

# Power Supply

## *A/X series*

## Thank you for buying the ASUS® Power Supply!

The ASUS power supply combines the latest heat management and noise-reduction technologies to ensure reliable and stable performance you can count on. The power supply features over-power protection, over-voltage protection, and short-circuit protection to prevent damage to the power supply and to your computer system.

## Package contents

- Power supply
- AC power cord
- Screws (4 pcs.)
- Quick reference



If any of the above items is damaged or missing, contact your retailer.

## Installing the power supply

1. For A-series, locate the voltage selector switch at the back of the power supply. Set the power supply to the correct power voltage.
  - If the voltage supply in your area is 100~127V, set the switch to 115V.
  - If the voltage supply in your area is 200~240V, set the switch to 230V.

For models with full range AC input voltage, proceed to step 2.

2. Install the power supply into the chassis and secure it with four screws. (Refer to the documentation that came with your system for specific instructions.)

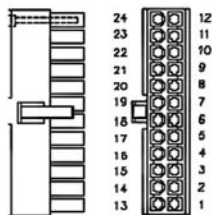
## Power connectors



The connectors from the power supply are designed to fit in only one orientation. Find the proper orientation and push down firmly until the connectors fit completely.

### 1. ATX motherboard connector (24-pin)

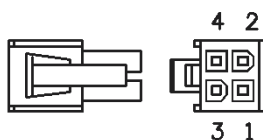
This connector is for the main power connector on the motherboard.



Pin	Color	Voltage	Pin	Color	Voltage
1	ORANGE	+3.3V	13	BROWN	+3.3VS
2	ORANGE	+3.3V	14	BLUE	-12V
3	BLACK	GND	15	BLACK	GND
4	RED	+5V	16	GREEN	PS-ON
5	BLACK	GND	17	BLACK	GND
6	RED	+5V	18	BLACK	GND
7	BLACK	GND	19	BLACK	GND
8	GRAY	PS	20	NC	
9	PURPLE	+5VSB	21	RED	+5V
10	YELLOW	+12V1	22	RED	+5V
11	YELLOW	+12V1	23	RED	+5V
12	ORANGE	+3.3V	24	BLACK	GND

## 2. +12V connector (4-pin)

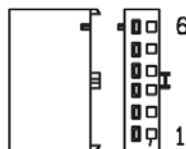
This connector is for the 4-pin ATX +12V power connector on the motherboard.



Voltage	Color	Pin
GND	BLACK	1
GND	BLACK	2
+12V	YELLOW	3
+12V	YELLOW	4

## 3. Auxiliary connector (6-pin) [optional]

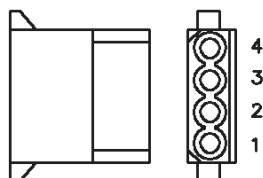
This connector is for motherboards that require extra power (250W or more). This connector consists of thicker wires for +3.3V and +5V signals.



Voltage	Color	Pin
GND	BLACK	1
GND	BLACK	2
GND	BLACK	3
+3.3V	ORANGE	4
+3.3V	ORANGE	5
+5V	RED	6

## 4. Peripheral connector (4-pin)

This connector is for internal hard disks, optical drives, cooling devices, adapters, and other peripheral devices.



Voltage	Color	Pin
+12V	YELLOW	1
GND	BLACK	2
GND	BLACK	3
+5V	RED	4

## 5. Floppy disk connector (4-pin)

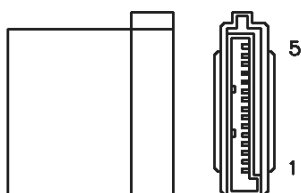
This connector is for a 3.5" floppy disk drive.



Voltage	Color	Pin
+5V	RED	1
GND	BLACK	2
GND	BLACK	3
+12V	YELLOW	4

## 6. Serial ATA (SATA) connector (5-pin) [optional]

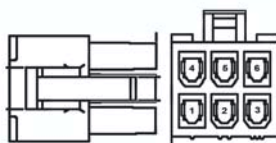
This connector is for Serial ATA devices.



Voltage	Color	Pin
+3.3V	ORANGE	1
GND	BLACK	2
+5V	RED	3
GND	BLACK	4
+12V	YELLOW	5

## 7. PCI Express™ connector (6-pin)

This connector is for PCI Express high-end graphics add-in cards.



Voltage	Color	Pin
+12V	YELLOW	1
+12V	YELLOW	2
+12V	YELLOW	3
GND	BLACK	4
SENSE	BLACK	5
GND	BLACK	6

## Protection features

### 1. Over-power protection

The power supply shuts down and latches off when output power is within 120 ~ 150 percent of rated DC output.

### 2. Over-voltage protection

No single point fault causes a sustained over-voltage condition on any or all outputs. The power supply provides latch-mode over-voltage protection as defined in the following table.

Output	Minimum	Nominal	Maximum	Unit
+12V1DC	13.4	15.0	15.6	Volts
+12V2DC	13.4	15.0	15.6	Volts
+5VDC	5.74	6.3	7.0	Volts
+3.3VDC	3.76	4.2	4.3	Volts

### 3. Short-circuit protection

The power supply can withstand a continuous short-circuit to the output without damaging or overstressing the unit. The power supply shuts down and latches off for shorting the +3.3V, +5V, +12V1, +12V2, or -12V rails to return. Shorts between main output rails and +5VSB do not cause any damage to the power supply.

### 4. Over-current protection

Overload currents applied to each tested output rail will cause the output to trip before reaching or exceeding 240 VA. For testing purposes, the overload currents should be ramped at a minimum rate of 10 A/s starting from full load.

## Warning!

To reduce the risk of fire, electric shock, body injury, or damage to the power supply and/or your computer system, take the following safety precautions:



- Never open or dismantle the power supply!
- Do not remove the power supply while the system is on.
- Do not unplug the AC power cord while the system is on.
- Do not put the power supply where it can get wet.

## Troubleshooting

If the power supply fails to function properly, do the following:

- Check if the AC power cord is plugged firmly.
- Check if the extension power cord is switched on.
- Check if the voltage switch is set to the appropriate position (115V or 230V).
- Check if the main power connector is firmly plugged into the socket.
- Disconnect the power cord to reset the power supply. Reconnect after 30 seconds or so.

For more information, visit the ASUS website at [www.asus.com](http://www.asus.com).