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!

The LCT 540 Authentica 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, exceptionally nuanced sonic details and optimizes isolation of the main sound source by rendering off-axis sounds. The LCT features three levels of attenuation and three switchable high-pass filters, 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 round off the features of this exceptional microphone.

Features

- 1-inch dual-system externally biased capsule with an active front and ultra-thin, gold-layered low-mass diaphragm for superior transient response
- Tailored frequency response for rich and authentic sound onstage or in the studio
- Cardioid polar pattern for effective isolation of the main sound source
- Extremely low self-noise of 8 dB and max SPL of 143 dB for an impressive total dynamic range of 135 dB providing a maximum of acoustic presence and clarity
- 3-position switchable pre-attenuation pad (0 dB, 10 dB, and 20 dB) for handling extremely high sound pressure levels and 3-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
- Rugged all-metal construction for reliable performance onstage and in the studio
- Extra-large hexagonal ruthenium-galvanized steel mesh grille provides an open acoustic environment and prevent unwanted internal reflections
- Immune to electromagnetic interference thanks to transformerless preamplifier circuitry
- Corrosion-resistant gold-plated 3-pin XLR output connector
- Comes in a black carrying case; includes LCT 40 SHx shock mount, LCT 40 Wx windshield and DTP 40 Lb artificial leather bag

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

LCT 540

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.
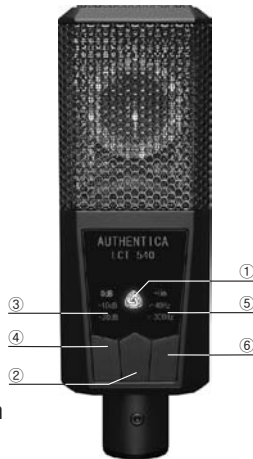
High-pass filter indications ⑤
• The currently active high-pass setting is illuminated.

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.

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 ⑥ 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 ⑥ 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.

LCT 540

Tech graph

Dimensions

LCT 540
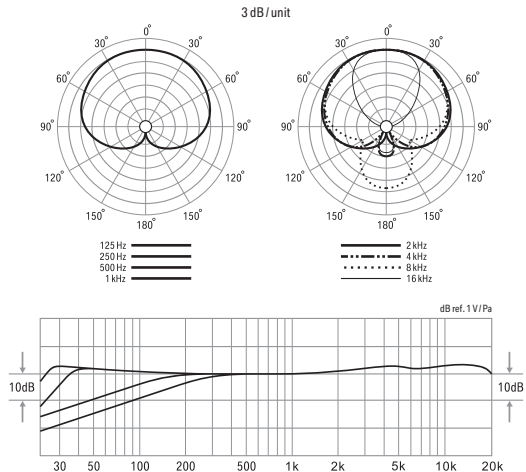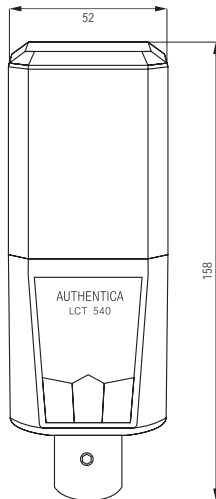
Tech data

- Acoustical operating principle: pressure gradient transducer, externally polarized
- Transducer Ø: 25,4 mm
  1 inch
- Directional pattern: cardioid
- Frequency range: 20 ... 20.000 Hz
- Sensitivity: 16 mV / Pa (-36 dBV)
- Signal / noise ratio: 86 dB-A
- Equivalent noise level: 8 dB-A (IEC 61672-1)
- Dynamic range of mic. amp.: 135 dB-A
- Max. SPL for 0,5 % THD: 143 dB, 0 dB pre-attenuation
  153 dB, 10 dB pre-attenuation
  163 dB, 20 dB pre-attenuation

- Pre-attenuation pad: 10 dB, 20 dB, switchable
- Bass cut filter slope: 12 dB / octave at 40 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: 5,1 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: 425 g
  14,9 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.

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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
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.