AUDES

TT-3200DC Power Conditioner

USER MANUAL

BEFORE USING THIS PRODUCT

Thank you for purchasing this Audes product. To use it safely please read and follow the instructions below at all times.

WARNING

This content refers to risks, which can lead to serious injuries or death.

Do not disassemble the unit. It contains no user serviceable parts inside. Contact the authorised dealer or the manufacturer if the unit malfunctions and requires service. Removing any panel will expose the user to the presence of uninsulated dangerous voltage. This can lead to electrical shock and serious injuries.

Refer to the weight of the unit prior to handling it. Take safety precautions to prevent the unit from falling. Dropping the unit can lead to permanent damage and injuries. The unit should be placed on a firm surface. If the unit is placed on a shelf, make sure it has a sufficient load-bearing capacity. The unit is equipped with rubber feet to prevent it from sliding off a surface.

Make sure the AC voltage in the mains is appropriate for this unit. The appropriate AC voltage is indicated on the rear panel next to the AC inlet. Connecting the unit to the mains with different AC voltage can lead to permanent damage to the unit and fire. Do not use this unit with plug adapters. Do not change outlet sockets. Use fuses only with the specified rating. The rating is indicated on the rear panel next to the AC inlet.

Do not do anything what can lead to damaging the power cord including bending it excessively and placing it near sources of excessive heat. Do not use the power cord if you notice it is damaged. Using a damaged power cord can lead to electrical shock or fire. This refers both to the power cord used to supply power to the power conditioner and to power cords used to supply power from the power conditioner to connected pieces of equipment.

Do not place any objects, which contain liquid on top of the unit. Spilled liquid can lead to electrical shock or fire. Do not expose the unit to rain or excessive humidity. Clean only with dry cloth. Do not handle the unit or insert power cords with wet hands. When the unit is subject to rapid heating or cooling (e.g., due to transportation) there is a risk of condensation forming inside. Do not turn the unit for several hours allowing it to get completely dry.

Disconnect the unit from the mains if it is not used for a prolonged period of time. Disconnect the unit from the mains in the event of a thunderstorm or lightning.

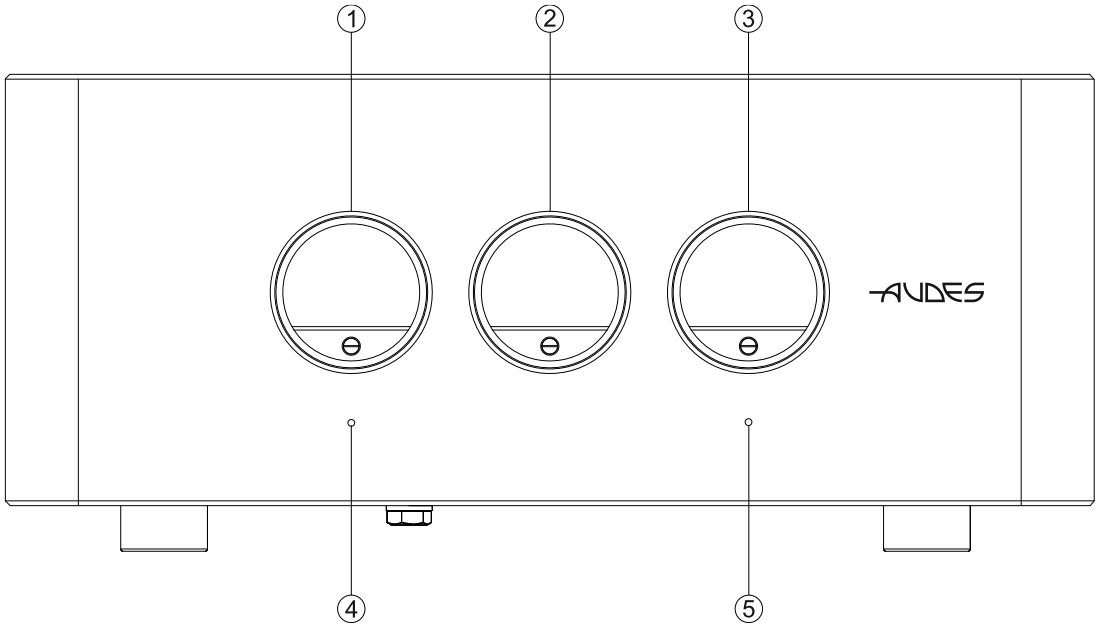
Hereby, Audes LLC OÜ declares that this equipment was manufactured in compliance with Directive 2014/30/EU.

CE

The unit is a piece of electrical equipment. In case of disposal, it should not be put in general waste. Please refer to local guidelines for disposal and recycling of electrical equipment.

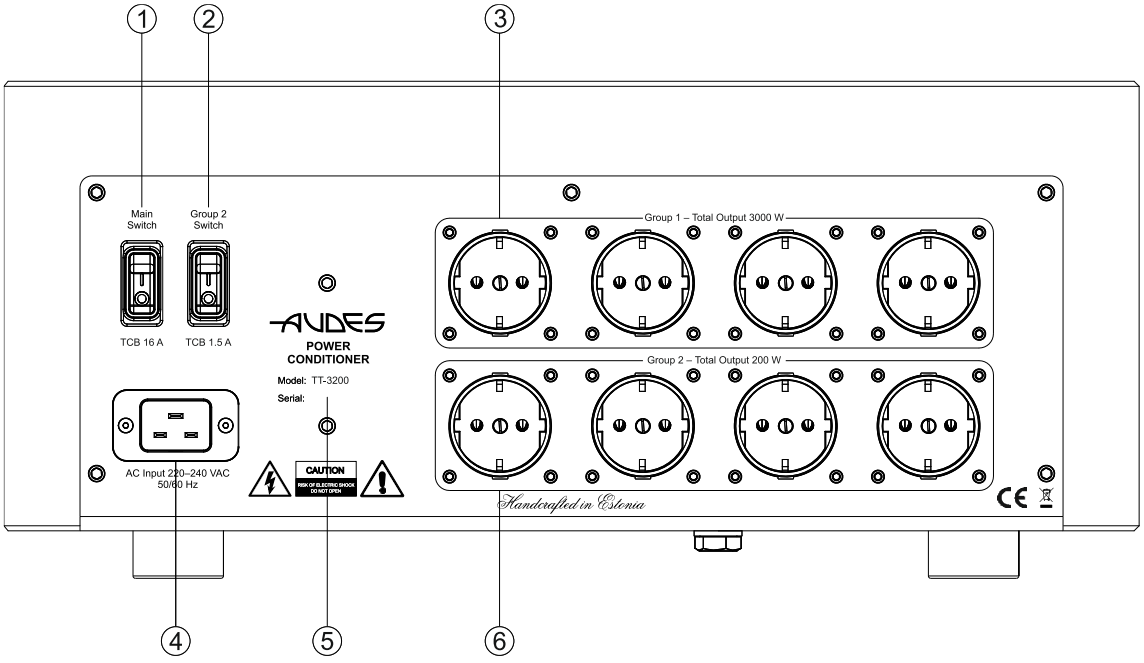
PART NAMES

FRONT



1. Main Ammeter – Indicates the current flowing through the power conditioner.
2. Voltmeter – Indicates the voltage supplied to the power conditioner.
3. Group 2 Ammeter – Indicates the current flowing through the Group 2 transformer.
4. Main Power LED Indicator – The indicator lights up once the power conditioner is switched on.
5. Group 2 Power LED Indicator – The indicator lights up once the Group 2 transformer is switched on.

REAR PANEL



1. Main Switch – Turns the unit on and off.
2. Group 2 Switch – Turns the Group 2 transformer on and off.
3. Group 1 Outlets – Outlets used to connect a power cord of a piece of equipment to the main transformer.
4. AC Inlet – The inlet for the supplied power cord.
5. Model and Serial – Indicates the model name and the serial number of the unit.
6. Group 2 Outlets – Outlets used to connect a power cord of a piece of equipment to the Group 2 transformer.

PRODUCT DESCRIPTION

The TT-3200DC power conditioner is designed to supply electrical power to High-End and Hi-Fi AV equipment. The main elements of the power conditioner are two toroidal transformers designed and developed by Audes, which isolate the equipment from the domestic network. The two transformers are referred to as the main transformer (comes with balancing capability, 230 VAC/115 + 115 VAC) and the Group 2 transformer (230 VAC/230 VAC), which have the power ratings of 3000 V·A and 200 V·A respectively. Such design allows to connect low-power devices with switched-mode power supply (SMPS) to the separate Group 2 transformer. The SMPS can introduce distortions, which may adversely affect analogue devices, when connected to the same power source. Devices connected to the Group 1 outlets are isolated from devices connected to the Group 2 outlets.

The toroidal transformers inside the unit were designed to filter noise from the mains utilising controlled leakage inductance and capacitance. An integrated DC blocker protects the unit from harmful influence of direct current present in the mains. This feature significantly reduces transformer hum caused by DC offset, ensuring quieter operation. The outlet sockets of the TT-3200DC are fully isolated from the mains. The output voltages are symmetrical with respect to the artificial centre tap that is connected to the PE contacts of each socket.

When the power conditioner is switched on the main transformer is subject to a high inrush current during magnetisation of the transformer core. Due to this a soft start is implemented into the power conditioner. The power conditioner has a special ballast resistor to limit the current surge, so that other electrical equipment, which is connected to the same electrical network, remains unaffected.

The power conditioner is protected by a thermal circuit breaker. As an additional precaution, both transformers have thermal protection, which switches a transformer off if the temperature of the transformer reaches 90 °C. Once the temperature drops to 75 °C the device will reconnect to the electrical network automatically.

INSTALLATION AND SETUP

1. **Positioning the Power Conditioner:** Despite its high power rating, the power conditioner's design minimizes electromagnetic radiation. However, it is recommended not to place the unit close to turntables or phono stages to avoid potential interference. Place the power conditioner on a stable, flat surface to ensure proper airflow and support.

2. **Checking Mains Voltage:** Before connecting the power conditioner, verify that the voltage in the mains supply matches the required voltage for the unit. The correct voltage is indicated on the label on the back of the power conditioner, next to the AC inlet.

3. **Connecting the Power Cord:** Connect the supplied power cord to the AC inlet on the back of the unit. The live wire (L) in the AC inlet is marked by a small white dot in the corner of the inlet.

4. **Powering On:** Ensure the unit is switched off before inserting the plug into the electrical outlet. Press the Power Switch to turn on the power conditioner. The LED indicators on the front panel will light up to confirm the unit is powered on. The voltmeter will show voltage in the network. The user can turn on or off the Group 2 transformer using a dedicated switch located on the back panel. Please note that the Group 2 outlets will not work if the power conditioner is not turned on with the Main Switch first.

5. **Connecting Equipment:** It is not necessary to turn off the unit before connecting your AV equipment. Simply plug the devices into the power conditioner as needed. It is strongly recommended to connect all devices with switched-mode power supplies (SMPS) to the Group 2 outlets. If no devices with SMPS are present in the setup, then the Group 2 outlets can safely be used to connect any other equipment, which does not exceed the total load of 200 W.

6. **Socket Orientation:** Since the output sockets are galvanically isolated from the neutral wire, the plugs of power cords can be inserted into any AC outlet without concern for orientation. However, for consistency, it is recommended to maintain the same orientation for all connected devices.

TROUBLESHOOTING

THE POWER CONDITIONER DOES NOT TURN ON

1. Check the voltage in the mains is suitable for the power conditioner. The required voltage is indicated on the back of the unit next to the AC inlet.
2. Check the power cord is connected securely both to the AC Inlet and to the mains socket.

A CONNECTED PIECE OF EQUIPMENT DOES NOT TURN ON

1. Check the power conditioner is switched on.
2. Check the power cord of a piece of equipment is securely connected to the AC Outlet of the power conditioner.

THE CIRCUIT BREAKER TRIPS PERSISTENTLY

1. Check the voltage in the mains is suitable for the power conditioner. The required voltage is indicated on the back of the unit next to the AC inlet.
2. Check the total connected load does not exceed the stated power rating of the unit.

THE POWER CONDITIONER CONTINUOUSLY SWITCHES OFF

1. Check the total connected load does not exceed the stated power rating of the unit.
2. If the ambient temperature is high (e.g., due to the unit placed in a very confined space), then the thermal protection will switch off the unit automatically to prevent the transformer from overheating. Place the power conditioner in a well-ventilated space or provide external cooling.

TECHNICAL SPECIFICATIONS

Model	**TT-3200DC**
Power Rating – Total	3200 V·A
Power Rating – Group 1	3000 V·A
Power Rating – Group 2	200 V·A
AC Input	220–240 VAC 50/60 Hz
Max AC Output – Group 1	13.6 A
Max AC Output – Group 2	0.9 A
Inlet	16 A IEC C20
Outlet – Group 1	4 × 16 A/250 VAC Socket CEE 7/3
Outlet – Group 2	4 × 16 A/250 VAC Socket CEE 7/3
Power Supply Cable	16 A/250 VAC Connector IEC C19
Dimensions (mm)	209 H × 477 W × 372 D
Weight (kg)	37

Audes reserves the right to change technical specifications without notification.

WARRANTY

The unit comes with a two-year warranty against defects in parts and assembly since the moment of the purchase. A receipt or an invoice should be submitted as a proof purchase. This warranty covers product issues strictly due to defects in parts and assembly. It does not cover any issues caused by misuse, unauthorised modifications, tampering or acts of God.

Audes LLC OÜ (’Audes’) reserves the right to choose whether the defect parts will be replaced with new or refurbished parts, or the complete product will be replaced with a new or refurbished product. Any parts or products replaced under this warranty will become property of Audes.

The owner is responsible to ensure safety of the product during transportation for repairs under the warranty. The owner is responsible for covering all transportation costs for shipping the product for inspection and repair. The product should be shipped in the original packaging or packaging, which provides an equivalent level of protection. Audes will not be held liable for any damage to the product, which happened during transportation of the product from the owner. Audes recommends keeping the original packaging for at least the warranty period. Audes reserves the right to deem the packaging inadequate upon receiving the product for inspection and repair under this warranty, even if product arrived safely without any damage during transportation. In this case Audes will replace the packaging with the original packaging and charge the owner for the replacement packaging.

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