Microphones

PZM`s

Measurement

Goosenecks

Large diaphragms

Small diaphragms

Preamps

Capsules

Discs

Accessories

Live dynamics

Headset

state of the art microphones
handmade in Germany

10 / 2002 edition

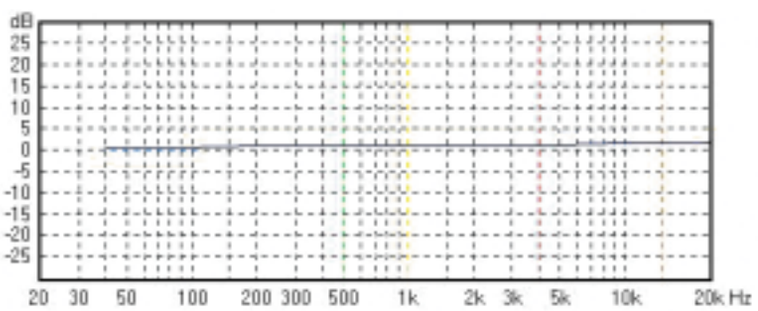
MBHO GmbH Im Valtert 39 D - 74847 Obrigheim phone: +49 6261 7970 fax: +49 6261 7110
www.mbho.de e-mail: info@mbho.de

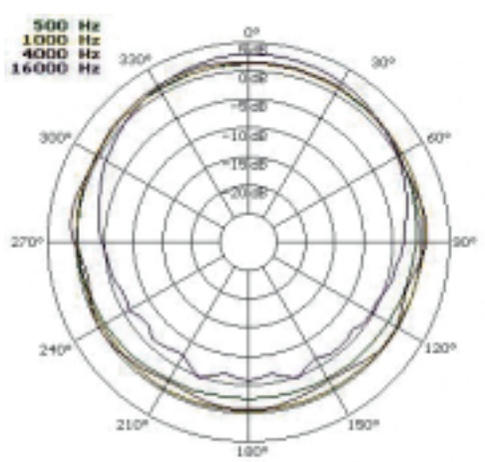
MBNM 550 EL

electret condenser microphone

measurement type

Primarily designed for calibration purposes, the MBNM 550 EL is an electret omni with superb linearity characteristics. As it is a neutral (+ 1 or - 0 dB) microphone with response at the tip nearly matching its response at the side or back, many prefer utilizing this microphone to minimize sound balance problems while recording solo instruments or voices in the near field. The capsule measures only 6 mm and works well with voltages from 16 - 48 V. Each MBNM 550 EL microphone is supplied with an individual test chart.





No. 92 - 5500

Tip:
- measurements
- percussion
- guitar
- piano

specifications

frequency response	10 - 20.000 Hz
sensitivity of field idling	0,6 mV/µbar
sensitivity of field idling with 1 kΩ at 1 kHz	6 mV/µbar
signal to noise ratio rated at 1 Pa CCIR	64 dB
equivalent SPL rated at CCIR	30 dB
max. spl at 1 kΩ	126 dB
electrical impedance	500 Ω
size	ø 21 x 190 mm
connector	XLR
phantom power / feed current	16 - 48 V / 5,5 mA

Each MBNM 550 EL is supplied in a vintage style wood box.

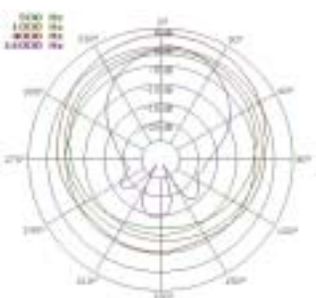
MBHO GmbH Im Valtert 39 D-74847 Obrigheim phone: +49 6261 7970 fax: - 7110 e-mail: info@mbho.de

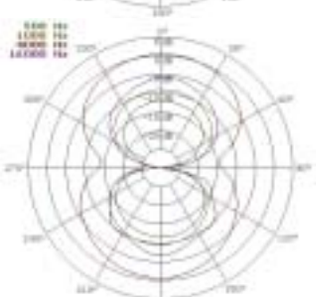
MBNM 608

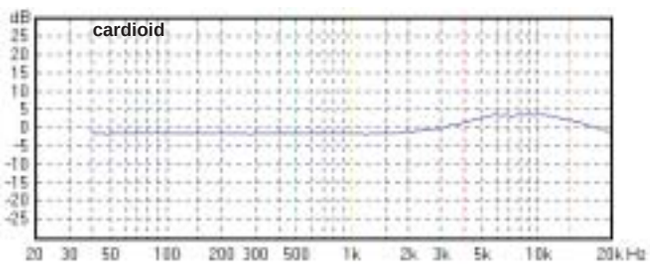
triple patterned condenser large diaphragm

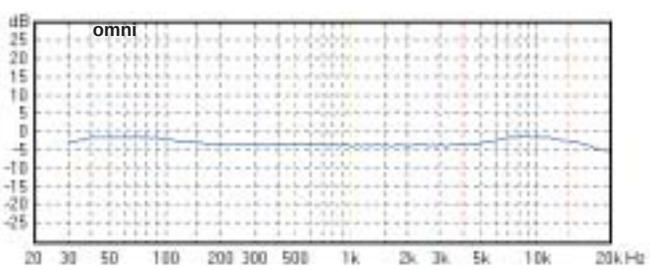
FIXED CAPSULE

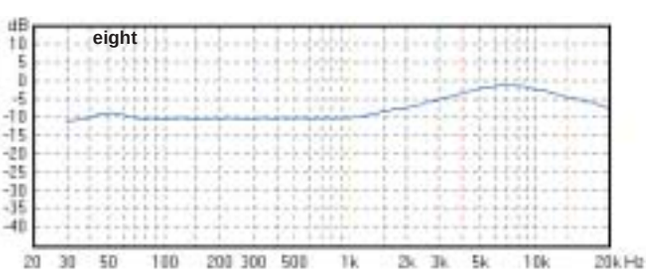
Our large diaphragm three pattern is unique in that the vintage “lollipop” dual gold spluttered capsule assembly is coupled to a modern FET body. The precision brass backed diaphragm has the authoritative sonority associated with the massive classics of the past with the advantage of allowing use in areas that the behemoth microphones from yesteryear can only dream getting into. In omni the microphone has an impressive frequency range of 5 - 20.000 Hz, with the addition of accurate renderings of both the cardioid and figure of eight patterns. The precision components that comprise the MBNM 608 have tolerances in the μ-range. It is no wonder that a 40-year history of proven performance stands behind the MBNM 608. For a bigger than life amazing sound look no further!











No. 92 - 6080

Tip:
- Announcements
- Face to face vocals
- General instrument applications

Press: EQ Magazine, MBNM 608: “When the percussionist (who I'd worked with before) played her shaker in front of the MBNM 608, it was the best I had ever heard it”. Steve LaCirra

specifications

polar pattern	omni	cardioid	figure eight
frequency response	5 - 20.000 Hz	10 - 20.000 Hz	40 - 18.000 Hz
sensitivity of field idling	1,0 mV/μbar	1,1 mV/μbar	0,8 mV/μbar
sensitivity of field idling 1 kΩ at 1 kHz	10 mV/Pa	11 mV/Pa	8 mV/Pa
phantom power / feed current		16 - 48 V	/ 4,5 mA
signal to noise ratio rated at 1 Pa CCIR	66 dB	67 dB	65 dB
equivalent SPL rated at CCIR	28 dB	27 dB	29 dB
signal to noise ratio rated at 1 Pa. A	79 dB-A	80 dB-A	78 dB-A
equivalent SPL rated at DIN / IEC	15 dB-A	14 dB-A	16 dB-A
max. spl at 1 kΩ	133 dB	132 dB	132 dB
signal to noise ratio DIN 45405			2,5 μV
electrical impedance	35 Ω	35 Ω	35 Ω
connector	XLR	XLR	XLR

MBHO GmbH Im Valtert 39 D-74847 Obrigheim phone: +49 6261 7970 fax: - 7110 e-mail: info@mbho.de

MBNM 440 + MBNM 410

condenser cardioid + omni - small diaphragm

MBNM 440 + MBNM 410

FIXED CAPSULES

MBNM 440 & MBNM 410

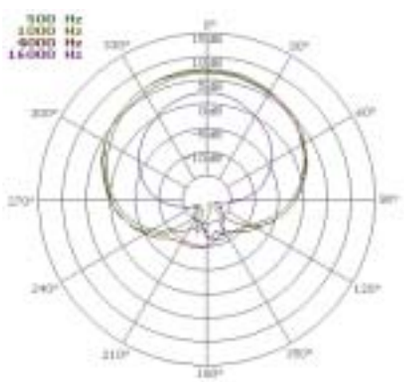
Our compact body (85mm) true condenser type with integrated capsule and amplifier is available in two models, the MBNM 440 cardioid and the MBNM 410 omni. Using advanced SMD technology with an extremely short signal path and low phantom power consumption plus the ability to accept voltages from 22 to 48 V, these microphones are well suited for battery operation. With a non-reflective lacquered mat black housing, precise and stunning sound reproduction is available at an entry-level price.

The MBNM 440 S model features a switchable 10 dB pad and a high pass filter (No. 92 - 4401).

Matched pairs are available!

MBNM 440
No. 92 - 4400

Polar Pattern Graphic MBNM 440

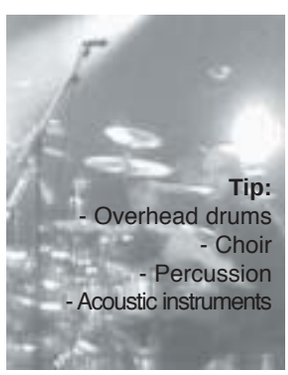


MBNM 410
No. 92 - 4100

Polar Pattern Graphic MBNM 410

specifications

pattern	440 - cardioid	410 - omni
frequency response	40 - 20.000 Hz	15 - 20.000 Hz
sensitivity of field idling	0,7 mV/µbar	0,7 mV/µbar
1 kΩ at 1 kHz	7 mV/Pa	7 mV/Pa
signal to noise ratio		
rated at 1 Pa CCIR	66 dB	66 dB
equivalent SPL rated at CCIR	28 dB	28 dB
signal to noise ratio		
A-rated at 1 Pa.	80 dB-A	80 dB-A
equivalent SPL rated at DIN / IEC	14 dB-A	14 dB-A
max.spl at 1 kΩ	126 dB	126 dB
electrical impedance	200 Ω	200 Ω
phantom power / feed current	22 - 48 V	1,7 mA
sizes without XLR	ø 21 x 85 mm	ø 21 x 85 mm
connectors	XLR	XLR



Tip:
- Overhead drums
- Choir
- Percussion
- Acoustic instruments

MBHO GmbH Im Valtert 39 D-74847 Obrigheim phone: +49 6261 7970 fax: - 7110 e-mail: info@mbho.de

MBNM 630

true condenser PZM

MBNM 630

FIXED CAPSULE

The MBNM 630 is a half-cardioid true condenser PZM in an ultra compact sleek Nextel finish. The two component mat finish is non reflective. In addition to the non-skid pad on the bottom, the unit has a screwable housing made of solid brass. This model exhibits extreme stability and very low noise by any known reference. The MBNM 630 is essential in discrete settings where the highest quality is needed.

No. 92 - 6300

specifications

directional characteristic	half cardioid / axial
signal to noise ratio DIN 45405	1,5 µV
phantom power / feed current	48 V / ca. 1,8 mA
frequency response	20 - 20.000 Hz
sensitivity of field idling	0,7 mV/µbar
at 1 kΩ at 1 kHz	7 mV/Pa
signal to noise ratio rated at 1 Pa. CCIR	74 dB
equivalent SPL rated at DIN / IEC	20 dB
signal to noise ratio rated DIN / IEC at 1 Pa.	87 dB-A
equivalent SPL rated at DIN / IEC	7 dB-A
max. spl at 1 kΩ	130 dB
electrical impedance	200 Ω
connector / size / weight	XLR / ø 70 x 21 mm / 440 g

Tip:
- Opera houses
- Theatrical performances
- Orchestras
- Stage
- Altars
- Broadcast
- News desks
- Conferencing
- MBNM 630 on bass drum = ”magical”

MBM 410 PZ

MBM 410 PZ

Theatre solution

The MBM 410 PZ offers easy handling solutions for smaller venues combined with an truly unbelievable sound image. The MBM 410 PZ proved to be the perfect microphone solution for venues such as theatres and conference rooms which do not employ full time sound engineers and the speaker/artist is often in charge of the sound system. The MBM 410 PZ is securely suspended by three safety mounting clips about 8 -10 feet above the sound source and the audio quality provide by this PZM is purely stunning. One to four different MBM 410 PZ may be used to cover larger recording areas such in as larger stages or conference centres etc. The MBM 410 PZ comes in an inconspicuous gray lacquered finish and incluedes one MBNM 410.

No. 92 - 6410

pattern	410 - omni
frequency response	15 - 20.000 Hz
sensitivity of field idling	0,7 mV/µbar
1 kΩ at 1 kHz	7 mV/Pa
signal to noise ratio	
rated at 1 Pa CCIR	66 dB
equivalent SPL rated at CCIR	28 dB
signal to noise ratio	80 dB
equivalent SPL rated at DIN/IEC	14 dB-A
max.spl at 1 kΩ	126 dB
electrical impedance	200 Ω
phantom power	22 - 48 V
plate size/ weight	800 x 800 mm / 6 kg
connectors	XLR

MBHO GmbH Im Valtert 39 D-74847 Obrigheim phone: +49 6261 7970 fax: - 7110 e-mail: info@mbho.de

MBP 648 PZ

MBP 648 PZ MODULAR SYSTEM

condenser PZM

A pressure zone microphone as pressure gradient receiver is used more and more where a discrete recording is to be made in the highest quality. Direct sound is 3 dB more sensitive than diffused sound (due to pressure duplication the output voltage at a pressure zone greater than 1 m² is increased by 6 dB, the directional diagram is halfed). Thanks to easy exchange of the capsules, the sound engineer has all application possibilities on hand. Using a hypercardiod capsule yields a remarkable range of results which are quite valuable for live broadcasting. Due to the remote impedance transformer, the PZM can use all MBHO capsules optimally and discretely. The microphone is mounted on a marble plate which has a non-slip pad at the back.

No. 92 - 6484

capsule	**KA 400**
characteristic	half cardioid
frequency response	80-20.000 Hz
sensitivity of field idling	1,4 mV/µbar
at 1 kΩ at 1 kHz	14 mV/Pa
signal to noise ratio rated at 1 Pa. CCIR	74 dB
equivalent SPL rated at CCIR	20 dB
signal to noise ratio DIN / IEC rated at 1 Pa.	87 dB-A
equivalent SPL rated DIN / IEC A-rated	7 dB-A
max. spl at 1 kΩ	131 dB
sound source direction	axial
signal to noise ratio at DIN 45405	1,5 µV
phantom power / feed current	48 V / 1,7 mA
electrical impedance	200 Ω
plate size / weight	85 x 85 mm / 170g
connector	XLR

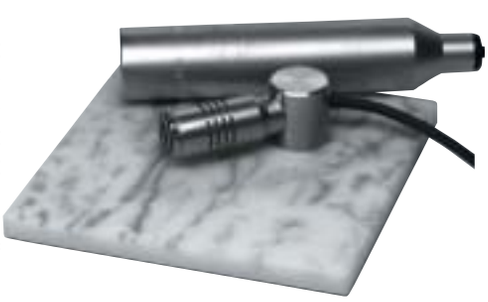
Tip:
live recording in
AB technology at:
- opera houses
- theatrical performances
- orchestras
- conferencing
- broadcast
- prof. recording

MBNM 620 PZ

MBNM 620 PZ FIXED CAPSULE

electret condenser PZM

The little sister of the MBP 648 PZ. This electret condenser microphone uses the same philosophy than the MBP 648. When the pressure zone is large enough, lowest frequencies are brilliantly reproduced. Direct sound is 3 dB more predominant than diffused sound and the directional diagram is halved.
The electric parameters nearly reach those of true condenser microphones. So a very professional and inexpensive solution has been found. This microphone is also mounted on a marble plate which has a non-slip pad at the back.



No. 92 - 6200

pattern / sound source direction	halfcardioid / axial
signal to noise ratio DIN 45405	1,5 µV
phantom power / feed current	48 V / ca. 1,8 mA
frequency response	20 - 20.000 Hz
sensitivity of field idling	1,2 mV/µbar
at 1 kΩ at 1 kHz	12 mV/Pa
signal to noise ratio rated at 1 Pa CCIR	67 dB
equivalent SPL rated at CCIR	27 dB
signal to noise ratio DIN / IEC	79 dB-A
equivalent SPL rated at DIN / IEC	15 dB-A
max. spl at 1 kΩ	133 dB
electrical impedance	200 Ω
connector/ size plate/ weight	XLR / 85 x 85 mm / 150 g

Tip:
live recording in
AB technology at:
- opera houses
- theatrical performances
- orchestras
- conferencing
- broadcast
- prof. recording

MBHO GmbH Im Valtert 39 D-74847 Obrigheim phone: +49 6261 7970 fax: - 7110 e-mail: info@mbho.de

MBNM 621 E PZ

mono PZM electret condenser

With room acoustics in mind, a classic PZM microphone that may be laid on the floor in front of the source was developed. The microphone performs over a wide voltage range (from 10 to 48 V) has a symmetrical design and includes an XLR connector. This product imparts excellent transient response plus extremely wide, smooth frequency response.

Press: DRUM! Magazine June 2001 MBNM 622:
"It (MBNM 622) was pretty incredible." K. Stackpole

No. 92 - 6210

MBNM 621 FIXED CAPSULE

specifications

frequency response	10 - 26.000 Hz
directional characteristic	omni-directional
sensitivity of field idling 1 kΩ at 1 kHz	5 mV / Pa
electrical impedance	200 Ω
nominal load impedance	≥ 800 Ω
max. spl - 0,5 % THD at 1 kΩ	130 dB
phantom power DIN 45596	16 - 48 V
feed current	0,5 mA
connector XLR DIN 45599	Pin 1 shield, Pin 2+, Pin 3-

Tip:
- Round table
- Stereo pickup
- Multi-mic pickup

MBNM 622 E PZ

stereo PZM electret condenser

An MBHO original, the MBNM 622 PZM is based on the Jecklin disc. The Jecklin disc provides a natural stereophony, combining the hemispherical attributes of the planer (PZM). The MBNM 622 has become a standard for recording high quality samples. In many cases this stereo PZM can replace the need for conventional microphones. Voltages from 10 to 48 V are accommodated with XLR connectors on each output. Performance that truly belies the entry-level price, point and shoot!

No. 92 - 6220

MBNM 622 FIXED CAPSULE

specifications

frequency response	10 - 26.000 Hz
directional characteristic	omni-directional
sensitivity of field idling 1 kΩ at 1 kHz	5 mV / Pa
electrical impedance	200 Ω
nominal load impedance	≥ 800 Ω
max. spl - 0,5 % THD at 1 kΩ	130 dB
phantom power DIN 45596	16 - 48 V
feed current	2 x 0,5 mA
connector XLR DIN 45599	Pin 1 shield, Pin 2 NF+, Pin 3 NF-

Tip:
- Room Ambiance
- Stereo recording
- Behind drum sets

Press: "The ease of set-up, placement and use, coupled with the spacious stereo (and mono compatible spread), make the MBNM 622 a good addition your microphone list - I just added another brush to my palette."
Stephen Murphy, Pro Sound Review

MBHO GmbH Im Valtert 39 D-74847 Obrigheim phone: +49 6261 7970 fax: - 7110 e-mail: info@mbho.de

MBP 648 S MODULAR SYSTEM

MBP 648 S

goosenecks

modular true condenser system

The **true condenser** gooseneck is a complimentary part of our modular system. The standard configuration includes the KA 400 capsule mounted. This capsule is pre-adjusted for the speech proximity effect with a 12 dB cut at 50 Hz. As with most of our line, the MBP 648 S may be supplied with a mat black or non-reflectively plated nickel finish.

The stock item is supplied in a 250 mm length with an XLR connector, while a 3/8" threaded sleeve lateral outlet version with an open-ended 3 m cable is available upon request. You will not find a superior podium microphone!

specifications

standard pattern	cardioid (KA 400)
sound source direction	axial
phantom power/ feed current	48 V / ca. 1,8 mA
frequency response	50 – 20.000 Hz
sensitivity of field idling	0,7 mV/µbar
sensitivity of field idling at 1 kΩ - 1 kHz	7,0 mV/Pa
signal to noise ratio1 Pa. CCIR	68 dB
equivalent SPL rated at CCIR	26 dB
signal to noise ratio1 Pa. A	81 dB-A
equivalent SPL rated at DIN / IEC	13 dB-A
max. spl at 1 kΩ	131 dB
electrical impedance	200 Ω
connector	XLR / 3/8"
size / weight	ø 21 x 350 mm / 210 g

No. 92 - 6482

Tip:
- Boardrooms
- Courtrooms
- Churches
- Talkback
- Podium
- Console talkback
- Pulpits
- Conference tables

MBNM 150 EN FIXED CAPSULE

MBNM 150 EN

electret condenser microphone in nextel design

The MBNM 150 EN represents the sum total of our exhaustive research into just what would represent the "perfect electret podium microphone". The electret cardioid capsule is mounted on a fully adjustable gooseneck. The 12 mm fixed capsule has extraordinarily well off axis rejection with built in compensation for the proximity effect. Sleek industrial design with a gray Nextel finish make the microphone seems as visually transparent as it sounds! While an XLR serves as the output connector, the microphone can shipped with a 3/8" threaded sleeve with a lateral outlet and a 3 m cable to the preamp. A wide voltage range is accommodated with extremely stable operating results.

No. 92 - 1500

specifications

directional characteristic	cardioid
sound source direction	axial
phantom power / feed current	48 V / ca. 1,7 mA
frequency response	80 - 20.000 Hz
sensitivity of field idling	1,0 mV/µbar
at 1 kΩ -1 kHz	10 mV/Pa
signal to noise ratio rated at 1 Pa. CCIR	61 dB
signal to noise ratio rated at CCIR	33 dB
equivalent SPL rated at DIN / IEC	73 dB-A
equivalent SPL rated at CCIR	21 dB-A
max. spl at 1 kΩ	130 dB
electrical impedance	200 Ω
connector	XLR / 3/8"
size / weight	ø 12 / 19 x 350 mm / 160 g

Tip:
- Boardrooms
- Courtrooms
- Churches
- Talkback
- Podium
- Console talkback
- Pulpits
- Conference tables

MBHO GmbH Im Valtert 39 D-74847 Obrigheim phone: +49 6261 7970 fax: - 7110 e-mail: info@mbho.de

MBP 648 HS

modular true condenser headset incl. headphone

MBP 648 HS

MODULAR SYSTEM

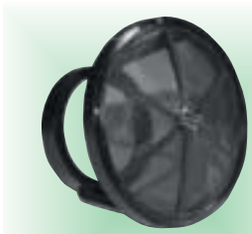
This unique system consists of an amplifier unit and a small, remote condenser capsule with impedance transformer. The microphone capsule has a diameter of 21 mm, the elastic suspension a diameter of 35 mm. The capsule may be exchanged, allowing for the choices of the KA 400 cardioid, the KA 500 hypercardioid and the KA 100 omni. With these pick-up pattern options a true studio quality condenser microphone as a headset is now available. The headset performs well with phantom power ranging from 12 to 48 V. A highly effective wind screen and a -10 dB pad are available as accessories.
A magical HiFi sound.

Illustration shows the MBP 648 HS with the standard supplied KA 400 cardioid capsule & the MB Quart headphone QP 250.

That microphone system can be mounted on different headphones as well!

handmade elastic suspension

No. 92 - 6483



handmade proximity protection

Press: "There can´t be many headsets on the market with such quality in both components."
Dave Foister, Prosound Magazine

specifications

standard pattern	cardioid (KA 400)
directional characteristic	axial
signal to noise ratio DIN 45405	1,5 µV
phantom power/ feed current	48 V / ca. 1,7 mA
frequency response	50 - 20.000 Hz
sensitivity of field idling	0,7 mV/µbar
sensitivity of field idling 1 kΩ at 1 kHz	7,0 mV/Pa
signal to noise ratio rated at 1 Pa. CCIR	68 dB
equivalent SPL rated at CCIR	26 dB
signal to noise ratio DIN / IEC	81 dB-A
equivalent SPL rated at DIN / IEC	13 dB-A
max. spl at 1 kΩ	131 dB
electrical impedance	200 Ω
connector / size / weigh	XLR / 220 mm / 84 g

Tip:
- journalists
- artists
- solo vocals
- DJ`s
- reporters
- pilots… and more

MBHO GmbH Im Valtert 39 D-74847 Obrigheim phone: +49 6261 7970 fax: - 7110 e-mail: info@mbho.de

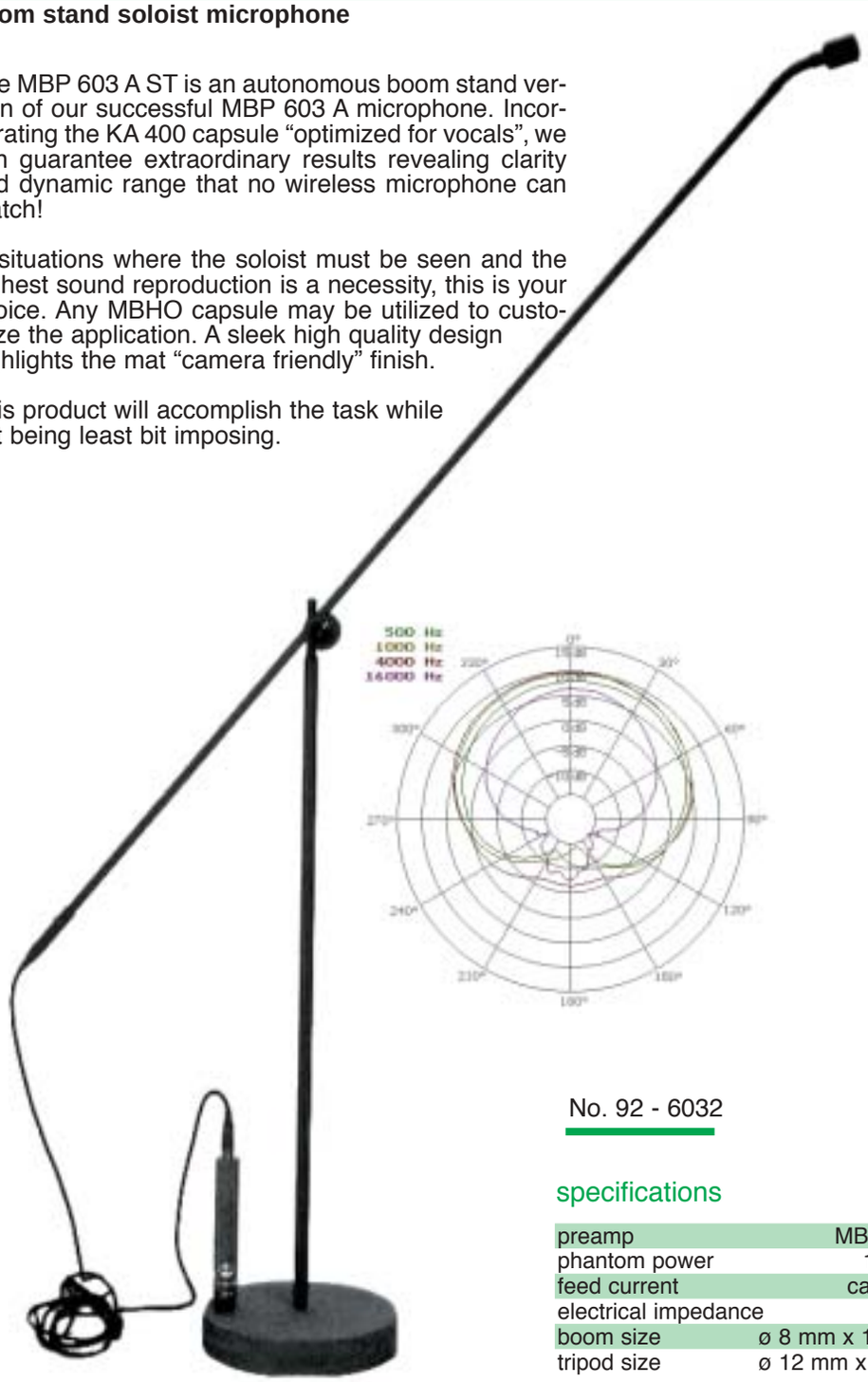
MBP 603 A ST

boom stand soloist microphone

The MBP 603 A ST is an autonomous boom stand version of our successful MBP 603 A microphone. Incorporating the KA 400 capsule “optimized for vocals”, we can guarantee extraordinary results revealing clarity and dynamic range that no wireless microphone can match!

In situations where the soloist must be seen and the highest sound reproduction is a necessity, this is your choice. Any MBHO capsule may be utilized to customize the application. A sleek high quality design highlights the mat “camera friendly” finish.

This product will accomplish the task while not being least bit imposing.



MBP 603 A ST

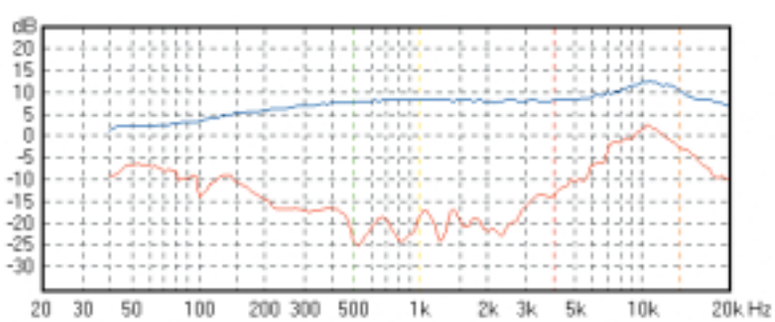
MODULAR SYSTEM

No. 92 - 6032

specifications

preamp	MBP 603 A
phantom power	16 - 48 V
feed current	ca. 4,5 mA
electrical impedance	35 Ω
boom size	ø 8 mm x 1000 mm
tripod size	ø 12 mm x 650 mm

KA 400 capsule



Tip:
- Television and all broad cast applications
- Cosmetic set ups

MBHO GmbH Im Valtert 39 D-74847 Obrigheim phone: +49 6261 7970 fax: - 7110 e-mail: info@mbho.de

OSS DISCS

unique discs

What you are looking at is not an extraterrestrial spacecraft but a "Schneider disc". The Schneider disc is a variation of the Jecklin disc developed by Jürgen Jecklin for his stereo microphone technique known as Optimal Stereo Signal (OSS). The idea behind OSS is to use a pair of spaced omnidirectional microphones approximately 6 inches apart (roughly the distance between the human ears) with a disc placed in between the spaced pair. The disc is covered with a thin layer of foam intended to absorb high frequencies - thus improving stereo separation between the microphones. The difference between the two types of discs is the foam sphere at the center of the Schneider disc, which reduces the amount of high-frequency energy reflected from the disc, and results in an increase of stereo separation. Below approximately 200 Hz, the Schneider disc has little (if any) effect on the stereo signal because the audio wavelength is large enough to bend around the disc, equally reaching both microphones. However as frequency increases above 200 Hz, the Schneider disc's foam sphere increases stereo separation between the spaced pair.

Jecklin disc
No. 99 - 7000

USER TIP:

The Schneider disc may be used in OSS technique for stereo recordings of orchestral or chamber music, as well as for stereo micing of solo instruments. In order to properly implement OSS, the microphones should be identical, omnidirectional and should be set for equal output to avoid unbalancing of the stereo image (this can be checked using headphones). For the best balance between direct and room sound, the Schneider disc should be located at the distance from the source where the direct sound and the diffuse sound from the room are at equal strength. This distance is known as the diffuse-field distance and can be located by careful listening.

Schneider disc
No. 99 - 7100

Jecklin + Schneider disc for OSS recording,
recommended microphones:
2 x MBP 648 preamps & 2 x KA 100 DK capsules

Press: MIX MAGZINE, Jecklin: “The MBHO omnis /Jecklin disc combination provided a wonderful blend of the hall's ambience with a tight, well-focused soundstage of the players.” George Petersen

Tip:
- symphonic orchestras
- choir
- brass-bands
- chamber music

MBHO GmbH Im Valtert 39 D-74847 Obrigheim phone: +49 6261 7970 fax: - 7110 e-mail: info@mbho.de

MBP 603

preamps

MBP 603 MODULAR SYSTEM

The highly efficient MBP 603 microphone amplifier has a sophisticated circuit comprised of an audio amplifier and a DC converter. The entire range of modular capsules can be accommodated for full system usage.
The **transformerless** circuit utilizes a symmetrical output stage for higher dynamic range, extremely low coloration and very low harmonic distortion. Operating voltages range from 16 to 48 V with stable results.
In a word, pristine.

Press: "The 603 / 200 (KA 200 cardioid capsule) would be a genuinely useful all-round workhorse, covering all the bases very competently and giving good results on virtually everything." Dave Foister, Prosound Magazine

specifications

preamp	MBP 603
phantom power	16 - 48 V
feed current	4,5 mA
electrical impedance	35 Ω
connector	XLR
size	ø 21 x 122 mm

No. 92 - 6030

MBP 648

MBP 648 MODULAR SYSTEM

"The standard" microphone amplifier for recording studios and broadcasters featuring very low current consumption. The integrated electronics, audio amplifier and transformer, utilize only the highest-grade components. A very compact body includes a **switchable low cut filter**. The small dimensions avoid undesirable coloration. Built to strictly conform to the DIN 45 596 phantom power standards, this amplifier is a price/performance paradigm!

switchable low cut filter

specifications

preamp	MBP 648
phantom power	48 V
feed current	ca. 1,7 mA
electrical impedance	200 Ω
connector	XLR
size	ø 21 x 122 mm

No. 92 - 6480

MBHO GmbH Im Valtert 39 D-74847 Obrigheim phone: +49 6261 7970 fax: - 7110 e-mail: info@mbho.de

MBP 648 A

extended preamp

As far as the technical features are concerned, the MBP 648 A is identical to the MBP 648. It has been developed for specific recording purposes. Due to the separation of capsule and impedance transformer, small microphone systems can be realized with all MBHO capsules. This preamp includes a 3 m cable and a fixed capsule attachment at the bottom end.

No. 92 - 6481

Tip:
- recordings for movies
- theatre
- news desks
- percussion
- brass instruments
- acoustic guitar

specifications

preamp	MBP 648 (A)
phantom power	48 V
feed current	ca. 1,7 mA
electrical impedance	200 Ω
connector	XLR
size	ø 21 x 25 mm

MBP 680

preamp with low cut filter

Think of the MBP 680 as a MBP 648 with these additional of the ability to accept our active battery cable (see 99-8030 and 99-8035). In the MBP 680 we have designed a voltage converter that is effective between 12 and 48 V at a very low current consumption. Need put together a solid microphone for fieldwork? Here it is!

The MBP 680 also features a switchable voice filter / low cut.

Tip:
- outdoor &
- mobile recordings

No. 92 - 6800

specifications

preamp	MBP 680
phantom power	12 - 48 V
feed current	ca. 1,9 mA
electrical impedance	200 Ω
connector	XLR
size	ø 21 x 122 mm

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MBP 603 A

extended preamp with balanced capsule attachment

MBP 603 A
MODULAR SYSTEM

The MBP 603 A is a special version of the MBP 603 that allows remote placement of the microphone capsule from the amplifier. With capsules separated up to 20 m, an almost “invisible” microphone that shows no loss of audio quality is a reality and all MBHO capsules are accepted! This advantage is needed in television and film production. The system is supplied with a 3 m mini-XLR cable. Customized lengths are available.

screwable capsule

No. 92 - 6031

capsule attachement & mini XLR for cable extension

preamp

Tip:
- TV
- Theatre
- hidden application
- concert taping

specifications

preamp	MBP 603 A
phantom power	16 - 48 V
feed current	ca. 4,5 mA
electrical impedance	35 Ω
connector	XLR
size	ø 21 x 130 mm

Press: "It is a real work of modern German industrial art where all the pieces fit together so perfectly to look as if it were all molded from a single block of metal."
Martin Chittum, Tape Op Magazine, 05/02

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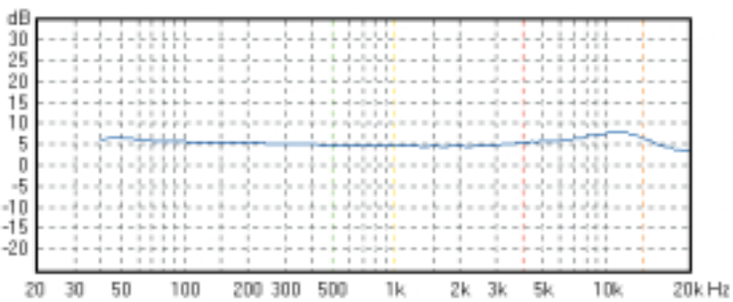
KA 100 LK - linear omni

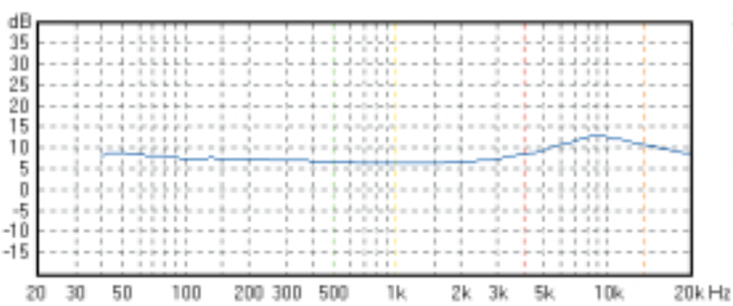


No. 82 - 3000

KA 100 LK			
recommended preamp	MBP 603 (A)	MBP 680	MBP 648 (A)
frequency response Hz	10 - 20.000	10 - 20.000	10 - 20.000
sensivity	12 mV/Pa	6 mV/Pa	6 mV/Pa
signal to noise ratio CCIR	68 dB	62 dB	67 dB
equivalent SPL rated at CCIR	26 dB	32 dB	27 dB
signal to noise ratio DIN/ IEC	80 dB	75 dB	80 dB
equivalent SPL rated at DIN / IEC	14 dB	19 dB	14 dB
max. spl	132 dB	132 dB	132 dB
size			ø 21 x 20 mm

A constant frequency response if the sound impinges frontally upon the capsule. This leads to a natural tonal response. With a non-axis impingement of sound upon the microphone, a decay of treble results. This effect is relevant when sound quotas come from other angles than 0°, for instance by reflections.

KA 100 DK - omni

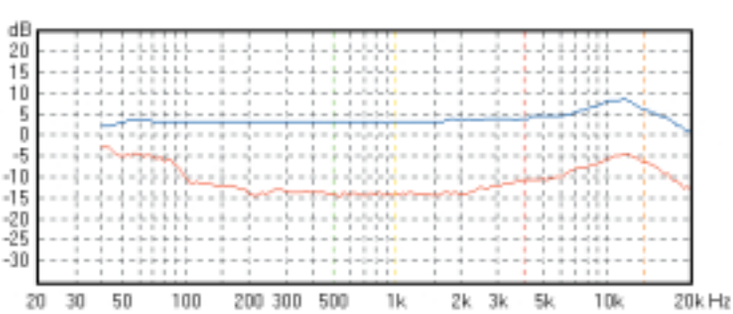


No. 82 - 3010

KA 100 DK			
recommended preamp	MBP 603 (A)	MBP 680	MBP 648 (A)
frequency response Hz	10 - 20.000	10 - 20.000	10 - 20.000
sensivity	12 mV/Pa	6 mV/Pa	6 mV/Pa
signal to noise ratio CCIR	68 dB	62 dB	67 dB
equivalent SPL rated at CCIR	26 dB	32 dB	27 dB
signal to noise ratio DIN/ IEC	80 dB	75 dB	80 dB
equivalent SPL rated at DIN / IEC	14 dB	19 dB	14 dB
max. spl	132 dB	132 dB	132 dB
size			ø 21 x 20 mm

- omni pattern
- features 6 dB peak at 8-9 kHz for more distant pickup
- recommended for outdoor recordings if less directivity is desired
- frequency response 10 - 20.000 Hz

KA 300 NB - wide cardioid

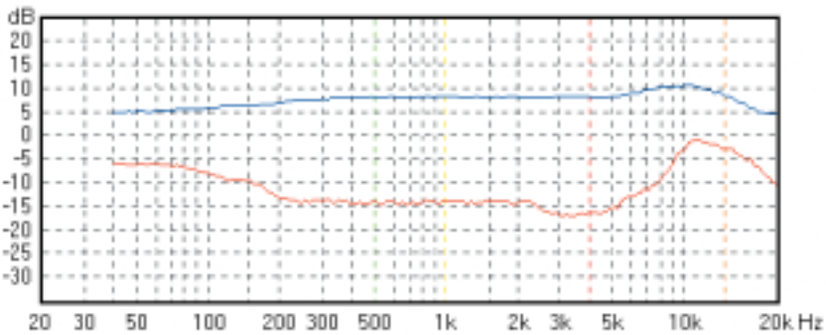


No. 82 - 3030

KA 300 NB			
recommended preamp	MBP 603 (A)	MBP 680	MBP 648 (A)
frequency response Hz	20 - 20.000	20 - 20.000	20 - 20.000
sensitivity	12 mV/Pa	6 mV/Pa	6 mV/Pa
signal to noise ratio CCIR	68 dB	62 dB	67 dB
equivalent SPL rated at CCIR	26 dB	32 dB	27 dB
signal to noise ratio at DIN / IEC	80 dB	75 dB	80 dB
equivalent SPL rated at DIN / IEC	14 dB	19 dB	14 dB
max. SPL	130 dB	130 dB	130 dB
size			ø 21 x 20 mm

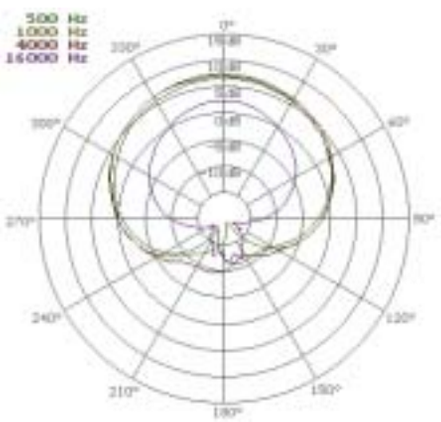
- wide cardioid pattern
- slight increase in low-frequency reproduction (compared to KA 200)
- frequency response 20 - 20.000 Hz

KA 200 N - cardioid



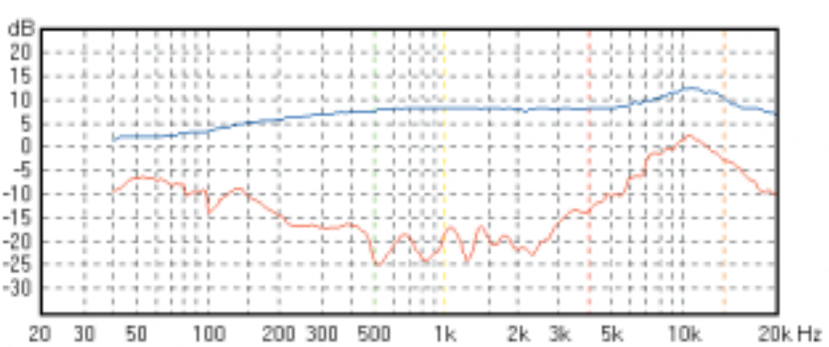
No. 82 - 3020

KA 200 N cardioid			
recommended preamp	MBP 603 (A)	MBP 680	MBP 648 (A)
frequency response Hz	40 - 20.000	40 - 20.000	40 - 20.000
sensitivity	14 mV/Pa	7 mV/Pa	7 mV/Pa
signal to noise ratio CCIR	69 dB	63 dB	68 dB
equivalent SPL rated at CCIR	25 dB	31 dB	26 dB
signal to noise ratio DIN / IEC	82 dB	76 dB	81 dB
equivalent SPL rated at DIN / IEC	12 dB	18 dB	13 dB
max. spl	130 dB	130 dB	130 dB
size			ø 21 x 20 mm



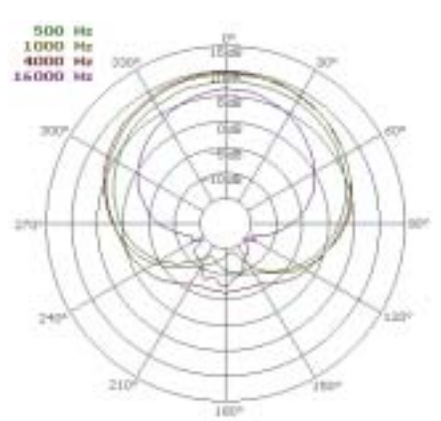
- cardioid pattern
- highly versatile capsule
- maximum rejection on rear-incident sound
- X/Y recordings or Mid-Side configuration
- frequency response 40 - 20.000 Hz
- neutral record space ± 135°

KA 400 N - cardioid



No. 82 - 3040

KA 400 N cardioid			
recommended preamp	MBP 603 (A)	MBP 680	MBP 648 (A)
frequency response Hz	50 - 20.000	50 - 20.000	50 - 20.000
sensitivity	15 mV/Pa	7 mV/Pa	7 mV/Pa
signal to noise ratio CCIR	70 dB	63 dB	68 dB
equivalent SPL rated at CCIR	24 dB	31 dB	26 dB
signal to noise ratio DIN / IEC	83 dB	76 dB	81 dB
equivalent SPL rated at DIN / IEC	11 dB	18 dB	13 dB
max. SPL	131 dB	131 dB	131 dB
size			ø 21 x 20 mm



- cardioid speech optimized
- 12 dB low cut at 50 Hz
- frequency response 50 - 20.000 Hz

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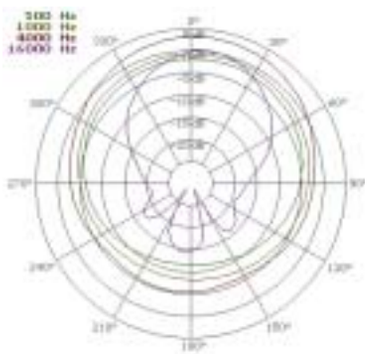
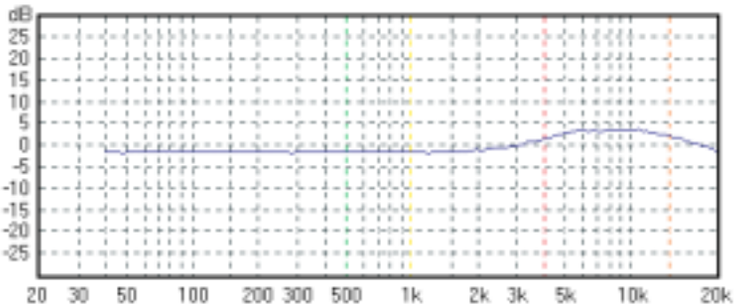
KA 1000 N - large diaphragm cardioid

Our large diaphragm capsule with cardioid characteristic is an ideal solution for recording of singers, choirs, piano, saxophone and guitar. The pleasing warm sound has a fine-drawing, nice and airy effect. The vintage capsule design features gold sputtered membran and brass back plate.





KA 1000 N

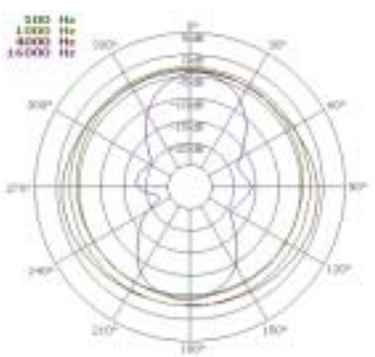
No. 82 - 3070

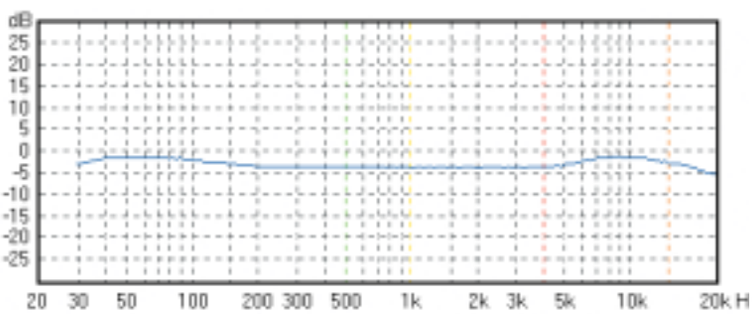
specifications

KA 1000 N		
recommended preamp	MBP 603 (A)	MBP 648 (A)
frequency response	10 - 20.000 Hz	10 - 20.000 Hz
sensitivity	11 mV/Pa	11 mV/Pa
signal to noise ratio CCIR	67 dB	67 dB
equivalent SPL rated at CCIR	27 dB	27 dB
signal to noise ratio DIN/IEC	79 dB	79 dB
equivalent SPL rated at DIN/IEC	15 dB	15 dB
max. spl	132 dB	132 dB
size		ø 50 x 20 mm

KA 1100 K - large diaphragm omni

The 35 mm double-diaphragm system with gold sputtered polyester foil 6 µm is manufactured with precision and tolerances in the µ-range. Recordings sound particularly precise.





KA 1100 K

No. 82 - 3080

specifications

KA 1100 K		
recommended preamp	MBP 603 (A)	MBP 648 (A)
frequency response	5 - 20.000 Hz	5 - 20.000 Hz
sensitivity	11 mV/Pa	11 mV/Pa
signal to noise ratio CCIR	67 dB	67 dB
equivalent SPL rated at CCIR	27 dB	27 dB
signal to noise ratio DIN/IEC	79 dB	79 dB
equivalent SPL rated at DIN/IEC	15 dB	15 dB
max. spl	132 dB	132 dB
size		ø 50 x 20 mm

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MBD 219 Series

dynamic line

MBD 219 DYNAMIC MICROPHONES

With more than 30 years of experience fabricating high-end condenser microphones, we saw the need for a similar “no holds barred”, approach with our dynamic line. The rules here call for linearity without high frequency peaks, minimum proximity effect, high directivity and reduced handling noise. To this end we added a hand-optimized aluminum housing with the further advantage of internal shock mounting. The surface of the microphone is finished in non-reflective Nextel. Extreme high quality in fit and finish denote this product from the competition. We offer the MBD 219 series in three models, the MBD 219 C - cardioid, the MBD 219 SC - hypercardioid and the MBD 219 O - omni.

HKD - Nextel designed
clamp No. 99 - 8075

engraved logo and
individuell engraved number

Each microphone is supplied in a suit case.

MBD 219 C No. 92 - 2190
MBD 219 SC No. 92 - 2191
MBD 219 O No. 92 - 2192

specifications

model	MBD 219 C	MBD 219 SC	MBD 219 O
polar pattern	cardioid	hypercardioid	omni
frequency response Hz	50 - 16.000	40 - 20.000	40 - 18.000
sensitivity of field idling	0,15mV/µbar	0,16mV/µbar	0,13mV/µbar
1 kΩ at 1 kHz	1,5 mV/Pa±3dB	1,6 mV/Pa±3dB	1,3 mV/Pa±3dB
electrical impedance	200 Ω	200 Ω	200 Ω
connector	XLR	XLR	XLR
size each	200 mm x 51 mm		
weight each	295 g		

Tip:
In any live application where a rugged “state of the art” dynamic is the call, the MBD 219 will surpass your expectations.

Press:
" ..they deserve to be more widely known, as anybody using existing dynamic vocal microphones in the usual variety of ways ought to give them a listen.”
Dave Foister, Studio Magazine Dec/2000

MBHO GmbH Im Valtert 39 D-74847 Obrigheim phone: +49 6261 7970 fax: - 7110 e-mail: info@mbho.de

fittings & accessories

microphone accessories - handmade

FITTINGS ACCESSORIES

DZ 40
No.99-8005

- 10 dB pad
as pickup for all
MBHO preamps

extension unit 250 mm
No.99-8070

EA 22
No.98-8040

elastic suspension
Ø 21 mm,
3/8“ - 5/8“

ZSS 400
on - off switch
No. 99-8010

phantom power supply for 2 microphones 220 V

NT 48 C
No. 99-8000

HKA
No. 99-8065

steel clamp
for hanging
microphones

HK 1135
No.98-8045

Mic clamp
Ø 21 mm
1/2“ - 3/8“ - 5/8“

3 m mini XLR cable
for MBP 603A
No. 99-8085

EA 24
No.98-8080

shockmounted table tripod

XLR active battery cable 3 m
No. 99-8030
Jack active battery cable 3 m
No. 99-8035
recommended batteries:
2 pcs. Duracell PX 28L 6 V

MB 110
No. 99-8050

Windshield foam
Ø 20 - 22 mm

KNEE
No. 99-8015

90° vertical rotation
for all capsules

MB 648 HS
No. 99-8060

Handmade spherical Perlon popscreen diameter 21 mm special developed for the MBHO headset.

HKD
clamp for
MBD 219
No. 99-8075

table tripod black
No.98-8020

table tripod nickel
No.98-8025

MB 115
No. 99-8055

Handmade spherical Perlon popscreen for 21 mm diameters

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