

# AMT PowerEater PE-120

## USER'S MANUAL



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# AMT

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**EVERYTHING IS JUST BEGINNING**



Thank you for purchasing an **AMT PE-120**.



Please take the time to read through this manual to become acquainted with the **AMT PE-120**.

## INTRODUCTION



AMT Electronics wants to present our new product – **AMT PowerEater PE-120**.



This device has in fact **four units in one**.



1) It is a **loadbox**. All guitarists well know that if you have a tube amplifier, it cannot be used without a load (a guitar cabinet). **Using an amplifier without a load simply will “kill” it.** So now many guitarists use loadboxes.



2) It is a power **attenuator**.



3) It is a passive **Cabinet Simulator**.



4) It is an **indicator of output signals' levels**.

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## 1. SAFETY INSTRUCTIONS

### WARNING!

- ! Do not expose the **PE-120** to **rain, moisture, dripping or splashing water**. **Do not place objects filled with liquids**, such as vases, etc, on or near the device.

### WARNING!







- ! Inside the device there are no parts that are user-serviceable. Repairs to the device may only be performed by qualified personnel.

### SPECIAL ATTENTION!!!

- ! When in work, the **PE-120 can be Hot**. You have to be sure that **the ventilation grilles are not closed** and there are no obstacles for the right air flow.
- ! **Do not put the PE-120 near the heat sources** or inside a closed cabinet.
- ! **Do not touch the internal loading resistors**; they can be very hot when operating.



- ! **IGNORING THE ABOVE RULES CAN CAUSE THE DEVICE'S BREAKDOWN AND CAUSES THE LOST OF WARRANTY SERVICE!**

## 2. HOW DOES IT WORK

-  **AMT Electronics PE-120** is a reactive load.
-  **PowerEater** lets you load your power amplifier by a reactive load equivalent, which is close by its electrical parameters to a real guitar cabinet speaker. It can be used with tube or solid state amplifiers with the output power **up to 120Watt**.
-  **PowerEater** lets you "noiselessly" load your power amplifier and send the output signal of the amplifier (reduced by the level ) to the external cabinet simulator (for example - **Pangaea CP-100**), to the input of your sound card for later processing by a software IR cabinet simulator.
-  **PowerEater** also has an internal passive **cabinet-simulator**. Its output can be send directly to the input of a mixer or directly to the input of a broad band amplifier.
-  **PowerEater** lets you load your power amplifier by a load equivalent of **8 Ohm** or **16 Ohm** (for you to choose). There is the opportunity to plug in a real guitar cabinet, in this case the internal load equivalent will be switched off and your power amplifier will be working on the real guitar cabinet.
-  **PowerEater** lets you to plug in a cabinet using only **1% or 4% of the power of your amplifier** and your amplifier will be still fully loaded. It lets you to use the guitar cabinet at low loudness.

### 3. PE-120 FRONT PANEL FUNCTIONS



-  1. **"Q-factor"** - cabinet's resonance level.
2. **"Resonance"** – resonance frequency (82 Hz - opened cabinet or 110 Hz - closed cabinet).
3. **"Presence"** – choosing high frequency impedance.
4. **"Level"** - output signals' regulator.
5. **Peak Impulse Indicator of output signals' level** (Indicator's level 0dB corresponds to output levels mentioned below).
6. **"Out -10dB"**- direct power amplifier output signal reduced to -10 dBV (The input resistance of a destination device ought **to be more 5 kOhm**).
7. **"Cab.Sim. out -10 dBV"** - the output of the internal passive cabinet simulator (the input resistance of a destination device ought **to be more 47 kOhm**).
-  8. **"Out +4dB/Cab.Sim Mic Level -30dB"** – switch for selection of the XLR connector mode:
  - a) **"Out +4dB"** – balanced direct output of the power amp signal level reduced to +4dBu at a load more than 10 kOhm;
  - 6) **"Cab.Sim Mic Level -30dB"** - balanced output of the internal Cabinet Simulator at a load 600 Ohm.
9. **"Lift/Gnd"** - ground lifting.
10. XLR connector **balanced output**.

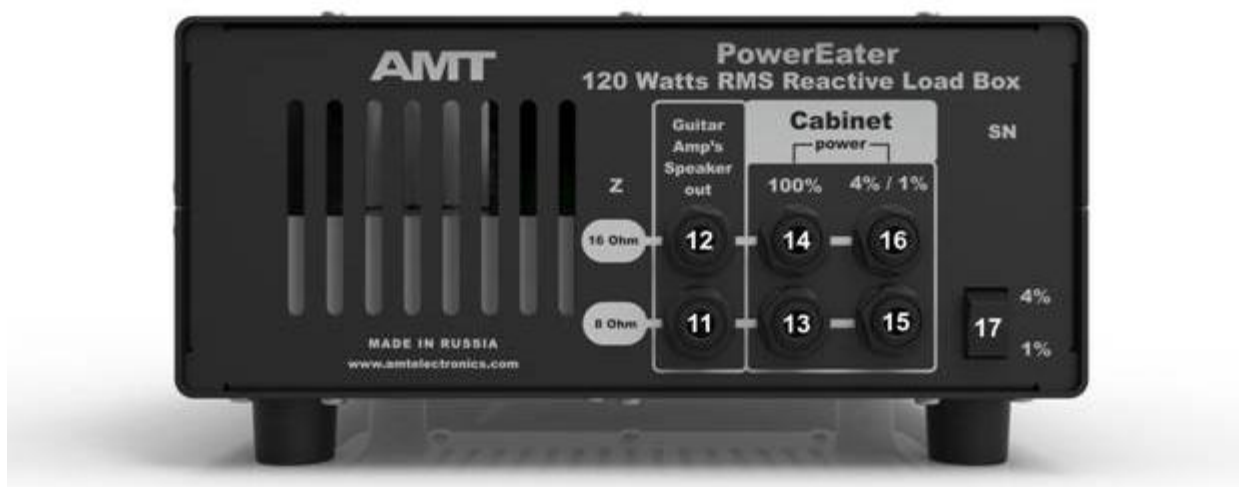



**Note 1:** All **PE-120** signal outputs (Front Panel) are galvanically isolated from a power amp output.



**Note 2:** The internal circuits of the **PE-120** have no elements which can clip the output signals, so you can get higher output levels if you wish and if your power amp has enough power.

## 4. PE-120 REAR PANEL FUNCTIONS




-  **11. "Guitar Amp's Speaker output/8 Ohm"** – Jack Socket for Power amp output (load 8 Ohm).


**12. "Guitar Amp's Speaker output/16 Ohm"** – Jack Socket for Power amp output (load 16 Ohm).

**13. "Cabinet power 100%-8 Ohm"** – Jack socket for Cabinet connection (load 8 Ohm, when the cabinet is connected, the internal load of PE-120 is switched OFF ).

**14. "Cabinet power 100%-16 Ohm"** – Jack socket for Cabinet connection (load 16 Ohm, when the cabinet is connected, the internal load of PE-120 is switched OFF ).

 **15. "Cabinet power 1%/4%-8 Ohm"** – Jack socket for Cabinet\* connection (load 8 Ohm).

**16. "Cabinet power 1%/4%-16 Ohm"** – Jack socket for Cabinet\* connection (load 16 Ohm).

 *\* When a cabinet is connected, the power amp is still fully loaded with the internal load equivalent.*

**17. A switch for choosing the output power (1%/4%) on sockets [15],[16].**



AMT Electronics reserves the right to change the internal and external design of the device which won't decrease its consumer properties without preliminary notification. In this connection the specifications and appearance of the device might differ from the ones shown in this document.

## 5. SPECIFICATIONS

1.	Weight netto	2,15 kg
2.	Dimensions	210x110x180 mm