



PWR-222
Mono Power Amplifier
User Manual



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Don't be a stranger

Thank you for purchasing the Gato Audio PWR-222. We are absolutely confident that it will bring you many hours of listening pleasure.

We hereby cordially invite you to join the Gato Audio family by registering your product online. You may also consider signing up for our newsletter to receive information about exciting new products, events and technical updates. We are also present on several social media like Facebook, Twitter, Instagram, Google+ and LinkedIn.

All this and more on www.gato-audio.com

Our very best,

Gato Audio

Package contents

Please check that the following is included in the package:

- 1 Gato Audio PWR-222 mono power amplifier
- 1 Mains cable
- 1 Mini jack link cable
- 1 Mini jack Y-splitter cable (1pc for each pair of PWR-222)
- This manual - which you should be reading now 😊



Safety first!

Mains plug and cable:

- Insert the mains plug fully into the mains outlet socket
- Do not use any mains cable other than the one provided with this amplifier
- Do not defeat the ground connection
- Do not move the amplifier around while it is connected to mains
- Do not place heavy objects on the mains cable or place the cable near high-temperature objects
- Do not use damaged mains plugs or socket outlets

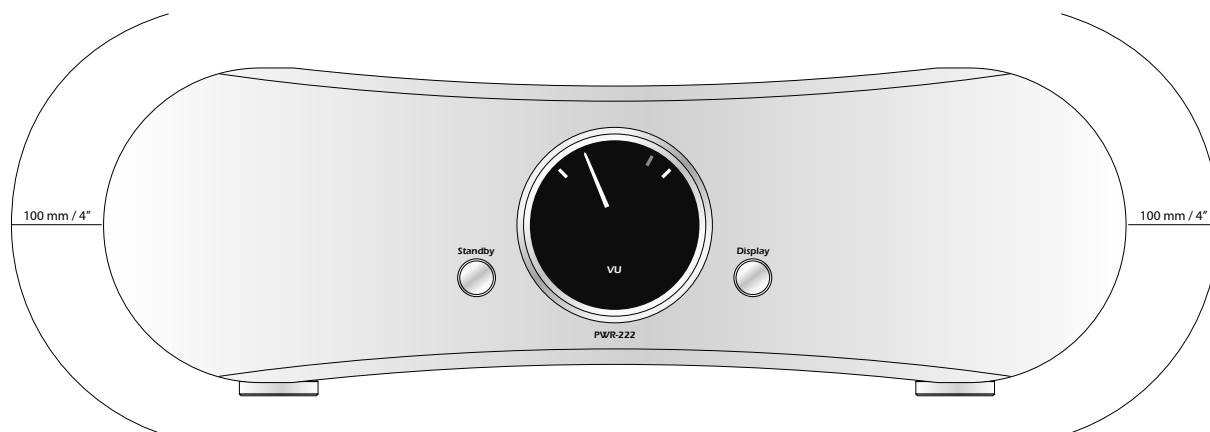
Liquids:

Electricity and liquids are not a safe combination, therefore:

- When cleaning the amplifier, remove the mains plug
- Do not handle the mains plug with wet hands
- Do not spray any liquid directly onto the amplifier
- Do not place liquid containers above or near the amplifier
- Keep liquids away from the amplifier

...And:

- This is not a toy and should not be handled like one (by children OR adults)
- Do not remove the covers of the amplifier (for service see page 10)
- Do not attempt to put foreign objects inside the amplifier (for service see page 10)
- Do not cover the amplifier with cloth
- Do not place the amplifier on sloped or unstable surfaces
- When the amplifier will not be used for a long time, remove the mains plug
- Never connect or disconnect cables when the amplifier is switched on
- Do not short the amplifier outputs
- This unit is made for indoor temperature (15-25° C or 59-77 °F). If it has been exposed to cold temperature, let it adjust itself to indoor temperature before use
- Make sure that your amplifier is able to breathe by securing a minimum safe distance around the heat sinks of 100 mm or 4 inches
- The amplifier can get hot during use. Normal operating temperature is from room temperature to 50° C or 122° F



About the amplifier

General Design

The main aim for the Gato Audio design team was to create the best sounding power amplifier possible inside a compact exterior. Secondly, we wanted to create a line of products where design was not simply a question of a good-looking face plate, but a more complete product where form and function goes hand in hand.

The top cover in either real wood veneer or painted finish can be chosen to accommodate other design elements in your home or system.

TwinFET Power Amplifier

The input section features a bipolar input stage, a separate power supply for the critical driver circuit and a single set of unique high-power MOSFET output devices able to handle current levels of more than 400 amperes without using more than one transistor for each positive and negative period. This combines loads of power with softness and the transparent sound of a good tube amplifier.

Protection Circuits

We have incorporated several advanced and highly effective protection circuits in the output stage in order to protect your amplifier and the connected speakers from abuse and faults. Heat, current and DC are under constant surveillance by a microprocessor, which will shut down the amplifier if the accepted values are exceeded.

Components

Every single component in the PWR-222 must live up to not only stringent production tolerances and over specified values, but equally importantly, it will not be selected before having been approved for its sonic capabilities through many intensive listening tests. Simply put, if it does not sound right inside its circuitry environment, we cannot use it regardless of how good its measurement values are. This is the only way to maintain a natural, crisp and clear soundstage. Most of the components are only working at 30% of their maximum workload capacity under normal use. This will ensure your amplifier a long life with a minimum of stress.

Fine-Tuning – by Listening

The last 5% of fine-tuning and voicing is by far the most complicated and time consuming part of our development work. Single critical components are replaced, and often voltage and current supplies need to be modified to accommodate them, and consequently, listening starts all over again.

In addition, blind-test listening is used, not just using our own reference system but also in other setups, as measures we have taken to complete this amplifier just as comprehensively as every other product in our range.



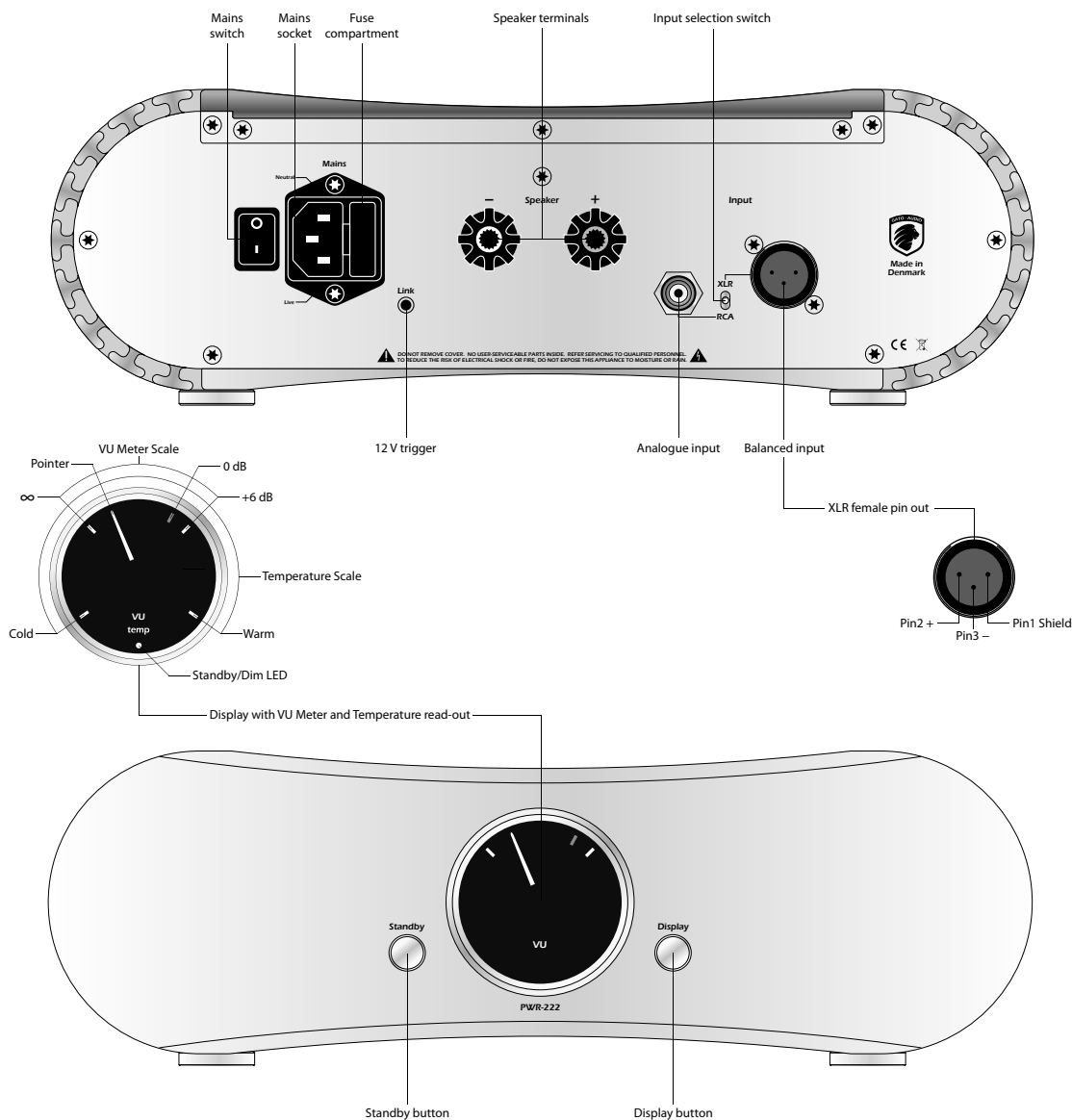
Setting up your amplifier

Basic connection

Follow these steps for setting up your system in this sequence:

1. Place the PWR-222 as per the instructions on page 5
2. Connect the input to the amplifier
3. Connect your loudspeaker to the amplifier
4. Connect mains power cable to the amplifier and turn it on
5. Enjoy!

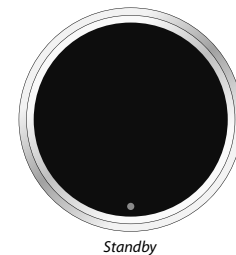
Overview



How does it work?

Power on

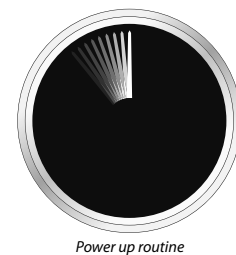
Use the mains switch on the back of the amplifier to turn it on. The amplifier will enter Standby mode.



Standby

To exit Standby mode press the Standby button on the front of the amplifier. It will need a few moments before it is ready. Press the Standby button again to enter standby.

It is possible to control the standby mode by connecting it to a piece of equipment featuring a 12 V trigger (e.g. pre amplifier or integrated amplifier) with a mini jack cable. The power amplifier will then go into standby in sync with the connected equipment.



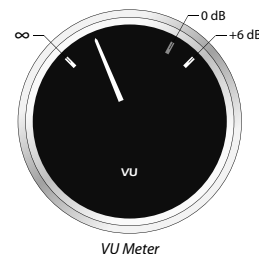
Display modes

The central display of the amplifier can be set to show three different display modes which are described below. To select a display mode simply press the Display button on the front panel of the amplifier. The display will switch modes in this order:

↪ VU Meter → Temperature → Display Dim ↩

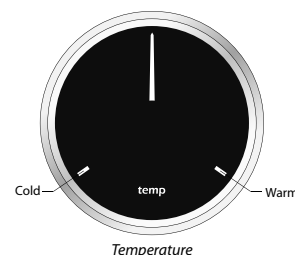
VU Meter

The VU meter display mode shows the output power of the amplifier. The pointer responds to peaks on a scale illustrated by two white end brackets. The red bracket indicates 0 dB.



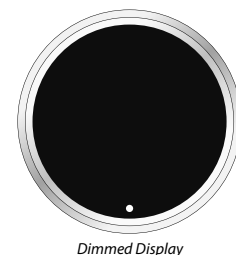
Temperature

The PWR-222 core temperature can be read out in the display. The scale is illustrated by two white end brackets. The pointer will show the temperature. The normal working temperature for the amplifier is right about 12 o'clock.



Dim

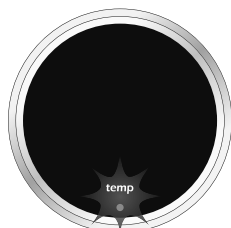
The display can be dimmed by pressing the Display button on the front of the amplifier. The display is now turned off except for one LED indicating the dimmed display state. Press the button again to exit display dimming mode.





Protection warnings

The PWR-222 is equipped with a sophisticated protection circuit to protect the amplifier and/or the connected equipment in case of failure. The PWR-222 features three warning signals:

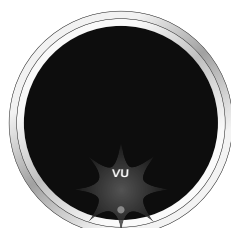


Temperature Warning

Temperature:

If the amplifier develops too much heat and reach a high internal and external temperature it will automatically shut down. During this fail condition the "temp" and the standby LED will flash. Please turn off the amplifier by the mains switch on the back, allow a 10 minutes cooling time and check following points before turning the amplifier on again:

- The ventilation around the amplifier
- The speaker cable and cable connections
- The specification of the connected loudspeakers



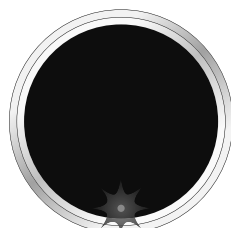
Clipping and DC Warning

Clipping and DC:

This failure can either be generated by too high listening volume with large amount of clipping and distortion, or by a malfunction in the connected equipment. The amplifier will shut down and the "VU" and standby LED will flash. Please turn off the amplifier by the mains switch at the back. Before switching on the amplifier again, please check the following:

- The speaker cables and cable connections
- The connected equipment
- That the volume is set below the amplifiers clipping range

If the warning lights keep flashing after the power up routine, please turn off the amplifier and contact your dealer or the national distributor.



Short Circuit Warning

Short Circuit:

During a short circuit of the amplifiers output or a failure from the components inside, the amplifier will shut down and the standby LED will flash. Please turn off the amplifier by the main switch. Before turning on the amplifier please:

- Remove speaker cables and other cable connections (except mains cable)
- Check the connected cables and equipment
- Check that the volume is set below the amplifiers clipping range.

If the warning lights keep flashing after the power up routine, please turn off the amplifier and contact your dealer or the national distributor.

Input Setting

The input selction switch is placed on the back of the amplifier by the input connectors. Use this to select wether RCA or XLR input is active.

Make it last!

Please apply simple common sense to maintain the sound quality and lifespan of your new Gato Audio amplifier. Here are a few guidelines:

- Regular care: wipe the surfaces carefully by using a clean soft dry cloth
- Cleaning: if necessary, wipe the hard surfaces clean using a soft cloth dampened only with clean water.
- Grease stains or finger marks can be removed carefully with a clean soft cloth lightly dampened in a mix of clean lukewarm water and a single drop of dish-washing liquid. Then wipe the surfaces dry using a soft dry cloth
- Be careful never to use hot water or any type of concentrated detergent, solvent, thinner, or any other volatile substance on the surfaces, or you may cause permanent damage to the surface coating
- Keep the cabinet away from prolonged contact with rubber or PVC materials
- Do not expose the amplifier to direct sunlight or other heat sources

If all else fails...

...don't panic! Every Gato Audio product comes with a minimum 2-year warranty. See our website for details.

This warranty does not cover damage or wear directly or indirectly caused by improper use, violence, tampering with or unauthorized access to or servicing of any part of the product.

If you are in need of service or repair, please do not hesitate to contact us at hello@gato-audio.com or visit our website www.gato-audio.com for more information.

Technical specifications

Output power (230 VAC)	1x 250 W RMS 8 Ω / 1x 450 W RMS 4 Ω
Frequency response	20 Hz-20 kHz - 0.1 dB, and 2 Hz-100 kHz - 3 dB
Total Harmonic Distortion	< 0,003%
Signal to noise ratio	> 115 dB
Input impedance	100 k Ω RCA and 100 k Ω Balanced
Voltage gain	26 dB
Recommended speaker load	4 -16 Ω
Load Protection	Speakers < 1.5 Ω

Connectors

Balanced analogue input	1 pc of gold plated XLR Neutrik
Unbalanced analogue input	1 pc of gold plated RCA
Speaker output	1 pair of WBT NextGen
Trigger, 12V	1 mini jack

Size & Power

Power Requirements	115 VAC/230 VAC, 50 Hz/60 Hz, 800W max
Fuse	20 mm sand-filled, 6,3 AT@115 VAC, 3.15 AT@230 VAC
Power consumption stdb/idle/max	< 1W/55W/800W
Dimensions (WxHxD)	325 x 105 x 400 mm / 12.8 x 4.1 x 15.7"
Weight	16 kg / 35.3 lb



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