

# high-amp Polaris

## Operating instructions



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Thank you for purchasing a headphone amplifier from high-amp.

## Characteristics

- Class A Push-Pull amplifier
- fully symmetrical DC amplifier with stabilized linear power supply
- Input section equipped with extremely low-noise JFETs
- High frequency interference decoupled by using silver-plated mica capacitors
- Vishay/Panasonic electrolytic capacitors in the power supply
- Oversized transformer for a powerful structured bass
- All signal lines oxygen-free copper cable from Neotech
- Optional XLR or RCA input and output for looping through
- 2 x 5-pin headphone output with bias voltage 580V DC

## Connection and operation

- Connect the power cable to the power supply with a mains voltage of 230V.
- The amplifier can be connected directly to source devices such as D/A converters, CD players, or preamplifiers that have an RCA or XLR output. Use a cable with RCA (unbalanced) or XLR (balanced) connectors to connect your source devices with the input sockets on the rear panel of the amplifier. Both inputs also have a loop-through option for forwarding the input signal to further devices.
- Now switch on the amplifier using the power switch and turn the volume knob to the left to about 9 o'clock to avoid excessively high switching volume levels.
- Select the input source using the RCA/XLR switch on the front page.
- Finally, plug the 5-pin connector of the electrostatic headphone into one of the sockets on the front panel of the amplifier, parallel operation of two headphones is possible.
- When listening to music, increase or decrease the volume as needed using the volume control.
- After operation, switch on the amplifier using the power switch the front panel of the amplifier.

## Notes and warnings

- It is recommended to turn on the headphones only after switching on the amplifier and before switching off again remove.
- Since the amplifier housing also serves as a heat sink for the Power transistors, the temperature on the top can rise to about 40-50 degrees!
- Do not expose the amplifier to direct sunlight.
- Do not place the amplifier in the immediate vicinity of a heat source such as a radiator.
- For very fast repeated switching on and off processes (from about 3-4 times) a protective circuit is activated which remains active for about 30 minutes until a switching it on again is possible.
- Because of the high voltages inside the amplifier, you should not open the housing or expose it to splashing water. Metal objects must not be plugged into the input or output sockets become.
- high-amp assumes no liability for the proper functioning or the occurrence of defects in the connected electrostatic headphones! This amplifier is specified for a bias voltage of 580V, optionally 230V and has a 5MOhm protective resistor in the Bias voltage supply.
- In the interest of your ear health, you should avoid volumes above 100dB over a longer period of time.

## Front and rear view



- 1 power switch
- 2 input selector switches XLR/RCA
- 3 Volume control
- 4 headphone jacks
- 5 XLR input
- 6 RCA input
- 7 XLR output
- 8 RCA output
- 9 IEC socket

# Troubleshooting

## No sound

- Is the amplifier connected to the mains via the power cable?
- Check the position of the power switch.
- Is the power switch lit?
- Is there a signal at the input jacks?
- Is the input selector switch in the correct position?

## Distorted sound, noise

- Distortions can occur if the volume level is significantly too high set or the output level of the source devices exceeds the standardize standards.
- If humming problems occur please check the contacts, especially the ground connections and ensure that the sensitive signal paths are galvanically isolated.

If the above checks do not solve the problem, please contact us.

## Technical data

- Frequency response: 0-70000 Hz
- Gain factor: 60 dB (x1000)
- Total harmonic distortion at 100 Vrms, 1 KHz: < 0.01 % THD
- Input impedance: 10 KOhm
- Maximum output voltage: 610 Vrms (1720 Vpp) at 1 kHz and 1% THD (Stax SR-007: 115 dB, Stax SR-L700/SR-009: 116 dB)
- Bias voltage: 580V (usable for all Pro-Bias headphones)
- Mains voltage (AC): 230 V / 50-60 Hz
- Operating conditions: 0-30°C
- Weight: 8 kg
- Dimensions: WxHxD: 450x100x315 mm
- Power consumption: 50W

## Guarantee

high-amp provides a 24-month warranty for this product. In case of a defect in your amplifier, high-amp will repair the device.

### **The warranty claim expires in the following cases:**

- Operating the device in violation of the conditions stated in the operating instructions.
- Misuse, accidental damage or unauthorized modifications
- Improper shipping of the device, if possible use complete original packaging.

## EU Declaration of Conformity

The manufacturer declares under his sole responsibility that the above-mentioned product complies with the following EU directives:

- 2014/35/EU – Low Voltage Directive (LVD)
- 2014/30/EU – EMC Directive
- 2011/65/EU – RoHS Directive (including 2015/863/EU)
- (EU) 2024/178 – Ecodesign Directive

Harmonized standards applied:

- EN 62368-1:2014 + A11:2017 – Audio/video, information and Communications technology – security
- EN 55032:2015 – Multimedia equipment – Emission
- EN 55035:2017 – Multimedia equipment – Immunity
- EN IEC 61000-3-2:2019 – Harmonics
- EN IEC 61000-3-3:2013 – Voltage fluctuations/flicker

Please dispose the product at the end of its useful life at your local municipal collection point or recycling center.

The manufacturer is responsible for this declaration. All information in this declaration was prepared to the best of our knowledge and belief and is based on the time of issue of this statement.

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