## 512c DISCRETE MIC / LINE PRE-AMP USER GUIDE

The API 512c is a highly musical, rich-sounding analog microphone /
 line / instrument preamplifier known for both its great-sounding front end and low noise generation in all sorts of audio applications. It artfully combines API's proprietary transformers and the 2520 op-amp while exhibiting the reliability, long life, and uniformity which is characteristic of all API products.

FEATURES:

1. Gain control: Mic preamp with gain range +34 dB to +65 dB , line/instrument preamp with gain range +14 dB to +45 dB
2. LED VU meter for monitoring output level
3. Front panel XLR (mic) and Hi-Z $1 / 4$ inch (instrument/line) input connections
4. Signal polarity switch
5. 48 V phantom switchable power
6. Pad switch (applies to XLR [mic] and Hi-Z $1 / 4$ inch [line/instrument]) reduces input signal by 20 dB
7. Switchable input selector: when engaged - XLR (mic) input active, when disengaged - Hi-Z 1/4 inch (instrument/line) input active
8. Internal rear connection selector jumper: when engaged - enables parallel rack rear input connection capability (XLR [mic] input only)

The API 512c also comes with API's unique Five Year Warranty.

BLOCK DIAGRAM


Front \& Rear Connectors: Front: XLR mic input, Hi-Z 1/4" unbalanced input Rear: Output on edge connector, mic input on edge connector, can be defeated

Gain Range: Mic: 34 dB to 65 dB (14dB to 45 dB w/PAD)
$\mathrm{Hi}-\mathrm{Z}: 14 \mathrm{~dB}$ to 45 dB ( -6 dB to 25 dB w/PAD)
Maximum Input Levels: Mic: +8 dBu
Hi-Z input: +36 dBu
Input Impedance: Mic: 1500 Ohms (150 Ohm mic)
Hi-Z input: 400 kOhms ( 20 kOhms w/PAD)
Output Impedance: Less than 75 Ohms, transformer balanced
Clipping Level: +30 dBu
Frequency Response: $\quad+0,-.3,30$ to 20 kHz
Signal to Noise Ratio: 120 dB
Distortion: Less than $0.05 \%$ @ +4 out Less than $0.1 \%$ @ +28 out

Power Consumption: $\pm 16$ Volts/DC @ 60 mA
Size: $\quad 1.5^{\prime \prime} \times 5.25 " \times 7$ " deep
Size (Boxed for Shipping): $\quad 4.5^{\prime \prime} \times 6.5^{\prime \prime} \times 10.25 "$
Actual Weight: 1.41 lbs .
Shipping Weight: 1.94 lbs .

