buzzaudio

tonic

API™ 500 Series Compatible Equalizer Module

Users Manual

TONIC USERS MANUAL VERSION-1, AUGUST 2007.

PO BOX 6677, TE ARO. WELLINGTON, NEW ZEALAND. VOICE/FAX 64+4+385-2478.
www.buzzaudio.com email management@buzzaudio.co.nz

Thank you for choosing the Buzz Audio Tonic Equalizer module. Please take the time to read this manual so that you are familiar with the operation of the unit.

To gain our Extended Warranty, please return the enclosed Registration Card or register your purchase online at www.buzzaudio.com

Contents

1] Compatibility and Power

The Tonic equalizer module is designed to be installed into an API™ 500 Series compatible rack and cannot function stand alone, requiring the power source supplied by the rack system.

It should be noted that the Buzz Audio Tonic module consumes more power supply current than most other 500 series modules available due to the True Class A amplifiers used in the design. For this reason, there may be limitations on how many Tonic modules can be installed into some rack systems currently available.

The current consumption of the Tonic is rated at 120 milliamperes at +/-15 volts DC. If 10 modules are installed into a rack, then a total of 1.2 amperes will be required from the rack power supply. Please check with the rack manufacturer that the design can meet this rating. 10 Tonics can safely be fitted to the API™ 500VPR rack.

For more information on the API™ 500 Series racks, visit the API™ website at www.apiaudio.com.

2] Installation

After unpacking your Tonic module, please check for any visible damage that may have occurred during transit. If there is any problem, please contact your dealer immediately for advice on what to do.

Before fitting into the rack, you may wish to set the HPF turnover frequency jumpers to your choice, see section 4 of this manual.

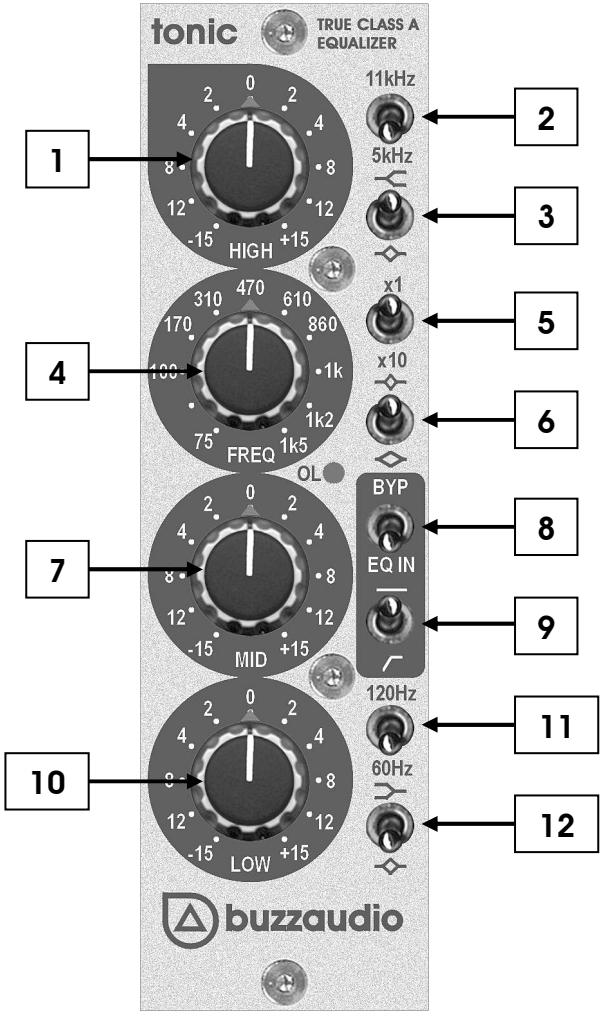
Installation into the 500 Series rack is relatively straight forward. Ensure the rack is completely powered down before attempting installation to prevent damage to the module.

Choose the position in the rack to which you will install the module and slide it in so that the gold plated edge connector of the module aligns with the matching connector in the rack. A gentle push and the module should slide home into the rack connector.

Attach the Tonic front panel to the front of the rack with screws supplied by your rack manufacturer. This is important for mechanical rigidity. Do not over tighten these screws to avoid stripping out the threads.

Apply power, test that everything is working OK, and most importantly, enjoy!

3] Controls and Indicators



Controls and Indicators continued…

[1] HIGH This centre detented pot controls the amount of boost and cut of the high (treble) band. The 12 o'clock "0" mark is flat response (no boost or cut applied). +/- 15db range is provided.

[2] 11kHz - 5kHz This switch selects the centre frequency of the high band filter section in bell mode, or the frequency of maximum boost/cut in shelf mode.

[3] This switch selects the operating mode of the high band section to shelving mode or bell mode respectively.

[4] FREQ This pot adjusts the operating frequency of the midrange filter section. It sweeps from 75Hz to 1500Hz or 750Hz to 15kHz depending on the setting of the x1-x10 switch below.

[5] x1 - x10 This switch is used to multiply the midrange freq control by a factor of ten, as above.

[6] This switch select the shape of the mid range bands filter. It can be a tight bell shape or a broad bell shape respectively.

[7] MID This pot controls the cut or boost amount of the mid range filter section, with "0" being the flat position. +/- 15db range is provided.

Controls and Indicators continued…

[8] BYP – EQ IN This switch will bypass all the Tonic equalizer sections when in the BYP position with the audio input connected directly to the audio output via a relay. To engage the Tonic equalizers, the switch should be in the EQ IN position.

[9] — ⌐ This switch selects the high pass filter (HPF) in and out of the Tonic signal path. The HPF is bypassed when the switch is in the up position. The turnover frequency of the HPF can be selected via jumpers on the Tonic circuit board. See section 4 of this manual.

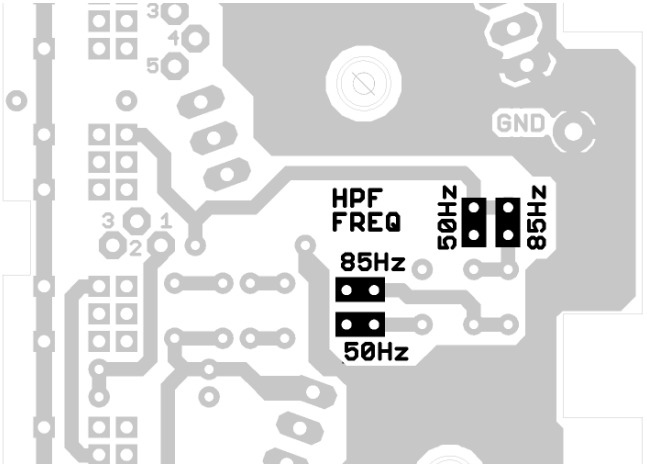
[10] LOW This centre detented pot controls the amount of boost and cut of the low (bass) band. The 12 o'clock "0" mark is flat response (no boost or cut applied). +/- 15db range is provided.

[11] 120Hz - 60Hz This switch selects the centre frequency of the low band filter section in bell mode, or the frequency of maximum boost/cut in shelf mode.

[12] ⊂ ◇ This switch selects the operating mode of the low band section to shelving mode or bell mode respectively.

4] High Pass Filter Frequency Adjustment

Facility is provided on the Tonic set the high pass filter frequency to either 50Hz or 85Hz depending on your preference.



Locate the little black HPF FREQ jumpers as shown in the above picture on the Tonic upper circuit board. To change frequency you need to move both jumpers to the 50Hz of 85Hz positions.

The Tonic is supplied from the factory set to 50Hz. The HPF will not operate correctly if the jumpers are not in matching positions or are missing.

5] Specifications

Maximum Input Level +23dBu
Maximum Output Level +26dBu into 3k ohm load.

Frequency Response EQ set flat
17Hz to 175kHz (+1dB, -3dB).

Harmonic Distortion Measured +10dBu output level
0.08% @ 100Hz, 0.02% @ 1kHz, 0.005% @ 10kHz

Signal to Noise Ratio
-88dB A wtg, input shorted.

Input Impedance
20k ohms approx balanced

Indicators
Single LED overload indicator at +20dBu.

Size
(1.5"Wx5.25"H). Fits 1 slot in API™ 500VPR Series rack

Power requirements = 120mA +/- 15-18 volts DC as supplied by rack power supply.

Specifications are typical of a production unit and are subject to change without notice because we might be able to make it slightly better. 0dBu reference = 0.775 volts RMS.

6] Warranty and Service

We are confident that you will receive many years of trouble free operation from your unit. If however you experience any technical problem with your Tonic equalizer, contact your dealer or Buzz Audio for recommendations on what to do.

For on line support visit our web site;
www.buzzaudio.com and click on Users Area

Buzz Audio, 42b Hania St, PO Box 6677, Te Aro,
Wellington, New Zealand.
Voice/Fax 64+4+385-2478.
Email; support@buzzaudio.co.nz

•Disclaimer

Buzz Audio is not liable for any damage to microphones, amplifiers, consoles, speakers or any other equipment and/or electric shock to humans that is caused by negligence or improper installation and/or use of the Tonic Equaliser module.

•Standard Product Warranty

Buzz Audio guarantees the Tonic to be free of defective materials and/or workmanship for a period of 1 year (12 months) from the date of sale, and will replace

Warranty and Service continued…

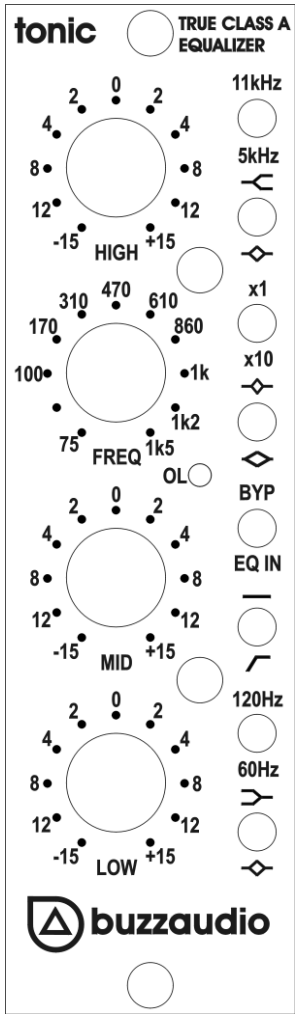
defective parts and repair malfunctioning products under this warranty when the defect occurs under normal installation and use – provided the unit is returned to our factory (or duly authorised service centre) via prepaid transportation with a copy of the proof of purchase, ie, sales receipt. This warranty provides that examination of the returned product must indicate, in our judgement, a manufacturing defect. This warranty does not extend to any product that has been subjected to misuse, neglect, accident, improper installation, or where the date code has been removed or defaced. The standard warranty is NOT transferable.

•Product Warranty Extension

The above Warranty may be extended to a period of 2 years (24 months) from date of sale provided the enclosed Warranty Registration card is completed and returned to the office of Buzz Audio within 4 weeks (28 days) from purchase date. Alternatively, you may Register your purchase on-line at our web-site www.buzzaudio.com. The Extended Warranty is transferable to the new owner if you on sell the unit during the warranty period.

TONIC USERS MANUAL VERSION-1, AUGUST 2007.

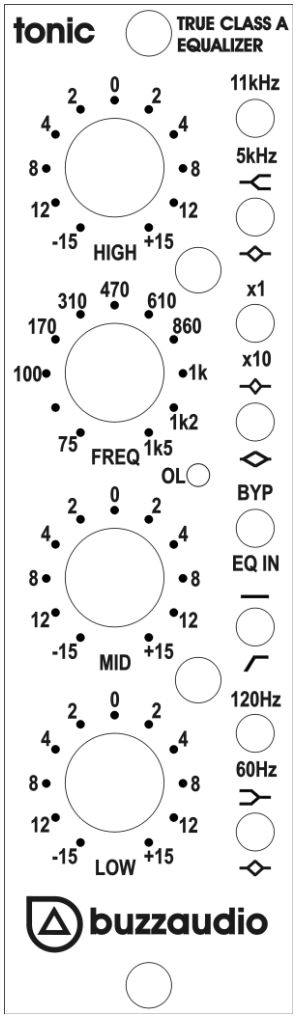
PO BOX 6677, TE ARO. WELLINGTON, NEW ZEALAND.
VOICE/FAX 64+4+385-2478.
www.buzzaudio.com email management@buzzaudio.co.nz



Artist……

Source……

Date……



Artist……

Source……

Date……