



UTTwin48

MASSIVE TUBE SOUND.

The most legendary series of microphones has returned.

The **UT Twin48** is an exceptional preservation of two venerable classic tube microphone designs. The original classics of the late '40s and '50s have been front and center in countless recordings — and demand for them is higher than ever! United has taken these classic-specification designs to the next level by uniting both designs into a single microphone.

Massive tube sound calls for the right tube: The UT Twin48's amplifier stage is based around a select new old stock EF86 pentode glass vacuum tube — the last living descendent of the originals' tube. This results in a bold, rich sound, due to the pentode's harmonic profile being much different than modern dual-triode tubes.

These legendary microphones, still inspiring after generations, are now available in both of their original forms in the UT Twin48.



TWIN MODE OPERATION.

The UT Twin48's two operating modes go beyond just polar pattern selection.

The classic 47 and 48-style mics each derived their cardioid operation in very different ways — producing subtle tone differences as well as a slightly different polar pattern. For the first time ever, the UT Twin48 delivers both options in a single microphone.

47 Mode offers both **47 Cardioid** and **Omni** patterns, while 48 Mode offers **48 Cardioid** and **Figure-of-8**. Each cardioid mode delivers a different tonal flavor and performance:

- **47 Cardioid:** de-couples the rear diaphragm in a process known as True Cardioid, for a louder sound with improved sensitivity with more background and top-end detail.
- **48 Cardioid:** polarizes the rear diaphragm with the same voltage as the backplate — AKA Active Cardioid — for a more tightly closed-in, warmer, intimate tone that is a bit lower in sensitivity.

Many recording engineers prefer the warmer, more intimate sound of the 48 Cardioid, while others prefer the bigger, open sound of the 47 Cardioid — these options make the UT Twin48 a perfect choice for many different applications; Experiment to find the most flattering capture of a singer's voice; add a bit of ambience to a horn performance; and get the cleanest, most articulate tones imaginable from strings and horns — all from a single mic!





A CUSTOM UNITED UT K48 CAPSULE.

The UT K48 capsule is a custom-made, historically correct single backplate/dual diaphragm capsule; skinned in a laboratory clean-room environment and 24k gold-sputtered on 6 micron Mylar. It's been optimized for 60v operation, and tuned to the exacting specifications of the original to match its ancestors' historically smooth sound while avoiding any resonances or overly bright or sibilant sounds that can be found in many other reproductions.



CUSTOM UNITED TRANSFORMERS.

The custom-wound, US-made, UT-BV8 transformer is wound to the original Braunbuch specifications and set to the same laminations historically used on the original parts. Careful measurements were made from a golden specimen of the original German transformer.

We used all high-nickel alloy laminations and employed a copper Faraday shield for reduced Radio Frequency Interference (RFI). While we could have used a smaller or less expensive transformer; we simply refused to compromise.

HIGH-PERFORMANCE POWER SUPPLY.

A tube mic is only as good as its power supply — so we didn't cut corners on that, either.

We developed a fully discrete power supply with individually isolated discrete rails for filament, B+, and polarization voltages. We used a custom, US-made discrete regulator by Sparkos Laboratories for the filament voltage, and fully discrete Zener diode regulation for the high voltage rails, for clean, maintenance-free operation. (No calibration required — ever!) Custom US-made PRP resistors and long life/high quality electrolytic capacitors are used throughout, and we selected a very robust, over-spec'd, traditional linear frame-mounted power supply transformer.

In an effort to eliminate as much noise as possible, no IC package regulators, generic parts, or cheaper, switch-mode power transformers were used in the UT Twin48. The power supply also features both an inline EMI/RFI AC input filter as well as a selectable RF filter on the audio output, which can be engaged from the convenience of the power supply front panel.

And because cable quality matters, we include the finest tube microphone cable currently available — the Sommer (Germany) Octave 7 conductor cable — configured and optimized for use with the UT Twin48.



IT'S NOT JUST ANOTHER MIC — IT'S A UNITED.

We have gone to great lengths to make the UT Twin48 an exceptional microphone fit to be the showpiece of any studio. We spared no expense on premium and custom-made components: audiophile grade polystyrene, tantalum, and film capacitors; and audiophile grade, US-made PRP thin-film resistors. We have gone the extra mile to reduce noise and RFI, and to ensure that the UT Twin48 provides boutique-quality sound that's built to last.

Also included is a vintage-inspired briefcase — custom-fit to house the UT Twin48 and all included accessories.

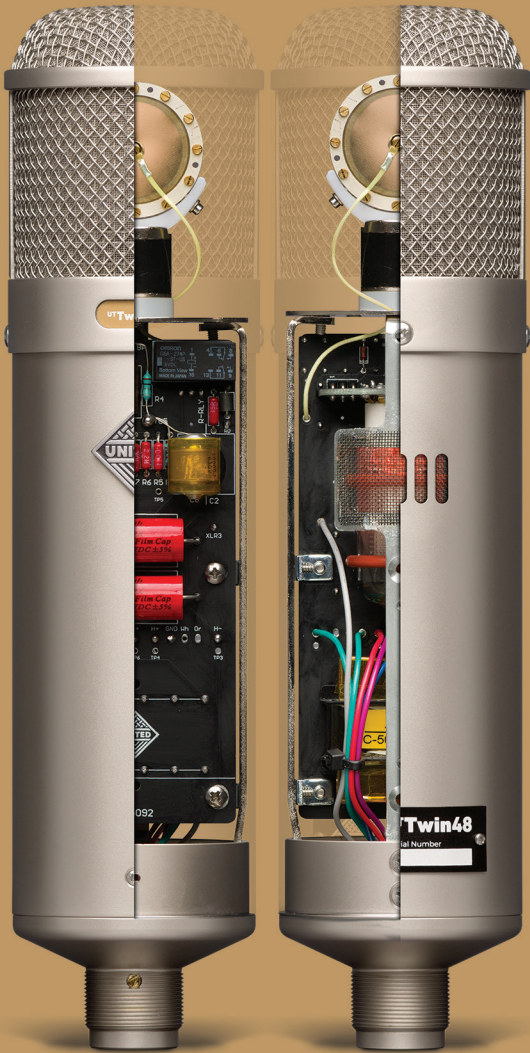
From the Sommer Octave 7 pin cable to the sleek briefcase, to all final assembly and testing conducted in the USA at United's base of operations, we have left no stone unturned in the pursuit of the highest level of audio quality. The Twin48 is more than a phenomenal addition to any mic locker — it's an amazing creative tool for the most demanding engineers.



Specifications

Type	Condenser Microphone
Diaphragm	6 micron, 24k gold sputtered Mylar (PET film)
Capsule	UT Series, 34 mm brass, single backplate K48
Frequency response	20 Hz - 20 kHz
SPL	137dB @ 0.5% THD
Polar Pattern	47 Cardioid, 48 Cardioid, 47 Omni, 48 Figure-of-8
Output Impedance	35 Ω
Output Connector	24k gold plated 3 pin XLR, pin 2 HOT, pin 1 GND
Amplifier Type	Vacuum tube
Tube	NOS selected EF86 pentode vacuum tube
Self noise	11 dBA
Output	Custom-wound UT Series transformer, made in USA
Body	Nickel electroplated, solid milled brass
Mount	Suspension type shock mount (included)
Interconnect	Custom Sommer 7 conductor XLR cable 6 m / 19.7'
Power Connector	IEC320 3-conductor receptacle
Power Input	110-120 vAC or 220-240 vAC; switch selectable
Dimensions - Microphone	Height: 26.5 cm / 10" Diameter: 6.25 cm / 2.5" Shockmount Depth: 16 cm / 6"
Dimensions - Power Supply	Height: 9.25 cm / 3.25" Width: 19.5 cm / 7.5" Depth: 18 cm / 7"
Dimensions - Briefcase	Height: 17 cm / 6.75" Width: 50 cm / 19.75" Depth: 32 cm / 12.75"

As a commitment to constant improvement, United reserves the right to change any specifications, at any time, without notification.



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