

ARIES AR-314 VOLTAGE CONTROLLED AMPLIFIER MODULE

The Aries AR-316 is a voltage-controlled amplifier. The 4 audio inputs are internally summed and the first 2 have associated input attenuators. The gain of the VCA (i.e., the ratio of the audio input to the output voltage) is manually controlled by the initial gain control and voltage controlled by voltages patched into any control voltage input. The first control input has an associated input attenuator.

The control mode toggle switch determines the sensitivity of all control inputs. In the linear mode, the VCA's gain is $V_{out} = V_{in} \times (CV / 10)$, where V_{out} is the voltage output, V_{in} is the amplitude of the voltage at the audio input, and CV is the amplitude of the control voltage. In the exponential mode, the output voltage changes 10dB with each control volt input.

Commonly, the VCA is controlled by an envelope generator, an envelope follower or a low frequency waveform. In these cases it produces discrete events or tremolo. Controlling the VCA with an audio frequency waveform can result in complex amplitude modulation timbres.

SPECIFICATIONS:

- Frequency Response - 0 Hz to 30 kHz, +/- 3dB
- Signal to Noise Ratio - 70dB
- Distortion - 1%

POWER CONSUMPTION:

- 6mA at +15V
- 6mA at -15V

VCA



1 AUDIO LEVELS 2



INITIAL GAIN CONTROL 1

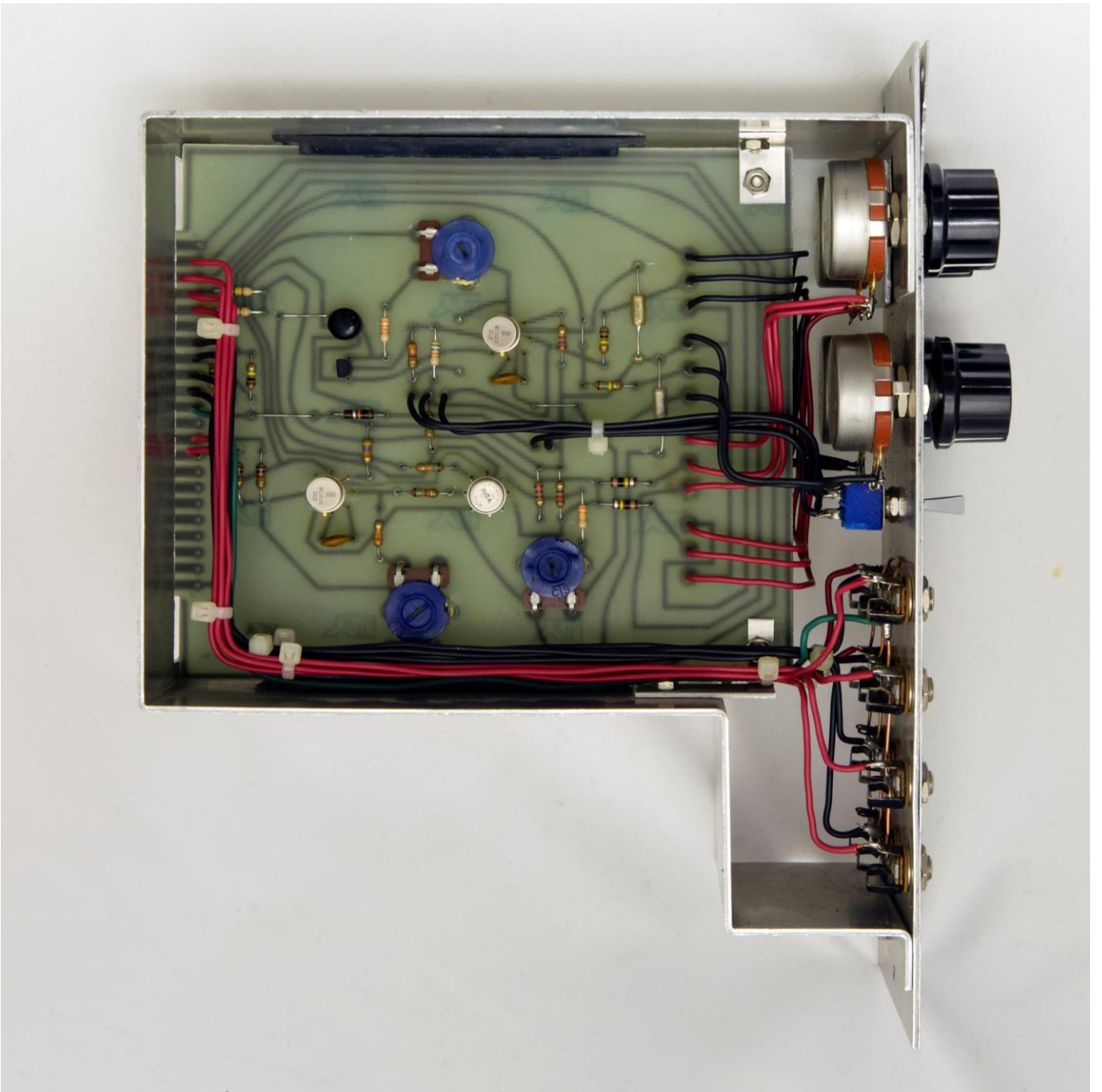


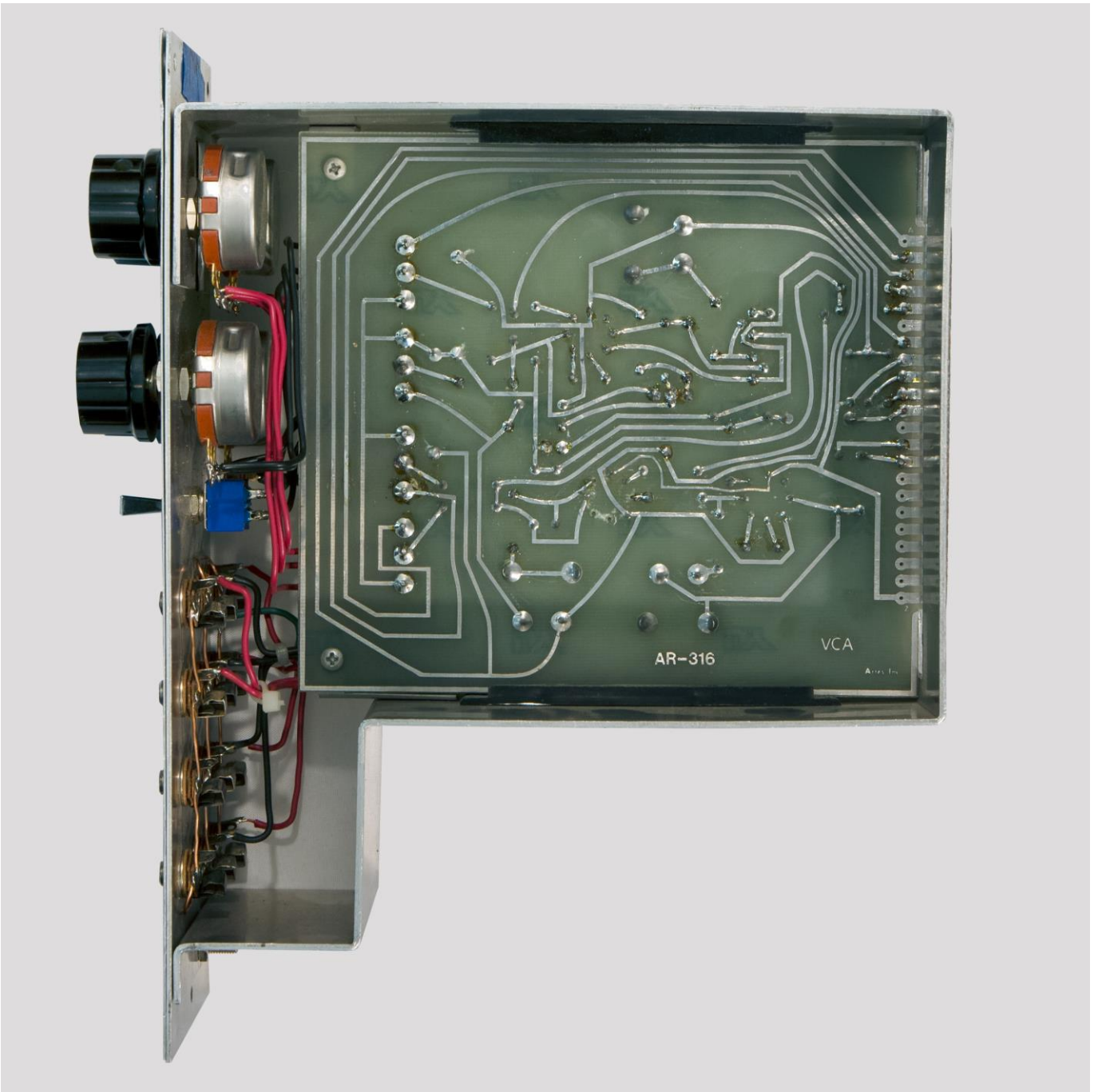
CONTROL MODE

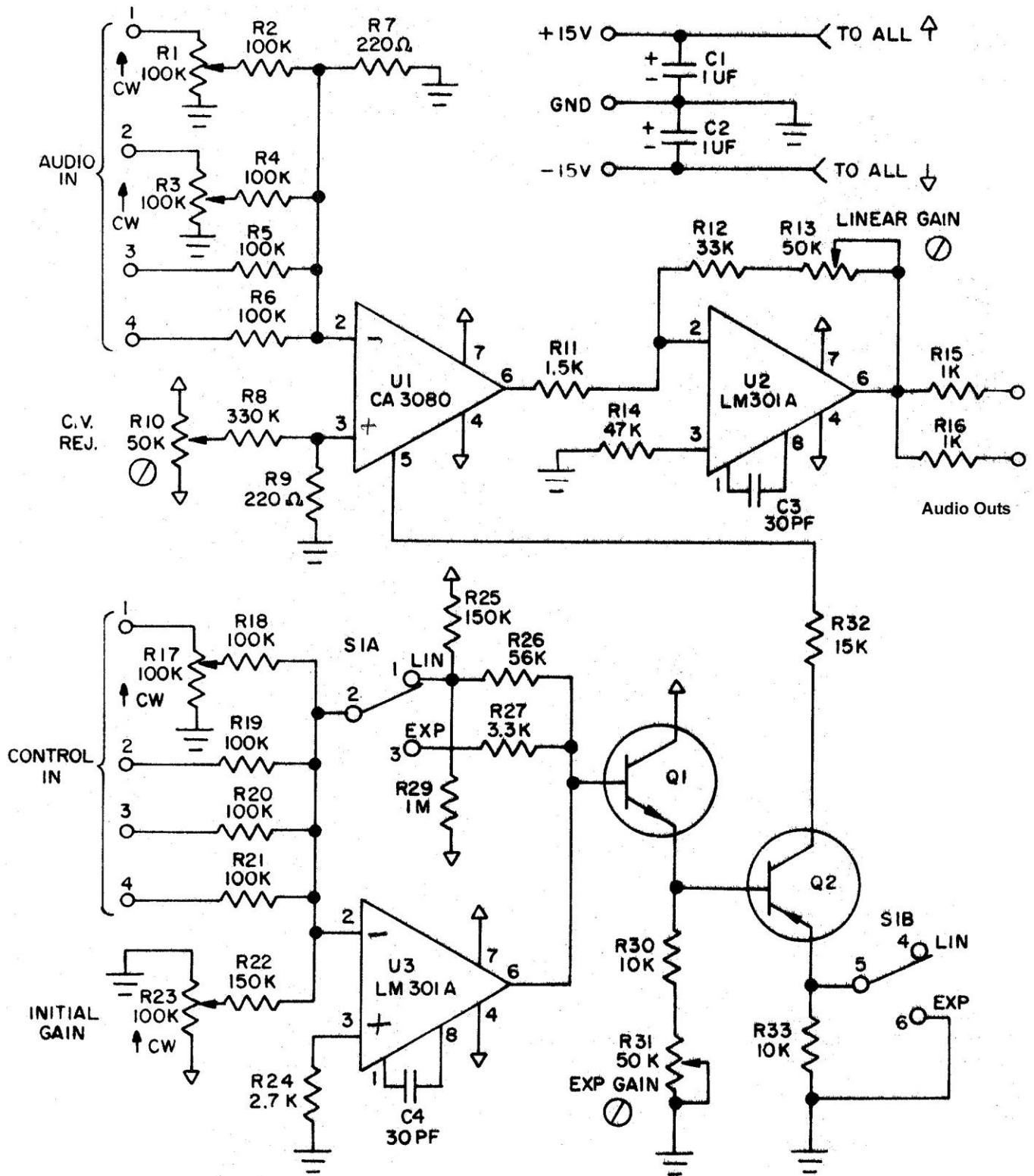


AUDIO CONTROL OUTPUTS

AR-316







HIGHEST REFERENCE
DESIGNATION
C4 Q2 R33 S1 U3

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