

Audionet

AMP II

Mono - Amplifier

Owner's Manual

Owner's manual

The Audionet-Team would like to congratulate you to purchasing the Audionet AMP II! Your Audionet AMP II 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 questions to occur please do not hesitate to contact your local Audionet dealer or our factory directly.

Setting up your system

Placing Your Audionet AMP II have the perfect dimensions to be placed near your speakers. But put side by side both AMP II 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 must match your mains specifications. The AMP II is a Class I unit and has to be earthed.

Polarization The correct polarization of mains is important for reasons of audio clarity and stability. Please make sure that the "hot" pin of your power cord is connected to the left pin of the power jack (front view).

Inputs and outputs

For connecting or removing any units the AMP II 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. For audio input you can use balanced (XLR) as well as unbalanced (cinch) cables. For connections longer than 2 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. 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.

Wrong polarization will lead to severe loss of sound quality!

The speaker impedance must not be less than 2Ω!

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

Operating

Switching on Switch on your AMP II 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 is in stand by mode.

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

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

- using "Audionet Link": You switch on or off your AMP II with your Audionet pre amplifier PRE or PRE I
- 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" are necessary. Connect the output labeled "AUDIONET link" at your pre amplifier with the "AUDIONET link" input of the first AMP II. Then connect the "AUDIONET link" output with the second optical cable to the "AUDIONET link" input of the second AMP II

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

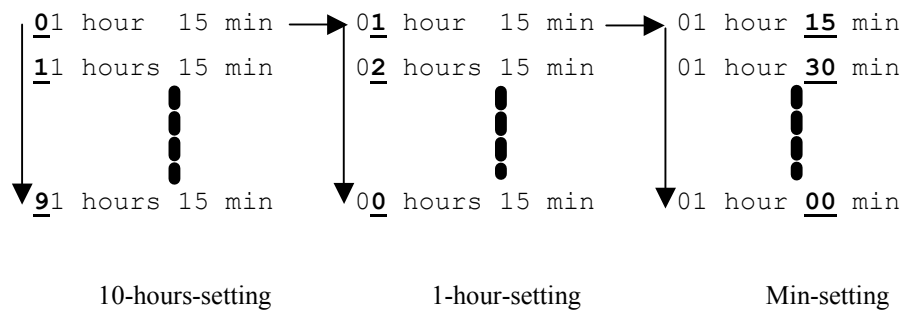
Automatic shut down will happen when no input signal is detected for a user definable time (30 seconds up to 2 hours).

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 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

Active countdown by leaving the timer setting 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 count down 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 use a *short* key press at any time.

Protection system

Your Audionet AMP II and your loudspeakers are protected by a complex protection circuitry. Any error will be printed in clear at the display:

- Overload: Shorted loudspeaker cables or defective loudspeaker (your AMP II 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 can be setup to your preferences by menu selections. The settings will last after switching off the AMP II. 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:

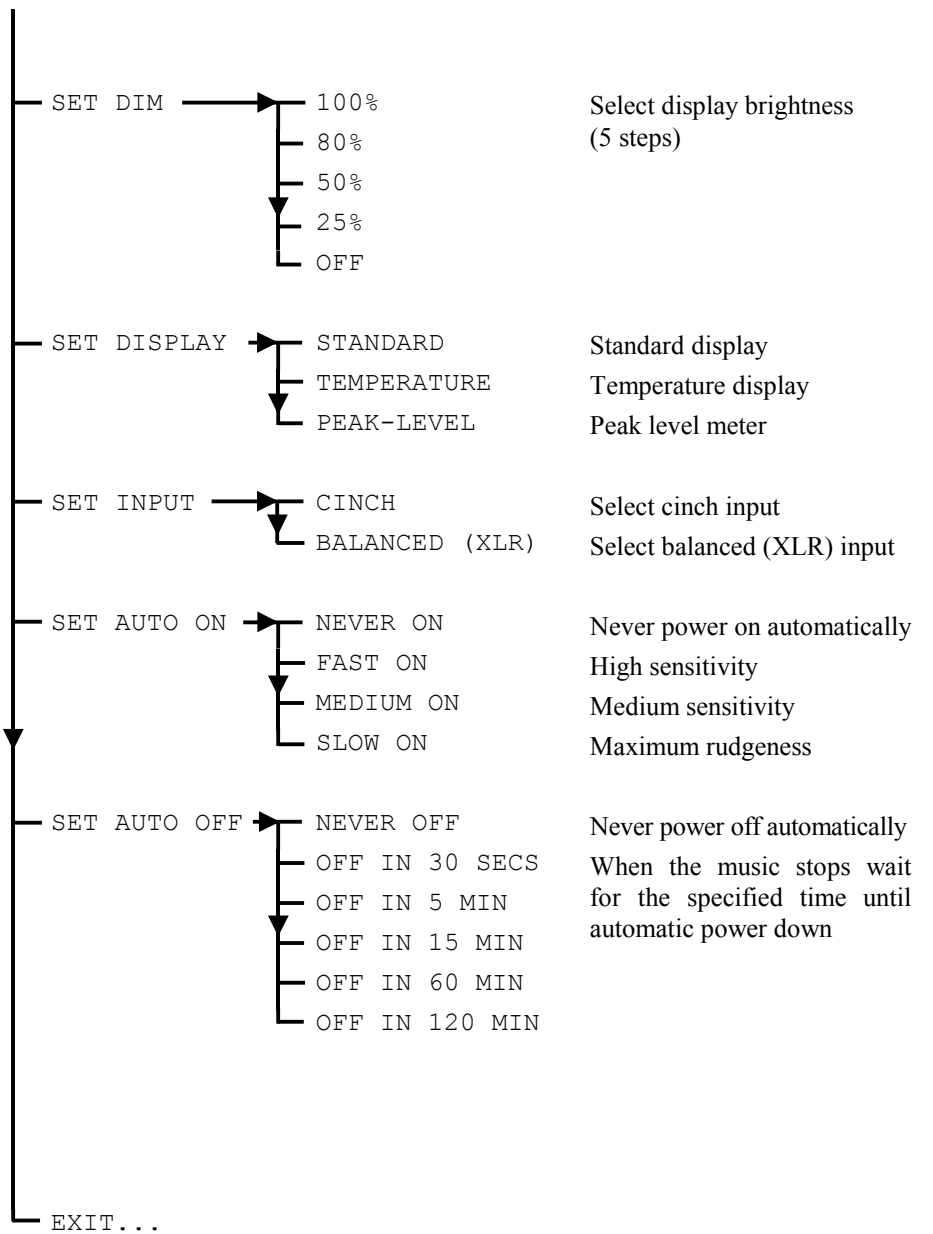
- Brightness of display (also turning off)
- Display mode: selected input, temperature, peak-level meter
- Input selection: Cinch or balanced (XLR) input
- Auto-On: threshold for level controlled automatic power on (see above)
- Auto-Off: time to automatic power down (see above)
- Choose between two 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. *Switch on your AMP II* and hold the button pressed for at least 2 seconds to enter the menu.

For further operating please consult graphic below. A long key press will enter a menu or sub-menu. Use short key presses 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

Technical information

- Construction** The AMP II 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 (700 VA) drives two Siemens Long-Life (>250.000h) electrolyte capacitors (33.000 μ F each) 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 pure Class A.
- Peak level meter** In order to determine the impulse peak level the AMP II 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 are given 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 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	< -100dB for 20Hz..20kHz, 35W/2Ω k2 typ. -117dB, k3 typ. -127dB, at 25W/4Ω
Noise	> 112dB (A) at 10V _{eff} > 124dB dynamic at maximum input
Inputs	Cinch, WBT: 37kΩ, 220pF XLR, Neutrik: 3kΩ, 170pF (1: GND, 2: Pos, 3: Neg)
Output	2 pair of gold plated WBT terminals
Mains	220..240 Volt / 50..60 Hz 3W Stand-By, 100W typ., 700W max.
Dimensions	214mm x 198mm x 500mm (WxHxD)
Weight	18kg
Finish front:	brushed Aluminum, 10mm (Front plate in "alu nature" or black available)
Button:	chrome or black
Top:	brushed Aluminum, black
Chassis:	Steel, black

Engineered and produced by:

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

www.audionet.de

kontakt@audionet.de