

Bringing Best Acoustic Experiences with the Latest Studio Microphones

Exploring Exceptional Sound with Leading Brands in 2024

Thrilling performances need exceptional microphones. Studio microphones or vocal recording microphones allow users to experience amplified and processed sound during recording sessions, making it easy for users to enjoy sound with consistency and durability. As the most essential acoustic partner in studios, be it dynamic or condenser, microphones excel in channelling sound with efficient frequency response. This recurring feature, focused on top products and technologies of the year, in this issue, explores latest studio microphones that are leading the pro audio market today.

Lauten Audio Tom Mic LS-508

Tom Mic is the world's first large diaphragm condenser microphone custom-crafted for use on toms. Equipped with **Lauten Audio's** newly designed super-cardioid capsule and award-winning dual-bias circuitry, Tom Mic captures pure, high-definition rack and floor tom sonics with maximum impact and tone while minimizing cymbal bleed.

Main Features include:

- Super-cardioid large diaphragm condenser capsule focuses on the source, the drum.
- Circuit designed for high-dynamic range and an output level that melds well with preamps.
- Body designed to allow proper airflow but also reduce frequencies captured by the rear node.

Technical Specifications:

- Type: Side-address pressure gradient FET condenser
- Polar Patterns: super-cardioid
- Frequency Response: 20Hz-20KHz
- High Pass Filter: Flat/80Hz/140Hz
- Low Pass Filter: Flat/5kHz/12kHz
- Dynamic Range: 135dB minimum
- SPL Handling: 135DB (0.5%THD@1000Hz)
- Impedance: 150 ohms
- Self-noise level: 15dB-A
- Signal-to-Noise Ratio: 79dB
- Sensitivity: -58.0dBV/Pa (0dB=1V/Pa 1KHz)
- Connector: 3-pin XLR
- Power: Requires 48v Phantom Power



Rode NT1 Signature Series

Rode NT1 is a workhorse studio condenser microphone with a warm, silky character, exceptionally low noise, and high SPL handling – ideal in a wide range of studio applications.

Main Features include:

- Large-diaphragm cardioid condenser microphone.
- HF6 1-inch true condenser capsule, precision engineered to sub-micron tolerances.
- Tight cardioid polar pattern for excellent background noise rejection.
- Classic NT1 sound signature.
- Extremely low noise (4dBA) – the world's quietest studio condenser microphone.
- High SPL handling capabilities (142dB) for capturing very loud sound sources.

Technical Specifications:

- Acoustic principle: Pressure gradient
- Active electronics: JFET impedance converter with bipolar output buffer
- Capsule: 1.00"
- Frequency range: 20Hz - 20kHz
- Output impedance: 100Ω
- Maximum SPL: 142 dB SPL
- Equivalent noise (A-Weighted): 4dBA
- Sensitivity: -32 dB re 1 Volt/Pascal (25 mV @ 94 dB SPL) +/- 2 dB @ 1 kHz
- Analogue power requirements: P48
- Analogue output connection: 3-pin XLR



SE Electronics sE4100

The **sE4100** is the latest addition to the renowned range of large-diaphragm true-condenser microphones. This cardioid-only version of the multi-pattern sE4400 comes with the same sleek design and warm, smooth sound, making it an ideal choice for a wide variety of applications such as drum overheads and guitar amps.

Main Features Include:

- Hand-crafted twin 1" gold-sputtered brass capsule as the sE4400.
- True condenser cardioid capsule.
- Built roadworthy with all-metal housing.
- Innovative close-miking shockmount.
- 80 / 160 Hz low-cut filters and -10 / -20 dB pads.

Technical Specifications:

- Electrical impedance: 125 Ohms
- Powering: 48V phantom power (P48 according to IEC 61938)
- Polar pattern: Cardioid
- Frequency range: 20 Hz - 20 kHz
- Sensitivity: 25 mV/Pa (-32 dBV)
- Max SPL: 137/147/157 dB (0/10/20 dB Attenuation Pad - 0.5% THD)
- Equivalent noise level: 9 dB(A)
- Signal to noise ratio: 85 dB
- Low-cut filter: 80/160 Hz, 6 dB/Oct, switchable
- Attenuation pad: 10/20 dB, switchable



Shure SM7dB

Shure SM7dB has provided the loveable sound, but with the convenience of a built-in preamp, it provides all the extra gain that users need. The latest iteration of this legendary **XLR dynamic microphone** makes it easier for podcasters, streamers, and musicians to get perfect vocals from any recording setup..

Main Features include:

- Selectable preamp boost of either +18dB or +28dB of extra gain.
- Preamp bypass switch deactivates the preamp to revert to original SM7B performance.
- Bass roll-off and mid-range emphasis (presence boost) EQ controls.
- Internal "air suspension" shock isolation virtually eliminates mechanical noise transmission.
- Highly effective pop filter eliminates need for any add-on protection against explosive breath sounds, even for close-up vocals or narration.
- Rugged construction and excellent cartridge protection for outstanding reliability.

Technical Specifications:

- Built-in preamp
- Transducer: Dynamic
- Polar pattern: Cardioid
- Connection: XLR
- Mic stand & boom arm compatible EQ switches
- Sensitivity: -59dB, -41dB, -31dB
- Frequency response: 50Hz-20kHz
- Output impedance: 150 ohms
- Low cut filter: Bass Roll-off
- Power source: 48V phantom power



Telefunken Elektroakustik TF17 FET

The **TF17** is the newest voice in the **Alchemy Series** and combines an iconic mid-forward "German" voicing with modern FET technology. The TF17 is sonically bold with a punchy transient response, high SPL handling, and very low self-noise. Designed with all recording environments in mind, the fixed true cardioid TF17 is perfect for home, studio, or stage.

Main features include:

- Fixed true cardioid polar pattern with K47-style capsule.
- High SPL handling, low noise phantom-powered FET amplifier.
- UK-made OEP/Carnhill transformer with high grade nickel-iron core.
- Recommended applications include vocals, drums & percussion, electric guitar, and live sound.

Technical Specifications:

- Type: FET Condenser
- Polar Pattern: Cardioid
- Frequency Range: 20 Hz – 20 kHz, ±3 dB
- Power Source: +48V Phantom Power
- Capsule: TK47S – Center Terminated Large Diaphragm, Single Membrane
- Transformer: OEP/Carnhill T217
- Sensitivity: 12 mV/Pa, ±1 dB
- THD at 1kHz at 1Pa (Amplifier): 0.01%
- Output Impedance: < 200 Ω
- Maximum SPL (for 1% THD): >135 dB
- S/N Ratio: 91 dBA
- Self Noise (Amplifier): 3 dBA



Universal Audio's SD-7

From a rowdy stage to a quiet studio, **SD-7** dynamic microphone's ultra-high SPL capability makes it a perfect choice for loud and transient-rich sources. Thanks to its hypercardioid polar pattern, users are able to back the mic away for added 'air' without sacrificing isolation.

Main features include:

- Studio-quality instrument with a UA-designed dynamic modeling microphone.
- Hemisphere mic modeling technology for authentic sound of the most popular microphones.
- Precise results in any environment, from pro rooms and home studios to stages.
- Perfect sound with ease using filter, proximity, and axis controls.

Technical Specifications:

- Microphone Type: Dynamic
- Polar Pattern: Hyper-cardioid
- Frequency Range: 30 Hz - 17 kHz
- Sensitivity: -54 dB
- Output Impedance: 600 Ohms
- Connector: 3-Pin XLRM
- Dimensions: 4.47" (113.5 mm) length, 1.97" (50 mm) width, 3.84" (97.5 mm) height

