

MKH 30 P48

Bedienungsanleitung
Instructions for use
Notice d'emploi
Istruzioni per l'uso
Instrucciones para el uso



Inhalt/Contents/Sommaire/Indice/Contenido

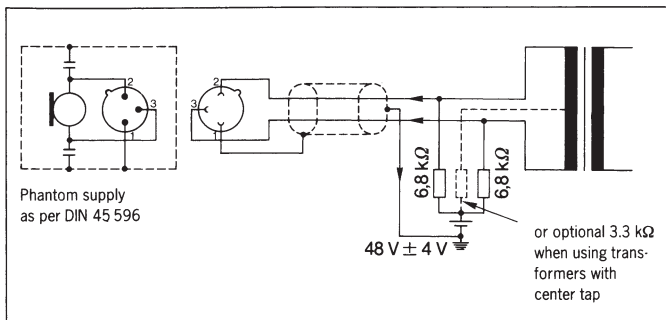
Kurzbeschreibung	3	Descrizione sommaria	30
Inbetriebnahme		Messa in funzione	
Speisung und Anschluß	4	Alimentazione e collegamento	31
Einstellen der Vordämpfung und des Roll-off Filters	5	Regolazione della preattenuazione e del filtro roll-off	32
Aufstellen des Mikrofons	6	Piazzamento del microfono	33
Befestigen des Mikrofons	7	Fissaggio del microfono	34
Technische Daten	8	Dati tecnici	35
Empfohlenes Zubehör	10	Accessori consigliati	37
Anschluß-und Speisemöglichkeit	11	Possibilità di alimentazione e di collegamento	38
Brief description	12		
Putting into service		Description breve	39
Power supply and connections	13	Puesta en servicio	
Setting the pre-attenuation and roll-off filter	14	Alimentación y conexión	40
Setting up the microphone	15	Comutación del filtro roll-off y del preatenuador	41
Mounting the microphone	16	Colocación del micrófono	42
Technical data	17	Fijación del micrófono	43
Recommended accessories	19	Datos técnicos	44
Powering and connection possibilities	20	Accesorios Recomendados	46
		Alimentación y conexiones	47
Breve description	21		
Mise en service			
Alimentation et raccordement	22		
Commutation du filtre de grave et du préattenuateur	23		
Positionnement du microphone	24		
Fixation du microphone	25		
Caractéristiques techniques	26		
Accessoires recommandées	28		
Branchement et alimentation	29		

Brief description

The MKH 30 P 48 is a high-frequency condenser microphone with bilateral characteristics. Its features include:

- Symmetrical, bi-directional (figure-eight) characteristic
- Very low noise level, making possible high-dynamic recordings
- Undistorted transmission of sound pressures up to 142 dB
- Frequency response range 40 to 20 000 Hz
- Electronically balanced output
- Defeatable roll-off filter
- Pad switch (-10 dB attenuation)

Putting into service



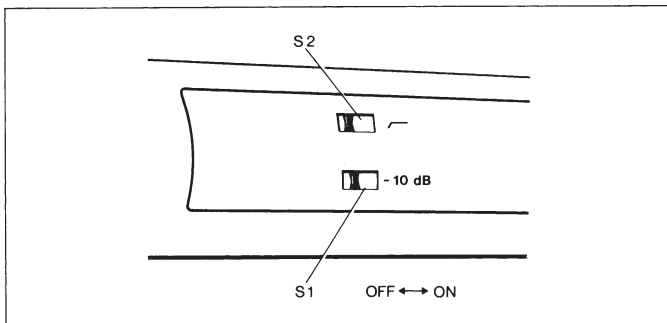
Power supply and connections

The MKH 30 P 48 is designed for use with phantom power supply between 44 and 52 V, as prescribed in DIN 45 596.

Plug:	3-pole XLR
Wiring:	balanced
Impedance:	150 Ω
Min. terminating impedance:	1000 Ω

See page 20 for powering and connection possibilities.

Note: Extension cables should if possible be inserted between the power supply unit and the audio recorder or mixer. Total cable length should not exceed 200 m. At greater lengths the cable capacitance will affect microphone frequency response at the upper end of the response range.



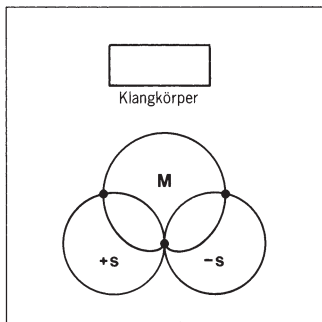
Setting the pre-attenuation and roll-off filter

Pre-attenuation **S 1**

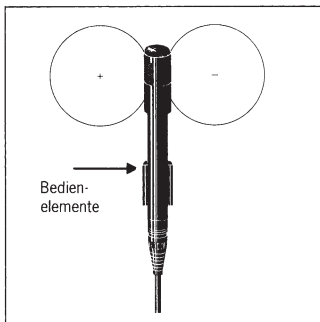
Pad switch **S 1** is used to attenuate microphone sensitivity by 10 dB. This feature should be used only when the microphone input at downline equipment is not designed to handle the high microphone output voltages generated at high sound pressure levels (which would result in distortion).

Setting the roll-off filter **S 2**

The MKH 30 P 48 is equipped with a switchable roll-off filter to compensate for the proximity effect which is common for microphones and to avoid low-frequency interference due to footfall vibration. The filter design is such that the proximity effect is compensated for at distances from 40 to 60 cm. The effect of the roll-off filter on the frequency response is shown on page 18. Regardless of the setting of switch **S 2**, a cut-off filter is effective below 30 Hz to suppress disturbances due to low-frequency air or body noises (subsonic signals).



Principle used in MS stereophonic recording



Setting up the microphone

An important field of application for the MKH 30 P 48 is in MS (mid-side) stereophonic recordings; this microphone distinguishes itself with particularly good monaural compatibility.

Two microphones are required for this type of recording:

- 1 microphone with bi-directional characteristic to record the side signal (S)
- 1 microphone with cardioid, supercardioid or bi-directional characteristic to record the signal at the center (M)

Possible microphone combinations:

- MKH 30 P 48 +
- MKH 20 P 48 (omnidirectional) or
- MKH 40 P 48 (cardioid) or
- MKH 30 P 48 (bi-directional)

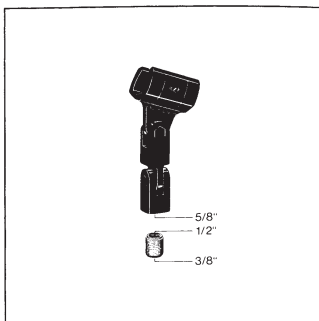
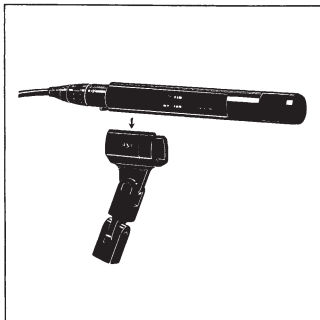
The S-microphone (MKH 30 P 48) is to be positioned in front of the sound source in such a way that the "+" side is to the left (switches visible).

The left (L) and right (R) signals are derived from the MS signal by addition and subtraction:

$$L = M + S$$

$$R = M - S$$

Mounting the microphone



The stand socket is equipped with a threaded, interchangeable insert to adapt to stands with 3/8", 1/2" or 5/8" threads.

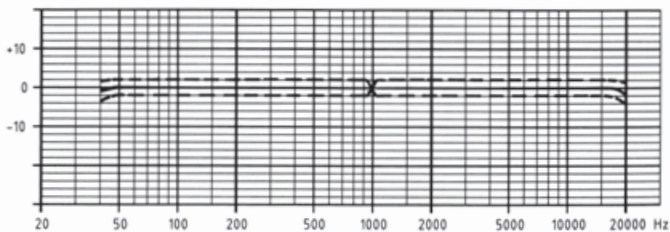
Technical data

Acoustic principle	pressure-gradient receiver
Directional characteristics	bilateral (figure-eight)
Frequency response range	40 to 20.000 Hz
Free-field, no-load transmission factor at 1 kHz	25 mV/Pa (8 mV/Pa) \cong -32 dBV (-42 dBV)
Equivalent sound pressure level	
as per DIN 45 500, curve A	13 dB (18 dB)
as per DIN 45 405/CCIR 468	22 dB (28 dB)
Max. sound pressure level	134 dB (142 dB)
Output	balanced
Nominal impedance	150 Ω
Min. terminating impedance	1000 Ω
Pre-attenuation	10 dB, defeatable
Low-cut filter	12 dB/oct below 30 Hz
Roll-off filter (switch setting "f")	additional 4 dB attenuation at 50 Hz
Power supply	Phantom supply as per DIN 45 596
Supply voltage	44 to 52 V
Supply current	2 mA
Dimensions (mm)	25 \varnothing x 150
Weight	110 g
Standard equipment	one MKH 30 P 48 microphone one MZQ 31 stand adapter one MZW 41 windscreen

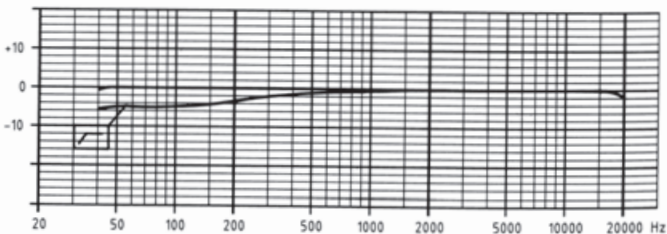
Values in brackets with pad switch in position -10 dB

We reserve the right to adopt changes, particularly in the interest of technical progress.

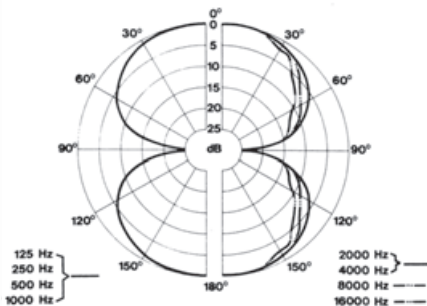
dB Frequency response



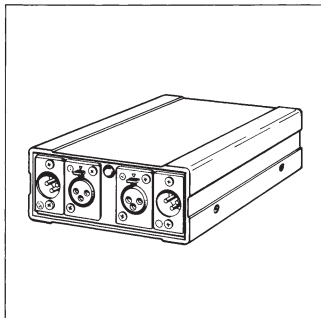
dB Effect of the roll-off filter



Polar diagram



Recommended accessories



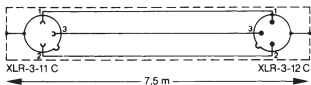
MZN 16 P 48 U power supply

(Art.No. 1241)

Power supply for 48 V phantom supply (DIN 45 596). Allows simultaneous supply of two microphones. Required line voltage: 95 to 265 V/50 – 60 Hz.

KA 7 U connector cable

(Art.No. 1777)

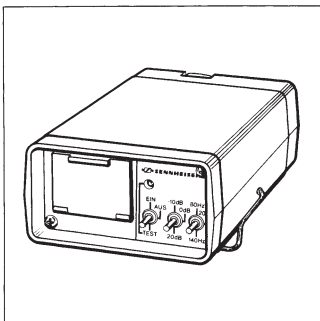


Three-conductor, shielded cable;
7,5 m long.

Suspension MZS 40

(Art.No. 03017)

Features high damping of structure-borne noise.



Battery-powered supply adapter MZA 14 P 48 U

(Art.No. 2034)

Adapter to supply a MKH 30 P 48 microphone, independent of a line power source. The MZA 14 P 48 U contains a voltage converter which boosts the voltage of a 9 V battery to 48 V. Battery life: approx. 25 hours. Output suitable for connection to balanced and unbalanced microphone inputs. Special features: defeatable 10 dB and 20 dB pre-attenuation; switchable low-cut filter. Dimensions: 140 x 46 x 76 mm.

Stand holder MZQ 31

(Part. No. 35972)

Enables microphone adjustment in any direction.

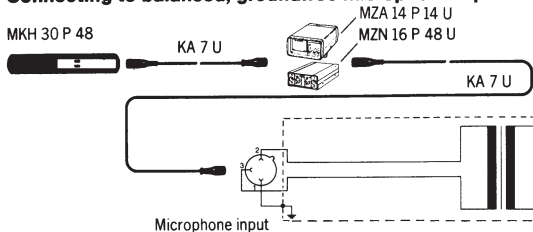
Twin clip MZD 30

(Art.No. 02990)

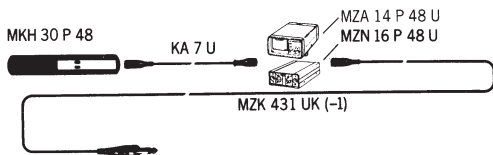
For mechanical connection of a MKH 30 with MKH 20 or MKH 40 when used for MS-stereo recordings (Blumlein configuration).

Powering and connection possibilities

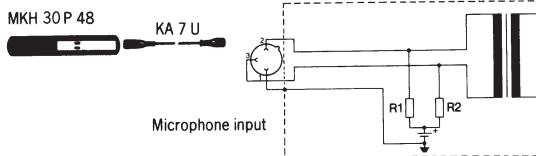
Connecting to balanced, groundfree microphone inputs



Connecting to unbalanced microphone inputs



Connecting to mixers and audio recording decks with phantom voltage supply





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