the mid-range, the highly precise rendition proves to be a source of pleasure of the special sort. Due to the already described characteristics regarding the tonal balance and the fast modelling result a sound reproduction of realistic physical existence with impressive detail depth. To put it in a nutshell, one can certify without exception best performances to the bass representation, where in each aspect of rendition absolute benchmarks are set."

Homevision:

"Strength paired with perfect control; Actio and Reactio as if Isaac Newton himself had created the components. ... Unquantifiable sensual enjoyment opening a cosmos of sound colours and facets; speed paired with control. Audionet products are not mere interpreters; they portray the truth, transporting emotions without detours, stages or bows. ... A new reference has been established."

Stereo, Germany:

"The sparse group of the super-preamplifier has a new shooting star as member. I have never heard a better preamplifier from Germany. And actually no better one at all. His frankness and dynamic directness make him a hot tip"

en.audionet.de

Audionet

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Sources
PLANCK
VIP G3
ART G3

Integrated Amplifiers
WATT
SAM G2

Preamplifiers
STERN
PRE G2
PRE I G3
PAM G2

Power Amplifiers
HEISENBERG
MAX
AMP
AMP I V2

Network Components
DNP
DNA 2.0
DNA I
DNC

Power Supplies
AMPERE
EPX
EPS G2

AUDIONET

Scientific magic.

PRE I G3

A Wide Grin at the Touch of a Button

This is a scientific paper.
For holographic images and optimal resolution please do visit your audionet expert dealer.
Thanks very much. We're glad you are with us.

AUDIONET

Scientific magic.

A Wide Grin at the Touch of a Button

The Audionet PRE I G3 combines opulent equipment with a brilliant sound. It is difficult to describe the sound it produces: spacious yet subtle, transparent and sleek, powerful and unshakeable. The PRE I G3 plays music in all its facets naturally and effortlessly.

With six inputs and two outputs which can be labelled with individual names, a bypass mode for integration into a home cinema system, two subwoofer outputs, level offset for the inputs, a headphone output, monitor switching for accessories, automatic mains phase recognition and trigger output, two Audionet links and an additional earth connector. Optionally, the PRE I G3 can be extended with our high-quality phono preamplifier board.

The technically unique complex circuitry is radically realized. Distortion and noise are almost non-detectable across the entire frequency and dynamic range. With a modern assembly, shortest signal paths and a capacitively and inductively optimized construction provide optimal

> “... Crème de la Crème of high-end amplifiers ...”
>
> (i-fidelity.net)

high-frequency characteristics. Volume and balance adjustment is performed using a unique, electronically switched precision resistance network which is realized in real time, ensuring a constant dynamic and distortion-free operation across the entire control range.

We use only selected high-quality components such as the fast discrete voltage regulator with a low-noise gallium arsenide precision voltage references, high audio-grade electrolyte capacitors with a silk dielectric and selected high-current film capacitors with the lowest possible loss angle and gold-plated silver internal cabling.

The unit is controlled using a high-performance microcontroller with separate power supply. It enables operator-friendly access of comprehensive functions. A large display shows all the operating states and settings.

Architecture

In order to optimize the high-frequency attributes, circuit size has been radically reduced. The remaining signal paths are kept to a minimum, and are free of sound-critical components such as coils or chokes. Gold-coated precision-relays switch the input signal and earth. Ground wires run in a star shape towards one central point. The design has been capacitatively and inductively optimized. All in all, distortions have been reduced to a barely detectable minimum.

The input buffer is a cascoded, bootstrapped, monolithic double-FET, offering virtually infinite input impedance. This unique concept makes the PRE I G3 independent of unwanted influences extra to the source. Only the pure music signal will be processed. A DC-coupled driver stage amplifies the signal distortion free for the following circuitry. Volume and balance are set by an electronically switched, real time linearized high precision resistor network. The output driver combines high-speed bipolar opamps with discrete realized A/B-drivers with high bias currency. The voltages for the input and output stage are additionally smoothed by two discrete and ultra-fast bipolar regulators.

An encapsulated 50 VA toroid core transformer and high audiograde electrolyte capacitors with a capacity of 30,000 µF provide the supply voltage. These voltages are smoothed by two fast bipolar regulators.

> “... outstanding finish and very agile sound. A real reference ...”
>
> (Stereoplay, Germany)

Exclusive Materials

Every sound-critical point in the Pre I G3 is fitted exclusively with the finest components available worldwide, many of which are custom-made for Audionet. The selected filter capacitors, for example, or the bulk of our high audiograde electrolyte capacitors with a dielectric made of silk. We use mica capacitors, insert selected high voltage foil capacitors and deploy high-quality silver-gold alloys for our internal wiring.

> "... one of the best solutions for a preamplifier at all ..."
>
> (AV Extreme, Greece)

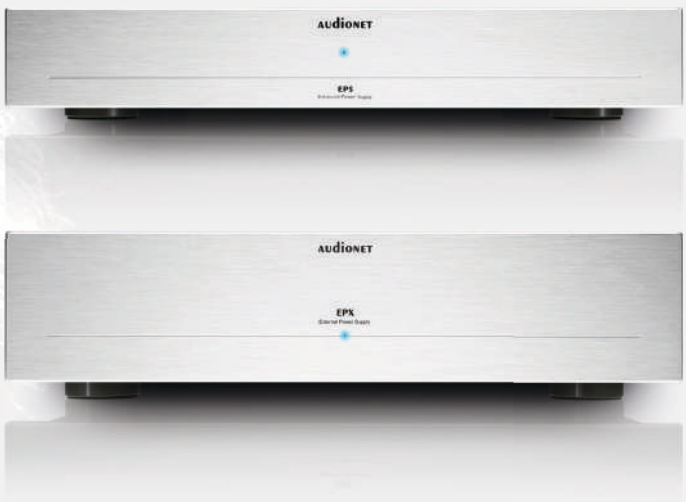
Features

A flashable microprocessor controls and regulates the whole system. The digital section has its own power supply. The digital control is physically and electrically separated. The software of the PRE I G3 allows many new and comfortable functions. For example the two subwoofer outputs can be used as left and right signal for to subs or as summed signal of both channels for one subwoofer. The headphone output can be switched on and off electronically, the home cinema mode offers a by-pass function to integrate a home cinema system. Six signal sources, two power amplifiers and one recorder can be connected. Furthermore a high-quality monitor loop is present. Other devices can be remotely activated via an Audionet link. A two-row display provides information about the system state. The inputs are nameable and their input sensitivity can be modified for different signal source levels.

Pure in sound, superior in function, clear in form – the PRE I G3 preamplifier combines outstanding versatility with musical charm.

Optional: External Precision Power Supply EPS G2 or EPX

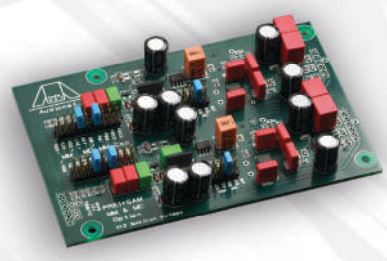
Our high performance external precision power supplies EPS G2 or EPX are improving the qualities of connected equipment tremendously indeed.



Optional: Phono Module

We do offer an excellent phono module for MM and MC cartridges for our preamplifier Pre I G3.

It is possible to setup load resistance, load capacitance and gain on the phono module to achieve the best match to your phono cartridge based on output and electrical impedance.



Finish

Front panel:
Brushed aluminium, black anodized, light grey printing
Brushed aluminium, silver anodized, black printing

Display:
Red or blue

Top cover:
Brushed Aluminum, black anodised

Chassis:
Sheet steel, black varnished

AUDIONET

Scientific magic.

> "...The dynamic range is unlimited. They exceed the magic border. ..."
>
> (Sat Audio Video, Poland)

Function

Microprocessor controlled preamplifier.

Special Features

- Input buffer with a virtual infinite input impedance
- Electronically switched, real time linearised high precision resistor network for volume and balance
- Volume adjustment for each channel
- Discrete realized output drivers
- Signal path and controller optically separated
- Completely DC-coupled, no capacitors in the signal path
- Optional AC-coupled via active DC-servo
- Home cinema mode for home cinema integration
- Two subwoofer outputs
- Dynamic volume control
- Headphones output electronically switchable
- Monitor loop
- Trigger output
- Mains phase recognition

In- and Outputs

Analogue audio inputs:	5 pair RCA line, gold plated, teflon insulated 1 pair XLR symmetric, gold plated 1 pair RCA Monitor in, gold plated, teflon insulated
Analogue audio outputs:	1 pair RCA line, gold plated, teflon insulated 1 pair XLR, gold plated 2 RCA Subwoofer, gold plated, teflon insulated 1 pair RCA Record out, gold plated, teflon insulated 1 pair RCA Monitor out, gold plated, teflon insulated
Additional in- and outputs:	2 optical Audionet Link out (TosLink) for remote operation, Link 2 electronically switchable 3.5 mm socket trigger output with 12V switching voltage (optional 5V) 5-pole precision socket for optional power supply EPS 6.3 mm socket for headphones, electronically switchable screw for additional grounding, gold plated

Technical Data

Bandwidth:	0 – 3,000,000 Hz (-3 dB), DC-coupled
THD+N:	-110 dB @ 20 Hz to 20 kHz @ Vin=4.5 Vrms
SNR:	120 dB @ 1kHz @ Vin, max
Slew Rate	10 V/µsec
Channel separation:	channels: 100 dB @ 20 kHz inputs: 108 dB @ 20 kHz
Input voltage:	max. 5 Vrms
Input impedance:	line 82 kOhm real XLR 15 kOhm real
Output voltage:	line max. 8 Vrms XLR max. 16 Vrms headphones max. 8Vrms (max. gain 6dB)
Output impedance:	line, XLR 22 Ohm real headphones 47 Ohm real
Mains:	220…240 Volt / 50…60 Hz or 110…120 Volt / 50…60 Hz
Power consumption:	< 1 W stand by, max. 50 W
Dimensions:	width 430 mm height 70 mm depth 310 mm
Weight:	6 kg

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Scientific magic.

Scientific Breakthroughs: Audionet Key Technologies

Audionet-Ultra-Linear-Amplifier ULA

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Asynchronous Upsampling

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The delay manager has an adjustment range of up to 7 m and automatically calculates the delay times from the distances.

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Scientific magic.

Reference

i-fidelity.net:

"You sit in your armchair, listen to Pink Floyds 'The Wall' and be pleased about the helicopter (the whistling of the helicopters turbines brings also 30 years after appearance of the album still large pleasure), and then you get suddenly goosebumps. … The Audionets deal regular with amplifiers of the competition; they need however in best Klitschko manners rarely more than three rounds, in order to knock the opponent out. … There's simply nothing to beef about: plenty of power, smallest distortions and absolutely first-class signal-to-noise ratios. These two Audionets belong to the Crème de la Crème of high-end amplifiers."

Stereoplay, Germany

"Universal, microprocessor-controlled preamplifier with outstanding finish and very agile sound. A real reference."

Sat Audio Video, Poland:

"PRE I G2 / EPS open the door to musical dynamic. The dynamic range is unlimited. They exceed the magic border. Audionet PRE I G2 / EPS sound warm, cold, soft, analytic, bright, dark. One can find everything that defines music."

Stereo, Germany

"Sometimes the evolution has no mercy: The new PRE I G2 is actually in every respect better than his certainly good predecessor. … The G2 plays with grip, precisely dry and lively and marks within his class the state-of-the-art."

en.audionet.de

Audionet

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IDEKTRON Unternehmens- und
Technologieberatung GmbH & Co.
Entwicklungs- und Produktions-KG

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Sources
PLANCK
VIP G3
ART G3

Integrated Amplifiers
WATT
SAM G2

Preamplifiers
STERN
PRE G2
PRE I G3
PAM G2

Power Amplifiers
HEISENBERG
MAX
AMP
AMP I V2

Network Components
DNP
DNA 2.0
DNA I
DNC

Power Supplies
AMPERE
EPX
EPS G2

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PAM G2

Making Vinyl Fly

This is a scientific paper.
For holographic images and optimal resolution please do visit your audionet expert dealer.
Thanks very much. We're glad you are with us.

AUDIONET

Scientific magic.

Making Vinyl Fly

With the unique circuit, function and operating concept of the new PAM G2, Audionet has once again made a seminal technological advance. The new PAM G2 is an absolutely consistent High Performance system; the first phono pre-amplifier in the world to which not only two record players / pick-ups can be connected, but which includes an external, precision mains adaptor for a precise and ultra-stable current supply and a controller allowing the remote-control of all functions and the display of all settings on a large display. For the first time ever, we have enabled the remote selection of inputs; each input can be controlled and modified separately for amplification, input resistance and capacity, even during operation.

With its uncompromising demands for the best sound, engineering, flexibility and ease of operation, the new PAM G2 represents the first choice for all true connoisseurs.

The new PAM G2 plays records with a striking degree of informational diversity, revealing even the smallest of nuances with full emotion, convincing with its exquisite naturality and faithfulness to detail. The reproduction of fundamental low produces a deep-reaching sound and an authentic rhythm. The PAM G2 generates an astonishingly wide tonal range, producing a superbly sophisticated musical experience with the greatest degree of reality in which music is not played, but brought to life.

> "... The microscopic modulations of the record tracks that PAM and EPS make audible have not been heard before ..."
>
> (Stereo, Germany)

> "... on my very short list of true first-rank world-class reference systems ..."
>
> (Positive Feedback, USA)

With settings for capacity, input resistance and variable amplification, the PAM G2 can be adapted to all high-end pick-ups. Its gilded parallel connections produce exceptional connectivity values. Operation with a precision external mains adapter EPS G2, EPX or controller EPC means the sound production of the PAM G2 can be extended even further.

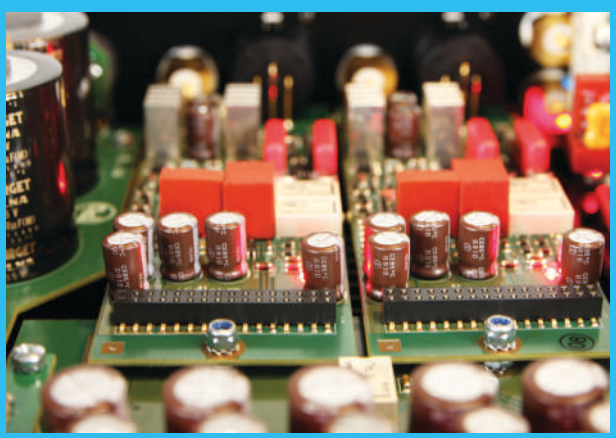
Mains Adapter

The mains adaptor consists of a large 100 VA toroidal transformer and selected audio condensers with a total capacity of 40,000 µF, both extremely fast and impulse-resistant, thus guaranteeing extremely clean sifting. The operating voltage is smoothed and stabilized by a total of 14 fast-working, discrete, MOSFET regulators, cooled via a common aluminium bar guarantee.

> "... balance between musical analyses and exuberant enthusiasm ..."
>
> (Image HiFi Germany)

Amplification and De-Emphasis

The often only weak (amounting often to only some microvolts) pick-up signal is equalized and amplified in an elaborate two-stage procedure.



The Primary amplification is performed in the transistor input stage by our double mono construction, fitted with double FET inputs. With no error current, these provide unlimited input resistance, and under conditions of minimal constant capacity have an almost unlimited input resistance.

Every channel uses two specially adjusted Audionet operation amplifiers integrated directly in the input topology. Every Audionet operation amplifier is discretely constructed from 86 individual components characterized by a unique amplification broadband product of 100 MHz.

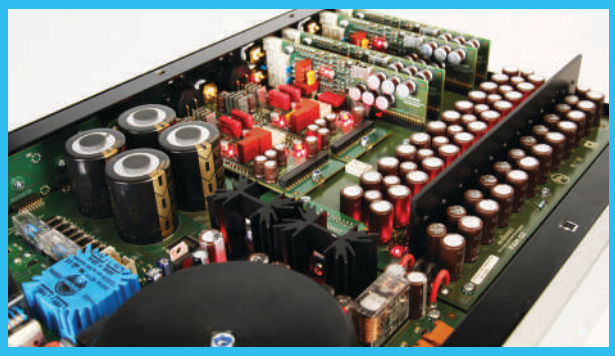
Input switching occurs between the first and second amplification stage using the amplified and stabilized signal. This extremely elaborate concept avoids all negative audio effects on the switching.

Secondary equalization and amplification is performed in the double mono configured output stage, both of which are equipped with a discrete Audionet operation amplifier integrated in the driver circuit. Their drivers integrate a class-A circuit with high standby current, designed for operation with long cables configured both coaxially and symmetrically.

The PAM G2 mutes its outputs during switching so as to avoid any disruptive popping or snapping noises. Moreover, a safety switch monitors the supply voltage and shuts down the output signal quickly before any interference reaches the loudspeaker. The new PAM G2 issues a warning before any inverted or distorting network connection which could corrupt the sound.

This elaborate and consistently-implemented concept makes the PAM G2 a standard-setter in terms of accuracy and is able to process even the weakest pick-up signal, providing the technical requirements for its phenomenal sound potential.

The new PAM G2 is Audionet's statement for all phono lovers: an uncompromising concept in a radical realization. Multifunctional and upgradeable, it produces a world-beating sound with unique operation.



Finish

Front panel:
Brushed aluminium, black anodized, light grey printing
Brushed aluminium, silver anodized, black printing

LED:
Red or blue

Cover:
Brushed Aluminium, black anodized

Chassis:
Sheet steel, black varnished

AUDIONET

Scientific magic.

The PAM G2 System

PAM G2 Basic Unit 1

Fitted with one phono input, the PAM G2 is suited to all users of record players and pick-ups. Amplification, input resistance and capacity are set on the rear of the device using three turn switches. The PAM G2 can also be fitted with a second input.

PAM G2 Basic Unit 2

Fitted with two phono inputs, the PAM G2 is suited to all users of two record players and pick-ups. Amplification, input resistance and capacity are set for each input on the rear of the device using six turn switches.

Upgrade Using the External Precision Mains Adaptor Audionet EPS G2 or EPX

The EPS G2 and EPX are external precision voltage sources developed to process low-level analogue signals. Providing an exceptionally precise and load-independent supply voltage, it actively and effectively decouples the PAM G2 from all the negative influences of a public electricity supply.

Separation of the mains adaptor from the device prevents disruption of the highly-sensitive signal processing by magnetic, electrical or mechanical emissions from the internal mains adaptor. The EPS G2 as well as the EPX effect a near-palpable increase in stability and calm, spatial illumination and tonal purity, playing music with greater naturality and expression.

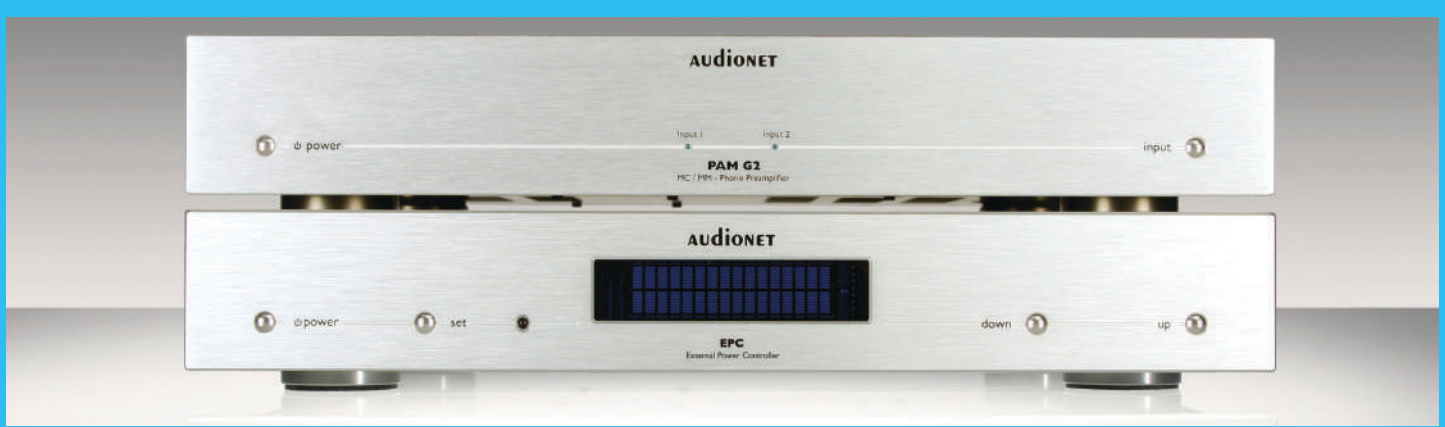
Upgrade Using the External Precision Mains Adaptor Controller Audionet EPC

As with the EPS G2 or the EPX, the EPC is an external precision voltage source with the same characteristics described above. The EPC also comes equipped with a high-performance remote-controlled flash micro-control unit performing all the functions of the PAM G2: on-off switch, input selection, amplification setting, input resistance and capacity. All parameters can be set during operation. It is controlled via a purely analogue signal. We have succeeded in decoupling the PAM G2 from the digital controller, eliminating digital sources of interference.

The EPC is fitted with a large vacuum fluorescent 2 row, 16-character display which providing clear-text information regarding all its operating states and settings. Connected to the PAM G2 via a 7 and 40 pole connection cable, the EPC is subject to remote control via the programmable Audionet system remote control Harmony Ultimate One.

Please note:

If you consider on purchasing a PAM G2 System with the external mains adapter controller EPC, the PAM G2 must be bought together with the EPC in first place, because the PAM G2 must be equipped with the optional 40 pole input to work with the EPC!



AUDIONET

Scientific magic.

Function

Remote-controllable phono pre-amplifier for two record players / pickups with a variable input resistance and variable capacity and amplification.

Special Features

- Connection of up to two record players / pick ups
- Universal adjustment without needing to open the device
- Completely remote-controllable via the external controller (precision mains adaptor) EPC
- Active 2-stage RIAA equalization
- No integrated operational amplifier and condenser in the signal path
- 14 fast, pure and discretely realized MOS controllers for battery-similar current provision
- 100 VA screened toroidal transformer, 40,000 µF sifting capacity
- Class A output stage
- Complete DC coupling, subsonic filter via active DC coupling
- Double FET inputs, no error current

Audionet Listening Room

Listen and be enlightened!
In Audionet's quite incomparable listening room.

In- and Outputs

Audio inputs:	2 pair WBT RCA sockets, gold plated, teflon insulated 2 pair WBT RCA sockets, gold plated, teflon insulated, for additional impedance adjustment
Audio outputs:	2 WBT RCA sockets, gold plated, teflon insulated 2 XLR sockets (Neutrik), gold plated
Additional:	7-pin input for Audionet EPS G2/EPX (external power supply) 2 screws for earth connection, gold plated
Optional:	40-pin input for EPC connection (only for EPC-factory-supplied PAM G2 Systems!)

Technical Data

Frequency response:	40 – 30,000 Hz (+/- 0,2 dB) 18 – 80,000 Hz (+/- 1,0 dB)
Subsonicfilter:	4th order high-pass, fg = 8 Hz
Amplification:	38 dB, 48 dB, 58 dB, 68 dB (for 1 kHz) selectable at the rear or the EPC's remote control
Input resistance:	100 Ohm, 150 Ohm, 470 Ohm, 1 kOhm, 23 kOhm, 47 kOhm, 69 kOhm, selectable at the rear or the EPC's remote control
Input capacity:	100 pF, 200 pF, 320 pF, 420 pF selectable at the rear or the EPC'sremote control
SNR:	< -103 dB @ 1 kHz (Gain = 38 dB) < -83 dB @ 1 kHz (Gain = 58 dB)
Output resistance:	RCA 22 Ohm real XLR 94 Ohm real
Output voltage:	6 V @ 58 dB amplification
Mains:	230 V, 50...60 Hz or 115 V, 50...60 Hz
Power consumption:	Stand by < 0,5 W max. 40 W
Dimensions:	width 430 mm height 70 mm depth 310 mm
Weight:	9 kg

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Reference

Positive Feedback, USA:

"We all want gain without pain; the PAM G2 seems constructed to provide it. ... Tonal harmonics were therefore extremely satisfying, with no sense of disjunction or overemphasis. ... As a result, the organic development of the music, regardless of genre or source type, was truly exemplary. ... In fact, the discovery of Audionet was the single biggest audio find that I made in 2014. And it has brought me constant delight since it arrived for review. I would therefore place Audionet on my very short list of true first-rank world-class reference systems that I've had in my listening room. No qualifications; no footnotes; no if's, and's, or buts."

i-fidelity.net:

"Furthermore, a closer investigation of the technical construction shows that we're talking about finest German art of engineering. The PAM G2 is superb technology. ... It is inevitable that the daily test routine will eventually lead to a certain and mostly uniform course. ... However, on very rare occasions even veteran editors are vaulted out of beat by a review device the way the Audionet PAM G2 did in an utterly unexpected manner. ... The new Audionet PAM G2 is a massive surprise in terms of sound. ... For instance, the solidity of its spatial reproduction is impressive, the style of its tonal resolution presumably no more enhanceable and the harmonic energy distribution across all octaves simply sensational. With great authority and clearance to the competition the Audionet PAM G2 takes its seat on the i-fidelity.net reference throne. This is not the first title Audionet could claim, but probably one of the most important. After all the market for phono pres is not exactly that large, and the PAM G2's performance is far beyond what otherwise may well be called a decent result. People who are capable of treasuring the sound of records should get to know the Audionet PAM G2 bombshell!"

en.audionet.de

Audionet

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Germany

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contact@audionet.de

Sources
PLANCK
VIP G3
ART G3

Integrated Amplifiers
WATT
SAM G2

Preamplifiers
STERN
PRE G2
PRE I G3
PAM G2

Power Amplifiers
HEISENBERG
MAX
AMP
AMP I V2

Network Components
DNP
DNA 2.0
DNA I
DNC

Power Supplies
AMPERE
EPX
EPS G2

AUDIONET

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HEISENBERG

Say My Name

This is a scientific paper.
For holographic images and optimal resolution please do visit your audionet expert dealer.
Thanks very much. We're glad you are with us.

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The Machine

Designed by German design legend Hartmut Esslinger of Cupertino fame, our new über-performance power amp HEISENBERG combines Audionet's unique electronics, stratosphere version, with a design quality that has not been seen in the realms of highenddom before.

The patented Floating Pane Design incorporates the ultimate audiophile qualities.

The Science

- Mono power amplifier for absolute channel separation.
- Magnetically and capacitively optimized circuit and device design without any ferro-magnetic materials.
- Floating Pane Design for optimal resistance against microphonic effects and temperature stability.
- The floating panels of the body are resonance-optimized by pads on an aluminum frame.

One amp to rule them all – HEISENBERG rises high above anything, anywhere – even our serial show winner MAX (2015 "best sound" at RMAF, AXPONA, T.H.E.SHOW and HIGHEND).

- Mounting and bolted assembly of transformers made of stainless steel.
- Air Flow Design circuit boards for an optimum of cooling and stable quiescent currents.
- Galvanic separation of all analog circuits by opto couplers.

AUDIONET

Scientific magic.

- Audionet ULA technology (Ultra Linear Amplifier) for real-time linearization of distortions.
- Rhodium cinch jacks and rhodium torque speaker terminals by Furutech.
- DC coupled with no sound diminishing capacitors or coils, shortest signal paths.
- Lossless signal transport via massive, gold-plated copper rails to the speaker terminals.
- No speaker relays.
- Two separate power supplies for device control and detection / monitoring of zero-crossing of mains power.
- Four power supplies for positive and negative power currents, separate for input & driver stage and power stage.
- Two encapsulated und decoupled 50 VA toroid transformers for input & driver stage.
- Two encapsulated and decoupled 1,200 VA toroid transformers for the power stage – ensuring a perfect power supply.
- Low impedance-optimized power capacitors with a total capacitance of 200,000 µF.
- Microprocessor controlled protection circuit with separate power supply, detecting high frequency, DC, overload and overheating.
- Rhodium fuse for mains and secondary side.
- Rhodium mains connector by Furutech.

Finish: Colours silver or black.

Technical Data

Output power:	530 W into 8 Ω 1,050 W into 4 Ω 2,100 W into 2 Ω
Frequency response:	0 – 700,000 Hz (-3 dB)
Damping factor:	> 1,800 @ 10 kHz > 10,000 @ 100 Hz
Harmonic distortion:	k2 typ. -117 dB for 25 W into 4 Ω k3 typ. -123 dB for 25 W into 4 Ω
Intermodulation:	< -110 dB SMPTE 100 Hz : 20 kHz, 4 : 1, 50 W into 4 Ω
THD + N:	> -106 dB @ 1 kHz, 25 W to 700 W into 4 Ω
SNR:	> 125 dB
Filtering capacitance:	200,000 µF
Input impedance:	Line input: 50 kΩ, 33 pF XLR input: 7 kΩ, 66 pF (line to line)
Mains:	220..240 V / 50..60 Hz or 110..120 V / 50..60 Hz
Power consumption:	max. 2,400 W
Dimensions:	width 270 mm height 500 mm depth 490 mm
Weight:	66 kg

Function

Ultimate Linear Mono Power Amplifier.


audionet

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In- and Outputs

Inputs:	1 Cinch line, Rhodium plated, Teflon insulated (Furutech) 1 XLR balanced, gold plated (Neutrik) 1 Audionet Link, optical (TosLink)
Outputs:	2 pair speaker terminals, Rhodium plated, with torque guard (Furutech) 1 Audionet Link, optical (TosLink)

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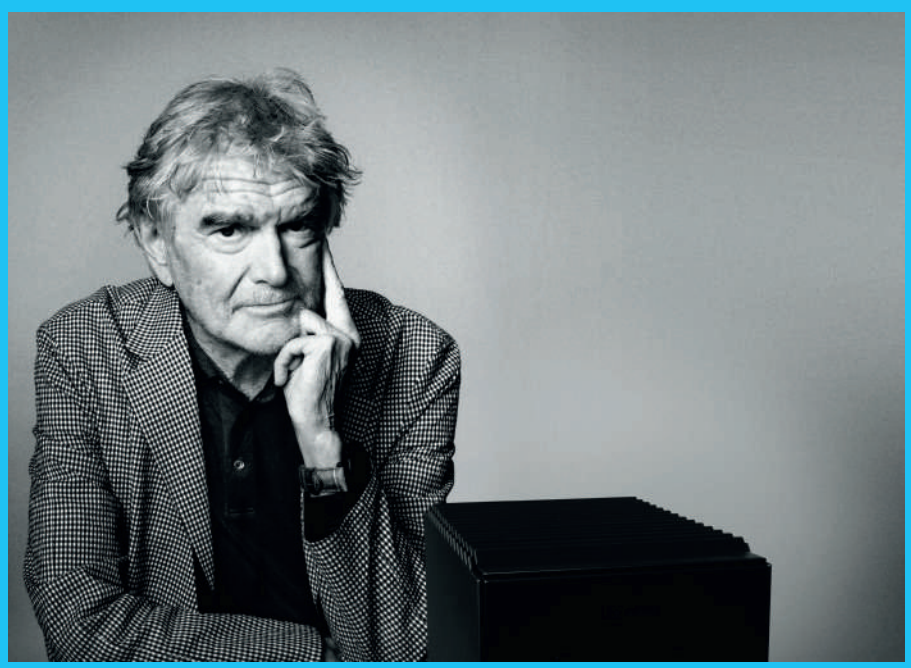

Designed by Hartmut Esslinger.

HANDMADE
IN BERLIN,
GERMANY

Sources
PLANCK
ART G3

Integrated Amplifiers
WATT
SAM G2

Preamplifiers
STERN
PRE G2
PRE I G3
PAM G2

Power Amplifiers
HEISENBERG
MAX
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Network Components
DNP
DNA I
DNC

Power Supplies
AMPERE
EPX
EPS G2

AUDIONET

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MAX

The Über Block Busters

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Thanks very much. We're glad you are with us.

AUDIONET

Scientific magic.

The Über Block Busters

The at the same time diminutive and unsurpassable name of our majestic power amp reference reference MAX doesn't just refer to the physical size of these gigantic mono block(s). But rather merrily evokes the ultimate high performance capabilities nature and our scientists – not exactly in this order – have endowed it with.

Resting on one's laurels is a) not truly comfortable and b) not really satisfying, scientifically speaking. Actually, we do much prefer to push the boundaries of the possible again and again in order to reach better and better results with each and every attempt and generation. It's probably genetic. The Mendel thing. A birth defect German scientists are often born with.

> "... More soul! Top to bottom ...
> Any given day I would chose one ..."
>
> (AVShowrooms, USA)

Our Ultimate Statement Amplifier

The MAX always plays with a both fascinating and formidable ease, stunningly elemental, tonal accuracy and with striking macro- and micro-dynamical precision. Imposing performance goes hand in hand with compelling authority, awesome musicality and technical specifications almost no-one on this planet gets close to.

Our refined amplifier-technology results in a linearity and loudspeaker control not to be found in any other piece of equipment anywhere. Distortion is kept to such a low level that it's almost undetectable even with the most sophisticated laboratory-equipment. In a nutshell: No other amplifier has better loudspeaker control. Plus, the MAX performs so well, that it is very difficult to imagine a situation which it would not master. All this at your fingertips. And with a comprehensive user interface

> "... I have found my next reference ..."
>
> (Positive Feedback, USA)

informing you about all going-ons on a wide format display.

Ultra-Linear-Amplifier

Our MAX mono-blocks represent Audionet's latest internationally acclaimed ULA (Ultra-Linear-Amplifier) technology. This highly complex circuit topology, which we originally invented for medical engineering, delivers results that nudge the boundaries of what is feasible with current measuring techniques. Even under conditions of maximum strain or in other borderline situations, any incidence of signal impurity remains almost undetectable, while the outstanding feedback damping ensures that the loudspeakers crisply perform to the limits of their capacity.

The Cream of the Crop

The efficiency and precision of MAX is such that even the sound properties of components and materials are clearly audible. As a result, every sound-critical point in the MAX is exclusively fitted with the finest components obtainable worldwide, in many cases custom-made for Audionet. Equipped with a silk dielectric, our High Audiograde electrolytic capacitors come from Japan. Our low-loss capacitors are made of mica, a silicate made for us in India and China.

We deploy selected high-current foil capacitors with a minimal loss angle, high-quality silver-gold alloys for our internal wiring and use the very best connector systems available from Furutech. Even the MAX's fuses are made of – gold!

During the manufacturing process of every single mono-block, all the relevant components are re-checked again and again, meticulously measured and then perfectly matched in optimal pairs in order to guarantee optimum performance.

Architecture

To guarantee absolute channel separation, MAX is designed as a mono amplifier. The magnetically and capacitatively optimized assembly of the mono-blocks largely eliminates all feedback from electrical interference as well as from reciprocal influences between the amplification channels during the amplification process. The massive aluminium cabinet eradicates any effects of the dreaded subsonic noise.

In order to optimize its high-frequency attributes and velocity, we indulged in an orgy of minimalization. The signal paths have been kept to a minimum and contain no sound-impairing components such as coils, chokes or power relays.

MAX comes equipped with RCA and XLR inputs, which are electronically switched over gold-plated precision relays. The input stage is configured as a cascaded and bootstrapped differential amplifier with a low-noise, monolithic dual FET, thus electrically decoupling the end amplifiers from the input signal and avoiding harmful interaction with source. A special double cascade decouples the source signal from the driving and output stage. The driving stage linearizes distortion of the output circuit locally with a unique, cross-linked correction circuit in real time. The input and driving stage are separately powered by an oversized 80 VA toroid-core transformer with separate windings for positive and negative operating voltage.

The output stage is equipped with eight hand selected power MOSFETs with actively controlled bias current amounting to 0.6 A. The supply voltage is stabilized as rapidly as inhumanly possible by optimized discrete MOSFET regulators. To reach optimal performance, the negative and positive operating voltage is decoupled entirely. Two individual 1000-VA toroid-core transformers feed the positive and the negative half-cycles of the mains. Four special, fast and impulse-resistant high-current capacitors with a total filtering capacity amounting to 156,000 µF serve as an accumulator.

A microprocessor unit controls all functions and permanently monitors DC, HF, temperature and overload. In the case of a fault, it disconnects the MAX from the mains supply. A large, two-line display indicates fault sources in plain text. An Audionet-Link provides optical remote activation and signal-dependence in three sensitivity ranges. The control unit has a separate power supply from a transformer.

Finish

Front panel:
Brushed aluminium, black anodized, light grey printing
Brushed aluminium, silver anodized, black printing

Display:
Red or blue

Cover:
Brushed aluminium, 6 mm, black anodised

Sides:
Brushed aluminium, 4 mm, black anodised

Chassis:
Sheet steel, 2 mm, black varnished

AUDIONET

Scientific magic.

Function

Microprocessor controlled mono reference amplifier.

Special Features

- Audionet ULA technology (Ultra-Linear-Amplifier)
- Magnetically and capacitatively optimized construction
- Signal paths are kept to a minimum
- No capacitors and electromechanical components in the signal path
- Completely DC coupeld
- Four separate power supplies for controller, input and driving stage and positive and negative operating voltage for the power stage
- Toroid transformer with 80 VA for the input and driving stage with separate windings for positive and negative operating voltage
- Two toroid transformer with 1,000 VA for positive and negative operating voltage for the power stage
- Four impulse-stable high-current capacitors with filtering capacity totalling 156,000 µF
- Discrete, extremely fast and stable driver and output stages
- Bi-wiring terminal with two pairs of Furutech Rhodium connectors
- Remote activation over Audionet Link (optical waveguide) and via input signal (3 switchable sensitivities)
- Timer
- Large-size, two-line VDF-display
- Screen saver
- Automatic mains phase detection
- Microprocessor unit controls all functions and permanently monitors DC, HF, temperature and overload

In- and Outputs

Audio inputs:	1 Furutech RCA line, gold-plated, teflon insulated 1 XLR balanced, gold-plated
Loudspeaker outputs:	2 pairs Furutech 4mm-jacks, rhodium-plated
Remote activation:	2 Audionet Links, optical (in- and output)

Technical Data

Output:	400 W into 8 ohms 700 W into 4 ohms 1,100 W into 2 ohms
Frequency Response:	0 – 500,000 Hz (-3 dB)
Damping Factor:	> 1,800 @ 10 kHz > 10,000 @ 100 Hz
Harmonic Spectrum:	k2 typ. -117 dB for 25 W @ 4 Ohm k3 typ. -123 dB for 25 W @ 4 Ohm
Intermodulation:	< -110 dB SMPTE 100 Hz : 20 kHz, 4 : 1, 50 W @ 4 Ohm
THD + N:	> -106 dB at 1 kHz, 25 W to 700 W @ 4 Ohm
SNR:	> 125 dB
Input Impedance:	RCA: 37 kOhm, 100 pF XLR: 3 kOhm, 100 pF
Power Consumption:	max. 2,000 W
Mains connection:	120 or 230 V, 50...60 Hz
Dimensions:	width 215 mm height 285 mm depth 500 mm
Weight:	38 kg/mono block

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Scientific Breakthroughs: Audionet Key Technologies

Audionet-Ultra-Linear-Amplifier ULA

Audionet's worldwide respected and award-winning ULA (Ultra Linear Amplifier) technology is of fundamental importance for our outstanding technology. This highly complex circuit topology, initially conceived with medical engineering in mind, delivers metrological results which mark a limit of feasibility. Even under the most severe strain or in other stress situations signal impurities are barely traceable, and the high return loss guarantees that even the most demanding loudspeakers will perform faultlessly up to their utmost limits.

Audionet Operational Amplifier

Audionet operational amplifiers (OP) are used in our devices at most sound-critical parts of the circuit design to deliver the very best tonal results. Usual operational amplifiers, available in different quality and price ranges on the global market, can't satisfy our core demands for perfect sound quality. Even the most expensive ones with the best results on paper aren't perfect. That's why we have designed our own operational amplifier technology. Any single Audionet OP contains at least 86 parts and components, and our topology ensures an impressive gain-bandwidth-product of 1 GHz.

Asynchronous Upsampling

With the D/A conversion we've focused our highest attention on eliminating jitter, the wobbling of digital signal slopes. Jitter faults curtail the sound reproduction in every respect: imaging, stage and depth rendition will be impaired. The conversion is done using Audionet's Intelligent Sampling Technology which guarantees an absolutely flawless recovery of the analogue signal from the digital bit stream. For this purpose the data are sent through a sophisticated, two-stage filtering and decoupling procedure. First the input data are filtered with Audionet's proprietary software using a powerful signal processor and upsampled synchronously. The filters have been designed under audiophile aspects with regard to an optimised transient and frequency response. The thus optimised data are then resolved through an asynchronous upsampling procedure at 192kHz/24bit. Hereby the bit stream is completely isolated from its input clock and its associated jitter. The data are then fed to high-performance converters, which are clocked by special ultra-precision quartz crystals, and individually processed per channel into analogue signals. This method ensures that jitter faults are almost entirely eliminated in the analogue signal. No information gets lost and every bit of information will be processed at the right time, bringing forth an unmatched clarity, room depth and stage imaging.

Double-Precision-Bassmanager and Parametric Equalizer

The digital signal processing is accomplished with efficient signal processors and our proprietary Audionet software which was developed and continuously improved exclusively under audiophile aspects in more than 15 years of painstaking scientific labour.

Audionet Listening Room

Listen and be enlightened!
In Audionet's quite incomparable listening room.

The double precision bass management uses a 48bit resolution at all sampling frequencies. Even the very lowest frequencies are therefore precisely reproduced and accurately processed. The bass manager offers freely selectable cutoff frequencies, filter Q factors and subwoofer phases. Thus you can perfectly integrate your subwoofers into the system and into the room.

The digital parametric equalizer uses Minimum Phase Equalizers (MPE) both for the main channels and subwoofer channels. For each MPE the filter type, frequency, gain and Q factor can be selected within an unusually wide adjustment range and disturbing room interference and tonal annoyances efficiently compensated. In combination with CARMA, our computer aided room acoustics measurement system, it is possible even for non-professionals to reach nearly professional results.

The delay manager has an adjustment range of up to 7 m and automatically calculates the delay times from the distances.

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Reference

AVShowrooms:

"More soul! Top to bottom. This is the first time I've ever heard a KEF Blade – disappear. Any given day I would chose one."

Positive Feedback:

"Beyond a dynamic range and thrust power that is the envy of the competition-dynamic prowess doesn't get any better than this – the MAX amps plumb the hidden depths of your favorite CDs and LPs. With the MAX you experience refinements offered only by the top models from the major players. The MAX join a very select group of top-tier components, but the MAX get you there for a fraction of the price. I'm not saying they're cheap, but they do meet the definition of a bargain. Nit-pickers will look high and low in vain, because the MAX do everything right. I have found my next reference."

Area DVD:

"The three adjectives 'easy', 'airy' and 'fleet-footed' don't describe a new pizza dough, but characterize the high frequency reproduction of the test equipment in the best way … Although the required clarity, fine design as well as sound transparency provide best performances and bring unimaginable musical details to life, no inappropriate aggressiveness disturbs the connection between men and technology. Even in the mid-range, the highly precise rendition proves to be a source of pleasure of the special sort. … Due to the already described characteristics regarding the tonal balance and the fast modelling result a sound reproduction of realistic physical existence with impressive detail depth. … To put it in a nutshell, one can certify without exception best performances to the bass representation, where in each aspect of rendition absolute benchmarks are set."

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Audionet

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IDEKTRON Unternehmens- und
Technologieberatung GmbH & Co.
Entwicklungs- und Produktions-KG

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Sources
VIP G3
ART G3

Integrated Amplifier
SAM G2

Preamplifier
PRE G2
PRE I G3
MAP I
PAM G2

Power Amplifier
MAX
AMP
AMP VII
AMP I V2
AMP V
AMP IV
AMP III

Network Components
DNP
DNA 2.0
DNA I
DNC

Power Supply
EPX
EPS G2

AUDIONET

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AMP

Blockbusters for Demanding Listeners

This is a scientific paper.
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Thanks very much. We're glad you are with us.

AUDIONET

Scientific magic.

Blockbusters for Demanding Listeners

The new Audionet AMP high performance power amplifiers are true mono-blocks that combine remarkable sound potential with high-end technical possibilities. A pair of blockbusters for real connoisseurs.

Air plays a key role in regard to our AMP mono-blocks. For one thing, the pair needs some air around them in order to permit the diffusion of the heat either block generates. And for another, air is part of the sound experience they offer: every fragment of a beat, every acoustic detail is offered to the listener in transparent spatiality, as if encapsulated in the purest air. Weighing in at 22 kilograms, the two mono outputs deliver a maximum of airiness and vivid rendition, and may well bring tears of joy to the eyes of more sensitive listeners. The AMPs play with fascinating ease, impressing us with acoustic permeability, tonal accuracy and striking macro- and micro-dynamical precision. The musical reproduction is transparent, airy and colourful, but remains agreeably relaxed at the same time.

> "... The sound: Simply natural and in one word: TOP! ..."
>
> (AV Extreme, Greece)

Ultra-Linear-Amplifier

Our AMP mono-blocks represent the state-of-the-art of Audionet's internationally acclaimed ULA (Ultra-Linear-Amplifier) technology. This highly complex circuit topology, which we originally invented for medical engineering, delivers results that push the boundaries currently feasible in measuring technology. Even under maximum strain or in some other borderline situation,

> "... Crème de la Crème of high-end amplifiers ..."
>
> (i-fidelity.net)

the incidence of signal impurity remains almost below detectable levels, whilst outstanding feedback damping ensures that the loudspeakers perform to the limits of their capacity.

The Cream of the Crop

The efficiency and precision of ULA is such that even the sound properties of components and materials are clearly audible. As a result, reason, every sound-critical point in the AMP is exclusively fitted with the finest components obtainable worldwide, in some cases custom-made for Audionet. The 47,000 µF filter capacitors, for instance, are manufactured according to our specifications by specialists in the USA. Equipped with a silk dielectric our high audiograde electrolytic capacitors come from Japan. Our low-loss capacitors are made of mica, a silicate manufactured to order in India and China. We use selected high-current foil capacitors with a minimal loss angle, high-quality silver-gold alloys for our internal wiring and the very best connector systems available from Furutech.

Moreover, during the manufacturing process of every single mono-block, all the relevant components are re-checked, measured and matched in order to guarantee optimum performance.

Architecture

In order to guarantee absolute channel separation, the AMP pair is designed as mono amplifiers. The powerful, extremely stable performance of the AMP ensures interference-free operation even in extreme range.

The magnetically and capacitatively optimized assembly of the mono-blocks largely eliminates both feedback from electrical interference rays as well as reciprocal influences between the amplification channels during the amplification process. In order to optimize the high-frequency attributes and the velocity attained by the AMPs, miniaturization techniques were consistently deployed. The remaining signal paths have been kept to a minimum, and contain no sound-impairing components such as coils, chokes or relays.

The AMPs are equipped with RCA and XLR inputs, which are electronically switched via gold-plated precision relays. The input stage is configured as double-differential amplifier with a low-noise, monolithic dual FET, thus making the end amplifiers electrically independent of the input signal and avoiding harmful interaction with the power source.

The input stage is separately powered by an 80 VA toroid-core transformer. With a gain-bandwidth product exceeding one Gigahertz, it is additionally decoupled from the power stages by double bootstrapping. The output stage is equipped with six power MOSFETs with actively controlled bias current amounting to 0.6 A. Thanks to a unique and highly elaborated correction stage, distortions are linearized locally in real time; the negligible level of total distortion is scarcely detectable, even with the most sophisticated measuring methods. The supply voltages are stabilized as rapidly as possible by optimized discrete MOSFET regulators, whose basic supply comes from an encapsulated 850-VA toroid-core transformer and two special, fast and impulse-resistant high-current capacitors with total filtering capacity amounting to 188,000 µF.

A microprocessor unit controls all functions and permanently monitors DC, HF, temperature and overload, and disconnects the AMP from the mains supply in the case of faults. A large, two-line display indicates fault sources in plain language. Remote activation is possible optically via Audionet-Link as well as signal-dependently in three sensitivity ranges. The control unit is separately supplied by a transformer.

> “... I cannot imagine myself having a HiFi life without this mono amplifier ...”
>
> (Highendnews.com)

Finish

Front panel:
Brushed aluminium, 10mm, black anodized, light grey printing
Brushed aluminium, 10mm, silver anodized, black printing

Display:
Red or blue

Cover:
Brushed aluminium, 6 mm, black anodised

Sides:
Brushed aluminium, 4 mm, black anodised

Chassis:
Sheet steel, 2 mm, black varnished

AUDIONET

Scientific magic.

Function

Microprocessor controlled mono power amplifier.

Special Features

- Audionet ULA technology (Ultra-Linear-Amplifier)
- Magnetically and capacitatively optimized construction
- Signal paths are kept to a minimum
- No capacitors and electromechanical components in the signal path
- Completely DC coupeld
- Separate power supply for input and power stage
- Toroid transformer with 850 VA
- 2 impulse-stable high-current capacitors with filtering capacity totalling 82,000 µF
- Discrete, extremely fast and stable driver and output stages
- Automatic mains phase detection
- Large-size, two-line VDF-display
- Screen saver
- Remote activation over Audionet Link (optical waveguide) and via input signal (3 switchable sensitivities)
- Microprocessor unit controls all functions and permanently monitors DC, HF, temperature and overload

In- and Outputs

Audio inputs:	1 Furutech RCA line, gold-plated, teflon insulated 1 XLR balanced, gold-plated
Loudspeaker outputs:	2 pair Furutech 4mm-jacks, rhodium-plated
Remote activation:	2 Audionet Links, optical (in- and output)

Technical Data

Output:	200 W into 8 ohms 350 W into 4 ohms 550 W into 2 ohms 750 W into 1 ohms
Filtering capacity:	82,000 µF
Frequency Response:	0 – 300,000 Hz (-3 dB)
Damping Factor:	> 1,800 @ 10 kHz > 10,000 @ 100 Hz
Harmonic Spectrum:	k2 typ. -117 dB for 25 W @ 4 ohms k3 typ. -140 dB for 25 W @ 4 ohms
Intermodulation:	< -110 dB SMPTE 100 Hz : 20 kHz, 4 : 1, 50 W @ 4 ohms
THD + N:	< -105 dB at 1 kHz, 35 W @ 2 ohms between 20 Hz and 20 kHz
SNR:	> 122 dB
Input Impedance:	RCA: 37 kOhm, 220 pF XLR: 3 kOhm, 170 pF
Power Consumption:	max. 1,000 W
Mains:	120 or 230 V, 50…60 Hz
Dimensions:	width 215 mm height 190 mm depth 500 mm
Weight:	22 kg / mono block

AUDIONET

Scientific magic.

Scientific Breakthroughs: Audionet Key Technologies

Audionet-Ultra-Linear-Amplifier ULA

Audionet's worldwide respected and award-winning ULA (Ultra Linear Amplifier) technology is of fundamental importance for our outstanding technology. This highly complex circuit topology, initially conceived with medical engineering in mind, delivers metrological results which mark a limit of feasibility. Even under the most severe strain or in other stress situations signal impurities are barely traceable, and the high return loss guarantees that even the most demanding loudspeakers will perform faultlessly up to their utmost limits.

Audionet Operational Amplifier

Audionet operational amplifiers (OP) are used in our devices at most sound-critical parts of the circuit design to deliver the very best tonal results. Usual operational amplifiers, available in different quality and price ranges on the global market, can't satisfy our core demands for perfect sound quality. Even the most expensive ones with the best results on paper aren't perfect. That's why we have designed our own operational amplifier technology. Any single Audionet OP contains at least 86 parts and components, and our topology ensures an impressive gain-bandwidth-product of 1 GHz.

Asynchronous Upsampling

With the D/A conversion we've focused our highest attention on eliminating jitter, the wobbling of digital signal slopes. Jitter faults curtail the sound reproduction in every respect: imaging, stage and depth rendition will be impaired. The conversion is done using Audionet's Intelligent Sampling Technology which guarantees an absolutely flawless recovery of the analogue signal from the digital bit stream. For this purpose the data are sent through a sophisticated, two-stage filtering and decoupling procedure. First the input data are filtered with Audionet's proprietary software using a powerful signal processor and upsampled synchronously. The filters have been designed under audiophile aspects with regard to an optimised transient and frequency response. The thus optimised data are then resolved through an asynchronous upsampling procedure at 192kHz/24bit. Hereby the bit stream is completely isolated from its input clock and its associated jitter. The data are then fed to high-performance converters, which are clocked by special ultra-precision quartz crystals, and individually processed per channel into analogue signals. This method ensures that jitter faults are almost entirely eliminated in the analogue signal. No information gets lost and every bit of information will be processed at the right time, bringing forth an unmatched clarity, room depth and stage imaging.

Double-Precision-Bassmanager and Parametric Equalizer

The digital signal processing is accomplished with efficient signal processors and our proprietary Audionet software which was developed and continuously improved exclusively under audiophile aspects in more than 15 years of painstaking scientific labour.

Audionet Listening Room

Listen and be enlightened!
In Audionet's quite incomparable listening room.

The double precision bass management uses a 48bit resolution at all sampling frequencies. Even the very lowest frequencies are therefore precisely reproduced and accurately processed. The bass manager offers freely selectable cutoff frequencies, filter Q factors and subwoofer phases. Thus you can perfectly integrate your subwoofers into the system and into the room.

The digital parametric equalizer uses Minimum Phase Equalizers (MPE) both for the main channels and subwoofer channels. For each MPE the filter type, frequency, gain and Q factor can be selected within an unusually wide adjustment range and disturbing room interference and tonal annoyances efficiently compensated. In combination with CARMA, our computer aided room acoustics measurement system, it is possible even for non-professionals to reach nearly professional results.

The delay manager has an adjustment range of up to 7 m and automatically calculates the delay times from the distances.

AUDIONET

Scientific magic.

Reference

i-fidelity.net:

"Listening to songs with the Audionet amplifier trio each title gains in expressiveness, timbre and temper. You sit in your armchair, listen to Pink Floyds 'The Wall' and be pleased about the helicopter (the whistling of the helicopters turbines brings also 30 years after appearance of the album still large pleasure), and then you get suddenly goosebumps … The Audionets deal regular with amplifiers of the competition; they need however in best Klitschko manners rarely more than three rounds, in order to knock the opponent out. … There's simply nothing to beef about: plenty of power, smallest distortions and absolutely first-class signal-to-noise ratios. These two Audionets belong to the Crème de la Crème of high-end amplifiers."

Highendnews.com:

"How good is this mono amplifier from Bochum in Germany? Well, I can tell you that I cannot imagine myself having a HiFi life without this mono amplifier. So until someone convince me otherwise, this pair of mono amplifier will remain in my listening room as my reference. I consider myself to 'have seen the light at the end of the tunnel'."

Stereoplay, Germany:

"State-of-the-art mono amplifiers ... Absolute Top Class I, Reference"

AV-Magazin, Brasil:

"In summary it is one of the best price-performance ratio ever."

en.audionet.de

Audionet

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Sources
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VIP G3
ART G3

Integrated Amplifiers
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PRE I G3
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Power Amplifiers
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AMP I V2

Network Components
DNP
DNA 2.0
DNA I
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Power Supplies
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AMP I V2

28 Kilograms of Passion

This is a scientific paper.
For holographic images and optimal resolution please do visit your audionet expert dealer.
Thanks very much. We're glad you are with us.

AUDIONET

Scientific magic.

28 Kilograms of Passion

The AMP I V2 represents an exemplary combination of pioneering Audionet technology with the company's typically detail-obsessed scientific application and experience-based knowledge.

> "...That impulsiveness and drive with simultaneous delicacy ... is hard to get elsewhere ..."
>
> (Salzburger Nachrichten, Austria)

The sonic culture of the AMP I V2 is characterized by emotionality, sincerity and completeness. Performing quickly and with extremely fine resolution, it dazzles with its richness of detail. At the same time, the delivery is relaxed, devoid of the least hint of harshness or rigidity. Dynamic leaps are imparted with the necessary impact, without being merely loud. The bass is resolute and richly contoured. All this amounts to strikingly realistic holographic quality. And as a machine, the new Audionet discreetly stays in the background and creates a space within which the effect of the music can unfold – in all its artistry and emotionality.

Ultra-Linear-Amplifier

The AMP I V2 is fitted with state of the art of Audionet's ULA (Ultra-Linear-Amplifier) technology, which generated not only world-wide attention but won a number of awards. Originally invented for the purposes of medical engineering, this highly complex circuit topology provides cutting-edge measuring-technical results. Signal impurity remains below detectable levels even under the most strenuous of circumstances, whilst its outstanding feedback damping ensures that the loudspeakers perform at full capacity.

Cream of the Crop

Every sound-critical point in the AMP I V2 is fitted exclusively with the finest components procurable worldwide, many of which are custom-made for Audionet. For instance, the filter capacitors are manufactured according to our specifications by specialists in the USA; the bulk of our high audiograde electrolyte capacitors with a silk dielectric come from a Japanese audio manufacturer. We rely on mica capacitors, insert selected high voltage foil capacitors, deploy high-quality silver-gold alloys for our internal wiring and use the very best connector systems available from Furutech.

Architecture

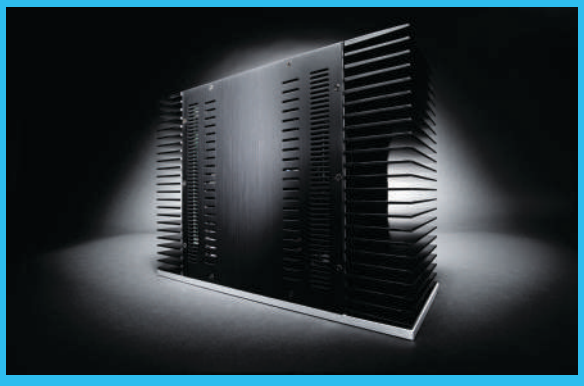
The AMP I V2 sets standards regarding linearity, reflux damping and loudspeaker control. It is magnetically and capacitatively optimized and coherently assembled as a dual-mono amplifier. This minimizes feedback from magnetic fields and electrical interference rays, thus eliminating nearly all reciprocal influences between the amplification channels as well as between the input, correction and output stages.

> “... Constructed without compromise, a powerful amplifier with excellent sound properties ...”
>
> (Stereoplay, Germany)

In order to optimize its high-frequency attributes, circuit size has been radically reduced. The remaining signal paths are kept to a minimum and are free of sound-critical components such as coils, chokes or relays. All in all, distortion is near-eliminated. The damping factor pushes the possibilities to the edge. The input stages are double-differential pre-stages with monolithic dual FETs separately powered by an 80 VA toroid-core transformer with separate windings for each channel. Their gain-bandwidth product exceeds one Gigahertz. Double bootstrapping decouples them from the power stages. Each output stage possesses four power MOSFETs.

> “... An excellent amplifier by any measure ...”
>
> (Highendnews.com)

Their bias current (0.4 A) is actively controlled. They are supplied by two 700 VA toroid-core transformers and four fast, impulse-stable high-current capacitors with filtering capacity totalling 188,000 µF. Distortion is compensated-for locally by a real-time correction stage. The voltages are smoothed as rapidly a possible by optimized discrete MOSFET regulators. A control unit with separate power supply monitors DC, HF, temperature and overload. If necessary, it disconnects the AMP I V2 from the mains supply, thus ensuring absolute operating safety.



Finish

Front panel:
Brushed aluminium, black anodized, light grey printing
Brushed aluminium, silver anodized, black printing

Display:
Red or blue

Cover and heat sink:
Brushed aluminium, black anodised

Chassis:
Sheet steel, black varnished

AUDIONET

Scientific magic.

Function

Stereo power amplifier.

Special Features

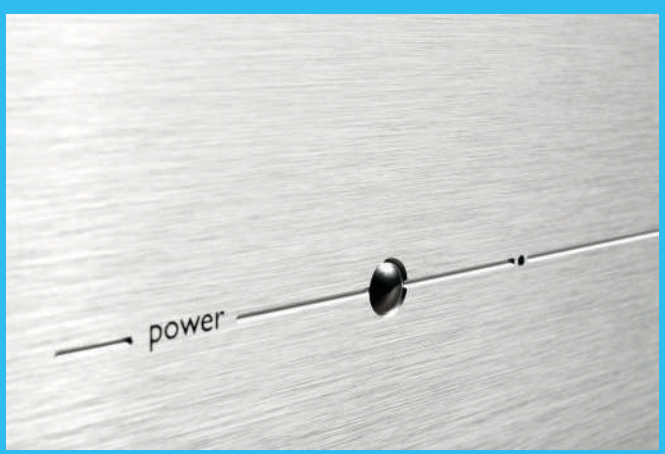
- Audionet ULA technology (Ultra-Linear-Amlifier)
- Dual-mono amplifier
- Magnetically and capacitatively optimized construction
- Signal paths are kept to a minimum
- No capacitors and electromechanical components in the signal path
- Completely DC coupeld
- Separate power supply for input and power stage
- 2 toroid transformer, each with 700 VA
- 4 impulse-stable high-current capacitors with filtering capacity totalling 188,000 µF
- Discrete, extremely fast and stable driver and output stages
- Control unit for HF, DC, temperature rise and overload
- Remote activation via Audionet Link (optical waveguide)

In- and Outputs

Audio inputs:	2 Furutech RCA line, gold plated, teflon insulated
Loudspeaker outputs:	2 pair Furutech 4mm-jacks, rhodium plated
Remote activation:	2 Audionet Links, optical (in- and output)

Technical Data

Output:	2 x 200 Watt into 8 ohms 2 x 300 Watt into 4 ohms 2 x 450 Watt into 2 ohms 1 x 600 Watt into 8 ohms (bridged) 1 x 900 Watt into 4 ohms (bridged)
Filtering capacity:	188,000 µF
Frequency Response:	0 – 300,000 Hz (-3 dB)
Damping Factor:	> 10,000 @ 100 Hz
Harmonic Spectrum:	k2 typ. -120 dB for 25 Watts @ 4 ohms k3 typ. -123 dB for 25 Watts @ 4 ohms
Intermodulation:	< -110 dB SMPTE 100 Hz : 20 kHz, 4 : 1, 50 W @ 4 ohms
Channel Separation:	> 100 dB @ 1 kHz
THD + N:	< -102 dB at 1 kHz, 35 Watts @ 2 ohms between 20 Hz and 20 kHz
SNR:	> 106 dB at 10 Veff
Input Impedance:	37 kOhm, 220 pF
Power Consumption:	max. 1,500 W
Mains connection:	120 or 230 V, 50…60 Hz
Dimensions:	width 430 mm height 175 mm depth 315 mm
Weight:	28 kg



AUDIONET

Scientific magic.

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Asynchronous Upsampling

With the D/A conversion we've focused our highest attention on eliminating jitter, the wobbling of digital signal slopes. Jitter faults curtail the sound reproduction in every respect: imaging, stage and depth rendition will be impaired. The conversion is done using Audionet's Intelligent Sampling Technology which guarantees an absolutely flawless recovery of the analogue signal from the digital bit stream. For this purpose the data are sent through a sophisticated, two-stage filtering and decoupling procedure. First the input data are filtered with Audionet's proprietary software using a powerful signal processor and upsampled synchronously. The filters have been designed under audiophile aspects with regard to an optimised transient and frequency response. The thus optimised data are then resolved through an asynchronous upsampling procedure at 192kHz/24bit. Hereby the bit stream is completely isolated from its input clock and its associated jitter. The data are then fed to high-performance converters, which are clocked by special ultra-precision quartz crystals, and individually processed per channel into analogue signals. This method ensures that jitter faults are almost entirely eliminated in the analogue signal. No information gets lost and every bit of information will be processed at the right time, bringing forth an unmatched clarity, room depth and stage imaging.

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The delay manager has an adjustment range of up to 7 m and automatically calculates the delay times from the distances.

AUDIONET

Scientific magic.

Reference

Salzburger Nachrichten, Austria:

"That impulsiveness and drive with simultaneous delicacy as with the latest power amplifier AMP I V2 is extraordinarily hard to get elsewhere."

Highendnews.com:

"An excellent amplifier by any measure, and definitely one for the shortlist."

Stereoplay, Germany:

"Constructed without compromise, a powerful amplifier with excellent sound properties for a surprisingly reasonable price. Absolute Top Class I, Reference."

Music Home Studio, Netherlands:

"This stereo poweramplifier is build up extremely solid. ... The sound is open, stable, subtle, detailed and gives much knowledge of the recording conditions. ... His control over loudspeakers is amazing. The presentation of the music is natural and casual. The reader will see that this is a kind of magic."

High Fidelity, Sweden:

"This high-tech combination from Audionet offers a unimpeachable musical odyssey and simply a sound quality of international top class. ... This sound bears comparison with any other products, and this includes even the great American devices. ... A tough nut for the established labels of the market."

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Audionet

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AMPERE

Electrodynamics Reinvented

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Thanks very much. We're glad you are with us.

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SCIENTIST SERIES – ULTRA MACHINE AMPERE

The Machine

What's the scientific progress in external power supply? Ask AMPERE.

Providing you with hitherto unheard-of stability, calmness, spatiality and tonal pureness.

AMPERE is what will make the decisive difference regarding the performance of all your devices in the future.

The Science

- Absolute load stable external power supply for the analog sections of Audionet CD player PLANCK.
- Massive aluminium body and resonance-optimized fixation with invisible screws.
- Fully separated, discrete circuitry for positive and negative voltage, each with its own low emitting toroid transformer.
- Control and stand-by circuitry with separate galvanically isolated power supply.
- Extreme low impedance, low noise and load independent voltage outputs.
- Two 300 VA toroid transformers with optimized winding design, encapsulated and resonance optimized.
- Ultra fast recovery time Schottky diodes for rectification.
- Laboratory grade high precision und low noise voltage reference.

AUDIONET

Scientific magic.

- Audio grade capacitors with silk dielectricum, total capacitance 576,000 µF.
- High precision voltage regulator with discrete MOSFETs.
- Circuitry layout for optimized current conduction.
- Double layer glass fibre reinforced and resonance-minimized epoxy circuit board.
- Low impedance circuit layout with extra-thick copper layers.
- Internal wiring with gold-doped pure silver cables.
- Short-circuit proof and protected against overheating.
- Rhodium fuse.

Function

Ultra low noise, highly stable and constant external power supply for AMPERE compatible Audionet devices.

Output

7-pin socket for connecting the mother unit.

Technical Data

Power supply:	Two encapsulated 300 VA toroid transformer and 576,000 µF capacitance
Circuitry:	Reference voltage sources for positive and negative analog voltages using discrete Audionet voltage regulators (MOSFET)
Output voltage:	±24.00 V for analog sections, +5 V for digital and control sections
Stability:	Deviation absolute: < 0.1% of nominal value Deviation relative: < 0.01% accuracy
Noise:	-144 dB or 1.5 μV_{RMS} for 0 Hz up to 22 kHz
Mains:	220..240 V or 110..120 V, 50..60 Hz
Power consumption:	< 0.5 W Stand by, max. 400 W
Dimensions:	Width 430 mm Height 110 mm Depth 360 mm
Weight:	26 kg

Finish

Front:
Brushed aluminium, 12 mm, anodized, text engraved

Cover:
Brushed aluminium, 4 mm, anodized

Plates:
Brushed aluminium, 8 mm, anodized

Chassis:
Brushed Aluminium, anodized, text printed

Colors

Ultra:
C-32 light bronze with white LED

Classic:
Silver with blue LED

Silver with red LED

Black with blue LED

Black with red LED

AUDIONET

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Audionet

Audionet is a registered trademark of
IDEKTRON GmbH & Co. KG

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Managing directors: Thomas Gessler, Robert Hagemann.

Sources
PLANCK
ART G3

Integrated Amplifiers
WATT
SAM G2

Preamplifiers
STERN
PRE G2
PRE I G3
PAM G2

Power Amplifiers
HEISENBERG
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AMP
AMP I V2

Network Components
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Power Supplies
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EPX
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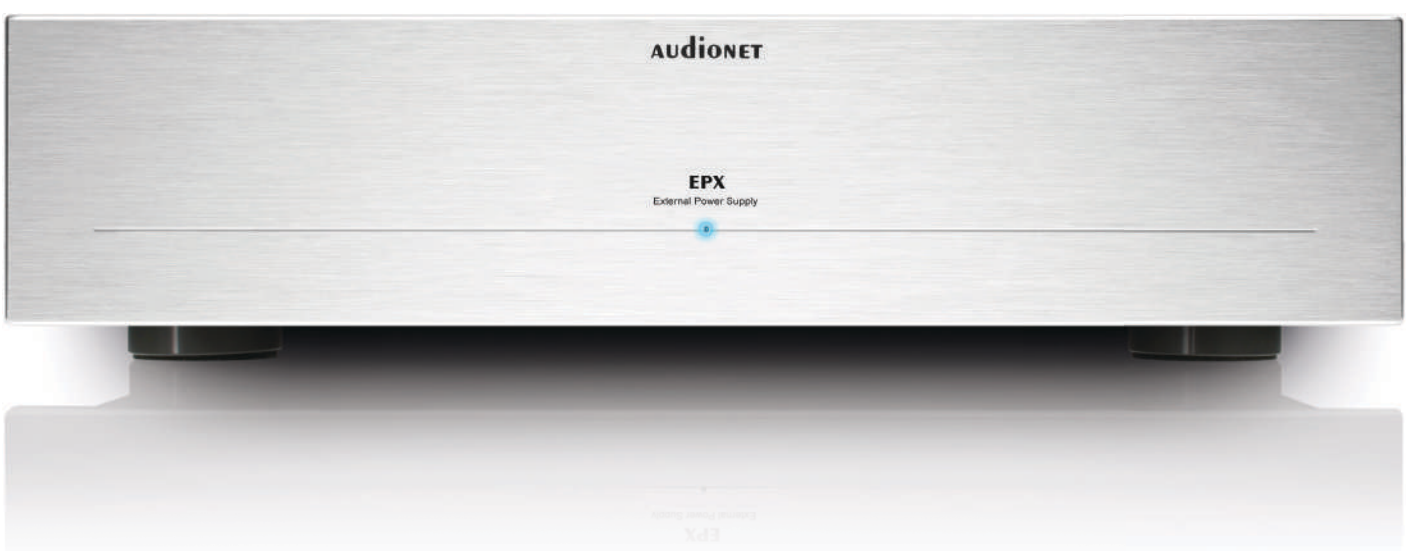
EPX

Energize Your Gear



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AUDIONET

Scientific magic.

Energize Your Gear

The EPX is Audionet's scientifically proven answer to very serious music lovers desperately wanting to enhance the performance of their already existing devices with a High Performance upgrade.

The EPX produces clearly audible improvement in terms of stability, calmness, spatiality and tonal pureness. Music is reproduced with greater naturalness, clearer expression and in a brighter quality. Its straight design fits in every configuration.

Why does an external power supply represent such an improvement? The properties of active circuits are highly dependent on their supply voltages. Devices designed for the reproduction of music are very sensitive to any kind of external supply variations. As a voltage source, the EPX offers extremely precise and load-independent supply voltages. With these properties, EPX comes close to an ideal voltage source without accepting the disadvantages of accumulators.

The EPX achieves effective decoupling of all harmful influences from the public power supply system. The EPX is fed by a constant, low-noise source usually only used in laboratory environments. This precise constant voltage supply will really make the decisive difference to the performance of your devices.

Absolute Control

The EPX is built up as a high-precision constant voltage source. The chassis and circuit design are magnetically and capacitatively optimized. The symmetrical circuit board layout minimizes loss from oversized current paths and earths the current flow.

The arrangement of the toroid core transformers minimizes the influence of magnetic disturbances. The voltage supply is managed by two 200 VA ring toroid transformers that are each responsible for one half-wave. The capacity of the fast and impulse-stable high current capacitors is 576,000 µF. Only Schottky-diodes with extremely fast switching times are used. A highly constant and low-noise laboratory source serves as voltage reference.

> "... an audiophile Bi-Turbo, which seems to be without any alternative for me ..."
>
> (HiFi & Records)

Function

External precision power supply and conditioner.

Special Features

- Discrete circuit layout for positive and negative voltages
- 2 * 200 VA toroid core transformers
- 576.000 µF filter capacity
- Separate 10 VA transformer for digital voltages
- High precision discrete voltage regulator with MOSFET power transistors
- Protected against shortcut and overtemperature
- Rhodium-plated fuse

In- and Outputs

Output:	7-pole socket for Audionet gear
Mains:	IEC male power insert connector

Technical Data

Output Voltage:	± 24V
Precision:	0,1%
Servo Accuracy:	0,01%, temperature compensated
Output Current:	±3A max
Power Consumption:	< 1 W stand-by, max. 400 W
Mains:	220…240 volts / 50…60 Hz or 100…120 volts / 50…60 Hz
Dimensions:	width 430 mm height 110 mm depth 360 mm
Weight:	18 kg

Compatibility

The EPX is compatible with the following Audionet products:

Sources:	ART G3, ART G2, VIP G3, VIP G2, CAT
Preamplifiers:	PRE 1 G3, PRE 1 G2, MAP 1, MAP, MAP V2, PAM G2, PAM V2, PAM
Network Components:	DNP, DNA, DNC

AUDIONET

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Asynchronous Upsampling

With the D/A conversion we've focused our highest attention on eliminating jitter, the wobbling of digital signal slopes. Jitter faults curtail the sound reproduction in every respect: imaging, stage and depth rendition will be impaired. The conversion is done using Audionet's Intelligent Sampling Technology which guarantees an absolutely flawless recovery of the analogue signal from the digital bit stream. For this purpose the data are sent through a sophisticated, two-stage filtering and decoupling procedure. First the input data are filtered with Audionet's proprietary software using a powerful signal processor and upsampled synchronously. The filters have been designed under audiophile aspects with regard to an optimised transient and frequency response. The thus optimised data are then resolved through an asynchronous upsampling procedure at 192kHz/24bit. Hereby the bit stream is completely isolated from its input clock and its associated jitter. The data are then fed to high-performance converters, which are clocked by special ultra-precision quartz crystals, and individually processed per channel into analogue signals. This method ensures that jitter faults are almost entirely eliminated in the analogue signal. No information gets lost and every bit of information will be processed at the right time, bringing forth an unmatched clarity, room depth and stage imaging.

Audionet Listening Room

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In Audionet's quite incomparable listening room.

Finish

Front panel:
Brushed aluminium, 10mm, black anodized, light grey printing
Brushed aluminium, 10mm, silver anodized, black printing

LED:
Red or blue

Cover:
Aluminium, 4 mm, black anodised

Sides:
Aluminium, 8 mm, black anodised

Chassis:
Sheet steel, 2mm, black varnished

AUDIONET

Scientific magic.

Reference

Positive Feedback:

"The EPX does the job of taking the PAM G2 to another level of purity and performance. The task of retrieving the very low signals from MCs is a delicate one; poor handling of the power supply in a phono amp will lead to degradation of the handling of the input signal. The EPX is Audionet's effort to minimize such signal corruption in their attached devices."

HiFi & Records:

„ … The combination with the high precision external power supply EPX results in an audiophile Bi-Turbo, which seems to be without any alternative for me … The signal-to-noise-ratio is so low, that it is nearly not detectably. State of the Art – as good as it gets."

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Audionet

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EPS G2

Upgrading any Device

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Upgrading any Device

The EPS G2 represents a serious scientific breakthrough for music lovers who want to vastly enhance the performance of their already existing devices.

The EPS G2 produces clearly audible improvement in terms of stability, calmness, spatiality and tonal pureness. Music is reproduced with greater naturalness, clearer expression and in a brighter quality. Its straight design visually fits in every configuration.

Why does an external power supply represent such an improvement? The properties of active circuits are highly dependent on their supply voltages. Devices designed for the reproduction of music are very sensitive to any kind of external supply variations. As a voltage source, the EPS G2 offers extremely precise and load-independent supply voltages. With these properties, EPS G2 comes close to an ideal voltage source without accepting the disadvantages of accumulators.

> "... the question is not whether I should buy it, but how long I can wait. ..."
>
> (AreaDVD)

The EPS G2 achieves effective decoupling of all harmful influences from the public power supply system. The EPS G2 is fed by a constant, low-noise source usually used in laboratory environments. This precise constant voltage supply will really make the decisive difference to the

Absolute Control

The EPS G2 is built up as a high-precision constant voltage source. The chassis and circuit design are magnetically and capacitatively optimized. The circuit board layout minimizes loss from oversized current paths and earths the current flow.

The arrangement of the toroid core transformers minimizes the influence of magnetic disturbances. The voltage supply is managed by two 100 VA ring toroid transformers that are each responsible for one half-wave. The capacity of the fast and impulse-stable high current capacitors is 260,000 µF. Only Schottky-diodes with extremely fast switching times are used. A highly constant and low-noise laboratory source serves as voltage reference.

Low Noise?

In an additional stage high-precision operational amplifiers smooth the reference voltage once again and eliminate the remaining noise. The voltage regulators are built up as discrete and very fast MOSFET regulators. Their output voltage is constant and load-independent up to highest frequencies.

The EPS G2 therefore is the ideal power supply for connected Audionet devices.

> "... brings the music reproduction to a new dimension ..."
>
> (High Fiedlity Schweden)

AUDIONET

Scientific magic.

Function

External precision power supply and conditioner.

Special Features

- 2 * 100 VA toroid core transformers
- 260.000 µF smoothing capacity
- Separate 10 VA transformer for digital voltages

In- and Outputs

Output:	7-pole socket for Audionet gear
Mains:	IEC male power insert connector

Technical Data

Output Voltages:	analogue +24 V and – 24 V digital +5 V
Voltage constancy:	+/- 0.01 V at 1 A
Power Consumption:	< 1 W stand by, max. 100 W
Mains:	120 V or 230 V, 50…60 Hz
Dimensions:	width 430 mm height 70 mm depth 310 mm
Weight:	9 kg

Compatibility

The EPS G2 is an external precision power supply & conditioner for Audionet electronic gear with a 5- or 7-pole socket. It is compatible with the following Audionet products:

Sources:	ART G3, ART G2, VIP G3, VIP G2, CAT
Preamplifiers:	PRE 1 G3, PRE 1 G2, MAP 1, MAP V2, MAP, PAM G2, PAM V2, PAM
Network Components:	DNA, DNC
Please note:	The EPS G2 is not compatible with the Audionet DNP. Please use the external external high performance precision-power supply EPX instead.

Audionet Listening Room

Listen and be enlightened!
In Audionet's quite incomparable listening room.

Finish

Front panel:
Brushed aluminium, black anodized, light grey printing
Brushed aluminium, silver anodized, black printing

LED:
Red or blue

Cover:
Aluminium, black anodised

Chassis:
Sheet steel, black varnished

AUDIONET

Scientific magic.

Reference

Stereo, Germany:

"Attention: Once you have listened to the PRE I together with the EPS there is no way back. PRE I with EPS power supply advances two classes."

AV Magazin:

"Electronic music devices react extremely sensitively to any sort of external influence. With its perfectly prepared, stable and clean energy supply, the EPS G2 precision external power supply ensures effective decoupling from the mains supply. It also provides high-precision, constant and load-independent mains supply directly to our players and preamplifiers."

AreaDVD:

"Even if it sounds like I am advertising for Audionet, when considering the EPS G2, the question is not whether I should buy it, but how long I can wait."

High Fidelity Sweden:

" … we like to emphasize that the power supply EPS brings the music reproduction to a new dimension. The music becomes more calm, relaxed and dynamic. It is hard to live without the EPS if one has tested it once."

en.audionet.de

Audionet

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Sources
PLANCK
VIP G3
ART G3

Integrated Amplifiers
WATT
SAM G2

Preamplifiers
STERN
PRE G2
PRE I G3
PAM G2

Power Amplifiers
HEISENBERG
MAX
AMP
AMP I V2

Network Components
DNP
DNA 2.0
DNA I
DNC

Power Supplies
AMPERE
EPX
EPS G2

COMPATIBILITY CHART

External power supply – mother unit

All Audionet external power supplies are equipped with a 7-pin connector on the back panel for the connection to the mother unit:

The cable for connecting the external power supply to the mother unit does always have a 7-pin connector at the end towards the power supply. The cable comes either with a 5-pin or 7-pin connector at the other end, which is connected to the mother unit - depending on the type of the mother unit.

Connection cable:

5-pin connector:

7-pin connector:

Connection jack on the mother unit:

5-pin jack:

7-pin jack:

With exception of the PAM G2, all modern Audionet devices have a 5-pin jack on the back panel, if they are capable of using an external power supply.

The table on the following page shows the information, which external power supply works with which mother unit and what type of connector the connection cable needs to have at the end towards the mother unit. The table also provides the information, if the mains power cord is necessary on the mother unit or not while using an external power supply.

The table also takes all legacy Audionet devices into account.

AUDIONET
Scientific magic.

Mother unit	AMPERE	EPX	EPS G2	EPS	EPC	Main power connection of mother unit
Sources						
PLANCK	5-pin	5-pin	5-pin	5-pin	not possible	necessary
ART G3	5-pin	5-pin	5-pin	5-pin	not possible	necessary
ART G2	5-pin	5-pin	5-pin	5-pin	not possible	necessary
VIP G3	5-pin	5-pin	5-pin	5-pin	not possible	necessary
VIP G2	5-pin	5-pin	5-pin	5-pin	not possible	necessary
Network Components						
DNP	5-pin	5-pin	not possible	not possible	not possible	necessary
DNC	5-pin	5-pin	5-pin	not possible	not possible	necessary
DNA	5-pin	5-pin	5-pin	not possible	not possible	necessary
Preamplifiers						
PRE I G3	5-pin	5-pin	5-pin	5-pin	not possible	necessary
PRE I G2	7-pin	7-pin	7-pin	7-pin	not possible	not necessary
PRE I	7-pin	7-pin	7-pin	7-pin	not possible	not necessary
PAM G2	7-pin	7-pin	7-pin	not possible	7-pin	not necessary
PAM V2	7-pin	7-pin	7-pin	7-pin	not possible	not necessary
PAM	7-pin	7-pin	7-pin	7-pin	not possible	not necessary
MAP V2	7-pin	7-pin	7-pin	7-pin	not possible	necessary
MAP	7-pin	7-pin	7-pin	7-pin	not possible	necessary
MAP I	7-pin	7-pin	7-pin	7-pin	not possible	necessary
Others						
CAT	7-pin	7-pin	7-pin	7-pin	not possible	not necessary