

AUDIONET

Scientific magic.

PRE G2

Revolutionary Resolution



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.

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. Benefiting 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 100VA 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



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 μ F 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 RCI

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



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.

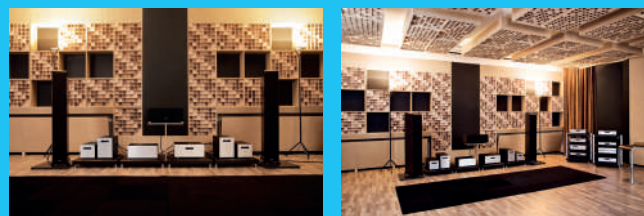
Double-Precision-Bassmanager and Parametric Equalizer

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.

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”

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Errors and omissions excepted. Specifications and design are subject to changes without prior notice.

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

