



Supplied with carrying case, windscreen, and basic clip (optional flute, guitar, and sax clips shown inset)

CAI COUNTRYMAN ASSOCIATES INC
ISOMAX 2
 ALL-PURPOSE MICROPHONE

The ISOMAX 2 is a Countryman classic, still delivering the industry's tightest pattern control for an all-purpose mic. Available in omni, cardioid, and hypercardioid patterns, the Isomax 2 offers true frequency-independent pattern control—unlike competing mics that become omnidirectional at the low frequencies. This precise response captures strings, wind, brass and percussion beautifully, with exceptional gain before feedback and excellent rejection of the rest of the band. What's more, they're so affordable, you'll find plenty of ways to use them!

Applications

- Inside or outside musical instruments, placed on or hung over stages and hidden in sets for theater, motion pictures and TV.
- Audience mics and stage floor mics.
- Available in all directional patterns including omnidirectional, cardioid, hypercardioid, and bidirectional/ Figure 8.

Style

- Sleek, small, lightweight mic doesn't distract the instrumentalist or the house
- Lightweight and easy to hang without scaffolding, eliminating the risk of bulky equipment falling on performers or the house.

Performance

- Text book perfect polar patterns for excellent stereo separation and rejection of unwanted sounds.
- Very low distortion at the high sound levels encountered inside instruments with super-flat frequency response for an uncolored, very clean sound.
- Directional pattern is frequency-independent, so the microphone doesn't become omni at low frequencies.
- Excellent gain before feedback.
- Handles very high SPL.

Frequency Response:

ISOMAX 2 O: 20 Hz to 20 kHz
 ISOMAX 2 C, H: 50 Hz to 20 kHz

Overload Sound Level: 150 dB SPL @ 1% THD

Output Impedance: 600 Ohms +/- 2% balanced, transformerless. Will drive load impedance without distortion at full rated SPL.

Maximum Noise Level:

ISOMAX 2 O: 25 dB SPL A-weighted
 ISOMAX 2 C, H: 29 dB SPL A-weighted

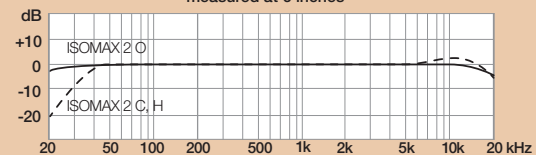
Power: Phantom, 6 to 50 Volts @ 4 mA. Voltages below 24V will result in reduced overload SPL.

Dimensions: 5/16" (8 mm) x 5/8" (16 mm) x 5/32" (4 mm) excluding cable strain bushing.

Sensitivity: -57 dB (0 dB = 1 V/Pascal. Open circuit)

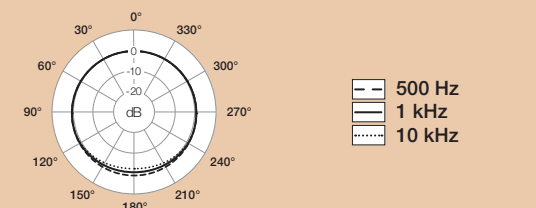
Frequency Response

measured at 6 inches

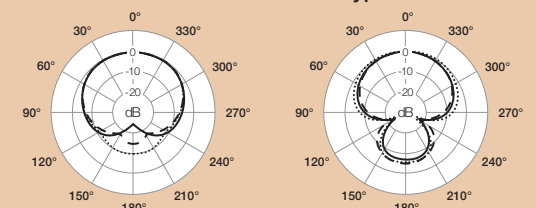


Polar Response

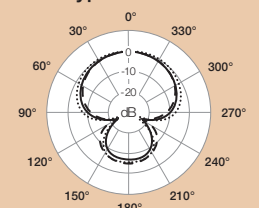
omnidirectional



cardioid



hypercardioid

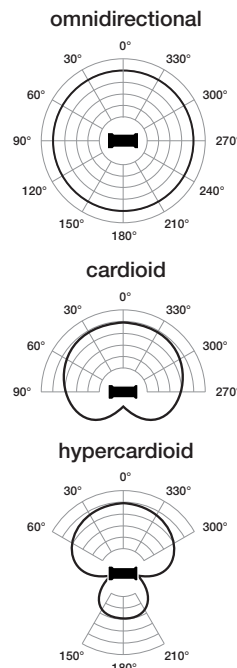


ISOMAX 2 All-Purpose: Frequently Asked Questions

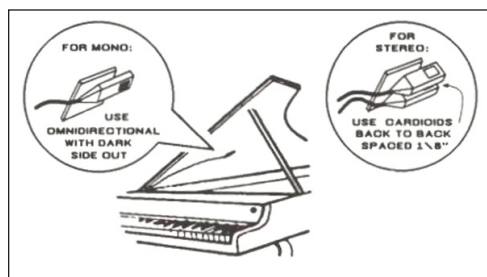
Which pattern should I choose?

To get the best performance, know the angles where your microphone is most sensitive to sound, and which angles offer the best rejection of unwanted sounds.

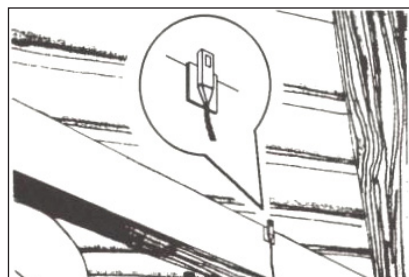
- The omnidirectional pattern picks up all sounds from all directions equally. It has the flattest frequency response, the lowest noise level, and is the least susceptible to wind noise and vibration. The omnidirectional microphone is often used for recording and sound reinforcement of acoustic instruments such as percussion, guitar, saxophone, and piano.
- The cardioid pattern is most effective at picking up sound directly in front of the microphone, and is least sensitive to sound directly behind the microphone. Overall the cardioid picks up about 1/3 less ambient noise than the omnidirectional, so the working distance (the distance a performer could be positioned from the microphone) is approximately 1.7 times that of the omni. The cardioid is an excellent choice when you can position the microphone directly toward the sound you wish to record (a lead singer, for example) and directly away from unwanted sound sources (a crowd or loud monitor).
- The hypercardioid pattern has a narrower pick up pattern in front than the cardioid, and overall better rejection of ambient noise, and the working distance is about twice that of the omni. The hypercardioid has a small “pick-up lobe” directly behind the microphone. This means that the maximum rejection areas are behind and to the sides (about 60 degrees away from the rear of the microphone on either side). The hypercardioid is the best choice when the loudest unwanted sounds—like speakers—can be positioned in these nulls.



How can I mic a piano?



For mono: use double-sided foam tape to attach an ISOMAX 2 Omni facing the lid of the grand piano near the center board, or positioned over the strings on a mic stand. For stereo: place two ISOMAX 2 Cardioid mics on edge 1/8" apart facing left and right. The lid should always be open 3" to 6" (Closing the lid creates a “boxy” sound.)



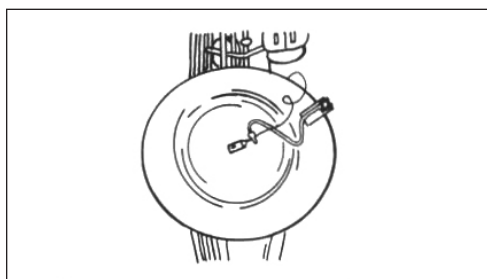
If the lid must be closed or removed, place an ISOMAX 2 Omni on one of the support braces near the middle of the instrument, as shown. Experiment with placement to avoid resonances. For stereo try one on the long support near the middle and one near the upper treble section.



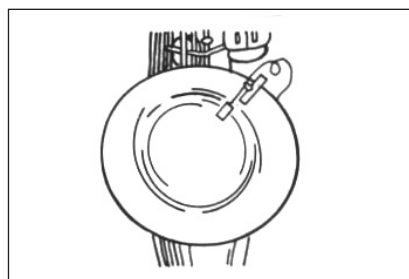
For upright pianos try affixing an ISOMAX 2 Omni to one of the central backposts, as shown. Experiment with placement as not all parts of the soundboard resonate the same. Two mikes in different areas should yield even better results.

How can I mic a saxophone?

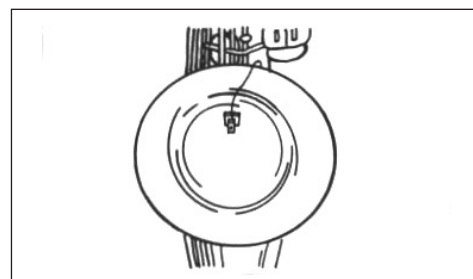
Choose the ISOMAX 2 Omni if you want to include ambient sound; choose the hypercardioid for maximum isolation and gain.



The Countryman Sax clip has foam-covered jaws that tightly grip the bell, with a stiff but adjustable wire that can be positioned at the center of the bell or twisted at the screw to capture sound through the keys.



The ISOMAX 2 standard clip also works well when mounted at the top of the bell with the microphone positioned down, pointing inward.



A more mellow sound is achieved by placing an ISOMAX 2 Omni microphone 2-3 inches down inside the bell using double-sided tape. Experiment with the face side down or up (do not cover the screen).