



VC500VPR

100W 8-slot 500VPR Series Chassis



Owner's Manual
Handmade Pro Audio Gear

We craft gear, you craft sound.

To the lucky few,

Thanks for creating with VC500VPR!

The enclosed machine is handbuilt by Z&H DESIGNS LTD. With solid construction and top-notch components, the VC500VPR Power Rack gives you peace-of-mind while accommodating your favourite 500 series modules in an 8-slot package.

Equipped with Neutrik gold-plated XLR ports for superior connectivity, a linear power supply for reduced noise, and an impressive 80W output, the VC500VPR delivers pristine audio quality. It also comes with channel linking toggle switches for stereo processing. DB25 input & output were added upon community request.

VC500VPR delivers 2.5A of power to symmetrical $\pm 16V$ rails. Featuring a fully linear design, its power is free of any artifacts which can arise out of switch-mode power supplies.

Equipped with Neutrik gold-plated XLR ports for superior connectivity and an impressive 100W output, the VC500VPR delivers pristine audio quality. We replaced the traditional 317/337 design with the modern high-performance LDO solution, which brings up the conversion efficiency & output power by 75%. At 80W output, it still maintains ultra-low ripple, delivering 50% cleaner power compared with conventional 317 designs. It also comes with channel linking toggle switches. DB25 input & output were added upon community request.

We shall invite you to go through this manual, so that you can discover its evolved functionality. You are always welcomed to find the latest updates of this VC500VPR and other crafts at www.zhdesigns.audio. If you have any feedback, we will be helpful and reachable at store@zhdesigns.audio. Our ideas always come from studios, especially the studios of our community around the world.

Wish you a pleasant time with the VC500VPR 8-Slot 500 Series Power Rack!

With kind regards,
Z&H Designs

Operation and safety precautions

- Use only grounded electrical outlet.
- Do not open the device and don't do any modifications on it.
- Do not attempt to repair or replace any of the components unless specifically instructed to do so in this guide.
- Pay attention to not put any solid matter (flammable things, coin, nail etc) or liquid (water, alcohol etc.) inside device.
- Do not twist or break the power cord or place heavy objects on it. Doing so may damage the cable and cause a short circuit.
- Damaged cables can cause fire and electric shock.
- Protect the device from intensive external shock (e.g. falling down).



**Never use the device
in the following conditions:**

- Extreme temperature
- Moisture
- High humidity
- Rain
- Dust
- Heavy vibration

In the following cases, turn off
the device immediately,
unplug the power cord,
and contact us
(store@zhdesigns.audio):

- If the mains plug of the appliance is damaged
- If you notice smoke or an unusual odor
- If any object or liquid gets inside the device
- If the machine has been exposed to rain or other moisture
- If the device does not operate normally

- Do not connect the appliance to a mains socket to which an electrical appliance is controlled by an inverter, switching power supply (eg. refrigerator, washing machine, microwave, air conditioner) or an appliance with a motor is connected.
- Depending on the use of electrical devices, power supply noises may cause a malfunction or audible noise on this unit. If a separate electrical outlet cannot be used, connect a noise filter between this and the other electrical appliances.
- The unit heats up during several hours of continuous operation. This is normal and not a cause of concern.

- Turn off all devices before connecting the device to other devices. This will prevent damage to speakers and other equipment.
- Use of the unit near amplifiers or other equipment that contains a transformer may cause noise. To resolve this issue, relocate the device or move it away from the interfering device.
- Noise may be caused by using a wireless communication device near the device, such as a mobile phone. Such noise can occur when making, receiving, and diverting a call. If you experience this problem, move the wireless device away from the device or turn it off.
- This unit may interfere with radio and television operation, so do not use near such receivers.
- If the device is transported to a location with a very different temperature and/or humidity, moisture may condense inside. Using the device in this condition may result in damage or malfunction. Therefore, wait a few hours for the moisture to completely evaporate before using the appliance.

Cleaning and maintenance

Clean the appliance daily with a soft, dry or slightly damp cloth. Use a soft, abrasion-free cloth to remove stubborn dirt. Then wipe the device with a dry cloth. Never use benzine, thinner, alcohol or other solvents, strong alkaline or acidic cleaners as they may cause discoloration and deformation.

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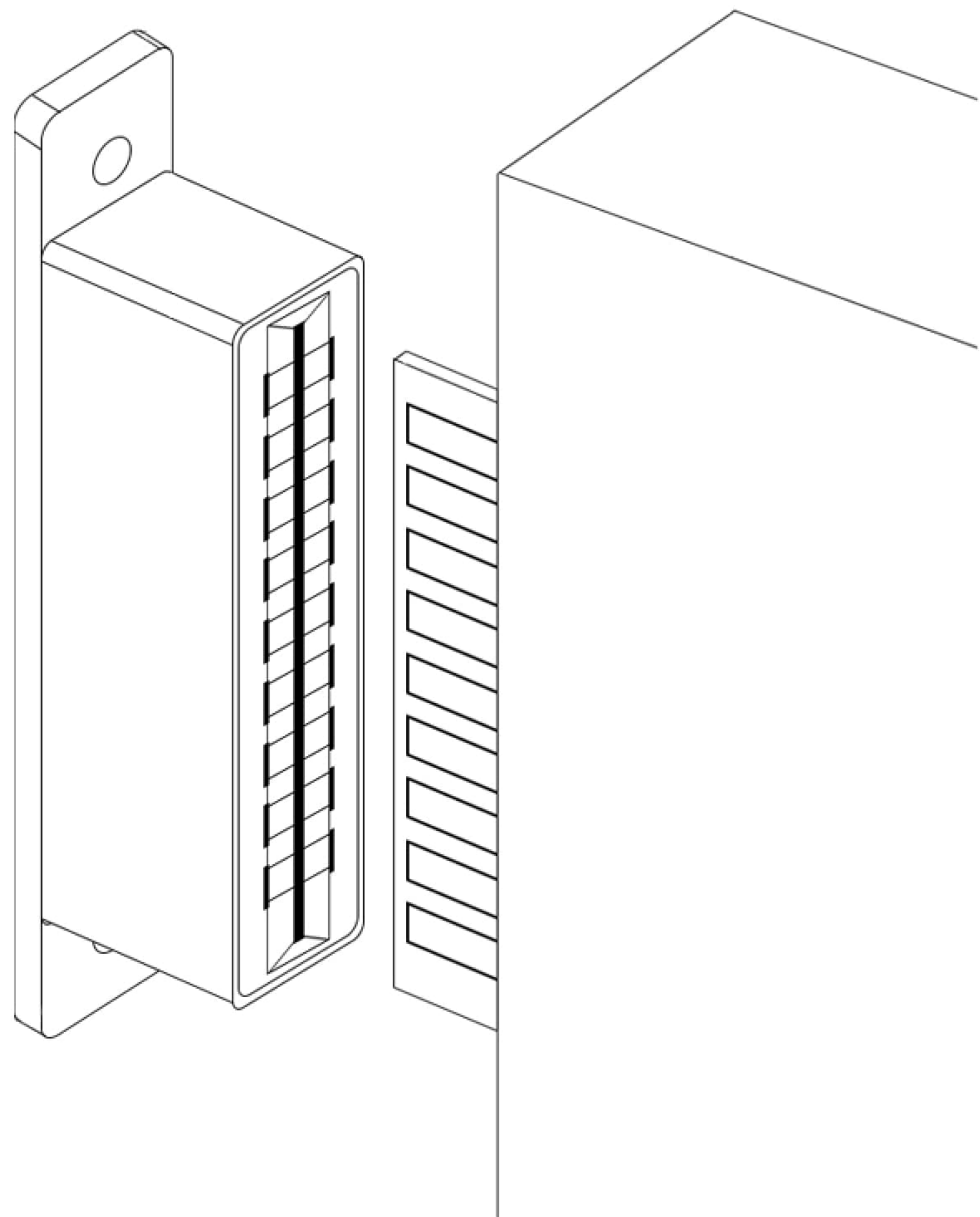
Installation and setup



Please follow the instructions to protect your equipment, prevent electric shocks and other catastrophic events.

VC500VPR setup

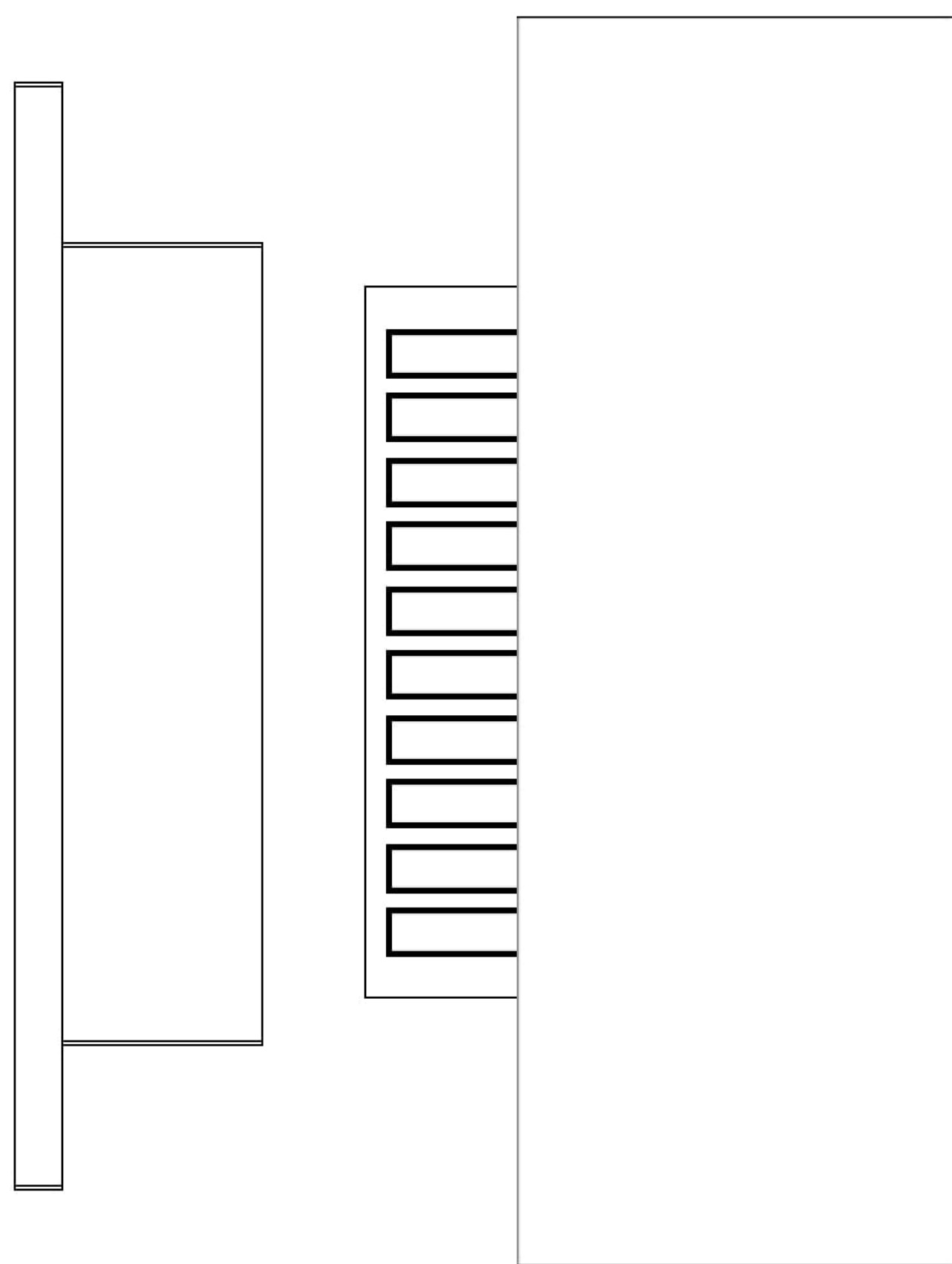
1. Mute your studio monitors.
2. Connect the VC500VPR to the appropriate inputs and outputs of your mixer or interface using balanced XLR cables or the DB25 jacks on the rear of the VC500VPR.
3. Connect the VC500VPR to power.



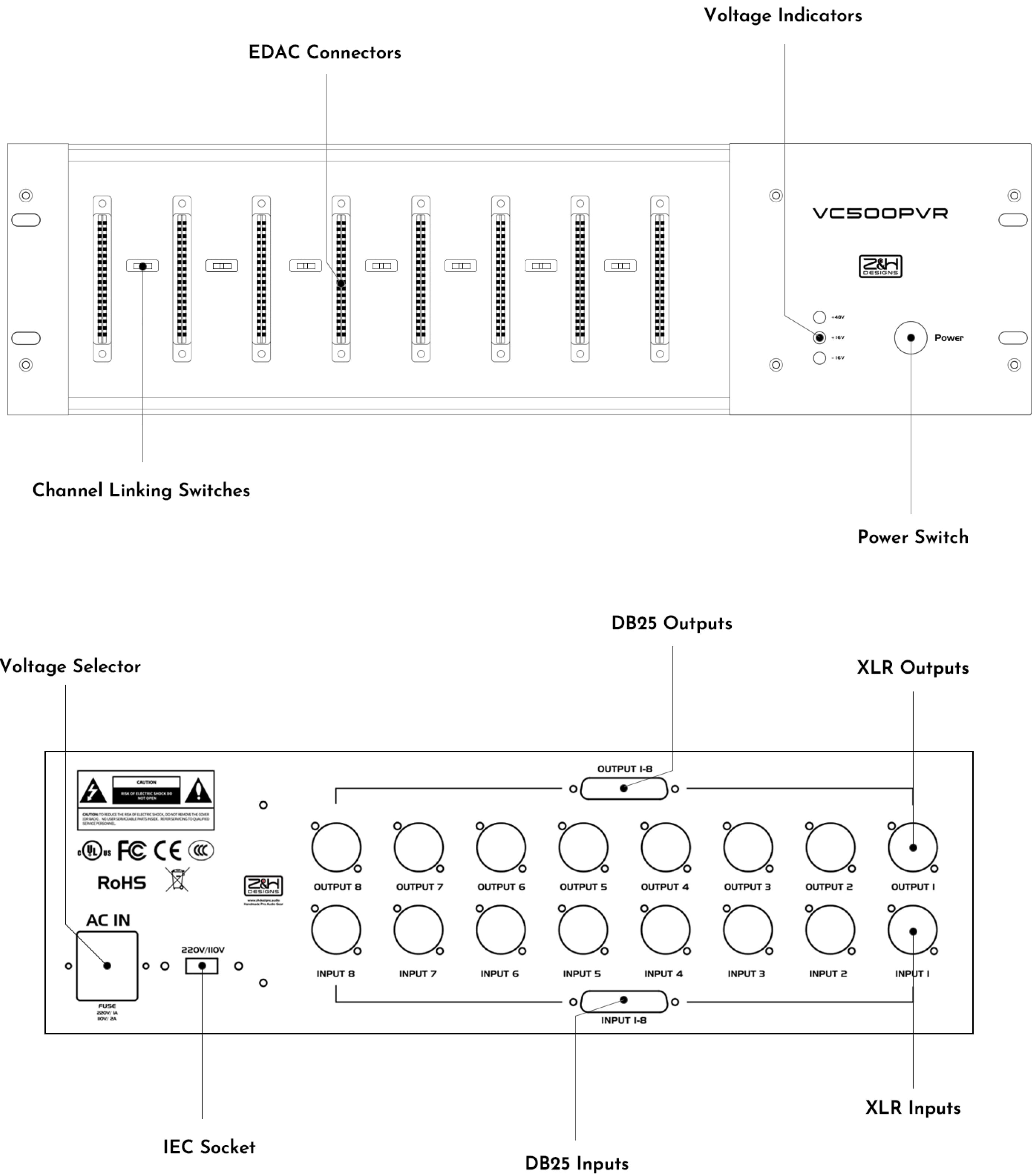
500 series module installation

DO NOT attempt to install or remove a module while VC500VPR is powered on. Such conduct may cause severe damages beyond the module itself.

1. Inspect VC500VPR and your 500-series module. Make sure nothing is surrounding the card edge connectors.
2. Power off the VC500VPR.
3. Carefully slide your 500-series unit into an empty slot in your VC500VPR.
4. Make sure the module connector sits well into the mating EDAC chassis connector.
5. Secure the 500-series module to the VC500VPR chassis using the included M3 screws.
6. Power on the VC500VPR.



Panel description



Installation and setup

EDAC Connectors

Connect your 500-series modules here.

Channel Linking Switches

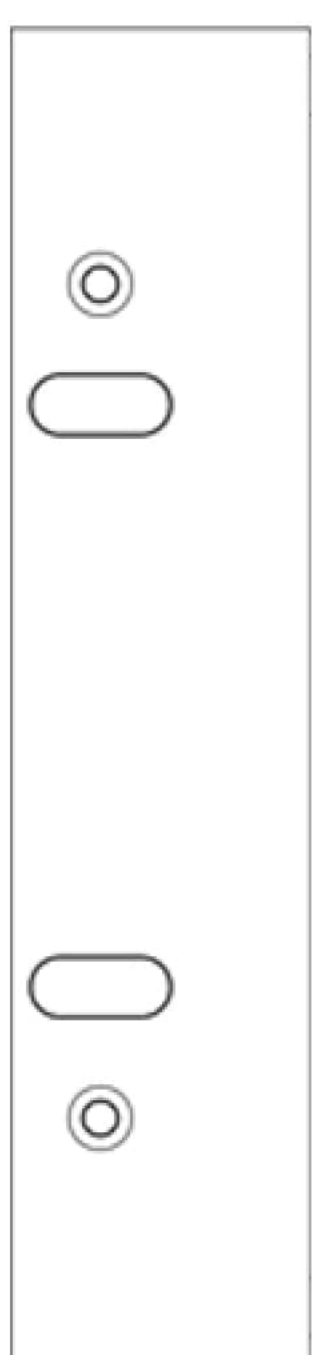
An official link switch is between every adjacent pair of slots. Enabling linking allows devices such as compressors to be linked, provided the module supports it.

Power Switch

Turns the unit on/off.

Voltage Indicators

When lit, indicate the proper working status of +48V, +16V, and -16V.



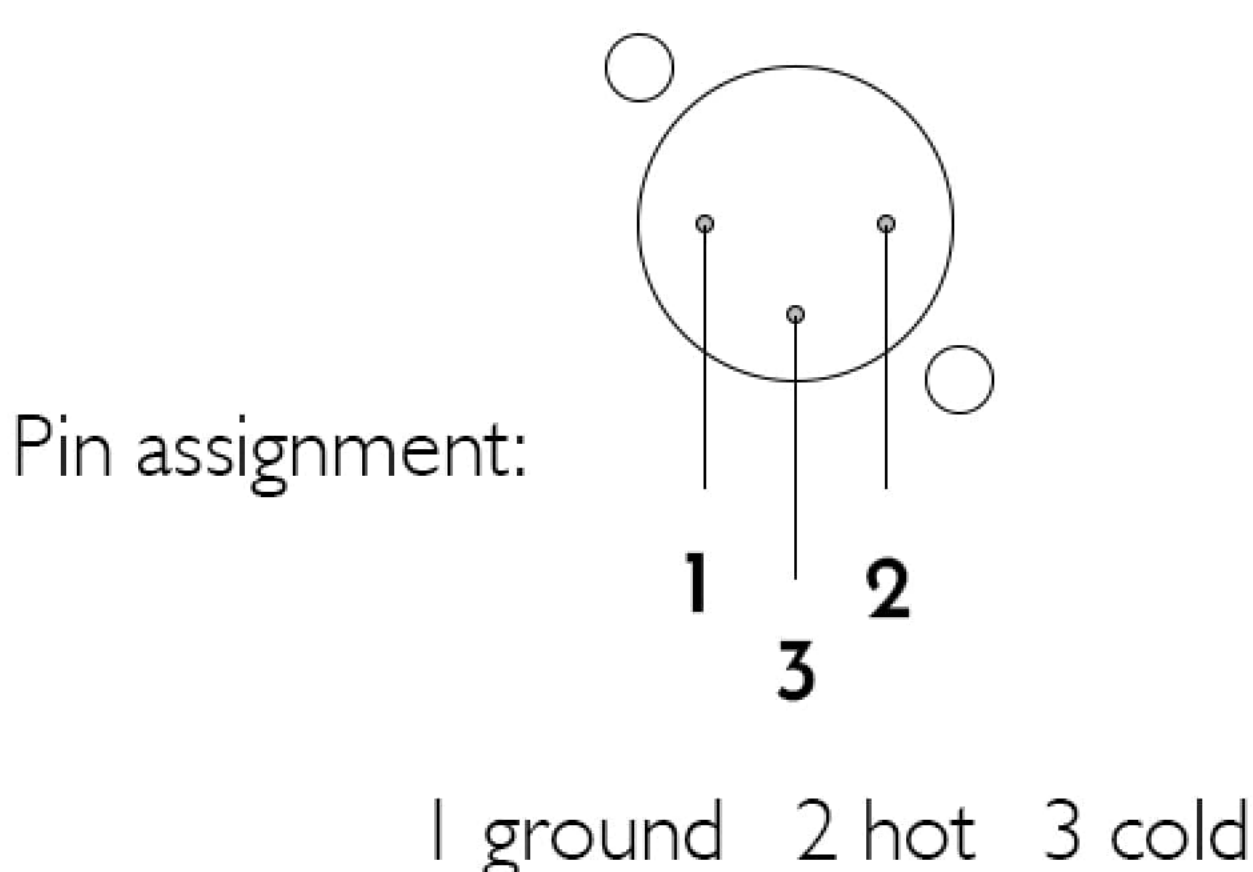
Tips: 500 modules made by different manufacturers may have slight dimensional variations. If there turns out to be bothering gaps between modules, the left panel of VC500VPR can be removed. We made some adjustable room through the cell shape of positioning holes. Users can fine-tune the mounting distance for a seamless fit.

DB25 Outputs

Connect inputs to your mixer or interface via a DB25 cable with TASCAM pin configuration.

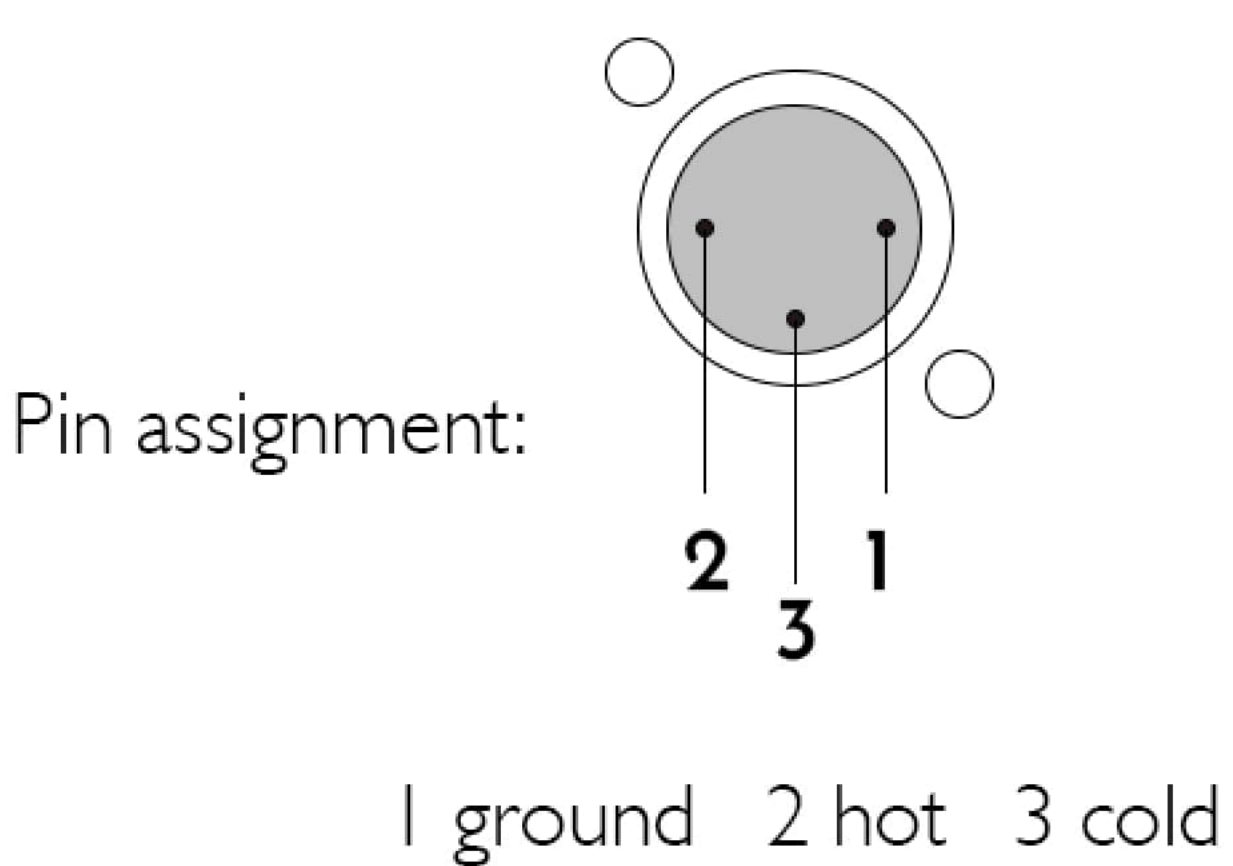
XLR Outputs

Connect to the inputs of your mixer or interface via balanced XLR cables.



XLR Inputs

Connect to the outputs of your mixer, interface, or microphone via balanced XLR cables.

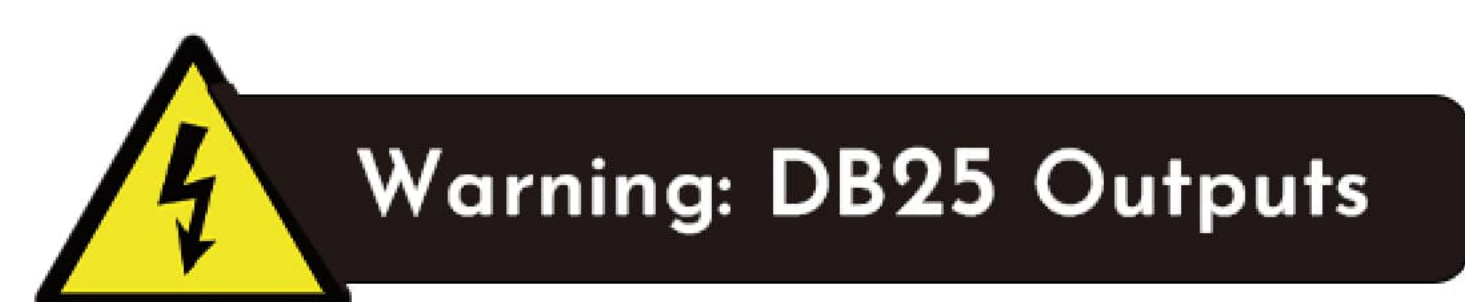


DB25 Inputs

Connect outputs from your mixer or interface via a DB25 cable with TASCAM pin configuration.

Panel description

Tips: XLR ports and DB25 ports are always parallel. In a full line-level environment, VC500VPR can work as a DB25 converter. Each slot supports Input & Output through both type of ports simultaneously.



When you use a mic preamp that consumes 48V power, please use XLR ports only meanwhile DO NOT use DB25 Outputs to connect to ADDA. Otherwise, the 48V may cause damage to other equipment.

Voltage Selector

220V/110V AC voltage selector.

IEC Socket

A power cable is provided in the package, which is supposed to match the standard of user's location. The fuse socket is located under the IEC socket. The fuse burns above 1A at 220V, or 2A at 110V.

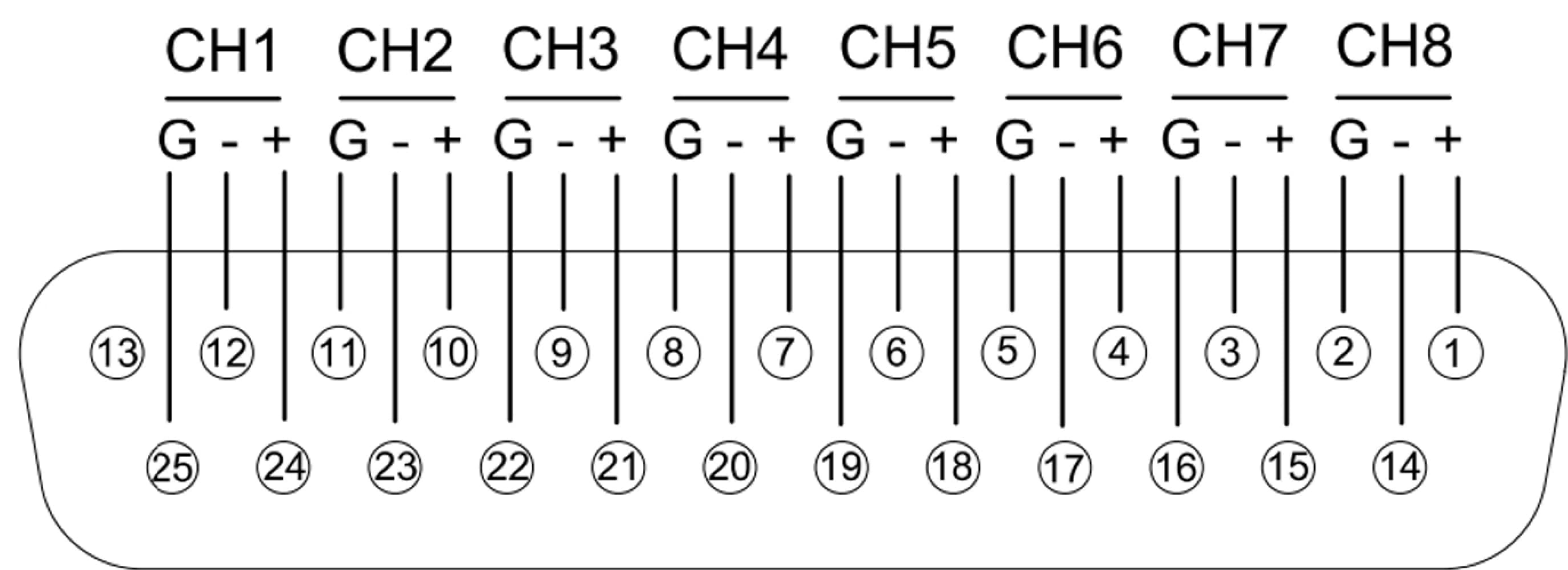


Make sure to disconnect the IEC socket before replacing eventually blown fuses or changing the operating voltage of the unit! In order to change the operating voltage, the fuse holder has to be taken out and re-inserted so that the desired voltage can be read correctly (and is not standing upside down).

DB25 connectors

DB25 connectors

All DB25 multi pin connectors are TASCAM protocol. This same protocol is also used by AVID amongst many others, and is as follows:



DB-25 TASCAM PINOUT

Specifications

Voltage	Universal 100-240 V AC
Maximum audio rails current	5A in total or 625mA (10W) per slot whichever is reached first.
XLR Inputs & Outputs	Gold Plated Balanced +4 dBu Connectors.
DB25	25 Pin Balanced +4 dB Eight Channel Connectors.
Dimension (H x W x D)	10.6" (27 cm) × 23.6" (60 cm) × 16.5" (42 cm)
Weight	16.5 lbs (7.5 kg)
Fuse	5 x 20mm 2A, Fast Acting, Glass

Troubleshooting

1. There is no power and no light on.

Take the following steps:

- Check if the voltage selector is at the correct local voltage of yours.
- Check if the fuse is burnt.
- Try another cable.

2. One of the 3 voltage indicators does not lit.

Please contact support for repair and avoid using the unit.



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Handcrafted in China

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