# audionet

# SAM V2

Stereo - Amplifier

# User's Manual

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Audionet is proud to welcome you in the world of German high-end! Your Audionet SAM (= Stereo AMplifier) is designed for natural and audiophile music reproduction in conjunction with safe operation and perfect long-term stability. The SAM combines excellent high-frequency capabilities with total control of your loudspeakers.

We strongly recommend to read the manual and precautions carefully first. The SAM is a complex unit and offers various uncommon features, which enable you to adjust the device to your personal preferences.

In case of difficulties please do not hesitate to contact your dealer or our factory directly.

# Installation and power supply

**Placement**  Please make sure that your Audionet SAM is installed at a place that is sufficiently ventilated to allow the heat to dissipate.

**Installation**  Connect the power jack at the rear to your wall outlet. You should either use the provided power cord or another one meeting your home country's specifications. Tuning with "audiophile" power cords can lead to improved sound field. Please ask your dealer for assistance.

The power specifications at the rear must meet to your home country's specifications. The SAM is a Class I system and must be earthed. Please ensure a stable earth connection.

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

The correct polarizing of mains is important for reasons of audio clarity and stability.

# Overview

**Inputs**     For adding or removing connections your SAM must be switched off or at least the volume has to be turned down completely.

Your SAM is equipped with 6 high-level RCA inputs marked 1..6. The inputs 2..5 are of the same kind, however input 6 is reserved for recording systems, such as tape decks or DAT recorders (see below). In the case you purchased the optional phono module please use input 1 for connecting your turntable. Otherwise input 1 can be used as a regular input.

Please connect your audio sources to the inputs of your Audionet SAM. Do not care about the order because it is possible to assign dedicated names to the inputs later on.

**Recorders**     The line out of a tape-, video- or DAT-recorder has to be connected to input 6. For this unit the SAM delivers an output signal at the sockets REC-OUT. Connect this output to the line in of your recorder.

If the recorder is connected to input 6 the recorder will be prevented from recording itself. For input 6 the REC-OUT is disabled (muted).

If you connected the recorder to input 3, for instance, the recorder would get its own output signal routed back on the input. If the recorder is set into record mode this could cause dangerous feedback oscillations!

**Turntable**     In case you purchased the optional phono module please use input 1 for connecting your turntable as mentioned above. Additionally the turntable chassis has to be connected to the SAM's earth screw labeled "GND" to prevent hum.

The phono module fits perfectly to all MM- and MC-systems available. It offers independent settings of the parameters gain, input resistance and input impedance. For detailed description please refer to the manual shipped with the module.

**Connecting the speakers**

Connect the left and right speakers to the appropriate gold plated WBT terminals at the rear. Please make sure that the red outputs (+) of the SAM are connected to the positive inputs of the loudspeakers (usually red) and the white outputs (-) are connected to the negative loudspeaker inputs (usually white or black).

Wrong polarization will result in severe loss of sound quality!

The nominal loudspeaker impedance must be 4 ohms or higher!

Although the SAM has a protections circuit to prevent damage of the system always switch off the unit while working on the loudspeaker cables. Please make sure that all cables are in absolute best condition. Broken shields or short-cut loudspeaker cables could damage loudspeakers or the SAM! Never use force or tools for tightening the terminal screws!

**Bi-Amping**
In case you want to use an external power amplifier for bi-amping purposes connect the "Pre-Out" outputs at the rear of the SAM to the inputs of your external power amplifier. Before using you have to enable them by selecting "active" for the "Pre-Out" option in the system setup menu (see "System setup"). The "Pre-Out" output deliver a signal controlled by the "vᴏʟᴜᴍᴇ" knob to drive the external power ampilfier.

**Bi-Wiring**
For bi-wiring the loudspeakers with your Audionet SAM please use two loudspeaker cables. Insert the cable to the tweeters from the rear using banana plugs and mount the cables to the bass speakers from the side. In doubt please ask your dealer for assistance.

**Headphones**
A 6.3 mm headphone jack is located at the rear of your SAM. The signal at this socket can be switched on and off to allow the headphones to be plugged in permanently. Switching is easily done from the front using the "sᴇᴛ" button. Please refer to the paragraph "Programming of special features".

Please be aware of listening music via headphones can seriously damage your ears! Control the volume at the front so that a level of 95dB SPL is not exceeded. The program can start suddenly!

# Operating

**Power**

At first please put the mains switch at the rear of the SAM to position "1". The switch is located above the mains socket. After a sort time "Audionet" is displayed indicating the stand-by mode.

For switching your SAM on and off please use the "power" button at the front panel. The main switch does not need to be used unless you are absent for a long time.

**Volume**

Turn the knob "volume" at the front panel to adjust the volume level. The volume is indicated in dB in the display. The range is -80..0dB, where -80dB is the greatest possible attenuation. 0dB means maximum volume. Please make sure that the volume is turned down (counterclockwise) before you switch on your SAM the first time!

**Input selection**

Please choose your input channel with the knob "input" at the front panel. The inputs are switched by precise gold plated relays. You can perceive their "*clicks*" from within the unit.

The current input is shown by the display in number plus text form. The text can be adjusted to your preferences (see below).

**Remote control**

Using the optional remote control you can control all functions of your SAM from a distance of up to 10 meters. The "set" function is operated using short and long key presses. To select the channels 7 and 8 (digital inputs if DAC module is mounted) please press the keys 5 and 6 long respectively.

The remote control offers an additional function "mute". After pressing the "mute" key the volume is reduced to -80dB automatically. Press this key again to get back to the previous volume.
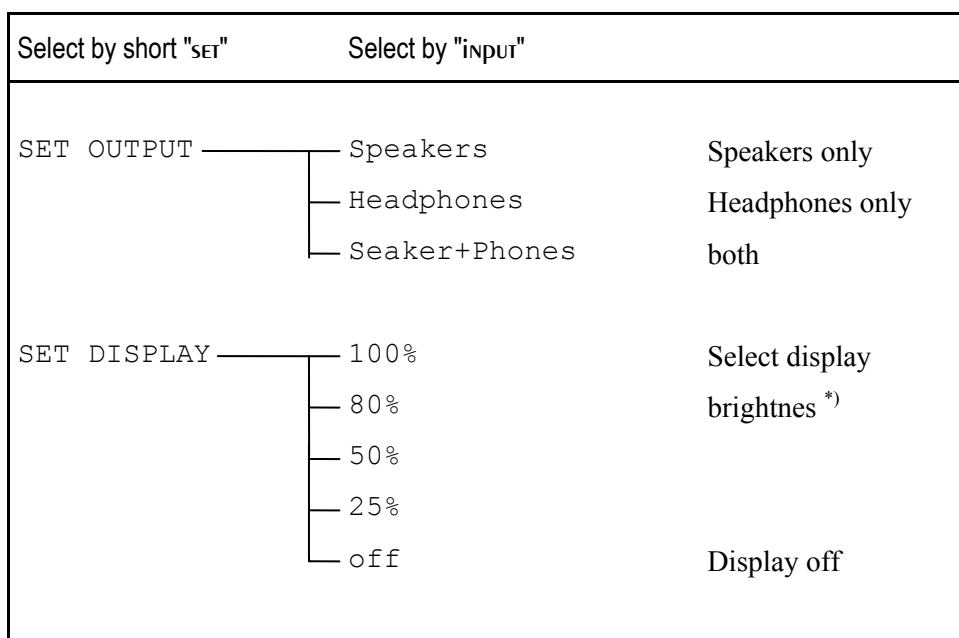
# Programming of special features

**Overview**   Your Audionet SAM is adjustable to meet your personal requirements using a computer controlled menu. The settings remain active even when this unit is switched off or disconnected from the mains.

In detail there are the following possibilities:

- Output selection: Speakers, headphones or both

- Adjust brightness of display (also switching it off)

- Individual selection of a text for each input (up to 14 characters in length)

- Auto-power-on when SAM gets mains supply (for timer usage)

- Enable/Disable Pre-Out outputs and digital inputs 7 and 8, if optional DAC board is mounted

- Choose between two texts for stand-by-mode.

**User setup**   The settings frequently used are reached by a short key press on "ѕɛт". Then please use the "ıɴᴘᴜт" knob or the volume up and down keys on the remote control and follow the diagram below:

| Select by short "ѕɛт" | Select by "ıɴᴘᴜт" | |
|---|---|---|
| SET OUTPUT ——— Speakers | Speakers only | |
| —— Headphones | Headphones only | |
| —— Seaker+Phones | both | |
| | | |
| SET DISPLAY ——— 100% | Select display | |
| —— 80% | brightnes [*)] | |
| —— 50% | | |
| —— 25% | | |
| —— off | Display off | |

**If no changes are made for 10 seconds, your SAM will automatically exit the programming menu.**

**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
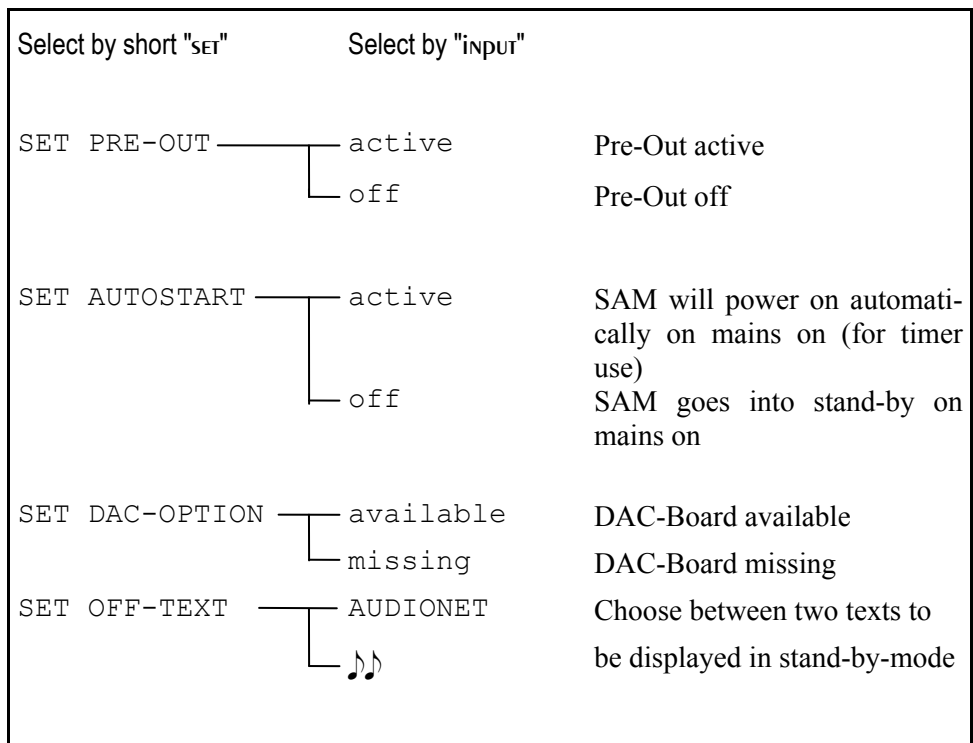
**Edit name for inputs**

With a long key press on "sᴇᴛ" you get to into the edit mode for each input names. A "^" marks the current character to be changed. Turn the "ɪɴᴘᴜᴛ" knob or the volume up and down keys on the remote control to choose a character. Press "sᴇᴛ" shortly or the "ᴍᴜᴛᴇ" key on the remote control to move the "^" one step to the right.

Use the numeric keys on the remote control to directly choose an input while editing its name.

For further system preferences use a long key press on "sᴇᴛ".

**System setup**

The systems settings used less frequently are reached by leaving the text edit mode with a long key press on "sᴇᴛ". Then please use the "ɪɴᴘᴜᴛ" knob or the volume up and down keys on the remote control and follow the diagram below:

| Select by short "sᴇᴛ" | Select by "ɪɴᴘᴜᴛ" | |
|---|---|---|
| SET PRE-OUT | active | Pre-Out active |
| | off | Pre-Out off |
| SET AUTOSTART | active | SAM will power on automatically on mains on (for timer use) |
| | off | SAM goes into stand-by on mains on |
| SET DAC-OPTION | available | DAC-Board available |
| | missing | DAC-Board missing |
| SET OFF-TEXT | AUDIONET | Choose between two texts to |
| | ♪♪ | be displayed in stand-by-mode |

**If no changes are made for 10 seconds, your SAM will automatically exit the programming menu.**

## Precautions

- Prevent children playing with plastic bags!

- Please store and operate this unit in a dry room at reasonable room temperature!

- Avoid moisture or any liquid to get into this unit!

- Set up this unit in a free position. Do not cover the top!

- Do not open the case! No user serviceable parts inside.

- Unauthorised opening voids warranty!

- Do not short-circuit the output terminals!

- Please use a dry cloth for cleaning!

We would like to wish you many exciting listening experiences with your Audionet products!

# Technical Data

| | |
|---|---|
| Function | High-End modular stereo amplifier |
| Power | 2 x 110 Watt into 8 Ohms<br>2 x 200 Watt into 4 Ohms |
| Freq. response | 0 - 500.000Hz (-3dB) |
| Damping factor | typ. 1000 at 100Hz, (8 Ohms) |
| Distortion spectrum | k2 typ. -100dB, k3 typ. -120dB, at 25W/4 Ohms |
| Noise | > 112dB (A) at10V$_{RMS}$ |
| Channel separation | > 90dB for 1kHz |
| Input impedance | 10kOhms, 150pF |
| Inputs | 6 x LINE IN, Cinch/RCA, gold plated<br>2 x DIGITAL IN, optional |
| Outputs | 1 x REC OUT, for recorders<br>1 x PRE OUT, for external power amplifiers |
| Speakers output | WBT terminals, gold plated |
| Headphones out | 1x 6,3mm, stereo, 32..600 Ohms (rear side) |
| Power supply | 220..240 Volts / 50..60 Hz<br>5W Stand-By, 700W max. |
| Dimensions | 430mm x 110mm x 360mm (WxHxD) |
| Weight | 16kg |
| Finish Front | brushed aluminum, 10mm thick<br>(natural or black elox) |
| Knobs and keys | Aluminum natural or black |
| Top | brushed aluminum plates, black |
| Chassis | 2mm steel, black |
| Options | Massive remote control for all functions,<br>Phono plug-in module (MM and MC)<br>D/A-converter plug-in module |