

Power Controller Guide

Introduction

This power controller box provides power for the Plustek NVR (Network Video Recorder), DC12V surveillance cameras, and DC12V Video Server on the motor vehicles. In normal operational conditions, this device receives battery DC power and transforms to stable DC power for the NVR and related electronics equipments. This intelligent power module contains self-protection function to effectively protect your vehicle power. When the car battery voltage reaches the cut off limit, this device will stop providing power for the NVR and related equipments in order to protect the car battery. Hence, the battery voltage is avoided to be too low to start the engine for insuring normal operation.

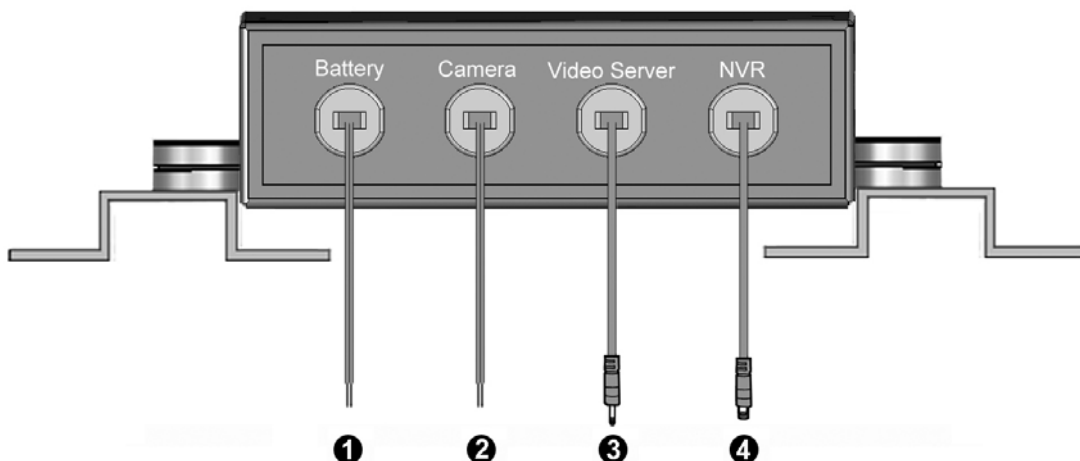
Safety Precautions

1. Please be well aware of the hazards during the installation. The power controller box contains hazardous voltages. It should be tested and installed by qualified technicians who are trained in the use of power systems.
2. Do not touch the input and output terminals when power is applied. These areas are at hazardous voltage potentials.
3. The power controller cover should not be removed because the internal voltages are at hazardous potentials. Removing the box cover will void the warranty.

Box Contents

1. Power Controller Box
2. Screws
3. Quick Guide

Overview



1. Battery Cable
2. Camera Cable
3. Video Server Cable
4. NVR Cable

To set up the Power Controller box in vehicle environment

1. Wire the Battery cable to the vehicle's battery.
2. Wire the Camera cable to the surveillance camera (no adapter needed).
3. Connect the Video Server cable to the DC-Jack power input of the Video Server.
4. Connect the NVR cable to the DC-Jack power input of the NVR.
5. Fix the power controller box with screws to the desired location.

Specifications

Model Name	NP 120
Input Voltage	12VDC
Input Voltage Range	9~36 VDC
Max Input Current at No Load	185mA
Output Voltage	12VDC
Cut Off Voltage	10.5V
Power Consumption	5W
Output Adjustment	9.6-13.2V with internal trimpot
Max Output Current(s)	6.3A
Max Output Power (milliseconds)	75 Watts
Max Output Power (3 seconds)	75 Watts
Max Output Power (continuous)	43 Watts
Output Plug Type	Screw Terminal Standard
Efficiency	88%
Line Regulation	24 mV
Load Regulation	30 mV
Switching Frequency	300 KHz
Output Ripple Noise	100mVp-p
Remote power on/off	Yes
Connections	Screw terminals
Protection	Over Voltage, Over Current, Short Circuit, Reverse Polarity, Over Temperature
Dimensions	160x140x42.2mm (6.30x5.51x1.66 inches)
Weight	985g (2.17 lbs)

Model Name	NP 120-100W
Input Voltage	12VDC
Input Voltage Range	9~18 VDC
Max Input Current at No Load	185mA
Output Voltage	12VDC
Cut Off Voltage	10.5V
Power Consumption	5W
Output Adjustment	9.6-13.2V with internal trimpot
Max Output Current(s)	8.4A
Max Output Power (milliseconds)	100 Watts
Max Output Power (3 seconds)	100 Watts
Max Output Power (continuous)	60 Watts
Output Plug Type	Screw Terminal Standard
Efficiency	88%
Line Regulation	24 mV
Load Regulation	30 mV
Switching Frequency	300 KHz
Output Ripple Noise	100mVp-p
Remote power on/off	Yes
Connections	Screw terminals
Protection	Over Voltage, Over Current, Short Circuit, Reverse Polarity, Over Temperature
Dimensions	160x140x42.2mm (6.30x5.51x1.66 inches)
Weight	985g (2.17 lbs)

Model Name	NP 240
Input Voltage	24VDC
Input Voltage Range	9~36 VDC
Max Input Current at No Load	185mA
Output Voltage	12VDC
Cut Off Voltage	20.5V
Power Consumption	5W
Output Adjustment	9.6-13.2V with internal trimpot
Max Output Current(s)	6.3A
Max Output Power (milliseconds)	75 Watts
Max Output Power (3 seconds)	75 Watts
Max Output Power (continuous)	43 Watts

Output Plug Type	Screw Terminal Standard
Efficiency	88%
Line Regulation	24 mV
Load Regulation	30 mV
Switching Frequency	300 KHz
Output Ripple Noise	100mVp-p
Remote power on/off	Yes
Connections	Screw terminals
Protection	Over Voltage, Over Current, Short Circuit, Reverse Polarity, Over Temperature
Dimensions	160x140x42.2mm (6.30x5.51x1.66 inches)
Weight	985g (2.17 lbs)

Model Name	NP 240-100W
Input Voltage	24VDC
Input Voltage Range	9~36 VDC
Max Input Current at No Load	185mA
Output Voltage	12VDC
Cut Off Voltage	20.5V
Power Consumption	5W
Output Adjustment	9.6-13.2V with internal trimpot
Max Output Current(s)	8.4A
Max Output Power (milliseconds)	100 Watts
Max Output Power (3 seconds)	100 Watts
Max Output Power (continuous)	60 Watts
Output Plug Type	Screw Terminal Standard
Efficiency	88%
Line Regulation	24 mV
Load Regulation	30 mV
Switching Frequency	300 KHz
Output Ripple Noise	100mVp-p
Remote power on/off	Yes
Connections	Screw terminals
Protection	Over Voltage, Over Current, Short Circuit, Reverse Polarity, Over Temperature
Dimensions	160x140x42.2mm (6.30x5.51x1.66 inches)
Weight	985g (2.17 lbs)

Model Name	NP 480-75W
Input Voltage	48VDC
Input Voltage Range	18~75 VDC
Max Input Current at No Load	185mA
Output Voltage	12VDC
Cut Off Voltage	33V
Power Consumption	5W
Output Adjustment	9.6-13.2V with internal trimpot
Max Output Current(s)	6.3A
Max Output Power (milliseconds)	75 Watts
Max Output Power (3 seconds)	75 Watts
Max Output Power (continuous)	43 Watts
Output Plug Type	Screw Terminal Standard
Efficiency	88%
Line Regulation	24 mV
Load Regulation	30 mV
Switching Frequency	300 KHz
Output Ripple Noise	100mVp-p
Remote power on/off	Yes
Connections	Screw terminals
Protection	Over Voltage, Over Current, Short Circuit, Reverse Polarity, Over Temperature
Dimensions	160x140x42.2mm (6.30x5.51x1.66 inches)
Weight	985g (2.17 lbs)