



## Thank you for choosing the Lobo Contact Microphone!

This microphone is hand-made by Anand Lobo in Fatorda, South Goa.

### How does the Lobo Contact Microphone work?

The microphone operates on the principle of piezoelectricity – this is the generation of electricity when a material bends or moves. Using a disc of piezoelectric material, the vibrations of your acoustic instrument are converted into an electrical signal that can be amplified by a PA speaker or mixer.

### What's special about this microphone?

Unlike common instrument pickups, this microphone produces a “balanced” audio signal similar to vocal microphones – in non-technical terms, this means that it is highly resistant to electrical interference or noise, which can often be heard as a ‘buzzing’ or humming sound from typical instrument pickups.

In order to take advantage of this noise immunity, you must use the correct audio cable, which should be included with your purchase – a standard instrument cable will not be resistant to noise.

In addition, the Lobo Contact Microphone is designed to be used in conjunction with the **Lobo Piezoelectric Preamplifier**, which is also hand-built by yours truly. The preamplifier acts to improve the sound of the piezoelectric microphone, when connected to a mixer. It can be used without the preamplifier, but sound quality will suffer.

### The Lobo Piezoelectric Preamplifier

Piezoelectric microphones are simple but special devices, such that common sound systems are not designed to handle them directly. As an analogy, think of trying to drive a pickup truck using the engine of a motorcycle; you’ll move, but neither the truck nor the engine are well suited to each other. This incompatibility can be heard when cheap piezoelectric microphones are used in music shows; instruments will tend to sound unnatural, sounding very ‘sharp’ and ‘tinny’ as though they’re being played through a metal box.

Hence, the Lobo Piezoelectric Preamplifier module is designed specifically for this microphone, in order to capture the best possible sound. It acts as a buffer between the microphone and a PA system, preventing any incompatibility and thus preserving the natural sound of the instrument.

The piezoelectric preamplifier requires power to work, which is provided by 48V ‘phantom power’ available on all professional sound systems.

### Usage

- For basic usage, the microphone can be connected to any common sound system using a standard instrument cable (TS, or tip-sleeve jack).
- To improve noise immunity, use a ‘stereo’ jack (also known as TRS, or tip-ring-sleeve) to connect to a mixer.
- For the best performance, connect the contact microphone to the piezoelectric preamplifier module using the provided custom cable, and connect the preamplifier to a mixer using a standard XLR microphone cable.