

# 1500W Power Supply User Guide

# EVGA

1500W Power Supply User Manual

# Table of contents

ntroduction3	5
Safety Information3	
ēeatures4	
nstallation4	
Advanced Features6	;
Cable Configuration7	,
Specification8	
DIP Switches9	)

# EVGA

## 1500W Power Supply User Manual

## Introduction: Premium Power

Thank you for purchasing an EVGA NEX-1500 CLASSIFIED power supply. The NEX-1500 CLASSIFIED is a premium quality power supply intended to meet the needs of the most demanding enthusiast systems. Designed with enthusiast needs in mind the NEX series is the best choice to power next generation systems.

This manual will cover important information regarding the specifications, installation, features, and operations of your EVGA NEX-1500 CLASSIFIED power supply.



## **Safety Information**

WARNING: This unit has no user-serviceable parts inside. Opening the casing presents a risk of electrocution and will void the warranty. EVGA will not be responsible for any result of improper use, use for which the product was not intended, or use inconsistent with the warranty terms (available for review at www.evga.com/support/warranty/) and this manual (also available at www.evga.com/support/manuals/).

WARNING: Do not operate this power supply with any power cord but the one provided. If your cord is lost or damaged, please contact EVGA for a replacement.

WARNING: Do not operate this power supply with an extension cord or power strip. Plug directly into the wall socket or an Uninterruptable Power Supply rated for 2800VA or greater.



1500W Power Supply User Manual

### Features

#### **EVGA SUPERNOVA**

The NEX-1500 CLASSIFIED is compatible with the unique and exclusive EVGA SuperNOVA software that lets you monitor and control your power supply from your desktop. Monitor and adjust voltage, change fan speed, and even switch between single and multiple rails!

#### TOP TIER PERFORMANCE

The NEX-1500 CLASSIFIED has class-defining performance with **ultra stable voltage** and extremely **clean outputs**. This can help you achieve the highest possible overclock, or just the most stability and reliability. The NEX-1500 CLASSIFIED also has high efficiency **up to 90%** at 50 degrees Celsius and is **80PLUS Gold** certified.

### THE BEST PROTECTION

The NEX-1500 CLASSIFIED comes equipped with the most comprehensive protection set possible, including Over Voltage Protection (**OVP**), Under Voltage Protection (**UVP**), Over Power Protection (**OVP**), Short Circuit Protection (**SCP**), Over Temperature Protection (**OTP**), and Over Current Protection (**OCP**). This product is also covered by our industry-leading **ten year warranty**.

### BEST BUILD QUALITY

The NEX-1500 CLASSIFIED is built to the highest standards, using **Japanese capacitors** rated at 105 degrees Celsius and high quality brand-name semiconductor components for the highest performance and reliability.

### FULLY MODULAR CABLES

The NEX-1500 CLASSIFIED is designed with the enthusiast in mind, with fully modular, individually-sleeved cables to maximize airflow and keep your system looking slick and clean.

## Installation

- 1. Remove the power supply from its packaging.
- 2. Use the provided screws to install the power supply into your computer case. NOTE: It is recommended to install the power supply with the fan facing down. However, if your case places the power supply at the bottom of the case and there are no ventilation holes there, it may be best to install the power supply with the fan facing up for greater efficiency and reliability.



# EVGA

## 1500W Power Supply User Manual

3. Connect the 24-pin ATX cable to the power supply and the motherboard.

4. Connect the 8-pin EPS12V cable(s) to the power supply and the motherboard. Connect the 6/8-pin PCIe cables to the power supply and your graphics card(s). NOTE: Do not attempt to plug an 8-pin PCIe cable into a 6-pin connector without first detaching the two extra pins.

 Connect the SATA cables to your power supply and drives (hard drives, solid state drives, optical drives).

6. Connect the peripheral "molex" connectors to the power supply and your fans and other devices.

7. Connect the provided EVGA USB cable to your power supply and your motherboard's USB header.



8. Connect the AC power cord to your power supply and to the wall, and turn the power switch to the ON position.



## **Advanced Features**

### VOLTAGE AND CURRENT MONITORING

EVGA SuperNova software allows you to monitor your power supply's performance in real time, so you can gauge your system's power usage and your power supply's health. SuperNOVA allows you to monitor up to six performance characteristics at once, including the voltage of all rails, output current, input current and voltage, fan speed, power consumption, efficiency, and more! Finally, you can adjust the output of your +12V rail from 11.8V to 12.6V or anywhere in-between for maximum overclocking performance. SuperNova can be downloaded at EVGA.com

### OVERCLOCK YOUR POWER SUPPLY

At EVGA, we know that squeezing the best performance out of your system sometimes means taking risks. Therefore we offer the ability to raise the trip point of this unit's Over Power Protection, to allow the unit to be overloaded to a degree. In effect, your 1500W power supply becomes a 1650W power supply, allowing you to push your system to its limits. You can enable this feature through our SuperNOVA software, or by manual switch located on the power supply next to the on/off switch – DIP switch #2.

**Note:** EVGA "OC Mode" will only work with 230VAC input. If user activates OC Mode on 115VAC input the OC Mode will be disabled and the Over Current and Over Power protections will remain set at 1500W.

## SINGLE / MULTIPLE RAIL TOGGLE

The NEX-1500 CLASSIFIED comes with Over Current Protection on the +12V rail enabled by default, dividing it into eight 20A (240W) +12V rails. This protects your system and the power supply from overloading and certain types of short circuit. This protection should normally be invisible to overclockers and has no effect on power supply performance or efficiency. However, under extreme conditions it may be possible to trip the multi-rail +12V OCP on accident, causing the power supply to shut down. In these situations we allow you to disable multi-rail +12V OCP, turning it into a single rail power supply. This can be done through our SuperNOVA software, or by manual switch located on the power supply next to the on/off switch – DIP switch #3.

## MANUAL FAN CONTROL

The NEX-1500 CLASSIFIED has a PWM controlled fan that balances cooling performance and efficiency versus noise and fan wear. However, fan control is fully adjustable via our SuperNOVA software. (**NOTE:** If a low fan speed is insufficient to keep the power supply cool, user input may be overridden to prevent unit Over Temperature shutdown). If noise levels and fan wear are not a concern for you, you can manually set the fan speed to 100% via a manual switch located on the power supply next to the on/off switch – DIP switch #4.



# **Cable Configuration**

Modular Connector	Cables (distance to first connector)	Cable Color	+12V Rail	
MB	1x ATX 24/20 pin (750mm)	Black	+12V1	
CPU0	1x EPS12V 8 pin + PCle 6 pin (750mm)	Black	+12V2 / +12V3	
CPU1	1x EPS12V 8 pin + PCle 6 pin x2 (750mm)		+12V5 / +12V6	
VGA0		Red	+12V1	
VGA1			+12V4	
VGA2	4x PCle 6+2 pin x2 (750mm) 4x PCle 6+2 pin x2 (600mm)		+12V3	
VGA3			+12V8	
VGA4			+12V4	
VGA5			+12V5	
VGA6			+12V6	
VGA7			+12V7	
SATA0		Black	+12V8	
SATA1	2x SATA 5 pin x3 (650mm)			
SATA2	1x SATA 5 pin x3 (550mm) 1x SATA 5 pin x3 (450mm)			
SATA3				
PERP0		Dist	1017	
PERP1	2x iviolex 4 pin x4 (550mm)	ыаск	+12V/	
USB	1x USB (850mm)	Black	N/A	
N/A	1x Molex -> FPP 4 pin x2 adapter (150mm)	Black	N/A	



1500W Power Supply User Manual

## **Specifications**

#### Label

EVCA	A	TX Pow	er supp	oly	+50°C ambient @ full load					005		
EVGA	A 120-PG-1500				+40°C ambient @ 110% load					80Plus		
AC Input	100-24	0 VAC		47-63 Hz, IEC 60320 C-20 input connector					GOLD			
DC Output	+5V	+3.3V	+12V1	+12V2	+12V3	+12V4	+12V5	+12V6	+12V7	+12V8	-12V	+5Vsb
MAX output, A	25	25	20	20	20	20	20	20	20	20	0.8	4
Combined, W	ombined, W 150			1485 / 1600			9.6	20				
OCP Sum				131 A in normal mode, 145 A in OC mode								
Output power, Pcont	1500W @ +50°C Normal / 1650W @ OC											



Dimensions: 86 x 150 x 200 mm

Over Voltage Protection, Under Voltage Protection, Short Circuit Protection, Over Temperature Protection, Over Power Protection.

Rail	OCP trip point	OVP Range	UVP Range	
+12V (1-8)	25A		10 5V 10 5V	
+12V (single)	131A	+13.3V +14.3V	+9.50 +10.50	
+5V	27.5A	+5.7V +6.5V	+4.0V +4.3V	
+3.3V	27.5A	+3.9V +4.5V	+2.8V +3.0V	
+5VSB	4.2A	+5.7V +6.5V	+4.0V +4.5V	

Note: Over Current Protection has a ten second delay before shutting down the PSU. This allows the PSU to support greater peak loads.



## **DIP Switches**

Switch Position	Function ON	Function OFF
1	Turn PSU on w/o motherboard	N/A
2	Enable OC mode (1650W)	Disable OC mode
3	Enable +12V Single Rail operation	Enable +12V Multi Rail operation
4	Force Fan 100%	Enable fan PWM control
5	Enable User DIP Switches	Disable User DIP Switches



DIP Switch #5 must be turned on for other Dip Switches to operate. While DIP Switch #5 is on, the DIP switch settings will take priority over firmware or software settings. While DIP Switch #5 is turned off, the PSU will default to the settings present in the PSU firmware or in the SuperNova software.



## EUGA Corp. 2900 Street, Suite B Brea, CA 92821

www.euga.com