

PRECAUTIONS

- CAUTION! It is necessary to comply with basic rules while using devices supplied from AC power.
- The device should be supplied with current of parameters complied with markings on the product.
- It is recommended to use plugs with grounding.
- Use fuses of parameters recommended by the producer only.
- Protect the device against moisture.
- A perfusion of the device may cause damage or electric shock.
- The amplifier should be placed in a spot that enables free air circulation for the cooling system to work properly.
- The device should be used away from heat sources.
- It is necessary to remember that too loud play may cause hearing damages.
- Never try to repair the device personally.

Taurus

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RoHS



Disposal of old Electrical & Electronic Equipment (Applicable throughout the European Union and other European countries with separate collection programs)

This symbol, found on your product or on its packaging, indicates that this product should not be treated as household waste when you wish to dispose of it. Instead, it should be handed over to an applicable collection point for the recycling of electrical and electronic equipment. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences to the environment and human health, which could otherwise be caused by inappropriate disposal of this product. The recycling of materials will help to conserve natural resources. For more detailed information about the recycling of this product, please contact your local city office, household waste disposal service or the retail store where you purchased this product.

Amplification Taurus

OPERATING MANUAL



DESIGNED BY MUSICIANS FOR MUSICIANS



The **T-450 HEAD** is the youngest member of Taurus analog bass head amps family, powered by outstandingly efficient Switching Mode Power Supply. The SMPS ensures great dynamic and high power output as well as light weight and overall compact amps size.

The **T-450** is dedicated to those who are looking for very easy to tune and control, reliable and efficient bass head with very wide dynamic range and selectivity, which reproduce exact sound characteristic of plugged instrument. As a whole Taurus line of amplifiers, the T-450 is equipped with unique MLO-System which greatly benefit musicians by logical and effective tone adjustment.

MLO - SYSTEM *Middle-range Level Optimization*

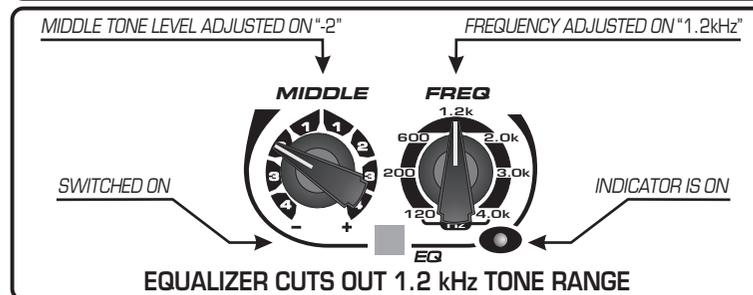
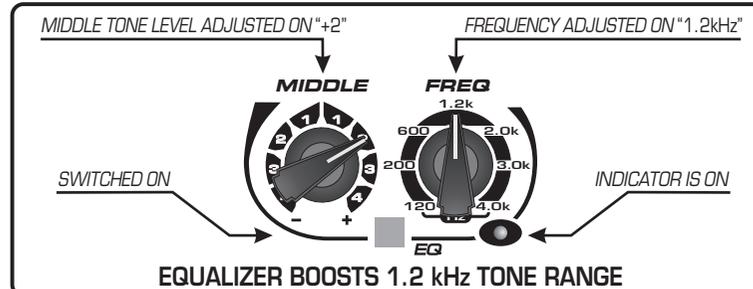
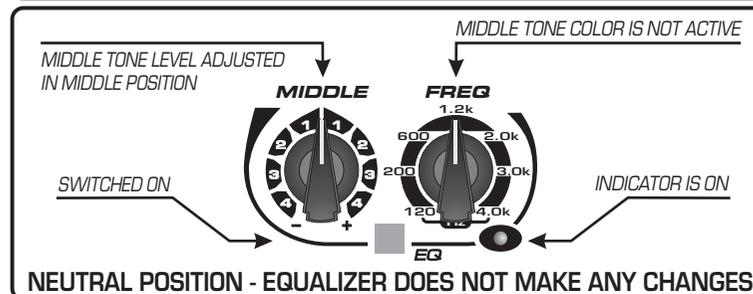
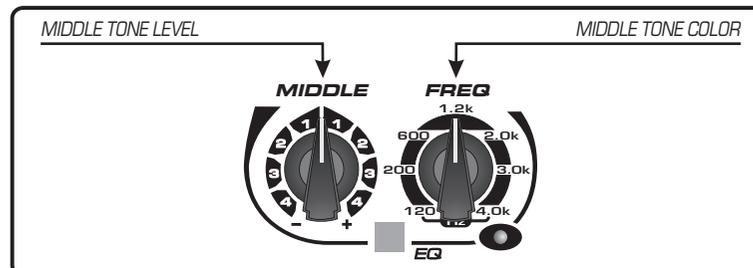
MLO-system equalization control is conceived to achieve easy and intuitive tailored sound using only bass and treble knobs. This sound correction simplifies finding the proper tone colour. Tone setting characteristics are designed to meet the parameters of the instruments, both technically and musically.

In regular EQ practically 50% of the bass and treble correction range is used. Adding more low frequencies will result in loss of sound control. Automatic paired mid-range equalization control offers two point correction and optimal middle range frequency tone adjustment, especially in adjacent mid and low spans.

The MLO-equalizer maintains volume level while low frequencies are added to the original sound, changing only the tone, not its volume. (No need for volume correction level).

The musician can simply focus on sound control without knob confusion.

PARAMETRIC EQUALIZER is composed of 2 controllers - LEVEL and FREQUENCY. LEVEL controller is designed for mid tones adjusting, FREQUENCY controller adjusts appropriate mid tones range. LEVEL controller decides whether we want to amplify or cut out selected tone range. Setting LEVEL controller in middle position will cause that the EQUALIZER does not make any changes. Available tone color adjustment range is set between 120Hz and 4kHz. The EQUALIZER operation is illustrated below.



5 GETTING STARTED

- A** Connect the speaker cabinets which have an appropriate power and impedance to the amplifier.
- B** Set every front panel controllers and switches on following positions:
 - GAIN, BASS, TREBLE, LEVEL and VOLUME controllers in middle position,
 - PRESENCE, PARAMETRIC EQUALIZER ON and DBS switches in "OFF" position.
- C** Select HORN on/off switch on the combo back panel as you wish.
- D** Connect your bass guitar to amplifier INPUT, then switch on POWER button.

6 SOUND CREATION

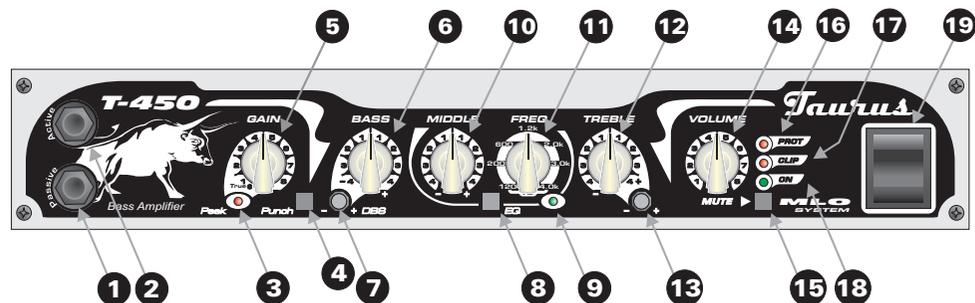
Basic elements that make up the character of desired sound are tone color and dynamics. Section composed of controllers BASS, TREBLE, PARAMETRIC EQUALIZER as well as switches DBS and TREBLE is responsible for tone color. Firstly set tone color using only BASS and TREBLE controllers and DBS and TREBLE switches. In case when the adjustment is insufficient, use PARAMETRIC EQUALIZER.

► FIRST USING TIPS

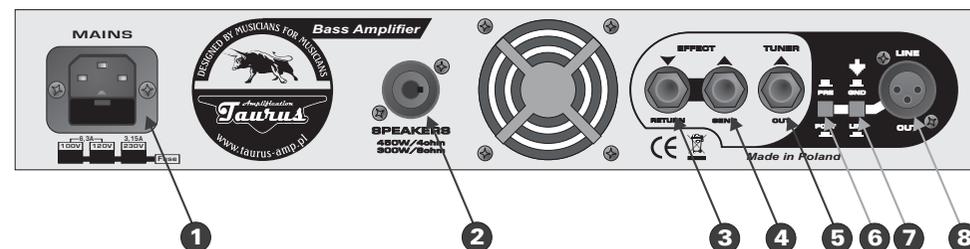
- A** Set VOLUME controller in optimum and then set appropriate input sensitivity by using GAIN controller. GAIN controller should be set in a way that ensures to control the amplifier on required level. It is necessary to remember not to allow to overload the preamplifier while hard hitting the strings. The overload is indicated with OVERLOAD indicator [3].
- B** Begin with setting BASS and TREBLE controllers. If you need more bass tone saturation, use the DBS switch. If you need to brighten the instrument color, use the TREBLE switch.
- C** Creating of advanced tone color is possible thanks to PARAMETRIC EQUALIZER. One can switch on the EQUALIZER using button [7]. Using EQUALIZER you can precisely adjust mid tones color. PARAMETRIC EQUALIZER is composed of 2 controllers - MIDDLE and FREQUENCY. Operating with these 2 controllers, you can select proper tone color range you want to amplify or cut out. Available tone color adjustment range is set between 120Hz and 4kHz. It corresponds with range up to bass sounds throughout whole mid band up to high tones. The EQUALIZER operation is described in point 7 of the operation manual.
- D** In order to enrich the instrument sound you are allowed to use additional sound effects. The effect loop on the back panel with SEND and RETURN are meant for that.

1 SPECIFICATIONS

- **Power output:**
 - 450W RMS / 4ohm
 - 300W RMS / 8ohm
- **Inputs:** passive & active
- **Controls:**
 - **GAIN** - control with overload indicator.
 - **VOLUME** control
- **Tone:**
 - **BASS** and **TREBLE** equalizer with "[MLO-system](#)".
 - Triple **BASS-switch** to reduce or boost low frequency:
DBS-cut/OFF/DBS-boost
 - Triple **TREBLE-switch** to reduce or boost high frequency:
CUT/OFF/PRESENCE
 - **PARAMETRIC EQUALIZER** for precise control of middle range:
120Hz-4kHz
 - **PUNCH** button - increases sonic expression
- **Other features:**
 - **MUTE** button
 - **CLIP** power amp indicator
 - **PEAK** preamp overload indicator
 - **Effect loops: SEND / RETURN** (jack 1/4 inch)
- **Outputs:** XLR balanced **LINE** output with **PRE/POST** switch and **GROUND LIFT** circuit switch, **TUNER, SPEAKERS** [combo speakon/jack]
- **Protections:** short circuit, thermal overload, power overload
 - Forced cooling system with electronic efficiency control
- **Casing dimensions:** [H x W x D] 66x380x180mm
- **Overall dimensions:** [H x W x D] 66x380x205mm
- **Weight:** 3.3 kg

2**FRONT PANEL**

- [1] - Active bass instrument INPUT [JACK 6.3mm].
- [2] - Passive bass instrument INPUT [JACK 6.3mm].
- [3] - PEAK indicator in preamp section.
- [4] - PUNCH button - increases sonic expression.
- [5] - GAIN control
- [6] - BASS control with MLO-system.
- [7] - Triple BASS switch to reduce or boost low frequency: DBS-cut/OFF/DBS-boost.
- [8] - PARAMETRIC EQ on/off switch.
- [9] - PARAMETRIC EQ indicator.
- [10] - PARAMETRIC EQ level control.
- [11] - PARAMETRIC EQ frequency adjustment [120Hz...4kHz].
- [12] - TREBLE CONTROL with MLO-system.
- [13] - Triple TREBLE switch to reduce or boost high frequency: CUT/OFF/PRESENCE.
- [14] - VOLUME control.
- [15] - MUTE on/off switch.
- [16] - PROTECTION indicator.
- [17] - Power amplifier CLIP indicator.
- [18] - ON/MUTE indicator.
- [19] - POWER on/off switch.

3**REAR PANEL**

- [1] - EC POWER INPUT socket with AC fuse.
- [2] - SPEAKERS output [combo SPEAKON and 6,3mm JACK].
- [3] - AUX SEND output [6,3mm JACK].
- [4] - AUX RETURN input [6,3mm JACK].
- [5] - TUNER OUTPUT [6,3mm JACK].
- [6] - Balanced LINE OUTPUT [XLR].
- [7] - LINE OUTPUT PRE/POST EQ switch.
- [8] - LINE OUTPUT GROUND LIFT switch.

4**PROTECTIONS**

The amplifier is equipped with automatic power amplifier protecting systems. Activating the protection is noticed with PROT indicator located on the front panel of the amplifier. In case when the indicator is on permanently, then the loudspeakers are going to be disconnected. Inactivating of protection systems should be performed by turning off and on the amplifier. If the amplifier does not return to normal action, it means that the anti-overload or anti-short circuit system has been activated. In such case it is necessary to check loudspeakers impedance (it may be too low) and amplifier-loudspeakers connection (there may be short circuit). If the PROT indicator is still on, check the amplifier temperature (it may be too high). In this case just wait few minutes to amplifier cooling.