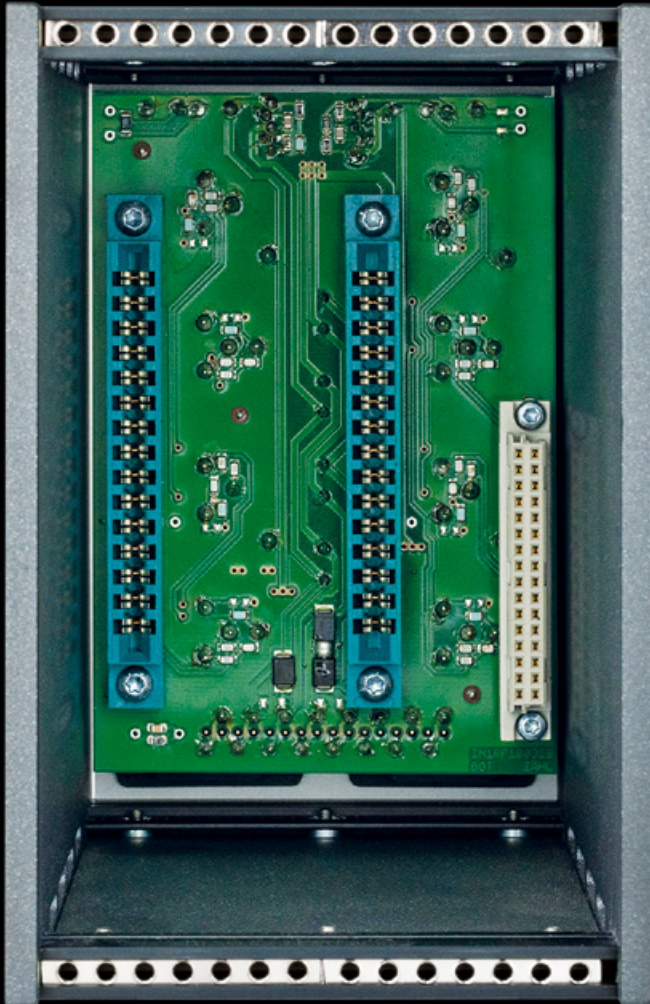# ZÄHL RACK 500 DUAL

Zähl 500 series desktop case
with external PSU

Zähl

ZÄHL Rack 500 Dual
500 series desktop case w/ external PSU

FEATURES

high quality rack providing the perfect technical environment for ZÄHL EQ1 and IM1 or other high grade 500 modules

fully compatible to the API 500 standard

special 8-XLR rear panel as an option, providing all audio I/Os needed for the Zähl IM1 INSERT MASTER. Compatible to the API 500 standard but no 48V for phantom supply.

CASE

compact, lightweight, sturdy

holds two single space modules or one double space module

48V switchable for each slot on standard 4-XLR rear panel

integrated linear voltage regulators for +/-16V

integrated linear voltage regulator for 48V on standard 4-XLR rear panel

optimal, extremely short audio signal path (XLR connectors and module connectors on same PCB)

high grade connectors

POWER SUPPLY

linear PSU delivering filtered and pre-stabilized DC

standard cable length 4m (formerly 6m) (PSU/desktop case)

no interference with audio circuitry due to remote concept

available in either a 230V or 115V Version

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SCOPE OF DELIVERY

- Case with standard rear panel 4-XLR or special rear panel 8-XLR

- Power Supply 500-44 (IEC320-C14 mains inlet) – either 230V or 115V version

- Power Lead with IEC320.C13 / Schuko plug (other power lead may be needed in different countries)

- Low Voltage 4m (formerly 6m) DC cable with Sub-D connectors

- Plastic bag with mounting screws for 500 series units - 4 countersunk screws M3x6 and 4 countersunk screws M3x8

  Note: Case is equipped with M3 threads. Use M3 screws only (no UNC etc.)

SETTING-UP OPERATION

1. Unpack all components including power cable and DC cable with SubD connectors.

2. Connect the 6m DC cable to the Power In connector on the rear panel of your Rack 500 Dual case.

3. Connect the other end of the 6m DC cable to the DC output connector of the Power Supply.

4. Make sure to tighten screws on all Sub-D connectors.

5. Insert your 500 module(s) in the Rack500 DUAL case. For fixing the modules use M3 screws only.

6. **CHECK THE MAINS VOLTAGE LABELLING OF YOUR POWER SUPPLY. It is labelled above the mains inlet.**

7. **If the labelling is not compatible to your mains voltage do NOT connect the PSU to mains! Please refer to your dealer.**

8. Power-up the case by connecting the PSU to a correctly earthed power outlet with the included power lead. In case the included power lead is not compatible to your country use a 3-wire mains cable with IEC320.C13 connector on one end and the appropriate power plug for your country on the other end.

9. Check settings of the toggle switches for 48V on the 4 XLR standard rear panel

10. **Always proceed in the order described, otherwise equipment might be damaged.**

! **Warning: Always disconnect power lead before performing any changes of the set-up. Otherwise equipment might be damaged.**

Rack 500 Dual must not be operated at ambient temperatures above 35°C and below 5°C

FUNCTIONAL DESCRIPTION

Zähl Rack 500 Dual was primarily designed as a high quality rack for ZÄHL 500 series units,
but it is also a perfect choice to operate high grade 500 series units from other manufacturers.

It consists of a case which accepts two one-slot or one two-slot API 500 series unit(s)
and a remote power supply.

The case is available with different rear panel versions.

The standard 4-XLR panel is fully compatible to the API 500 standard.

A special 8-XLR rear panel provides additional audio I/Os needed for the ZÄHL IM1 INSERT MASTER unit.
It is also compatible to the API 500 standard but does not provide 48V for phantom supply.

The remote power-supply 500-44 is connected to the case with a 4m Sub-D cable (formerly 6m).
It is either set-up for 230V or 115V AC 50-60Hz. Check the labelling above the mains inlet!

4-XLR Panel

8-XLR Rear Panel

TYPICAL APPLICATIONS AND BENEFITS

Rack 500 Dual is ideally suited as a desktop unit. Due to its light weight and small size the user can even take it on his lap while operating it – thus staying relaxed in the "sweet spot" instead of bending towards equipment mounted in a rack.

The remote PSU concept prevents any inference of mains supply and mains transformer with audio circuitry.

DATA

Mains Voltage

230V +/-8% 50Hz...60Hz or 115V +/-8% 50-60Hz
internally set-up, labelled above the mains connector of the PSU

Mains Power

30W max.

DC supply

+/-16V, 130mA per slot minimum. Higher current may be drawn for limited time.

Connector Pin-Out

Card Edge 15 pin 0.156" space - compatible to EDAC type 306-015-520-102 - contact no. 01 is located at top

01	Ground/Case	06	n.c.	11	n.c.
02	Bal. Audio Output +	07	n.c.	12	+15...+17VDC
03	n.c.	08	Bal. Audio Input –	13	0V / Common
04	Bal. Audio Output –	09	n.c.	14	–15...–17VDC
05	Shield	10	Bal. Audio Input +	15	n.c.

XLR

Pin 1	Shield/Ground	Pin 2	Bal. Audio +	Pin 3	Bal. Audio –

Measures & Weights

Rack	195x137x86mm	1,1kg	(approx.)
PSU	170x105x58mm	1,45kg	(approx.)
Boxed	305x220x150mm	3,2kg	(approx.)

NOTES, SAFETY INSTRUCTIONS, WARRANTY

1. The equipment must only be used for the purpose described in this manual.

2. Keep the manual for further reference.
When passing the equipment on, enclose the manual.

3. Do not operate the equipment at
very high air humidity (>85% relative humidity)
- high environmental temperature (>35°C)
  or near heat radiating equipment or objects
- places which are exposed to solar radiation
- very low temperatures (<5°C)

4. Ensure appropriate air ventilation.

5. Do not store the equipment at temperatures below -20°C or above +50°C.

6. Do never expose the equipment to environmental conditions which can lead to water condensation.

7. Do not expose the equipment to mechanical stress or shock.

8. Ensure that liquids cannot get into the equipment.

9. Ensure that foreign objects cannot get into the equipment.

10. Only operate the equipment on a safe, legally approved, earthed mains power supply

11. Only clean the equipment with smooth cleaning tissues and soft detergents.

12. Never open the equipment.

13. In case of any damage of mains cable or power supply there is the risk of a perilous electrical shock! Replace the mains cable immediately. Have the power supply checked or replace it. Regularly check mains cable and power supply for any damage.

14. In case the equipment has been dropped or there is any external or functional damage, do not continue to operate the equip-ment. Have the equipment checked at your dealer's workshop or a person who is qualified to do such checks.

15. When shipping, use a package which protects the equipment from environmental impact such as mechanical shock or humidi-ty.

16. The equipment applies to EU directives RoHS and WEEE. Dispose separately according to WEEE. Manufacturer WEEE register number: DE 90586269

17. Manufacturer's warranty covers the equipment to be free from defects of quality at the time of delivery for a period of 24 month presumed that
- the equipment was treated properly according to its intended use
- all information and safety instructions given in this manual have been followed
- the equipment shows no external damage
- the equipment is shipped to the manufacturer or to an authorised repair-shop free of charge
- a proof of purchase is supplied
- a detailed failure description is supplied

The manufacturer accepts the costs of parts and labour incurred by repair. Any other costs including shipping and packaging will be charged.

18. We expressly exclude any liability for incidental or consequential damages which might arise from operating the equipment, including failure of the equipment.

19. All information in this manual has been carefully reviewed. It has been updated at the time of passing for press. Nevertheless we do not accept any liability for insufficiency or errors.

20. EEC Declaration of Conformity: The equipment applies to applicable EMC rules 2004/108/EEC.

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