



# 8-Port DC Power Supply Manager 5V/12V/24V/48V



## PS-8DC-5V PS-8DC-12V PS-8DC-24V PS-8DC-48V USER MANUAL

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# SAFETY INSTRUCTIONS AND COMPLIANCE DECLARATION

PLEASE OBSERVE THE FOLLOWING SAFETY PRECAUTIONS

## **SURGE PROTECTION DEVICE RECOMMENDED**

This product contains sensitive electrical components that may be damaged by electrical spikes, surges, electric shock, lightning strikes, etc. Use of surge protection system is highly recommended in order to protect and extend the life of your equipment.

## SAFETY INFORMATION

Do not use this device near water/liquids. This device should not be exposed to dripping and splashing or liquids.

Clean only with dry cloth.

Do not use solvents such as paint thinners and acetone to clean external casing. Such agents will remove any labels on the device.

Do not block any fan ventilation openings.

Do not install near any sources of intense heat such as radiation, boilers, or other equipment that produce heat

Not intended for use/storage in close proximity of critical medical supplies such as those that might come into direct contact with patients or medical staff.

Protect the power cord from being pinched or damaged at receptacles and the point of exit from the device.

Only use attachment /accessories specified by manufacturer. If you have any questions about the compatibility of an accessory, contact your dealer.

In case liquid spillage on device, unplug mains power cord and contact your dealer. Continuous use in this case may result in fire or electric shock.

To reduce the risk of electric shock, do not touch connectors with wet hand.

Only power with the marked voltage on the device. Any other voltage can cause fire or electric shock.

Do not use the device if an abnormality occurs. If any smoke or odor becomes apparent, unplug the power cord and contact your dealer. Do not try to repair the device yourself.

Avoid using physically damaged devices. If your device metal housing is seriously physically damaged, the internal components may function abnormally. Contact your dealer.

Do not install the device in an area heavy with dust or constant high humidity. Operating the device in this case may result in fire or electric shock.

Only use supplied power supply. For a list of other compatible medical grade power supplies, contact your dealer.

Install this device in a secure location where it cannot be easily pushed or knocked over.

Use of this device is not suitable for use within 6 ft. of a medical patient.

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This 8-Port Managed DC Power Supply is a DC power splitter which can distribute up to 3 amps of 5, 12, 24 or 48 volt power to up to eight connected devices via 2-pin terminal block connections (120 watts total across all 8 outputs) depending on the model. Ideal for professional applications, this unit provides direct per-port power control via WebGUI, Telnet or RS-232. An integrated, battery backed-up, clock allows for detailed power scheduling based on a repeating daily/weekly schedule, or single events. Up to 2 fans may be connected and their speed can be either automatically controlled based on a detected temperature, or set to a single static speed. Detailed status information about the power input, each power output, current fan speed, and system temperature is provided to give a comprehensive system overview.

### FEATURES

- Power management system providing voltage-controlled current (5V/12V/24V or 48V) on each output
- Battery backed up clock for scheduling power events
- Integrated WebGUI for control and power analysis
- Unit's overall maximum power consumption is only 140 watts
- Supports 8 power output ports with professional 2-pin 3.5mm terminal block connectors

### IDEAL FOR

- Entertainment Rooms & Home Theaters
- Showrooms & Demo Rooms
- Lecture Hall Presentations
- Public Commercial Displays
- AV Equipment and Control Rooms

### PACKAGE CONTENTS

- 1- 8-Port DC Power Manager
- 1- DC Power Adapter
- 1- Power Cord
- 1- 8×2-pin Terminal Block to DC Power Adapter Cable
- 1- Fan Power/Control Cable
- 1- 3.5mm to 9-pin D-sub Adapter Cable
- 1- User Manual

### SYSTEM REQUIREMENTS

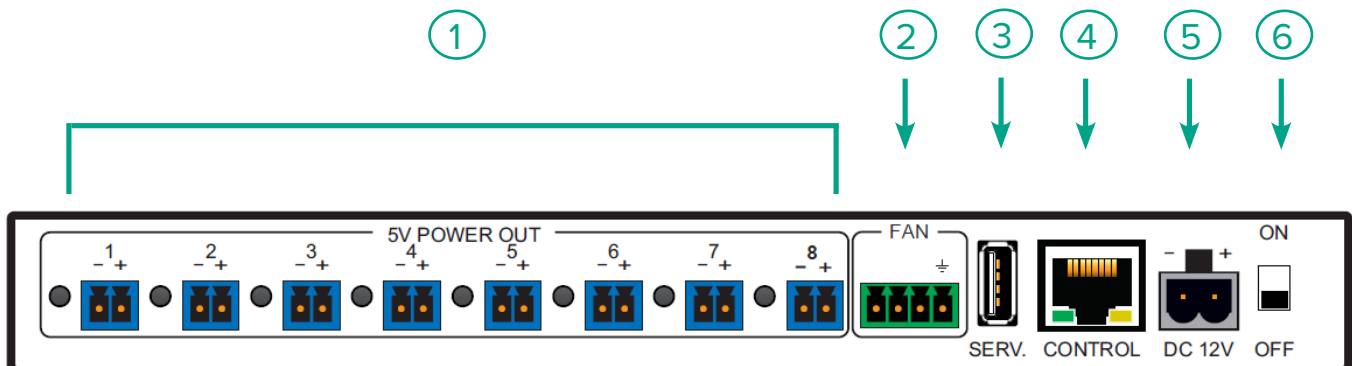
5V, 12V, 24V or 48V powered equipment requiring less than 15 watts of power using 2-pin 3.5mm terminal block terminated power cables.

## FRONT PANEL



- ① **RS-232:** Connect directly to your PC/laptop using a 3.5mm mini-jack to 9-pin adapter to send RS-232 commands to control the unit. Mounts to a single-gang electrical box or mud-ring
- ② **ISP/RESET:** This button has multiple functions, see below.
  - ②a **ISP MODE:** Press and hold this button while powering the unit on to enter ISP mode. This mode is for firmware upgrade
  - ②b **FACTORY RESET:** Press and hold this button for 5+ seconds, after the unit is already powered on, to perform a full factory reset of the unit.
  - ②c **REBOOT:** Momentarily press this button, after the unit is already powered on, to reboot the unit.

## REAR PANEL



- ① **POWER OUT & LEDs 1~8:** Connect power cables with 3.5mm 2-pin terminal blocks from units requiring 5V, 12V, 24V or 48V power. Up to 8 devices can be powered. When power is available from a port, the associated LED will be green. When a power port is disabled its LED will turn off.
- ② **12V FAN A/B:** Connect to a dedicated dual-fan power and control cable. Fan speed can be controlled via WebGUI, Telnet, or RS-232.
- ③ **SERV.:** This slot is reserved for firmware update use only.
- ④ **CONTROL:** Connect directly, or through a network switch, to your PC/laptop to control the unit via Telnet/WebGUI.
- ⑤ **DC 12V:** Plug the 12V DC power adapter into the unit and connect it to an AC wall outlet for power.
- ⑥ **ON/OFF:** Flip this switch to turn the unit ON or OFF after connecting a 12V power source.

UNIT	
PIN	DEFINTION
1	NC
2	TXD
3	RXD
4	NC
5	GND
6	NC
7	NC
8	NC
9	NC

REMOTE SYSTEM	
PIN	DEFINTION
1	NC
2	RXD
3	TXD
4	NC
5	GND
6	NC
7	NC
8	NC
9	NC

Baud Rate: 19200bps

Data Bits: 8

Parity Bits: None

Stop Bits: 1

Flow Control: None



COMMAND	DESCRIPTION AND PARAMETERS
HELP	SHOW THE FULL COMMAND LIST.
?	SHOW THE FULL COMMAND LIST.
HELP N1	SHOW A DESCRIPTION OF COMMAND N1. N1 = {COMMAND NAME} (UPPERCASE ONLY)
IPCONFIG	DISPLAY THE CURRENT IP CONFIGURATION.
IPSTATIC N1 N2 N3	SET THE FULL STATIC IP CONFIGURATION. N1 = X.X.X.X [X = 0 ~ 255, IP ADDRESS] N2 = X.X.X.X [X = 0 ~ 255, NETMASK] N3 = X.X.X.X [X = 0 ~ 255, GATEWAY]
IPDHCP N1	ENABLE OR DISABLE DHCP FOR OBTAINING THE UNIT'S IP CONFIGURATION.  N1 = ON, OFF
VERSION	SHOW THE UNIT'S FIRMWARE VERSION.
FADEFAULT	RESET THE UNIT TO THE FACTORY DEFAULT SETTINGS.
REBOOT	REBOOT THE UNIT.
PWN N1 N2	ENABLE OR DISABLE POWER OUTPUT N1.  N1 = 1 ~ 8 [PORT NUMBER] N2 = ON, OFF
PWR N1 NAME N2	RENAME POWER OUTPUT N1.  N1 = 1~8 [PORT NUMBER]
PWR_STATUS N1	SHOW THE CURRENT POWER STATE (VOLTS, WATTS, AMPS)  N1 = 1 ~ 8 [PORT NUMBER] N2 = {NAME STRING} [16 CHARACTERS MAX]
TEMPERATURE	SHOW DETAILS OF THE UNIT'S TEMPERATURE AND FAN CONTROL SETTINGS.
FAN SET N1	SET NON-"AUTO MODE" FAN SPEED OR ENABLE "FAN AUTO MODE".  AVAILABLE VALUES FOR N1: 0 ~ 100 [DISABLE FAN AUTO MODE AND SET THE FAN SPEED TO THE SELECTED PERCENTAGE] AUTO [ENABLE FAN AUTO MODE]
FAN_SET N1 N2 N3	SET THE FAN SPEED AND TEMPERATURE THRESHOLD FOR THE SELECTED AUTOMATIC SPEED TIER.  AUTO_LOW [AUTO FAN SETTING TO ADJUST] AUTO_MID AUTO_HIGH  N2 = 0 ~ 100 [TEMPERATURE THRESHOLD IN °C] N3 = 0 ~ 100 [FAN SPEED IN PERCENT]

**Note:** Commands will not be executed unless followed by a carriage return <CR>. In addition commands are not case-sensitive unless specified.

Before attempting to use Telnet control, please ensure that both the unit and the PC/Laptop are connected to the same active network.

To Access The Command Line Interface (CLI)	
In Windows 7	Click <b>Start</b> , type “cmd” in the search filed and press <b>Enter</b> .
In Windows XP	Click <b>Start</b> , > <b>Run</b> type “cmd” in the search filed and press <b>Enter</b> .
In Windows 7	Click Go > <b>Applications</b> > <b>Utilities</b> > <b>Terminal</b> .

Upon accessing the Command Line Interface (CLI), type “telnet” followed by the IP address of the unit (and the port number if it is non-standard) and hit the “Enter” key. See below for reference.

```
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\Users\Administrator>telnet 192.168.1.50 23
```

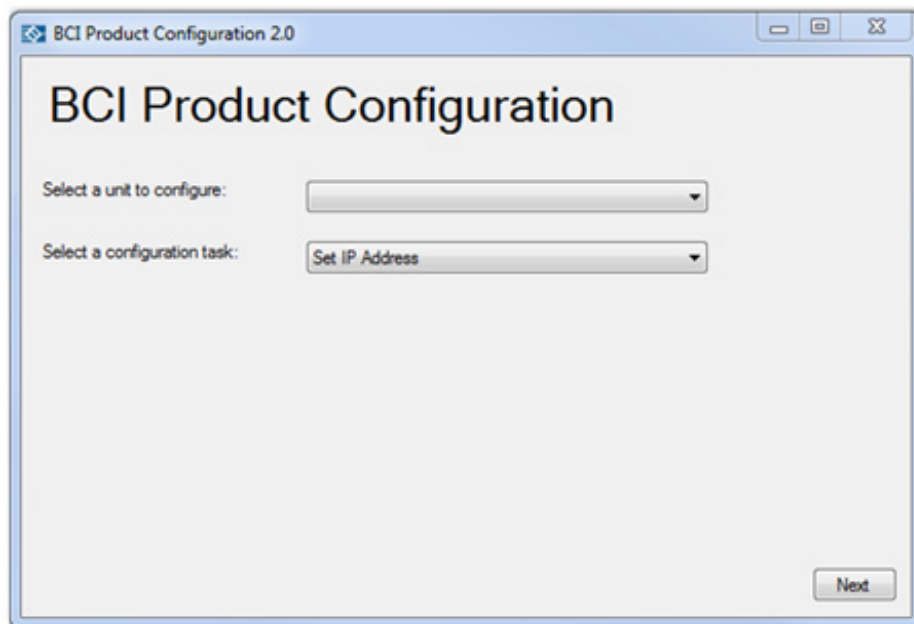
This will establish communication to the desired unit to control. Type “help” to list the available commands.

Note: The unit’s default IP address is 192.168.1.50. If the IP address is changed then the IP address required for Telnet access will also change accordingly.

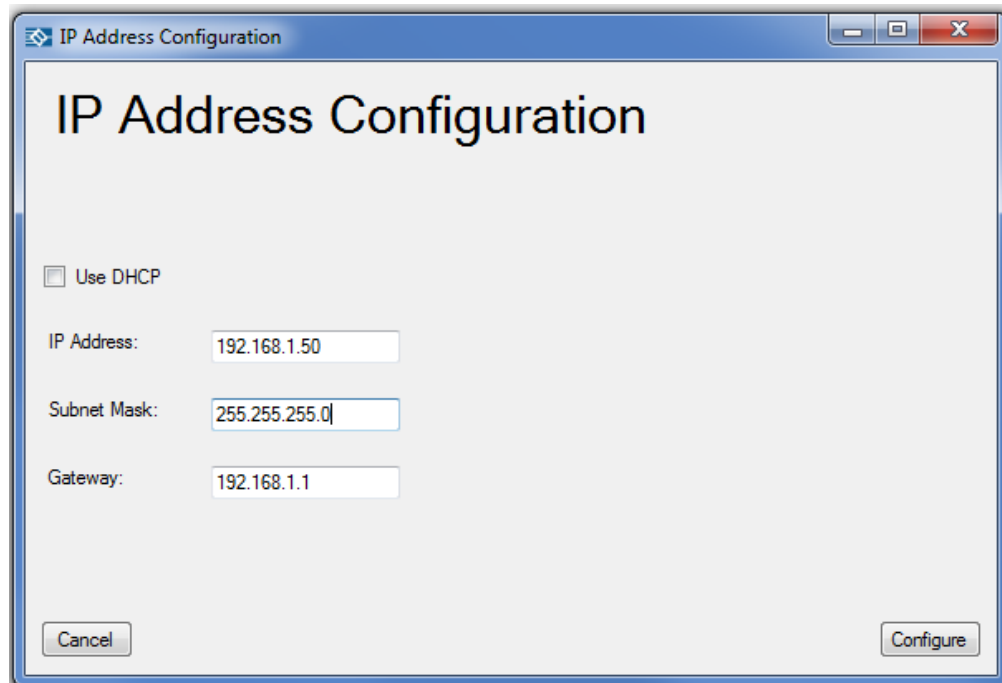
### BCI Product Discovery Tool

Please request the BCI Product Discovery Tool from your authorized dealer and save it in a directory in a PC/laptop where you can easily find it.

Connect the unit and the PC/Laptop to the same active network and execute the Product Discovery Tool. Click on the dropdown bar in the “Select a unit to configure” field and a list of devices connected to the local network will show up. Select the desired device. Click on the dropdown bar in the “Select a configuration task” field. Select “Set IP Address” and click Next.



In the next section the “IP Address” field will display the assigned IP address of the desired device. Copy the IP address and paste it to the address bar of your internet browser.



The image shows a screenshot of a web-based configuration window titled "IP Address Configuration". The window has a blue title bar with standard minimize, maximize, and close buttons. The main content area is light gray and contains the following elements:

- A checkbox labeled "Use DHCP" which is currently unchecked.
- Three text input fields with labels to their left:
  - "IP Address:" with the value "192.168.1.50" entered.
  - "Subnet Mask:" with the value "255.255.255.0" entered.
  - "Gateway:" with the value "192.168.1.1" entered.
- Two buttons at the bottom: "Cancel" on the left and "Configure" on the right.

**Note:** The unit's default IP address is 192.168.1.50

## WebGUI Overview

After connecting to the WebGUI's address in a web browser, log into the unit by entering the appropriate user name and password.

Default username and password: **admin**

The login form consists of a blue 'Login' header, a 'Username' text box, a 'Password' text box, and a 'Submit' button.

All primary functions of this unit are controllable via the built in WebGUI, including Status, Device Settings, Schedule, and System Settings. The individual functions will be introduced in the following section.

## Status

This tab displays the current status of the various components of the unit in real-time.

The screenshot shows the 'Status' page with a sidebar menu containing 'Status', 'Device Settings', 'Schedule', 'System Settings', and 'Admin - Logout'. The main content area displays the following data:

- Power IN**
  - Voltage : 12.192 V
  - Current : 0.128 A
  - Watt : 1.561 W
- Power Out** (8 ports):
 

Port	Voltage (V)	Current (A)	Watt (W)
1	5.196	0	0
2	0	0	0
3	5.156	0	0
4	5.196	0	0
5	5.196	0	0
6	5.235	0	0
7	0	0	0
8	5.235	0	0
- System Temperature**
  - Main Board : 35 °C
  - Area1 : 36 °C
  - Area2 : 35.499 °C
- System Fan**
  - Auto Fan Mode : Enabled
  - Fan Speed 1 : 0 RPM
  - Fan Speed 2 : 0 RPM
  - Auto Low Fan : 45 °C, Fan set 30 %
  - Auto Middle Fan : 60 °C, Fan set 60 %
  - Auto High Fan : 70 °C, Fan set 100 %

Version.V1.98.3

- (1) **Power In:** Displays the voltage, current, and wattage of the unit's main power supply.
- (2) **Power Out:** Displays the voltage, current and wattage of each of the 8 individual power outputs.
- (3) **System Temperature:** Displays the unit's temperature as measured at 3 locations inside the case on the PCB.
- (4) **System Fan:** Displays the current state of 2 external fans (optional) including individual fan RPM, and the current fan speed thresholds, if auto mode is enabled.

### Device Settings

This tab provides controls for all 8 power output ports as well as control over the optional external fans' speed and temperature thresholds.

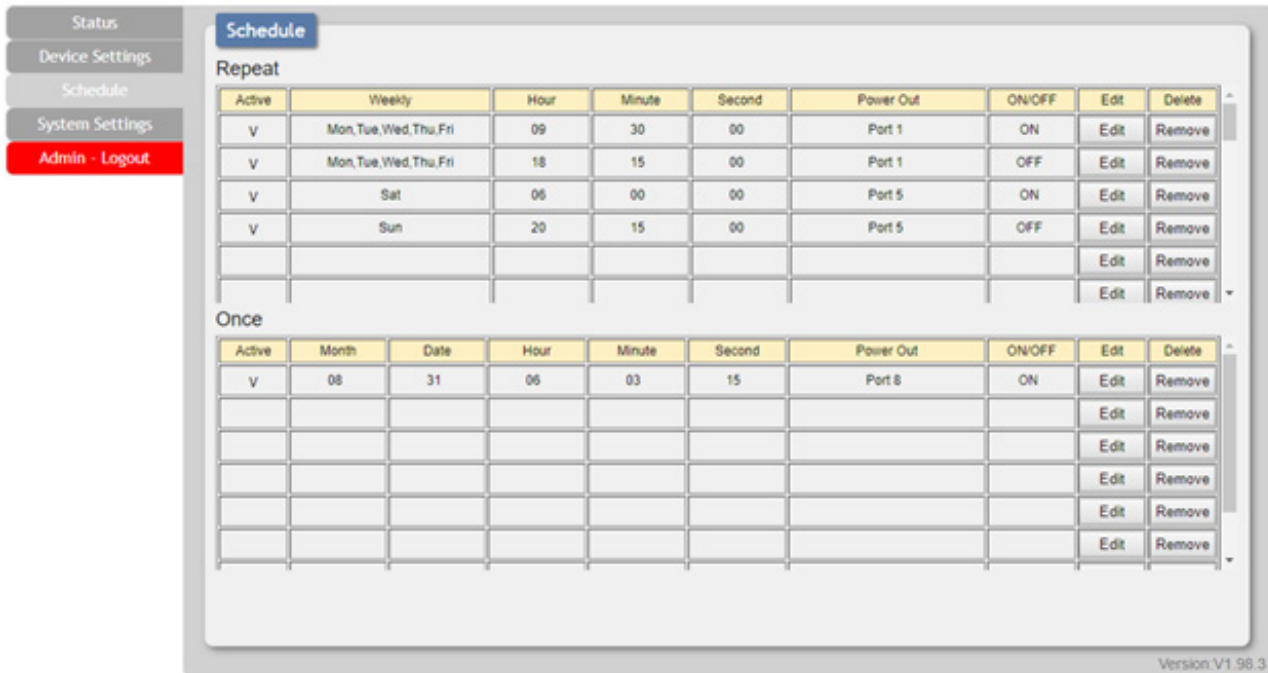


- (1) **Power Out:** This section provides control over each individual power output. The outputs may be turned on, turned off, and renamed.
- (2) **Fan Setting:** This section provides controls for any connected fans. When Auto Fan Mode is enabled the fan speed will be controlled based on the three user-defined temperature thresholds and speed selections. The preferred fan speed at each threshold is also user configurable. If Auto Fan Mode is disabled, the fan speed can be set as a static percentage of maximum power. If two fans are connected to the unit, both will follow the same settings.

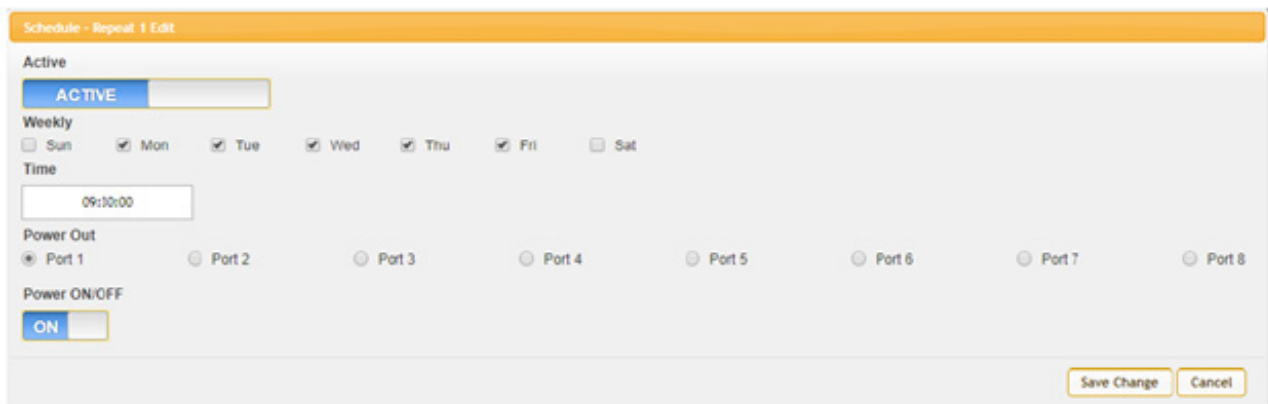
**Note:** The highest of the three System Temperature measurements is used to determine which Auto Fan Mode speed (low, middle, or high) is active when Auto Fan Mode is enabled.

**Schedule**

The Schedule tab provides multiple ways to automate and schedule the powering on and off of any of the 8 power ports on this unit.



- (1) **Repeat Mode:** Items in this section will execute at their set times on the selected days (Sunday through Saturday) every week as long as they are marked as “Active”.



- (2) **Once Mode:** Items in this section are scheduled to occur a single time on a specific date at the specified time. Each item will automatically change to “None Active” after they have been executed once.

**Note:** Each schedule item must be set as “Active” in order for it to activate at the desired scheduled time.

## System Settings

This tab provides system configuration options including changing the network settings, downloading/restoring saved system configurations, modifying the username and password, system time setting, and updating the firmware.



(1) **Network:** This section allows for setting the unit to either Static or DHCP mode for its IP information. When in Static mode, the IP, Netmask and Gateway may be set manually.

(2) **Web User Setting:** This section allows for the login password to be changed. The username is “admin” and the default password is also “admin”.

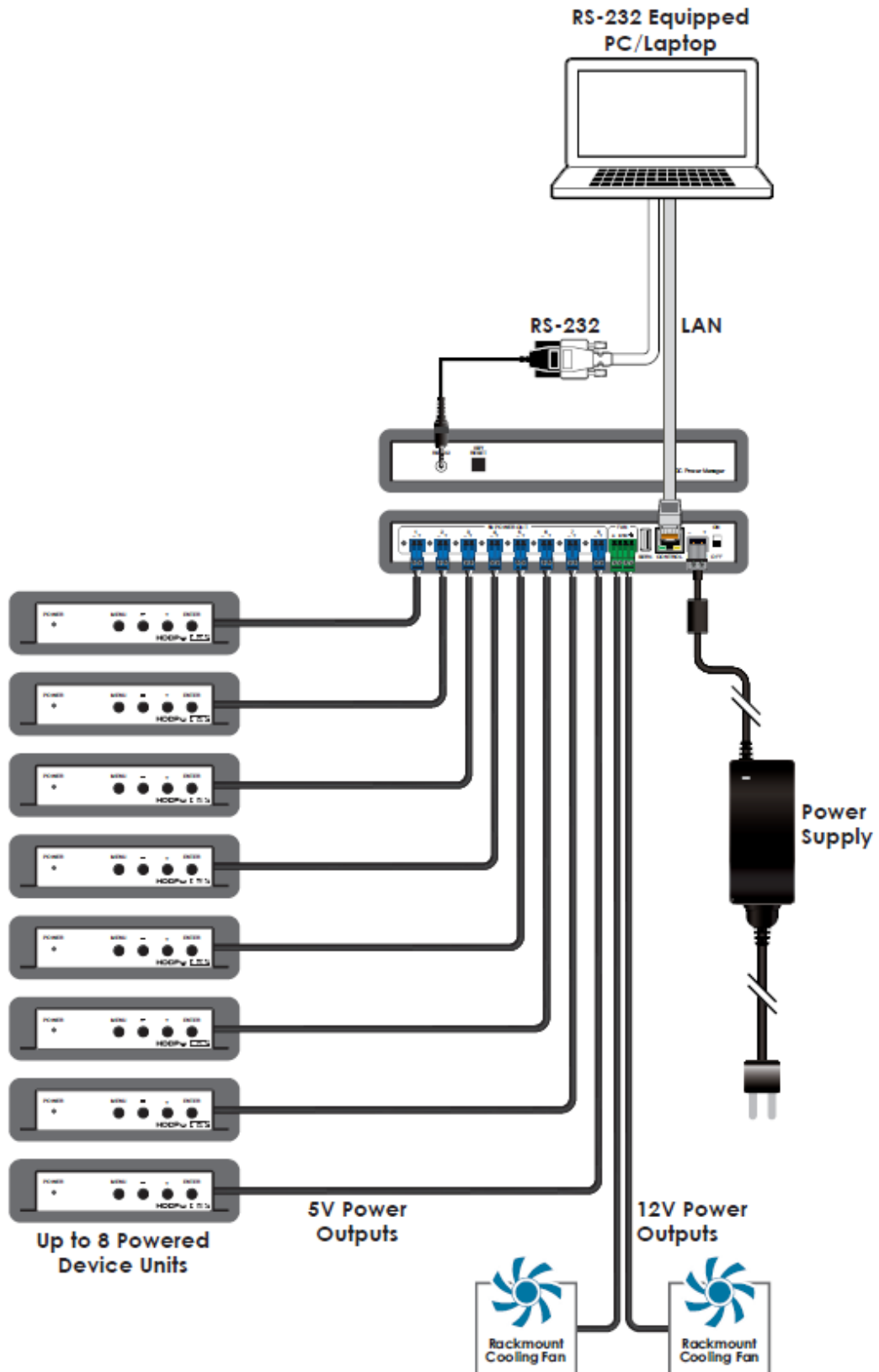
(3) **System Time:** This section allows user to set the system time and date.

Note: The new setting will not take effect until “Save” is clicked.

(4) **Download Current Configuration:** This section allows the user to download the current system configuration to a local PC for restoration later.

(5) **Restore Configuration:** This section allows user to restore a previously downloaded system configuration.

(6) **Firmware Upgrade:** This section allows for new firmware to be uploaded into the unit.



**Note:** 5V Power Manager Pictured

## CONTROL PORTS

**Ports** Ethernet, RS-232, USB A (Service Port)

## OUTPUT PORTS

**Ports** 2-pin Terminal Block x 8  
4-pin Terminal Block x 1 (For Fan)

## RS-232

**Signal Format** RS-232  
**Baud Rate** 19200 bps  
**Connector** 3.5mm Input Jack

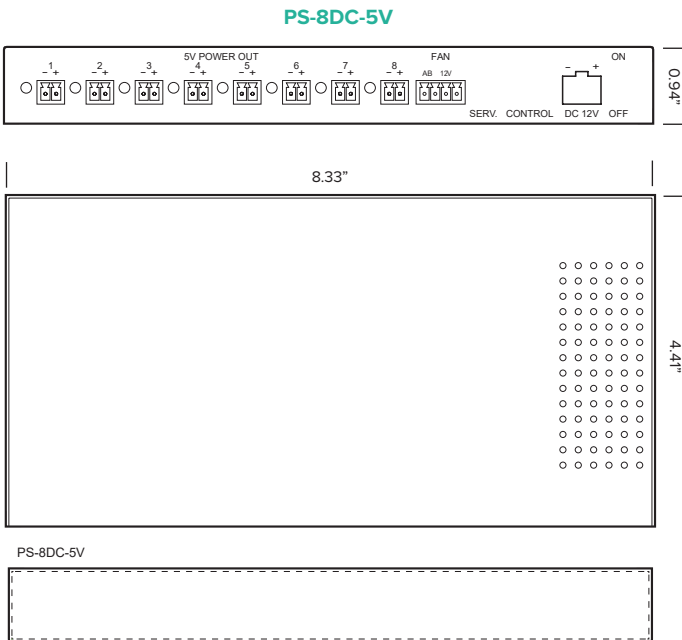
## STATUS LED INDICATORS

**Power Out 1~8** Indicates output power is present. LED will turn off if port is disabled

## POWER RATING (MAX)

**PS-8DC-5V** 5V@3A, 15W/port  
**PS-8DC-12V** 12V@1.25A, 15W/port  
**PS-8DC-24V** 24V@0.625A, 15W/port  
**PS-8DC-48V** 48V@0.300A, 14.4W/port

## PANEL DRAWING



## PHYSICAL

**Dimensions PS-8DC-5V** 8.33"(W) x 4.41"(D) x 0.94"(H)  
**Dimensions PS-8DC-12V** 8.33"(W) x 4.41"(D) x 0.94"(H)  
**Dimensions PS-8DC-24V** 8.33"(W) x 4.61"(D) x 0.94"(H)  
**Dimensions PS-8DC-48V** 8.33"(W) x 4.61"(D) x 0.94"(H)  
**Power Rating** 12V DC, 12.5A (PS-8DC-5V)  
12V DC, 12.5A (PS-8DC-12V)  
24V DC, 6.25A (PS-8DC-24V)  
48V DC 3.12A (PS-8DC-48V)  
**Operating Temperature** 0 to 40°C, operating  
**Humidity** 20 to 90% RH, Non-Condensing

## CERTIFICATIONS

CE, FCC

## GREEN COMPLIANCE

RoHS

## ORDER INFORMATION

**PS-8DC-5V** 5V Power Manager  
**PS-8DC-12V** 12V Power Manager  
**PS-8DC-24V** 24V Power Manager  
**PS-8DC-48V** 48V Power Manager

## Included Accessories

5 VDC Power Adapter for PS-8DC-5V  
12 VDC Power Adapter for PS-8DC-12V  
24 VDC Power Adapter for PS-8DC-24V  
48 VDC Power Adapter for PS-8DC-48V  
Power Cord x 1  
2-pin Terminal Block to DC Power Adapter Cable x 8  
Fan Power/Control Cable x 1  
3.2mm to 9-pin D-sub Adapter Cable x 1

### 5.1 Replacement Policy

Standard products found defective on arrival (DOA) will be replaced, based on availability, within 24 to 48 hours anywhere in the U.S. Please call Customer Service at 800-214-0222 for information.

### 5.2 Return/Repair Service

The PS-8DC Power Manager Series contains no user serviceable components. If you have a problem with your unit, please contact the Customer Service Department. To facilitate our return/ repair processing please contact Broadata Communications, Inc. to obtain a Return Material Authorization (RMA). Please include the following information:

- Product Model Number
- Serial Number
- Complete Description of Problem
- Hardware Installation Description

Broadata Communications, Inc.  
2545 West 237th Street, Suite K  
Torrance, CA 90505  
1-800-214-0222  
(310) 530-1416  
(310) 530-5958 (Facsimile)  
e-mail: CustomerService@Broadatacom.com

Website: [www.broadatacom.com](http://www.broadatacom.com)

## 6.0 LIMITED WARRANTY

Broaddata Communications, Inc. (BCI) warrants, for a period of one year from date of shipment, each product sold shall be free from defects in material and workmanship. BCI will correct, either by repair, or at BCI's election, by replacement, any said products that in our sole discretion prove to be defective and are returned to the manufacturing location within 30 days after such defect is ascertained. All warranties are limited to defects arising under normal use and do not include malfunctions or failure resulting from misuse, abuse, neglect, alterations, electrical power problems, usage not in accordance with product instructions, improper installation, or damage determined by BCI to have been caused by the Buyer or repair made by a third party. Limited warranties granted on products are to the initial customer end-user and are not transferable. OUR LIABILITY UNDER THIS WARRANTY SHALL IN ANY CASE BE LIMITED TO THE INVOICE VALUE OF THE PRODUCT SOLD AND BCI SHALL NOT BE LIABLE TO ANYONE FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES ARISING FROM THE USE OF ITS PRODUCTS OR THE SALE THEREOF. We make NO WARRANTY AS TO THE MERCHANTABILITY OF ANY GOODS, OR THAT THEY ARE FIT FOR ANY PARTICULAR PURPOSE OR END APPLICATION NOR DO WE MAKE ANY WARRANTY, EXPRESSED OR IMPLIED OTHER THAN AS STATED ABOVE.



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