

EMPHASIZE THE

GENUINE

IN YOUR

SOUND. LCT 540



LCT 540 Introduction

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.

We've put all our knowledge and all our passion for audio technology into building microphones for people whose standards for their own audio work and performances are just as high as our own. With the LCT Authentica series, LEWITT introduces a new generation of highly versatile wired condenser microphones that all aim for one thing and one thing only: to set new benchmarks of technology, sound quality and user-friendliness in both professional studio recording and onstage use. The mics of the Authentica series – especially the LEWITT LCT 640 – employ innovative technologies and a multitude of possible settings to offer a crystal-clear, authentic and characteristic sound for every imaginable application.

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!

The Authentica LCT 540 exhibits a combination of qualities that will undoubtedly make it a studio favorite among audio engineers and professional musicians. Designed to complement modern recording techniques and meet the expectations of ever-demanding sound professionals, this versatile large-diaphragm condenser microphone offers outstanding performance in miking lead vocals, drums and percussion instruments, brass and woodwinds, classical music ensembles.

The LCT 540's cardioid 1-inch capsule, enclosed by an extra-large hexagonal grille, captures elaborate and exceptionally nuanced sonic details by rendering off-axis sounds while optimizing isolation of the main sound source. The LCT 540's pad features two levels of attenuation and two switchable low-cut frequencies, two-color LEDs as well as pushbuttons for noiseless handling. A dynamic range of 135 dB and an extremely low self-noise of 8 dB-A round off the features of this exceptional microphone.



LCT 540

Features

- Cardioid 1-inch capsule for beautifully detailed sound reproduction
- Wide dynamic range of 135 dB and extremely low self-noise of 8 dB
- Key-lock, clipping history and automatic attenuation
- Noiseless pushbuttons for attenuation and HPF selection
- Immune to electromagnetic interference thanks to transformerless output stage
- Extra-large hexagonal steel-mesh grille with ruthenium-galvanized finish (black)
- Illuminated user interface for quick and easy handling
- Gold-plated 3-pin XLR output connector
- Comes in an elegant black aluminium case with foam layers; includes LCT 40 SHx shock mount, LCT 40 Wx windshield and DTP 40 Lb leather bag

Top applications

Studio applications

Live sound

- Vocals
- Percussions, drums

- Acoustic instruments
- Guitar and bass amps

User-interface

- 1 Status indicator
- ② Key lock push button
- 3 Attenuation indications

- 4 Noiseless attenuation push button
- 5 High-pass filter indications
- 6 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.

Attenuation indications ③

• The currently active attenuation setting is illuminated.

Setting an attenuation level

Attenuation levels can be set by briefly pressing the noiseless attenuation
push button ④. Settings are: off, -10 dB and -20 dB. Attenuation is used
in extremely high SPL environments in order to prevent clipping of the
microphone, mixer and other audio equipment.



LCT 540 Using the mic

High-pass filter indications (5)

• The currently active high-pass setting is illuminated.

Setting a high-pass filter

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

Key-lock function

The noiseless push buttons of the microphone can be locked and unlocked by constantly pressing the key-lock push button ② for more than 2 seconds.

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 ④ 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 around half a second to adjust to the new attenuation level.

LCT 540 Using the mic

Clipping history

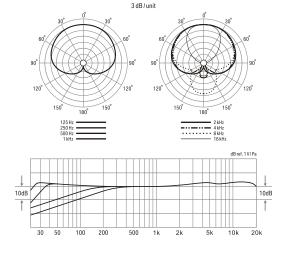
Checking the clipping history lets you know if the microphone had experienced clipping in the past.

The microphone displays the clipping history after constantly pressing the high-pass push button (a) for more than 2 seconds. When in clipping history mode the status indicator (1) flashes red and white in an alternating sequence the high-pass indications (5) are not illuminated. Clipping history mode provides information and works according to the rules listed below:

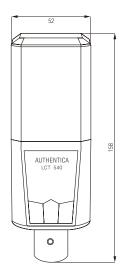
- The last manually set attenuation level is indicated by a constantly illuminated attenuation LED.
- If clipping has occurred in the past the next higher attenuation LED will flash.
- The clipping history information can only be accessed once. Clipping information will be deleted after leaving this mode by constantly pressing the high-pass push button

 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



Dimension



Tech data

 Acoustical operating principle: pressure gradient transducer, Preattenuation pad: 10 dB, 20 dB switchable externally polarized Bass cut filter slope: 12 dB / octave at 40 Hz Transducer Ø: 25.4 mm 6 dB / octave at 300 Hz 1 inch Rated impedance: < 150 ohms Directional pattern: cardioid Rated load impedance: > 1,000 ohms Frequency range: 20 ... 20,000 Hz Supply voltage: 48 V +/- 4 V (IEC 61938) Sensitivity: 16 mV / Pa (-36 dBV) Current consumption: 5.1 mA (IEC 61938) Signal/noise ratio: 86 dB-A Connector: gold plated 3-pin XLR 158 x 52 x 36 mm Equivalent noise level: 8 dB-A (IEC 61672-1) Dimension: • Dynamic range of mic. amp.: 135 dB-A 6.22 x 2.04 x 1.42 inch Max. SPL for 0.5% THD: 143 dB, 0 dB preattenuation Net weight: 425 a 153 dB, 10 dB preattenuation 14.9 07.

163 dB, 20 dB preattenuation

LCT 540

Accessories









Alu-case

LCT 540 Cautions



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.

LCT 540 Warranty

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.

Certain products manufactured by LEWITT GmbH feature a limited five-year warranty. For this five-year warranty the same conditions as listed for the two-year warranty are applicable.

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

LCT 540

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LEWITT GmbH declares under its sole responsibility that LCT 540 complies with the European directive 2004/108/EC. The product has been tested according to harmonized European standards:

EN 55013:2001+A1:2003+A2:2006

EN 55020:2007

EN 61000-3-2:2006

EN 61000-3-3:1995+A1:2001+A2:2005

Product testing was carried out by TIMCO Engineering Inc., notified body number 1177.

LEWITT GmbH hereby declares under its sole responsibility that LCT 540 has been tested and conforms to the following FCC and ANSI standards: FCC Part 15:2008 Section 15:109

FUG Part 15:2008 Section 15.10

ANSI C63.4:2003

 $Product\ testing\ was\ carried\ out\ by\ INTERTEK\ Testing\ Services\ Shenzhen\ Ltd.$



WEEE note: Electronic waste has to be collected separately. Please bring this device to a local recycling center at the end of its life time.

Manufacturers signature:

Date: 18th November 2010 Place: Vienna, AUSTRIA

DI Roman Perschon CEO – Lewitt GmbH

Declaration of conformity can be downloaded at www.lewitt-audio.com or obtained from info@lewitt-audio.com.



