



Professional Power Amplifier

Operating Manual



PX series

Before attempting to connect, operate or adjust this product, please read these instructions completely

Rev: 1.0-ASTATIC-PX(2CH) 01/2026

OPERATION MANUAL

Thank you for buying this product. To take full advantage of all possibilities, please read these operating instructions very carefully.

FEATURES

- Professional 2-channel power amplifier
- Extremely compact 19" housing, height only 1U (44mm)
- Lightweight design based on soft start switch mode power supply
- 3 amplifier modes: stereo, mono and bridge
- Very efficient cooling, using temperature controlled fans.
- Peak limiter prevents signal distortion
- Switchable 75Hz / -24dB low cut filter
- Adjustable input sensitivity: 0,775V ~ 1,0V ~ 1,44V
- Ground lift switch
- DC fault + high temperature + overload and short circuit protections
- Balanced XLR inputs & outputs: daisy chaining of several amplifiers
- 3 Speakon® outputs: left + right channels + bridge

BEFORE USE

- Before you start using this unit, please check if there's no transportation damage. Should there be any, do not use the device and consult your dealer first.
- **Important:** This device left our factory in perfect condition and well packaged. It is absolutely necessary for the user to strictly follow the safety instructions and warnings in this user manual. Any damage caused by mishandling is not subject to warranty. The dealer will not accept responsibility for any resulting defects or problems caused by disregarding this user manual.
- Keep this booklet in a safe place for future consultation. If you sell the fixture, be sure to add this user manual.
- To protect the environment, please try to recycle the packing material as much as possible.

Check the contents:

Check that the carton contains the following items:

- Power amplifier
- Operating instructions
- Mains power cable.

SAFETY INSTRUCTIONS:



CAUTION: To reduce the risk of electric shock, do not remove the top cover. No user-serviceable parts inside. Refer servicing to qualified service personnel only.



The lightning flash with arrowhead symbol within the equilateral triangle is intended to alert the user or the presence of un-insulated "dangerous voltage within the product" s enclosure that may be of sufficient magnitude to constitute a risk of electric shock.



The exclamation point within the equilateral triangle is intended to alert the user to the presence of important operation and maintenance (servicing) instructions in the literature accompanying this appliance.



This symbol means: indoor use only



This symbol means: Read instructions



This symbol means: this amplifier is capable of producing very high sound pressure levels that may permanently damage your ears. Hearing experts strongly advise against permanent exposure to high sound levels!

- To prevent fire or shock hazard, do not expose this appliance to rain or moisture.
- To avoid condensation to be formed inside, allow the unit to adapt to the surrounding temperatures when bringing it into a warm room after transport. Condense sometimes prevents the unit from working at full performance or may even cause damages.
- This unit is for indoor use only.
- Don't place metal objects or spill liquid inside the unit. No objects filled with liquids, such as vases, shall be placed on this appliance. Electric shock or malfunction may result. If a foreign object enters the unit, immediately disconnect the mains power.
- No naked flame sources, such as lighted candles, should be placed on the appliance.
- Don't cover any ventilation openings as this may result in overheating.
- Prevent use in dusty environments and clean the unit regularly.
- Keep the unit away from children.
- Inexperienced persons should not operate this device.
- Maximum save ambient temperature is 40°C. Don't use this unit at higher ambient temperatures.
- Minimum distances around the apparatus for sufficient ventilation is 10cm.
- Always unplug the unit when it is not used for a longer time or before you start servicing.
- The electrical installation should be carried out by qualified personal only, according to the regulations for electrical and mechanical safety in your country.
- Check that the available voltage is not higher than the one stated on the rear panel of the unit.
- The socket inlet shall remain operable for disconnection from the mains.
- The power cord should always be in perfect condition. Switch the unit immediately off when the power cord is squashed or damaged.
- The socket inlet is used as the disconnect device, the disconnect device shall remain readily operable
- This appliance must be earthed to in order comply with safety regulations.
- In order to prevent electric shock, do not open the cover. There are no user serviceable parts inside.
- **Never** repair a fuse or bypass the fuse holder. **Always** replace a damaged fuse with a fuse of the same type and electrical specifications!
- In the event of serious operating problems, stop using the appliance and contact your dealer immediately.
- Please use the original packing when the device is to be transported.
- Due to safety reasons it is prohibited to make unauthorized modifications to the unit.

INSTALLATION GUIDELINES:

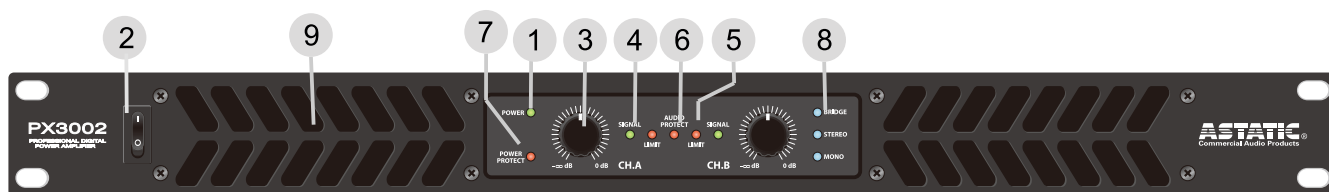
- Install the unit in a well-ventilated location where it will not be exposed to high temperatures or humidity.
- Placing and using the unit for long periods near heat-generating sources such as amplifiers, spotlights, etc. will affect its performance and may even damage the unit.
- The unit can be mounted in 19-inch racks. Attach the unit using the 4 screw holes on the front panel. Be sure to use screws of the appropriate size. (screws not provided)
- Take care to minimize shocks and vibrations during transport.
- When installed in a booth or flight case, please make sure to have good ventilation to improve heat evacuation of the unit.
- To avoid condensation to be formed inside, allow the unit to adapt to the surrounding temperatures when bringing it into a warm room after transport. Condense sometimes prevents the unit from working at full performance.

CLEANING THE APPLIANCE:

Clean by wiping with a polished cloth slightly dipped with water. Avoid getting water inside the unit. Do not use volatile liquids such as benzene or thinner which will damage the unit.

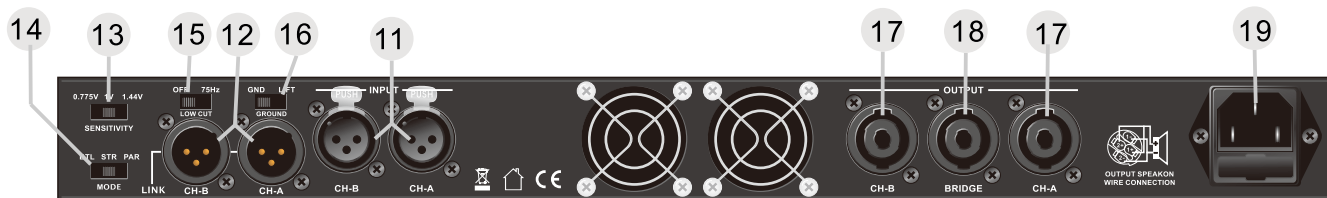
Clean the ventilation holes regularly with a vacuum cleaner. This increases the cooling capacity of the amplifier fans and helps preventing temperature overheat.

FUNCTIONS (FRONT)



1. **POWER LED:** This white led is on when you turn the amplifier on using switch(2).
2. **MAINS SWITCH:** Used to turn the amplifier on and off. A few seconds after switching on the amplifier it is ready for operation.
3. **GAIN CONTROLS:** These potentiometers are used to control the input sensitivity of the amplifier. Each channel has its own control.
You can use these controls to set the maximum sound level of your setup:
 - Turn both controls on the amplifier (3) to the left.
 - Put on some music on and make sure the VU meters on your mixer are at 0dB. (from time to time the red zone is lit)
 - Set the Master output from your mixer to maximum.
 - Open the Gain controls from the amplifier (3) until the maximum desired sound level is reached.
 - Make sure nobody can reach the Gain controls of the amplifier or install the plastic cover (4).
- Note:** In Mono and Bridge mode, only the gain control of the left channel is used to adjust the input sensitivity.
4. **SIGNAL LEDS:** these LEDs indicate that a music signal is present at the inputs.
5. **LIMIT LEDS:** Lit on just before the maximum, distortion free, output level of the amplifier. They indicate that the internal limiter starts working. The limit LEDs may turn on shortly from time to time but they may certainly not turn on for longer periods. In this case you have to turn the output level down!
6. **AUDIO PROTECT LED:** Is on when the speakers are disconnected from the amplifier. This occurs in the following situations
 - During the first seconds after switching on the amplifier.
 - When the temperature of the power stage becomes too high.
 - In case of a technical defect: DC protection, overload, short circuit, ...
 - While switching the amplifier off, the "protect led" turns on for a short time.
7. **POWER PROTECT LED:** is lit for 3 to 4seconds after you turn on the amplifier, this is normal. During operation this LED will be lit when a problem is detected in the power supply of the amplifier. When this occurs, please turn off the amplifier.
8. **OPERATION MODE LEDS:** These LEDs indicate the operation mode switch (14) on the rear panel is used to choose one of these 3 possible modes:
 - **STEREO MODE:** This is the most common mode, both channels are working separately.
 - **MONO MODE:** Basically this is identical to stereo mode but the inputs of both channels are linked so the output will be mono. In this case you only need to use the input of the left channel to drive both output channels.
 - **BRIDGE MODE:** Both channels are linked in "bridge mode" to obtain a mono output with much higher power. .
9. **VENTILLATION FANS:** During its operation the amplifier produces heat that needs to be dissipated. The fans inside the amplifier must be able to evacuate the heat in the most effective way. Therefore is it very important not to cover any of the ventilation openings as this may result in overheating. Clean the ventilation holes regularly with a vacuum cleaner. This increases the cooling capacity of the amplifier fans and helps preventing temperature overheat.

FUNCTIONS (rear)



11. XLR inputs: You can connect these balanced inputs to balanced and unbalanced line level audio sources (example: DJ-mixer):

- **Balanced source:** Use good quality XLR/XLR balanced audio cables.
Wiring of the XLR connector: PIN1: GND PIN2: pos+ PIN3: neg-.
- **Unbalanced source:** Use good quality XLR/cinch audio cables.

12. BALANCED XLR OUTPUTS: Can be used to send the signal to the next amplifier. Pin1: signal ground, Pin2: signal+, Pin3: signal -

13. INPUT SENSITIVITY switch: With this switch you can perfectly adapt the input sensitivity of the amplifier: 0,775V; 1,0V or 1,44V.

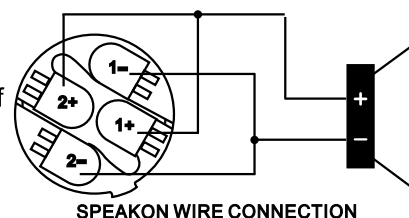
14. OPERATION MODE switch: Used to set the operation mode of the amplifier. The most common operation mode is "stereo". If you need more power, you can operate the amplifier in bridge mode.

15. LOW CUT FILTER switch: eliminates low frequencies under 75Hz. Can be used when small speakers are connected, these cabinets often don't support very low frequencies.

16. GROUND LIFT switch: In some cases nasty hum noises can occur due to ground loops in your setup. Setting the Ground lift switch to the position "lift" breaks the ground loop between the amplifier and the chassis grounds of various other components in your setup. As a result the hum noises disappear.

17. L+R SPEAKON OUTPUTS: use these Speakon® connectors to connect your speaker cabinets in stereo or mono mode. Wiring of these connectors is as follows:

- POS(+) = Speakon connector PIN1+ and PIN2+
- NEG(-) = Speakon connector PIN1- and PIN2-



18. BRIDGE SPEAKON OUTPUT: use this Speakon® connector to connect your speaker cabinet in bridge mode. Refer to points 3 and 12 for more information. Wiring of this connector is as follows:

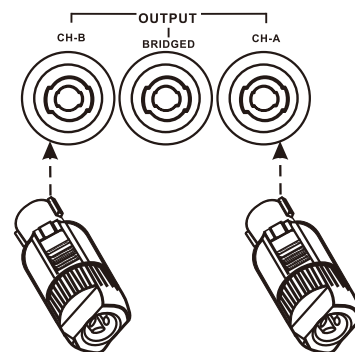
- POS(+) = Speakon connector PIN1+ and PIN2+
- NEG(-) = Speakon connector PIN1- and PIN2-

19. POWER input: Use the supplied power cable to connect the amplifier to the mains. This connector also holds a 20mm glass fuse. Always replace a blown fuse by another with exactly the same specifications. (fuse specifications can be found on the rear panel, next to the power input connector)

HOW TO USE

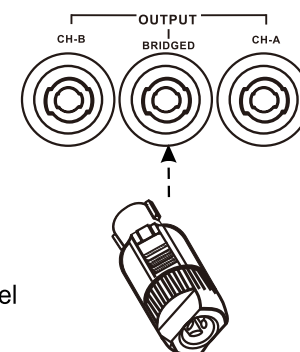
STEREO OPERATION:

- Connect the audio signal to the inputs (11/12)
- Set the operation mode switch (14) to “stereo” (STR)
- Connect the matching speakers to the L+R Speakon® outputs (17)
- Make sure the mains voltage matches 230Vac before connecting the mains cable to the earthed wall socket.
- Set both input gains (3) to zero
- Make sure there' s a music signal at the input
- Turn the amplifier on (2)
- Adjust the input gains (3) to the desired level



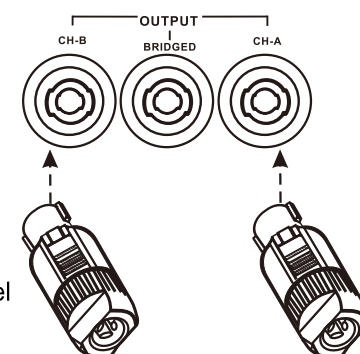
BRIDGE OPERATION:

- Connect the audio signal to the left input (11/12)
- Set the operation mode switch (14) to “bridge” (BTL)
- Connect the matching speaker(s) to the Bridge Speakon® output (18)
- Make sure the mains voltage matches 230Vac before connecting the mains cable to the earthed wall socket
- Set both input gains (3) to zero
- Make sure there' s a music signal at the left input
- Turn the amplifier on (2)
- Adjust the left input gain (3) to the desired level, leave the right channel gain to zero.



MONO OPERATION:

- Connect the audio signal to the input of the left channel (11/12)
- Set the operation mode switch (14) to “mono” (PAR)
- Connect the matching speakers to the L+R Speakon® outputs (17)
- Make sure the mains voltage matches 230Vac before connecting the mains cable to the earthed wall socket
- Set both input gains (3) to zero
- Make sure there' s a music signal at the input
- Turn the amplifier on (2)
- Adjust the left input gain (3) to the desired level, leave the right channel gain to zero.



SPECIFICATIONS

Model	PX3002	PX5002
Out Power 8 ohm	2x150W	2x300W
Out Power 4 ohm	2x300W	2x500W
Out Power4 (BRIDGE)	1x600W	1x1000W
Output Circuit Type	Class D	
Peak limiters	Yes	
THD+N (stereo 8 ohm)	<0.1%	
Freq. Response (+/-1dB)	20~20.000Hz	
Input sensitivity	0.775V~1.0V~1.44V	
S/N ratio (A-weighted)	> 100dB	
Slew Rate	> 20V/ms	
Weight	3.8kg	4.2kg
Dimensions	483x240x44.5(19"/1U)	
Power Range	(115V/230V) Can offer different voltage according client's requirement.	

