# POWERBOARD SPECTRE 3.0 12VHPWR



# MANUAL





▲ All PowerBoards need PowerBoard Linking Cables.

# PowerBoard PSU Cables:

The stock cables that come with every power supply can be used, plug in as many cables as input connectors are available. Do not use components that have more connectors than Your power supply has cables for. For example, if Your power supply comes with a single 8pin EPS (4+4) plug and Your motherboard has 2X 8pin EPS connectors, than a better power supply needs to be used.

Singularity Computers offers custom sleeved and shorter PSU cable kits that are a better fit in the PSU shroud area than stock cables.

# PowerBoard Linking Cables:

Spectre 3.0 PowerBoard comes with a standard kit of PowerBoard Linking Cables which includes 24pin MB x1, 8pin EPS x2 and 8pin PCIE x3. The pinout of these Linking cables is mirrored and the lengths are custom to achieve an arch. The connectors are also female on both sides (refers to the pin and not to the connector housing). PWM and ARGB linking cables are also included to connect from your motherboard or controller to the PowerBoard PWM and ARGB inputs. Use our <u>Cable setup guide</u> if making custom Linking cables.

#### **Power Connectors:**

The input and output connectors are not wired directly together but they are shared, so if EPS-1-IN is plugged in then any of the EPS outputs can be used, it is not limited to EPS-1-OUT. The same applies to the PCIE inputs, they can be mixed and matched.

# **ARGB Connectors:**

The PowerBoard has built-in ARGB lighting and acts as an ARGB hub. An ARGB source, like a motherboard ARGB header, must be connected to the ARGB-IN header on the PowerBoard. The input header is marked with a white rectangle around it for easier identification. The PowerBoard uses this ARGB signal to light up the built-in LEDs and splits this signal to all ARGB outputs. What signal goes into the input will be displayed on the built-in LEDs and all LED strips attached to the ARGB outputs, in parallel. The PowerBoard does not show up as an individual component in ARGB controlling software, but it can be controlled by controlling the motherboard ARGB header, which will show up in software. The PowerBoard LEDs and headers are powered by the power supply 24pin connection, so they will only light up when the system is turned on, but not when the system is turned off or in stand-by mode. The ARGB headers are conveniently located where they are expected to be used, next to radiator mounts, GPU, and CPU waterblocks and close to Elite kits. Do not plug a 4pin/12V RGB device into the PowerBoard, only 3pin/5V ARGB/DRGB (addressable/digital RGB) devices are compatible.

# ARGB On/Off Switch:

This switch connects/disconnects the ARGB control signal from the built-in LEDs on the PowerBoard. When turned ON, the LEDs will immediately light up. When turned OFF, the LEDs will not light up from the next time the system is turned ON from a cold boot but will display the last colour they were displaying before the switch was turned OFF. After turning the switch OFF, turn

off the system, wait 5 seconds and turn the system ON again. This switch does not control ARGB headers, only the built-in LEDs on the PowerBoard.

# PWM/Fan Connectors:

The PowerBoard acts as a powered PWM/Fan hub. A PWM source, like a motherboard CPU Fan header, must be connected to the FAN-IN header on the PowerBoard. The PowerBoard shares this PWM signal to all PWM outputs. What signal goes into the input will be the same control signal sent to every fan connected to the PowerBoard. The PowerBoard does not show up as an individual component in fan controlling software, but it can be controlled by controlling the motherboard CPU Fan header, which will show up in software. The PowerBoard PWM headers are powered by the power supply, so there is less strain on the motherboard. Only FAN-1-OUT-RPM monitors the speed of a connected fan which is reported back to the motherboard. If no fan is connected to them, so populate FAN-1-OUT-RPM first with a fan that You would like to monitor the RPM of. The PWM headers are conveniently located where they are expected to be used, close to the top radiator mount.

# **PowerBoard Installation:**

To install the PowerBoard remove the rear cover of Spectre 3.0 (all versions except for Integra) by undoing the 4x M3 x 16mm Fasteners.

Once the cover is removed you will have access to the rear of the MotherBoard Tray. Remove cable combs if you have any installed.

Then installed the 12x M4 x 6mm Stand Offs in the positioned marked in the diagram below.



