

# 19" Rack Mount Redundant Power Center

## PD-4A



## Quick Start Guide



## 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's 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

Datavideo warrants that the equipment it manufactures shall be free from defects in material and workmanship for a period of 2 years from the date of product purchased. If equipment fails due to such defects, Datavideo will, at its option, repair or provide a replacement for the defective part or product.

Equipment that fails after the warranty period, has been operated or installed in a manner other than that specified by Datavideo, or has been subjected to abuse or modification, will be repaired for time and material charges at the Buyer's expense.

This warranty does not affect your statutory rights within the Country of purchase.

## Disposal

For EU Customers only - WEEE Marking.



This symbol on the product indicates that it will not be treated as household waste. It must be handed over to the applicable take-back scheme for the recycling of electrical and electronic equipment. For more detailed information about the recycling of this product, please contact your local Datavideo office.

## Packing List

|   |   |                         |
|---|---|-------------------------|
| 1 | X | AC CORD                 |
| 1 | X | PD-4A Quick Start Guide |

## Introduction

The PD-4A is a 19" Rack Mount Redundant Power Centre. It is able to supply multiple 12V power outputs from a 100-240V AC Input.

The PD-4A redundant power supply unit protect your power system against unforeseen events by supplying power to devices the instant they begin to fail.

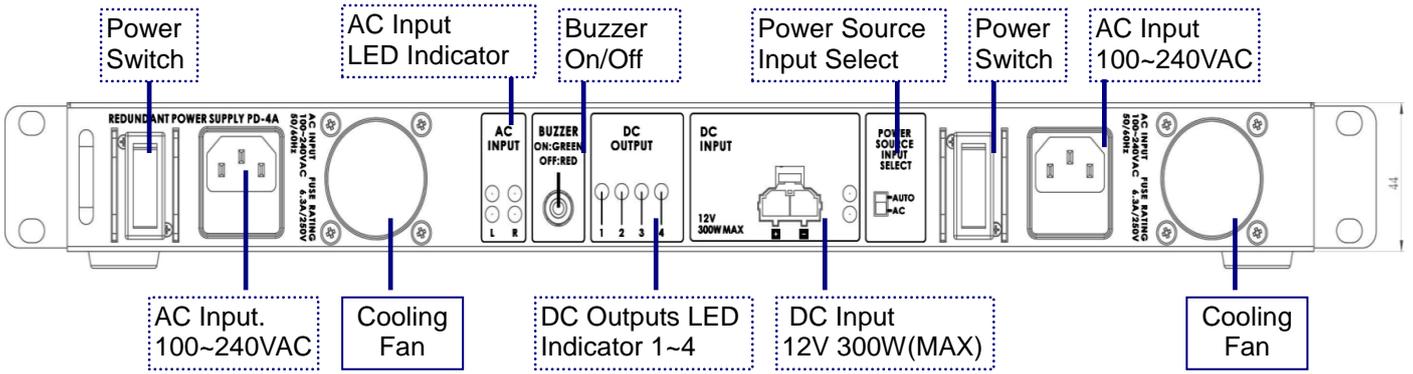
The PD-4A is an essential accessory for Datavideo Mobile Studio applications, together with the Video switcher, LCD, recorders...the PD-4A makes the integration of a Mobile Studio become easier and more professional. Built-in time delay power on control to initiate each DC output terminal in sequence, and installed with an auto-recover fuse in every terminal to safely protect every working device.

Supports input power source from AC 100V to 240V or input from the DC-12V/25Amp input terminal.

## Features

- Power supply up to 384 Watts for most of production requirements
- Power indicator and Auto-Recovering fuse protector for each output terminal
- Sequential-Power On for each DC output terminal during power on by 1 second duration
- Switchable AC 110/220V or DC 12V input source (110 and 220 are separated models)
- Provides safety net protection of both AC and DC to prevent power lost
- Eco-Friendly thru compliant with Safety / EMI and RoHS certification

# Front Panel



## On / Off Switch

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

**N.B. From DC Power the On / Off Switch is redundant**



## AC In with built-in fuse

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



## AC INPUT LED indicator

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

**Green:** AC Input fine and DC output power good.

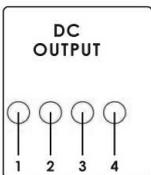
**Red twinkle:** AC Input fail.(When input goes under  $80\pm 5VAC$ )



## Cooling Fan

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

**N.B. Internal ambient temperature of about 70°C fan starts.**



## DC OUTPUT LED

1~4 XLR DC outputs LED indicator

Indicator lights up during normal operation

Output overload or fault indicator to put out the light



## Power source Input Select AUTO / AC

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

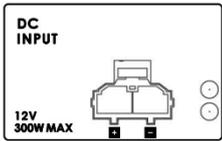
**(V1 and V2 at the same time supply)**

**AUTO:**When V1 drops below 9.5V,V2 will supply current to DC output until V1 rises above 11.3V.

**AC:** The DC output is only by the V1.

**V1:AC to DC 12V (Internal switching power supply)**

**V2:DC input (External)**



### 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.

Green: DC input LED indicator

Red twinkle: when internal ambient temperature exceeds approximately 70°C degrees



### BUZZER ON/OFF( Push button)

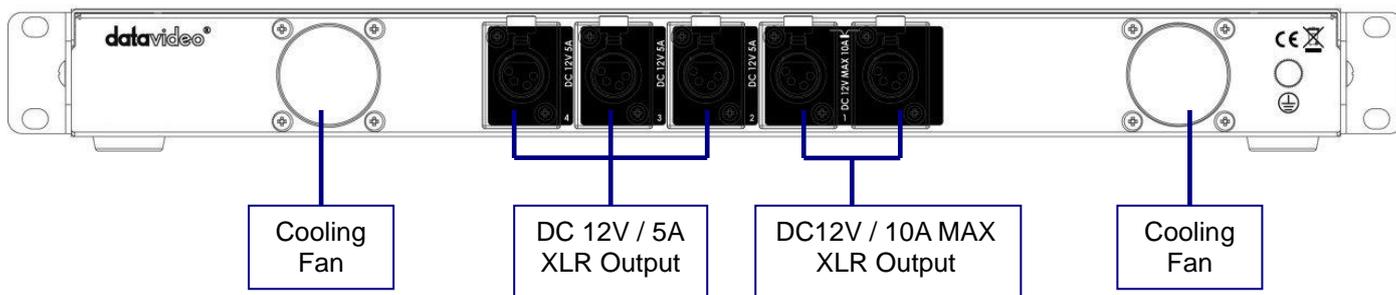
#### ON: Green (Press the push button)

Buzzer sound when the AC fail 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 Sockets



### Cooling Fan

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

**N.B. Internal ambient temperature of about 50°C fan starts.**



### 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 mm<sup>2</sup>.

## **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**

## Specification

### 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

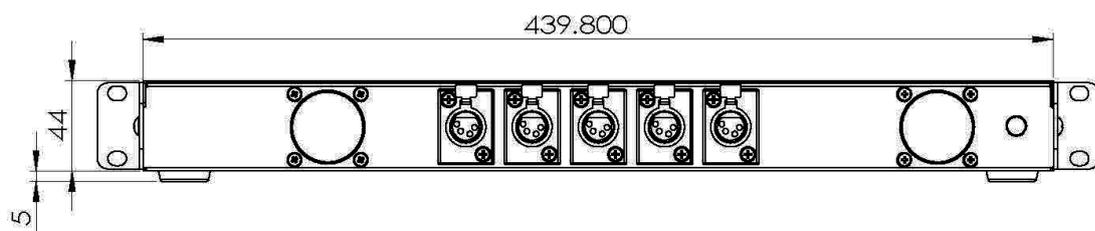
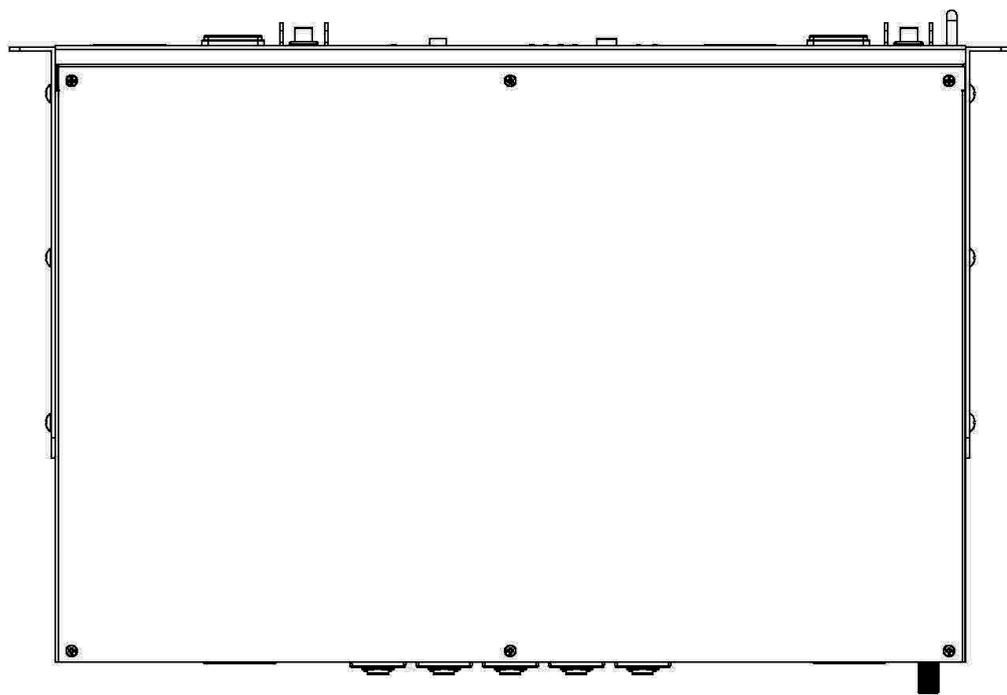
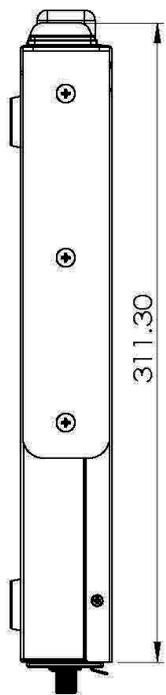
DC Output: 12V±5%, 5A XLR AC Female Jack x 3  
12V±5%, 10A XLR DC Female Jack x 2  
(Two of the outputs can combine the rating become one 12V±5%, 10A DC outputs)

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%  
Chassis Ground terminal  
Embedded four units of heat sink Fan design  
Selectable of Auto/DC input switch  
AC overload protection, non-recovery fuse on the AC input outlet  
DC overload protection, auto-recovery fuses on each DC output terminal  
AC Power light switch indicator  
DC output LED indicators  
Built-in buzzer abnormal warning  
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

# Dimension



## Service & Support

It is our goal to make your products ownership a satisfying experience. Our supporting staff is available to assist you in setting up and operating your system. Please refer to our web site [www.datavideo.com](http://www.datavideo.com) for answers to common questions, support requests or contact your local office below.

Datavideo Global Website: [www.datavideo.com](http://www.datavideo.com)

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