

In any studio, the best sound gets produced when captured the right way. Which is why, not every microphone is designed to deliver true studio-created sound. But the ones that are designed to do so, accomplish the feat in an impressive manner. In this issue, PALM Team has curated a list of six latest studio microphones to check out in 2023.

Audix PDX720 Professional Dynamic Studio Microphone

According to the Audix website, the PDX720 Studio Microphone is “designed for the most demanding studio recording engineers and producers, vocal recording, high-end home solutions, professional podcasting, and voiceover.” That sums it up. This studio microphone from Audix works well in a spectrum of settings with its sound signature, delivering smooth, natural vocals without active filtering.

Main Features include:

- Dynamic Microphone
- High-pass filter switch at 120Hz and 155Hz
- Presence boost switch +1.5db and 3db
- Hyper Cardioid
- Plug & Play brilliant sound with excellent default gain level
- Frequency response optimized for vocal performance
- Great versatility for drum and instrument recording

Technical Specifications::

- Transducer Type: Dynamic
- Frequency Response: 50 Hz – 20 kHz
- Polar Pattern: Hypercardioid
- Output Impedance: 280 ohms
- Sensitivity: 1.9 mV / Pa @ 1k
- Maximum SPL: ≥135 dB
- Power Requirements: None
- Connector: 3-pin XLRm
- Polarity: Positive pressure on diaphragm produces positive voltage on pin 2 relative to pin 3 of output XLR connector
- Materials/Finish: Aluminum/Black/Gold Finish
- Weight: 869gm
- Length: 212mm



Universal Audio UA Sphere DLX Modeling Microphone

The Sphere DLX Modeling Microphone features 38 mic models from brands such as Neumann, Sony, AKG, Telefunken, and more. With its dual-capsule design, the Sphere DLX allows users to record musical instruments in stereo and use Dual Mode to blend the sound of two mono microphones together. Crafted with dual gold-splattered diaphragm, the Sphere DLX Modeling Microphone is built to last for a wide range of recording applications – from music recordings to podcast recordings, and more.

Main Features include:

- Dual-output
- 38 mic models
- Shockmount included
- 25' cable
- 7 dB self-noise
- Stereo recording

Technical Specifications:

- Mic Type: Modeling
- Polar Pattern: Variable Dual Output
- Diaphragm Size: 1" (25.4mm)
- Frequency Response: 20Hz-20kHz
- Output Impedance: 200 ohms
- Connector: 5-pin XLR
- Weight: 772 gms
- Included Accessories: Mic shockmount, stand mount, 25ft Mic Cable, Hardshell Case
- Suggested Applications: 38 Virtual Modeled Microphones available



Sennheiser Profile USB Microphone

Sennheiser Profile USB Microphone is a USB-C microphone featuring a cardioid condenser capsule and several integrated features for elevated recording applications. With three fundamental controls, namely Gain Control (to adjust the microphone’s level), Mix Control (to balance the microphone with the device audio), and Volume Control (to set the monitoring level of the headphones), the Profile USB Microphone, an adjustable tilt function coupled with a self-locking joint, a table stand or a boom arm for optimal positioning, the Profile USB Microphone is designed for end-to-end recording needs.

Main Features Include:

- USB-C powered
- Cardioid condenser capsule
- Adjustable tilt function with self-locking joint
- Soft-touch mute button with LED ring
- Gain control with LED ring
- 3.5 mm headphone output for audio monitoring
- Robust metal housing and premium finish

Technical Specifications:

- Transducer principle: Pre-polarized condenser microphone
- Pick-up pattern: Cardioid
- Sensitivity at max. gain: -10 dBFS at 80 dB SPL
- Sensitivity at min. gain: -50 dBFS at 80 dB SPL
- Max. sound pressure level: Min. gain: 125 dB SPL; Max. gain: 85 dB SPL
- Frequency range: 20 to 20,000 Hz
- Equivalent noise level: Min. gain: 34 dB(A) SPL; Max. gain: 28 dB(A) SPL
- Cable length: 1.2 m (Profile)
- Power supply: 5 V ⏏, max. 200 mA



From Lewitt Audio's Pure Tube Microphone to Sennheiser's Profile USB Microphone, these studio microphones offer precise audio quality to the users and deliver crisp, clear sound every single time.

RØDE NT1 5th Generation Studio Condenser Microphone

The NT1 5th Generation Studio Condenser Microphone from RØDE couples the signature sound of the classic NT1 with new-edge, revolutionary technology in sound recording. Featuring the brand's Dual Connect output, XLR and USB connectivity, world's first "unclippable" 32-bit float digital output, and advanced digital signal processing, the NT1 5th Generation Studio Condenser Microphone is a studio workhorse in every sense.

Main Features include:

- Large-diaphragm cardioid condenser microphone
- HF6 1-inch true condenser capsule
- Smooth frequency response, high sensitivity and high SPL handling
- Exceptionally low noise (4dBA)
- Patent-pending Dual Connect output
- World-first 32-bit float digital output
- Ultra-high-resolution (up to 192kHz) analog-to-digital conversion
- On-board DSP for advanced APHEX audio processing
- Studio-grade shock mount and pop filter, XLR and USB cables included
- Available in black or silver

Technical Specifications:

- Acoustic Principle: Pressure gradient
- Capsule: 1.00"
- Polar Pattern: Cardioid
- 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: Via XLR: P48
- Analogue Output Connection: 3-pin XLR
- Sampling Rate (kHz): 48 / 96 / 192
- Processing: APHEX digital signal processing (only available at 48kHz / 24-bit)



Sony C-80 Condenser Microphone

The C-80 from Sony is an unidirectional condenser microphone that is ideal for use in a variety of applications, from music recording and vocal recording to instrument recording in a studio. The C-80 features a high-resolution large capsule inspired by the C-100 from Sony, which allows users to benefit from a characteristic peak of 13kHz. Equipped with a low-cut filter and pad-switch, the C-80 eliminates unwanted frequency and minimizes distortion.

Main features include:

- Large 25-mm microphone capsule emphasises the presence of sound
- Rich mid-range characteristics ensure a precise vocal pickup
- Dual-diaphragm structure suppresses proximity effect for stable recording and broadcast
- Extended low-end and natural sound provide a realistic reproduction of instruments
- Precision resin backplate, for reduced acoustic impedance and high sensitivity
- Switchable low-cut filter reduces the pickup of low-frequency and ambient noise.

Technical Specifications:

- Capsule Type: Condenser Microphone
- Frequency Response: 20Hz - 20kHz
- Directivity: Uni directional
- Sensitivity: -30 dB
- Dynamic Range: More than 125.5 dB
- Signal-to-Noise Ratio: 81.5 dB
- Connector: XLR-3-12C (male)
- Power Requirements: DC 44 to 52 V
- Dimensions: Approx. 40mm x 158mm
- Weight: Approx. 215 grams
- Supplied Accessories: Cradle Suspension (1), Operating Instructions (1), Carrying Case (1)



Lewitt Audio Pure Tube Studio Microphone

Accented by gold condenser capsule, the Pure Tube Studio Microphone by Lewitt Audio features a cardioid pattern and comes with a transformative circuit and a semiconductor-free, capacitor-free puristic signal path that helps users achieve a low noise floor of 7 dB.

Main features include:

- Studio microphone for premium sound
- 1" true condenser capsule
- Optimized for vocals
- Revolutionary circuit design
- Puristic signal path
- Hand-selected 12AU7/ECC82 tube
- Ultra-low self-noise of 7 dB (A)
- Cardioid polar pattern
- 10-year LEWITT warranty

Technical Specifications:

- Type: Condenser, externally polarized
- Acoustical operating principle: Pressure gradient transducer
- Diaphragm: 3 micron gold sputtered Mylar
- Transducer Ø: 25.4 mm, 1 in
- Polar pattern: Cardioid
- Frequency range: 20 ... 20,000 Hz
- Sensitivity: 28.2 mV/Pa, -31 dBV/Pa
- Self-noise: 7 dB (A)
- Max SPL: 132 dB SPL
- Signal / noise ratio: 87 dB (A)
- Dynamic range: 125 dB (A)
- PSU - supply voltage: 230 V, 50 Hz; 110 V, 60 Hz
- Connector: 7-pin XLR connector
- Microphone enclosure: Zinc die cast
- Microphone dimensions: 196 x 65 x 45mm, 7.7 x 2.6 x 1.8 in
- Microphone net weight: 692 g, 24.41 oz

