







1RK-SPDR-STRIP-23 ONErack Spider Strip

1RK-SPDR-HALF-7 ONErack Spider Half

User Guide

MNL-1RK-SPDR-V1.0

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## Introduction

ONErack Spider optimizes any installation by eliminating unreliable DC wall warts and other power clutter from the rack design, while also providing reliable power to support any mix of 7 different voltages.

This innovative, multi-voltage design takes the award-winning power capabilities from the ONErack system to a smaller more flexible level!

The ONErack spider can be installed at the back or side of the rack to provide the ultimate installation flexibility.

There are 2 ONErack Spider PSU available: -

1RK-SPDR-STRIP-23 ONErack Spider Vertical Strip 1RK-SPDR-HALF-7 ONErack Spider Half Rack

This manual describes operation of both units.

#### **Product Features**

- Up to 7 simultaneous DC voltages
- AC Surge Protection
- DC Overload Protection
- Universal DC power for any brand
- 'Zero Space' rear mounting
- UL Compliant
- TAA Compliant

## In the box

The box should include: -

- Main Unit with Power Modules Pre-fitted
- AC Mains lead suitable for your region.
- Green 2-pin module power connectors, enough for the number of outputs in the supplied unit
- Voltage stickers
- This User Guide
- Safety, Compliance & Warranty Statement
- Rack mount instructions (ONErack Spider Strip only)

### **Locking Mains Lead**

The Supplied Mains lead has Locking Feature. We recommend using this to prevent unintended disconnection. If you replace the AC Mains lead, or wish to use your own, its recommended to use leads with a locking feature.



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# **Using the ONErack Spider PSU's**

Both models have Power Modules fitted, status LED's and a power Meter. The power modules need to be configured to the required voltage of your 3<sup>rd</sup> party equipment, and you can use the LED's and Power Meter to check the status, and diagnose faults as explained here.

#### **Power Modules**

To set the correct voltage output [shipping default voltage = 5V] and connect your device to the output of the power module, you may need the following tools: -

Pozidriv® PZ1 crosshead screwdriver

2mm flat head screwdriver

Wire cutters

Wire strippers Voltmeter







## **Setting the Output Voltage**

- 1. Unscrew and remove the module from the ONErack Spider PSU using the Module Extractor as shown.
- 2. Turn the switch inside the module until the white dot points to the correct voltage for your device(s).
- 3. Replace the Module back into the ONErack Spider PSU and tighten screw. Use one of the Voltage stickers, apply to the end of the screw that holds the Power Module in place.

## **Preparing the Lead**

1. Cut the power lead for your device, with enough length to reach from your device, to the location of the ONErack Spider Unit.



- 2. Strip the insulation from the ends of the wires and identify which is positive and which is negative for your 3<sup>rd</sup> party equipment.
- 3. Insert the stripped ends into the power connector. Make sure that the polarity is correct, as shown, before you tighten the screws.



4. Insert the power connector into one of the outputs on the Power Module.



# Risk of damage to equipment

- Before you cut any power leads, record the polarity and voltage for each one with a suitable meter.
- Before you connect any rewired DC power connector to any device, check that the polarity and voltage match what you recorded before you cut the power lead.
- Remove your device's power lead from the mains supply before you cut the cable.
- Cutting power leads should only be done by competent, qualified personnel - if in doubt, consult a qualified electrician.

#### Status LED's

If Mains AC is applied to the ONErack Spider Unit, the green 'PSU' LED should light, and the red 'FUSE' should be off.





- If the PSU is on and the FUSE is off, the unit is operating correctly.
- If both LED's remain off, check the mains power supply, mains lead, and the fuse in the mains lead. If still no LEDs illuminate, please contact tech.usa@tvone.com or tech.europe@tvone.com.

#### The fuse has tripped.

If the PSU and FUSE LED's are both lit, the internal DC Overload fuse of the ONErack Spider PSU has tripped. This is probably due to too many loads attached that exceed the rating of the model you have chosen.

## To reset the fuse

- 1. Remove the cause of the power overload by disconnecting one or more devices.
- 2. Turn off the ONErack Spider PSU
- 3. Wait for one minute, and then turn back on.

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#### **Power Module Status LED**

The Power Module has its own Green status LED, Normally on. If it is off the load may have exceeded the 35W Max.



### To reset the fuse without turning off the Main PSU

- 1. Remove the loads connected to this Power Module.
- 2. Unscrew and partly slide out the power module.
- 3. Wait for one minute, and then re-fully insert the Power Module.
- 4. Verify the green LED is lit on the module
- 5. Check the power needs of the load or loads attached, if 2 loads together exceed 35W then you will need to use separate Modules.



# Risk of damage to equipment

■ Each Power Module can only supply 35W Max. If your DC load exceeds this, you CANNOT power it with ONErack Spider Power Module.

#### **Power Meter**

Drawing too much power from the ONErack Spider PSU can cause individual power modules to fail, or the fuse can trip [note, there are fuses on each module, and the main unit]. The front panel of your PSU includes a power load meter to help you prevent this happening.

The power meter shows you how much power you are drawing. Green LEDs only shows a safe power load below the rating of the Spider PSU. Two yellow LEDs warns you the power load is close or at the limit.

The red LED tells you the power load is over the limit and there is a risk of failure. For best results, keep the power load below the rating of your chosen model.





If the red LED is lit, reduce the amount of power drawn by disconnecting one or more devices, until only green and yellow LEDs are lit. If you want to run more devices, use an additional ONErack Spider PSU.

# Safety information for the **ONErack Spider PSU**

## Risk of electrical shock

- Do NOT open any covers of these unit.
- There are no user-serviceable parts inside.
- Do NOT use faulty or damaged AC Mains Leads

# A Risk of damage to equipment

■ Do not block vents of the ONErack Spider PSU or the Power Module.

# **⚠** Warning - Take Care

Take care if you need to remove or insert power modules while the ONErack Spider PSU is powered. Only do this if ABSOLUTELY necessary – i.e., Something Critical is being powered that cannot be interrupted.

#### Other Documents

More ONErack Spider documents are available for this and related Products: -

- ONErack Spider Specification sheet Available on the Website
- ONErack Spider PSU Mounting Options Supplied with the Mounting Kit
- **ONErack Spider Power Module** Supplied with Additional/Replacement Power Modules

#### Contact us

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