

LS-208

Front Address Large Diaphragm Condenser Voice & Instrument Microphone

PRODUCT OVERVIEW & OPERATION MANUAL

Summary

The Lauten Audio LS-208 is a professional front-address large diaphragm condenser voice and instrument microphone offering excellent versatility and the recording quality of high-end studio microphones. The LS-208 will capture the brilliance and expressiveness of any source in broadcast, sound reinforcement, and studio recording. It features a wide frequency response with a full 120dB of dynamic range and 135dB of SPL handling without the need for attenuation. With its excellent off-axis rejection it's excellent for focusing on the source and reducing bleed in multi-source live environments. Constructed from high-quality components and outfitted with frequency shaping high and low-cut filters, the LS-208 comes with a spider shock mount great for broadcast, a hard mount for tight spots, a foam windscreen to protect from plosives, and a rugged road case housing all these accessories.

The LS-208 is a great choice for

- Spoken Voice, and Singing
- Radio broadcasting
- Podcast and Voice-overs
- Highly dynamic instruments and environments
- Close mic'ing drums and guitar amps
- Studio quality recordings nearly anywhere

Description

The LS-208 is a professional front-address large-diaphragm condenser microphone designed for studio, live, broadcast recording and sound reinforcement. The LS-208 combines the handling capabilities of a dynamic microphone with the recording qualities of a professional high-end studio condenser microphone.

The LS-208 does not require pre-attenuation but can handle 135dB SPL due to its circuit design. Highly unique for a microphone of its type is its ability to capture a full 120db of dynamic range without the use of internal or external pre-attenuation. This gives engineers the ability to capture brilliant recordings of highly dynamic instruments and environments without sacrificing sound quality.

The LS-208 also features excellent off-axis rejection. It will provide excellent rejection of off-axis voices, instruments, crowds, etc., making it great for live radio broadcast and podcasts, or for multi-instrument, live-studio and on-stage recording or sound reinforcement.

The Independent, multi-stage, high and low-cut filters help engineers balance recordings at the microphone and aid in successfully capturing the performance reducing the need for mixing. The 2-stage low-cut aids in reducing low-end rumble, muddiness, and proximity effect. The 2-stage high-cut helps tame bright instruments and high frequencies.

The LS-208 is fully accessorized and ships with the following.

- Spider-shock mount with threaded nut and adjustable elbow joint.
- Hard mount with threaded nut and adjustable elbow joint.
- Foam windscreen to protect transducer element from plosives, wind, and debris
- Hard case that fits all accessories and is built for the rigors of the road.

Unlike any microphone of its kind on the market today, the LS-208 offers excellent off-axis rejection and dynamic-range capabilities combined with studio quality sound to achieve exceptional results in any recording environment.

Key Features

Full 120dB (135dB total) of dynamic range without the need of additional attenuation

Wide frequency response and studio quality sound

Excellent off-axis sound rejection

Independent 2-stage low and high-cut frequency switches

Internally shock mounted pressure gradient condenser element

Both spider shock mount and hard mount included

Foam windscreen for plosive and wind rejection

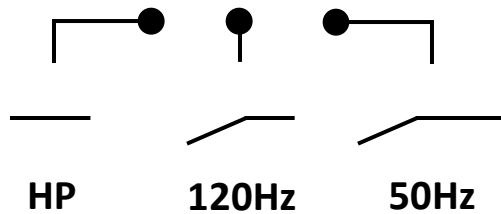
Operating Instructions

Quick Start Guide/Sequence of Operation

1. Attach the microphone to its threaded hard mount or spider shock mount and tighten the wing nut. Attach the chosen mount to a high-quality microphone stand. Loosen the wing nut and adjust for proper pick up position.
2. Make sure the phantom power is turned off and the gain on the preamplifier channel is turned down.
3. Securely connect the female end of a high-quality standard 3-pin XLR microphone cable to the male connector on the microphone, and then the male end of the XLR cable to your recording interface or microphone preamp.
4. After securely connecting the cables, turn on the +48v phantom power and all the microphone to warm up for a couple minutes.
5. If you are using the microphone for vocals or voice, please ensure you use a high-quality pop-filter or the included foam windscreen.
6. Gradually increase the input gain on your recording interface or preamp to test and achieve your desired microphone input levels.
7. Congratulations, you are ready to begin using your microphone.

High-pass Filter

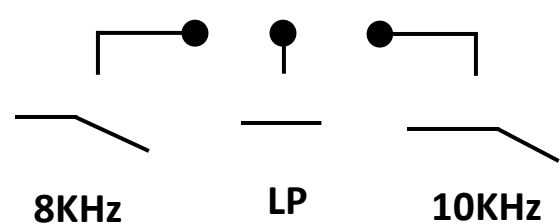
The LS-208 feature a 2-stage high-pass filter located on the left side of the microphone. The low-cuts are at 50Hz and 120Hz. The “HP” is the off position.



Left “HP” is OFF position

Low-pass Filter

The LS-208 features a 2-stage low-pass filter located on the right side of the microphone. The high-cuts are at 8KHz and 10KHz. The “LP” is the off position.



Center “LP” is OFF position

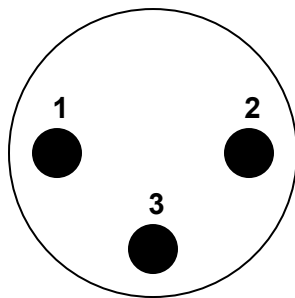
Power Requirements

This microphone requires +48v phantom power. Phantom power can be found as a built-in feature on most modern recording interfaces and microphone preamplifiers, or you may use an external +48v phantom power supply.

Do not connect this microphone to any power source other than +48v phantom power. Using +48v phantom power is the only way to ensure safe and reliable operation.

Connections

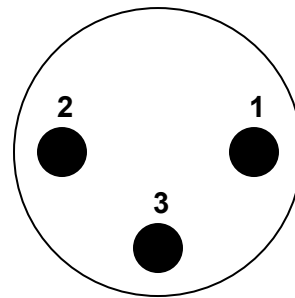
Always use a high quality 3-pin XLR microphone cable with your microphone. Connect the female end of the XLR cable to the microphone and the male end of the XLR cable to your recording interface.



Female
Output



To microphone

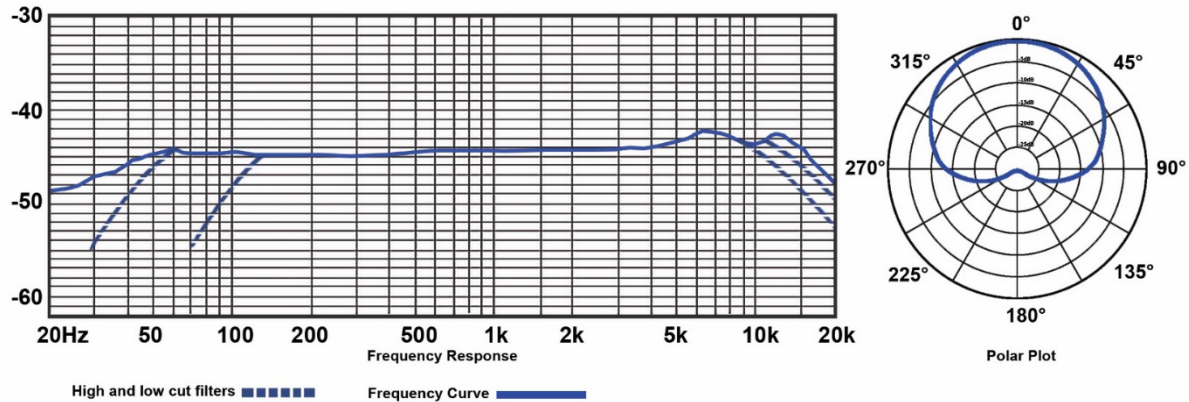


Male
Input



To recording interface

Specifications



Type:	Front-Address Pressure gradient large diaphragm transducer microphone.
Polar Patterns:	Cardioid
Circuit:	JFET transistor with transformer balanced output
Frequency Range:	20Hz-20KHz
Dynamic Range:	135dB (Full Range >120dB) without the need of internal or external attenuation (15dB to 135dB)
Impedance:	>150 ohms
SPL Handling:	>135dB (0.5%THD@1000Hz)
Self-noise Level:	<15dB-A
Sensitivity:	5mV/Pa -46dBV (0 dB=1V/Pa 1kHz)
Special Features:	Independent 50 & 120Hz low-cut & 8 & 10 kHz high-cut filters
Connector:	3-pin XLR
Power Requirement:	+48v Phantom power
Weight:	Microphone only: 1.05lbs – 0.48kg w/ shock mount: 1.75lbs – 0.79kg w/ hard mount: 1.30lbs – 0.59kg w/ case and accessories: 5.40lbs – 2.45kg
Dimensions:	Length: 7.5in (19.05cm) Diameter (w/ arm): 1.98in (5.3cm) <i>With Shock mount</i> Width: 4.7in (12cm) Depth: 4.8in (12.2cm)

Care and Cleaning

THERE ARE NO SERVICABLE PARTS INSIDE THE MICROPHONE

Only authorized Lauten Audio technicians should perform disassembly and maintenance on any part of this microphone. Disassembling and modifying any part of this microphone by anyone other than an authorized technician will void its warranty.

NEVER DISASSEMBLE ANY PART WHEN POWER IS BEING SUPPLIED

This microphone is a precise and delicate instrument. Do not drop or allow the microphone to collide with other objects as this may damage the internal components.

The metal surfaces of the microphone can be cleaned with mild mineral spirits or alcohol on a lightly dampened very soft cloth. Be very careful not to get any moisture inside the microphone grill or microphone.

Warranty

This microphone comes with a 1-year limited warranty from date of sale from authorized dealer/distributor. Items limited to 90-days coverage include shock mounts, shock mount bands, hard mounts, clips, windscreens, cases, boxes, cables, microphone bags, and vacuum tubes.