

Audionet

AMP II MAX

Mono - Amplifier

Owner's Manual

Owner's manual

The Audionet-Team would like to congratulate you to purchasing the Audionet AMP II MAX! Your Audionet AMP II MAX 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 MAX have the perfect dimensions to be placed near your speakers. But positioned side by side both AMP II MAX 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 the provided Audionet Power Cord (APC).

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

Mains phase recognition The correct polarization of the 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 MAX indicates a wrong polarization of the mains lead. If you read: "Attention: Mains Phase incorrect" when powering up, switch off the AMP II MAX and flip the plug in your wall outlet.

Inputs and outputs

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

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

Inputs At first please connect your pre amplifier to the inputs of your AMP II MAX. 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 MAX. 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 MAX.

Wrong polarization will lead to severe loss of sound quality!

The speaker impedance must not be less than 4Ω!

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

Operating

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

For switching on and off please press the "power" button at the front of the AMP II MAX. 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 MAX is in stand by mode

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

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

Auto On/Off The AMP II MAX 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 MAX will switch on automatically. Due to stereo signals it may occur that both AMP II MAX will switch on at different points of time.

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

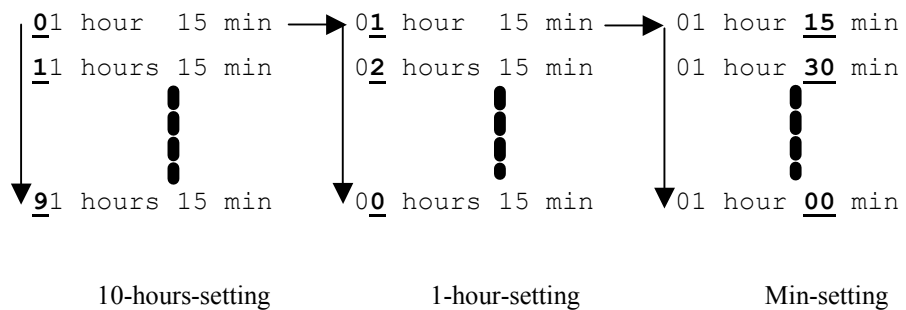
Automatic shut down will happen when no input signal is detected for a user definable time (30 seconds up to 2 hours).

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 MAX 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 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 MAX 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.
- Temp Failure: Do not cover the ventilation slots.
- HF-Failure: High frequency oscillation, e.g. defective pre amplifier.
- DC-Failure: The level of DC voltage at the output is too high.

Programming

Overview Except the previous described feature of countdown timer controlled automatic power on your AMP II MAX can be setup to your preferences by menu selections. The settings will last after switching off the AMP II MAX. 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:

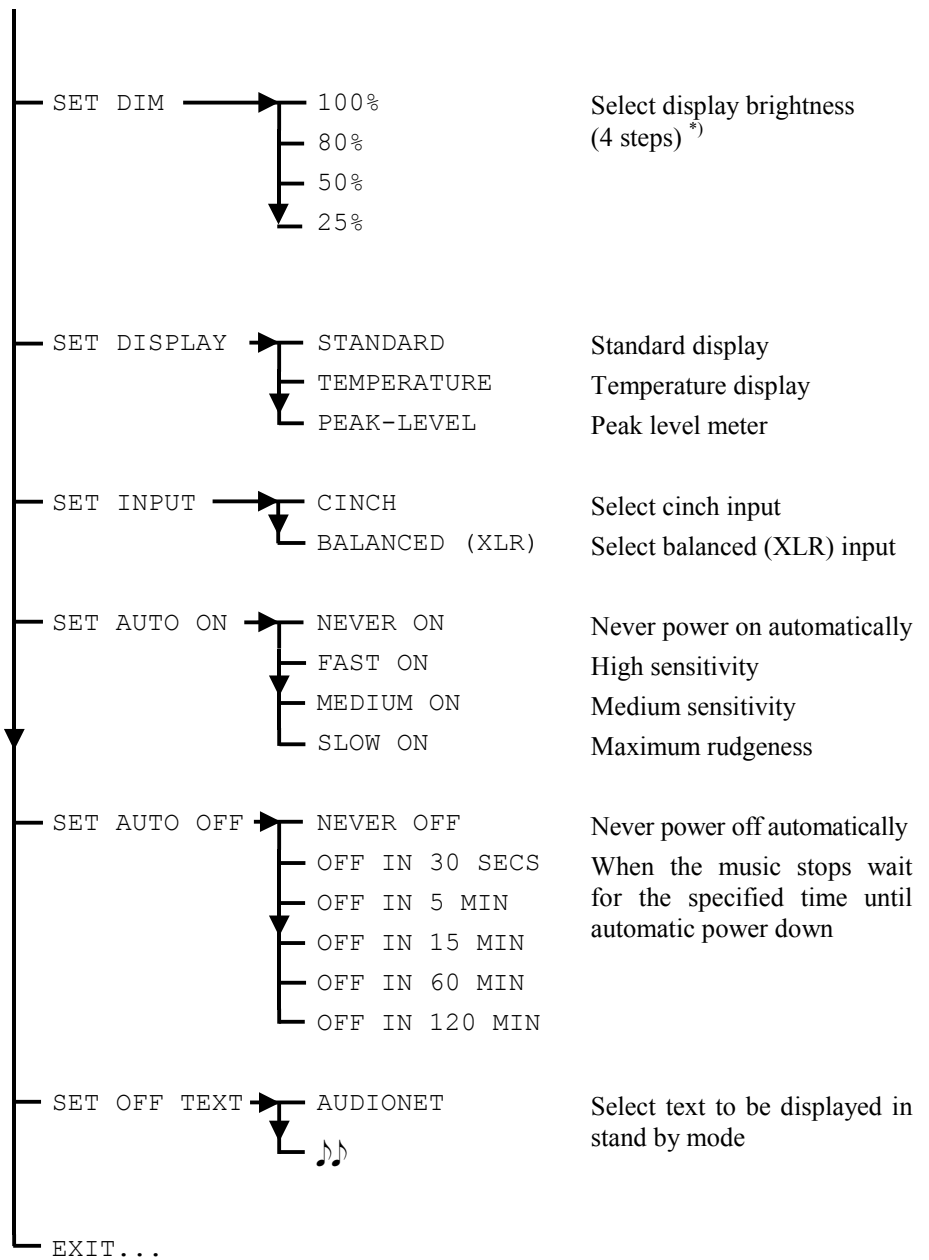
- Brightness of display (**default: 50% brightness**).
- Display mode: Selected input, temperature, peak-level meter.
- Input selection: Cinch or balanced (XLR) input.
- Auto-On: Threshold for level controlled automatic power on (see above).
- Auto-Off: Time to automatic power down (see above).
- Choose 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 MAX. *Switch on your AMP II MAX* and hold the button pressed for at least 2 seconds to enter the menu.

For further operating please consult the 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

^{*)} **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 MAX 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. Two main transformers (each with 1100 VA) drive four Siemens 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.
- Peak level meter** In order to determine the impulse peak level the AMP II MAX 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 is 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 get 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	400 Watt in 8Ω 700 Watt in 4Ω 1100 Watt in 2Ω
Bridged operations	2000 Watt in 8Ω, two AMP II MAX 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
Output	2 pair of gold plated WBT terminals
Mains	220..240 Volt / 50..60 Hz 5W Stand-By, 100W typ., 2000W max.
Dimensions	215mm x 285mm x 500mm (WxHxD)
Weight	38kg
Finish front:	brushed Aluminum, 10mm (Front plate in "alu nature" or black available)
Button:	chrome or black
Top:	brushed Aluminum plates, black elox
Chassis:	Steel, black

Engineered and produced by:

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