

CROWN MICROPHONE APPLICATION GUIDE FOR LIVE SOUND



Crown International, Inc
P.O. Box 1000, Elkhart, Indiana 46515-1000
(219) 294-8200 Fax (219) 294-8329
www.crownaudio.com

© 2000 Crown International. All rights reserved.
PZM®, PCC®, SASS® and DIFFEROID®, are registered trademarks of
Crown International, Inc. Also exported as Amcron®

CROWN MICS FOR LIVE SOUND

This guide describes Crown microphones suitable for live music, and suggests how to use them for best results.

HANDHELD MICS



CM-200A: Cardioid condenser mic. Sounds much smoother and clearer than typical stage vocal mics. Much less EQ is needed to make it sound good. The CM-200A is stylish and has low handling noise. For best results, use the included foam pop filter. The CM-200A also makes a great all-around instrument mic.



CM-310A: Differoid condenser mic. This mic has the best gain-before-feedback and isolation of any handheld mic you can buy. It's a handheld version of our popular CM-311A headworn mic. Be sure to use it with lips touching the grille for best isolation. The CM-310A also sounds good on snare drum, and cuts down on leakage from the other drums and the hi-hat.

HEADWORN MICS



CM-311A: Differoid condenser mic. The industry-standard headworn mic, used by Garth Brooks, Britney Spears, and many more. It has the best gain-before-feedback and isolation of any headworn mic you can buy. Adjust the headband and boom for best fit, with the mic touching the lips for best sound.

CM-311AE: Wireless version of the CM-311A, to be used with your favorite wireless transmitter.



CM-312A: Hypercardioid condenser mic. For situations where feedback and isolation are not too critical. Sounds clear and natural. The mic is to the side of the singer's mouth. Adjust the mic

position toward or away from the mouth to prevent breath pops.

CM-312AE: Wireless version of the CM-312A, to be used with your favorite wireless transmitter.

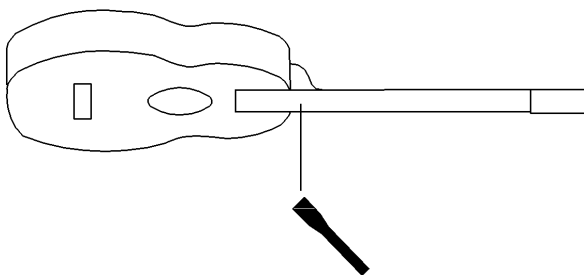
INSTRUMENT MICS



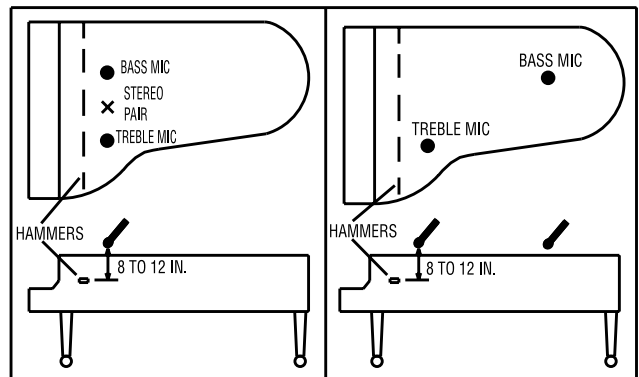
CM-700: Cardioid condenser mic. Flat response, accurate sound, 151 dB maximum SPL! Sounds great on acoustic guitar and piano, drum overheads, toms, horns, sax. A useful accessory is the CM-SM shock mount.

Suggested starting positions:

Acoustic guitar: About 8 inches from the 12th fret. You might want to use the low-cut switch.



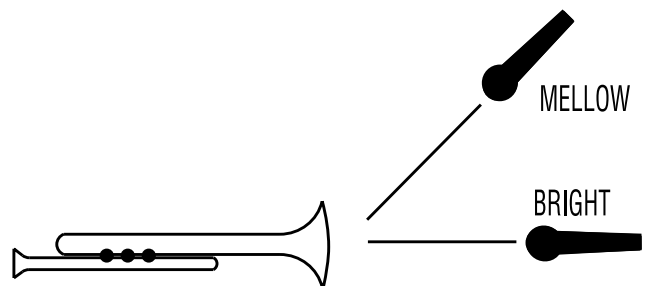
Piano: Mike the treble and bass strings with two mics about 8 inches horizontally from the hammers and 8 inches above the sound board. Some pianos sound best with the bass mic toward the piano tail.



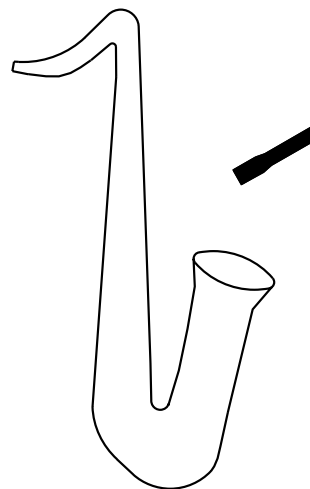
Drum overheads: About 2-3 feet over the drummer's head, about 2 feet apart. Or, crossed overhead as a coincident pair.

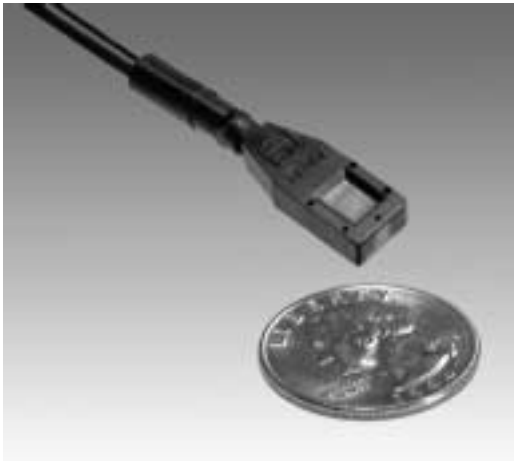
Tom-toms: About 2 inches above the drum head and 1-2 inches in from the rim.

Horns: About 1 foot in front. On-axis to the horn sounds bright; off-axis sounds more mellow.



Sax: Several inches above the bell, aiming at the tone holes.

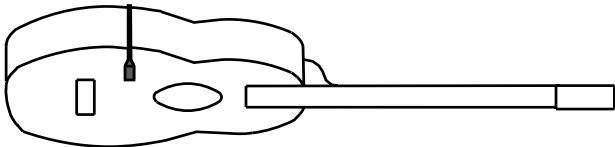




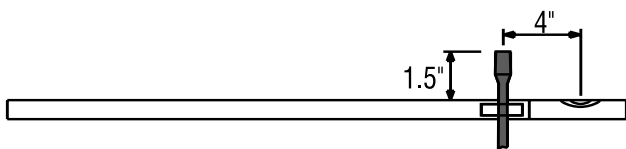
GLM-100: Mini omni condenser mic. Flat response from 20 Hz-20 kHz, accurate sound, 148 dB maximum SPL! Clips onto acoustic guitar, flute, horns, sax, drums, fiddle, etc.

Suggested starting positions for the GLM-100:

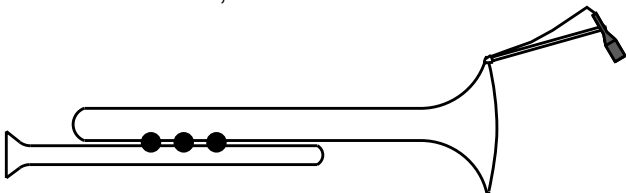
Acoustic guitar: Tape the mic to the guitar body about ½ inch from the low E string, midway between the sound hole and bridge.



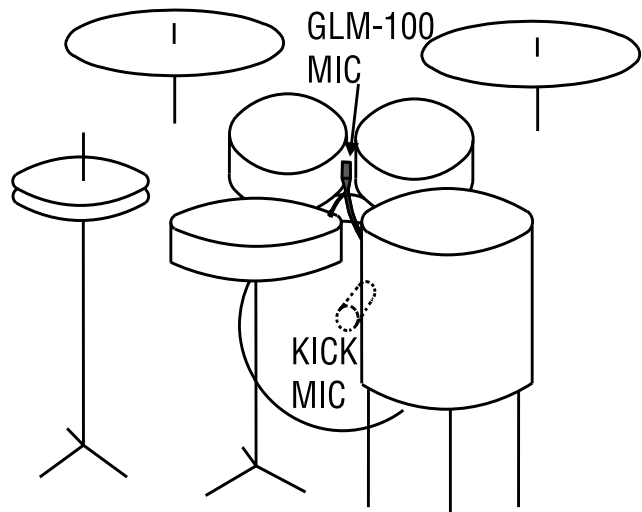
Flute: Tape the mic about 1.5" above the flute, between the lip plate and tone holes.



Trumpet, trombone: Use the GLM-UM universal mount supplied with the GLM-100. Clip the mic about 4" out front, off-center of the horn.

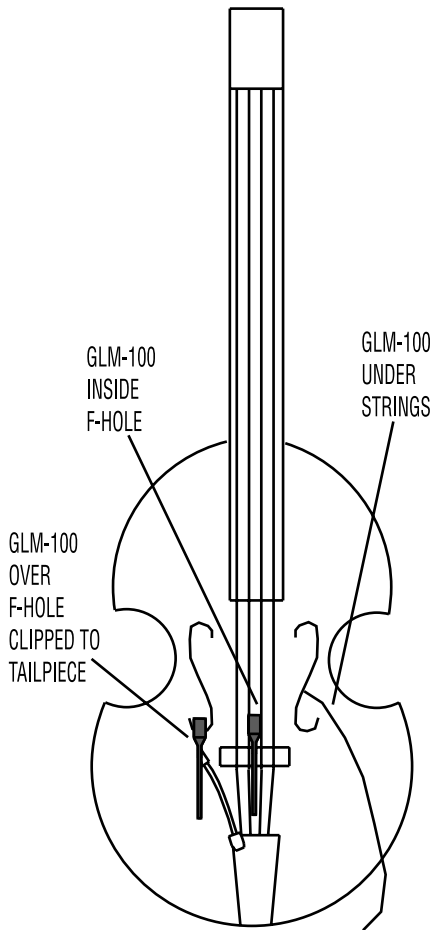


Drums: Use the GLM-UM universal mount supplied with the GLM-100. Clip the mic to the drummer's right side of the snare drum rim, about 4 inches above the rim. Put another mic in the kick. With small kits, this single GLM can pick up the whole drum kit. Boost the lows and highs a little.

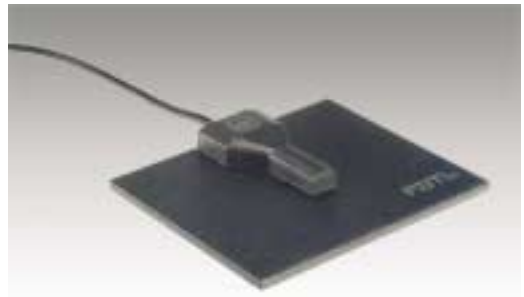


Fiddle or violin:

- 1" above an f-hole, held by a GLM-UM Universal Mount clipped to the tailpiece .
- Under the strings, near the bridge, clipped ¼" over the body .
- Glue some foam onto the mic capsule flex relief. Insert the mic and the foam through the hole in the bridge. The GLM mic "floats" between the strings and the top of the violin.
- For loudest sound and best isolation, place the GLM inside an f-hole, with the cable wedged into the narrow part of the f-hole. For cable strain relief, trap the cable under a rubber band stretched around the fiddle. This method needs some EQ to sound natural; try cutting at 100 Hz and 3 kHz.



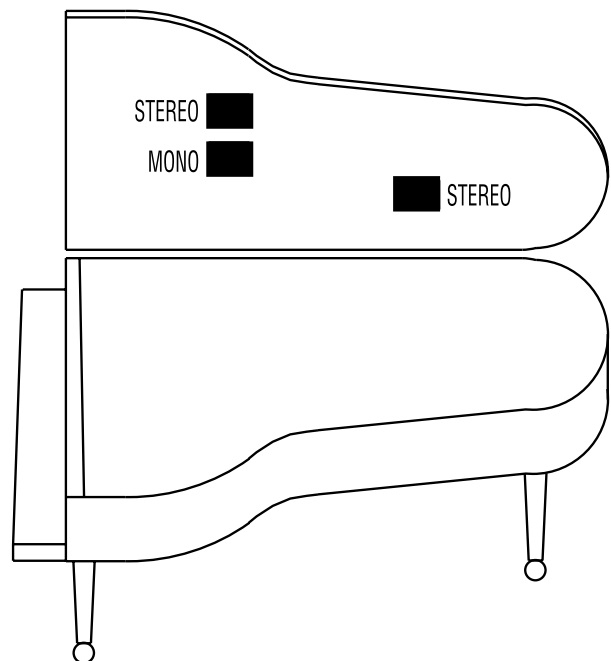
SASS-P MKII: Stereo condenser mic. Excellent for drum overhead miking. Toms sound deep, full-bodied and close-up. Cymbals sound bright and crisp. Place the SASS at least 3 feet above the snare drum.



PZM-6D[®]: Pressure Zone Microphone[®]. Prevents phase interference when used on reflective surfaces. Its tone quality is switchable between natural and bright.

Suggested starting positions:

Acoustic piano: Tape two PZMs to the underside of the raised lid, one over the treble strings and one over the bass strings.



Kick drum: Mount the PZM so the plate faces the kick-drum pedal inside the drum. Damp the drum head with a pillow or blanket.



PCC-160[®] : Surface-mounted cardioid microphone. Terrific in a kick drum – just lay it on a pillow or blanket inside.

All Crown microphones are condenser mics which require phantom power.