

AUDIONET

AMP II G2

Mono - Amplifier

Owner's Manual

Owner's manual

The Audionet-Team would like to congratulate you to purchasing the Audionet AMP II G2! Your Audionet AMP II G2 is designed for absolutely natural music reproduction at highest user comfort embedding total system security.

Please read this manual before first use to make sure that you are able to use all provided functions of your new amplifier.

In case of occurring questions please do not hesitate to contact your local Audionet dealer or our factory directly.

Setting up your system

Placing Your Audionet AMP II G2 have the perfect dimensions to be placed near your speakers. But positioned side by side both AMP II G2 are 43 cm in width (standard width).

Do not cover the top to prevent the amplifiers from overheating!

Power connections Please connect the power jack at the rear to your wall outlet using a suitable power cord. Using high quality power cords may increase sound quality. Please consult you local Audionet dealer.

The voltage specified at the rear of your AMP II G2 must match your mains specifications. The AMP II G2 is a Class I unit and has to be earthed.

Mains phase recognition The correct polarization of mains is important for reasons of audio clarity and stability. Please make sure that the pin labeled "PHASE" at your APC is connected to the "hot" pin of your wall outlet. The Audionet AMP II G2 indicates a wrong polarization of the mains lead. If you read: "Attention: Mains Phase incorrect" when powering up, switch off the AMP II G2 and flip the plug in your wall outlet.

Inputs and outputs

For connecting or removing any units the AMP II G2 must be switched off.

Please make sure that all cables are in absolute best condition. Broken shields or short-cut loudspeaker cables could damage loudspeakers or the amplifiers!

Inputs At first please connect your pre amplifier to the inputs of your AMP II G2. For audio input you can use balanced (XLR) as well as unbalanced (cinch) cables. For connections longer than 10 m we recommend balanced cables.

Please don't forget to activate the selected input in the set menu.

Speakers Now connect your speakers to one pair of the gold plated output jacks of your AMP II G2. You may use pure wires or "banana" plugs.

Check the polarization of the speakers cables:

Usually the speaker jacks are labeled "+" and "-". You will find the same label at your AMP II G2.

Wrong polarization will lead to severe loss of sound quality!

The speaker impedance must not be less than 2Ω!

Though your AMP II G2 is effectively protected against shorted speaker jacks it has to be switched off while working on speakers and speaker cables!

Bi-Wiring Your Audionet AMP II G2 supports bi-wiring of loudspeakers. Connect your speaker with two separate cables to each AMP II G2. Using the bi-wiring method to connect your speakers can lead to enhanced sound quality.

Operating

Switching on Switch on your AMP II G2 at the rear side. The switch is above the mains socket. After some short time the line "Audionet" will appear in the display. Now your AMP II G2 is in stand by mode.

For switching on and off please press the "power" button at the front of the AMP II G2. The main switch at the back is only to be used if you are absent for a longer time. It must only be operated while the AMP II G2 is in stand by mode

Remote power on Your mono amplifiers AMP II G2 can both be switched on remotely by several different ways:

- using "Audionet Link": You can switch on or off your AMP II G2 with your Audionet pre amplifier PRE G2, PRE I G2, MAP or MAP 1,
- using automatic detection of an input signal: "Auto On/Off",
- using a countdown of specified time.

(If the unit is in *stand by mode* you enter the corresponding menu by pressing the button at the front for longer than 2 seconds.)

Audionet Link For a remote controlled switching on by your Audionet pre amplifier two simple optical "Toslink" cables are necessary. Connect the output labeled "AUDIONET link" at your pre amplifier with the "AUDIONET link" input of the first AMP II G2. Then connect the "AUDIONET link" output with the second optical cable to the "AUDIONET link" input of the second AMP II G2

Auto On/Off The AMP II G2 is equipped with a multi-stage input signal detection circuit. If an input signal is detected at the input (XLR or cinch) crossing the user definable threshold your AMP II G2 will switch on automatically. Due to the nature of stereo signals it may occur that both AMP II G2 will switch on at different points of time.

The amplifiers will function as usual. Of course you still be able to switch on and off the units manually.

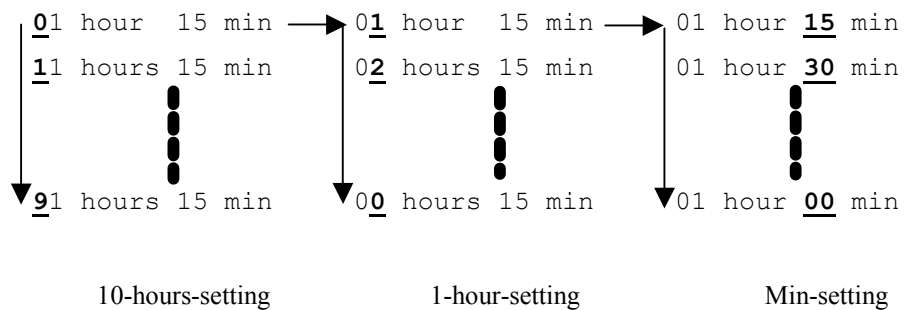
The amplifiers will shut down automatically when no input signal is detected for a user definable time (30 seconds up to 2 hours).

To activate and setup this feature please refer to chapter "Programming".

Due to security concerns the "Auto-On" feature will only be available after first manual switching on!

"Warm Up" Countdown

While you are absent your AMP II G2 can switch on automatically and will be pre-heated for use when you get back. To activate this feature please use a *long* key press on the "power" button at the front. The display changes to show the countdown timer. A cursor will mark the number to be changed. A *long* key press will move the cursor one step to the right. Using a *short* key press you can change the desired number. Hours can be programmed in steps of one hour. Minutes can be programmed in steps of 15 min. The following diagram explains the possible countdown timer settings:



Legend: \longrightarrow long key press \downarrow short key press

Activate countdown by leaving the timer settings menu with a *long* key press. It will be activated automatically if you do not change any setting for longer than 10 seconds.

If you want to use the countdown timer again it is activated by a single key press. Press the "power" button for more than 2 seconds and wait. After 10 seconds the previous set up countdown will start again.

To deactivate the countdown use a *short* key press at any time.

Protection system

Your Audionet AMP II G2 and your loudspeakers are protected by a complex protection circuitry. The display will report in clear every detected error:

- Overload: Shorted loudspeaker cables or defective loudspeaker (your AMP II G2 is capable of driving even 1Ω loads)
- Temp Failure: Do not cover the ventilation slots
- HF-Failure: high frequency oscillation, e.g. defective pre amplifier
- DC-Failure: too high level of DC voltage at the output

Programming

Overview Except the previous described feature of countdown timer controlled automatic power on your AMP II G2 can be setup to your preferences by menu selections. The settings will last after switching off the AMP II G2. Changing settings has to be done while the amplifier *is switched on and in operating mode*.

List of settings to be adjusted to your preferences:

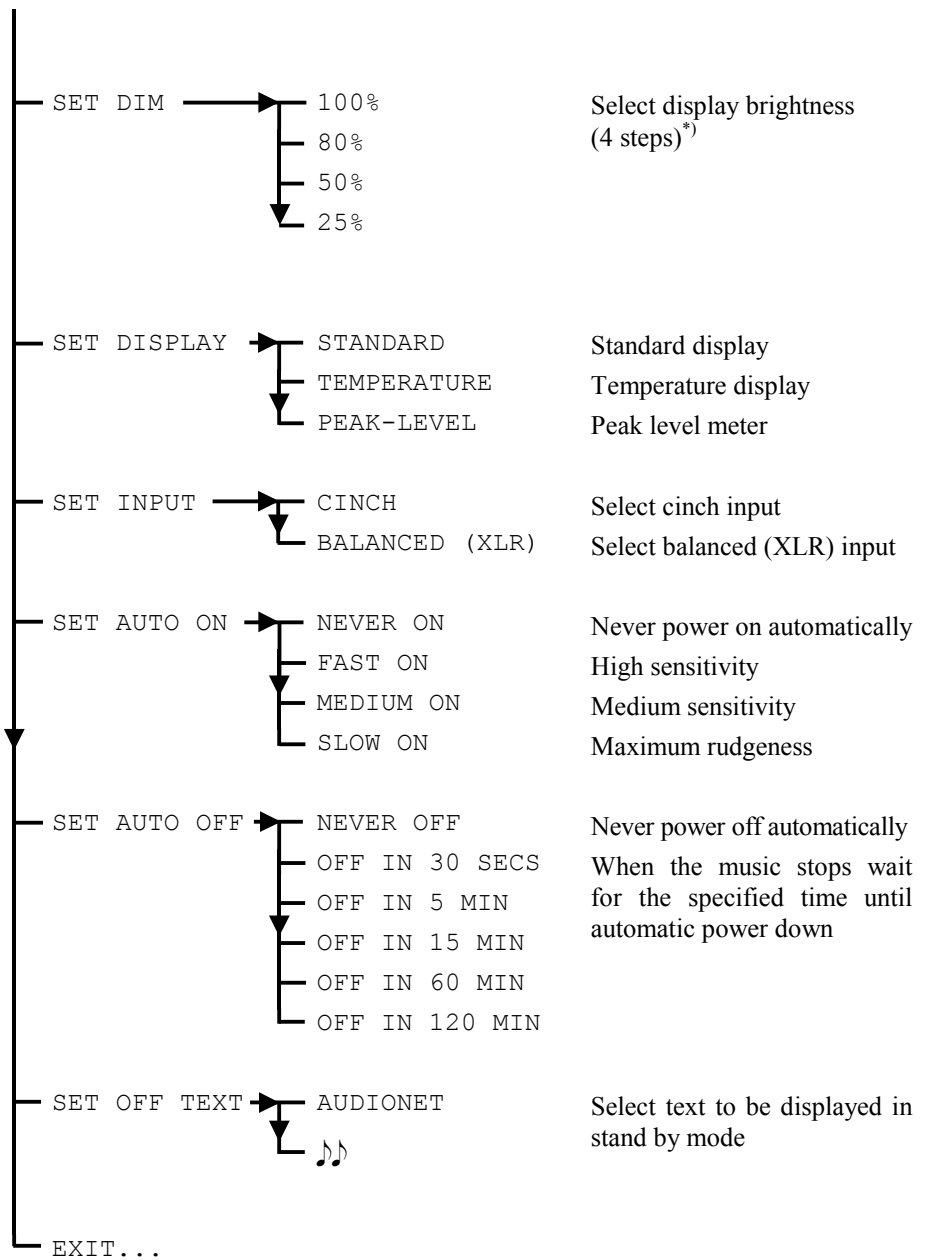
- Brightness of display (**default: 50% brightness**)
- Display mode: selected input, temperature, peak-level meter
- Input selection: Cinch or balanced (XLR) input
- Auto-On: threshold for level controlled automatic power on (see above)
- Auto-Off: time to automatic power down (see above)
- Choose between two texts to be displayed in stand by mode

Operating To change settings use short or long key presses on the "power" button at the front of the AMP II G2. *Switch on your AMP II G2* and hold the button pressed for at least 2 seconds to enter the menu.

For further operating modes please consult graphic below. A long key press will enter a menu or sub-menu. Use short key pressings to move along the menu options.

To save the changed settings use a long key press or wait for at least 10 seconds. For further changes to the settings re-enter the menu as described above.

Operating



Legend: → long key press ↓ short key press

^{*)} **WARNING:** Long term usage of the display set to maximum brightness (setting 100%) may cause extended signs of wear resulting in a decay of contrast or brightness of individual dots in the display. Do not use the display with a brightness set higher than the factory default setting of 50% over a longer period of time

Technical information

- Construction** The AMP II G2 is designed as a dual-mono amplifier. SMD techniques are used to optimize high-frequency characteristics. All signal paths are reduced to minimum length. No 'evil' elements (like coupling capacitors, coils, relays) are located in the signal path. The design is magnetically and capacitively optimized. Negative magnetic and electric influence and interaction between input, decoupling and power section are reduced to a residual minimum.
- Power supply** Control, decoupling and power sections have separated transformers and rectifiers. The main transformer (850 VA) drives two high-current capacitors (80.000 μ F) especially manufactured for Audionet by Schottky diodes.
- Circuitry** For the input section Audionet uses a low-noise, monolithic dual FET. The gain-bandwidth product of the succeeding dual-stage differential voltage amplifier exceeds 1 GHz. Input and output sections are decoupled using 'bootstrapped' emitter followers.
- The output section is equipped with power MOS-FETs. They can handle a pulse power up to 2.5 kW. The high bias current through that stage (0.4 Amperes) is regulated actively. Therefore, signals at normal volume level are handled in pure Class A mode.
- Peak level meter** In order to determine the impulse peak level the AMP II G2 detects a voltage maximum and *measures* the current flowing at that point of time. By that impedance critical loudspeakers are processed automatically and according to that a higher peak level is displayed. You will get the exact effective power. If no loudspeaker connected only a small measuring error is displayed (e.g. 3.0W instead of 200W for a 4 Ω -loudspeaker). The current number is displayed for about 2 seconds if not replaced by a higher peak level.

Security advice

- ◆ Avoid packaging material, especially plastic bags, to come into children's hands.
- ◆ Store and operate the unit in a dry room at a reasonable room temperature.
- ◆ Avoid moisture or any liquid to get into the unit.
- ◆ Set up the unit in a free position so that the air is allowed to flow through the unit slits.
- ◆ **Do not cover**, e.g. with a blanket.
- ◆ **Do not open** the case. Unauthorised opening will cause loss of guarantee.
- ◆ Use a dry cloth for cleaning.

Technical data

Type	Microprocessor controlled power amplifier
Power	200 Watt in 8Ω 350 Watt in 4Ω 550 Watt in 2Ω 750 Watt in 1Ω, all true RMS at 1% THD
Bridged operations	1400 Watt in 4Ω, two AMP II G2 per channel
Frequency response	0 - 300.000Hz (-3dB)
Damping factor	> 1.800 at 10kHz, (8Ω) > 10.000 at 100Hz, (8Ω)
Intermodulation	< -110dB SMPTE (100Hz:200kHz, 4:1), 50W/4Ω
THD	< -105dB at 1kHz, 35W/2Ω k2 typ. -117dB, k3 typ. -140dB, at 25W/4Ω
Noise	> 110dB at 10V _{eff}
Inputs	Cinch, WBT (gold plated): 37kΩ, 220pF XLR, Neutrik (gold plated): 3kΩ, 170pF (1: GND, 2: Pos, 3: Neg)
Output	2 pair of gold plated WBT terminals
Mains	220..240 Volt / 50..60 Hz 5W Stand-By, 1000W max.
Dimensions	215mm x 190mm x 500mm (WxHxD)
Weight	22kg
Finish front	brushed Aluminum, 10mm (Front plate in "alu nature" or black available)
Button	chrome or black
Top	brushed Aluminum, black, 6mm
Sides	brushed Aluminium, black, 4mm
Chassis	Steel, black

Engineered and produced by:

Idektron GmbH & Co. KG, Herner Str. 299, Gebäude 6, 44809 Bochum

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