

# **TC3 Three Band Tone Control**

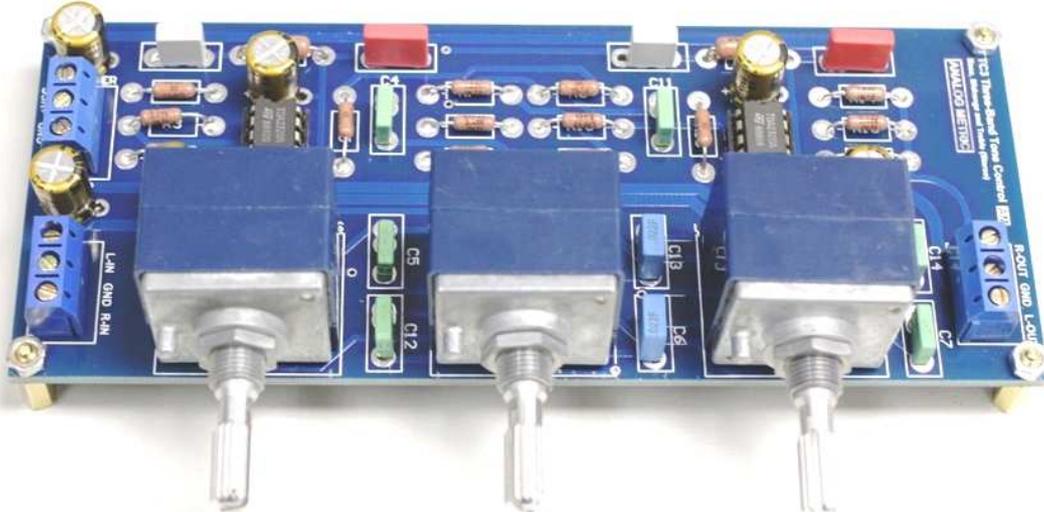
## **User Manual**

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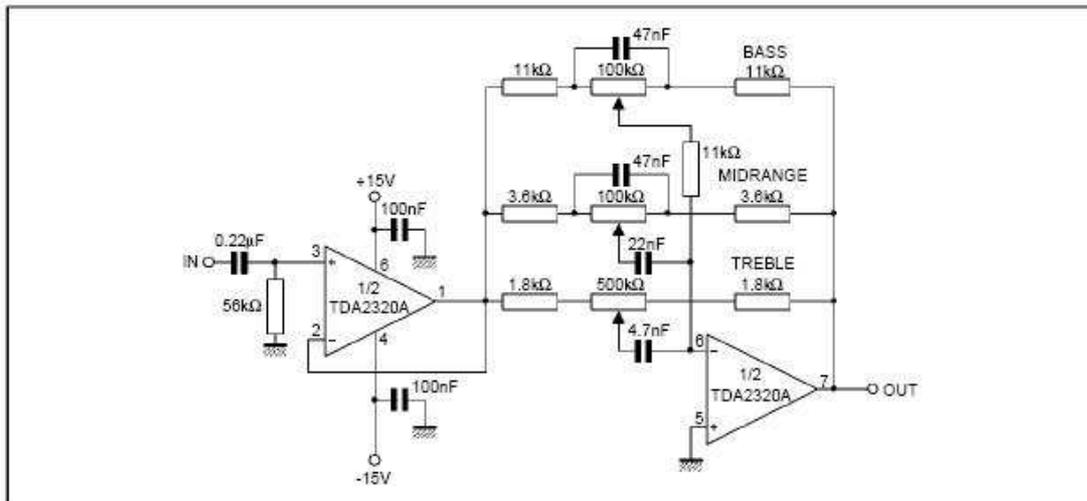
## FEATURES

- Support 3 bands (bass, mid-range and treble frequency) tone control for stereo audio.
- Use of audiophile ALPS R27 potentiometers.
- Use of very low distortion high quality audio OPAMP, TDA2320A, 0.03% at  $f=1\text{kHz}$  typical
- High power rejection ratio: 80dB and channels isolation: 100dB
- Symmetric PCB design for both R and L channels.
- Implemented with WIMA, Nichicon capacitors and Dale resistors.
- High quality PCB with dimension 153 x 63cm, blue solder mask, double layer, 2.4mm thickness, 2oz copper.
- Required power supply: +/-15V DC

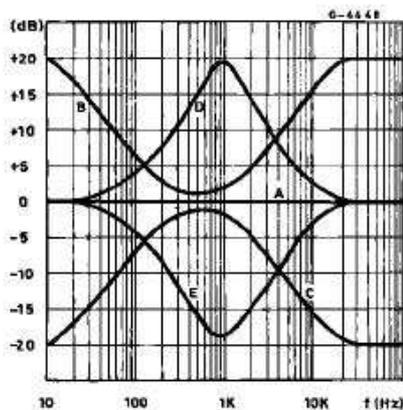
## PROCEDURES

1. Solder the components according to the schematic and part list. Notice the polarities of the electrolytic capacitors CP1-6. There is no polarity of the thin film capacitors.
2. Apply DC voltage +15V and -15V to connector (DC) without plug in the opamp U1 and U2.
3. If everything is ok, plug back the opamp U1 and U2 and apply input signals.
4. The frequency responses can be changed by three variable resistors VR1 (bass), VR2 (mid-range) and VR3 (treble). The responses are shown as following diagram:
5. Enjoy it. If you have any questions on assembly, please contact us by [tech@analogmetric.com](mailto:tech@analogmetric.com).

Three Band Tone Control



Frequency Response



A : all controls flat

B : bass & treble boost, mid flat

C : bass & treble cut, mid flat

D : mid boost, bass & treble flat

E : mid cut, bass treble flat