



AEA RIBBON MICS INC Since 1964

# AEA RPQ503 500 Series Mic Preamp & EQ

## Your Favorite Ribbon Preamp— Now in 500 Series



The RPQ503 is the next evolution in AEA's trusted lineage of high-impedance, high-gain preamplifiers.

Based on the 3rd Generation circuit design of our celebrated RPQ3, the RPQ503 brings the same rich and natural sound to the 500 Series Format. Featuring a powerful combination of ultra-low noise, low-distortion op-amps, ultra-high 68K $\Omega$  input impedance, and 85dB of clean gain, the RPQ503 delivers exceptional clarity and detail. More than just a preamp, the RPQ503 also includes the expanded EQ section of the RPQ3, with boost and cut controls for both low and high end, on custom, compact, dual-concentric potentiometers.

At once open and transparent but equally responsive and dynamic, the RPQ503 is a versatile tool for the front end of any signal path.

## Feature set

- 1-Space 500-series preamp
- AEA Gen 3 preamp circuitry
- Ultra-high 68K $\Omega$  input impedance (phantom power off)
- 7 to 85 dB of gain
- LF/HF sweepable frequency
- EQ boost/cut, +/-20 dB
- EQ in/out switching; center detents on EQ gain pots
- +48V phantom
- Polarity switch
- Mic/line input switching (line input bypasses mic pre)
- Made in the USA

## Expanded EQ Section

The RPQ503 expands on our signature CurveShaper™ circuitry, offering boost and cut curves for both bands of the EQ allowing users to control their sound right at the start of the signal path. With easy-to-understand controls and sweepable frequency knobs, the expanded EQ section of the RPQ503 offers boost and cut options for both lows and highs. Even when boosting aggressively, the RPQ503 remains flatteringly natural. When the EQ IN LED is illuminated, both LF and HF EQs are in the circuit. If you want to use only one band of EQ and not the other, simply turn the gain knob (the front one) of that pot to the center, which is detented.

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## Technical Specifications

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| <b>Max Gain at 1kHz:</b>               | 85 dB  |
| <b>EIN (Max Gain 22 Hz to 22 kHz):</b> | -130 dBu (typical), 40 $\Omega$ source unweighted<br>-128 dBu (typical), 150 $\Omega$ source unweighted  |
| <b>Frequency Response:</b>             | 30 dB gain: (-0.6 dB 10 Hz, -3 dB 160 kHz)<br>85 dB gain: (-3 dB 10 Hz and 160 kHz)  |
| <b>THD+N:</b>                          | 0.0018% (1 kHz, 22 Hz-22 kHz @30 dB Gain +4 dBu output)  |
| <b>XLR Output Maximum Level:</b>       | +27 dBu into 600 $\Omega$ load   |
| <b>Input Impedance:</b>                | 68 k $\Omega$  |
| <b>Input Impedance (P48 Engaged):</b>  | 11.3 k $\Omega$  |
| <b>Output Impedance:</b>               | 50 $\Omega$  |
| <b>Max Input Signal Level</b>          | +20 dBu (minimum gain)   |
| <b>Mic Gain Control:</b>               | 12-position switch from +7 dB to +65 dB  |
| <b>Output Trim:</b>                    | Continuously variable from 0 dB to +20 dB  |
| <b>EQ Circuitry:</b>                   | First order shelving response <ul style="list-style-type: none"><li>- 20 dB max boost/cut</li><li>- Low frequency sweep continuously variable 40 Hz to 675 Hz</li><li>- High frequency sweep continuously variable 2 kHz to 28 kHz</li></ul> |
| <b>Input and Output XLR Polarity:</b>  | Pin 2 high   |
| <b>LED Signal Level Indicators:</b>    | Green LED = -20 dBu;<br>Yellow LED = 0 dBu;<br>Red LED = +20 dBu (clipping +27 dBu)  |
| <b>Dimensions:</b>                     | 0.125" anodized aluminum front panel<br>measured with knobs and switches: 1.5"W,<br>6.8"D, 5.2"H (3.8cm x 17.27cm x 13.34cm)   |
| <b>Weight</b>                          | 12 oz (~0.338 kg)  |

