PML DS 70 Condenser Microphone

MULTI-PURPOSE STEREO MICROPHONE

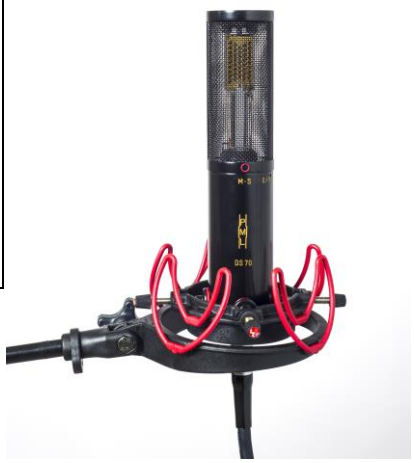
This microphone offers stereo recording in different modes. It contains two rectangular dual membrane capsules mounted one above the other 90 degrees apart. The microphone is equipped with the legendary Pearl 2800 capsules, ensuring a very flat and resonance-free frequency response that extends deep into the lower frequencies and high into the upper frequencies.
The DS 70 is very versatile in many different recording situations. It is a natural choice for the concert hall yet just as well suited for church organs. Success is guaranteed when recording small groups such as a string quartet. The microphone is finished in black ED-lacquer.
For X-Y recording, simply turn the microphone and direct the engraved X-Y sign towards the centre of the sound field.
For M-S recording, there is an engraved M-S sign to be used in the same way. The required microphone pattern is chosen at the console or in the DAW.
Each capsule provides 180 degrees coincident stereo. The operator decides how to use the signals, either cardioid, figure of eight, omni-directional, X-Y, M-S patterns or Blumlein. Using all four channels allows the DS 70 to be used as a surround microphone
The microphone is connected by a special cable consisting of a 10-pin Lemo at the microphone end and a four way splitter terminating in 3-pin XLR´s to the console. The four directions are highlighted with colour symbols corresponding to the same colour symbols on the splitter box. The microphone is phantom powered. A red LED shows that power is on. The pre-amplifier has four output channels, one for each cardioid membrane, connected via a 10 pin Lemo plug.
The DS 70, complete with a Rycote elastic suspension and cable, comes in an aluminium flight case.

Accessories:

Stereo cable 10-4x3/10:	10 metres 8 core cable incl. 10 terms Lemo plug for the microphone and a four way splitter termination in 3-pin XLR´s to the console.
Shockmount USM-L:	Elastic suspension to prevent the microphone from mechanical vibrations. Incl. tilting 3/8” female thread.
Aluminium case:	Ample space for microphone, cable and Shockmount.

Specification:

Polar pattern:	Multipattern (4 cardioids)
Sensitivity:	20 mV/Pa
Frequency response:	20 Hz - 25 kHz
Impedance:	100 ohm
Operating voltage:	48 Volts
Rec. min.load imp.:	1 Kohms
Current consumption:	5,5 mA
Self noise:	14 dBA
Max SPL:	126 dB
Dimensions:	195 x ∅42 mm
Weight:	470 grams

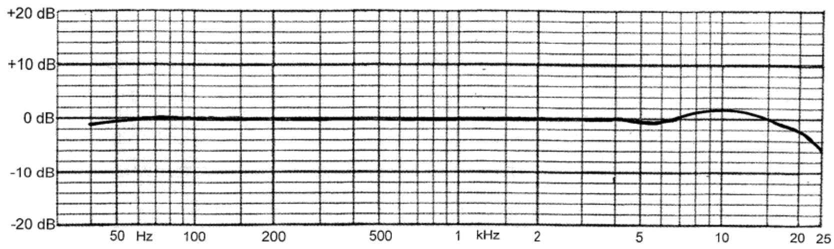


Stereo cable 10-4x3/10

RoHS Compliant
Directive 2002/95/EC

Milab Microphones AB
N. Strandgatan 4, Helsingborg, SWEDEN
Phone: +46 (0)42 38 16 20
E-mail: pearl@milabmic.com
www.milabmic.com

DS 70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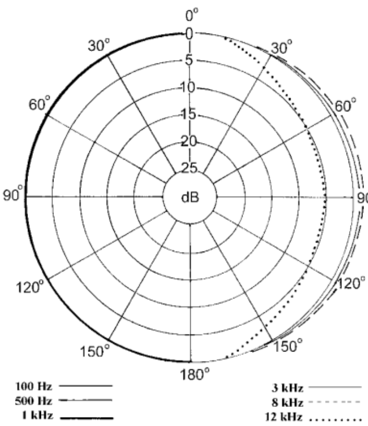
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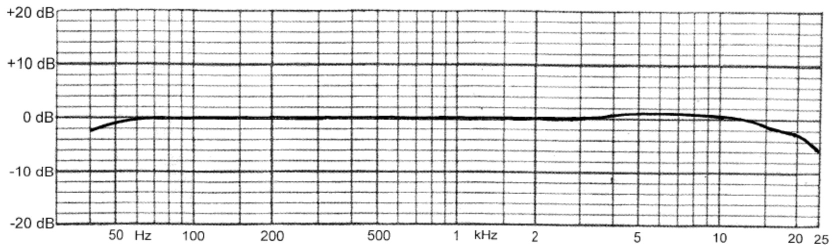
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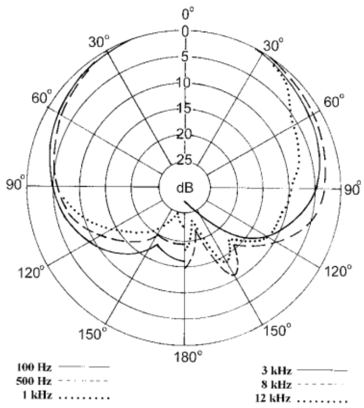
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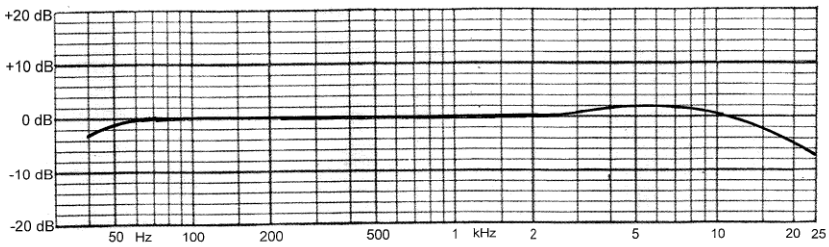
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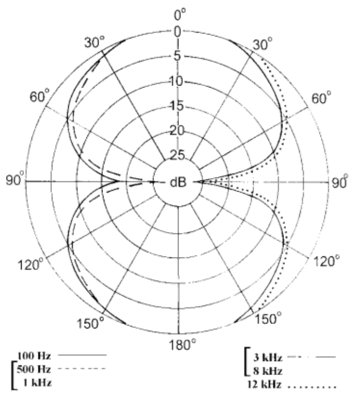
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Multi-Purpose Microphone Pearl DS 70

Directions for use.

How to achieve different patterns for the DS 70 microphones.

All patterns have to be selected at the console or in the DAW. There are no switches on the microphone. Each capsule has two cardioid patterns, one for each membrane, 180 degrees apart. By using phase shift and addition at the console, different recording patterns can be achieved.

1. If the signals from the membranes of one capsule are added for a mono signal, the recording characteristic becomes omni directional.
2. If the signals are added and one of them is phase inverted, the recording characteristic becomes figure of eight.
3. By using the faders, all patterns in between can be obtained. Although there are only two dual membrane capsules, four cardioid patterns are available. These four cardioids, 90 degrees apart from each other, can be used simultaneously or independent of each other for instance as the basis for a surround 5.1 recording.

Important.

1. The microphone must be phantom powered.
2. The two Red Cables to the top capsule must always be connected to secure polarization voltage.
3. If only one capsule is to be used for cardioid, figure of eight or omni, then the top capsule has to be connected.
4. Once the top capsule is connected with both plugs then either of the bottom capsules can be used by connect to phantom power supply.

Stereo modes.

1. M&S recording.

All plugs must be connected. Turn the microphone and direct the engraved sign to the centre of the sound field. The front membrane of the top capsule is the "M" channel. Use it as a cardioid (most common) or add a signal from the opposite membrane, (to record the audience for example).

The bottom capsule has to be mixed to figure of eight.

Cable connections: Top = Red cable and red mark on the microphone= “M” (Cardioid.)
Bottom = Yellow cables and Yellow/Blue marks on the microphone=“S” (fig. of eight)

N.B.: Important, point two above

2. X/Y recording.

Connect both plugs from the top capsule and at least one from the bottom capsule. Point the X/Y sign to the centre of the sound field. Use one cardioid signal from each capsule, 90 degrees angle.

Cable connections: Top = Red cable and Red Mark on the microphone = "X" (cardioid)
Bottom = Yellow cable and Yellow Mark on the microphone = "Y" (Cardioid)

N.B.: Important point two above

3. Blumlein recording.

Point the microphone as X/Y above. Connect all plugs and mix both capsules to figure of eight.

Cable connections: Top = Red Cables and Red/White Marks on the microphone. (Figure of eight)
Bottom = Yellow cables and Yellow/Blue Marks on the microphone. (Figure of eight)

Microphone cable.

The engraved marks on the cable splitter box (DS 70 Cable 10-4x3) refers to the same marks on the microphone.

Four 3-pin XLR male connectors