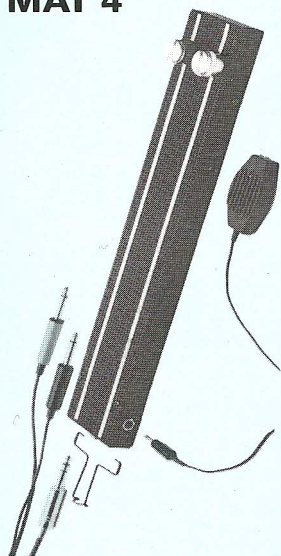


DYNAMIC MICROPHONES FOR MUSICIANS

MAT 4



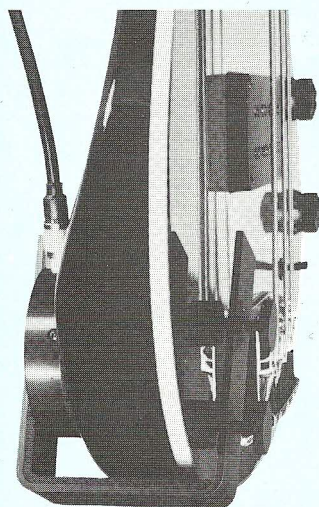
Accordion pickup.

In contrast to well-known models, these are two dynamic plug-in microphones comprising the treble pickup MAT 3.01 and the bass chord pickup MAB 3. Exceptionally wide frequency response and designed for suppressing unwanted noise from the keyboard's mechanical system, stops, register slides, or fingering. Satisfies all requirements concerning high-fidelity and full reproduction of the accordion sound. Separate volume control for treble and bass. Connection to two microphone inputs. Easy installation on the outside of the accordion.

Technical specifications

Frequency response	
Treble pickup:	30 - 20 000 Hz
Bass chord pickup:	20 - 6 000 Hz
Pickup pattern	
Treble pickup:	bidirectional
Bass chord pickup:	bidirectional
Directivity factor	
Treble pick up:	> 26 dB at 1 kHz/90°
Bass chord pickup:	> 20 dB at 1 kHz/90°
Free-field sensitivity	
Treble pickup:	2 mV/Pa Δ - 54 dBV
Bass chord pickup:	1 mV/Pa Δ - 60 dBV
Nominal impedance:	200 Ω each
Nominal load impedance:	\approx 1 k Ω each

KBM 1



Pickup for electric bass guitars (system Dömling).

World's first special pickup for producing the sound of an acoustic bass by means of an electric bass guitar. Simple mounting to the body with a clip. Extensive sound variation by adjusting the pressure with two setscrews.

Technical specifications

Nominal impedance:	600 Ω
Nominal load impedance:	\approx 3 000 Ω

Dimensions

Diameter:	69 mm
Height:	20 mm
Weight (with fastening bow):	330 g

HM 560



Dynamic vocalist's microphone with headband.

Bidirectional characteristic.

The solution for drummers, keyboarders, also entertainers, who sing in addition to playing their instruments. Headband for mounting the microphone either on the left-hand or right-hand side. Adjustable distance and angle to the musician's mouth. For outside broadcast purposes also combinable with headphones DT 100 by simply replacing a cover on the housing of the headphones (BN 54-158).

Technical specifications

Frequency response:	20 - 20 000 Hz
Polar pattern:	bidirectional
Open circuit voltage:	0.4 mV/Pa Δ - 68 dBV
Output impedance:	200 Ω
Load impedance:	\approx 1 k Ω

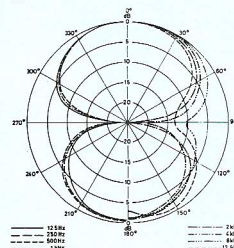
Weight without headband:	66 g
Weight with headband:	120 g

Models

HM 560 N (C)
HM 560 V. 04 ^{*1}
M 560 N (C)
M 560 V. 04 ^{*1}
HM 560/42 ^{*2}

^{*1} with microphone preamplifier

^{*2} for direct interface to pocket transmitters TS 42.10 - 10 etc.



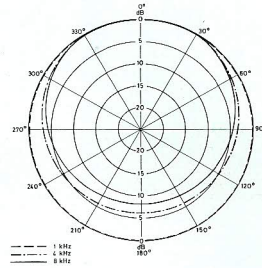
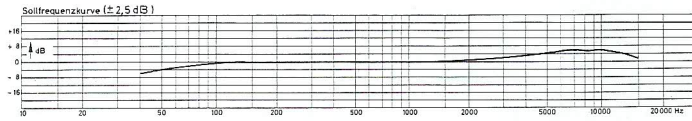
SPECIAL APPLICATION DYNAMIC MICROPHONES

M 58



Studio-quality microphone.

The M 58 omnidirectional moving coil microphone has been specifically designed to satisfy the demands of electronic news gathering (ENG) and electronic field production (EFP) applications in broadcast industry. Its sophisticated internal shockmount dramatically reduces undesirable handling noise. The frequency response has been fine tuned to provide broadcasters with accurate reproduction of voice information with a very high degree of intelligibility.



Technical specifications

Transducer type: Dynamic, moving coil, pressure transducer
 Frequency response: 40 - 20 000 Hz
 Polar pattern: Omnidirectional
 Open Circuit voltage at 1 kHz: 1,3 mV/Pa
 Output level: -57 dBm (0 dBm ≙ 1 mW/Pa)
 EIA sensitivity rating: -149 dB (0 dB ≙ 1 mW/2 · 10⁻⁵ Pa)
 Nominal impedance: 200 Ω
 Load impedance: > 200 Ω

Dimensions

Length: 260 mm
 Shaft diameter: 23 mm
 Head diameter: 40 mm
 Weight: approx. 256 g

Models

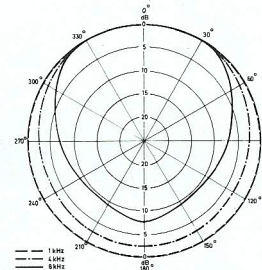
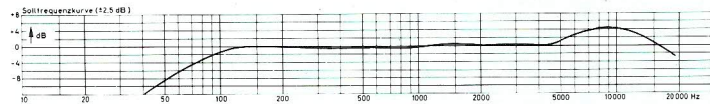
M 58 N (C)

M 101



Studio-quality dynamic microphone.
 Omnidirectional characteristic.

This microphone requires excellent room acoustics, but in turn it gives an atmosphere to the production. Balanced frequency response with a slight emphasis at the upper end. Suited for studio and OB productions. Talk-back is possible because the M 101 can handle speech modulated voltages of up to 2 volts.



Technical specifications

Transducer type: Dynamic, moving coil
 Frequency response: 40 - 20 000 Hz
 Polar pattern: Omnidirectional
 Open circuit voltage at 1 kHz: 1,3 mV/Pa
 Output level: -57 dB (0 dB ≙ 1 mW/PA)
 EIA G_m output: -149 dB (0 dB ≙ 1 mW/2 · 10⁻⁵ Pa)
 Nominal output impedance: 200 Ω
 Load impedance: > 200 Ω

Dimensions

Length: 118 mm
 Shaft diameter: 22.6 mm
 Head diameter: 22.6 mm
 Weight: approx. 160 g

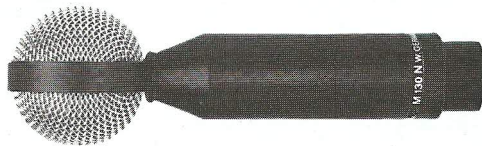
Models

M 101 N
 M 101 N (C)



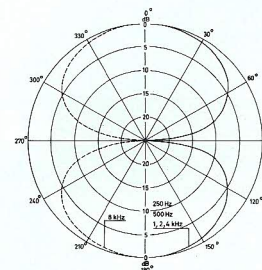
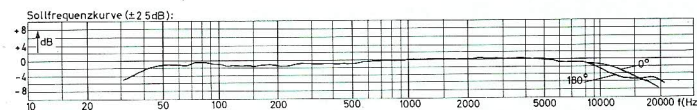
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center
Stuttgart

M 130



Studio-quality dynamic microphone.
 Figure eight characteristic.

This double-ribbon microphone features a uniform, frequency-independent directional characteristic in the shape of figure 8. It is used in M/S stereo, for picking up dialogs, and for including the audience in the transmission of a stage production. Excellent suppression of unwanted signal at 90° and 270° off-axis.



Technical specifications

Transducer type: Dynamic, ribbon
 Frequency response: 40 - 18 000 Hz
 Polar pattern: Figure 8
 Side attenuation at 90°: >30 dB
 Open circuit voltage at 1 kHz: 1,0 mV/Pa
 Output level: -59 dB (0 dB ≙ 1 mW/Pa)
 EIA G_m output: -152 dB (0 dB ≙ 1 mW/2 · 10⁻⁵ Pa)
 Nominal output impedance: 200 Ω
 Load impedance: ≙ 1 000 Ω

Dimensions

Length: 128 mm
 Shaft diameter: 23 mm
 Head diameter: 38.5 mm
 Weight: approx. 150 g

Models

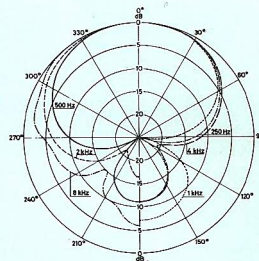
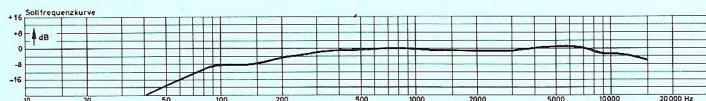
M 130 N (C)

DYNAMIC MICROPHONES FOR ANNOUNCERS

M 260 N. 80



Dynamic microphone. Hypercardioid characteristic. Ribbon microphone with bass de-emphasized frequency response for use in live rooms such as churches. Extremely low feedback. Cylindrical shaft.



Specifications

Transducer type: Dynamic, ribbon
 Frequency response: 100 - 18 000 Hz
 Polar pattern: Hypercardioid
 Side attenuation at 115°, 1 kHz: > 20 dB
 Open circuit voltage at 1 kHz: 1.2 mV/Pa
 Output level: - 57 dB (0 dB \triangleq 1 mW/Pa)
 EIA G_m output: - 150 dB (0 dB \triangleq 1 mW/2 · 10⁻⁵ Pa)
 Nominal output impedance: 200 Ω
 Load impedance: > 500 Ω

Dimensions

Length: 163 mm
 Shaft diameter: 24 mm
 Head diameter: 43.5 mm
 Weight: 230 g

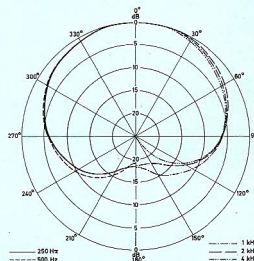
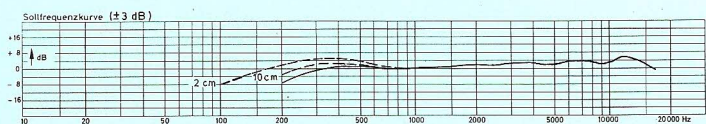
Models

M 260 N. 80*
 M 260 N (C). 80

M 411



Dynamic directional microphone. Cardioid characteristic. Field-proven announcer's microphone. Maximum intelligibility of speech picked up in noisy surroundings. Very low feedback. Available as a hand-held microphone as well as for gooseneck mounting. Switch function available in various versions. M 411.15 with push button.



Specifications

Transducer type: Dynamic, moving coil
 Frequency response: 200 - 12 000 Hz
 Polar pattern: Cardioid
 Attenuation at 180°, 1 kHz: > 15 dB
 Open circuit voltage at 1 kHz: 1.4 mV/Pa
 Output level: - 56 dB (0 dB \triangleq 1 mW/Pa)
 EIA G_m output: - 149 dB (0 dB \triangleq 1 mW/2 · 10⁻⁵ Pa)
 Nominal output impedance: 200 Ω
 Load impedance: > 500 Ω

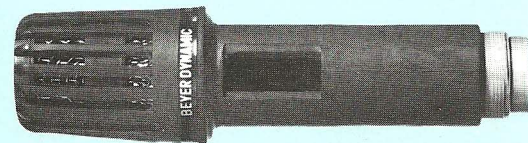
Dimensions

Length: 139 mm
 Length for model without push button: 82 mm
 Shaft diameter: 28 mm
 Head diameter: 38 mm
 Weight: 150 g

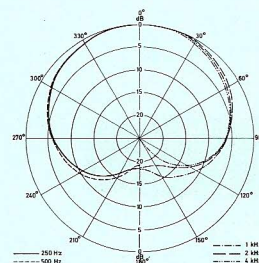
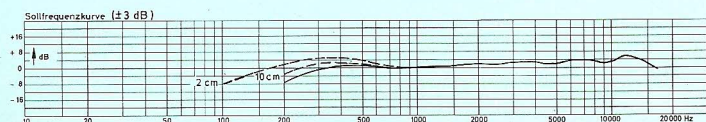
Models

M 411 N (T)
 M 411 N (T) S
 M 411 N (T/5) S.1
 M 411.15

M 412



Dynamic directional microphone. Cardioid characteristic. High-security ductile microphone. Its crushability reduces injuring hazards in case of violent breaking or accident. Very low feedback. Available as a hand-held microphone as well as for gooseneck mounting. Also available with ON/OFF switch or switch to control an external relay circuit.



Specifications

Transducer type: Dynamic, moving coil
 Frequency response: 200 - 12 000 Hz
 Polar pattern: Cardioid
 Attenuation at 180°, 1 kHz: > 15 dB
 Open circuit voltage at 1 kHz: 1.4 mV/Pa
 Output level: - 56 dB (0 dB \triangleq 1 mW/Pa)
 EIA G_m output: - 149 dB (0 dB \triangleq 1 mW/2 · 10⁻⁵ Pa)
 Nominal output impedance: 200 Ω
 Load impedance: > 500 Ω

Dimensions

Length: 140 mm
 Shaft diameter: 28 mm
 Head diameter: 38 mm
 Weight: 150 g

Models

M 412 N (T) S
 M 412 N (T) S.2
 M 412.15



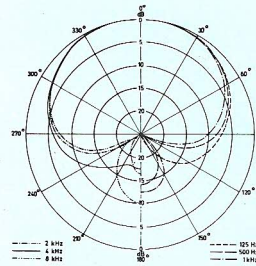
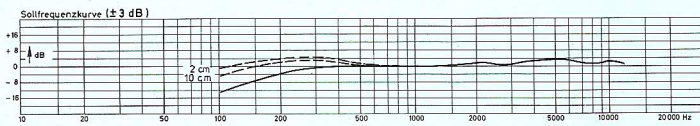
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 Stuttgart

DYNAMIC MICROPHONES FOR ANNOUNCERS

M 420



Dynamic directional microphone. Hypercardioid characteristic. For use in high-quality electroacoustical installations. Efficient bass de-emphasis prevents pickup of low-frequency noise. Extremely low feedback. Rugged all-metal housing. Slim, elegant styling. For gooseneck mounting e.g. in conjunction with the beyerdynamic table stand MTF 222-SH 15/250 N resp. MTF 222-SH 15/250 N (C).



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Stuttgart

Specifications

Transducer type:	Dynamic, moving coil
Frequency response:	100 - 12 000 Hz
Polar pattern:	Hypercardioid
Side Attenuation at 120°, 1 kHz:	> 20 dB
Open circuit voltage at 1 kHz:	1.2 mV/Pa
Output level:	- 57 dB (0 dB \pm 1 mW/Pa)
EIA G _m output:	- 150 dB (0 dB \pm 1 mW/2 · 10 ⁻⁵ Pa)
Nominal output impedance:	200 Ω
Load impedance:	> 500 Ω

Dimensions

Length:	98 mm
Shaft diameter:	24 mm
Head diameter:	24 mm
Weight:	approx. 150 g

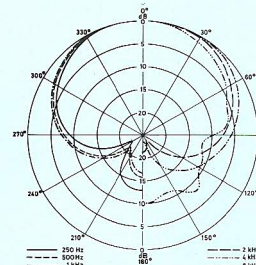
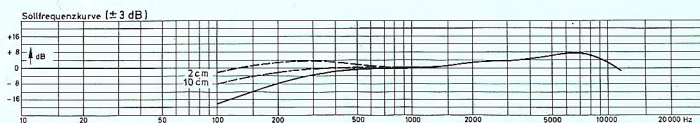
Models

M 420 N
M 420 N (C)

M 422



Dynamic directional microphone. Supercardioid characteristic. Particularly low-priced, small directional microphone for speech transmission. Very low feedback. Excellent intelligibility also of speech picked up in noisy surroundings. Suited for voice communication and paging systems and as an announcer's microphone on mixing consoles. For gooseneck mounting e.g. in conjunction with the beyerdynamic table stand MTF 222-SH 15/250 N resp. MTF 222-SH 15/250 N (C).



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Specifications

Transducer type:	Dynamic, moving coil
Frequency response:	100 - 12 000 Hz
Polar pattern:	Supercardioid
Side attenuation at 135°, 1 kHz:	> 20 dB
Open circuit voltage at 1 kHz:	1 mV/Pa
Output level:	- 59 dB (0 dB \pm 1 mW/Pa)
EIA G _m output:	- 152 dB (0 dB \pm 1 mW/2 · 10 ⁻⁵ Pa)
Nominal output impedance:	200 Ω
Load impedance:	> 500 Ω

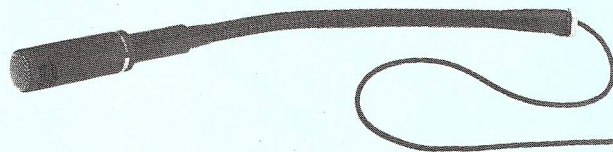
Dimensions

Length:	80 mm
Shaft diameter:	23.8 mm
Head diameter:	23.8 mm
Weight:	approx. 70 g

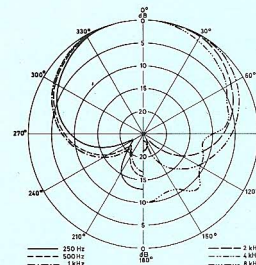
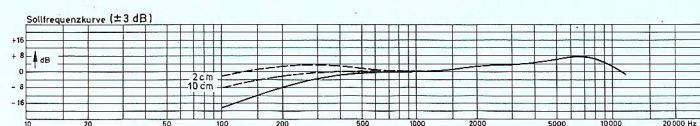
Models

M 422 N
M 422 N (C)

SHM 422



The M 422 permanently attached to a gooseneck, suited for installation on a speakers' desk or mixing consoles. Excellent intelligibility of speech also under unfavourable conditions. Combined with the ZSH 40 (see page 40) ideal protection against footfall sound and other noise.



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Technical specifications

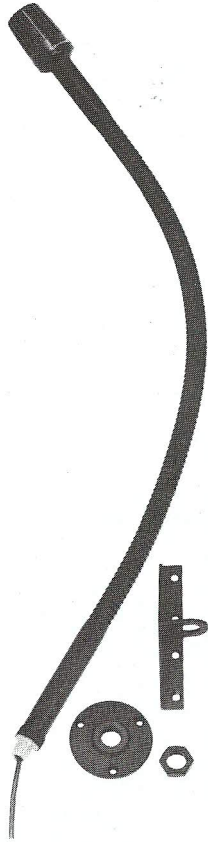
Transducer type:	Dynamic, moving coil pressure gradient
Polar pattern:	Supercardioid
Frequency response:	100 - 12 000 Hz
Side attenuation at 135°:	> 20 dB
Open circuit voltage at 1 kHz:	1 mV/Pa
EIA sensitivity rating:	- 152 dBm
Nominal impedance:	200 Ω
Load impedance:	> 500 Ω

Dimensions

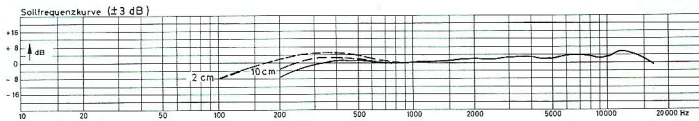
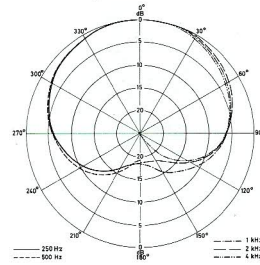
Length:	350 mm
gooseneck diameter:	11 mm
Internal thread at bottom:	3/8"
Length of cable:	1 m (free end)
Weight:	250 g

DYNAMIC MICROPHONES FOR ANNOUNCERS

SHM 415



Gooseneck announcer's microphone, suited for installation in urban and suburban buses of public transport systems. Acoustical characteristics identical to those of the safety microphone M 412 that has proven itself over many years. The system is flexibly mounted in a rubber head which is protected by a deformable wire screen. This head prevents injury to the driver in the event of an accident. The head is permanently attached to a rugged gooseneck, the lower end of which terminates in a straight tube with mounting flange. Suspended mounting. Optimum voice pickup distance: 10 -15 cm.



Specifications

Model:
Mode of operation:
Pickup pattern:
Frequency response:
Free-field sensitivity at 1 kHz (0 dBV ± 1 V/Pa):
Output level for close-talking (approx. 5 cm) and normal talking volume:
Electrical impedance:
Rated load impedance:
System nominal temperature range:
System maximum temperature range:

SHM 415
Pressure-gradient microphone
Cardioid
200 -14 000 Hz

1.4 mV/Pa ± -57 dBV

approx. 2.5 mV
200 Ω
> 500 Ω
from -20° to +80°C
from -40° to +100°C
(No permanent changes in the characteristics may occur if these limits are reached for short periods.)

Mechanical specifications:

Microphone head:
Volume weight of the shell material:
Ultimate elongation:
Notch value:
Low temperature toughness:

Neoprene, 70 CR/746
1.51 g/cm³
300 %
78.5 N/cm
-30°C

(Rubber will not be destroyed at this temperature, however it may break under strain.)

Shore hardness:
Temperature range:

70° Shore
-30° to +100°C
(Short-time heating for up to 15 minutes and up to 140°C admissible.)

Stability to light:

No discoloration, also not by the UV radiation contained in sunlight.

Ageing stability:
ASTM grading:
Cleaning:

5 years warranty
2 BC 715 A 14 B 14 E 34
Soap or detergent solution, or quick wiping with a piece of cloth soaked with alcohol, mineral spirits, or trichloroethylene.

Gooseneck:
Surface:
Overall length:
Mounting:

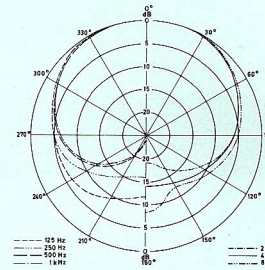
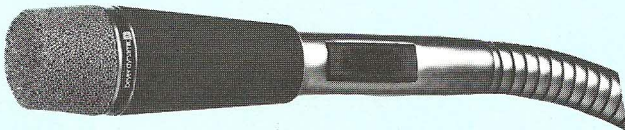
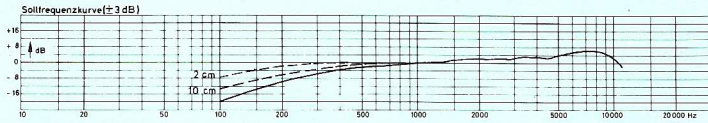
18 mm diameter
chromium-plated, black
730 mm
By means of mounting bracket or mounting flange (specify with order).

DYNAMIC MICROPHONES FOR ANNOUNCERS TABLE STANDS

M 640/M 680



Dynamic directional microphone. Cardioid characteristic. Small microphone for conference and interpreter installations. Insensitive to solid-borne noise because of flexible system mounting. Extremely low feedback. Ideal close-talking characteristic through sintered bronze head in conjunction with an acoustical filter. For gooseneck mounting. For versions with permanently attached gooseneck refer to models.



Specifications

Transducer type: Dynamic, moving coil
 Frequency response: 100 - 12 000 Hz
 Polar pattern: Cardioid
 Attenuation at 180°, 1 kHz: > 20 dB
 Open circuit voltage at 1 kHz: 1 mV/Pa
 Output level: - 59 dB (0 dB Δ 1 mW/Pa)
 EIA G_m output: - 152 dB (0 dB Δ 1 mW/2 · 10⁻⁵ Pa)
 Nominal output impedance: 200 Ω
 Load impedance: > 500 Ω

Dimensions

Length: 80 mm
 Shaft diameter: 20 mm
 Head diameter: 26.5 mm
 Weight: approx. 110 g

Models

M 640 N
M 680 S

Attached to gooseneck, diam. 15 mm, bottom with 3/8" internal thread. Overall length approximately 500 mm with ON/OFF switch. Shielded, 2-conductor connecting cable, length 6 m, blank end.

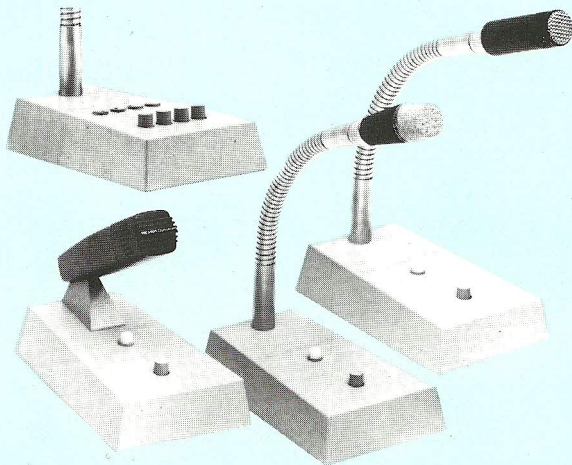
M 682

Attached to gooseneck, diam. 11 mm, bottom with 3/8" internal thread, overall length approximately 300 mm without switch. Shielded, 2-conductor connecting cable, length 6 m, blank end.

M 682 N (CF)

Same as M 682, but gooseneck with female screwable XLR-type connector at the bottom end.

MTF 222



Desktop speaker's station. beyerdynamic table stands satisfy all requirements for individual, application-oriented design of the installation. The universal base MTF 222 can be fitted with up to 4 pilot lamps and up to 12 switches*. Standard version: 1 switch/ 1 lamp (S 1/L 1).

The switches can be individually converted to push buttons by removing a spring. This station is designed to accommodate beyerdynamic transformers and a relay. The table stands are supplied without cabling and without microphone.

Models

MTF 222-81

Desktop speaker's station with permanently attached directional microphone M 81.

MTF 222-SH 15/250 N

Desktop speaker's station with gooseneck, diam. 15 mm, length 250 mm, top fitted with standard DIN female coupling for microphones M 420 - M 422 - M 640.

MTF 222-SH 11/200 N

Desktop speaker's station with gooseneck, diam. 11 mm, length 200 mm, top fitted with standard DIN female coupling for microphone M 420 - M 422 - M 640.

MTF 222-SH 15/250 N (T)

Desktop speaker's station with gooseneck, diam. 15 mm, length 250 mm, top fitted with large, Tuchel female coupling for microphones M 411 N (T).

MTF 222-SH 15/250 N (CF)

same as above, but with gooseneck for microphones with XLR-connector.

*Optional configurations (available only in larger quantities)

● = possible

○ = impossible

Lamps (L)

Switches (S)

Touches (S)	0	1	2	3	4
0	●	●	●	●	●
1	●	●	●	●	○
2	●	●	●	○	○
3	●	●	○	○	○
4	●	○	○	○	○
5	●	○	○	○	○
6	●	○	○	○	○
7	●	○	○	○	○
8	●	○	○	○	○
9	●	○	○	○	○
10	●	○	○	○	○
11	●	○	○	○	○
12	●	○	○	○	○

Dimensions in inches (mm in brackets)

