

Operating instructions

# DC-196



**Milab**  
SWEDEN

DC-196  
CONDENSER

**Milab**

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Errors excepted, subject to changes.

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### 1. Welcome to Milab Microphones

Thank You for choosing a Milab Microphone!

Milab Microphones has more than 60 years of experience of developing and manufacturing professional microphones for studio and stage. The microphones are well-known and frequently used by conscious and accurate audio professionals all over the world. Milab Microphones are known for the unique sound and design. All microphones are handmade and individually tested with full documentation before shipping. We put an extra effort in high quality and best performance! All microphones are delivered with a lifetime warranty.

### 2. The following items will be included in the delivery:

- 1 pcs of Milab DC-196 with individually plotted frequency curve
- 1 pcs of stand holder
- 1 pcs of windscreen
- 1 pcs of manual

### 3. DC-196 Condenser Microphone Art.No 1133

The DC-196 microphone is designed for professional vocal and instrumental work, both on stage and in studio. The microphone has the rectangular large membrane capsule, which has made Milab studio microphones famous. It has a variable polar pattern, easily adjusted with a knob into 3 positions; Omni, Cardioid and Figure-of-eight. It is also equipped with a -12dB pre-attenuation, which makes the microphone able to take sound pressure levels (SPL) more than 144dB. The body is made of solid brass and it is connected with a standard XLR-contact. The microphones gives a fullbodied, exceptionally clean sound with natural brightness.

Features:

- Variable pattern; Omni, Cardioid, Figure-of-eight
- Rectangular large dual membrane capsule
- Very efficient built-in POP-protection
- Shock absorbing rubber fitted capsule
- 48 V phantom
- -12dB pre-attenuation

#### 4. Connection

The DC-196 can be connected to any mic input, mixer/amplifier, or mic preamp using a standard microphone cable.

The microphone is designed for phantom powering at 48 V (P12, P24, P48, IEC 1938) with positive voltage on the audio lines versus the cable shield.

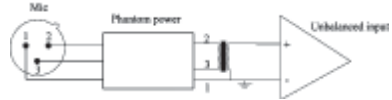
Microphone connection:

- 1 Ground (shield)
- 2 Hot (+ phase)
- 3 Cold (- phase)



When the input device do not have phantom powering, an external power supply has to be connected between the microphone and the input. Be sure that the extra phantom power has a DC-free output against the mixer (like Milab phantom power supply

Art No: 1300), otherwise a RC network has to be incorporated to block the 48 Vdc.



Connecting the microphone to an unbalanced input.



Connecting the microphone to an unbalanced input without any transformer. Pin 2 is the “hot phase“ and should be connected to the input, and pin 3 should be left open.

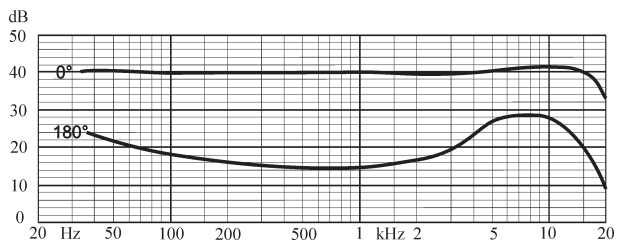
#### 5. Guidelines for Microphone use

- The DC-196 microphone should be aimed with the milab logo towards the sound source. See polar patterns.
- The DC-196 microphone must be placed in a microphone stand holder (enclosed) or in a shock-mount. This microphone is not intended to be used as a handheld.
- When using the microphone close to vocals or other sound source, the proximity effect appear. Proximity effect is experienced like a more powerful bass.
- When using, do not cover the microphone grill with your hand.
- When the microphone is used outdoors, it may be advisable to use the wind-screen to minimize wind noise.
- Protect the microphone from dust and dirt which may affect the membrane.
- The DC-196 is equipped with a pre-attenuation switch. When risk for more than 132 dB SPL. (Sound Pressure Level), set the switch in the -12dB position. It will then take a few minutes (2-5) to stabilize it's settings.
- The microphone should be placed as close to the sound source as possible. Used in vocal applications, unwanted “pop” –sounds can appear. If so, use the windscreen (enclosed) as an external pop-filter.
- Protect the microphone from water, extreme heat and humidity.
- The DC-196 is a multi-purpose microphone with a variable polar pattern. Depending om what type of pattern is suitable for the situation, one of three patterns can be choosed. Firmly turn the knob to set the microphone polar pattern in Cardioid, Omni or Figure-of-eight position.

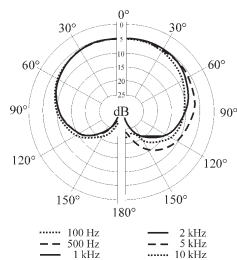
## 6. Frequency response at 1m distance

The frequency response may vary within  $\pm 2,5$  dB of the published graph. Before delivery, each microphone is measured and accompanied with its own graph.

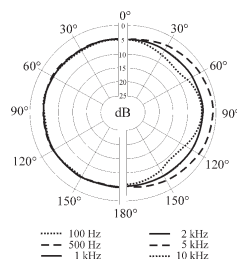
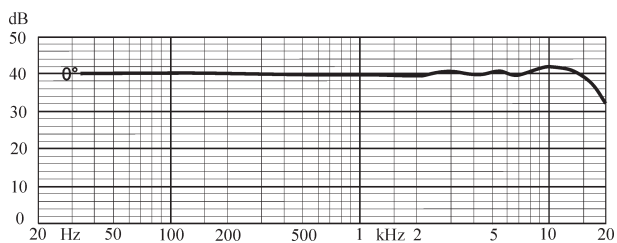
Cardioid



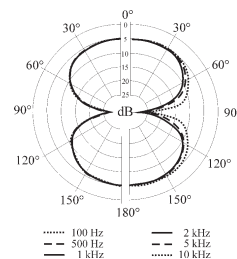
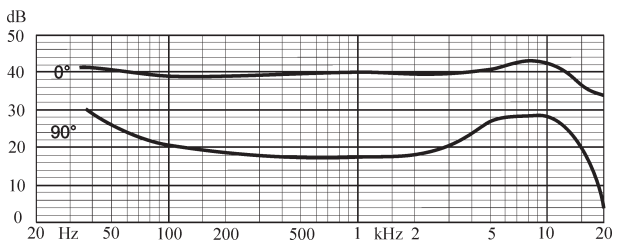
## 7. Polar diagram



Omni



Eight



## 8. Specifications DC-196

Frequency response ( see graph )	20 - 20 000 Hz
Polar pattern	Cardioid, Omni, Figure-of-eight
Pre-attenuation (switchable)	-12 dB
Max. SPL ( 1 % THD at 1 kHz)	132/144 dB
Sensitivity at 1kHz	21,5 mV / Pa $\pm$ 1 dB
A-weighted noise level ( IEC 179-A)	12 dB
Power supply	48 V $\pm$ 4 V phantom
Current consumption	4,2 mA
Output impedance	< 200 $\Omega$
Minimum load impedance	1 k $\Omega$
Connection	3-pin XLR pin 1: ground ( Shield ) pin 2: plus ( Hot ) pin 3: minus ( Cold )
Net weight	240 g
Length	145 mm
Diameter	30 mm

## 9. Declaration of Conformity CE

Milab Microphones AB, declares as it's sole responsibility that the above named product is in compliance with the EMC Directive 89/336/EEC, 92/31/EOF and conform to the requirements of the Harmonized Products Standards EN 55013, EN 55020, IEC 803-1. The aforementioned products may only be used for audio purposes, and in configurations approved by Milab Microphones AB

## 10. Service & Cleaning

All service and repair of the microphone should be performed by authorized service personnel. After frequent use in different environments and by different hands, all metal surfaces may be safely cleaned from time to time with alcohol or methylated spirits.

**CAUTION!** Protect the membrane when cleaning.

## 11. Lifetime Warranty

Milab introduced a lifetime warranty for all microphones manufactured in 1997 and later. Your microphone is covered by our lifetime warranty. If your microphone breaks down, contact the place where you purchased it, either they will repair it or send it to our service department in Sweden. We will immediately start a fault detecting and a guarantee inspection. Not valid for 2:nd hand purchased products.

The warranty does not cover carelessness as physical negligence or electrical overload etc. Users of this product must accept the following disclaimer of warranty.

This product is supplied "as is." Milab Microphones disclaims all warranties, expressed or implied, including --without limitation-- the warranties of merchantability and of fitness for any purpose. Milab Microphones and the user are aware that functional defects in the products cannot be totally ruled out, in the present state of technical knowledge, even if the very greatest care is taken. Milab Microphones assumes no liability for damages, direct or consequential, which may result from the use of the supplied product.

Under no circumstances and under no legal theory, tort, contract, or otherwise, shall Milab Microphones be held liable to you or any other person for any indirect, special, incidental, or consequential damages of any kind, including, without limitation, damages for loss of goodwill, work stoppage, computer or equipment failure or malfunction, or any and all other commercial damages or losses. This limitation of liability shall not apply to liability for death or personal injury to the extent applicable law prohibits such limitation. Furthermore, some jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, so this limitation and exclusion may not apply to you.

This User Agreement shall be exclusively subject to the laws of Sweden.

This is the entire agreement between you and Milab Microphones, which supersedes any prior agreement or understanding, whether written or oral, relating to the subject matter of this product. If a fault of the microphone is referred to the Lifetime Warranty, please fill in the form below and send it with the microphone to your service- or repair shop.

Type of microphone: .....

Serial number: .....

Date of purchase: .....

Purchased from: .....  
(Shop/Dealer/Distributor)

Fault description: .....

Your Name: .....

Company (i.e.): .....

Address: .....

City: .....

Country: .....

Telephone: .....

Fax: .....

Mail address: .....



Phantom Power  
Supply  
art.no: 1300



Windscreen  
art.no: 3403



Stand holder  
art.no: 3127



Shockmount  
art.no: 3227



Mahogany case  
art.no: 1004



Pop shield  
art.no: 3500

