



EMPHASIZE
THE
GENUINE
IN
YOUR
SOUND. LCT 640

SOUNDS LIKE  **LEWITT**

Thank you that you have opted for a LEWITT product. In this operating manual you will learn more about your LEWITT microphone, its handling and its proper usage.

With the LCT Authentica Series, LEWITT introduces a new generation of highly versatile wired condenser microphones that all aim for setting new benchmarks of technology, sound quality and user-friendliness in both professional studio recording and onstage use.

The microphones of the LCT Authentica Series stand for unaltered sound and innovative features: Illuminated Settings, Noiseless Push Buttons, Automatic Attenuation with Clip Detection and History all ensure error-free sonic perfection and peerless ease of use for today's demanding recording artists and engineers.

Day after day, be it for live acts, in home studios or in professional studio productions.

LEWITT wishes you a lot of fun and success with this product!

LEWITT's LCT 640 is designed to raise the bar in its class of reference-quality large-diaphragm condenser microphones. This Austrian-designed and engineered pro-mic delivers a smooth, unsurpassably rich and exceptionally nuanced sound, and exhibits a remarkable set of qualities that enthralls even the most discerning users. The LCT 640 excels in a variety of demanding studio applications and stands for unrivalled performance in miking lead and background vocals, drums, percussion instruments, grand pianos, brass and woodwinds, classical music ensembles.

In addition to the standard omni-directional, cardioid and figure-8 polar patterns, the LCT 640 offers a wide-cardioid and super-cardioid characteristic. It offers a dynamic range of 135 dB and stands out for its extremely low self-noise of 10 dB. In combination with a 4-level high-pass filter and 4-level switchable pre-attenuation, the LCT 640 provides maximum versatility in all recording situations. Automatic attenuation, key-lock, clipping history, push buttons and a light-up user interface round off the features of this outstanding microphone.



Features

- Superior transient response from ultra-thin externally biased, gold-layered low-mass diaphragms for ear-catching realism and authentic sound
- Flat frequency response for natural, authentic sound
- Five consistent directional characteristics – cardioid, omnidirectional, figure-8, broad cardioid and supercardioid – for maximum flexibility in a wide variety of recording applications
- 10 dB self-noise and max SPL of 145 dB for an impressive total dynamic range of 135 dB, providing maximum acoustic presence and clarity
- 4-position switchable pre-attenuation pad for handling extremely high sound pressure levels and 4-position high-pass filter
- Illuminated user interface for quick and easy handling even in dark environments
- Noiseless pushbuttons for quick and easy attenuation and HPF selection
- Clipping history, automatic attenuation and key-lock provide error-free recording and unparalleled ease of use
- Extra-large hexagonal ruthenium-galvanized steel mesh grille provides an open acoustic environment and prevents unwanted internal reflections
- Immune to electromagnetic interference thanks to transformerless preamplifier circuitry
- Corrosion-resistant gold-plated 3-pin XLR output connector

Top applications

- Lead and background vocals
- Acoustic instruments // piano, guitar, drums, percussion, strings...
- Overhead miking // drums, percussion...
- Ensembles // choral or orchestral
- Room ambiance pick-up // guitar amplifier, drums...
- Wind instruments // brass and woodwinds...
- Demanding live and studio applications

User-interface

- ① Status indicator
- ② Polar pattern indications
- ③ Noiseless polar pattern push button
- ④ Attenuation indications
- ⑤ Noiseless attenuation push button
- ⑥ High-pass filter indications
- ⑦ Noiseless high-pass filter push button

Status indicator ①

- The microphone is in normal working mode if the status indicator is illuminated in white.
- The microphone is in key-lock mode if the status indicator is not illuminated.
- The microphone experiences clipping due to high SPL if the status indicator flashes in red.
- The microphone is in automatic attenuation mode if the status indicator is illuminated in red.
- The microphone indicates the clipping history if the status indicator flashes red and white in an alternating sequence.

Polar pattern indications ②

- The currently active polar pattern setting is illuminated.

Setting the polar pattern

- Five different directivity characteristics – omnidirectional, broad cardioid, cardioid, supercardioid, figure-8 – can be set by briefly pressing the polar pattern push button ③.

Attenuation indications ④

- The currently active attenuation setting is illuminated.

Setting an attenuation level

- Attenuation levels can be set by briefly pressing the attenuation push button ⑤. Settings are: off, -6 dB, -12 dB and -18 dB. Attenuation is used in extremely high SPL environments in order to prevent clipping of the microphone, mixer and other audio equipment.

High-pass filter indications ⑥

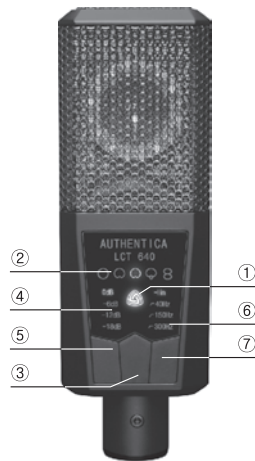
- The currently active high-pass setting is illuminated.

Setting a high-pass filter

- High-pass filters can be set by briefly pressing the high-pass filter push button ⑦. Settings are: Off, 12 dB / octave at 40 Hz and 6 dB / octave at 150 and 300 Hz. High-pass filters eliminate unwanted low frequency noise such as structure borne noise.

Automatic attenuation function

The microphone will automatically adjust to the next higher attenuation level if it experiences clipping due to a high SPL. The microphone enters and leaves the automatic attenuation mode by constantly pressing the attenuation push button ⑤ for more than 2 seconds. The microphone is set to automatic attenuation mode if the status indicator ① is illuminated in red. Please note that the microphone will need 1/2 second to adjust to the new attenuation level.



Key-lock function

The push buttons of the microphone can be locked and unlocked by constantly pressing the polar pattern push button ③ for more than 2 seconds.

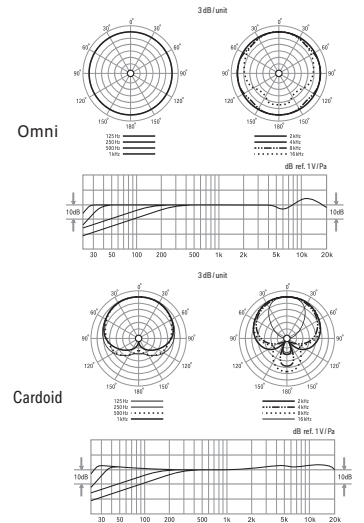
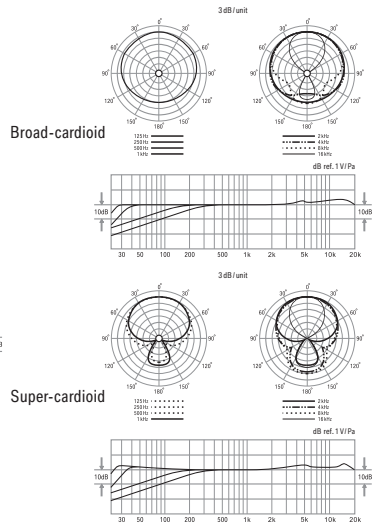
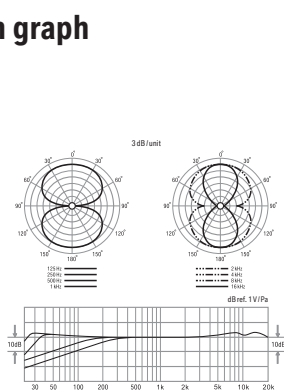
Clipping history

Checking the clipping history lets you know if the microphone had experienced clipping in the past. The microphone displays the clipping history after constantly pressing the high-pass push button ⑦ for more than 2 seconds. When in clipping history mode the status indicator ① flashes red and white in an alternating sequence, the polar pattern indications ② as well as the high-pass indications ⑥ are not illuminated. Clipping history mode provides information and works according to the rules listed below:

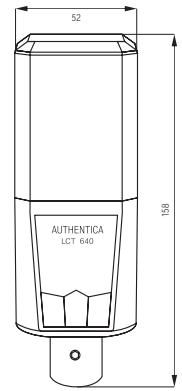
- The last manually set attenuation level is indicated by a constantly illuminated attenuation LED. If clipping has occurred in the past this LED will flash.
- The clipping history information can only be accessed once. Clipping information will be deleted after leaving this mode by constantly pressing the high-pass push button ⑦ for more than 2 seconds.
- Clipping history information will be deleted once you access the automatic attenuation mode.
- Clipping history information will not be deleted when unplugging the microphone.

Tech graph

Figure-8



Dimensions



Tech data

- Acoustical operating principle: pressure gradient transducer, externally polarized
- Transducer Ø: 25,4 mm
1 inch
- Directional pattern:
 - omni
 - broad-cardioid
 - cardioid
 - super-cardioid
 - figure-8
- Frequency range: 20 ... 20.000 Hz
- Sensitivity:
 - 13 mV / Pa (-38 dBV), cardioid
 - 10 mV / Pa (-40 dBV), omni
 - 9 mV / Pa (-41 dBV), figure-8
- Signal / noise ratio: 84 dB-A
- Equivalent noise level:
 - 10 dB-A, cardioid (IEC 61672-1)
 - 12 dB-A, omni (IEC 61672-1)
 - 13 dB-A, figure-8 (IEC 61672-1)
- Dynamic range of mic. amp.: 135 dB-A
- Max. SPL for 0,5 % THD:
 - 145 dB, 0 dB pre-attenuation
 - 151 dB, 6 dB pre-attenuation
 - 157 dB, 12 dB pre-attenuation
 - 163 dB, 18 dB pre-attenuation
- Pre-attenuation pad: 6 dB, 12 dB, 18 dB, switchable
- Bass cut filter slope:
 - 12 dB / octave at 40 Hz
 - 6 dB / octave at 150 Hz
 - 6 dB / octave at 300 Hz
- Rated impedance: < 150 ohms
- Rated load impedance: > 1.000 ohms
- Supply voltage: 48 V +/- 4 V (IEC 61938)
- Current consumption: 5,5 mA (IEC 61938)
- Connector: gold plated 3-pin XLR
- Dimensions:
 - 158 x 52 x 36 mm
 - 6,22 x 2,04 x 1,42 inch
- Net weight:
 - 430 g
 - 15,2 oz.

Accessories



LCT 40 Wx



DTP 40 Lb



LCT 40 SHx



Alu-case



Cautions

- The capsule is a sensitive, high precision component. Make sure you do not drop it from high heights and avoid strong mechanical stress and force.
- To ensure high sensitivity and best sound reproduction of the microphone, avoid exposing it to moisture, dust or extreme temperatures.
- Keep this product out of the reach of children.
- Do not use force on the switch or cable of the microphone.
- When disconnecting the microphone cable, grasp the connector and do not pull the cable.
- Do not attempt to modify or fix it. Contact qualified service personnel in case any service is needed. Please do not disassemble or modify the microphone for any reasons as this will void users warranty.
- The casing of the microphone can be cleaned easily using a wet cloth, never use alcohol or another solvent for cleaning. If necessary the foam wind stopper can be washed with soap water. Please wait till it is dry before using it again.
- Also please refer to the owner's manual of the component to be connected to the microphone.

Warranty

All products manufactured by LEWITT GmbH feature a limited two-year warranty. This two-year warranty is specific to the date of purchase as shown on your purchase receipt.

LEWITT GmbH shall satisfy the warranty obligations by remedying any material or manufacturing faults free of charge at LEWITT's discretion either by repair or by exchanging individual parts or the entire appliance. Any defective parts removed from a product during the course of a warranty claim shall become the property of LEWITT GmbH.

While under warranty period, defective products may be returned to the authorized LEWITT dealer together with original proof of purchase. To avoid any damages in transit, please use the original packaging if available. Please do not send your product to LEWITT GmbH directly as it will not be serviced. Freight charges have to be covered by the owner of the product.

For further information please visit www.lewitt-audio.com or check your warranty card.

Regulatory information

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Declaration of conformity can be requested at info@lewitt-audio.com.

Manufacturer Details

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CEO LEWITT GmbH

