



EMPHASIZE
THE
GENUINE
IN
YOUR
SOUND. LCT 940

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!

LCT 940

The product

Sound professionals naturally rely on a set of different high-end microphones in order to get the best out of their sound. But changing microphones and adjusting settings takes valuable time, the creative flow of a session is interrupted. With its new Authentica series flagship LCT 940, LEWITT now introduces a microphone that will revolutionize modern studio recording procedures and help engineers and artists to react more quickly to a desired change of style and sound.

The LCT 940 combines the specific characteristics of a premium large-diaphragm FET condenser microphone and a top-notch tube microphone in one housing. Basically, users can choose between the two main settings "FET" and "Tube".

"Tube" delivers the classic, warm and rich tube sound, while "FET" stands for the clear, exceptionally rich and nuanced sound LEWITT condenser microphones are renowned for. However, the LCT 940 offers another unique feature that true recording enthusiasts will swoon over: As the characteristics of the two main settings can be mixed and merged continuously variable, the LCT 940 opens up huge creative possibilities for artists and producers.

Furthermore, the LCT 940 features a total of nine different polar patterns – our five "standard" polar patterns omnidirectional, cardioid, figure-8, wide- and super-cardioid and four additional intermediate patterns. The microphone features four levels of attenuation and four switchable high-pass filters, LEDs and push buttons for noiseless handling on the PSU. Automatic attenuation and clipping history round off the outstanding feature list of the LCT 940.

Rich in advanced technological features, the LCT 940 opens up a new dimension of sound reproduction in demanding professional studio applications. Its unrivaled set of qualities makes this microphone a must-have for recording pros who strive for nothing less than perfection.



Features

- Combines the sonic characteristics of a tube and a FET mic in one single housing for maximum creative freedom and an undisturbed workflow
- Continuously variable switching and merging of tube and FET sound via rotating potentiometer
- 1-inch externally biased, dual-system capsule with ultra-thin, gold-layered low-mass diaphragms combined with a dual triode tube ensures accurate transient response while providing smooth, warm and airy tube sound
- Nine consistent directional characteristics – cardioid, omni-directional, figure-8, broad cardioid, supercardioid and four intermediate patterns – for maximum flexibility in a wide variety of recording applications
- Superior dynamic range of 128 dB-A (Tube) / 135 dB-A (FET) and exceptionally low self-noise of 12 dB-A (Tube) / 8 dB-A (FET) for ear-catching realism and distortion-free sonic depth
- 4-position switchable pre-attenuation pad (0 dB, 6 dB, 12 dB and 18 dB) for handling extremely high sound pressure levels and 4-position high-pass filter
- Illuminated user interface and jog dials for easy handling even in dark environments
- Noiseless pushbuttons for quick and easy attenuation and HPF selection
- Unique features like clipping history and automatic attenuation provide error-free studio recording and unparalleled ease of use
- Solid die-cast metal body with a stylish, oversized tube inspection window specially coated for maximum protection against electromagnetic interference
- Custom PSU 940 power supply unit with sturdy full-metal housing and brushed, anodized black aluminum front
- Extra-large hexagonal ruthenium-galvanized steel mesh grille provides an open acoustic environment and prevents unwanted internal reflections
- Corrosion-resistant gold-plated 3-pin XLR output connector
- Comes in a black carrying case; includes PSU 940 power supply unit with sturdy full-metal housing and milled, anodized black aluminum front, LCT 40 SHxx shock mount, LCT 40 Tr audio cable with gold-plated 11-pin XLR connectors and LCT 40 Wxx windscreen

Top applications

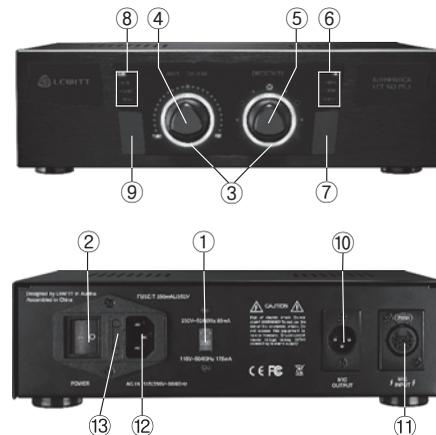
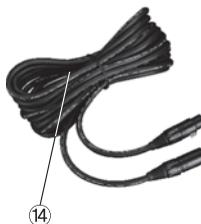
- Lead and background vocals
- Acoustic instruments // piano, guitar, drums, percussion, strings...
- Wind instruments // brass and woodwinds...
- Demanding studio applications

User-interface

- | | | | |
|--|-------------------------------------|---|----------------------|
| ① Mains voltage selection switch | ⑤ Polar pattern selection, jog-dial | ⑨ Noiseless pre-attenuation push button | ⑬ Fuse |
| ② On / Off switch | ⑥ High-pass filter indications | ⑩ 3-pin XLR socket | ⑭ 11-pin audio cable |
| ③ Status indicator | ⑦ Noiseless high-pass filter | ⑪ 11-pin XLR socket | |
| ④ Stageless amplification selection, rotary knob | push button | ⑫ Mains socket | |
| | ⑧ Pre-attenuation indications | | |

Getting started

- Make sure that the Mains voltage selection ① switch is set to the correct position.
- Use the 11-pin audio cable to connect the microphone with the 11-pin XLR socket ⑪ on the backside of the PSU.
- Use the 3-pin audio cable to connect your mixer with the 3-pin XLR socket ⑩ on the backside of the PSU.
- Put the LCT 940 into operation by activating the On / Off switch ② on the backside of the PSU.



Status indicator ③

- 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.

Stageless Amplification selection ④

- Turn the rotary knob and select the desired amplification. Clean “FET” and warm “TUBE” amplification is available on the far right and left position, a mixture of the two in between.
- The actual amplification mix is indicated by the red illuminated dot or red illuminated “FET” or “TUBE” indication.

Polar pattern selection ⑤

- The currently active polar pattern is illuminated in white. If an intermedia polar pattern is selected the neighboring polar pattern are illuminated in red as well.
- Select up to nine different directivity characteristics by briefly turning the jog-dial to the right or left.

High-pass filter indications ⑥

- The currently active high-pass filter setting is illuminated in white.

Setting a high-pass filter ⑦

- High-pass filters can be set by briefly pressing the noiseless high-pass filter push button ⑦. Settings are: linear, 12 dB / octave at 40 Hz, 6 dB / octave at 150 Hz and 6 dB / octave at 300 Hz.

Pre-attenuation indications ⑧

- The currently active pre-attenuation setting is illuminated in white.

Setting a pre-attenuation level ⑨

- Pre-attenuation levels can be set by briefly pressing the noiseless pre-attenuation push button ⑨. Settings are: 0 dB, -6 dB, -12 dB and -18 dB. Pre-attenuation is used in extremely high SPL environments in order to prevent clipping of the microphone, mixer and other audio equipment.

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 pre-attenuation push button ⑨ for more than 2 seconds. The microphone is set to automatic attenuation mode if the status indicator ③ is illuminated in red. Please note that the microphone will need one second to adjust to the new attenuation level in the event of too high sound pressure levels.

Key-lock function

- The noiseless push buttons ⑦ and ⑨ as well as the polar pattern jog dial ⑤ can be locked by pressing the jog dial knob ⑤ for more than 2 seconds.

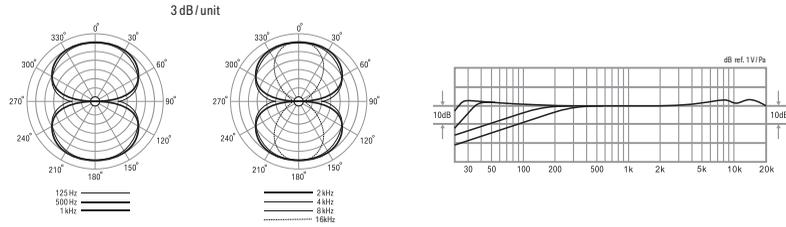
Clipping history

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 two seconds. When in clipping history mode the status indicator ③ flashes red and white in an alternating sequence, the polar pattern indications as well as the high-pass indications ⑥ are not illuminated. Clipping history mode provides information and works according to the rules listed below:

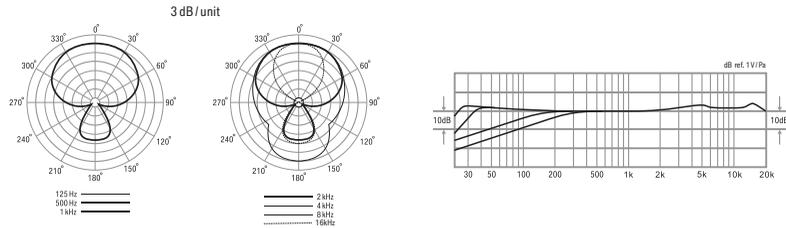
- The last manually set attenuation level is indicated by a constantly illuminated attenuation LED. If clipping has occurred in the past this LED will flash.
- The clipping history information can only be accessed once. Clipping information will be deleted after leaving this mode by constantly pressing the high-pass filter push button ⑦ for more than two 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

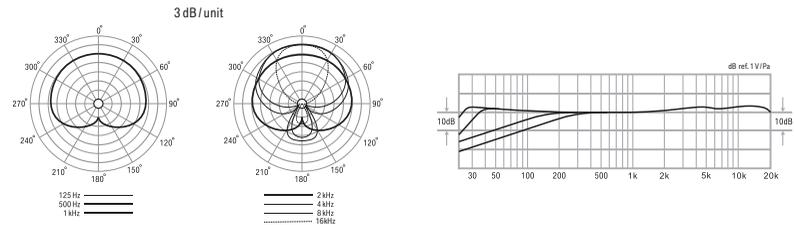
Figure-8



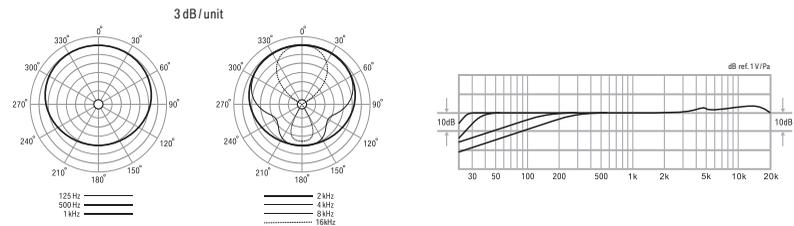
Super-Cardioid



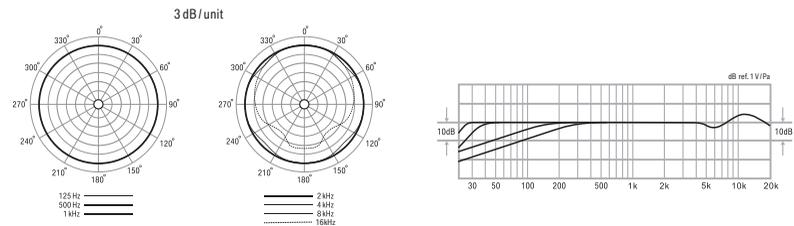
Cardioid



Broad-Cardioid



Omni-Directional



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 and four additional intermediate pattern
selectable on remote control
- Frequency range: 20 ... 20.000 Hz
- Sensitivity: 23 mV / Pa (-33 dBV), cardioid
20 mV / Pa (-34 dBV), omni
23 mV / Pa (-33 dBV), figure-8
- Signal / noise ratio (FET) : 86 dB-A
- Signal / noise ratio (Tube) : 82 dB-A
- Equivalent noise level (FET) : 8 dB-A, cardioid (IEC 61672-1)
9 dB-A, omni (IEC 61672-1)
8 dB-A, figure-8 (IEC 61672-1)
- Equivalent noise level (Tube) : 12 dB-A, cardioid (IEC 61672-1)
13 dB-A, omni (IEC 61672-1)
12 dB-A, figure-8 (IEC 61672-1)
- Dynamic range of FET mic. amp.: 135 dB-A
- Dynamic range of Tube mic. amp.: 128 dB-A
- Max. SPL for 0,5 % THD (FET): 143 dB, 0 dB pre-attenuation
149 dB, 6 dB pre-attenuation
155 dB, 12 dB pre-attenuation
161 dB, 18 dB pre-attenuation
- Max. SPL for 0,5 % THD (Tube): 140 dB, 0 dB pre-attenuation
146 dB, 6 dB pre-attenuation
152 dB, 12 dB pre-attenuation
158 dB, 18 dB pre-attenuation

LCT 940

Tech data

- | | | | |
|--------------------------|---|---------------------|---|
| ▪ Pre-attenuation pad: | 6 dB, 12 dB, 18 dB, switchable
selectable on remote control | ▪ Dimensions (Mic): | 192 x 60 x 46 mm
7,5 x 2,4 x 1,8 inch |
| ▪ Bass cut filter slope: | 12 dB / octave at 40 Hz
6 dB / octave at 150 Hz
6 dB / octave at 300 Hz
selectable on remote control | ▪ Dimensions (PSU): | 250 x 150 x 70 mm
9,8 x 5,9 x 2,8 inch |
| ▪ Rated impedance: | < 200 ohms | ▪ Net weight (Mic): | 662 g
23,3 oz |
| ▪ Rated load impedance: | > 1.000 ohms | ▪ Net weight (PSU): | 1930 g
68,1 oz |
| ▪ Supply voltage: | custom power supply unit,
230 V, 50 Hz
110 V, 60 Hz | | |
| ▪ Current consumption: | 170 mA | | |
| ▪ Connector: | gold plated 11-pin XLR | | |
| ▪ Cable: | 8 m (26 ft)
11-pin audio cable
oxygen-free copper | | |

Accessories



LCT 40 Wxx



LCT 40 SHxx



LCT 40 Trs



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.

LCT 940

Regulatory information



LEWITT GmbH declares under its sole responsibility that LCT 940 complies with the European directive 2004/108/EC and 2006/95/EC. The product has been tested according to harmonized European standards:

EN 55022: 2010

EN 55024: 2010

EN 61000-3-2: 2006 + A2: 2009

EN 61000-3-3: 2008

EN 60950-1:2006 + A11:2009 + A1:2010 + A12:2011

Product testing was carried out by SEM. Test Compliance Service Co., Ltd. notified body number SEM11124587 / SEM11126875.

LEWITT GmbH hereby declares under its sole responsibility that LCT 940 has been tested and conforms to the following FCC and ANSI standards:

FCC Part 15B Section 15.205, 15.107 and 15.109

ANSI C63.4-2009

Product testing was carried out by SEM. Test Compliance Service Co., 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

DI Roman Perschon

Place: Vienna, AUSTRIA

CEO – Lewitt GmbH

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



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