

# **Audionet**

## **AMP III**

Three Channel Power Amplifier

### **User's Manual**



# Contents

<b>1</b>	<b>Preface .....</b>	<b>4</b>
1.1	Included .....	5
1.2	Transport.....	5
<b>2</b>	<b>Overview control elements.....</b>	<b>6</b>
2.1	Front panel.....	6
<b>3</b>	<b>Overview connections.....</b>	<b>7</b>
3.1	Back panel .....	7
<b>4</b>	<b>Installation and power supply .....</b>	<b>8</b>
4.1	Placement .....	8
4.2	Mains connection.....	8
4.3	Orientation of mains plug .....	9
<b>5</b>	<b>Inputs and outputs.....</b>	<b>10</b>
5.1	Line inputs .....	10
5.2	Speaker terminals .....	11
<b>6</b>	<b>Operating.....</b>	<b>11</b>
6.1	Switching on/off .....	11
6.2	Mains phase detection .....	12
6.3	Audionet Link.....	12
<b>7</b>	<b>Protection system.....</b>	<b>13</b>
<b>8</b>	<b>Security notes .....</b>	<b>15</b>
<b>9</b>	<b>Technical data.....</b>	<b>Fehler! Textmarke nicht definiert.</b>

# 1 Preface

The Audionet Team congratulates you on your purchase of this unit.

AMP III is Audionet's latest 3-channel power amplifier for all music enthusiasts who would like to expand their stereo system, they became fond of, or already existing stereo amplifiers to a full-grown home theater setup. Providing three power amplifier channels, AMP III is primarily designed to drive the Center and Rear speakers making it easy to extend your stereo setup to a 5-channel home cinema application: AMP III is our home cinema expansion unit for stereo amplifiers.

AMP III accomplishes the feat to combine outstanding performance and matchless sound character with utmost compactly dimensions. With these features, the AMP III is predestined for home theater solutions in particular suitable for your living space and primarily convincing in sound.

AMP III masters all its tasks with dedication and captivates its audience with an authenticity rarely to be experienced. Its sound is fast, vigorous and thoroughly honest, but simultaneously full of concinnity, grace and accuracy. Paired with its contagious delight of performance, an amazingly realistic sound experience arises.

AMP III represents the latest state of Audionet's award-winning amplifier technology and audiophile passion: Engineered and produced in Bochum, Germany.

Like in all our mono and stereo power amplifiers, we consequently realized Audionet's ultra linear amplifier concept in the AMP III, too. The circuitry is designed to achieve exemplary low distortion, celerity and stability. The internal structure of the AMP III was developed in a way that all three channels work independently as far as possible. Only exclusively selected high-grade components are used. Influences harmful to the sound quality of the amplifier have been completely eliminated, and an exemplary stability of performance is granted.

AMP III is controlled and monitored by a capable microprocessor. It provides an easy handling, comforting reliability and even checks the correct polarization of the mains plug. Of course, the AMP III can be remotely controlled by the Audionet Link interface.

But before you start listening to your new Audionet AMP III, please read this manual carefully so you are able to use and enjoy all functions of this unit without drawback on music quality.

## **1.1    *Included***

Included you will find the following items:

- the multichannel amplifier AMP III
- the user's manual (that you are currently reading)
- one standard mains chord.

## **1.2    *Transport***

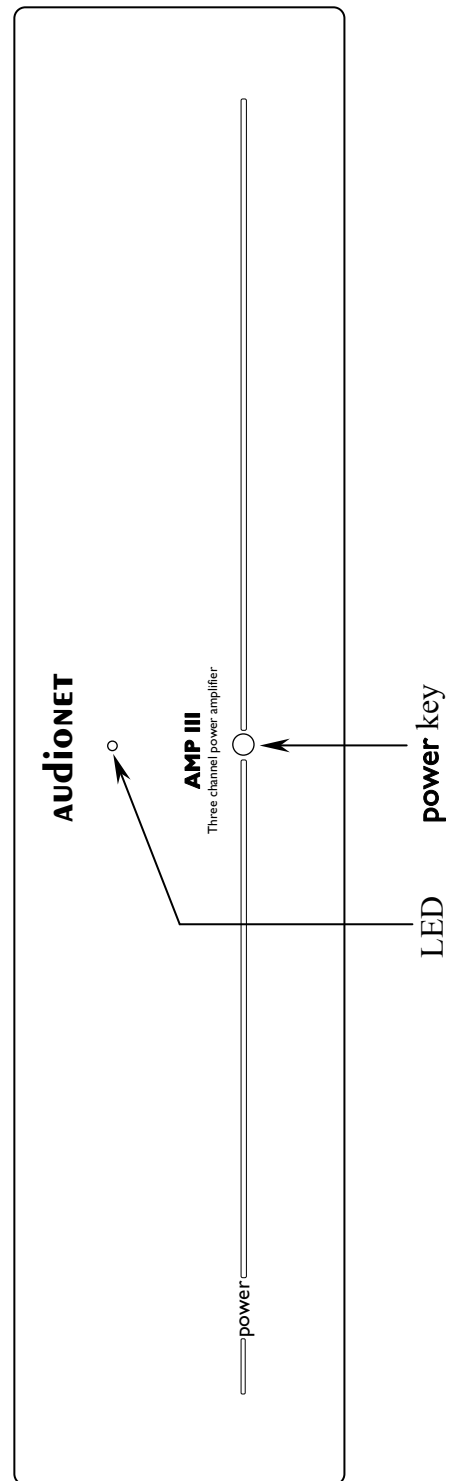


### **Important**

- Please transport the AMP III only in the included package.
- Always use the plastic bag to prevent scratches on the housing.
- Please allow the AMP III to adapt to the climatic conditions in your listening room before you switch on the unit for the first time after transport.

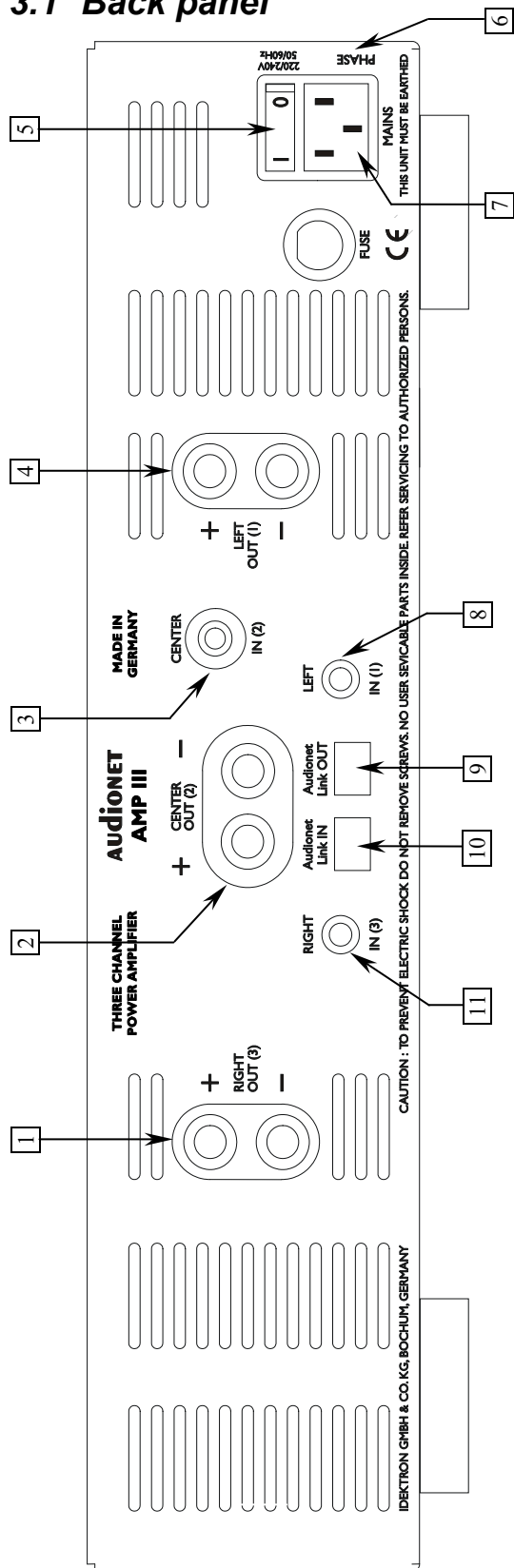
## 2 Overview control elements

### 2.1 Front panel



## 3 Overview connections

### 3.1 Back panel



- |   |                                     |    |                              |
|---|-------------------------------------|----|------------------------------|
| 1 | Speaker terminal channel 3 (Right)  | 6  | Marking mains phase          |
| 2 | Speaker terminal channel 2 (Center) | 7  | Mains input                  |
| 3 | Line input channel 2 (Center)       | 8  | Line input channel 1 (Left)  |
| 4 | Speaker terminal channel 1 (Left)   | 9  | Audionet Link output         |
| 5 | Mains switch                        | 10 | Audionet Link input          |
|   |                                     | 11 | Line input channel 3 (Right) |

## 4 Installation and power supply



### Important

- For connecting or removing loudspeakers and/or the pre amplifier your AMP III must be switched off to prevent damage on the amplifier or the connected units.
- Please make sure that all cables are in absolute best conditions! Broken shields or short-cut loudspeaker cables could damage speakers and/or amplifiers.

### 4.1 Placement

Please find a place for your Audionet AMP III that is sufficiently ventilated to allow the heat to dissipate. It is recommended to place the AMP III into a high quality rack or onto a stable table. Do not expose the unit to direct sunlight. Do not place the unit in close range to heat sources like radiators. Do not cover the ventilation slots of the AMP III.

### 4.2 Mains connection

The mains input [7]\* is on the back panel of the AMP III. To connect the unit to mains use the included mains cord. If you want to use a different power cord make sure that it meets the specifications for your home country.



### Important

- The electrical specifications printed onto the back panel must meet the electrical specifications of your home country.
- The AMP III is a Class I unit and must be earthed. Please ensure a stable earth connection. 'Phase' ('hot' pin) is marked on the back panel ('PHASE') [6].
- Never pull the mains plug while the AMP III is switched on. Always power down the unit to stand-by mode first, before you use the mains switch [5] on the back panel or pull the mains plug.

---

\* see numbers in section 'Back panel'

Only in case of extended absence (like vacations) or if massive trouble on the mains power is to be expected you should disconnect the unit from mains. To disconnect the AMP III completely from mains pull the mains plug.

### 4.3 Orientation of mains plug

The correct polarization of mains is important for reasons of audio clarity and stability. Please connect the mains cord that the hot pin of the wall outlet is connected to the pin of mains input 7 marked '**PHASE**' 6 on the back panel of the unit.



#### Note

- Your Audionet AMP III is able to detect a wrong polarization of the mains plug. The LED in the front panel will flash quickly while powering up from stand-by mode using the **power** key. In this case, power down the unit and flip the mains plug (see section '*Mains phase detection*').

## 5 Inputs and outputs



### Important

- For connecting or removing loudspeakers and/or the pre amplifier the your AMP III must be switched off to prevent damage on the amplifier or the connected units.
- Please make sure that all cables are in absolute best conditions! Broken shields or short-cut loudspeaker cables could damage speakers and/or amplifiers.

### 5.1 Line inputs

At first, connect your pre amplifier to the line inputs **3**, **8** and **11** of the AMP III. Go by the names of the channels printed above the input jacks.



### Note

- Please refer to the following table for some recommended setups of typical speaker configurations:

Configuration	AMP III line inputs		
	1	2	3
5.1 standard system with separate amplifiers for L/R	LS	C	RS
5.1 standard system with separate amplifiers for LS/RS	L	C	R
7.1 system with separate amplifiers for LS/RS and LB/RB	L	C	R
7.1 system with separate amplifiers for L/R and LS/RS	LB	C	RB
3 channel system	L	C	R
2 channel system	L	n.c.	R
L = Left C = Center R = Right LS = Left Surround RS = Right Surround n.c. = not connected LB = Left Back RB = Right Back			

- Of course, channel assignments differing from the table above are possible. Preferably assign channels 1 & 3 first.

## 5.2 Speaker terminals

Now, connect your speakers to the gold plated terminals on the back panel. The assignment to the respective line input is clearly indicated.



### Note

- Look out for the correct connection of your speaker cables. Usually, the terminals of your speakers are marked '+' and '-'. The AMP III uses the same marks.
- Wrong speaker polarization will result in severe loss of sound quality!



### Important

- **Although the AMP III has an effective protection system to prevent damage to the circuits, switch off the unit while working on the speaker and/or audio cables.**
- The nominal loudspeaker impedance should be 4 Ohms or higher.
- Never use force or tools tightening the terminal screws.

## 6 Operating

### 6.1 Switching on/off

First switch on the AMP III using the mains switch **5** on the back panel. For about 2 seconds the LED will flash rapidly while the unit is initialized. Afterwards, the AMP III is in stand-by mode; the LED is off.

Press **power** key on the front panel to switch on the unit. The LED on the front panel reports the polarization of mains phase for a few seconds (see sections '*Mains phase detection*') until the speaker outputs are enabled. The AMP III is now ready to playback music.

To switch off the AMP III press **power** key on the front panel again. The unit is in stand-by mode; the LED is off.



### Note

- During shut down procedure the LED will flash 7 times. Before you can switch on the AMP III again, you have to wait until the shut down procedure is finished and the LED is off. Do not switch off the amplifier with the mains switch **5** at the back panel during shut down procedure.

## 6.2 Mains phase detection

The AMP III is able to detect the correct polarization of the mains plug. After pressing the **power** key until the speaker outputs are enabled, the LED will flash in different rhythms:

- If the polarization is correct, the LED flashes slowly: ⊗\_\_⊗\_\_⊗...
- If you see the LED flashing rapidly: ⊗\_⊗\_⊗\_⊗\_⊗... please switch off the unit and flip the mains plug. If you now switch on the AMP III again, the unit should show the correct mains polarization by a slowly flashing LED.

## 6.3 Audionet Link

For your convenience, the AMP III can be controlled remotely by one of Audionet's multi-channel pre amplifiers MAP or MAP 1, as well as one of Audionet's stereo pre amplifiers PRE or PRE 1 using the 'Audionet Link' interface.

You only need a simple optical 'Toslink' cable to connect the 'Audionet Link' output of your Audionet pre amplifier to the 'Audionet Link' input **10** of your AMP III. Now, the AMP III will be switched on/off automatically, when you switch on/off your pre amplifier at the front panel or by remote control.

In case you would like to automatically control further Audionet units in your system with the 'Audionet Link' interface, please connect the 'Audionet Link' output **9** of your AMP III to the 'Audionet Link' input of the next Audionet unit using a simple optical 'Toslink' cable.



### Note

- The 'switch on' signal is issued to any further Audionet units daisy chained to the 'Audionet Link' output of your AMP III with a little delay to avoid all units switching on at the same moment, which could cause an overload of your mains fuse.
- Independently from the 'Audionet Link' interface, you can switch on/off your AMP III at any time by using the **power** key on the front plate.

## 7 Protection system

Your Audionet AMP III is equipped with a powerful protection system that safeguards your speakers and itself.

In case of an error the AMP III will report the cause in two steps. First, the LED on the front panel will flash the number of the error occurred. Just count how often the LED flashes and check that number with the following table:

**1x DC failure:**

dangerous DC voltage level at the speaker output: defective pre amplifier, source or active crossover carrying DC

**2x High frequency (HF):**

high frequency oscillation, please check your input source

**3x Overload:**

short-circuit of a loudspeaker cable or speaker is defective

**4x Temperature:**

do not cover the ventilation slots of your AMP III

Press **power** key at the front panel. Now, the AMP III reports the number of the erroneous channel. Count how often the LED flashes to get the channel number. The channel number is printed on the back panel right beside the speaker terminals **1**, **2** and **4**, and also printed below the line inputs **3**, **8** and **11**.

Press **power** key again to enter stand-by mode.



### Important

- Remove cause of error before switching on the AMP III again!



### Note

- The AMP III will report the error code or channel number repeatedly until you press the **power** key at the front panel.
- Between each repetition of the error report is a small pause of about 1 second. During this pause the LED is off.



### Example

An error occurred. The AMP III switches off the speakers, and the LED on the front panel flashes:

⊗ \_ ⊗ \_ \_ \_ ⊗ \_ ⊗ \_ \_ \_ ⊗ \_ ⊗ \_ \_ \_ ⊗ \_ ⊗ ...

According to the table above 2 flashes denote 'High Frequency Error'.

Now, press the power key. The AMP III will report the channel number. The LED flashes:

⊗ \_ ⊗ \_ ⊗ \_ \_ \_ ⊗ \_ ⊗ \_ ⊗ \_ \_ \_ ⊗ \_ ⊗ \_ ⊗ ...

Between the pauses, you can count 3 flashes of the LED which denotes that the error occurred in channel nr. 3 (Right).

To enter stand-by mode please press the **power** key again.

**Legend:**      ⊗ = LED on              \_ = LED off

## 8 Security notes



### Important

- Avoid packaging material, especially plastic bags, coming into children's hands!
- Store and operate the unit in a dry room at a reasonable room temperature only!
- Avoid moisture, any liquids, dirty or small objects getting into the unit!
- Set up the unit in a sufficiently ventilated environment!
- Do not cover the unit!
- Do not open the unit. Unauthorised opening will void warranty!
- Do not short circuit the outputs!
- For connecting or removing loudspeakers and/or the pre amplifier your AMP III must be switched off to prevent damage to the amplifier or the connected units.
- Use dry cloth for cleaning!

We would like to wish you many exciting listening experiences with your new Audionet product.

If you still have any questions, do not hesitate to ask your competent Audionet dealer or contact us directly.

## 9 Technical data

<b>Function</b>	3-channel power amplifier
<b>Power</b>	100 Watts in 8 Ohms per channel 190 Watts in 4 Ohms per channel
<b>Frequency response</b>	2 – 300,000 Hz (-3dB)
<b>Damping factor</b>	> 2,000 from 10 Hz to 10 kHz
<b>THD+N</b>	< -100 dB (25 Watts / 4 Ohms)
<b>SNR</b>	> 120 dB (A-weighted)
<b>Channel separation</b>	> 100 dB for 1 kHz
<b>Input impedance</b>	37 kOhms, 150 pF
<b>Inputs</b>	3 Cinch Line, AC coupled, gold plated 1 Audionet Link, optical
<b>Outputs</b>	3 pairs of WBT speaker terminals, gold plated 1 Audionet Link, optical
<b>Mains</b>	230 V, 50..60 Hz
<b>Power consumption</b>	1 Watt Stand by, max. 700 Watts
<b>Dimensions</b>	Width: 430 mm Height: 110 mm Depth: 360 mm
<b>Weight</b>	18 kg
<b>Finish Front</b>	brushed aluminium, 10 mm, black anodized, light grey print or aluminium 'nature' anodized, black print, LED red or blue
<b>Features</b>	Processor controlled protection circuit for HF, DC, temperature and overload Remote control by Audionet Link (optical) Automatic mains phase detection

Errors and omissions excepted. Specifications and design are subject to changes without prior notice.

**AUDIONET** is a trademark of Idektron GmbH & Co KG

Engineered and produced by:  
Idektron GmbH & Co. KG, Herner Str. 299, Gebäude 6, 44809 Bochum, Germany  
[www.audionet.de](http://www.audionet.de)  
[contact@audionet.de](mailto:contact@audionet.de)