

STUDIO CONDENSER MICROPHONES C-2

en

User Manual

A50-26313-00002

www.behringer.com



STUDIO CONDENSER MICROPHONES C-2

1. Safety precautions

Please read all safety precautions and operating instructions before attempting to operate the unit. Keep all safety precautions and operating instructions for future reference.

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Water and moisture:

Condenser microphones are extremely moisture-sensitive. Never use your microphone in close proximity to water (e.g. bath tubs, wash basins, sinks, washing machines, pools, etc.). When doing voice recordings, always use the enclosed windscreen to safely protect the capsule from moisture.

Power supply:

Always use the power supply specified in the operating instructions.

Damage:

Take care not to drop your microphone as this can lead to severe damage. BEHRINGER assumes no liability for any damage caused by the user.

Service and care:

After each use, wipe the microphone down with a soft cloth and place it back into its protective casing (included with the microphone). Then, lay the small bag containing the moisture-absorbing crystals on top of the microphone head.

2. Introduction

Congratulations! By purchasing the BEHRINGER C-2, you have obtained 2 condenser microphones that offer the highest quality standards and the best audio characteristics.

Both microphones have been matched to one another (matched pair), and are therefore particularly well-suited for stereo recordings. Of course, you can also use the microphones individually.

Their outstanding characteristics make these microphones a valuable tool in the studio and on the stage.

3. Power supply

Phantom power (+48 V) is required to operate your microphone. We assume no liability for damage caused to your C-2 through defective phantom power. Before activating phantom power, mute your playback system and connect the C-2 to the microphone input of your mixing console. After activating phantom power, the C-2 requires several seconds to stabilize itself.

4. Pickup patterns

Both microphones feature a capsule with a cardioid pickup pattern. Microphones with this polar pattern are most sensitive to sound coming from in front of the microphone, and also to a lesser extent from the sides. Sound coming from behind the microphone will be greatly attenuated. This makes the cardioid polar pattern most suitable for recording individual instruments or vocals within a group.

The so-called *proximity effect* is typical for microphones with the cardioid pickup pattern. Depending on the distance between the microphone and the sound source, a slight increase in the lower frequency range occurs. The shorter the distance, the more pronounced this effect. By cleverly selecting the position and the angle of your microphone, you can effectively manipulate the proximity effect and thus affect how your recording sounds. Experiment with various positions in order to gain more experience.

5. Possible applications

Both microphones have been matched to one another (matched pair). Therefore, they are particularly well-suited for stereo recordings. Regardless of whether you are miking an entire ensemble or a single sound source (e.g. drums, piano or background vocals), this pair of condenser microphones lets you achieve outstanding spatial impressions in every recording session.

Of course, you can use your microphones individually as well. A cardioid pattern capsule is often used in recording situations in which several sound sources are present. Since this capsule selectively tones down the pickup of sounds located to the side of the microphone, this way you can achieve good separation of sound sources, thus easily avoiding feedback.

6. Low cut-filter and signal level attenuation (-10 dB)

The C-2 studio microphones feature a switchable low-cut filter that lets you eliminate low-frequency disturbances such as subsonic noise. Set the switch to its middle position to activate the low-cut filter.

A switchable level attenuation is provided on your C-2s for applications in which the microphones are exposed to extremely high sound pressures. When the switch is in its “-10 dB” position, the level attenuation is activated.

When the switch is in its top-most position, the signal is not influenced in any way.

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7. Microphone installation

To attach the microphones to the microphone stands, two clamps are included with the delivery. First screw a clamp onto the stand before attaching the microphone itself.

8. Audio connection

Use a balanced XLR microphone cable with the following pin assignment: pin 1 = shielding; pin 2 = +; pin 3 = -. Since your C-2 features gold-plated contact points throughout, we recommend that you use only microphone cables with gold-plated connectors.

9. Level setting / adjusting the basic sound

Adjust the gain control in the microphone channel of your mixing console so that the peak LED lights up only occasionally or never at all. The EQ controls in the microphone channel should be set to mid-travel position to start with; low-cut filter and signal level attenuation should be switched off. To get the sound you want, try changing the mic position relative to the sound source or even move the microphone around in the recording room of your studio. Adjusting the angle at which walls face the sound source can also be helpful. Only when the desired basic sound has been achieved, should you start to use equalizers and signal processors, if any at all. Remember: less is often more!

10. Warranty

For our current warranty terms, please refer to our website at <http://www.behringer.com>, or call +49 2154 9206 4166.

11. Specifications

Transducer type	condenser, 16 mm (0.63")
Operating principle	pressure gradient
Polar pattern	cardioid
Connector	gold-plated balanced XLR connector
Open circuit sensitivity (@ 1 kHz)	-41 dBV (0 dBV = 1 V/Pa)
Frequency response	20 Hz to 20 kHz
level attenuation	-10 dB, switchable
Low-cut filter	6 dB/oct. @ 120 Hz (switchable)
Max. SPL ($\leq 1\%$ THD @ 1 kHz)	140 dB (0 dB), 150 dB (-10 dB)
Equivalent noise level (IEC 651)	19 dBA
Signal-to-noise ratio	75 dB
Nominal impedance	75 Ω
Load impedance	> 1 k Ω
Supply voltage	+48 V

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Supply current

3 mA

Dimensions

Ø shaft: 0.8", length: 3.7"
(Ø shaft: 20 mm, length: 94 mm)
approx. 0.2 lbs (approx. 0.09 kg)

Weight

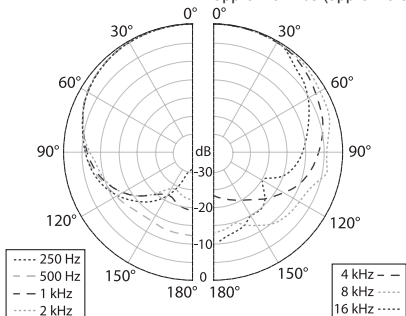


Fig. 11.1: Polar pattern

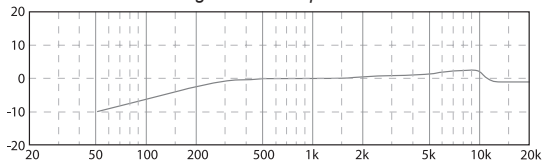


Fig. 11.2: Frequency response

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