www.lewitt-audio.com

EMPHASIZE
THE
GENUINE
IN
YOUR
SOUND. LCT 840

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 840

LEWITT's LCT 840 is a premium-class externally polarized dual-diaphragm tube microphone designed to excel in a variety of demanding applications. Equipped with a precision-engineered 1-inch capsule, the LCT 840 stands for exceptionally warm and classic, solid vintage sound. Perfectly suited for miking vocals and instruments, this rugged multi-purpose microphone allows for highly nuanced and authentic sound reproduction in the studio and even on stage. Five switchable polar patterns – omni-directional, cardioid, figure-8, wide-cardioid and super-cardioid – make the LCT 840 a highly versatile tool for professional audio engineers and performers looking for true and authentic tube sound.

Like all LEWITT mics, the LCT 840 stands out for its extremely low self-noise of 9 dB and effective rejection of off-axis sounds. The microphone features three levels of attenuation and three switchable high-pass filters, LEDs and pushbuttons for noiseless handling on the power supply unit (PSU).

Apart from user-friendly operating controls and advanced technological features so essential to memorable recordings, the LCT 840 also makes an eye-catching design statement: The microphone is equipped with a plexiglass inspection window on the front side of the body, so the illuminated tube itself is fully exposed. The inside window surface is coated with a highly conductive, yet transparent film preventing electromagnetic interference.

In short: The unique combination of innovative design, high-end technology and tube-typical sound quality ensures magic takes.

Features

- Ultra-thin 1-inch externally biased, gold-layered low-mass diaphragms combined with a dual triode tube ensures accurate transient response while providing smooth, warm and airy tube sound
- Five consistent directional characteristics – cardioid, omnidirectional, figure-8, broad cardioid and supercardioid – offer maximum flexibility
- Superior dynamic range of 130 dB-A (Tube) and extremely low self-noise of 9 dB-A for ear-catching realism and distortion-free sonic depth
- 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 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 840 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 case; includes PSU 840 power supply unit, LCT 40 SHxx shock mount, LCT 40 Tr audio cable with gold-plated 11-pin XLR connectors and LCT 40 Wxx windscreen

Top applications

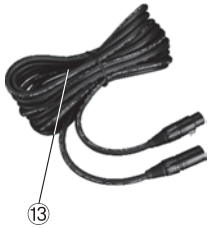
- Lead and background vocals
- Acoustic instruments // piano, guitar, drums, percussion, strings...
- Wind instruments // brass and woodwinds...
- Demanding studio applications

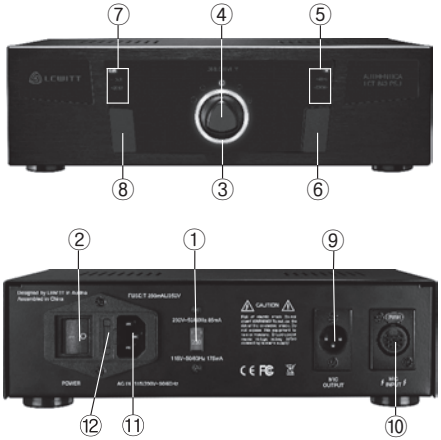
User-interface

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

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 840 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
- he microphone indicates the clipping history if the status indicator flashes red and white in an alternating sequence.

Polar pattern selection ④

- The currently active polar pattern is illuminated in white.
- Select up to five different directivity characteristics by briefly turning the jog-dial to the right or left.

High pass filter indications ⑤

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

Setting a high-pass filter ⑥

- High-pass filters can be set by briefly pressing the noiseless high-pass filter push button ⑥.

  Settings are: linear, 12 dB / octave at 40 Hz and 6 dB / octave at 300 Hz.

Pre-attenuation indications ⑦

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

Setting a pre-attenuation level ⑧

- Pre-attenuation levels can be set by briefly pressing the noiseless pre-attenuationpush button ⑨. Settings are: 0 dB, -10 dB and 20 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-attenaution push button ⑧ 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 ⑥ and ⑧ as well as the polar pattern jog dial ④ can be locked by pressing the jog dial knob ④ for more than 2 seconds.

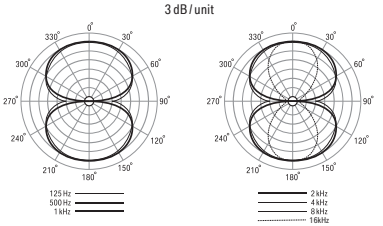
Clipping history

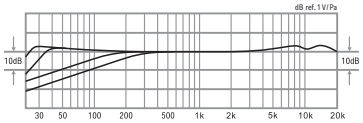
Checking the clipping history lets you know if the microphone had experienced clipping in the past. The microphone displays the clipping history after constantly pressing the high-pass push button ⑥ for more than two seconds. When in clipping history mode the status indicator ② flashes red and white in an alternating sequence, the polar pattern indications as well as 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 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 ⑥ 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.

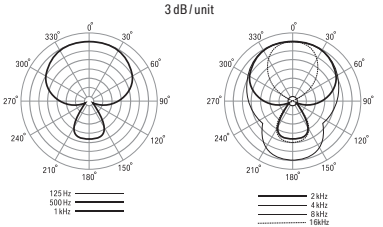
Tech graph

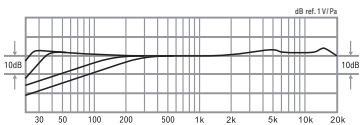
Figure-8





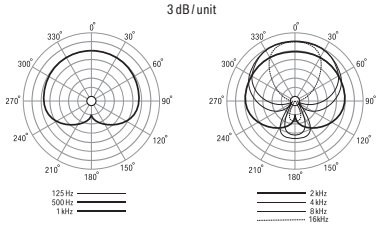
Super-Cardioid

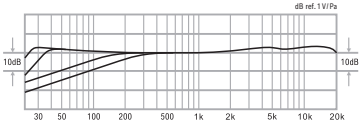




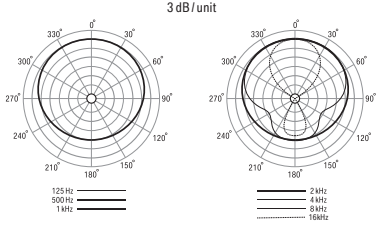
LCT 840

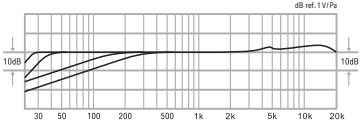
Cardioid



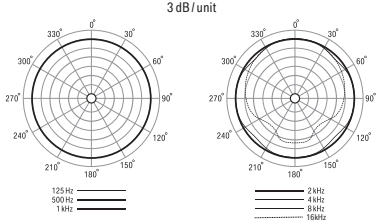


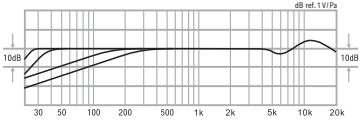
Broad-Cardioid





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
  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 : 85 dB-A
- Equivalent noise level (IEC 61672-1) : 9 dB-A, cardioid
  10 dB-A, omni (IEC 61672-1)
  9 dB-A, figure-8 (IEC 61672-1)
- Dynamic range of mic. amp.: 130 dB-A
- Max. SPL for 0,5 % THD: 139 dB, 0 dB pre-attenuation
  149 dB, 10 dB pre-attenuation
  159 dB, 20 dB pre-attenuation
- Pre-attenuation pad: 10 dB
  20 dB
  selectable on remote control
- Bass cut filter slope: 12 dB / octave at 40 Hz
  6 dB / octave at 300 Hz
- Rated impedance: < 200 ohms
- Rated load impedance: > 1.000 ohms

LCT 840

- 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

- Dimensions (Mic): 192 x 60 x 46 mm
  7,5 x 2,4 x 1,8 inch
- Dimensions (PSU): 250 x 150 x 70 mm
  9,8 x 5,9 x 2,8 inch
- Net weight (Mic): 662 g
  23,3 oz
- Net weight (PSU): 1894 g
  66,8 oz

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.

CE

LEWITT GmbH declares under its sole responsibility that LCT 840 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 840 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

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.

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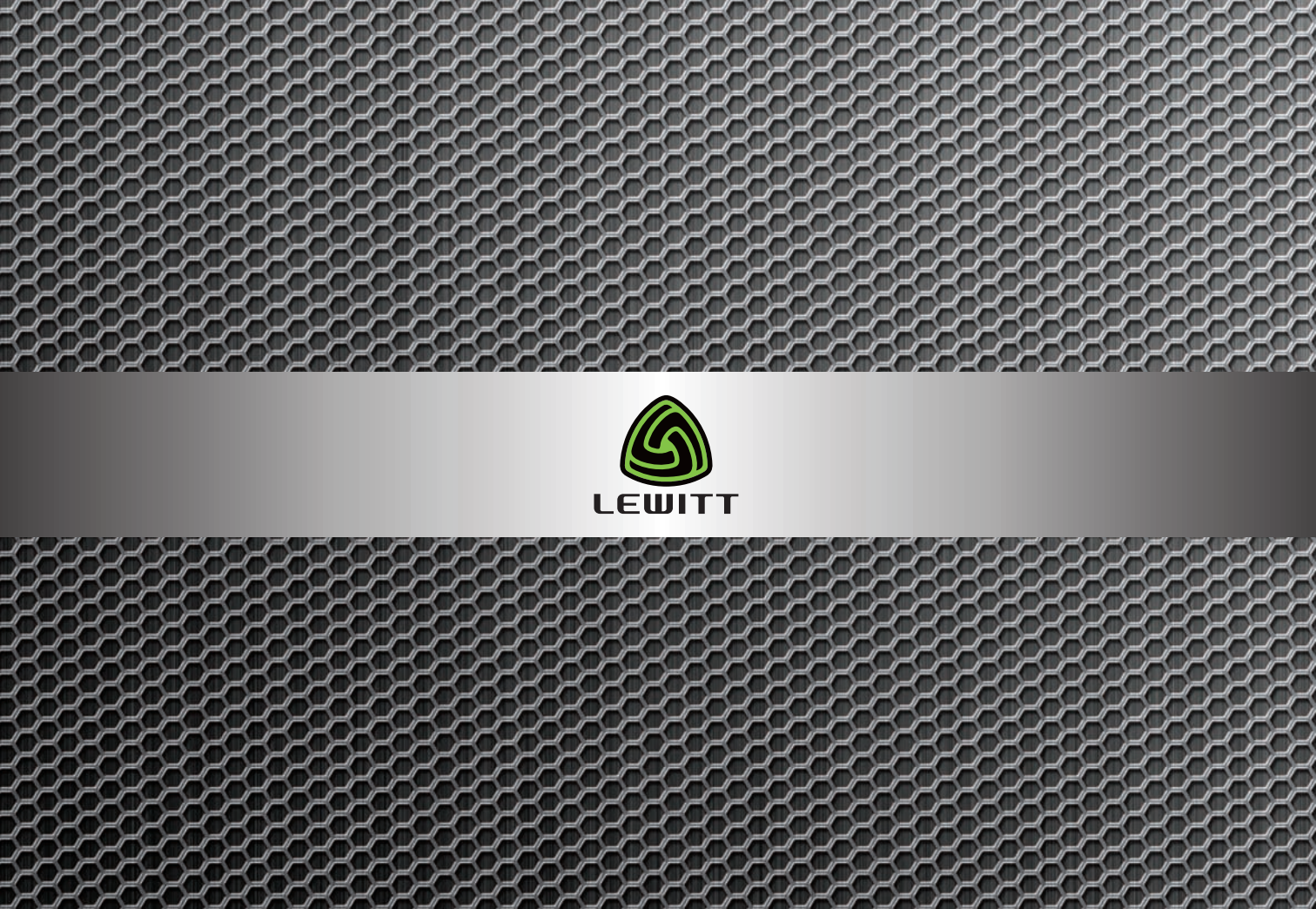
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