



Ladybug LB-102 PORTABLE MIXER

The *Ladybug LB-102 Mixer* is an inexpensive (\$50), compact audio mixer design, focused on the needs of beginning and intermediate square dance callers.

With the addition of a dynamic microphone (\$80), 2 XLR cables (\$10 ea.), and a powered speaker like a Alto TS-408 (2000W peak, \$250), a caller can provide high-quality sound for 8-10 squares for about \$400.

A single 9 volt battery provides power for months or years of dances, and the Ladybug mixer's compact size makes it easy to carry.

The entire Ladybug Mixer design is available under an Open Source License, allowing anybody to modify the design to fit their specific needs.



- 2 Music Inputs (1/8" stereo inputs)
- 2 Combo Mic Inputs (Lo-Z XLR or Hi-Z Hilton™-compatible 1/4" plug)
- Remote Volume Control Input (20KΩ Hilton™-compatible 1/8" plug)
- Low-noise Balanced Output (XLR)
- Separate Music (L) and Voice (R) out (1/8" stereo jack)
 - Music-only for a monitor speaker, or use Voice-only for hearing assist
- Uses a single 9V battery
 - Amazon Basics Alkaline (\$1.50): 100 hours (est.)
 - Tencent Lithium (\$7.00): 300 hours (est.)
 - USB-rechargeable Lithium (\$7.50): 120 hours per charge (est.)
- Low noise: -80dBfs
- Wide Bandwidth: Music 20Hz-20KHz, Voice 50Hz-20KHz
- Small size: 6.9"W x 2.5"H x 3.75"D (175 x 65 x 95 mm)
- Light weight (with battery): 9.1oz (260g)
- Open Source Hardware, Software, and Mechanical Design



Follow prototype progress at:

<https://github.com/mpogue2/ladybug-mixer>