



650W 750W 850W 1050W **User Manual** 



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#### **Carton Contents**

XFX XTR Series Power Supply Unit

User Manual

Modular Cable Set

AC Power Cord



# The Wattage you see isn't always the wattage you get.

Some brands tweak tests to get great wattage ratings, but in reality, they deliver much lower max wattages. Don't be fooled by wattage tricks. Below are examples of how we guarantee our wattage.

#### Continuous Power

Wattage and heat go hand-in-hand. Other PSUs claim a certain wattage by using unrealistic testing environments like 25°C, but in real settings, they might reach much lower wattages. XFX PSUs guarantee the advertised wattage, even at well above standard operating conditions at 50°C.

## SolidLink™ Technology

SolidLink™ technology allows XFX PSUs to drastically reduce the wires inside. Other PSUs have numerous wired internal components, which generate heat, wasting energy and decreasing efficiency.



#### Efficient Power Use

80 Plus Gold certified means that this XFX PSU has up to 90% power efficiency at typical load.

## Extreme Heat Tested Capacitors

Internal PC operating temperature is around 35°C but the internal PSU temperature can be much higher. XFX uses all high-quality capacitors rated to withstand up to 105°C. While some competitors claim to use Japanese capacitors, they may only be rated for 85°C, which can shorten the usable life of a PSU.

#### **Smart Sensors**

All XFX PSUs come with automatic output protection systems to protect you and your computer. This includes Total Power Protection (OPP), Over Voltage Protection (OVP), Over Current Protection (OCP), Short Circuit Protection (SCP), and Over Temperature Protection (OTP)

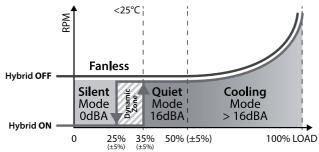
## Hybrid Fan Control

Hybrid mode, when activated, allows the PSU to operate silently until it reaches 20% load or 25°C. Then it switches to Quiet Mode (only 16dBA) until reaching 50% load which switches to Cooling Mode to cool the PSU appropriately.



#### Important Note!

When Hybrid Mode is ON the fan will not be on initially. This does not indicate fan failure, it will turn on automatically when needed.



## DC to DC Converter Design

Provides superior Dynamic response, greater system stability and maximize the 12VDC rail output.

## Conductive Polymer Aluminum Solid Electrolytic Capacitors

Ensures operational stability at extreme conditions.

## Active Power Factor Correction [99% PF Typical]

The "active" solution is the professional solution to power factor correction to reduce line loss and power distortion.

## High +12V Output

Enhances +12V current capability increases utilization possibilities and ensures there is enough power to support the system's +12V hungry components.

### Multi-GPU Technologies Supported

6-Pin & 8-Pin PCI-E connectors to support all GPU platforms

## All-in-One DC Cabling Design

Supports PC, IPC, workstations and server systems.

## Universal AC Input [Full Range]

Plug and run safely anywhere in the world.

## 5 Year Limited Warranty<sup>1</sup>

Our commitment to superior quality.

<sup>1</sup> European customers must register their product on www.xfxforce.co.uk within 30 days of purchase to upgrade their standard 3 year warranty to a 5 year extended warranty.

#### WARNING! IMPORTANT SAFETY NOTES

**NEVER**, under any circumstances, open the power supply unit. High voltages inside can be hazardous and dangerous. "WARRANTY IS VOID" once the cover is removed.

**DO NOT** insert any objects into the fan grill or ventilation area of the power supply unit.

**DO NOT** place any objects in front of the fan or any ventilation area of the power supply unit.

Keep the power supply unity in a dry environment, away from humidity.

The power supply unit is for integration into a computer system and not intended for external or outdoor usage.

## Specifications / DC Cable & Connectors

| Mo                     | del               | XFX XTR 550W          | XFX XTR           |
|------------------------|-------------------|-----------------------|-------------------|
| Intel Spec             | ifications        |                       |                   |
| Dimensions (L x W x H) |                   |                       | 170mm x 150mm     |
| PF Cor                 | rection           |                       |                   |
| Fan <sup>-</sup>       | Гуре              |                       |                   |
| Operating Temp.        |                   |                       |                   |
| Relative I             | Humidity          |                       |                   |
| Protection             | Features          | Over Pow              | er / Over Voltage |
| Safety A               | oprovals          |                       |                   |
| EM                     | 1C                |                       |                   |
| Hazardous              | Materials         |                       |                   |
| Efficie                | ency              |                       | 80PLUS®           |
| AC Inpu                | t Range           |                       |                   |
| Frequ                  | ency              |                       |                   |
| Input Current @        | 100~240 VAC       | 9.5 - 4.5 Amps (rms)  | 9.5 - 4.5 Amps    |
|                        | +3.3V             | 20A                   | 20A               |
|                        | +5V               | 20A                   | 20A               |
|                        | +12V              | 45A / 540W            | 54A / 648         |
| Max. Out               | -12V              | 0.3A                  | 0.3A              |
|                        | +5VSB             | 2.5A                  | 2.5A              |
|                        | +3.3V & 5V Comb.  | 100W                  | 100W              |
|                        | Total Power       | 550W                  | 650W              |
| Line Regulatio         | n (all DC rails)  | ±1%                   | ±1%               |
| Load Regulation        | on (all DC rails) | ±5% ±5%               |                   |
| Mainboard (24/20 Pin)  |                   | 1 x (610 mm) 1 x (610 |                   |
| CPU (8/4 Pin)          |                   | 1 x (650 mm) 1 x (650 |                   |
| CPU (8 Pin)            |                   | 1 x (650 mm)          | 1 x (650          |
| PCI-E (6+2 Pin)        |                   | 1 x (550 mm + 100 mm) | 2 x (550 mm +     |
| SA                     | TA                | 8                     | 10                |
| Perphera               | al (4 Pin)        | 6                     | 6                 |
| FDD (                  | 4 Pin)            | 1                     | 1                 |
|                        |                   |                       |                   |

Specifications are correct at time of printing and may change without prior notice. Wire length

| 650W              | XFX XTR 750W                 | XFX XTR 850W              | XFX XTR 1050W         |  |  |  |  |
|-------------------|------------------------------|---------------------------|-----------------------|--|--|--|--|
| ATX12V / EPS 12V  |                              |                           |                       |  |  |  |  |
| x 86mm            | 1                            |                           |                       |  |  |  |  |
|                   | Active, 0.99PF Typical       |                           |                       |  |  |  |  |
| ADDA <sup>-</sup> | 135mm Fluid Dynamic Ber      | ing Fan                   |                       |  |  |  |  |
|                   | 0 ~ 50°C                     |                           |                       |  |  |  |  |
|                   | 20% ~ 80%                    |                           |                       |  |  |  |  |
| / Under \         | Voltage / Short Circuit / Ov | er Current / Over Tempera | ture                  |  |  |  |  |
|                   | cTUVus / TUV / CB            |                           |                       |  |  |  |  |
|                   | CE / FCC / RCM               |                           |                       |  |  |  |  |
|                   | WEEE / RoHS                  |                           |                       |  |  |  |  |
| Gold / E          | nergy Star / EUP Lot 6 Co    | mpliant / Haswell Ready   |                       |  |  |  |  |
| Full Rang         | ge: 100 ~ 240 VAC (Max. 9    | 90 ~ 264 VAC)             |                       |  |  |  |  |
|                   | 50 / 60 Hz                   |                           |                       |  |  |  |  |
| (rms)             | 9.5 - 4.5 Amps (rms)         | 11 - 5.5 Amps (rms)       | 12 - 6 Amps (rms)     |  |  |  |  |
|                   | 20A                          | 25A                       | 25A                   |  |  |  |  |
|                   | 20A                          | 25A                       | 25A                   |  |  |  |  |
| W                 | 62A / 744W                   | 70A / 840W                | 87A / 1044W           |  |  |  |  |
|                   | 0.3A                         | 0.5A                      | 0.5A                  |  |  |  |  |
|                   | 2.5A                         | 3A                        | 3A                    |  |  |  |  |
|                   | 100W                         | 125W                      | 125W                  |  |  |  |  |
|                   | 750W                         | 850W                      | 1050W                 |  |  |  |  |
|                   | ±1%                          | ±1%                       | ±1%                   |  |  |  |  |
|                   | ±5%                          | ±5%                       | ±5%                   |  |  |  |  |
| mm)               | 1 x (610 mm)                 | 1 x (610 mm)              | 1 x (610 mm)          |  |  |  |  |
| mm)               | 1 x (650 mm)                 | 1 x (650 mm)              | 1 x (650 mm)          |  |  |  |  |
| mm)               | 1 x (650 mm)                 | 1 x (650 mm)              | 1 x (650 mm)          |  |  |  |  |
| 100 mm)           | 3 x (550 mm + 100 mm)        | 4 x (550 mm + 100 mm)     | 4 x (550 mm + 100 mm) |  |  |  |  |
|                   | 10                           | 10                        | 12                    |  |  |  |  |

within ±5% tolerance.

## Power Supply Removal

Please first read "Warnings! Important Safety Notes" on previous page.

Disconnect your PC from all AC sources. Make certain the system is turned OFF. If applicable, put the power supply unit's AC power switch to "O" (off) position.

Open the PC case and if applicable, refer to your PC manufacturer's User Manual.

Carefully disconnect all power supply unit's DC wire harness connectors from the mainboard and all peripheral connectors.

Unscrew the mounting screws securing the power supply unit to the back of the PC case back panel.

Carefully remove the power supply unit from the PC system.

#### Power Supply Installation

Place the XFX power supply unit into the space provided in the case and secure the power supply unit to the back panel of the case with the 4 mounting screws provided in the accessory bag. Do not over tighten.

Depending on the type of computer case, correct mounting of the power supply will result with the fan side top cover facing the mainboard. This does not apply to all types of cases.

#### Mainboard connection:

- DO NOT force the connector into place, the connectors are "keyed" so can only fit one way. Make sure the connector lock is secure.
- Connect the mainboard end of the 20/24-Pin convertible connector to the mainboard. Depending on the mainboard, you may need to either attach or detach the

- 4-Pin module of the 20/24-Pin connector.
- Connect the +12V P4 connector and the EPS +12V connector, if applicable.
- If your system requires dual EPS +12V connectors, connect the 8-Pin connector to the mainboard.

#### Peripheral components connection:

- DO NOT force the connector into place, the connectors are "keyed" so can only fit one way. Make sure the connector lock, if applicable, is secure.
- Connect the Easy Swap Connectors to the power receptor of the peripheral.
- ONLY use the supplied cable set of the unit. Using Cables that were not included with the power supply unit from this series may lead to defects

## Troubleshooting

If the power supply unit fails to function properly, please go through the checklist below.

- Check to make sure the AC cord is properly connected to the AC source and the power supply unit.
- Check to make sure the AC source is ON.
- Check to make sure the AC on/off switch on the back panel of the power supply unit in the "I", on position.
- Check and secure all mainboard and peripheral connectors.
- The AC on/off switch on the back of the power supply unit can be toggled between "I" and "O" a few times with a 0.5 second delay in between to make sure the power supply is reset.

If you are sill experiencing difficulties to get the power supply unit to function properly, please visit www.xfxforce.com for further technical support instructions.

#### Notes

The power supply is a "pull" technology, which only provides the power as demanded by the mainboard and components.

- If there is a mainboard malfunction, the power supply will not turn on.
- Peripheral component malfunction may result in power supply shut down.



European owners must register this product at www.xfxforce.co.uk to activate their **Free Warranty Upgrade** from 3 years to 5 years.

### Limited Warranty & Disclaimer

The XFX warranty covers the Pro Series power supplies for a period of sixty (60) months from the date of purchase against defects in materials or workmanship. During the guarantee period, XFX maintains the discretion to either repair or replace with parts in similar or equal performance, provided that:

- The product is returned to the power of purchase, postage prepaid.
- The product was not misused according to its original intended purposes.
- The product was not damaged due to acts of nature such as lightening, flood or fire.
- The product's cover was never removed and the warranty sticker not broken.

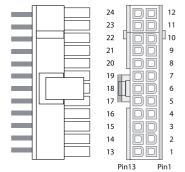
Warranty terms may vary between different geographic regions.<sup>1</sup> Please visit our homepage www.xfxforce.com for further details.

All efforts have been made to ensure accuracy of the information. XFX assumes no liability, expressed or implied, for any damage(s) occurring to your components as a result of mistake or omission in power supply removal and installation guide or due to defect or failure of the product. XFX assumes no liability, expressed or implied, for the use of this product and damage(s) caused by the use of this product to other devices in a computer due to failure of the product.

<sup>1</sup> European customers must register their product on www.xfxforce.co.uk within 30 days of purchase to upgrade their standard 3 year warranty to a 5 year extended warranty.

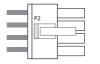
## DC Power Connectors

#### 24/20 Pin Main Power Connector



| СОМ     | Black  | 24 | 12 | Orange | +3.3VDC |
|---------|--------|----|----|--------|---------|
| +5VDC   | Red    | 23 | 11 | Yellow | +12VDC  |
| +5VDC   | Red    | 22 | 10 | Yellow | +12VDC  |
| +5VDC   | Red    | 21 | 9  | Purple | +5VSB   |
| NC      | NC     | 20 | 8  | Gray   | PWR_OK  |
| СОМ     | Black  | 19 | 7  | Black  | СОМ     |
| СОМ     | Black  | 18 | 6  | Red    | +5VDC   |
| СОМ     | Black  | 17 | 5  | Black  | СОМ     |
| PS_ON#  | Green  | 16 | 4  | Red    | +5VDC   |
| СОМ     | Black  | 15 | 3  | Black  | СОМ     |
| -12VDC  | Blue   | 14 | 2  | Orange | +3.3VDC |
| +3.3VDC | Orange | 13 | 1  | Orange | +3.3VDC |
|         |        |    |    | -      | -       |

#### 4/8-pin ATX12V/EPS12V Power Connector





| ŀ | +12VDC | Yellow | 8 | 4 | Black | СОМ |
|---|--------|--------|---|---|-------|-----|
| 3 | +12VDC | Yellow | 7 | 3 | Black | СОМ |
| 2 | +12VDC | Yellow | 6 | 2 | Black | СОМ |
|   | +12VDC | Yellow | 5 | 1 | Black | СОМ |
|   |        |        |   |   |       |     |

#### 8 Pin EPS12V Power Connector





| 4 | +12VDC | Yellow | 8 | 4 | Black | СОМ |
|---|--------|--------|---|---|-------|-----|
| 3 | +12VDC | Yellow | 7 | 3 | Black | СОМ |
| 2 | +12VDC | Yellow | 6 | 2 | Black | СОМ |
| 1 | +12VDC | Yellow | 5 | 1 | Black | COM |
|   |        |        |   |   |       |     |

#### 6/8 Pin PCI Express Connector





| 4 | СОМ | Black | 8 | 4 | Black  | сом    |
|---|-----|-------|---|---|--------|--------|
| 3 | СОМ | Black | 7 | 3 | Yellow | +12VDC |
| 2 | СОМ | Black | 6 | 2 | Yellow | +12VDC |
| 1 | COM | Black | 5 | 1 | Yellow | +12VDC |
|   |     |       |   |   |        |        |

#### Floppy Drive Power Connector



| 1 | Red    | +5VDC  |
|---|--------|--------|
| 2 | Black  | СОМ    |
| 3 | Black  | СОМ    |
| 4 | Yellow | +12VDC |

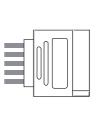
### **Peripheral Power Connector**





| 1 | 1 | Yellow | +12VDC |
|---|---|--------|--------|
| 2 | 2 | Black  | СОМ    |
| 3 | 3 | Black  | СОМ    |
| 4 | 4 | Red    | +5VDC  |
|   |   |        |        |

#### **Serial ATA Connector**





| 1  |        | +3.3VDC |
|----|--------|---------|
| 2  | Orange | +3.3VDC |
| 3  | _      | +3.3VDC |
| 4  |        | СОМ     |
| 5  | Black  | COM     |
| 6  |        | COM     |
| 7  |        | +5VDC   |
| 8  | Red    | +5VDC   |
| 9  |        | +5VDC   |
| 10 |        | COM     |
| 11 | Black  | СОМ     |
| 12 |        | COM     |
| 13 | Yellow | +12VDC  |
| 14 |        | +12VDC  |
| 15 |        | +12VDC  |



WWW.XFXforce.com