# Audionet AMP II G2

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Photo by Audionet

The Audionet products are developed, produced and distributed by Idektron, located in Bochum, Germany. Idektron GmbH & Co was founded in 1994 as a spin off of Ruhr University Bochum, one of the leading Universities in Germany. In a very short period of time they have managed to build up a strong brand name in Audionet. To sum up the philosophy of the manufacturer I will quote the Managing Director Mr. Thomas Gessler: "What we are doing is information engineering, which means that we are trying - ongoing from the source (vinyl, CD, DVD) - to give you as much information as possible, and this information contains all what music is: dynamic, control, ambience, transparency, resolution and rhythm and in the result: emotion."

# Design

My first impression when unpacking this 22 kg of mono power amplifier was solidity. My eyes curiously wandered over the amplifier to see if the impression lasts.

The front panel is made of 10 mm brushed aluminium that has been anodised in black or silver (nature) if preferred. The chassis is made of black varnished steel, the sides and top are made of anodised and brushed aluminium. AudioNet have used a minimalistic design with straight and pure lines that will make this mono amplifier fit into a modern home also as a decorating detail.

Audionet uses SMD techniques. No couplings capacitors, coils and relays are located in the signal path. The input stages are double-difference- amplifiers with low-noise monolithic dual FETs. An 80 VA toroid-core transformer powers them with separate windings for each channel. Their gain-bandwidth-product is higher than 1 GHz. Double-boot-strapping decouples them from the power-stage. The power-stage consists of six power MOSFETs. Their bias current is 0.6 A, and it is actively controlled. The signals at normal volume level are handled in pure class A.

They are supplied by two 700 VA toroid-core transformers and four fast and impulse-stable high current capacitors with a total of 80.000 uF. Distortions are compensated locally by a real-time

correction-stage. The voltages are smoothed by discrete and optimised MOSFET-regulators.

On the front you can see a display and a power on button to start up from stand by mode. Back of the amplifier there is one gold plated RCA line input and one gold plated symmetric Neutrik XLR. Furthermore I found two sets of high quality gold plated WBT loudspeaker terminals and one main socket with accompanied power on button. There is also the possibility to communicate with other Audionet products through an optical Audionet Link.

With a child's eager I powered up this mono amplifier to see what more I could find out before I start to listen.

## Features

When powered up there is a mains phase recognition. If the polarisation of the main lead is wrong you will get a message in the display that reads "Attention: Main Phase Incorrect". Through the multifunctional power on button on the front you will be able to adjust the AMP II G2 settings and features.

You have to start with adjusting your input selection: Cinch or balanced input. The AMP II G2 can also show you if the temperature is ok, or the peak level when the amplifier is in action and playing your favourite records.

If you find the display too bright you will be able to set the brightness in five steps from off to 100%. There is an "Auto On" function if you want it to power up when you start to play your music. It can also work in a reverse way if you choose. When no signal is presented to the amplifier you can set "Auto Off" in 30 seconds up to 120 minutes.

If you don't want to leave your AMP II G2 with power on when you are not at home, you can put it in stand by and use the "Warm Up Countdown". This is a timer that will switch on your AMP II G2 automatically and pre-heat the amplifier so it will be ready for some serious listening when you come home from a hard days work.

So did the impression of solidity last after the visual inspection? I have got a short answer for this one: Oh Yes!

# Set up

The amplifier was located close to the speakers, so I was able to use short speaker cables. Make sure there is plenty of air around the power amp, because it runs hot. As preamp, AudioNet's PRE 1 G2 and the power supply EPS was used. AudioNet ART V2 played those silver discs and VPI Aries Scout played the vinyl. Solid Techs Feet of silence was used under the preamp and CD player. Following speakers had the pleasure of feeling the power from AMP II G2: Amphion Xenon, JM Lab Electra 905, JM Lab Mezzo Utopia, Pe Leon, Von Schweikert VR-4SE (Gen III) The speakers were resting on Soundcare spikes. Various cables supplied the signal, and here is the list: Harmonic Tech, Acoustic Zen, Neotech, Kimber

## Musical Experience

The Swedish distributor, P.L. Audio strongly advised that I should let the AMP II G2 be powered on at all times and let it run for one week before some serious listening where done. To my experience, this is information that has to be taken seriously.

My first listening session was not really a listening session. The AMP II G2 where powered up at the side of the loudspeakers and I was playing on the very fine Bel Canto Evo 200.2 power amp. On that Saturday morning I was drinking my coffee and reading the newspaper. In the CD player Jewel's- This Way was spinning. For some reason I was too curious to just read the paper. Hmmm, I wonder why. I just had to feed that AMP II G2 with a signal. Well, said and done, back to the newspaper. It was not time for a listening session yet, not until the afternoon. I had a very hard time concentrating on the newspaper, and I could not keep my foot from moving. I just had to let the paper fall down on the table and let myself be taken by the pure music presented to me by this set up. The first week I let the music play for fun with no analytical listening. I just could not come around to it. What was it that captured my interest in a way that no power amp has ever done until this date? I will try to guide you through my musical journey with AMP II G2. Let's start the joyride.

Lisa Ekdahl and Peter Nordahl Trio- 'Back to Earth' is the first CD I will use to illustrate the sound of this amplifier: I let the cd player start with track 2- 'Nature Boy'. Lisa's voice came right at me and it was so brittle and fragile. The rhythmic bass played by Patrik Boman, supports that unsecured voice. You could really hear every note played by the bass and the modulation was absolutely spectacular.

I continued with Anne Sofie Von Otter- 'The Artist's Album'. Track 1- 'Mahler- Serenade'. Here we are confronted with a voice that is filled with confidence. Anne Sofie's voice is crystal clear and very dynamic. She has a strong support from the belly and I was able to hear that dynamic impact on this recording. The piano was distinctly reproduced by Ralf Gothoni, you could feel his passion as he let his fingers dance over the piano keys.

I just had to play one of my favourite records, Diana Krall - 'Live In Paris'. I chose track 11- 'A Case Of You'. This is a live recording and it really comes to live. The ambience was spooky, the music just breathes. The note that comes from the piano was filled with authority. I heard the whole note before it rolls of. Details in the recording were so natural and it created a feeling of being there. On this recording it was so obvious that a good amplifier also can present you with air around the music. I wonder though, if anybody can do it in the same effortless way.

Now I was starting to get the picture, but had to play more music, and I mean, "I have to play more music". When the night came and I had to go to bed, I coudn't push myself to do so. Just wanted to play that record, and the next one and so on. Then had to admit; I have become a HiFi addict and I blame it on AudioNet.

Next CD was music from motion picture 'The Million Dollar Hotel'. Track 10 - 'Tom Tom's room'. I played this track with the intent of listening to the dialog. But when the cd started there was a strange bumping. What was that? It was late in the evening and it sounded as if someone was redecorating my bedroom upstairs. I stopped and started again. Yes, there was that bumping noise again. Unbelievable. It was crystal clear. It really sounded as if it was coming from the left corner of the

ceiling. The dialog started up and you could feel the intimacy of the dialog. I only wish that this dialog could have been as good at the movie, because it would have given the movie another dimension.

It was time for some music with a little more energy. I decided to play Ryan Adams - 'Heartbreaker'. Track 9 - 'Come Pick Me Up'. This recording brought me right to the Rock Club. The impact of the drums caught me off guard and I jumped up as if I had been to a scary movie. Once again the room ambience was so obvious that you could feel the smoke in the room and start walking towards the bar to order a beer. There was a perfect control all the way. The soundstage size remained the same even when played very loud. The dynamic was fantastic; there was no limit. I just wanted to crank it up more and more. This was a rock concert. Sorry -- what did you say? I cannot hear because of this ringing in my ears.

And to bed we go with one happy smile. After the experiences with Ryan Adams I could not help myself. I had to get down and dirty. It was time for Buddy Guy - 'Sweet Tea'. Track 1 - 'Done Got Old'. This is a naked and raw recording. I could feel the paint coming down from those moisten cement walls. In the beginning of the track there was some burring noises. You could actually hear the traffic from outside the building. This helps to give the recording that raw and unpolished sound. When hearing Buddy telling us his blues there was nothing that could stop that foot from tapping and you may even feel like singing the blues yourself.

Under this review I have been able to partner this mono amplifier with different electronics, loudspeakers and cables. Not at any time did I notice a mismatch. But you must remember when you are dealing with highly revelling instrument like the AMP II G2 that it is very easy to get it wrong. Just as any fine tuned equipment this amplifier is extremely sensitive.

#### Sound

Balance: Neutral.

Resolution: World class. Very detailed throughout the whole spectra but not at the expense of the music.

*Transparency*: Crystal clear like a mountain creek, as we say in Sweden.

*Treble*: Very detailed. It feels almost like there is no stop in that high frequency. You will also be able to hear that sparkling top.

Midrange: Very natural. Voices are filled with body. Piano is presented in an unstrained way.

Lower register/Bass: The words that come to mind will be control, modulation and impact.

*Dynamics*: This is one of the strong points. The dynamic will even scare you if you are not prepared.

Soundstaging is exceptional. It gives 3D a new meaning to me.

*Visceral impact*: This is the truth and nothing but the truth. Listening to a full-scale classical concert will give you goose bumps. The impact of those entire instruments playing together in a crescendo is something I hope everyone will experience some day.

#### Conclusions

To get every bit of music out of this amplifier I strongly recommend it to be used with high quality electronics and full register speakers. In my set up I got the best results with AudioNet electronics, Von Schweikert loudspeaker and Acoustic Zen cables. There is no typical sign to the sound that will be presented at you by the AMP II G2. When I look back and read my notes, I see the same remarks used repeatedly: dynamic, control, ambience, transparency, resolution and rhythm.

Is there really no backside to the coin then? I cannot see anything besides the price. Unfortunately it will cost you quite a bit to get this performance. It will also make you want to upgrade the rest of your system if it is not up to the amplifiers standard.

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".

#### Technical Details:

- Function microprocessor-controlled mono power amplifier
- Output power 200 Watts into 8 ohms
  - o 350 Watts into 4 ohms
  - 550 Watts into 2 ohms
  - o 750 Watts into 1 ohm
- Frequency range 0 300.000 Hz (-3 dB)
- Damping factor
  - o > 1800 at 10 kHz
  - o 10.000 at 100 Hz
- Intermodulation
  - < -110 dB SMPTE 100 Hz: 20 kHz, 4: 1, 50 W/4 ohms</li>
- THD + N
  - $\circ$  < -105 dB at 1 kHz, 35 Watts into 2 ohms between 20 Hz and 20 kHz
- Harmonic distortion
  - o k2 typ. -117 dB for 25 Watts into 4 ohms
  - k3 typ. -140 dB for 25 Watts into 4 ohms
- Signal to noise ratio

- o 110 dB at 10 Veff
- Input impedance coaxial 37 kohms, 220 pF
- Input impedance symm. 3 kohms, 170 pF
- Inputs 1 RCA line, gold-plated 1 Neutrik XLR symmetric, gold-plated
- Outputs 2 stereo loudspeaker terminals, gold-plated for comfortable bi-wiring
- Mains 120 V or 230 V, 50...60 Hz
- Power dissipation 5 W Stand by, max. 1000 W
- Dimensions 215 mm \* 190 mm \* 500 mm (W \* H \* D)
- Weight 18 kg
- Finish
  - Front brushed aluminium, black anodised, white printing or aluminium nature, anodised, black printing
  - o Cover Chassis Aluminium, black anodised sheet-steel, black varnished
- Display: Red or Blue
- Features
  - Effective output power display
  - Remote switch-on via Audionet-link (optical) or signal (3 sensitivity levels) Timer microprocessor-controlled protection circuit