

## Audio Engineering Associates



# R84 Series Studio Ribbon Microphones

- Native-mode single-diaphragm figure-eight
- Wide-band response from 20Hz to 20KHz
- High null-axis rejection and gain before feedback
- Handles 165dB SPL above 1 kHz
- Effortless lows and smooth natural highs
- Fast, accurate transient reproduction
- Low self noise
- Excellent off-axis frequency response

The Big Ribbon™ sound in a smaller package

The R84 is different from other microphones. One listen and the R84 will stand out with its big, clean sound, quick natural transients, articulate midrange, and effortless bass. The R84 is ideal as a spot mic, but with its reduced bass proximity effect and extended high end compared to the R44, the R84 has a broad range of applications.

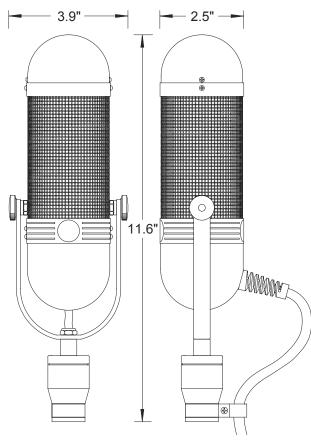
The R84 is an excellent digital recording tool, as digital processing has different limitations than analog. The digital recording process is more exacting. It's capable of preserving razor sharp details for generations. So it makes sense to use microphones that fit well into the final mix. Thus studio ribbon mics with their smooth, natural, and easy-to-EQ sound have enjoyed a rebirth as digital recording has blossomed.

Over 25 years of servicing ribbon mics taught us what users like, and they like the big sound of the RCA44. Preserving and reintroducing that sound became an AEA mission. The R44, robust, heavy, and expensive to manufacture, is now in daily use worldwide. But that's just the beginning of the story.

Could we preserve and update this Big Ribbon<sup>TM</sup> sound in a more affordable package? Using new technologies, how much could we simplify? The R84 uses the same big ribbon as the 44, is 5 pounds lighter, and less bulky. Designed for accent and solo work, its bass proximity effect is less pronounced and the upper 10K to 20 KHz octave is stronger than with the 44. Output sensitivity is good, being +2 dB to a Shure SM57. The R84 is now a standard in large and small studios around the world.

Why does the R84 sound so different when compared to a condenser microphone?

Classic condenser diaphragms are radially stretched. They typically have sharp, narrow resonances in the 8 to 12 kHz range, the sound quality we refer to as "tizz". The R84 and 44 use a long rectangular diaphragm that is clamped at the ends and tensioned lightly with a fundamental resonance below 20 Hz. Less than 80 millionths of an inch thick, this ultra low mass transducer has an excellent transient response with few resonances. It's one of the most sensitive and accurate transducers possible. Many have commented that the R84 records what your ear hears in the studio. Extreme high frequency headroom and low distortion allows close micing with an R84 without it sounding brittle. Additionally the smooth, nonresonant high end provides engineers considerable EQ flexibility. Try it, you'll enjoy it.



Weight: 3 pounds in storage case with cable Length: 11.6", Width: 3.9", Depth: 2.5"

#### **Options**

- Designed for close vocal work and includes greater internal sheilding against plosives.
- TVV Non-reflective exterior
- Μ Hand Tuning to stereo match a pair
- U Custom graphics laser engraved on the trim band

#### For more information contact:

#### Specifications:

Operating Principle: Velocity microphone Frequency Response: 20 Hz to above 20 kHz

Maximum SPL: 165 + dB SPL above 1 kHz for 1% third harmonic

Output Sensitivity: -52 dBv/Pa

Output Impedance: 270 ohms nominal

Recommended Load: 1.2 K ohm or greater

Powering: Not required or recommended

Polarity: Pin 2 high for positive pressure on front of microphone.

Connector: XLR-3M wired to a 3 meter captive cable

#### Off Axis Response:

- Polar Pattern: Native bi-directional pattern
- Horizontal: Level changes with angle, frequency response is consistent, -35 dB null at 90 / 270 degrees
- Vertical: Level changes with angle, reduced HF response above and below 0 / 180 degree axis, null at 90 / 270 degrees

#### Transducer element

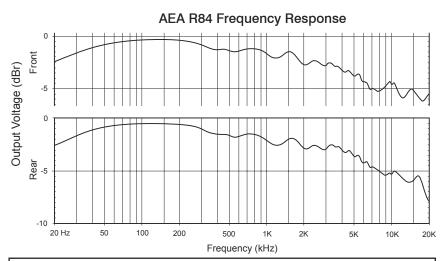
- Ribbon Thickness: 1.8 microns (.0000018 meter) of pure aluminum
- Ribbon Width: 4.7 mm Ribbon Length: 59.7 mm

#### Accessories:

Included: Custom soft storage / shipping case, and manual. Optional: Any length cable, inquire for price and delivery.

#### Limited Warranty:

One year parts and labor, shipping not included.



### Other AEA recording tools:

R44 Studio Ribbon Microphone

R88 Stereo Ribbon Microphone

R92 Stereo Ribbon Microphone

The Ribbon Pre

Stereo Microphone Positioners

Collapsible Tall Stands for on-location

Heavy-duty Microphone Stands and Booms

Decca Trees and Surround Microphone Arrays

The New Stereo Soundbook, Third Edition.

Plenty of information, no math required. www.stereosoundbook.com

