STUDIO CONDENSER MICROPHONES
MCM System

CK 706
MC 716 (CK 706 + CV 710)
MC 726 (CK 706 + CV 720)

Studio-quality directional condenser microphone. Cardioid/lobe directional pattern. Short shotgun microphone. Cardioid directional pattern for frequencies below 2000 Hz, lobe directional pattern for higher frequencies. As a result, disturbing sounds will be effectively masked also in the case of larger pickup distances. For short pickup distances the directional waveguide coupler prevents the close-talking effect normally occurring with directional microphones. Suited for soloist performances as well as for OB pickup. In the latter case we recommend the use of a windscreen. (WS 716 or KWS 726)

CK 707
MC 717 (CK 707 + CV 710)
MC 727 (CK 707 + CV 720)

Studio-quality directional condenser microphone. Lobe characteristic. Long shotgun microphone for extended pickup distance. Ambient noise is better masked by its lobe characteristic than is the case for other microphones. This is why it is preferably used in applications such as film and television productions where the microphone is not wanted in the picture. For recordings on location or fast movement of the microphone we recommend the use of a windscreen. (WS 717 or KWS 727)
STUDIO
CONDENSER MICROPHONES
MCM System

AV 750
CV 750

For special fields of application we recommend the remotely installable amplifier module CV 750 N (C). In this case the capsules CK 701 – CK 708 are converted by means of the active adapter AV 750 to a low-impedance unit which can be connected to the amplifier module via a cable MVK 750 of basically any length. The amplifier module CV 750 features an XLR connector and can be interfaced to any 48 V phantom power source in the usual manner. In this way it is possible, for example, to inconspicuously arrange microphone heads in stage sceneries. As is the case for amplifier handles CV 710 and CV 720, the amplifier module has a built-in 10 dB attenuator plus a permanently installed footfall sound filter. Frequencies below 200 Hz can be further lowered by 6 dB/octave with a switch-controlled filter.

Technical specifications

Amplifier module CV 750 N (C)
Supply voltage: 48 ± 4 V (Phantom)
Current consumption: 0.6 mA
Gain: 110 dB
Nominal impedance: 150Ω
Rated load impedance: 1000Ω
Max. output voltage at f = 1 kHz, RL = 1kΩ
and THD ±0.5%: 900 mV
Noise voltage (weighted): 3.2 µV
Phase shift between input and output: 180°

Dimensions
Length: 135 mm
Diameter: 25 mm
Weight: 170 g

Adapter module AV 750
Supply voltage: from +10 V to +45 V (on pin 1)
Current drain: 0.66 mA
Gain: 0.85 dB
Frequency response: 40 - 20 000 Hz ±0.5 dB
Nominal impedance: 1kΩ
Max. output voltage at f = 1 kHz, RL = 10kΩ
and THD ±0.5%: 2 V
Noise voltage (weighted): 3.8 µV
Phase shift between input and output: 0°
Amplifier output: asymmetrical (2: ground, 3: AF)

Dimensions
Length: 32 mm
Diameter: 19 mm
Weight: 16 g

ST 750
ST 751
ST 752

The capsule modules CK 701 – CK 708 (except CK 707) together with the adapter module AV 750 can also be used with the table stands ST 750, ST 751 or ST 752 respectively. Particularly interesting for the installation on speaker’s desks is the stand ST 750 which is insulated against solid-borne noise. The supporting tube, rigidly mounted on the cast-iron base, is approximately 170 mm high; the 3 m connecting cable can be run downward through the desk below where the corresponding amplifier CV 750 N (C) can be mounted. If less stringent demands are imposed with respect to the suppression of solid-borne noise, the more simple desk stand ST 751 may also be used. If different speaking angles are required, the ST 752 should be used which is identical to the model ST 751 except that the support tube can be tilted by ±90°.
STUDIO-QUALITY
CONDENSER MICROPHONES

MC 715
Clip-on condenser microphone.
High-quality clip-on condenser microphone with built-in windscreen and impede-
ance converter for reporters, emcees and quiz masters, for presentations, lec-
turers, conferences and "round-table discussions". In cable bound applications
the microphone is supplied from the battery power pack MSB 18.

Technical specifications
(with the MSB 18)
Frequency response:
Pickup pattern:
Sensitivity:
Source impedance:
Rated load impedance:
Weight:

40 - 20,000 Hz
omnidirectional
10 mV/Pa 4 - 40 dBV
200 Ω
≥1000 Ω
approx. 25 g without connector

MSB 18
Battery power pack for clip-on condenser microphone MC 715 in conjunction
with cable bound applications. Built-in bass roll-off filter.

Technical specifications
Operating voltage:
Batteries:
Operating time:
Supp'y voltage:
Feed current:
Source impedance:
Rated load impedance:
Voltage gain:
Dimensions:
Weight:

18 Vcc
2 x AA (IEC 9 F 22)
approx. 160 h
10 Vcc
0.7 mA
2200 Ω
≥1000 Ω
approx. 6 dB
66 x 81 x 26 mm
approx. 180 g

Models
MSB 18 N
MSB 18 N (C)

MC 734 N (C) P 48
Soloist's condenser microphone.
Cardioid characteristic.
Typical soloist's microphone with unusually flat frequency response
curve. Extremely low feedback. Highly effective suppression of pop
and hiss noise. Not sensitive to hand-held noise. The low frequency
response can be changed through a built-in, switch-controlled three-
stage filter. Additional footfall sound filter built in. Rugged design.
Wide dynamic range.
For 48 V phantom powering.

Technical specifications
Supply voltage:
Current consumption:
Frequency response:
Polar pattern:
Sensitivity:
Source impedance:
Minimum load impedance:
Max. SPL for 0.5% THD
at 1 kHz:
Noise voltage (DIN 45405):
S/N ratio according to DIN 45 690
(ref. level 1 Pa):
A-weighted equivalent noise level
due to inherent noise (IEC 179):
Dimensions
Length:
Shaft diameter:
Head diameter:
Head length:
Weight:

48 ± 4 V
approx. 0.5 mA
20 - 20,000 Hz
cardioid
5 mV/Pa 4 - 46 dBV
100 Ω
≥1000 Ω
138 dB
1.7 μV
69 dB
approx. 18 dB
175 mm
25 mm
45 mm
90 mm
270 g
MC 736 N (C) P 48
MC 736 N (C) PV


MC 736 N (C) PV: Direct connection to all phantom power sources between 12 V and 48 V. Lightweight aluminium housing. Hence particularly well suited for OB (outside broadcast) and film sound recordings.

Technical specifications
Type: MC 736 N (C) P 48 MC 736 N (C) PV
Supply voltage: 48 ± 4 V 12 V - 48 V
Current consumption: 1.4 mA 6.5 mA
Frequency response: 1000 Hz 40 - 20 000 Hz
Cardioid/lobe
-30 dBV -33 dBV 25 mV/Pa - 33 dBV
Sensitivity: 90 mV/Pa ± 30 dBV 150 mV/Pa
Source impedance: ≥ 1000 Ω ≥ 1000 Ω
Minimum load impedance: ≥ 1000 Ω ≥ 1000 Ω
Max. SPL for 0.5 % THD at 1 kHz: 123 dB 128 dB
with preattenuation: 95 dB 128 dB
Noise voltage (DIN 45 406): 6.0 µV approx. 74 dB approx. 74 dB
S/N ratio according to DIN 45 690 (ref. level 1 Pa): approx. 13 dB approx. 13 dB
Equivalent noise level, A-weighted:

Dimensions
Length: 294 mm 294 mm
Diameter: 21 mm 21 mm
Weight: 240 g 185 g

MC 737 N (C) P 48
MC 737 N (C) PV


MC 737 N (C) PV: Direct connection to all phantom power sources between 12 V and 48 V possible. Weight reduced by aluminium housing.

Technical specifications
Type: MC 737 N (C) P 48 MC 737 N (C) PV
Supply voltage: 48 ± 4 V 12 V - 48 V
Current consumption: 1.4 mA 6.5 mA
Frequency response: 1000 Hz 40 - 20 000 Hz
Cardioid/lobe
-30 dBV -33 dBV 25 mV/Pa - 33 dBV
Sensitivity: 90 mV/Pa ± 30 dBV 150 mV/Pa
Source impedance: ≥ 1000 Ω ≥ 1000 Ω
Minimum load impedance: ≥ 1000 Ω ≥ 1000 Ω
Max. SPL for 0.5 % THD at 1 kHz: 123 dB 128 dB
with preattenuation: 95 dB 128 dB
Noise voltage (DIN 45 406): 6.0 µV approx. 74 dB approx. 74 dB
S/N ratio according to DIN 45 690 (ref. level 1 Pa): approx. 13 dB approx. 13 dB
Equivalent noise level, A-weighted:

Dimensions
Length: 564 mm 564 mm
Diameter: 21 mm 21 mm
Weight: 440 g 250 g
Studio-quality condenser microphone with frequency-independent, switch-selectable directional pattern: omni-directional, wide cardioid, cardioid, hypercardioid, bidirectional. Uniform frequency response independent of polar pattern. For 48 V phantom powering, switch-controlled preset attenuation of 10 dB for high sound pressure levels. Available not only in the standard version with 3-pin XLR connector but also in the special version 5-pin XLR connector for remote control of the directional pattern from the power pack MSG 740. Supplied with microphone clamp MKV 11, 3/8" -5/8" internal thread.

Technical specifications
Supply voltage: 48 ± 4 V
Current consumption: 1.5 mA
Frequency response: 40 - 20,000 Hz
Pickup pattern: omni-directional, wide cardioid, cardioid, hypercardioid, bidirectional
Sensitivity: 10 mV/Pa = 40 dBV
Equivalent noise level, A-weighted: 100 kHz, 1200Ω, 194 dB, 144 dB
Max. S/N for 0.1% THD at 1 kHz: approx. 70 dB
Signal-to-noise ratio (referred to 1 Pa): approx. 17 dB
Equivalent noise level, A-weighted:

Dimensions
Length: 215 mm
Shaft diameter: 37 mm
Head dimensions: 36 x 55 mm
Weight: approx. 390 g

Models
MC 740 N (C)
MC 740 N (C/S)

The frequency response curves and polar diagrams depend on the selector switch position for the desired directional pattern:
STUDIO-QUALITY
CONDENSER MICROPHONES

MPC 40

Being integrated in the surface on which it is placed, the acoustical boundary microphone can use the phase balance of the waves which are received and reflected by the surface. This new design guarantees a clear sound reproduction and avoids that certain frequencies are not transmitted or over-emphasized. As it is independent on the distance to the sound source it can be placed anywhere in the room.

The MPC 40 has a frequency response of 25-20000 Hz and a half-spherical polar pattern. As well as for stereophonic purposes this microphone is also suited for the pick-up of instruments, such as pianos, where it is fixed inside the instrument. Due to its small dimensions, it is especially qualified for this purpose. Instead of a built-in pre-amplifier, the external amplifier module CV 750 (with built-in footfall filter, switchable 30 dB attenuator and switchable roll-off filters) can be connected to the microphone. For battery operation battery power supply MES 40 VN (C) is available which can also be used as adapter for the connection of any phantom power supply. The new beyerdynamic MPC 40 is an important alternative for recording studios as well as for the pick-up of instruments compared with microphones of usual designs.

Technical specifications
Operating principle: pressure transducer
Polar pattern: half-spherical
Frequency response: 25-20000 Hz
Nominal impedance: 1000 Q
Max. SPL at f = 1 kHz: 126 dB, when operated with CV 750 N (C)
A-weighted equivalent S.P.L.: approx. 20 dB
7 - 48 V = approx. 650 µA

Dimensions
Diameter: 70 mm
Height: 105 mm

Technical specification
Supply voltage: 48 ± 4 V (Phantom)
Current consumption: 0.6 mA
Voigt gain: 112
With 10 dB attenuation: 60 - 20000 Hz
Frequency response: 100 Q
Nominal impedance: 1000 Q
Max. output voltage at f = 1 kHz: 1 V
THD ≤ 0.5 %
Noise voltage (weighted): 3.2 µV
Phase shift between input and output: 180°

Dimensions
Diameter: 25 mm
Height: 135 mm
Weight: 170 g

Frequency response curve with CV 750 N (C)

Frequency response curve with MES 40 VN (C)

Technical specifications
Supply voltage: 9 V battery (IEC 6F 22) or 12-48 V phantom power
Current consumption: approx. 3.5 mA, when operated with 9 V battery
approx. 4.5 mA, when operated with 12-48 V phantom power
Voltage gain: 1
Frequency response: 1 - 20000 Hz
Nominal impedance: 1000 Q
Max. output voltage at f = 1 kHz: 500 mV
THD ≤ 0.5 %
Noise voltage: 3.2 µV
Phase shift between input and output: 180°

Dimensions
Diameter: 65 x 60 x 26 mm
Height: 100 g
STUDIO-QUALITY
CONDENSER MICROPHONES

MPC 50 N (C)

Productions with acoustical boundary or so-called PZM® microphones as alternatives to conventional, polymeric microphone pickup techniques excel through their balance and separating ability. Also field-proven for conference installations. The microphone installed in an oak panel is absolutely step proof because it is installed flush with the panel surface. XLR-connection, connecting cable can be of any length.
12 - 48 V phantom powering or self-contained powering. ON/OFF switch. Power pilot LED.

Technical specifications
Supply voltage: 12 V - 48 V phantom powering or 9 V battery approx., 4 mA
Current consumption: approx. 20 - 20,000 Hz
Frequency response: half-spherical approx., 20 mV/Pa
Polar pattern: approx. 200 Q
Nominal impedance: E 1800 Q
Rated load impedance: 9.0 dB
Max. SPL for 0.5% THD at 1 kHz: approx. 67 dB
Noise voltage (SNR 45-406): approx. 20 dB
Signal-to-noise ratio: 9 V block battery, IEC 6 F 22
Equivalent noise level, A weighted:

Battery:

Dimensions
Length: 220 mm
Width: 220 mm
Height: 22.5 mm
Weight: approx. 500 g

MPC 60/1
MPC 60/3

Acoustical boundary microphones. Conventional condenser transducers to achieve a better signal-to-noise ratio. The two microphones differ in polar pattern. The MPC 60/1 has a half-spherical polar pattern whereas the MPC 60/3 is cardioid. This cardioid polar pattern means a better protection against feedback and therefore on stage the MPC 60/3 version should be used. The transducer systems which are mounted in a slanting position are protected against damage by a metal bow. The two different cartridges can be exchanged by each other.

Technical specifications
MPC 60/1
Operating mode: pressure transducer
Polar pattern: half-spherical
Frequency response: 20 - 20,000 Hz
Sensitivity: 70 mV/Pa
Nominal impedance: 200 Q
Rated load impedance: 1000 Q
Max. SPL at 1 kHz, THD < 1%: 132 dB
Signal-to-noise ratio relative to 1 Pa: 72 dB
A-weighted equivalent SPL: 15 dB
Supply voltage: 9 V battery or 12 - 48 V phantom power
Current consumption: approx. 5.5 mA

Dimensions:
length: 220 mm
width: 220 mm
height: approx. 50 mm
weight: approx. 500 g

MPC 60/3
Operating mode: pressure gradient
Polar pattern: half-spherical
Frequency response: 20 - 20,000 Hz
Sensitivity: 100 mV/Pa
Nominal impedance: 1000 Q
Rated load impedance: 1000 Q
Max. SPL at 1 kHz, THD < 1%: 132 dB
Signal-to-noise ratio relative to 1 Pa: 72 dB
A-weighted equivalent SPL: 16 dB
Supply voltage: 9 V battery or 12 - 48 V phantom power
Current consumption: approx. 5.5 mA

Dimensions:
length: 220 mm
width: 220 mm
height: approx. 50 mm
weight: approx. 750 g
MCE 5/MCE 6

Clip-on electret condenser microphone. Because of its small dimensions, this clip-on microphone which is designed for the same applications as the MCE 715 is particularly well suited for film and television productions where microphones should be highly inconspicuous. Removable wire-type windscreen. In conjunction with the holder MGH 5 suited for picking up string instruments. In cable bound applications this microphone is supplied from the battery power pack MES 5. Direct connection of various models to the beyerdynamic pocket transmitters is possible. Adapters for powering via 12 V A-B and 48 V phantom sources as well as Nagra and Stellavox tape recorders are available.

MCE 6: Special model of the MCE 5 for picking up instruments producing high sound pressure levels such as flute, trumpet, saxophone, etc. Max. SPL >146 dB. Models see MCE 6.

Technical specifications

Model:
MCE 5, MCE 5.3
(with MES 5 V)
Pressure microphone omni directional 20 - 20000 Hz
7 mV/Pa ± 43 dB
800 Ω 
± 3000 Q
61 db
116 dB
9 V
1,4 mA
approx. 90 h
brass
chrome-plated, mat black
1,3 m
small 6-pin standard DIN connector

MCE 5.4, MCE 5.6
Pressure microphone omni directional 20 - 20000 Hz
14 mV/Pa ± 37 dB
200 Ω
± 1000 Q
61 db
117 dB
9 V
1,4 mA
approx. 40 h
brass
chrome-plated, mat black
1,3 m
MCE 6.4: small 6-pin standard DIN connector
MCE 6.5: 3-pin cannon female connector or equivalent

MCE 5.1, MCE 5.11
Pressure microphone omni directional 20 - 20000 Hz
14 mV/Pa ± 37 dB
200 Ω
± 1000 Q
61 db
116 dB
5 V
1,4 mA
approx. 90 h
brass
chrome-plated, mat black
1,3 m
MCE 6.1: 2-pole jack, 6,35 mm Ø, built-in battery
MCE 6.11: 3-pinch cannon male connector or equivalent, with built-in battery

Models
MCE 5
MCE 5.3
MCE 5.4
MCE 5.5
MCE 5.6
MCE 5.8
MCE 5.9
MCE 5.11/NIKI
MCE 5.11/NIC1
MCE 5.12
MCE 5.14
MCE 5.14 S

Standard model, small 6-pin standard DIN connector.
Same as MCE 5, however with bass roll-off, small 6-pin standard connector.
Same as MCE 5, however with low impedance and higher output voltage, Small 6-pin standard connector.
Special version for Nagra SN.
Same as MCE 5.4, but for direct connection to Nagra and Stellavox tape recorders, 3-pin XLR socket.
For direct connection to Microton TX101 and TX 502, 8-pin Lemooss connector or equivalent.
Same as MCE 5, but with 3 m long cable with blank end (outer shield = ground, inner shield = +9 V, inner green conductor = AF).
Same as MCE 5.4, but with 3 m long cable and built-in windscreen in 2-pole 6,35 mm diameter jack.
Same as MCE 5.1, but with 3-pinch cannon connector or equivalent for phantom or battery powering.
For direct connection to TS 42 R, with cinch connector.
For direct connection to TS 42 R-10, 30.
Same as above, but with ON-OFF switch.

MFT 5

Cartridge for German flute designed on the basis of MCE 5. To fit different flute diameters an adapter (matching part) in 3 different sizes is available. No transmission of key and handling noises. Equipped with a special filter to suppress blowing and popping noises. Highly insensitive to feedback due to pick-up inside the flute.
MCE 10
Clip-on electret condenser microphone.
Hypercardioid.
This high-quality electrostatic clip-on microphone in "back-electret technology" is used in place of the MCE 5 when feedback problems occur from simultaneous sound coverage. Because of the hypercardioid directional pattern of the MCE 10, the audio level in the hall can be slightly increased above the volume attainable with the MCE 5. Used particularly in theaters (musicals), live television productions, presentations, churches, etc. Despite its directional properties, the dimensions of the MCE 10 are only slightly larger than those of the MCE 5 which means that this microphone is also inconspicuous.

Technical specifications:
- Operating mode: pressure-gradient microphone
- Polar pattern: hypercardioid
- Frequency response: 40 - 20000 Hz
- Sensitivity at 1 kHz: 8 mV/Pa - 42 dB
- Source impedance: 700 Ω
- Rated load impedance: ≥2.7 kΩ
- Signal to noise ratio: approx. 61 dB
- Equivalent noise level, A-weighted: 26 dB
- Max. SPL at 1 kHz and RL: 116 dB
- Supply voltage: 8 V ± 18 V
- Current consumption at 9 V supply voltage: 1.4 mA
- Case: metal block
- Connector: according to models (refer to MCE 5)
- Dimensions:
  - Length: 30 mm
  - Diameter: 9 mm
- Weight: 16 g without cable and connector

Models
Refer MCE 5, page 28

Special accessories for MCE 5, MCE 6, MCE 10

MKV 5
- MKV 5/1: Clamp with mount, for one MCE 5 or MCE 6
- MKV 5/1 D: Clamp with swivel mount, for one MCE 5 or MCE 6
- MKV 5/2: Clamp with mount, for two MCE 5 or MCE 6

WS 5
- Wire mesh windscreen for MCE 5, MCE 6.
- ZWS 5: Foam mesh windscreen for outdoor productions.

WS 10
- Wire mesh windscreen for MCE 10.
- ZWS 10: Foam mesh windscreen for outdoor productions.

MKV 10
- MKV 10/1: Clamp with swivel mount for one MCE 10.

MSV 5
- MSV 5/1: Pin with mount for one MCE 5 or MCE 6
- MSV 5/2: Pin with mount for two MCE 5 or MCE 6

WS 10
- MTH 5: Mount for trumpet
- MAG 5.1: Mount for acoustical guitar
- MGH 5: Violin mount for MCE 5, MCE 6 or MCE 10
- MSH 5: Mount for cymbal.

(not illustrated)
- MAG 5: Mount for guitar
- MGH 5: Mount for flute
- MSH 6.1: Mount for cymbal.
ACCESSORIES FOR CONDENSER MICROPHONES

MA 5 P 48 N (C)
MA 5 T 12 N (C)

Adapter for connecting the clip-on microphone MCE 5/MCE 5.3/MCE 5.4 to 48 V phantom or 12 V "A8" supplies. Can be mounted on equipment side.

MA 5 P 48 N (C).F
MA 5 T 12 N (C).F

Adapter for connecting the clip-on microphones MCE 5.4 to Neapla and Steleaflex tape recorders. For 12 V "A8" powering. With XLR female connector on equipment side. On special request also available with male XLR connector (MA 5 P 48 N (C) M resp. MA 5 T 12 N (C) M).

POWER PACKS

MES 5

Battery power pack for clip-on condenser microphones MCE 5, MCE 6 and MCE 10 in conjunction with cable bound applications. Can also be used as an adapter to 48 V phantom power circuits without the need for battery removal.

Technical specifications
- Operating voltage: 9 V
- Battery: 1 x 9 V (IEC 6 F 22)
- Supply voltage: 12 V
- Feed current: approx. 90 mA
- Battery operating time: approx. 40 h
- MCE 5: 2000 Ω
- MCE 5.3: 3000 Ω
- MCE 5.4: 1000 Ω

Models
- MES 5 VN
- MES 5 VN (C)

MSB 9 N
MSB 9 N.1

Battery power pack for mains-independent phantom powering of a beyerdynamic studio condenser microphone with amplifier handle CV 720. Connects between the microphone and the amplifier/tape recorder input. Battery check LED. MSB 9 N and MSB 9 N (C) for balanced inputs. MSB 9 N.1 and MSB 9 N (C).1 with built-in balancing transformers for unbalanced inputs.

Technical specifications
- Operating voltage: 9 V
- Battery: 1 x 9 V (IEC 6 F 22)
- Supply voltage: approx. 40 h
- Current feed: 3.7 mA
- Nominal impedance: 200 Ω
- Mated load impedance: 68 x 68 x 20 mm
- Dimensions: approx. 150 g

MSB 48 N (C).1

Battery power pack for mains-independent phantom powering of a beyerdynamic studio condenser microphone, designed for 48 V phantom powering. Connects between the microphone and the amplifier/tape recorder input. Built-in balancing transformer permits connection to balanced and unbalanced inputs. Battery check LED. With the aid of the mounting clip it can be fastened e.g. to the trouser belt.

Technical specifications
- Phantom powering according to DIN 45 566
- Battery: 1 x 9 V (IEC 6 F 22)
- Supply voltage: approx. 180 h for 1 mA microphone current feed
- Battery operating time with alkaline-manganese batteries:
  - Dimenssions: 120 x 66 x 41 mm
  - Weight (without batteries): approx. 330 g
ACCESSORIES FOR
CONDENSER MICROPHONES

POWER PACKS

**MSG 248 N**
**MSG 248 N.1**
Mains-supplied power pack for 48 V phantom powering of two microphones according to DIN 45596. Connects between the microphone and the amplifier/mixing console input. MSG 248 N and MSG 248 N (C) for balanced inputs. MSG 248 N.1 and MSG 248 N (C).1 with built-in balancing transformer for balanced and unbalanced inputs.

**Technical specifications**
- Operating mains voltage: 220 V ±10%
- Power consumption: 2.2 W
- DC voltage output: 48 V ±1 V<br>10 mA
- Nominal impedance: 200 Ω
- Rated load impedance: 1000 Ω
- Dimensions: 203 x 89 x 44 mm
- Weight: approx. 650 g

**MSG 248 N (C)**
**MSG 248 N (C).1**

**MSG 648 N**
**MSG 648 N.1**
Mains-supplied power pack for 48 V phantom powering of six microphones according to DIN 45596. Connects between the microphone and the amplifier/mixing console input. MSG 648 and MSG 648 N (C) for balanced inputs. MSG 648 N.1 and MSG 648 N (C).1 with built-in balancing transformer for balanced and unbalanced inputs.

**Technical specifications**
- Operating mains voltage: 220 V ±10%
- Power consumption: 4 W
- DC voltage output: 48 V ±1 V<br>10 mA
- Nominal impedance: 200 Ω
- Rated load impedance: 1000 Ω
- Dimensions: 283 x 149 x 82 mm
- Weight: approx. 2200 g

**MSG 740 N (C)**
Mains-supplied power pack for connecting MC 740 N (C/5). Permits remote control of the directional pattern (omni-directional, wide cardioid, hypercardioid, figure 8) in switch position “R” of MC 740 N (C/5). Connects between the microphone and balanced amplifier input.

**Technical specifications**
- Operating mains voltage: 100...130 V/200...240 V
- Power consumption: approx. 4.5 W
- DC voltage output: 2 x +48 V<br>2 x +22 V<br>2 x +65 V<br>2 x -65 V
- Max. DC current: ±10 mA<br>±80 µA<br>±50 µA
- Ripple: approx. 830 g