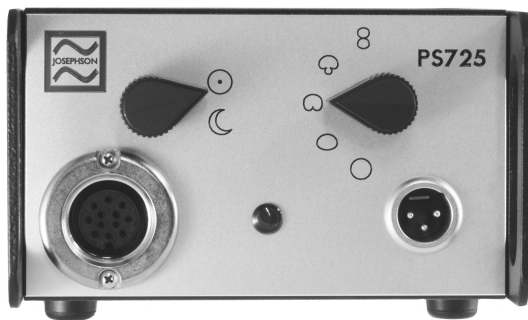


# C725 Studio Microphone

The **C725** provides classic studio microphone performance using a hybrid of vacuum tube and solid state technology, and our advanced dual-diaphragm capsule used on the C700 and C716 microphones. A separate high voltage regulated power supply is provided, with five switchable directional patterns and a unique warm/cool selector to optimize the signal path. The **C725** is suitable for detailed vocal and instrument pickup.

The head grille uses Josephson's patented aluminum foam, fused to the housing for physical and electrical protection, with only an ultrafine highly open mesh used for contamination protection. No other structure is needed, so internal reflections are random and minimal, allowing clean, detailed sound pickup. The capsule assembly is internally shockmounted so the microphone can be attached directly to a stand through its yoke mount. The **C725** features a satin nickel finish for durability in studio use.

The internal circuitry is related to other Josephson mics, with a cascode topology for best linearity. Instead of two FETs to build the cascode, in the C725 the voltage-gain section uses a custom low-noise FET, while the current gain stage uses a new production pentode vacuum tube. This allows the low noise of the FET along with the dynamic characteristics of the vacuum tube. The output is provided through a custom nickel-core transformer, which has independent windings for output and gain control.



The PS725 power supply allows operation on 100 to 240 volt mains supplies and allows selection of five directional patterns and two signal/dynamics characteristics. The "sun" setting operates at full gain, with a high sensitivity of 40 mV/Pa, and the warmth characteristic of many vacuum tube mics. In the "moon" setting, a small amount of negative feedback is provided from a dedicated winding of the output transformer back to the front end of the amplifier. This reduces the sensitivity by 12 dB, to 10 mV/Pa, and linearizes the

circuit to provide a more neutral sound at high levels. Switching between the two modes is accomplished with a precision reed relay inside the microphone. Five separate power supply sections are used: a preregulator for the vacuum tube filament along with a final regulator inside the microphone so that filament voltage is not changed by cable length, two low noise supplies for the high voltage regulator, and a precision shunt regulator for the vacuum tube plate and polarization voltages.

The cable is a highly flexible five-pair type terminating in a "large Tuchel" 12-contact connector. It may be extended up to 50 meters.

The C725 is supplied in a rugged, fitted carrying case with the power supply, line cord and protection sleeve.

## C725 Specifications

Pressure-gradient condenser microphone transducer

Omnidirectional, subcardioid, cardioid, hypercardioid, figure-8 directional patterns

Frequency range 20-20,000 Hz

Sensitivity 40 mV/Pa

Equivalent noise level <15 dB SPL, A weighted RMS

Overload sound level 130/142 dB SPL

Power supply 100-120 or 220-240 volt linear, switchable, 20 W

Diameter 63 mm (100 mm wide at yoke), length 261 mm

Weight 1.2 kg

Power supply dimensions 335 x 152 x 92 mm, 3 kg

Microphone connector Binder 691 ("large Tuchel" type) 12 contact

Output connector 3-pin XLR