BEDIENUNGSANLEITUNG OPERATING INSTRUCTIONS NOTICE D'UTILISATION

Opus 500

Drahtloses UHF-System Wireless UHF System Système sans fil UHF



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OPERATING INSTRUCTIONS OPUS 500

Thank you for selecting the Opus 500 wireless system in PLL synthesised technology. Please take some time to read carefully through this manual before setting up the equipment.

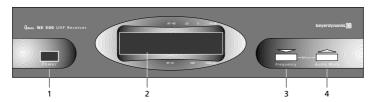
Important:

When you unpack the devices, inspect them for transport damage. If you do find transport
damage, notify the transportation company without delay. Delay in reporting transport
damage could result in the loss of your rights to an adjustment. Only the consignee (you)
may institute a claim with the carrier for transport damage.

1. NE 500 Diversity Receiver

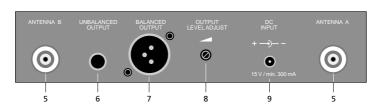
1.1 Controls and Indicators

Front view



- 1 Mains ON/OFF switch
- 2 Illuminated multifunction LC-display
- 3 Left button (Frequency)
- 4 Right button (Audio Mute)

Rear view



- 5 Antenna inputs
- 6 AF-output, 1/4" jack, unbalanced output signal
- 7 AF-output, 3-pin XLR, balanced, connection for mixing console, amplifier
- 8 Volume potentiometer, maximum output level can be adjusted for the unbalanced and balanced AF-output in the range of +6 dBm (fully clockwise) to -30 dBm (fully anticlockwise)
- 9 Connection for power supply unit

1.2 Connecting Antennae

Connect the two ZEA 500 telescopic antennae to the antenna inputs (5). Fully extend the antennae.

Please note that for diversity operation both antennae have to be connected. A weighting circuit silently switches the signal with the better S/N ratio to the output.

1.3 Setting up

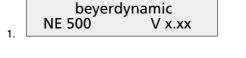
- 1. Place the NE 500 diversity receiver in the same room or area as the transmitters. Ensure that the NE 500 is installed as close as possible to the mixing console or amplifier so that the display can be seen at all times.
- 2. Do not place the NE 500 receiver near digitally controlled equipment.
- 3. Connect the XLR-output (7) to the corresponding input of the mixing console or amplifier.
- Make sure the mains voltage shown on the power supply unit corresponds to the local mains voltage.
- 5. Connect the power supply unit to the receiver and to AC power.
- 6. Adjust the output level (8) of the receiver depending on the connected mixing console or amplifier.

Rule of thumb: Microphone level - fully anti-clockwise

Line level - fully clockwise

7. Switch the NE 500 on (1).

The following indications will appear:



You can display this indication (2.) any time by pressing the left button (3).

8. If the transmitter is switched off, the following default screen appears on the display (2):

CH06 AF [A] RF muted

If there is a transmitter switched on, but nobody speaks into the microphone, the following default screen appears on the display:

CH06 AF [A] RF IIIIIIIIIIIII If there is a transmitter switched on and somebody speaks into the microphone, the following default screen appears on the display (2):

| CH06 | AF RF | 11111111111 |
|------|----------|------------------|
| [A] | ŊΓ | 1111111111111111 |

1.3.1 Diversity Indication of the Receiving Channel

The NE 500 has two separate receiving circuits for each of the antennae. The signal with the better S/N ratio is switched to the output. The received diversity channel (A or B) is shown on the LC-display.

1.3.2 Reading the AF- and RF-level

The AF- or RF- level can be read by using the upper and lower scale of the LC-display.

1.3.3 Switching off the AF

If you want to disable the AF signal of the transmitter, press the right button. The AF is switched off and the following indication appears:

| CH06 [A] | AF RF | disabled |
|-------------|----------|------------------|
| [A] | KF | 1111111111111111 |

1.3.4 AF overload

An overload of the transmitter is also indicated on the display (2). If the following indication appears, reduce the transmitter sensitivity or increase the distance between microphone and sound source.

CH06 AF --CLIP--[A] RF IIIIIIIIIIIII

1.3.5 Choosing another frequency

Press the left and right button simultaneously:

Press the left button once again. The following indication appears:

Choose the new frequency by pressing the left (descending) or the right (ascending) button. To store the new frequency press the two buttons simultaneously.

1.3.6 Adjusting the Squelch

Press the left and right button simultaneously:

Press the right button one time and the following indication appears on the display (2):

Press the left button. The following indication appears:

Adjust the squelch with the left button (descending) or with the right button (ascending). To store the new setting press the two buttons simultaneously.

1.3.7 RF-indication (RF-meter)

With this function you can check the receiving antennae and find out the optimum antenna positions.

Press the left and right button simultaneously:

SELECT MENU FREQ▼ ▲MORE

Press the right button two times. The following indication appears:

SELECT MENU RF-METER▼ ▲MORE

Press the left button. The following indication appears:

(In this figure the A antenna receives the better signal.)
If you press the left or right button, the default screen appears again (refer to 3. Setting up).

1.3.8 "Lock" Functions

- **The following functions** can be locked:
- Frequency selection
- Squelch
- Audio Mute

Locking the Frequency Selection Function

Press the left and right button simultaneously:

SELECT MENU FREQ▼ ▲MORE Press the right button three times. The following indication appears:

SELECT MENU LOCK▼ ▲ MORE

Press the left button. The following indication appears:

FREQ. UNLOCKED LOCK▼ ▲ MORE

For locking the frequency selection press the left button. The following indication appears:

FREQ. LOCKED UNLOCK▼ ▲ MORE

Locking the Squelch Function

Press the right button. The following indication appears:

SQUELCH UNLOCKED LOCK▼ ▲ MORE

For locking the squelch function press the left button. The following indication appears:

SQUELCH LOCKED UNLOCK▼ ▲ MORE

Locking the Audio Mute Function

Press the right button. The following indication appears:

MUTE UNLOCKED LOCK♥ ▲ MORE

For locking the audio mute function press the left button. The following indication appears:

MUTE LOCKED UNLOCK▼ ▲ MORE

For storing all lock functions press the left and right button simultaneously. If one of these locked functions is called, the following indication appears:

FUNCTION LOCKED

Release of the locked functions

To release the locked functions call the respective menu and press the left button until **UNLOCKED** appears in the upper line.

1.3.9 Adjusting the contrast

You can adjust the contrast of the display indication darker or lighter.

Press the left and the right button simultaneously:

SELECT MENU FREQ▼ ▲MORE

Press the right button four times. The following indication appears:

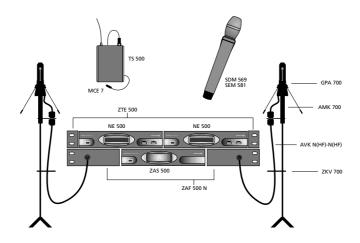
SELECT MENU CONTRAST▼ ▲MORE

Press the left button. You can adjust the contrast lighter with the left button or darker with the right button. To store, press the two buttons simultaneously.

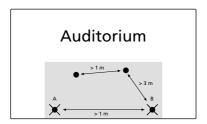


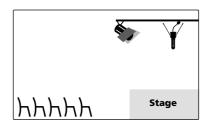
1.4 Connecting and Positioning of remote Antennae

In multichannel systems we recommend the use of the GPA 700 groundplane antennae in conjunction with the ZAF 500 N antenna connection panel and low attenuation antenna cables such as AVK N(HF)-N(HF) (LA). For mounting the antenna use the AMK 700 mounting device (on top 3/8" external thread for connection to GPA 700; on bottom 3/8" internal thread for stand mounting). You can mount the antenna cable to the stand with the ZKV 700 clamp for strain relief.



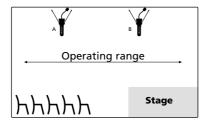
- 1. Connect the GPA 700 receiving antennae to the corresponding antenna inputs and place the antennae to the right and left of the receiver. Diversity reception is improved when the antennae are vertical or slightly tilted.
- 2. The distance between the two receiving antennae should be at least 1 m. $\,$





3. The distance between transmitting and receiving antennae should be at least 3 m to avoid overloading and interference between different channels. We therefore recommend installing the antennae in a high position, especially in multi-channel systems.

4. If the operating range of the transmitters is greater than the stage, the antennae can be mounted vertically on the ceiling. The distance between the two GPA 700 receiving antennae should be approximately half the total operating range.



Please note:

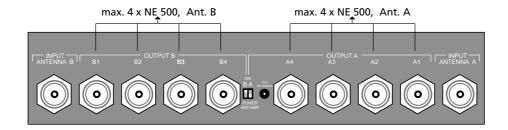
- 1. Install the antennae GPA 700 in the same area as the transmitter.
- 2. To avoid interference do not install the antennae near digitally controlled components.
- 3. Keep a minimum distance of 0.5 m from metallic objects, including reinforced concrete walls or pillars.
- 4. Do not bend the antenna cables at the antenna input, and ensure that they are not subjected to undue stress. For mounting the GPA 700 antenna use the AMK 700 mounting device for strain relief of the antenna cable.

1.5 ZAS 500 Antenna Splitter

Up to four NE 500 receivers can be connected to the ZAS 500 active antenna splitter. Any outputs which are not used should be terminated with a true resistance of 50 Ω (refer to accessories). Make sure that you do not accidentally terminate an input with a true resistance.

For powering the ZAS 500 antenna splitter connect the external power supply unit to the antenna splitter and to AC power. Switch on the ZAS 500 (green LED on the front panel is illuminated).

Up to two ZAV antenna amplifiers can be connected to each antenna input. For powering the ZAV switch on the ZAS 500 antenna splitter and switch the DIP-switches on the rear into the ON position. The supply voltage for the antenna amplifiers is switched to the antenna cable. If there is a short circuit in the antenna cable the supply voltage is switched off automatically. Furthermore, the supply voltage can also be switched off with the DIP-switches A and/or B.

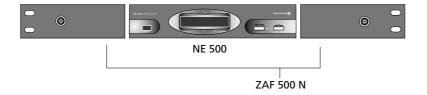


We recommend to use antenna amplifiers when cables lengths of longer than 50 metres are required. When using antenna amplifiers RG 213 type cable with the corresponding adapters must be used because of its low attenuation of high frequencies.

The ZAS 500 antenna splitter can be cascaded. With two ZAS 500 you can operate 7 receivers, with three ZAS 500 then 10 receivers. For operation of more than 10 channels please contact beyerdynamic.

1.6 19" Rack Mounting

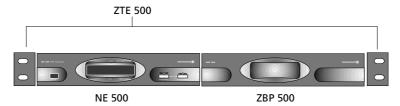
One NE 500 receiver and ZAF 500 N antenna connecting panel:



Two NE 500 receivers or one NE 500 / one ZAS 500



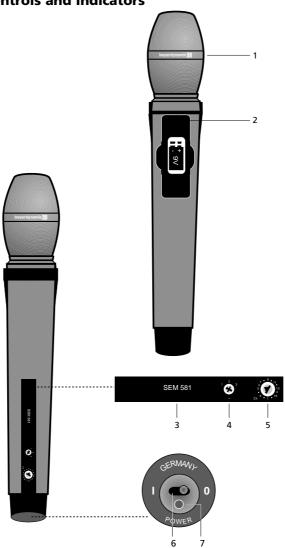
One NE 500 receiver and one ZBP blank panel:



Remove the 4 rubber stoppers from the bottom of the receiver and install the receiver/antenna splitter with 2 screws (supplied with ZTE 500, ZAF 500, ZAF 500 N) in the rack.

2. SDM 569 / SEM 581 Handheld Transmitters

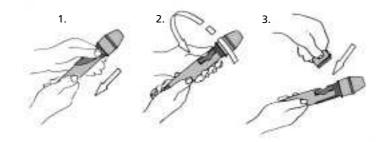
2.1 Controls and Indicators



- 1 Microphone head (fixed)
- 2 Battery compartment (Frequency table)
- 3 SDM 569 or SEM 581 type description
- 4 Sensitivity switch (3 stages)
- 5 Channel selector control (16 frequencies)
- 6 ON/OFF-switch
- 7 LED power indicator (green)

2. Setting up

1. Open the battery compartment (2) as indicated in the illustration and insert a 9 volt alkaline battery or a suitable rechargeable battery.



- 2. Switch on the handheld transmitter (6). The LED power indicator (7) is illuminated.
- 3. To change the frequency, turn the channel selector control (5) with a suitable screwdriver or trim tool until the control points to the desired frequency. For available frequencies refer to the frequency table inside the battery compartment (2). Make sure that the transmitter and receiver are on the same frequency.
- 4. When the battery capacity is too low for operation (below 6.5 V), the LED power indicator (7) starts to flash. The residual time of operation is then approximately 30 minutes (when a 9 V alkaline battery has been inserted). If the battery voltage drops below 6.0 V the LED power indicator (7) goes out and the transmitter is switched off.
- 5. The sensitivity can be adjusted for close and distant miking.

Recommended adjustment:

Close miking vocals: 1 (most insensitive)

Close miking speech: 2

Distant miking: 3 (most sensitive)

The "CLIP"-indication must not illuminate on the display of the NE 500 receiver even with the loudest signals. If this occurs a lower sensitivity should be selected.

2.3 Maintenance

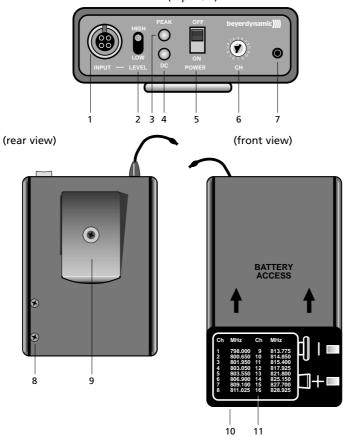
Protect the transmitter from humidity, knocks and shock. Avoid dropping the transmitter at all times.

For cleaning metal surfaces, use a soft cloth moistened with methylated spirits or alcohol. If your microphone sounds dull, clean the integrated foam pop shield. To do this, follow these instructions. Unscrew the microphone upper basket counter clockwise. Pull out the foam pop shield and clean it under clear running water. If necessary, use a mild washing-up liquid. Dry it afterwards with a hairdryer or allow it to dry overnight. Place the dry pop shield inside the microphone basket and replace the microphone basket by screwing it on clockwise.

3. TS 500 Beltpack Transmitter

3.1 Controls and Indicators

(top view)



- 1 Lemo socket (4-pin) connection for microphones, instruments (e.g. guitar)
- 2 26 dB attenuation switch
- 3 Overload LED (red)
- 4 Operating control LED (green)
- 5 ON/OFF-switch
- 6 Frequency select control (16 frequencies)
- 7 Antenna (fixed)
- 8 Charging contacts
- 9 Holding clip
- 10 Battery compartment
- 11 Frequency table

3.2 Setting up

- 1. Open the battery compartment (10) as indicated by the arrows and insert a 9 V alkaline battery observing the polarity +/- marks.
- 2. Instead of alkaline batteries you can also use V 7/8 H type rechargeable batteries. The SLG 44/500 charging unit can be used for charging this type of battery whilst still fitted in the transmitter.
- 3. Plug a suitable microphone or instrument into the lemo socket (1). The attenuation switch allows you to reduce the input sensitivity 26 dB for instruments and microphones when a close miking technique is used.
- 4. Switch on the beltpack transmitter (5).
- 5. If you want to change the frequency, turn the frequency select control (6) with a suitable screwdriver or trim tool until it points to the desired frequency. For available frequencies refer to the frequency table (11). Make sure that the transmitter and receiver are selected to the same frequency.
- 6. The operating control LED (4) is illuminated green, if the battery has been inserted correctly and has full capacity.
- 7. As the battery voltage decreases below 6.5 V, the operating control LED capacity (4) will flash. To avoid distortion replace or recharge the battery immediately. A 9 V alkaline battery should be replaced within 15 minutes of the low battery indicator flashing. If the battery voltage drops below 6.0 V the operating control LED (4) goes out and the transmitter is switched off.

CAUTION!

- The TS 500 beltpack transmitter is equipped with two external charging contacts providing an operating voltage of 9 V.
- The TS 500 beltpack transmitter should be applied so that it has no contact to the skin, because due to sweat a current flow can occur and cause skin damages.
- If contact to the skin cannot be avoided then apply protection to the charging contacts (for example tape).
- If you are allergic to metals the TS 500 must not have contact to the skin.

3.3 Recharging of Batteries

Put the transmitter TS 500 with the rechargeable battery installed into the SLG 44/500 recharging unit. Switch the transmitter off before and during the charging process! During the charging process a green LED flashes on the charging unit. As soon as the battery is recharged, the flashing changes into a permanent illumination. For detailed instructions refer to "Operating Instructions SLG 44/500".

Please note:

- Switch the TS 500 beltpack transmitter off before recharging or changing the battery. (ON/OFF switch (5) in position OFF).
- **Never** put the TS 500 beltpack transmitter in the charging unit with a standard battery in it. The battery could explode and destroy the beltpack transmitter.
- Different brands of 9 volt batteries may vary in length of up to 2 3 mm. When you
 change the battery make sure there is a good contact and adjust the spring in the battery
 compartment if necessary.
- Clean the battery contacts from time to time.
- If you do not use the TS 500 beltpack transmitter for several weeks or months, please
 remove the battery as it can leak after some time and damage parts of the transmitter.
 Even "leak proof" batteries are no warranty that they will not leak after some time. Failing
 to comply will render the guarantee null and void.
- Please do not throw used battery packs away with your house-hold rubbish, but take them to your local collection points.

3.4 Adjusting Input Gain

The input gain is adjusted automatically depending on the connected sound source (dynamic microphone, instrument, condenser microphone). Use the TPK 500 G cable for instruments or the TPK 500 M cable for dynamic microphones. The overload LED (3) indicates an overload of the transmitter. This LED should only light up momentarily with loud passages. If the overload LED (3) is flashing continuously, switch the sensitivity to "Low" (e.g. with neckworn or headworn microphones).

4. General Instructions for all Transmitters

4.1 Battery Change

- Switch the transmitter off before changing the battery.
- If you do not use the transmitter for several weeks or months, please remove the battery
 as it can leak after some time and damage parts of the transmitter. Even "leak proof"
 batteries are no warranty that they will not leak after some time. Failing to comply will
 render the quarantee null and void.
- Different brands of 9 volt batteries may vary in length of up to 2 3 mm. When you change the battery make sure there is a good contact and adjust the spring in the battery compartment if necessary.
- Clean the battery contacts from time to time.
- Please do not throw used battery packs away with your household rubbish, but take them to your local collection points.
- When using rechargeable batteries use conventional chargers.

4.2 Before the Soundcheck

- 1. Check the transmitter battery and replace or recharge it if necessary. Use fresh alkaline batteries only.
- 2. Adjust the level of the receiver to the amplifier or mixing console.
- 3. Check the performance area for dropouts. If you find any dropouts, try to eliminate them by repositioning the antennae or the receiver.
- 4. The receiving antennas should be placed so that the distance between receiving antennae and transmitter is at least 3 m. If necessary, use remote antennae (GPA 700).
- 5. To avoid popping try holding the microphone at a slight angle below the mouth.

4.3 Positioning of Transmitters if Interference occurs

Put all transmitters in their position and switch them on. Switch each transmitter off one at a time and check the receiver for interference in the corresponding channel. In case of interference, move the transmitter one at a time to find out which one is causing the interference. Exchange the transmitters among themselves or change the carrier frequency until the system is operating without any interference. The interference is possibly eliminated by changing the squelch.

4.4 What to Do against Feedback

Feedback is caused by your microphone getting too close to a loudspeaker.

We recommend:

- Reduce the volume of the sound system.
- Move away from the loudspeaker.
- Turn the microphone away from the loudspeaker.

5. Trouble Shooting

5.1 NE 500 Diversity Receiver

| Problem | Cause | Solution |
|--------------|---|--|
| No function | Power supply is interrupted, power supply unit is not connected to the mains and / or to the NE 500 receiver | Connect the power supply unit to the mains and / or to the NE 500 |
| No reception | Transmitter is not switched on Transmitter works on a different channel Receiving antennae are not pulled out Defect in the antenna cables with remote antennae | Switch on the transmitter Make sure that transmitter and receiver are on the same frequency Extend the receiving antennae Check the antenna cables |

| Problem | Cause | Solution |
|--|---|--|
| Distorted sound (no "CLIP"-indication on receiver) | Input amplifier of the connected mixer is overloaded | Use the reduction of the mixer or adjust the volume |
| "CLIP"-indication on receiver | Transmitter is overloaded | Reduce the sensitivity of the transmitter or increase the distance between microphone and sound source |
| No sound, RF-indication is okay, AF-indication is missing during modulation | Wrong indication caused by strong interference signals No microphone connected to transmitter | Choose another receiving channel Connect suitable microphone |
| Frequency cannot be changed | FUNCTION LOCKED | Release the locked function (refer to 1.3.8) |
| Squelch cannot be changed | FUNCTION LOCKED | Release the locked function (refer to 1.3.8) |
| AF cannot be switched off by Audio Mute | FUNCTION LOCKED | Release the locked function (refer to 1.3.8) |
| Indication: "RECEIVER ERROR - CHANGE FREQUENCY" | Frequency cannot be used any longer Disturbances due to RF-interference | Choose another frequency or consult your beyerdynamic dealer |

5.2 SDM 569 / SEM 581, TS 500 Transmitters

| Problem | Cause | Solution |
|----------------------------------|--|--|
| No function | Transmitter and receiver have different frequencies Insufficient battery voltage Poor battery contact, battery inserted incorrectly | Check if transmitter and receiver have the same frequency Replace the alkaline battery or recharge the battery Check the battery and insert it again |
| No RF-indication at the receiver | Transmission distance between transmitter and receiver is too far | Reduce the distance between transmitter and receiver |
| Noise / chirping | Interference from other transmitters Two transmitters on the same frequency Battery of the transmitter is too weak | Switch off the other transmitters Change the frequency of one transmitter Replace the battery |

6. Maintenance

In the unlikely event of equipment failure, the product should be returned to your beyerdynamic dealer. Failure to do so will render the guarantee null and void.

7. Licensing

In most countries around the world, wireless systems must be approved for use by the authorities and it may be necessary to obtain a licence to use it legally. Your local beyerdynamic dealer will be able to give you details on wireless system regulations for your area.

The components of the Opus 500 system are approved according to the directive 99/5/EEC:

Opus TS 500: E 811925N Opus SEM 581, SDM 569, SEM 500: E 811927N

under the CE 0682 (!) identification.

8. Versions

| Opus 500 | Set consisting of: |
|----------|---|
| | NE 500 diversity receiver and TS 500 beltpack transmitter, |
| | TV-channel 62 - 63 Order # 456.802 |
| Opus 550 | Set consisting of: |
| | NE 500 diversity receiver, TS 500 beltpack transmitter and |
| | MCE 50 clip-on microphone, TV-channel 62 - 63 Order # 456.810 |
| Opus 554 | Set consisting of: |
| | NE 500 diversity receiver, TS 500 beltpack transmitter and |
| | Opus 54 microphone, TV-channel 62 - 63 Order # 456.837 |
| Opus 569 | Set consisting of: |
| | NE 500 diversity receiver, SDM 569 handheld transmitter |
| | and MKV 11 microphone clamp, TV-channel 62 - 63 Order # 456.853 |
| Opus 581 | Set consisting of: |
| | NE 500 diversity receiver, SEM 581 handheld transmitter |
| | and MKV 11 microphone clamp, TV-channel 62 - 63 Order # 456.888 |
| Note: | |

All Sets are also available in other TV-channels.

9. Optional Accessories

| NE 500 Divers | |
|-------------------------|--|
| Antenna splitte | r |
| A-NCW/58 BNC ZAS 500 | True resistance, 50 Ω |
| | cable ZAS 500 - NE 500, TV-channel 62 - 64 Order # 448.540 |
| Antennae | |
| AMK 700 | Antenna mounting kit Order # 434.965 |
| GPA 700 | Groundplane antenna Order # 406.473 |
| ZRA 600 | Antenna for remote installation, BNC-connection Order # 443.883 |
| Antenna amplif | fier |
| ZAV | UHF wideband antenna amplifier Order # 449.261 |
| Antenna cables | for remote installation |
| AVK N(HF)-N(HF)/10(LA) | Antenna cable for GPA 700, low attenuation, 10 m \dots Order # 420.689 |
| AVK N(HF)-N(HF)/25(LA) | Antenna cable for GPA 700, low attenuation, 25 m Order # 420.697 |
| ZAA | Adapter N - BNC Order # 452.262 |
| ZKV 700 | Clamp for strain relief of the antenna cable Order # 508.837 |
| 19" Options | |
| ZAF 500 BNC | Antenna connecting panel (antennae on the front), |
| | with BNC-sockets, for 1 receiver NE 500 or splitter |
| | ZAS 500 for 19" rack mounting (1 HU), black Order # 448.567 |
| ZAF 500 N | Antenna connecting panel (antennae on the front), |
| | with N-sockets for AVK N(HF)-N(HF) (LA), |
| | 19" 1 HU, black Order # 449.199 |
| ZBP 500 | Blank panel for mounting one NE 500 receiver or |
| | ZAS 500 antenna splitter in the ZTE 500 rack mount Order # 448.575 |
| ZTE 500 | Rack mount, 1 HU for 19" rack, black Order # 448.559 |
| | |
| SDM 569 / SEN | ለ 581 Handheld Transmitter |
| Identification ri | ings |
| ZRS 600 | Set consisting of 12 rings, various colours Order # 449.520 |
| Stands | |
| GST 400 | Microphone stand, 3/8", height 0.90 - 1.65 m, |
| | with G 400 boom Order # 421.294 |
| GST 500 | Microphone stand, 3/8", height 0.80 - 1.60 m, |
| | with G 500 telescopic boom Order # 406.252 |

TS 500 Beltpack Transmitter

Microphones

| • | |
|-----------------|---|
| HEM 194.16 | Headworn microphone (cardioid) Order # 450.634 |
| MCE 5.16 | Condenser Clip-On-Microphone (omnidirectional) Order # 420.662 |
| MCE 7.16 BLK | Condenser Clip-On-Microphone (omnidirectional), black . Order # 447.463 |
| MCE 7.16 SC | same as above, but flesh-coloured Order # 447.471 |
| MCE 10.16 | Condenser Clip-On-Microphones (cardioid) Order # 420.379 |
| MCE 10.16 S | same as above, but with ON/OFF-switch Order # 426.822 |
| MCE 50.16 | Condenser Mini-Microphone (omnidirectional) Order # 419.079 |
| MCE 51.16 | Condenser Mini-Microphone (omnidirectional), |
| | flesh-coloured Order # 426.520 |
| MCE 52.16 | Instrumental Clip-On-Condenser Microphone, |
| | (omnidirectional), with short gooseneckOrder # 422.533 |
| MCE 53.16 | Instrumental Clip-On-Condenser Microphone |
| | (omnidirectional), with long gooseneck Order # 422.525 |
| TPK 170 N(CF) D | Connecting cable for dynamic mics (3-pin XLR) Order # 444.189 |
| | |
| V 7/8 H | NiMH rechargeable battery for TS 500 beltpack |
| | transmitter Order # 113.123 |
| SLG 44/500 | Charger for TS 500 beltpack transmitter Order # 439.142 |

10. Technical Specifications

NE 500 Diversity Receiver

Operating principle True diversity receiver (UHF)

Frequency range 16 frequencies between 798 - 814 MHz,

further frequencies on request

Switching bandwidth.....max. 32 MHz

Antenna connection 2 x BNC

Nominal deviation 50 kHz, wideband

Output level adjustable level, 25 mV - 1.55 V (+6 dBm),

3-pin XLR plug (bal.) and 1/4" stereo jack (unbal.), max. 3 V

(for monitoring via headphone)

Compander system......LN compander Signal-to-noise ratio.....> 100 dB(A)

AF transmission range 40 - 18,000 Hz (-3 dB) Squelch. adjustable 1 - 30 μV

Power supply ext. PSU 15/500 power supply unit (15 V DC, 500 mA)

Current consumption 300 mA

Dimensions (W x H x D) 215 x 43 x 179 mm (1/2 19")

Weight 950 g

ZAS 500 Antenna Splitter

Amplification approx. 2 dB Decoupling attenuation > 20 dB

Power supply ext. PSU 15/500 power supply unit (15 V DC, 500 mA)

Antenna amplifier 2 ZAV anntenna amplifiers per antenna cable can be

connected, power supply can be switched off

Current consumption 70 mA per amplifier

Dimensions (W x H x D) 215 x 43 x 179 mm (1/2 19")

Weight 710 g

SDM 569 Handheld Transmitter

Polar pattern hypercardioid Transducer type dynamic

Frequencies 16 in the 798 - 814 MHz range,

other frequencies upon request

Modulation wideband, pre-emphasis 50 μs

Nominal deviation 50 kHz

Radiated transmitter power. max. 50 mW (output power)

Compander system. LN compander S/N ratio > 100 dB (A) T.H.D. \leq 1% at max. SPL

Battery supply 9 V alkaline battery or rechargeable battery, at least 6 V,

flashing LED at 6,5 V

Current consumption approx. 50 mA

Operating time > 10 h with 9 V alkaline battery

approx. 2.5 h with NiMH rechargeable battery

Dimensions (with mic head). length: 240 mm

shaft Ø: 29/33 mm

SEM 581 Handheld Transmitter

Polar pattern cardioid

Transducer type electret condenser

Frequencies 16 in the 798 - 814 MHz range,

other frequencies upon request

Modulation wideband, pre-emphasis 50 μs

Nominal deviation 50 kHz

Radiated transmitter power. max. 50 mW (output power)

Max. SPL approx. 145 dB (A) at close miking

Battery supply 9 V alkaline battery or rechargeable battery, at least 6 V,

flashing LED at 6,5 V

Current consumption approx. 50 mA

Operating time > 10 h with 9 V alkaline battery

approx. 2.5 h with NiMH rechargeable battery

Dimensions (with mic head). length: 240 mm

shaft Ø: 29/33 mm

Weight 170 g

TS 500 Beltpack Transmitter

Carrier frequencies........... 16 frequencies switchable in the 798 - 814 MHz frequency

range, further frequencies upon request

Modulation wideband, preemphasis 50 μs

Nominal deviation 50 kHz

Transmitter power approx. 50 mW (output power)

for instruments approx. 1200 mV / 300 mV

for microphones 200 mV / 50 mV

Power supply 9 V alkaline battery or NiMH rechargeable battery,

at least 6 V, flashing LED at $6.5\ V$

Current consumption 45 mA

Operating time with 9 V alkaline battery > 10 h

with NiMH rechargeable battery approx. 2.5 h

Dimensions (H x W x D) 80 x 60 x 21.5 mm

Weight 80 g

Connection Lemo socket:



Pin 1 = 0 V

Pin 2 = stability voltage 6 V DC

Pin 3 = audio input with DC for electret condenser

microphones (2-pole connection)

Pin 4 = audio input, without DC for electret condenser

microphones (3-pole connection), dynamic microphones, instruments

EC-DECLARATION OF CONFORMITY

| Application of | | |
|--|---|--|
| Council directive: | 89/336/EEC, 93/68/EEC Electromagnetic Compatibility | |
| | 99/5/EEC R&TTE Directive | |
| Standards to which | | |
| Conformity is Declared: | EN 60268 (former DIN IEC 268) ETS 300 422 ETS 300 445 | |
| Manufacturer's Name: | beyerdynamic GmbH & Co. | |
| Manufacturer's Address: | Theresienstrasse 8, 74072 Heilbronn, Germany | |
| Type of Equipment: | Wireless Microphone System | |
| Model Numbers: | SDM 569, SEM 581, TS 500 | |
| I, the undersigned, as an employee of beyerdynamic, hereby declare that the equipment specified conforms to the above Directive and Standards. | | |
| Manufacturer's Signature: | Word Rote | |
| Date: | 1. January, 2001 | |
| Full Name: | Ulrich Roth | |
| | | |

Garantie

In den Ländern der EU (EWR) bietet beyerdynamic neben den gesetzlichen Gewährleistungsansprüchen gegen den Verkäufer Garantie für die in der EU gekauften Geräte. Die Garantieleistung beinhaltet Material und Arbeit während der Garantiezeit, welche in den einzelnen Ländern der EU vom beyerdynamic-Vertriebspartner festgesetzt ist.

In allen Ländern gelten neben den gesetzlichen Bestimmungen die von der beyerdynamic-Verkaufsstelle gewährten Garantieleistungen. Die Garantie ist in diesem Fall nur im Verkaufsland gültig und beträgt in Deutschland 12 Monate. Die Garantie erlischt bei unsachgemäßen Eingriffen oder nicht fachmännisch durchgeführten Reparaturen. Eventuell mitgelieferte Batterien, sowie Teile, die beim Gebrauch einem natürlichen Verschleiß unterliegen, wie Anschlußkabel,

Ohrmuschel, Kopfpolster etc. sind von der Garantie ausgeschlossen.

Wichtig: Die Rechnung gilt als Garantieschein.

Warranty

In the countries that are part of the EC (EEC) beyerdynamic supplies a warranty for the equipment purchased there. The warranty covers labour and material during at least 12 months from the date of purchase. In all other respects the warranty is subject to the laws of the corresponding country.

In all other countries either the légal provisions or the warranty granted by the beyerdynamic dealer is applicable. In this case the warranty is only valid within the country of sale.

The warranty becomes null and void if the equipment has been tampered with or repaired by inexperienced persons.

Batteries supplied and parts which are subject to normal wear and tear such as connecting cables, ear- and head-cushions are excluded from this warranty.

Important: The invoice is accepted as the guarantee.

Garantie

Dans les pays de la CE (CEE) beyerdynamic garantit les appareils qui y ont été achetés. La prestation de garantie comprend le matérial et la main-d'œuvre pendant au moins 12 mois à dater de l'achat. Par ailleurs, les prestations de garantie sont accordées selon les

prescriptions légales du pays concerné.

Dans tous les autres pays, les dispositions légales ou les prestations de garantie du point de vente sont valable. Dans ce cas, la garantie n'est valable que dans le pays de vente. La garantie est caduque en cas d'interventions ou de réparations non conformes aux

règles de l'art. Les piles éventuellement livrées avec l'appareil sont excluses de la garantie. Il en est de même pour les pièces soumeses à une usure naturelle.

Important: La facture d'achat fait office de garantie.

Subject to change without notice Sous réserve de modifications

beyerdynamic))))

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