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## Owner's Manual

Firstly, let us congratulate you on your purchase of the Pivot-TC/500 Tone control channel strip with equalizer designed for the API 500 series Lunchbox or suitable compatible rack.

We know you will be as pleased with it's sonic qualities as we are.

You are now the proud owner of a product that has the advantages of more than 40 years experience in audio engineering, today's component and manufacturing technology, but still retaining "that sound" uniquely achievable through Class A design.

As you can tell, Phoenix Audio is dedicated to the development of Class A discrete technology used within high build-quality equipment.

The Pivot-TC/500 uses our well proven and loved Class A output stage (DSOP2), but also has our latest breakthrough in transformer-less Class A, Discrete Input Technology which gives a "valve-like" sound.

You CAN hear the difference!!!

**Description:**

The Tilt Eq concept was first developed in the 1970's by Quad Ltd, it first appeared on the company's model 34 preamplifier. The tilt control tilts the frequency content of the audio signal by simultaneously boosting the treble and cutting the bass frequencies, or vice versa, making it a simple to use but powerful EQ.

Phoenix Audio have re-imagined this and taken the original concept and extended it to provide 3 unique selectable pivot points around which the audio can be tilted.

# Pivot-TC/500 Specifications

## **API 500 series compatible rack unit:**

### **Class A (DSOP2) Output specs.**

Frequency response: 20Hz to 20k +/- 0.5dB.

Maximum Output = +26dBu @ 1kHz

Noise = -90dB @ 20Hz to 20kHz.

Phoenix Audio's unique Class A, transformer-less, True electronically balanced input stage.

**Typical Headroom:** +26dB on output stage.

**Input connections:** XLR input on rear of API compatible rack and TS 1/4" Jack on front for DI input & TS through input.

**Output connections:** XLR output on rear of API compatible rack

**High Input Impedance DI: Mono 1/4" Jack on front panel**

**DI Stage gain: Maximum of 30dB gain range**

**Gain Meter:** LED output Metering. (Green = -4dbu, to +10dBu in 2db increments, Yellow = +12dbu Red= +14dBu)

**Pivot 'Tilt style' EQ controls :** Rotary switch with 3 pivot points : Bypass, 160hz, 800hz & 1.6khz.

**Toggle Switch :** Allowing Line level mode or DI mode

**Dark/bright control :** Rotary control allowing the degree of tilt on each frequency, more dark control will boost LF and reduce HF and more bright control will boost HF and reduce LF

**Output Level :** An output fader which will allow you to control the output level.

**Power requirements:** The Pivot-TC/500 utilizes the rack's +16V and -16V power rails, but uses our unique on-board power supply to convert the rails to +24V and 0V so that the unit sounds exactly the same as our mains-powered 19" units. This means you always know that the Phoenix sound is consistent across our whole range of products.

## Pivot-TC/500 SETUP INSTRUCTIONS

The Pivot-TC/500 has a vertical row of LED's to indicate output level. These LED's are connected to the OUTPUT of the unit, NOT the input section. This makes the LED's indication much more useful for setting up levels on the Tilt Tone channel and will give you a clearer view of what level is being sent to external equipment.

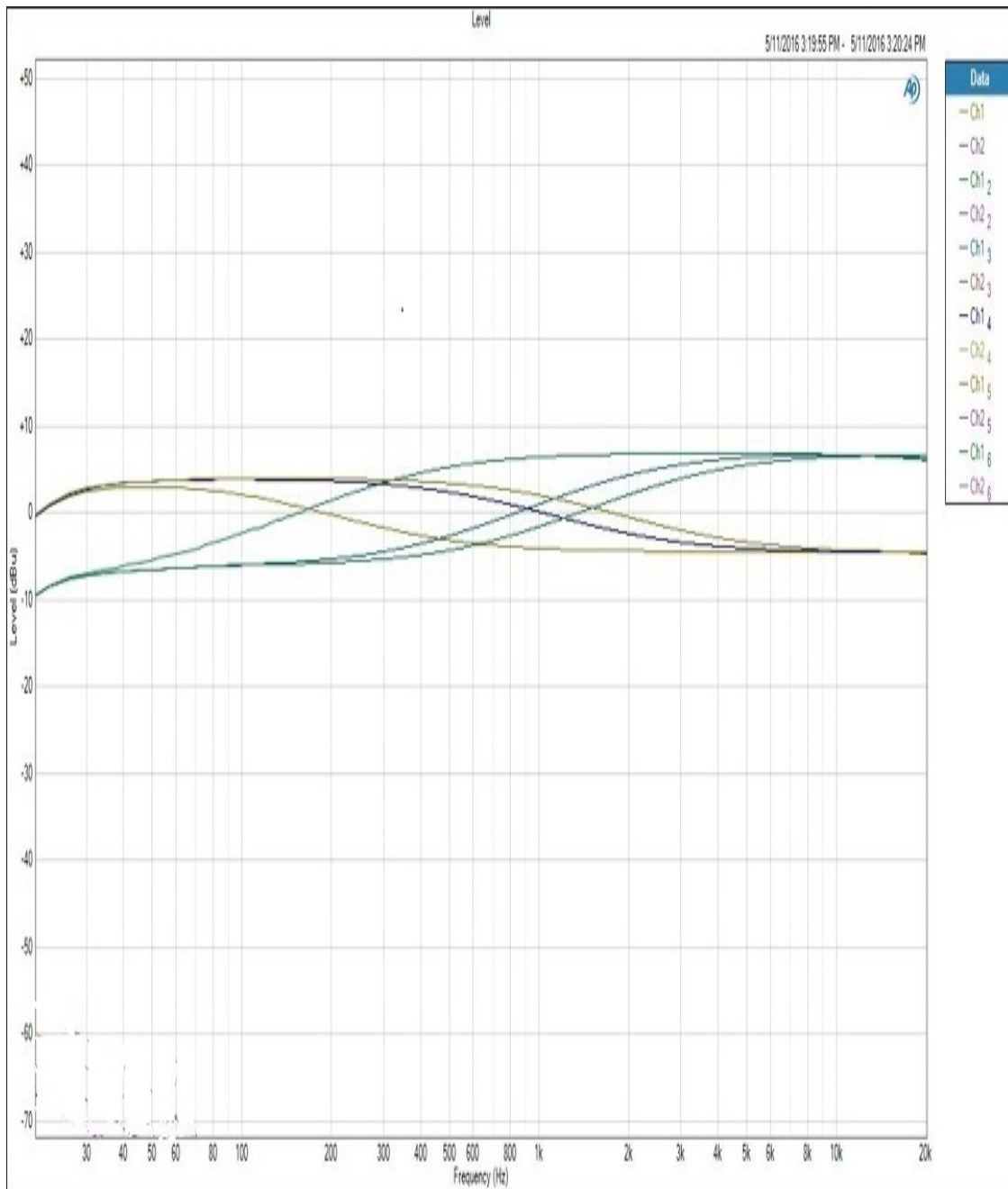
The LED metering has 2 selectable modes. Dot and Bar modes. The mode is selected by the LK1 (Red) jumper link on the upper (small) circuit board. No link = BAR mode. Placing a shorting link (fitted as standard) onto LK1 will put the LED metering into DOT mode.

The LED's are marked -4 to +10 (Green) and +12 (Yellow) and +14 (Red). When the Red Led lights, this isn't a sign of clipping as the Pivot TC will have at least another 12db of headroom.

You can turn the output knob all the way up to maximum and still be sure the output of the unit will not clip. The amount of headroom on both the input AND output stage is HUGE!!! There will never be a time when you can't get a hot enough output, only occasionally too hot an input (then you just simply turn down the input signal coming into your Pivot TC).

When using the DI input, plug the external signal source into the 1/4" jack on the front panel, and adjust the OUTPUT Level so that the 0dB Green Led is just illuminated. This will give an output Level of 0dB and can be adjusted to taste.

The OUTPUT level knob is provided to allow OUTPUT level adjustment. If you prefer to have a "hotter" output, turn the OUTPUT knob up to suit. You can turn the OUTPUT knob fully up without any distortion, as there is plenty of headroom on the output stage. Also, if you prefer to have a LOWER level on the output (I.E.: for semi-pro outboard gear which requires around -10dB input), simply turn the OUTPUT knob down to taste. The combination of the Class A discrete output stage coupled with our custom wound transformer will impart second harmonics into your music and also a form of compression, similar to tape compression, this will be achieved by running the unit with a high output level.



Here is a diagram showing the EQ curves and how they perform at 0db over a 20khz to 20hz frequency spectrum. Each pivot point is shown – 160hz, 800hz and 1.6khz.

Here is a description of the Pivot TC/500's front panel, showing all the connections and controls available.

