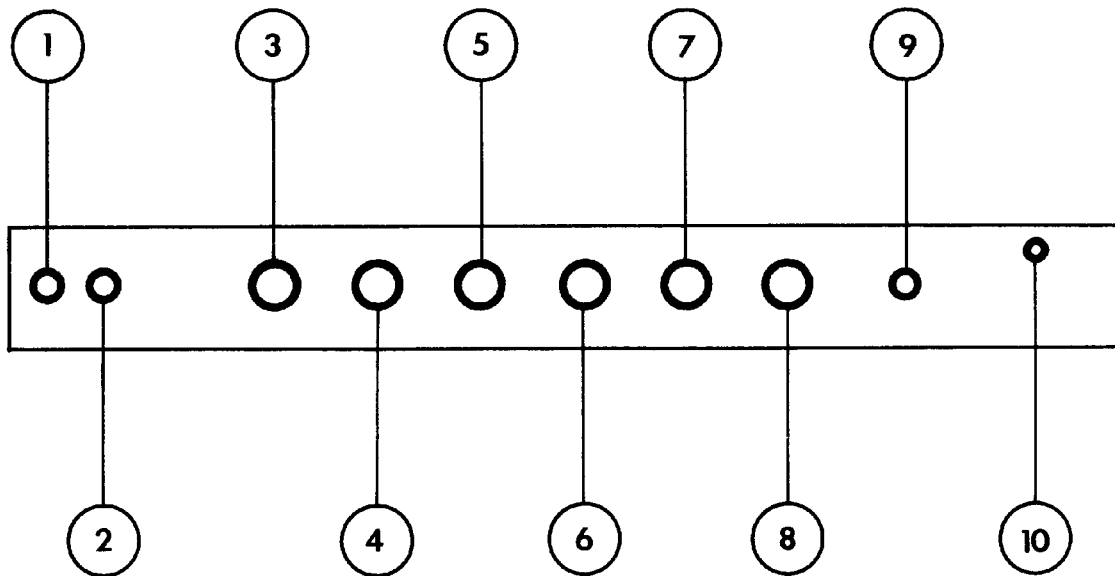


INTRODUCTION

The new TNT is the second generation in this series. Many new circuits and design techniques have been combined into this versatile unit. The TNT is powered by a totally new 50-Watt RMS (8 Ohms) power amplifier while preamp signal conditioning utilizes the latest advances in semiconductors and variable active filter technology. This single channel unit features a full brace of equalization controls. The TNT's equalization circuitry is entirely active and includes shelving type high and low frequency equalization, while the vital mid range frequencies are controlled by a parametric circuit. Our "PARAMID" circuit is of the peak/notch type with boost and cut capability and includes the ability to shift the center frequency over an extremely wide range of mid frequencies. Because of the extremely versatile nature of this equalization system, the TNT can produce an extremely wide tonal range to enable the bassist to achieve almost any tonality desired. This extremely effective equalization circuit makes the TNT ideal for use in the recording studio since it can create almost any tonal blend.

The TNT features our well-proven pre and post gain control system which allows total control over the gain/dynamic balances in the preamp. This capability allows for various effects such as overdrive, etc., and the post gain allows precise adjustment to minimize residual preamp noise in a recording environment. The TNT's preamp out jack allows patching signal directly from the internal preamp both with and without utilization of the internal power amp/speaker. The rugged 50-Watt output section consists of two high-voltage/high speed TO-3 power devices bolted to a massive aluminum heatsink. The new output stage is short-circuit and transient protected. Large electrolytic filter capacitors, coupled with four silicon rectifiers connected in a full wave bridge, constitute the power supply that allows considerably more music power to be developed than the 50-Watt continuous RMS capability would indicate. The overall effect of this new design is a unit with much greater tonal and projection capabilities. The TNT's massive 15" speaker is mounted in a solidly built enclosure that has been designed with the aid of computers and the latest alignment techniques to produce optimum results in this compact package. The new TNT should set a new "standard" for units in this power/size category. Comparison with competing units will illustrate its marked superiority.

WARNING: To prevent electrical shock or fire hazard, do not expose this appliance to rain or moisture.



FRONT PANEL

INPUT JACKS (1) (2)

The input jacks are arranged in a unique circuit which allows a wide range of input levels to be handled by the TNT. Input 1 is the high gain input and should normally be used when plugging in your instrument. Input 2 is the low gain input and should be used if the signal from your instrument tends to overload (distort) the preamp. If two instruments are used simultaneously into both jacks 1 and 2, the unique switching circuitry **automatically** balances the gain of both inputs.

PRE GAIN CONTROL (3)

The pre gain control determines the amount of gain produced in the input preamp. You should understand that this control determines the **sensitivity** and **not the power output** of the amplifier. The control settings can in no way be related to the power the amp is delivering to the speaker because of a number of other factors such as input signal amplitude, setting of the post gain control, etc., etc.

EQUALIZATION

LOW EQUALIZATION CONTROL (4)

The low equalization control is of the active shelving type capable of producing either a boost or a cut of the low frequencies. Vertical (straight up or 12:00) settings produce a flat response, while counterclockwise settings produce a cut and clockwise settings produce a boost. It should be noted that because this circuit is active, significant amounts of boost are available. One should avoid overboosting the lows since this will tend to require excessive amounts of power from the amplifier and might tend to cause premature clipping of the power amp because of the greater power requirements for low frequencies.

PARAMID MIDDLE EQUALIZATION

Our "PARAMID" equalizer is capable of two distinct equalization functions: (1) It features the ability to vary the center frequency of its action over a considerable range; and (2) A second control determines how much the selected frequency range is either boosted or cut.

PARAMID CONTROL (5)

The "PARAMID" control operates similar to the low and high equalization controls in that in the vertical (straight up or 12:00) position, no effect is produced, while counterclockwise settings produce a cutting effect and clockwise settings produce a boosting effect. Care should be taken not to overboost since this effectively increases gain in the selected frequency range and could overdrive the power amp and/or speaker as well as increase the residual noise of the system.

SHIFT CONTROL (6)

This control determines the center frequency of the mid range peak or notch and enables the operator to tremendously vary the tonality of the system by allowing the center frequency to be shifted over an extremely wide range of frequencies from approximately 150 Hz to approximately 1.5 kHz.

HIGH EQUALIZATION CONTROL (7)

The high equalization control is of the active shelving type capable of producing either a boost or cut of the high frequencies. Its operation is similar to the low and "PARAMID" controls in that a vertical (straight up or 12:00) position produces a flat response, with counterclockwise positions yielding a cut and clockwise settings yielding boost. It is a good idea to avoid extreme boosting of high frequencies since this tends to encourage emphasis of residual preamp noise and also can tend to make the amp sound "strident" and unduly emphasize string noise.

POST GAIN CONTROL (8)

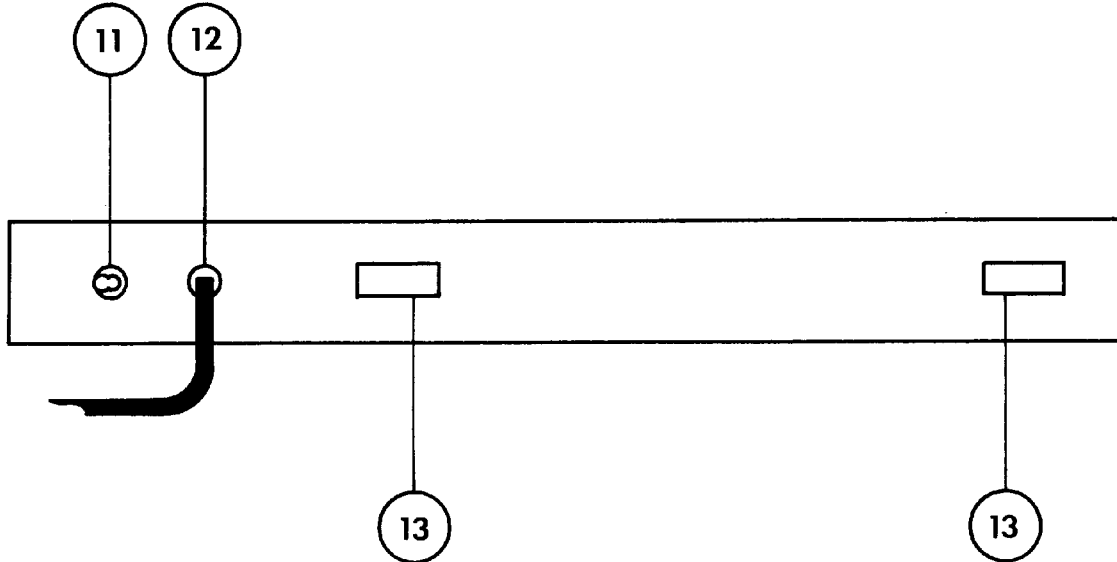
The post gain control is the master gain control for the TNT. The action of this control is conventional and experimentation will illustrate its function and flexibility. Please be aware that extremely low settings of the post gain control can require extremely high settings of the pre gain control with the subsequent loss of dynamic range in the input preamp. This mode of operation, i.e., minimizing input dynamic range to achieve overload, sustain, etc., etc., may be desirable in some situations to create overload or distortion effects in the input circuitry. Generally, bass instruments should be used with **maximum** dynamic range available from the amplifier. In the TNT, maximum dynamic range is achieved with high settings of the post gain control and relatively low settings of the pre gain control.

PREAMP OUT JACK (9)

The preamp out jack allows signal to be patched directly out of the TNT's input preamp. The preamp out jack is of the two-position switching type that allows two different modes of operation. The first detent (or click) allows utilization of the TNT's internal power amp/speaker combination while the preamp signal is being taken out from the preamp out jack. The second detent (or click), which is reached when the phone plug is pushed all the way into the preamp out jack, cuts out the internal amp/speaker combination and allows only the input preamp to be functional. This versatile two-detent output jack/switching system allows use either with or without the internal amp/speaker when patching signals out from the preamp. The signal level at this jack is approximately 2 Volts RMS when the power amp clips.

PILOT LED (10)

The pilot LED indicates when the electrical supply is switched on and is actually delivering power to the amplifier.



REAR PANEL

POWER SWITCH (11)

On domestic units, the power switch is of the three-position type with the center position being "OFF." This switch has two "ON" positions, one of which is used to ground the amplifier properly. One of the "ON" positions will yield the lowest amount of residual hum or "popping" when the instrument is touched and this is the position that should be used.

On export models, we utilize a simple on/off switch that does not have multiple "ON" positions since the grounding (earthing) conditions vary with the different electrical systems of the United States versus other nations.

LINE CORD (12)

For your safety, we have incorporated a three-wire line (mains cable) with proper grounding facilities. It is not advisable to remove the ground pin under any circumstances. If it is necessary to use the amp without proper grounding facilities, suitable grounding adaptors should be used. Much less noise and greatly reduced shock hazards exist when the unit is operated with the proper grounded receptacles.

LINE (MAINS) CORD RETAINERS (13)

We have provided two large molded line cord retainers on the rear panel to allow storage of the mains cable for travel. In operation the cable should be **completely** unwrapped to allow maximum heat dissipation from the rear panel/heatsink.

SPECS

POWER OUTPUT:

50 Watts RMS into 8 Ohms @ 5% THD. Frequency - 1 kHz,
120 VAC line

LINE OUTPUT:

2 V RMS into 10K Ohms @ power amp clip
1,000 Ohm source impedance

EQUALIZATION:

Low: ± 15 dB @ 100 Hz, shelving
Paramid: ± 15 dB adjustable with shift control from 150 Hz to
1.5 kHz, peak/notch
High: ± 15 dB @ 5 kHz, shelving

The following specifications are measured with these typical guitar settings:

Pre Gain @ 5; Post Gain @ 10; Low @ +10 dB; Paramid
@ -6 dB; Shift @ 500 Hz; High @ -10 dB

INPUT SENSITIVITY:

80 mV RMS @ 1 kHz for 50 Watts RMS into 8 Ohms

SIGNAL-TO-NOISE RATIO:

Greater than 70 dB

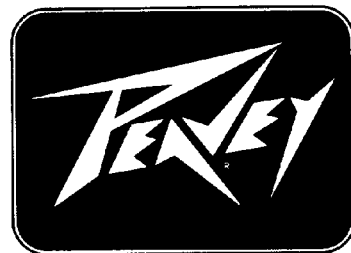
INPUT IMPEDANCE:

220K Ohms

MAXIMUM AVAILABLE GAIN:

72 dB

"Specifications are subject to change without notice."



PEAVEY ELECTRONICS CORP.

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