

PDU16-AV

20A AC PDU WITH POWER MONITOR



2U Rack Mount PDU with Overload Protection & Power Monitoring

2U high Horizontal Mounting unit designed to provide versatile hook-up for the distribution of AC power within Audio Visual & Multimedia applications.

Main Input Neutrik 20A powerCON with 2nd order EMI filter & GDT/VDR protection circuit against Lightning Strike & Local Power Surge

Circuit A

Protection Illuminated Circuit Breaker 10A overload protection

Output 4 Way IEC C13 Outlet Strip with max combined load of 10A
2 Dual USB 5V 1.8A charger modules

Circuit B

Output 5 Universal sockets useable with plugs from the UK, US, Europe and Australia, with a Maximum Combined Load 10A. (Schuko type plugs have a 2 pin connection only)
For full universal plug application guide see appendix A

Protection Illuminated Circuit Breaker 10A overload protection

LCD Monitor LCD Power Monitor giving Voltage, Current, Power & Energy Levels.

Earth Link M4 Screw Terminal for Rack Grounding

Usage

Nominal Voltage: 230V
Usable Voltages 240V full range
Frequency: 50/60HZ full range
Max. A/C Output: Current 20A
Case Size: 87 x 98 x 430mm (O.A.483mm)
Weight: 2.5Kg (5.5Lbs)

Compliance All components used in this conform to current RoHS, CE & UL certification - E&OE
(EMI:EN55022 (CISPR22) Class B; EN61000-3-2,3 EMS:EN61000-4-2,3,4,5,6,8,11; Light industry level, criteria A)



Power Monitoring Features

1. Voltage, Current, Active Power & Energy Usage
2. Overload alarm function: over power alarm
- backlight and the power figure will flash
3. Setting of power alarm threshold function
4. Power button clear function.
5. Power-down data storage function.



The universal output socket has been designed for worldwide applications. It is rated at 16A 250Vac and is compliant with CE and RoHS.

For **Euro Schuko** plug types the ground pin will have no connection.

Should this be a requirement then the **PDU16-EU** is available with Schuko type sockets.

Appendix A

B: NEMA 5-15P USA LT-202 E1212P1 10A 250V	D: India/South Africa 16A 250V 16A 250V 16A 250V	G: BS 1363 UK 13A 250V 13A 250V 13A 250V	H: Israel 16A 250V 16A 250V 16A 250V
I: Aust. / New Zealand 10A 250V 10A 250V 10A 250V	J: Swiss 16A 250V 16A 250V 16A 250V	K: Denmark 16A 250V 16A 250V 16A 250V	L: Italy 16A 250V 16A 250V 16A 250V
N: Brazil 10A 250V 10A 250V 10A 250V	O: China 16A 250V 16A 250V 16A 250V	P: Argentina 16A 250V 16A 250V 16A 250V	Q: Japan 10A 250V 10A 250V 10A 250V

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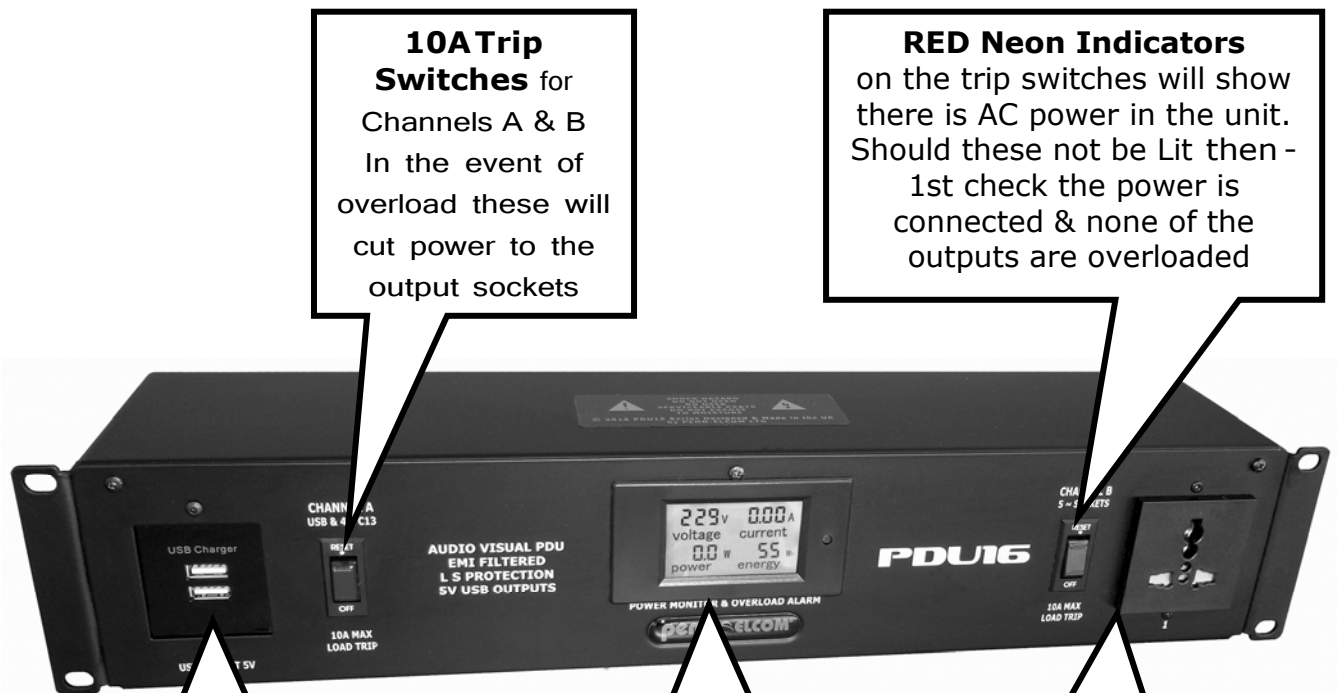
Designed & Manufactured in the UK by Penn Elcom Ltd

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0191 416 1717 or www.penn-elcom.com

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USERS GUIDE



10ATrip Switches

for Channels A & B
In the event of overload these will cut power to the output sockets

RED Neon Indicators

on the trip switches will show there is AC power in the unit. Should these not be Lit then - 1st check the power is connected & none of the outputs are overloaded

Dual USB
Charging Outputs
5V at 1.8A
Short circuit & overload proof

Power Monitor

This panel displays Overall Voltage - Current - Power & Energy Level being Used

AC~Output 1
Universal socket on Channel B with max combined load of 10A

AC~Outputs

5 sockets on Channel B with max combined load of 10A

AC~Outputs

4 Way IEC C13 Outlet Strip on Channel A with max combined load of 10A for use with C14 Plugs

Earth Strap Point

For attachment to the rack unit
This Unit Must Be Earthed



AC Power Input

A Neutrik **20A powerCON** Connector is supplied for A/C power input.

PLEASE NOTE

FITTING A 13A PLUG WILL REDUCE THE OVERALL POWER RATING E&OE

Dual USB
Charging Outputs
5V at 1.8A
Short circuit & overload proof



Neutrik 20A powerCON Power
input Connector NAC3FCA



10A
C14 Output Connector Plug

UNIVERSAL PLUG GUIDE

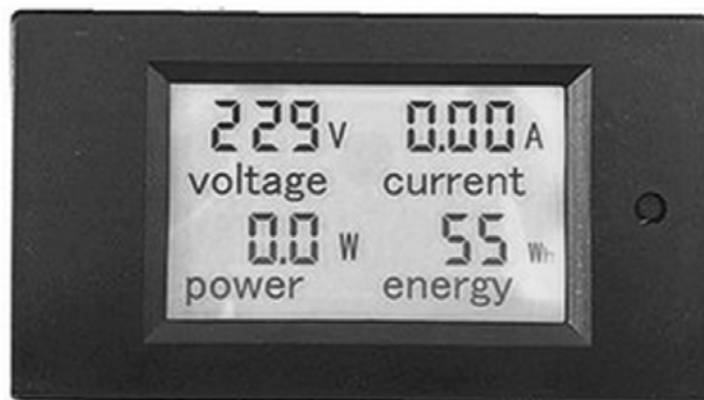
Channel B on the **PDU16-UN** model has 8 Universal sockets compatible with plug types shown below:

For **Euro Schuko** plug types the ground pin will have no connection.



B: NEMA 5-15P USA 	D: India/South Africa 	G: BS 1363 UK 	H: Israel
I: Aust. / New Zealand 	J: Swiss 	K: Denmark 	L: Italy
N: Brazil 	O: China 	P: Argentina 	Q: Japan

POWER MONITOR DISPLAY



Functions

1. Electrical parameter measurement function (voltage, current, active power, energy)
2. Overload alarm function (over power alarm threshold, backlight and power flashing to alarm) .
3. Power alarm threshold preset function (can set power alarm threshold) .
4. The reset function of energy key.
5. Stores data when powered off.
6. Backlight function.

User Button Key Functions

1. **Backlight Control:** just press the button to turn on or off the backlight.
The backlight has a memory function and will store its state when powered off.
2. **Energy Display Reset**
A: Hold down the button for 5 seconds until the number in energy display section flashes, then release.

B: Push the button again, then once the energy value is cleared it will exit the reset. If you don't want to it to clear, then hold down the button for 5 seconds again until the number stops flashing, this means the energy value has not been cleared and it will reset.
3. **Power Alarm Threshold**
A: Hold down the button key until the LCD screen display shows "SET CLr", then release to enter the setting mode

B: The Power section will display the current alarm value and the last digit should be flashing, To add plus 1, press down in 3 second intervals - the digital point will shift automatically

C: To finish setting, hold down the button for 5 seconds to store the settings and exit, the range of active power threshold is 0.0~22.0kW



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PDU 16 series

POWER DISTRIBUTION UNIT OPERATION & USER ADVICE

Please read the following information before installing or using your Power Distribution Unit

Safety and Grounding (earth)

- This PDU is intended for indoor use only.
- Do not install this PDU where excessive moisture or heat is present.
- Never install any wiring, equipment, or PDU's during a lightning storm.
- Always connect this PDU into a three-wire, grounded power outlet.
- The power input cable should be connected to appropriate branch circuit/mains protection (fuse or circuit breaker). Connection to any other type of power outlet may result in a shock hazard.
- Use only the supplied brackets for mounting.
- Never work alone under hazardous conditions.
- Check that the power cord, plug, and socket are in good condition.
- Disconnect the PDU from the power outlet before you install or connect equipment to reduce the risk of electric shock if you cannot verify grounding. Reconnect the PDU to the power outlet only after you have made all connections.
- Use a protective earth connector with equipment. This type of connector carries the leakage current from the load devices (computer equipment). Do not exceed a total leakage current of 3.5mA or a risk of electrical shock will result.
- Use the Stud Earth point on the front of the PDU to directly ground to the rack.
- ALWAYS make sure the equipment that has been connected to the PDU is **OFF**, before switching on the PDU, as the **Inrush Current** can blow the power fuse and activate the protection circuit.
- All equipment plugged into this unit should have the correct fuses fitted for their current draw.
- **Penn Elcom Ltd excepts no responsibility or liability for any equipment connected to this unit E&OE**

GUARANTEE

YOUR EQUIPMENT IS GUARANTEED FOR A PERIOD OF ONE YEAR FROM THE DATE OF PURCHASE OF THE PRODUCT AGAINST ANY DEFECTS DUE TO FAULTY MATERIALS OR FAULTY MANUFACTURING. DURING THIS PERIOD, REPLACEMENT OR REPAIR TO THE UNIT WILL BE MADE WITHOUT CHARGE BY ANY AUTHORISED DEALER OR THE FACTORY SUBJECT TO THE FOLLOWING CONDITIONS.

The fault must be entirely due to faulty materials or faulty manufacture.

*The defect must **NOT** have been caused by poor installation, accidental damage, misuse or failure to comply with the instructions given in the users guide.*

If at any time during the guarantee period a part or parts of the equipment are repaired with a part or parts not supplied or approved by us; or if the equipment has been dismantled or repaired by any person not authorised by the us, then the guarantee shall immediately cease and become void.

Evidence of the date of purchase must be produced at the service point to obtain the benefit of this guarantee. Any carriage charges relating to the guarantee will be the responsibility of the purchaser.

This guarantee applies to the original purchaser only and the equipment must have been purchased or financed from new, this guarantee cannot be assigned or transferred.

The company reserves the right to replace the equipment or repair it at their discretion, any defective part shall become the property of the company.

This guarantee applies to equipment purchased and used within the E.E.C. The importers of equipment in non E.E.C. countries are responsible for the guarantee of this unit. Parts required under guarantee are free. Shipping charges for components will be charged at cost.

The guarantee shall become void if the equipment is at anytime used on any supply circuit or voltage range other than that specified on the equipment.

12. THIS GUARANTEE DOES NOT IN ANY WAY AFFECT YOUR STATUTORY RIGHTS AS A CONSUMER.