

Condenser Microphone with large Diaphragms

C 414 EB



Professional perfection with the large diaphragm professional condenser microphone C 414 EB. The design of this studio condenser microphone is based on experience gained in 30 years and worldwide operation of the previous models C 12 A, C 12 B, and C 414 comb.

Four polar patterns can be selected on the microphone body: cardioid, omni-directional, figure-of-eight, and hypercardioid. Change of pattern does not change the sensitivity of the microphone. The diaphragm is made of a special goldsputtered synthetic material. The built-in 0, -10, -20 dB attenuation selector improves maximum sound pressure level capacity, thus preventing any distortion of the signal in the microphone output transformer or in input circuits of the associated amplifier equipment.

The three-position low-frequency rolloff switch has a more than 12 dB/octave slope at 75 and 150 Hz. The all-metal housing excludes r.f. interference when the microphone is used near transmitters.

The C 414 EB is supplied with a built-in 3-pin XLR-type connector.

The C 414 EB is designed for general use in studios, in concert halls, and on stage. When used near to the mouth, or on moving booms, a windscreen should be attached.

Incl. Accessories:

SA 18/3
Stand adapter
W 26
Foam windscreen
Frequency response curves.

Optional Accessories:

H 17 A
Elastic suspension/
windscreen comb.
N 62 E
Power supply unit for
two microphones.
N 66 E
Power supply unit for
six microphones.
MK 9/10 10 m cable.
B 18
Battery supply unit
for C 414 EB only.



C 414 EB – P 48

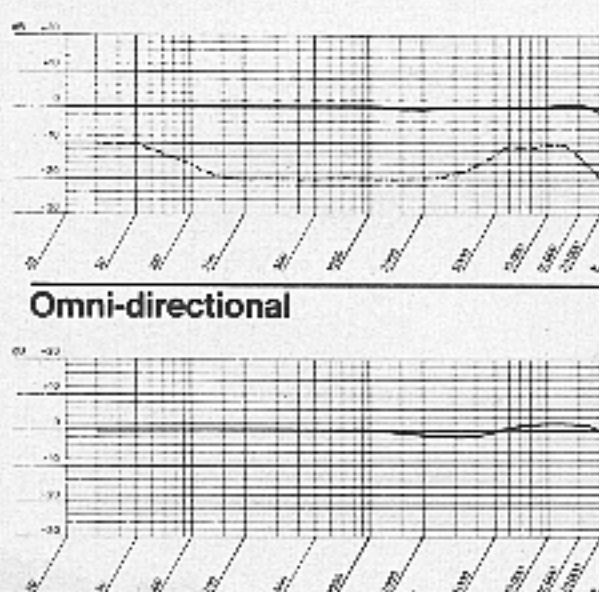


This special variation of the well-known C 414 EB has the following outstanding features:

- Exceptionally wide dynamic range.
- Low self noise.
- Designed to meet the demanding requirements of digital technology.
- For 48 volt phantom powering with low current consumption.
- All-metal housing in non-reflective black chrome finish.

Frequency Response:

Cardioid



Omni-directional

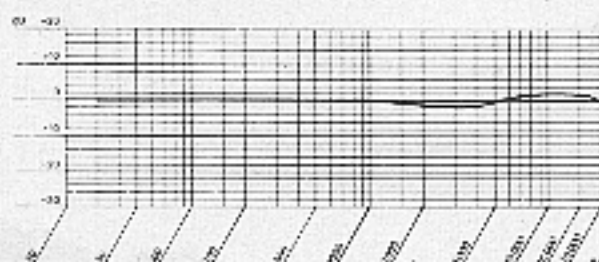
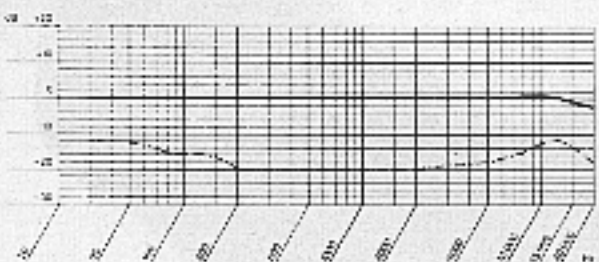


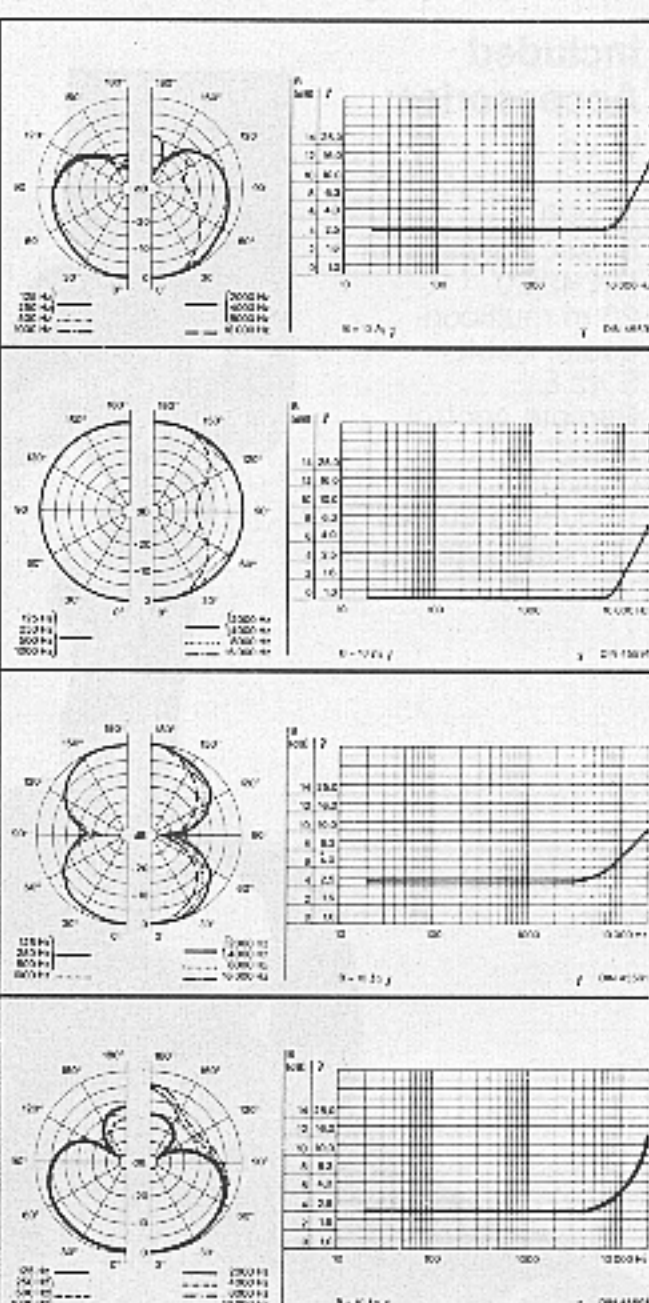
Figure-of-eight



Hyper-cardioid



Polar Diagrams:



Technical Data of C 414 EB:

- Transducer type: Pressure gradient transducer with twin-condenser diaphragm and FET-preamplifier.
- Directional characteristic: Cardioid, omni-directional, figure-of-eight and hypercardioid (selectable directly on the microphone).
- Sensitivity at 1,000 Hz: 6 mV/Pa $\pm$ 0.6 mV/ μ b $\pm$ -64.4 dBV ref. 1 μ b
- Frequency range: 20 to 20,000 Hz $\pm$ 2.5 dB from published curve.
- Impedance: $\leq$ 150 ohms.
- Recommended load impedance: $\geq$ 600 ohms.
- Equivalent noise level: acc. to DIN 45405 (CCIR 468-2): 29dB acc. to DIN 45412 (A-weighted): 17 dB-A
- S/N ratio ref. 1 Pa (A-weighted): 77 dB
- Powering: Universal Phantom Powering according to DIN 45596 with 9 to 52 volts.
- Current consumption: a) at 12 volts: $\leq$ 5.5 mA, b) at 48 volts: $\leq$ 3 mA
- Max. sound pressure for 0.5% THD: f = 1 kHz to 10 kHz = 1,600 μ b $\pm$ 160 Pa $\pm$ 138 dB SPL
- Acceptable climatic conditions: Temperature range: -10° C to +60° C. Rel. humidity: 90% (+20° C), 85% (+60° C).
- Connector: 3 pin XLR-type.
- Dimensions: 141 x 45 x 35 mm (5.6 x 1.8 x 1.4 inch).
- Net weight: 360 g (14 oz).
- Shipping weight: 720 g (1.6 lb).

Technical Data of C 414 EB-P 48:

- Sensitivity at 1,000 Hz: 9 mV/Pa $\pm$ 0.9 mV/ μ b $\pm$ -61 dBV ref. 1 μ b (all patterns, 0-attenuation)
- Impedance: $\leq$ 200 ohms
- Recommended load impedance: $\geq$ 600 ohms
- Equivalent noise level: acc. to DIN 45405 (CCIR 468-2): 26 dB acc. to DIN 45412 (A-weighted): 15 dB-A
- S/N ratio ref. 1 Pa (A-weighted): 79 dB
- Power requirement: 48 volt phantom powering (DIN 45596)
- Current consumption: $\leq$ 1 mA

- Max. sound pressure for 0.5% THD: at 1,000 Hz = 6300 μ b $\pm$ 630 Pa $\pm$ 150 dB SPL (all patterns, 10 dB-attenuation, 0-roll off), 2500 μ b $\pm$ 162 dB SPL (all patterns, 20 dB-attenuation).
- All other data remain unchanged from the standard C 414 EB.