

KINGWIN LAZER LZ-1000/850/750/660

ADVANCED CABLE MANAGEMENT POWER SUPPLY

GENERAL INFORMATION:

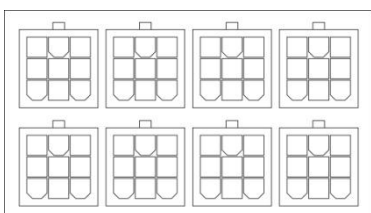
Kingwin is in consistent effort in developing high end power supplies and bring in new technologies to the market place. Lazer series is the newest offering to add onto the already acclaim Mach 1 modular line up, new break through designs and ideas are being use on the new Lazer series to bring you new gaming experience. Our high performance and professional desktop platform solution power supply meet **ATX +12V V2.2, EPS +12V V2.91** standard, the latest **EPS +12V V2.92** specifications, achieve high efficiency, density and expandability. We know the importance of a power supply in an advanced PC-System, it must have reliability and high efficiency. Our power supply was designed to work with the most high end CPUs, Intel Core i7, 2 Duo, Core 2 Quad, Core 2 Extreme LGA 1366, LGA775 / Athlon Phenom X4, Phenom X3, 64 X2, 945 & 955 CPU and high performances ATI / NVIDIA graphic-card etc (PCI-E 6pin / PCI-E 8pin), as well as support Serial ATA, HDD/FDD connectors with easy installation. Our **V2.92 power supplies have passed 80 PLUS® Certification, and most models could reach up to 83% in efficiency.** In addition, it includes a variety of protective circuit: OPP (Over Power Protection), OVP (Over Voltage Protection), and SCP (Short Circuit Protection).

IMPORTANT SAFETY INSTRUCTIONS:

Check the power supply voltage before installation. It should be the same as your local power voltage (115V for USA and 230V for most of the European countries). Change the voltage setting if necessary.

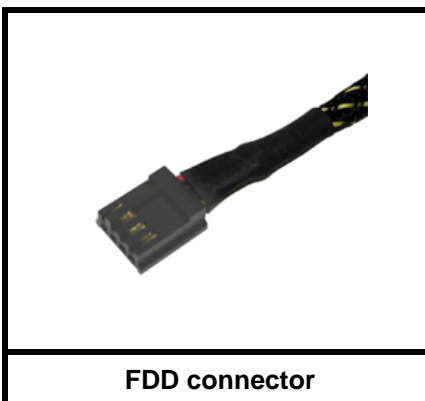
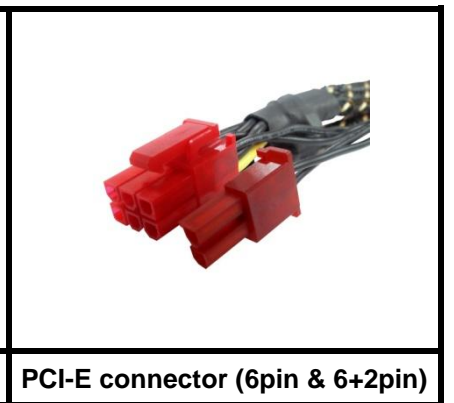
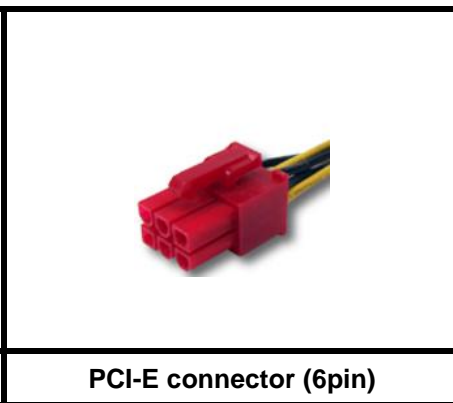
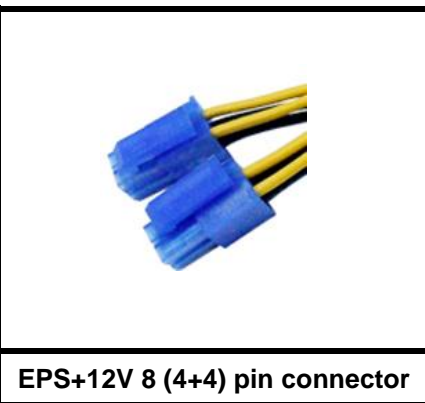
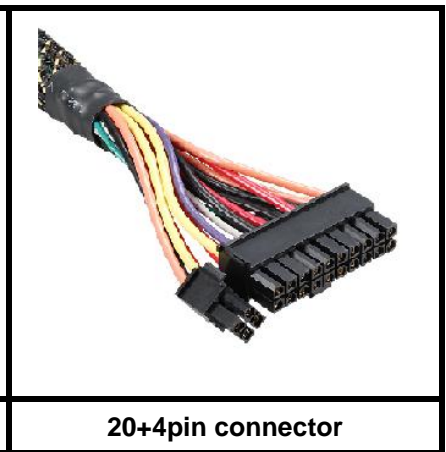
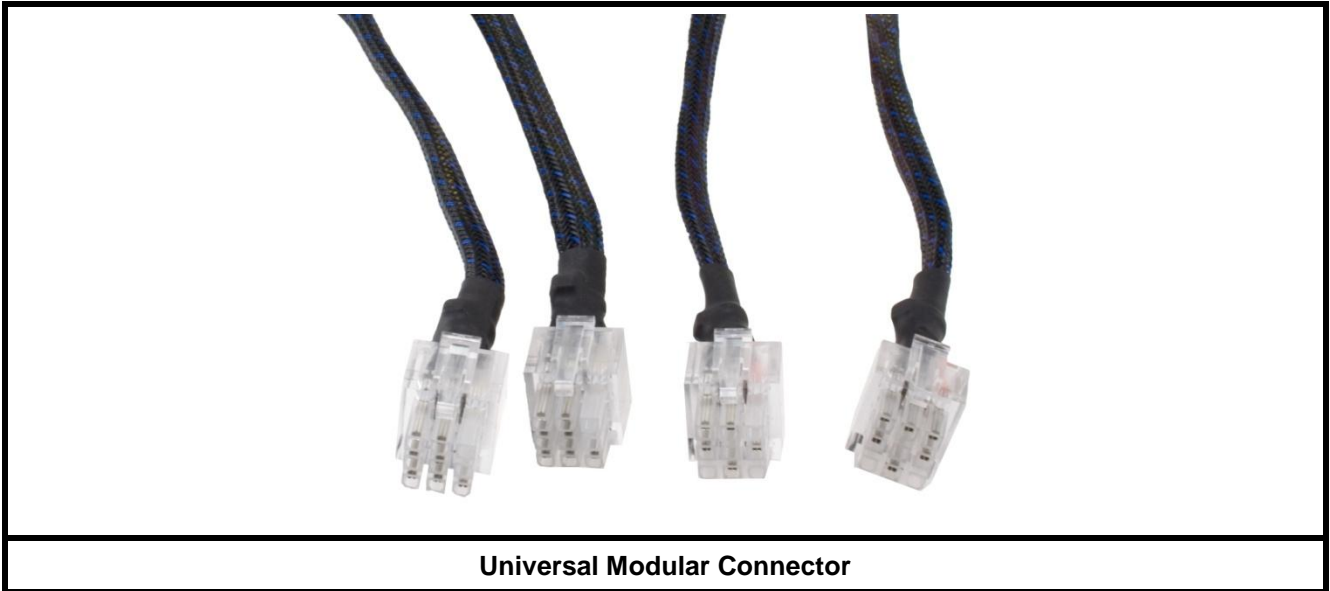
1. Disconnect the power cord from your old power supply.
2. Follow your computer case manual and open the case.
3. Disconnect all the power Connectors from the motherboard and the peripheral devices such as hard drives, floppy drives, etc.
4. Remove the existing power supply from your computer case and replace it with the Kingwin power supply.
5. Connect the Power Connectors to your motherboard and peripheral devices.
6. Close the computer case.
7. Connect the power cord to the Kingwin power supply.

Universal Modular Connector:



All modular connectors for Lazer Series Power Supply are completely interchangeable.

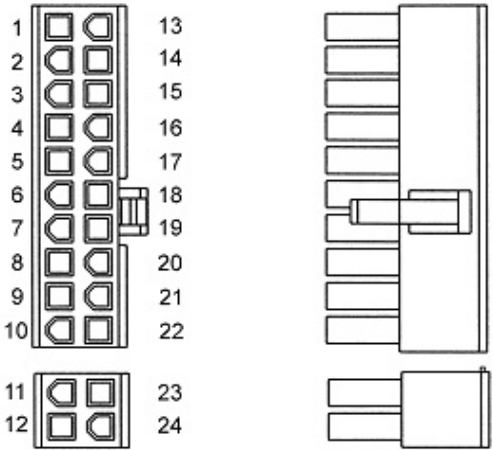
1. Pictures of connector:



1.1 Color, Pin and signal assignment of output power connectors:


a. EPS12V / BTX motherboard power connector (20+4Pin)

Color	Signal	Pin	Color	Signal	Pin
Orange	+3.3V	1	Orange	+3.3V	13
Orange	+3.3V	2	Brown	[+3.3V sense]	
Black	COM	3	Blue	-12V	14
Red	+5V	4	Black	COM	15
Black	COM	5	Green	PS_ON#	16
Red	+5V	6	Black	COM	17
Black	COM	7	Black	COM	18
Gray	PWR_OK	8	Black	COM	19
Purple	+5VSB	9	White	NC	20
Yellow	+12V	10	Red	+5V	21
Yellow	+12V	11	Red	+5V	22
Orange	+3.3V	12	Red	+5V	23
			Black	COM	24



b. EPS +12V Power Connector (8 Pin) for Intel 945/955 chipset

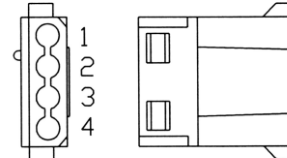
Color	Signal	Pin	Color	Signal	Pin
Black	COM	1	Yellow	+12V	5
Black	COM	2	Yellow	+12V	6
Black	COM	3	Yellow	+12V	7
Black	COM	4	Yellow	+12V	8



8 pin

c. Peripheral connector (4 Pin)

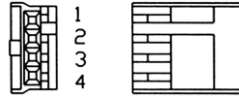
Color	Signal	Pin
Yellow	+12V	1
Black	COM	2
Black	COM	3
Red	+5V	4



4 pin

d. Floppy disc connector (4 Pin)

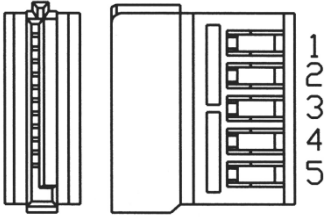
Color	Signal	Pin
Red	+5V	1
Black	COM	2
Black	COM	3
Yellow	+12V	4



4 pin

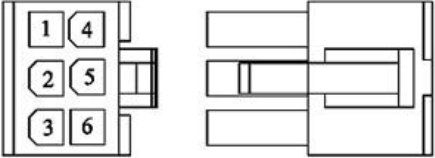
e. Serial-ATA power connector

Color	Signal	Location
Yellow	+12V	1
Black	COM	2
Red	+5V	3
Black	COM	4
Orange	+3.3V	5



f. PCI-Express 6pin power connector

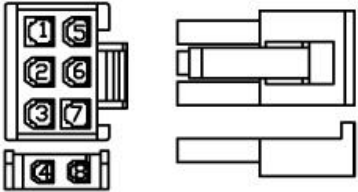
Color	Signal	Location	Color	Signal	Location
Yellow	+12V	1	Black	COM	4
Yellow	+12V	2	Black	COM	5
Yellow	+12V	3	Black	COM	6



PCI-Express 6pin

g. PCI-Express 6+2pin power connector

Color	Signal	Location	Color	Signal	Location
Yellow	+12V	1	Black	COM	5
Yellow	+12V	2	Black	COM	6
Yellow	+12V	3	Black	COM	7
Black	COM	4	Black	COM	8



6+2Pin

2. Remarks:

2.1 Do not open the top cover of power supply case!

******* To avoid electric shocks! *******

2.2 Before turning on the power supply, please make sure if the "Input Voltage" of the slide switch set on power supply corresponds to the power voltage given in your environment. (115V or 230V).

2.3 Keep the power supply from moistened or dusty places.

3. Specification:

Version 2.91:

Table (a) Model NO.: LZ-660 Series

AC INPUT	115 Vac 13.0A 230 Vac 7.0A	Frequency	50 / 60HZ
DC OUTPUT			
Load	Min	Max	Max Combined Wattage
+3.3V	1.0A	24A	+3.3V & +5V =175W +3.3V&+5V&+12V=640W +12V1+V2+V3+V4=552W Max Power = 660W
+5V	1.0A	30A	
+12V1	0.8A	18A	
+12V2	0.8A	18A	
+12V3	0.5A	18A	
+12V4	1.0A	20A	
-12V	0A	0.5A	
+5VSB	0.1A	2.2A	

Version 2.92:

Table (a) Model NO.: LZ-750 Series

AC INPUT	115 Vac ~ 240 Vac 12A	Frequency	60 / 50 HZ
DC OUTPUT			
Load	Min	Max	Max Combined Wattage
+3.3V	1.0A	24A	+3.3V & +5V =170W +3.3V&+5V&+12V=730W +12V1~ +12V6=720W (60A) Max Power = 750W
+5V	1.0A	30A	
+12V1	0.8A	20A	
+12V2	0.8A	20A	
+12V3	0.5A	20A	
+12V4	1.0A	33A	
+12V5	1.0A	33A	
+12V6	1.0A	20A	
-12V	0A	0.5A	
+5VSB	0.1A	3A	

Table (b) Model NO.: LZ-850 Series

AC INPUT	115 Vac ~ 240 Vac 15A	Frequency	60 / 50 HZ
DC OUTPUT			
Load	Min	Max	Max Combined Wattage
+3.3V	1.0A	24A	+3.3V & +5V =170W +3.3V&+5V&+12V=820W +12V1~ +12V6=816W (68A) Max Power = 850W
+5V	1.0A	30A	
+12V1	0.8A	20A	
+12V2	0.8A	20A	
+12V3	0.5A	20A	
+12V4	1.0A	33A	
+12V5	1.0A	33A	
+12V6	1.0A	20A	
-12V	0A	0.5A	
+5VSB	0.1A	5A	

Version 2.92:

Table (a) Model NO.: LZ-1000 Series

AC INPUT	115 Vac ~ 240 Vac 15A	Frequency	60 / 50 HZ
DC OUTPUT			
Load	Min	Max	Max Combined Wattage
+3.3V	1.0A	24A	+3.3V & +5V =170W +3.3V&+5V&+12V=970W +12V1 ~ +12V6 =960W (80A) Max Power=1000W
+5V	1.0A	30A	
+12V1	0.8A	20A	
+12V2	0.8A	20A	
+12V3	0.5A	20A	
+12V4	1.0A	35A	
+12V5	1.0A	35A	
+12V6	1.0A	20A	
-12V	0A	0.5A	
+5VSB	0.1A	5A	

4. Electric Specification

4.1 Timing Control

4.1.1 DC Output

Version 2.91:

DC Nominal Output	Output Voltage Tolerance	Ripple & Noise
+5V	± 5%	≤ 50 mV(pk-pk)
+12V1	±5%	≤ 120 mV(pk-pk)
+12V2	±5%	≤ 120 mV(pk-pk)
+12V3	±5%	≤ 120 mV(pk-pk)
+12V4	±5%	≤ 120 mV(pk-pk)
+3.3V	± 5%	≤ 50 mV(pk-pk)
-12V	± 10%	≤ 120 mV(pk-pk)
+5VSB	± 5%	≤ 50 mV(pk-pk)

*** Noise is within the frequency range of 10 Hz – 20 MHz***

Version 2.92:

DC Nominal Output	Output Voltage Tolerance	Ripple & Noise
+5V	± 5%	≤ 50 mV(pk-pk)
+12V1	±5%	≤ 120 mV(pk-pk)
+12V2	±5%	≤ 120 mV(pk-pk)
+12V3	±5%	≤ 120 mV(pk-pk)
+12V4	±5%	≤ 120 mV(pk-pk)
+12V5	±5%	≤ 120 mV(pk-pk)
+12V6	±5%	≤ 120 mV(pk-pk)
+3.3V	± 5%	≤ 50 mV(pk-pk)
-12V	± 10%	≤ 120 mV(pk-pk)
+5VSB	± 5%	≤ 50 mV(pk-pk)

* Noise is within the frequency range of 10 Hz – 20 MHz*

4.1.2 Risetime = 0.1 ~ 20mS

4.1.3 Power OK Signal = 100~500mS

4.1.4 Power OK Risetime ≤ 10mS

4.1.5 Hold-Up Time ≥ 16mS

4.2 Output protection:

The power supply is designed with protection for over-voltage, overload and short circuit as follows:

4.3 Over-voltage Protection

The over-voltage circuit is capable of preventing the system and its peripherals from being damaged by unexpected surges either from the inside or from the outside.

(+5VDC = 5.74V~7.0V / +12VDC = 13.4V~15.6V / +3.3VDC = 3.76V~4.3V)

4.4 Short-circuit Protection

In the event of short circuit in any output DC current, the power supply would stop automatically, preventing high temperature or fire.

4.5 Over-load Protection

For the sake of service life of the parts, when the total output exceeds the maximum voltage by between 105% and 150%, the power supply would stop automatically.

5. Features:

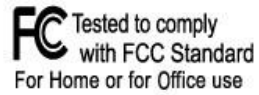
- 5.1 Fully gold-plated connectors for minimum power consumption and optimal conductance.
- 5.2 Built-in heat dissipating fan control system for adjustable rpm along with change in temperature in the power supply and extended service life of the fan for minimum noise, more efficiency and reduced power consumption.
- 5.3 Disc scanning protection (PS-off time ≥1mS) to prevent the system from performing automatic disc scanning in case of abnormal system off
- 5.4 20+4 pins connector support the Pentium 4 standard required & early version.

6. Easy troubleshooting:

If the power supply does not operate normally, please check the following:

- 6.1 Make sure the plug is properly inserted into the outlet.
- 6.2 Check the switch location shows the same input voltage as that of the outlet.
- 6.3 Check the peripheral or the floppy disc drive connector is correctly plugged.
- 6.4 Repeat the I/O several times, each in 5 seconds after the last attempt.
- 6.5 If after the aforementioned checks, the power supply remains with failure, please return the product to the retailer or dealer for service.

7. Safety certifications:



7.1. CUL, TÜV, CB, FCC, CE, C-Tick and BSMI