The slope of the bass-cut filter is more than 12 dB/octave, the cut-off frequency may be set to 75 Hz or 150 Hz. The all-metal housing adds to the rejection of r.f. interference when the microphone is used in close proximity to transmitter stations or in conjunction with wireless microphones or other communication equipment. In addition to extremely wide-range low-distortion performance and temperature/humidity-resistant construction, the microphone offers remarkable operational flexibility. A recessed switch on the front enables the user to select any one of four different polar patterns to adjust for different recording situations. Four different types of microphones are thus combined in only one C 414 EB. The chosen polar patterns are highly uniform and frequency independent to guarantee the same sound character for all angles of incidence.
Two different variations in respect to the powering are available:

**The C 414 EB**, prewired for 12 volts phantom power sources (acc. to DIN 45596), may be easily modified for 48 volts. Simply open the jumper bridged across its internal 8.2 kohms dropping resistor (detail A). The modification may be easily done by removing four screws at the lower housing part and by sliding off the outer housing very carefully from the grid assembly. Reassembling is made in reverse order.

The phantom-power source (9 to 52 volts dc. via a suitable voltage-dropping network specified in DIN 45596) may be any of the AKG accessory supplies listed in the Technical Data section, or a console, mixer or recorder having the proper dc. fed internally to its own low-impedance floating microphone inputs.

**The C 414 EB – P 48** may be used for standard 48 volts phantom powering systems only. The current consumption is below 1 mA. Both variations are low-impedance balanced output units fitted with a standard 3-pin male XLR-type connector.

The stand adapter provided, model SA 18/3 may be easily removed from the shaft of the microphone by positioning the microphone relative to the adapter as shown, and pulling the adapter in downward direction. The small rim on the microphone shaft will prevent the adapter from accidentally sliding-off, even when the fastening lever is not properly tightened. The standard 3/8" threaded insert on the stand adapter will match most stand or suspension fittings.
Technical Data of C 414 EB:

Transducer Type: Pressure gradient transducer with twin-condenser diaphragm and FET-preamplifier
Directional Characteristic: Cardioid, omni-directional, figure-eight and hypercardioid (selectable directly on the microphone)
Sensitivity at 1000 Hz: 6 mV/Pa ≈ 0.6 mV/µb ≈ -64.4 dBV
Frequency Range: 20 to 20,000 Hz
Impedance: ≤ 150 ohms
Recommended Load Impedance: ≥ 500 ohms
Equivalent Noise Level: 20 dB SPL (measured with filter CCITT-C/DIN 45 405)
Unweighted Noise Level: ≤ 10 µV r.m.s.
Powering: Universal Phantom Powering according to DIN 45 596 with 9 to 52 volts
Current Consumption: a) at 12 volts: ≤ 5.5 mA
b) at 48 volts: ≤ 3 mA (when circuit has been modified according the description in this leaflet)

Sound Pressure Level for 0.5% TDH:

\[
\begin{align*}
1 kHz & \quad 1600 \mu b \pm 160 Pa \pm 138 dB SPL \\
10 kHz & \quad 1900 \mu b \pm 160 Pa \pm 138 dB SPL
\end{align*}
\]

Acceptable Climatic Conditions:

Temperature Range: -10°C to +60°C
Rel. Humidity: 90% (+20°C) 85% (+60°C)

Connector: 3 pin XLR-type
pin 1 = ground, pin 2 = AF (in phase), pin 3 = AF
Dimensions: 5.6" x 1.8" x 1.4"
Net Weight: approx. 14 oz

Technical Data of C 414 EB – P 48:

Identical to C 414 EB except for:
Sensitivity at 1000 Hz (all patterns, 0 attenuation): 9 mV/Pa ≈ 0.9 mV/µb ≈ -61 dBV
Impedance: ≤ 200 ohms
Equivalent Noise Level: 18 dB SPL (measured with Filter CCITT-C acc. to DIN 45 405)
Power Requirement: 48 volts phantom acc. to DIN 45 596
Current Consumption: ≤ 1 mA
Sound Pressure Level for 0.5% THD (all patterns, 10 dB-attenuation, 0-roll off):

at 1000 Hz = 6300 µb ± 630 Pa ± 150 dB SPL

Included Accessories:
- W 26 foam windscren
- SA 18/3 all-metal stand adapter
- Individual frequency curves
- Protective case

Optional Accessories:
- H 17 A Elastic shock mount/windscreen combination
- N 62 E Power unit to feed two microphones
- N 66 E Power unit to feed six microphones
- MK 9/10 30 ft microphone cable incl. XLR-type connectors on both ends
- MK 9/20 60 ft. microphone cable incl. XLR-type connectors on both ends
Frequency Response Curve:
Cardiod
Cardioide
Cardioid Diagramme polaire

Polar Response:
Omni-directional
Facteur de directivité

Sound Power concentration factor
Figure-eight
Omnidirectionnel En huit

Hyper-cardioid
Hyper-cardiode
Technische Änderungen vorbehalten. We reserve the right to make technical alterations. Se réserve le droit de modifier ses produits sans préavis ni obligations.