



# EDGE **A2-300**

MANUAL

## Table of Content

Introduction	4	Practice of sound	9
Safety Instructions	4	Operating EDGE A2-300	11
Quick Setup	4	Connecting the speakers	12
Placing the unit	5	Bi-amping	13
AC Power (220V / 110V)	5	19" rack mounting	14
Connections (Noise issues)	5	Technical Specifications	18
Inputs & Outputs	6		

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### XTZ Values

Our basic philosophy is to recreate a balanced and natural sound with an optimum relation between price, performance and quality. This enables you to listen to your favorite music or movie with full joy and experience the sound like it was intended by the producer.

Our concept:

- Extensive development for advanced products
- Cost-effective manufacturing and sales strategy
- Meticulous quality controls
- Reduction of intermediaries

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XTZ is a registered trademark of XTZ Group AB  
ICEpower is a registered trademark of ICEpower A/S

# Important Safety Instructions

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. This apparatus was evaluated for use in an operating ambient temperature of 45 °C.
10. Do not defeat the safety purpose of the grounding type plug. The grounding plug has two blades and a third grounding prong. The third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
11. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
12. Only use attachments/accessories specified by the manufacturer.



13. Use only with cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.

14. Unplug this apparatus during lightning storms or when unused for long periods of time.

15. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

16. The appliance coupler is used as the disconnect device and shall remain readily operable.



**WARNING!** To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.



**WARNING!** This apparatus shall not be exposed to dripping or splashing, and no objects filled with liquids, such as vases, shall be placed on the apparatus.



**WARNING!** This apparatus shall be connected to a MAINS socket outlet with a protective earthing connection.



**DANGER!** No user serviceable parts inside. Service is to be performed only by XTZ.

*See markings on the bottom of the product.*



The lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electrical shock to persons.



The exclamation point, within an equilateral triangle, is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

## Introduction

We would like to thank you for buying a product of the XTZ EDGE series. The electrical design of the EDGE series offers the ultimate sound reproduction. In order to utilize your new device in the best possible way, please read this manual carefully before using it for the first time. It often takes some effort and patience to make a HiFi system sound its best. If you don't have any previous experience from this kind of installations, please feel free to contact our free of charge support and we will help you.

- Series name

- Power Amplifier  
- Two channels

- Power level

EDGE | **A2** | **300**

## Safety instructions

Switch off your amplifier before connecting the speakers. Make sure that the speaker cables are tightened and have a strong connection to the speaker terminal and amplifier terminal.

Make sure that the electronics are not exposed to direct sunlight or strong artificial light. Listening to high sound pressure levels over a longer period of time may harm your hearing. To avoid hearing damage do not listen to high sound levels over a longer period of time.

## Quick Setup

The initial setup of a XTZ product is relatively easy. Please take your time reading the guidelines and more detailed instructions on the following pages of this manual after completing the first four steps as listed below.

- 1** Connect your speakers to the SPEAKER-OUTPUT terminals of the EDGE A2-300.
- 2** Connect your Preamplifier's PRE OUT to the EDGE A2-300 rear panel's INPUT port.
- 3** Make sure to set your Pre-amplifier's volume level to minimum.
- 4** Connect the AC cord to the EDGE A2-300 AC Power input and then plug into an AC outlet.
- 5** Set the switches in the CONTROL section on the backside of the EDGE A2-300 as you wish. If the device is used in "AUTO ON" Mode, it will detect any incoming signal and automatically switch from STANDBY to ON. If used in "ALWAYS ON" Mode, the device will always be in ON Mode.
- 6** Switch the POWER switch on the rear panel to the "ON" setting in order to turn the EDGE A2-300 to standby mode. The Standby LED indicator embedded around the bezel of the STANDBY button will illuminate red in case you use the device in "AUTO ON" Mode and green in case you use it in "ALWAYS ON" Mode

## Placing the unit

Allow adequate ventilation. Do not place the unit on a soft surface like a carpet. Do not place it in an enclosed position such a bookcase or cabinet that may impede the air-flow through the ventilation slots.

## AC Power (220V / 110V)

To power the unit, connect the supplied power cord to the unit and a standard AC power outlet. The unit itself recognizes the prevailing voltage so you don't need to adjust it to your local voltage level. In standby mode the EDGE A2-300 consumes less than 0.3W (EU mains).

## Connections (Noise issues)

To ensure a safe management of the amplifier and speakers, always only connect and disconnect signal cables and speaker cables when the amplifier is shut off with the main switch on the back side. Always use signal and speaker cables as short as possible and of good quality. Long signal cables of poor quality works as antennas, and might in some cases create noise. Always connect using the correct phase, from the plus (+) pole on the amplifier to the plus (+) pole on the loudspeaker and respectively for the minus (-) pole.

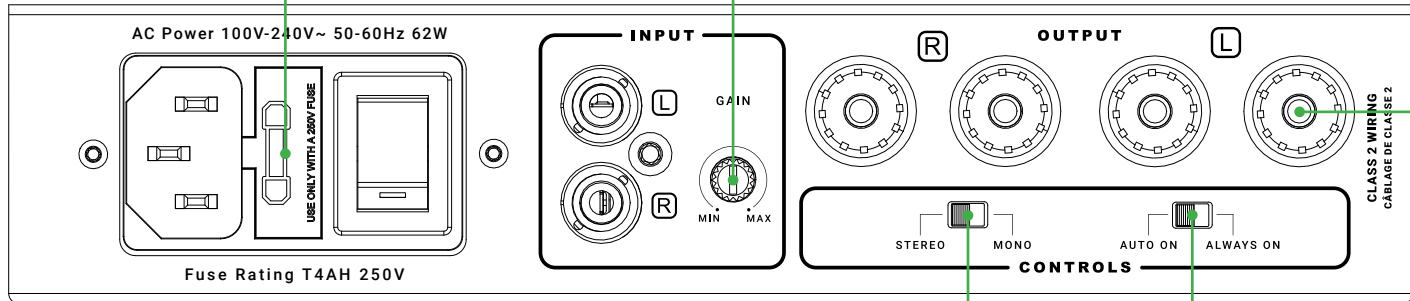
Earth/ground is often used to reduce noise from electrical interference from outside the casing, however in some cases several electrical devices which are connected to the same grounding grid can create loops that pick up interference ie. ground loops. There are a couple of ways to fix this problem:

- Use the same power strip / power outlet for the interfering equipment.
- Use short as possible signal cables of high quality to minimize resistance and impedance

## Cleaning the product

Switch off all components of your system when cleaning any of the components. Clean surfaces with a soft dry cloth only.

# Inputs & Outputs



## POWER

- AC POWER INLET AC Power input and FUSE compartment.
- FUSE Do only replace with "T4AH 250V" rated fuse.
- POWER SWITCH Main power switch (toggle).

## INPUT

- L RCA input for the **Left** amplification channel.
- R RCA input for the **Right** amplification channel.
- GAIN Potentiometer for trimming the input amplification gain.

## OUTPUT

- L Plus (+) Pole and Minus (-) Pole output connector for **Left** channel.
- R Plus (+) Pole and Minus (-) Pole output connector for **Right** channel.



### IMPORTANT: CLASS 2 WIRING

EDGE A2-300 power amplifier requires Class 2 output wiring.

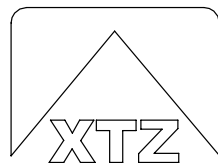
Turn the main power switch off when connecting or disconnecting the speaker wires.

## STEREO & MONO

- STEREO Left and Right channel are separated.
- MONO Left and Right channel are summed up.

## SIGNAL SENSE

- AUTO ON The amplifier powers on when a signal is present and goes into standby mode when there is no signal anymore.
- ALWAYS ON The amplifier is always turned on and will not switch to standby mode.



## FRONT LED

- RED            Amplifier is in Standby mode, waiting for a signal to power up
- GREEN        The amplifier is ON



# Practice of sound / Installation and placement tips

The following points contains common information on loudspeaker placement and installation. These are general rules, so there are exceptions.

How do i achieve the best sound?

No matter how good the equipment is, in the wrong listening environment it will inevitably sound bad. There are some basic rules concerning a proper loudspeaker installation:

Reflections

Carpets, curtains and soft furniture absorb mid range and high frequency sounds, and this is normally preferable. Big empty areas, on the contrary, reflect the sound which might lead to a blurry and unprecise sound. Apart from coloring the sound, also the perspective of the sound will deteriorate. Reflections in the room can roughly be compared to the reflections that cause ghost pictures on a TV screen.

Amplification of bass frequencies

A loudspeaker that is placed near a wall, ceiling or floor will amplify lower frequencies in a sometimes not desirable way (since it may lead to an indistinct sound reproduction). This amplification becomes even more obvious if the loudspeaker is placed near a corner. Thus, for a sound as clear as possible, the loudspeaker should be placed at least 30 cm (about 12 inch) away from the wall. Some constructions are designed to be placed close to a wall.

Furniture

Be aware that furniture may vibrate creating bad sound at loud bass levels.

Room dimension

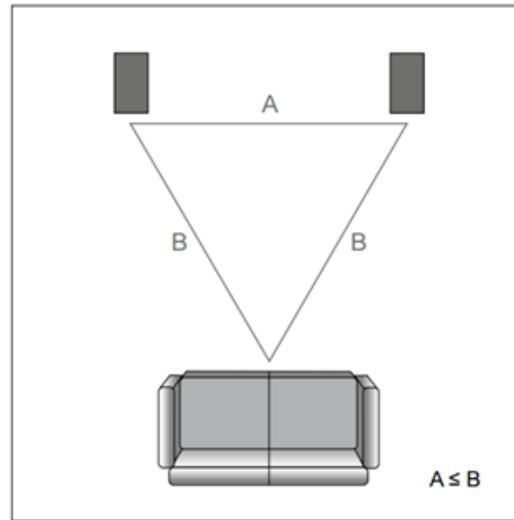
Quadratic rooms or rooms where the length is exactly twice as long as the width should be avoided, since they may create unwanted resonances.

Cables

Try to keep the cables as short as possible. By its electrical parameters, a long cable will have a bigger influence on the sound than a short one. It may also work as an antenna picking up various signals that may become a constant noise. Make sure that all connections are clean and free from oxidation. All connections should be mechanically stable, both power, signal and loudspeaker cables. Signal cables should be separated from other cables.

## Speaker Placement

To achieve the best results the front speakers should be placed symmetrically in front of the listener. The distance between the front speakers should be about 80% of the distance to the listener. In other words, the recommended angle between the front speakers is  $45^\circ$ .



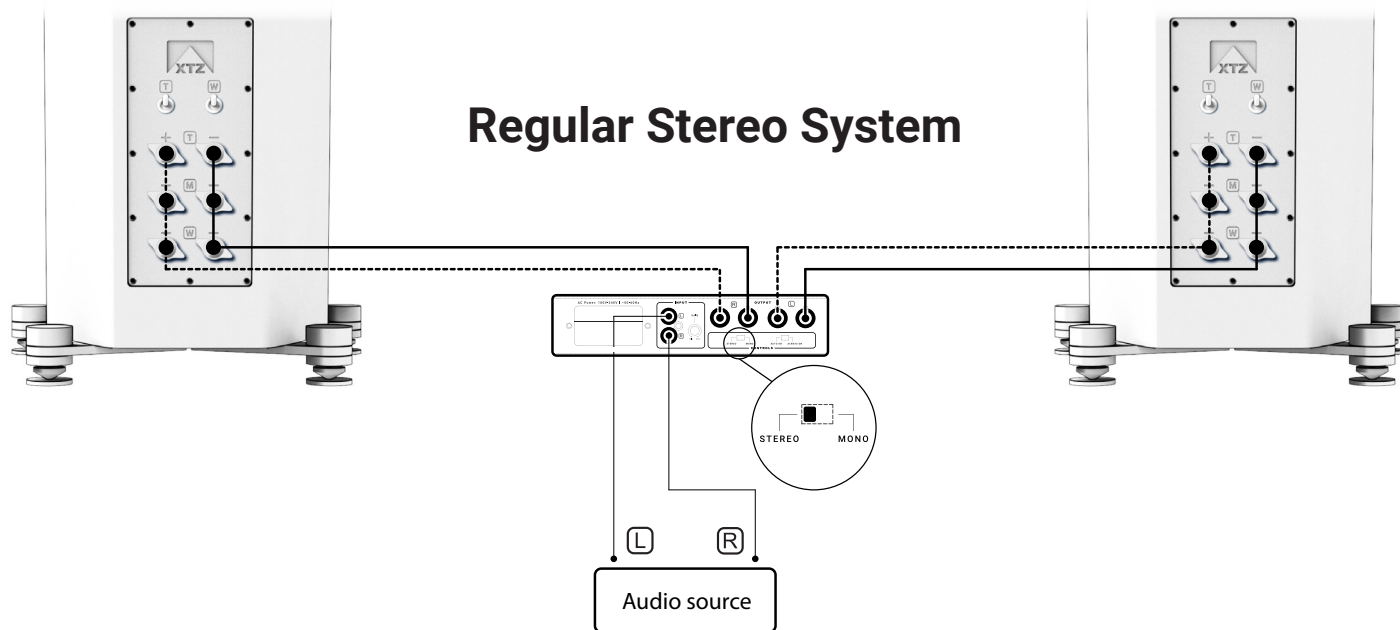
Finally

Please remember that good sound is a matter of taste, so you have to experiment to obtain your favorite one. We wish you best of pleasure.

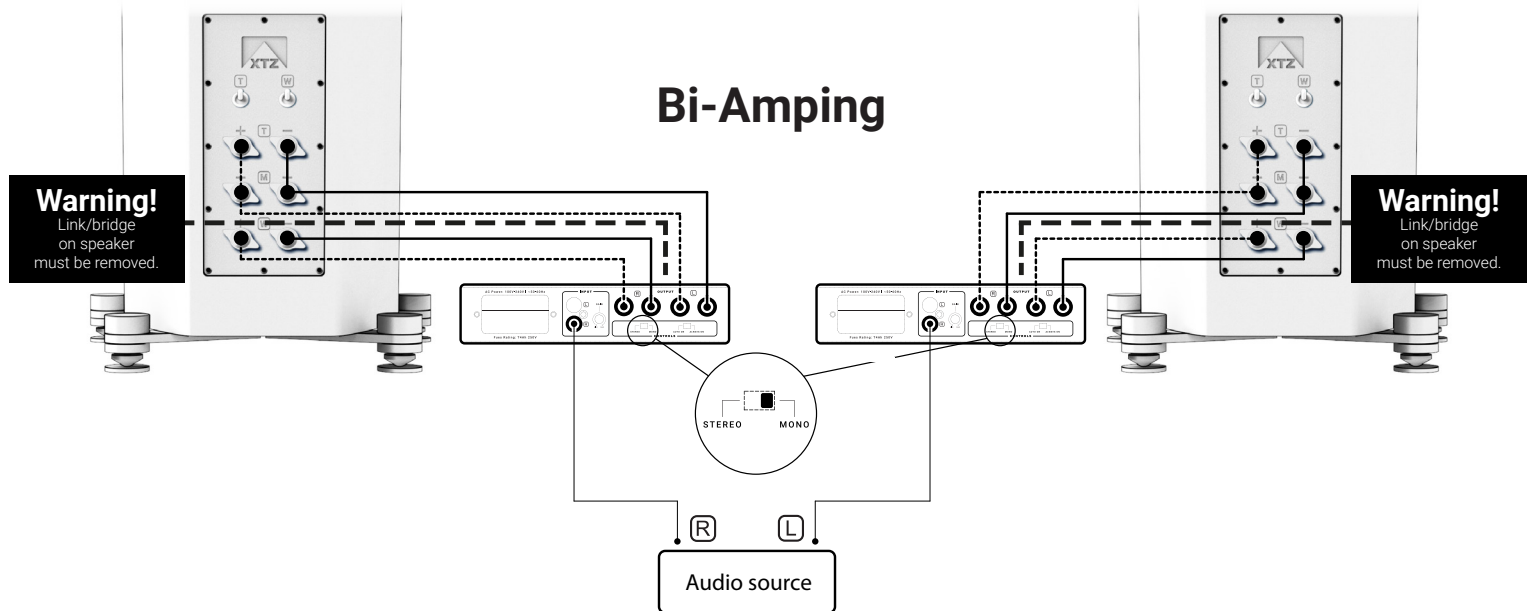
# Operating EDGE **A2-300**

	The EDGE A2-300 is designed to deliver high performance with easy management.
Auto On	When the unit is set to "Auto On" mode, the amplifier requires a constant signal to stay on. In absence of a signal the amplifier switches to standby mode in ~ 8 minutes.
Standby	In standby mode the whole unit consumes less than 0,3W which surpasses the requirements of the "one watt initiative 2013" by IEA "International Energy Agency ". The amplifier powers on when a signal is present and goes into standby mode when there is no signal anymore.
Front LED	<b>Red LED:</b> Device is in standby mode and waiting for a signal to turn on. <b>Green LED:</b> Device is on
Adjustable Gain	<ul style="list-style-type: none"><li>• You may use the adjustable gain for other sources than regular pre-amplifiers like mobile phones, media players etc. in order to adjust for their output level.</li><li>• The adjustable gain is also a good way to balance the volume of different ways/drivers when using the unit for Bi-Amping.</li><li>• Using the adjustable gain will limit the maximum power output of the device and thus protect your speakers from possible damage when playing loud. This feature can be used as a maximum volume lock.</li></ul>
Stereo / Mono	In mono mode, the input Signals at the left and right RCA Input are accumulated and both Output channels will reproduce this accumulated Signal. In case only one Input channel is used, the Signal from that channel will be distributed to both Output channels. e.g. <ul style="list-style-type: none"><li>- Use the stereo mode when using the amplifier in a regular stereo system.</li><li>- Use the mono mode when using the amplifier for Bi-Amping with a single speaker.</li></ul>

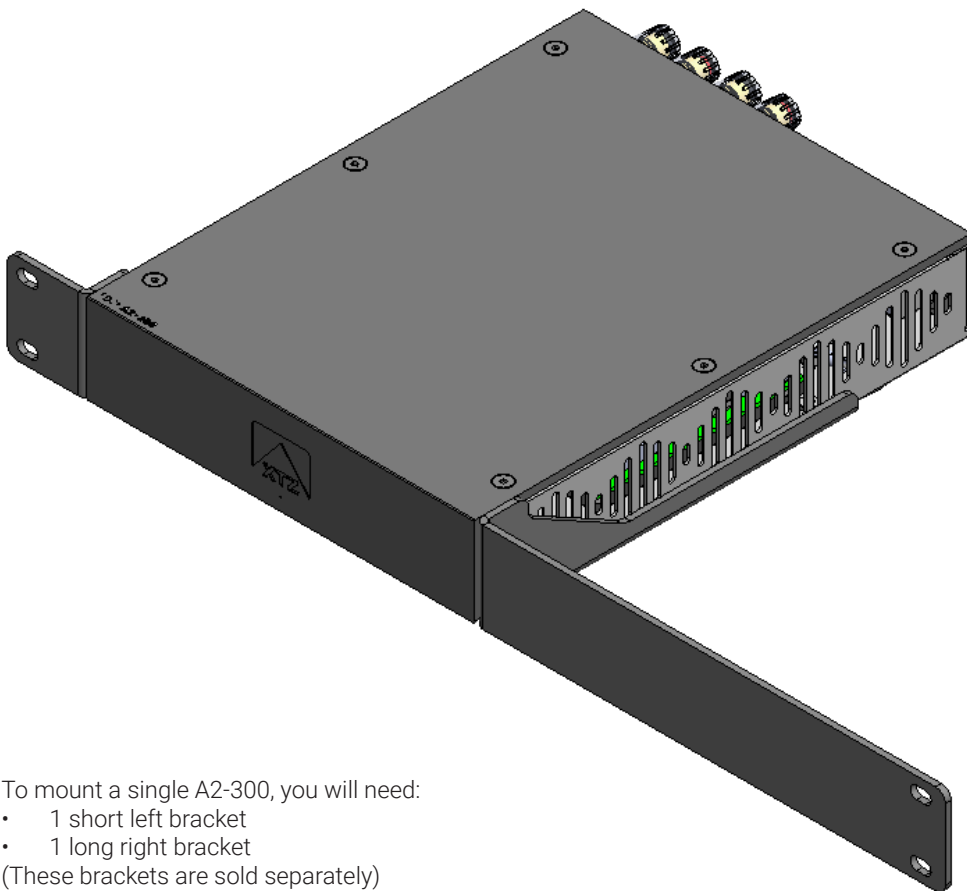
# Connecting the speakers



## Bi-Amping



## 19" Rack mounting



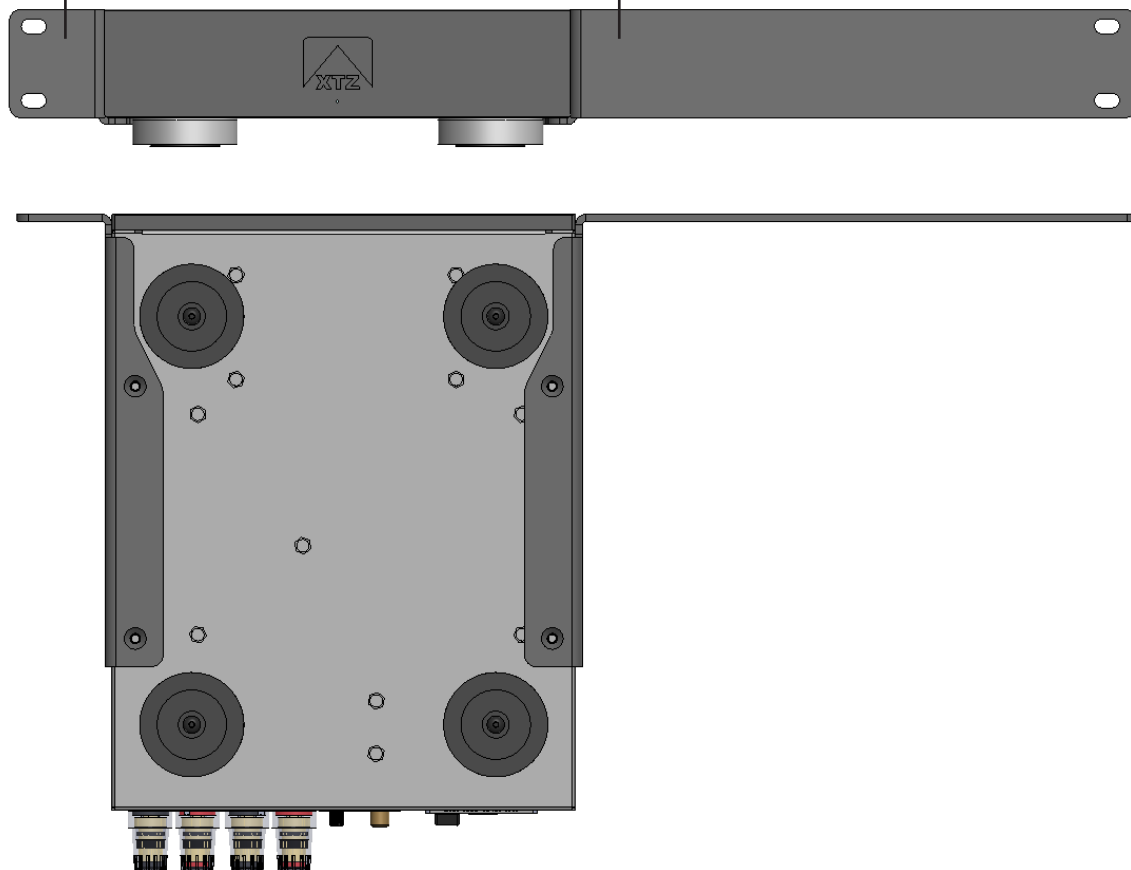
To mount a single A2-300, you will need:

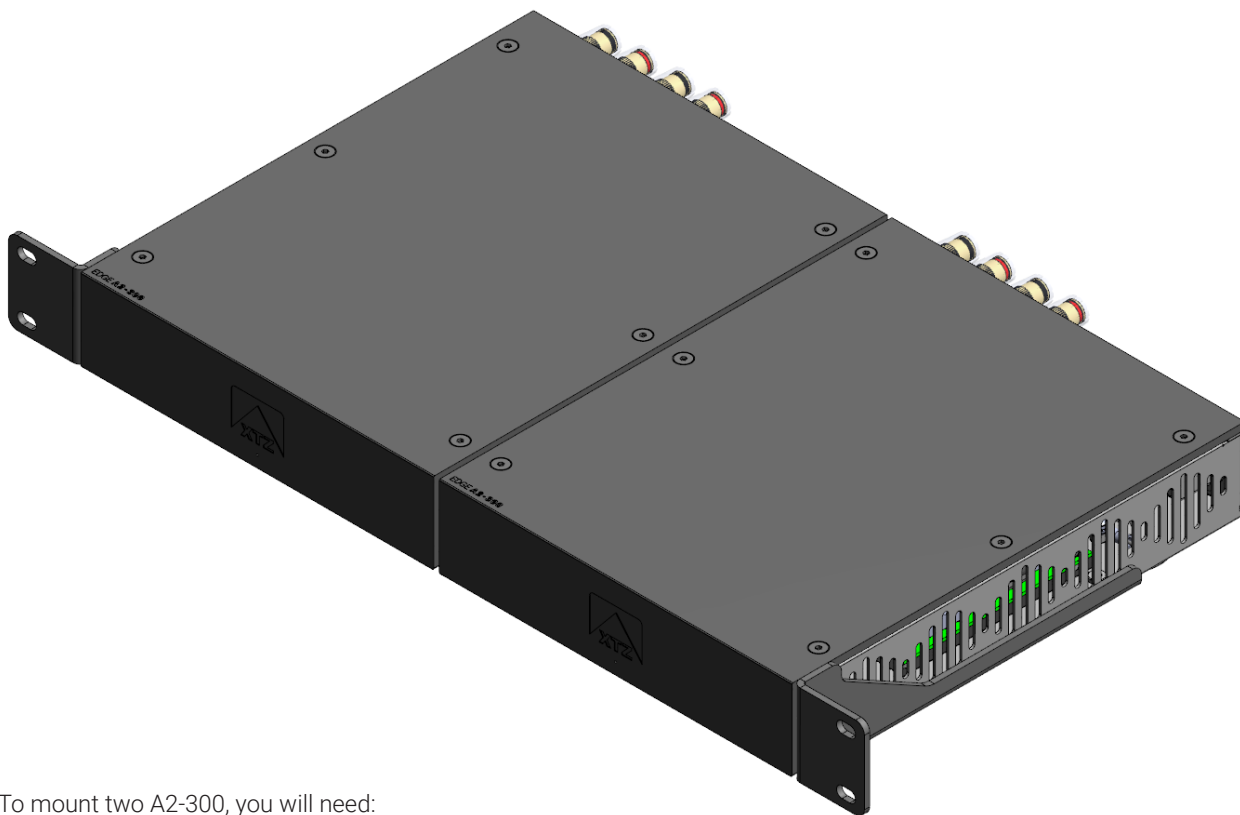
- 1 short left bracket
- 1 long right bracket

(These brackets are sold separately)

Short Left Bracket

Long Right Bracket





To mount two A2-300, you will need:

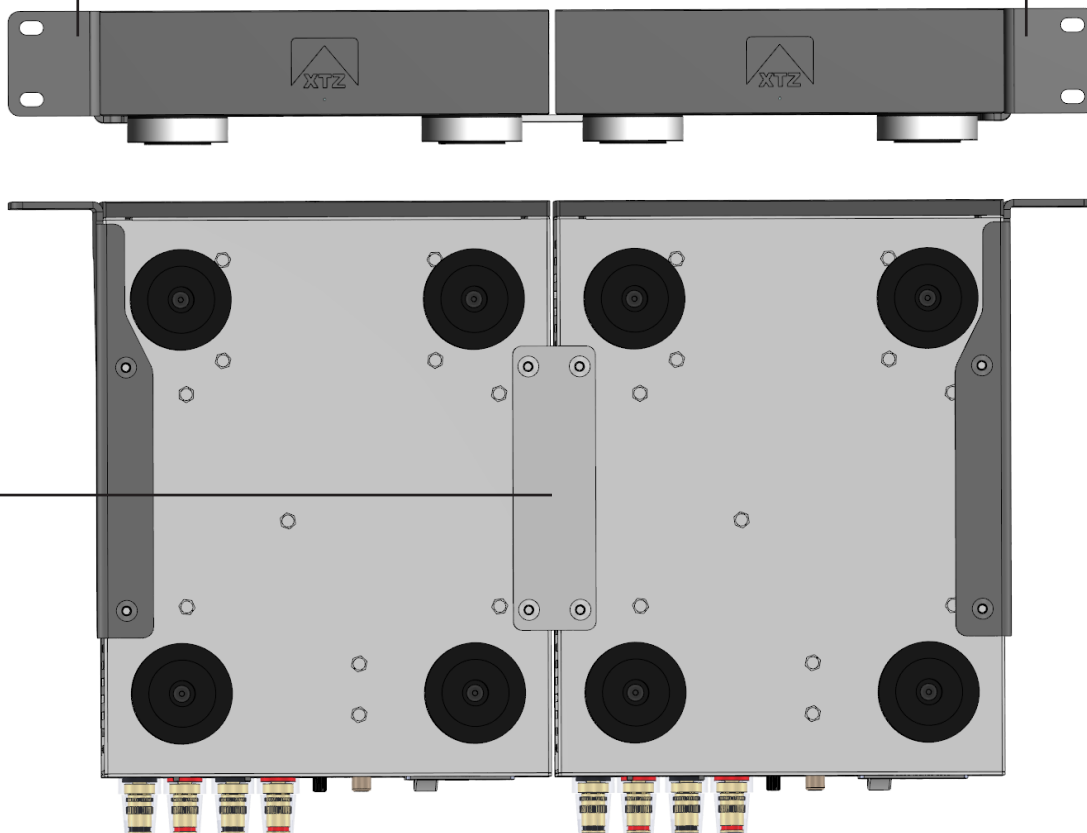
- 1 short left bracket
- 1 short right bracket
- 1 middle bracket

(These brackets are sold separately)



Short Left Bracket

Short Right Bracket



# Technical Specifications

## EDGE **A2-300**

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<b>Amplification type</b>	ICEpower® - triple loop feedback CLASS D
<b>Power</b>	2 x 460 W (1% THD, 2.7 $\Omega$ ) 2 x 300 W (1% THD, 4 $\Omega$ ) 2 x 150 W (1% THD, 8 $\Omega$ )
<b>Max output voltage / current</b>	50Vp / 20Ap, 4 $\Omega$
<b>Minimum load</b>	2.5 $\Omega$
<b>Nominal voltage gain</b>	28.15 dB ( $\pm 0.15$ dB)
<b>Common mode offset on output terminals</b>	$\sim 27$ V (output minus/negative is not GND)
<b>Frequency response</b>	20 Hz – 20 kHz ( $\pm 0.5$ dB)
<b>Bandwidth limit</b>	5 Hz – 70 kHz (-3 dB ref.)
<b>Distortion</b>	0.005% THD+N (1 kHz, <100 W, 8 $\Omega$ )   0.025% THD+N (1 kHz, <140 W, 8 $\Omega$ )
<b>Damping factor</b>	>400 (8 $\Omega$ , 20 - 500 Hz)
<b>Dynamic range</b>	>113 dB S/N, (A-weighted at 300 W, 4 $\Omega$ )
<b>Standby power consumption</b>	<0.28 W
<b>Idle power consumption</b>	6.80 W
<b>Auto on trigger level</b>	3 mV
<b>Standby mode timer</b>	$\sim 8$ minutes
<b>Input sensitivity</b>	$\sim 1.96$ Vp (1.39 Vrms)
<b>Inputs</b>	High Quality RCA Connections
<b>Input impedance</b>	38 k $\Omega$
<b>Outputs</b>	High Quality Copper binding posts (CMC®)
<b>Output impedance</b>	50 m $\Omega$
<b>Dimensions (W x D x H)</b>	200 x 285 x 58(*70) mm   7.9 x 11.2 x 2.3(*2.8) inches (*with feet)
<b>Weight</b>	2.3 kg   5 lbs

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# Accessories

Short Left 19" Bracket  
EAN: 7340030420212  
Article: 20057



Short Right 19" Bracket  
EAN: 7340030420229  
Article: 20058



Middle 19" Bracket  
EAN: 7340030420236  
Article: 20059



Long Right 19" Bracket  
EAN: 7340030420243  
Article: 20060



## Notes



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