

REDUNDANT POWER CENTER
PD-4A
Instruction manual

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Disclaimer of Product & Services

The information offered in this instruction manual is intended as a guide only. At all times, Datavideo Technologies will try to give correct, complete and suitable information. However, Datavideo Technologies cannot exclude that some information in this manual, from time to time, may not be correct or may be incomplete. This manual may contain typing errors, omissions or incorrect information. Datavideo Technologies always recommend that you double check the information in this document for accuracy before making any purchase decision or using the product. Datavideo Technologies is not responsible for any omissions or errors, or for any subsequent loss or damage caused by using the information contained within this manual. Further advice on the content of this manual or on the product can be obtained by contacting your local Datavideo Office or dealer.

FCC Compliance Statement

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions:

- 1. This device may not cause harmful interference, and
- 2. This device must accept any interference received, including interference that may cause undesired operation.

Warnings and Precautions



- 1. Read all of these warnings and save them for later reference.
- 2. Follow all warnings and instructions marked on this unit.
- 3. Unplug this unit from the wall outlet before cleaning. Do not use liquid or aerosol cleaners. Use a damp cloth for cleaning.
- 4. Do not use this unit in or near water.
- 5. Do not place this unit on an unstable cart, stand, or table. The unit may fall, causing serious damage.
- 6. Slots and openings on the cabinet top, back, and bottom are provided for ventilation. To ensure safe and reliable operation of this unit, and to protect it from overheating, do not block or cover these openings. Do not place this unit on a bed, sofa, rug, or similar surface, as the ventilation openings on the bottom of the cabinet will be blocked. This unit should never be placed near or over a heat register or radiator. This unit should not be placed in a built-in installation unless proper ventilation is provided.
- 7. This product should only be operated from the type of power source indicated on the marking label of the AC adapter. If you are not sure of the type of power available, consult your Datavideo dealer or your local power company.
- 8. Do not allow anything to rest on the power cord. Do not locate this unit where the power cord will be walked on, rolled over, or otherwise stressed.
- 9. If an extension cord must be used with this unit, make sure that the total of the ampere ratings on the products plugged into the extension cord do not exceed the extension cord rating.
- 10. Make sure that the total amperes of all the units that are plugged into a single wall outlet do not exceed 15 amperes.
- 11. Never push objects of any kind into this unit through the cabinet ventilation slots, as they may touch dangerous voltage points or short out parts that could result in risk of fire or electric shock. Never spill liquid of any kind onto or into this unit.
- 12. Except as specifically explained elsewhere in this manual, do not attempt to service this product yourself. Opening or removing covers that are marked "Do Not Remove" may expose you to dangerous voltage points or other risks, and will void your warranty. Refer all service issues to qualified service personnel.
- 13. Unplug this product from the wall outlet and refer to qualified service personnel under the following conditions:
 - a. When the power cord is damaged or frayed;
 - b. When liquid has spilled into the unit;
 - c. When the product has been exposed to rain or water;
 - d. When the product does not operate normally under normal operating conditions. Adjust only those controls that are covered by the operating instructions in this manual; improper adjustment of other controls may result in damage to the unit and may often require extensive work by a qualified technician to restore the unit to normal operation;

- e. When the product has been dropped or the cabinet has been damaged;
- f. When the product exhibits a distinct change in performance, indicating a need for service.

Warranty

Standard Warranty

- Datavideo equipment are guaranteed against any manufacturing defects for one year from the date of purchase.
- The original purchase invoice or other documentary evidence should be supplied at the time of any request for repair under warranty.
- The product warranty period begins on the purchase date. If the purchase date is unknown, the product warranty period begins on the thirtieth day after shipment from a Datavideo office.
- All non-Datavideo manufactured products (product without Datavideo logo) have only one year warranty from the date of purchase.
- Damage caused by accident, misuse, unauthorized repairs, sand, grit or water is not covered under warranty.
- Viruses and malware infections on the computer systems are not covered under warranty.
- Any errors that are caused by unauthorized third-party software installations, which are not required by our computer systems, are not covered under warranty.
- All mail or transportation costs including insurance are at the expense of the owner.
- All other claims of any nature are not covered.
- All accessories including headphones, cables, and batteries are not covered under warranty.
- Warranty only valid in the country or region of purchase.
- Your statutory rights are not affected.

Three Year Warranty

 All Datavideo products purchased after July 1st, 2017 are qualified for a free two years extension to the standard warranty, providing the product is registered with Datavideo within 30 days of purchase.



- Certain parts with limited lifetime expectancy such as LCD panels, DVD drives, Hard Drive, Solid State Drive, SD Card, USB Thumb Drive, Lighting, Camera module, PCle Card are covered for 1 year.
- The three-year warranty must be registered on Datavideo's official website or with your local Datavideo office or one of its authorized distributors within 30 days of purchase.

Disposal



For EU Customers only - WEEE Marking

This symbol on the product or on its packaging indicates that this product must not be disposed of with your other household waste. Instead, it is your responsibility to dispose of your waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will help to conserve natural resources

and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact your local city office, your household waste disposal service or the shop where you purchased the product.



CE Marking is the symbol as shown on the left of this page. The letters "**CE**" are the abbreviation of French phrase "Conformité Européene" which literally means "European Conformity". The term initially used was "EC Mark" and it was officially replaced by "CE Marking" in the Directive 93/68/EEC in

1993. "CE Marking" is now used in all EU official documents.

Introduction

The PD-4A is a 19" Rack Mount Redundant Power Centre with the ability to supply multiple 12V power outputs from a 100-240V AC Input or DC-12V/25A terminal.

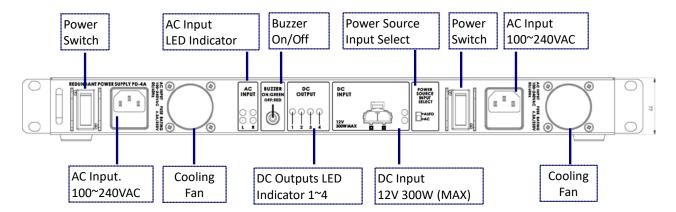
The PD-4A redundant power supply unit protects your power system against unforeseen events by supplying power to devices the instant they begin to fail. The PD-4A is an essential accessory for Datavideo Mobile Studio applications, together with the Video switcher, LCD, recorders and etc, the PD-4A makes the integration of a Mobile Studio easier and more professional.

The built-in time delay power on control initiates each DC output terminal in sequence, and each terminal is installed with an auto-recover fuse to safely protect every connected working device.

Features

- Power supply up to 384 Watts for most production requirements
- Power indicator and auto-recovery fuse protection for each output terminal
- Sequential Power On for each DC output terminal by 1 second duration
- Switchable AC 110/220V or DC 12V input source (110V and 220V devices are different models)
- Provides safety net AC and DC protections to prevent power loss
- Eco-Friendly by complying with Safety / EMI and RoHS certification
- Chassis ground terminal
- Embedded four units of heat sink fan design
- Built-in abnormal warning buzzer

Front Panel





On / Off Switch

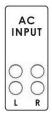
Powers the PD-4A On / Off when using AC Power.

Note: The On / Off Switch is not functional if the power input is DC.



AC In with built-in fuse

AC Inlet for connecting to suitable mains power outlet - 100-240VAC. The socket contains a fuse holder with a 6.3A/250V fuse.



AC INPUT LED indicator

L (LEFT AC Input) / R (RIGHT AC Input)

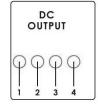
- Green: Good AC Input and DC output power
- Blinking Red: AC Input failed (When input falls below 80±5VAC)



Cooling Fan

The PD-4A has two built-in cooling fans; please ensure that the two fans are not blocked and the airflow is available.

Note: Fan starts when internal ambient temperature reaches 70 °C.



DC OUTPUT LED Indicators (1-4)

1~4 XLR DC output LED indicators LED Indicator is **ON** during normal operation LED Indicator is **OFF** if the output is overloaded or faulty

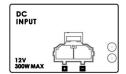


Power Source Input Select (AUTO / AC)

The Input select switch can be set to AC or AUTO depending on the power input that you intend to use.

AUTO: When DC power (12V) converted from AC input drops below 9.5V, the external DC input will start supplying current to DC outputs until its alternative rises above 11.3V.

AC: The DC outputs are supplied by DC power (12V) converted from AC input.



DC Input (Euro Type Terminal)

The PD-4A can be powered from a suitable 12V power source. When working from DC the PD-4A will not regulate the power outlets.

Please ensure that the 12V power source that you use is regulated. If you intend to run the PD-4A from a car or van power outlet make sure that a suitable regulator is used on the power feed.

LED Indicator

Green: DC input LED indicator

Blinking Red: Internal ambient temperature exceeds 70°C degrees.



BUZZER ON/OFF(Push button)

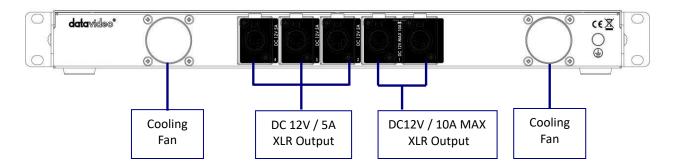
ON: Green (Press the push button)

Buzzer sounds when the AC fails or when the internal ambient temperature exceeds approximately 70°C degrees.

OFF: RED (Press the push button)

The buzzer does not sound.

Rear Panel





DC Out 12V 5A

3 x 12V 5A DC Output via XLR In-Line Socket



DC Out 12V 10A

2 x MAX 12V 10A DC Output via XLR In-Line Socket



Cooling Fan

The PD-4A has two built-in cooling fans; please ensure that the two fans are not blocked and the airflow is available.

Note: Fan starts when internal ambient temperature reaches 50 $^{\circ}$ C,



Ground Terminal

When connecting this unit to any other component, make sure that it is properly grounded by connecting this terminal to an appropriate point. When connecting, use the socket and be sure to use wire with a cross-sectional area of at least 1.0 mm².

Datavideo Product Voltage Requirements

This table is a guideline for Datavideo products; if you are using products from other manufacturers, please check their voltage requirements carefully before connecting to the PD-4A.

DC 12V 3A BAC-03, VP-332, DAC-15, DAC-10, DAC-6, DAC-5, TLM-70D, TLM-404,

TLM-702, TLM-350, SE-500, DVK-100, RMC-140, ITC-100, STC-100, DN-

100, CP-100, DAC-30, CKL-100, TLM-700, TLM-433

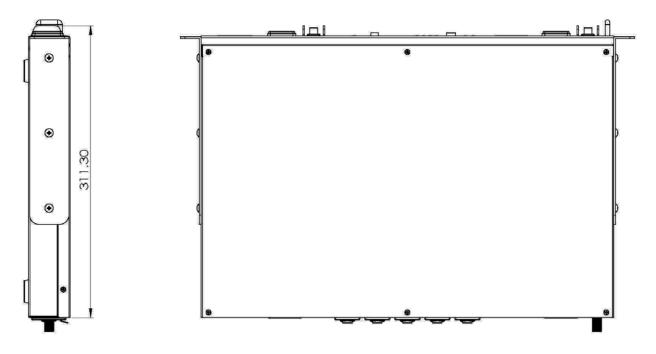
DC 12V 5A DN-300, TLM-170MD

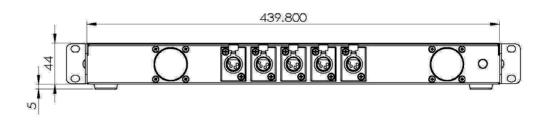
DC 12V10A SE-1000, SE-2000, SE-3000, SE-900, SE-800, MP-6000

Specifications

Input		
AC input outlet	Two AC input with Power switch	
AC input current rating	100 - 240VAC	
AC input fuse rating	100 – 240VAC MAX 6.3A	
AC frequency	50Hz or 60Hz	
DC input	One DC 12V, supports non-regulated DC 12V output	
•		
DC input watt	300W	
Output		
DC Output	12V±5%, 5A XLR AC Female Jack x 3	
	12V±5%, 10A XLR DC Female Jack x 2	
	(Two of the outputs can combine the rating become one	
	12V±5%, 10A DC outputs)	
	Sequential-On design of each DC output terminal during	
	power on stage by 1 second duration.	
General		
Output Efficiency	More than 80%	
DC Output Noise	+5%, -3%	
Operating Temperature	0 to 40 °C ambient	
Operating Humidity	5% to 90% RH, Non-condensing	
Storage Temperature	-20 to 85 degrees C	
Storage Humidity	5% to 90% RH, Non-condensing	
Size	440*44*330mm (W*H*D)	
Weight	6.2Kg	
AC overload protection	Non-recovery fuse on the AC input outlet	
DC overload protection	Auto-recovery fuse on each DC output terminal	

Dimensions





All measurements in millimeters (mm)

Service & Support

It is our goal to make owning and using Datavideo products a satisfying experience. Our support staff is available to assist you to set up and operate your system. Contact your local office for specific support requests. Plus, please visit www.datavideo.com to access our FAQ section.

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