

ENTHOO PRO II



Thank you
for choosing

PHANTEKS

■ 1. WHAT’S INSIDE?

Introduction	3	Optional Upgrades:	25
Specifications	4	Installing a Vertical GPU	27
Exploded View	5	Installing the 5.25 inch bay	28
Accessories	6	Installing a Dual System	29

■ 2. CHOOSE YOUR SETUP

Configure your Enthoo Pro 2	7
Getting started	8
Installing the Motherboard	10
Installing the Power Supply	11
Installing a second Power Supply	12
Installing Fans	13
Installing Drives	14
Installing Water Cooling	17
Radiator Clearance	18
Drain Port	19
Installing the GPU Anti-Sag Bracket	20
Connecting Front I/O	21
Lighting Control	22
Cable Management	23
Dust Filters	24

■ 3. SUPPORT

Contact Us	32
Warranty	33

Welcome to Phanteks!

The Enthoo Pro 2 has been designed with extreme performance in mind, featuring Phanteks' innovative 'High-Performance Fabric' that sets a new airflow performance standard in the PC enclosure industry. With an extremely spacious and versatile interior design and state-of-the-art features, the Pro 2 is ready to house any high-end configuration. From SSI-EEB motherboards to extreme water cooling to extensive storage capabilities, anything is possible. When combined with the Revolt X or Revolt PRO even a Dual System or the most powerful workstations can be a reality.

*Phanteks believes that meaningful designs are created through
the fusion of form and function.*

The Phanteks team



CASE SPECIFICATIONS

Dimension (WxDxH)	240 mm x 580 mm x 560 mm (9.45 x 22.83 x 22.05 in)
Form Factor	Full Tower
Materials	Steel chassis, <i>Tempered glass window**</i>
MB Support	SSI-EEB, ATX, Micro-ATX, Mini-ITX, E-ATX * *280mm wide to use grommets
Front I/O	Power button, 4x USB 3.0, Microphone, Headphone, Reset Button, <i>D-RGB Mode**</i> , <i>D-RGB Color**</i> , USB 3.1 GEN 2 Type-C

PCI SLOTS & DRIVE BAYS

PCI slots	8x	(+2x 3-vertical slot)
Internal 3.5"	12x	(4 included)
Internal 2.5"	11x	(11 included)

FAN120 MM140 MM

Front	4x	3x
Top	3x	3x
Rear	1x	1x
Bottom	3x	1x
Side	4x	-

RADIATOR120 MM140 MM

Front	Up to 480	Up to 420
Top	Up to 360	-
Rear	120	140
Bottom	Up to 360	-
Side	Up to 480	-

INCLUDED ACCESSORIES

3.5" Stackable HDD Bracket	4x
Vertical GPU Mount	1x
Accessory Bag	1x
GPU Anti-Sag Bracket	1x
Dual PSU Cover	1x
Dual System Cover	1x
Toolbox	1x

CLEARANCE

Max Motherboard width	330mm	(13.49 in)
CPU Cooler Clearance	195 mm	(7.7 in)
GPU Clearance	503 mm	(19.95 in)

SUPPORT

Contact (International)	support@phanteks.com
Contact (America)	support@phanteksusa.com
Warranty	5 Years, see page 33

*** Only PH-ES620PTG model is equipped with a
Tempered Glass sidepanel and D-RGB lighting*

EXPLODED VIEW

ENTHOO PRO II

1. Chassis
2. Front Panel
3. Right Side Panel
4. Left Side Panel*
5. Dual PSU Bracket
6. SSD Cover
7. Front Dust Filter
8. Top Dust Filter
9. Side Dust Filters
10. Bottom Dust Filter
11. Bottom Radiator Bracket
12. SSD Bracket



4* PH-ES620PC_BK version is not equipped with a tempered glass panel



3.5" MODULAR HDD BRACKET

- 4 included in accessory box
- For 3.5" or 2.5" Drive



DUAL PSU COVER

- Pre-installed
- Allows for an optional second Power Supply
- Includes cover for a closed look (pre-installed)



VERTICAL GPU MOUNT

- Included in accessory box
- Riser Cable is sold separately



DUAL SYSTEM COVER

- Included in accessory box
 - Allows for a second Mini-ITX system
 - Allows for a vertical GPU*
 - Revolt X power needed for Dual System
- * Riser cable sold separately (see page 26)*



ACCESSORY BAG AND TOOLBOX

Accessory bag

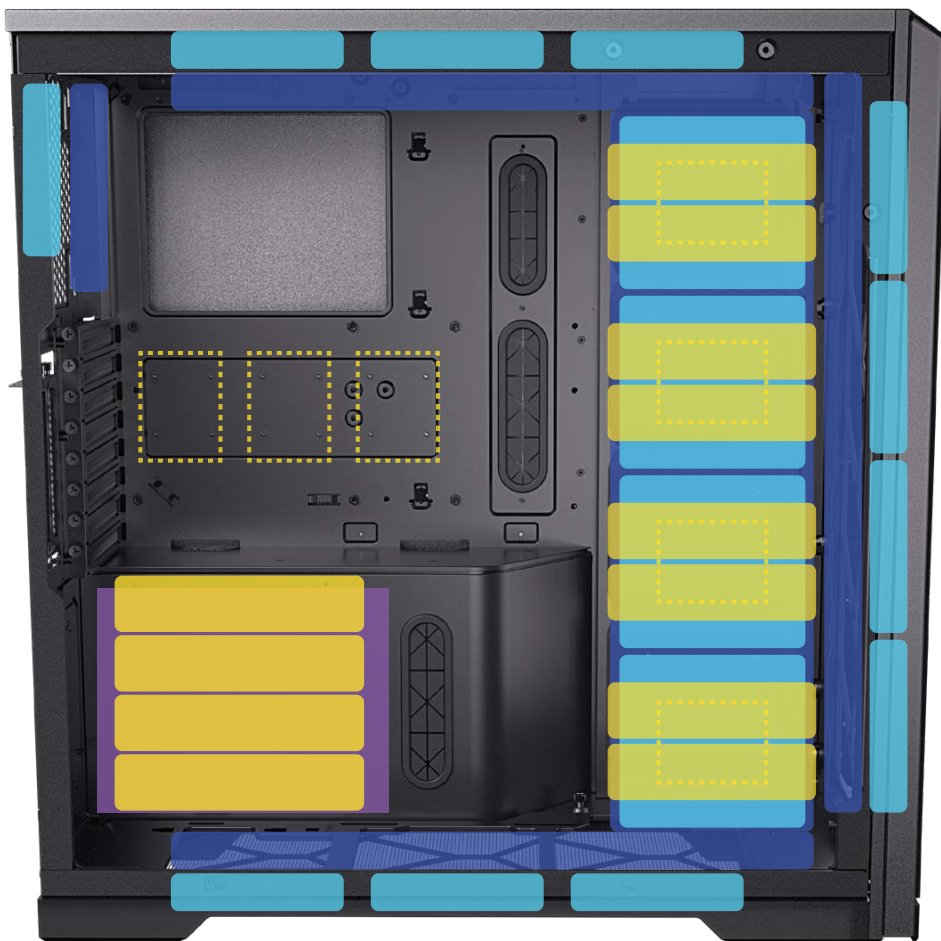


GPU Anti-Sag Bracket
6x Zip Tie 150mm
Phanteks Logo Badge

Toolbox

	M3x5 mm Motherboard / SSD screw	Fan screw	Motherboard Standoff + tool	
			 6x	
	38x	8x	1x	
6-32x6 mm Hex screw	6-32x6 mm Thumb screw	Rubber PSU pad	6-32x9 mm HDD screw	Riser Cable screw
				
12x	14x	4x	16x	3x

The Enthoo Pro 2 has the most versatile chassis design, providing you with a myriad of options. With so many possibilities to pick from, you can use this overview to choose and plan the best configuration for your build.



AIR COOLING- P13.

STORAGE - P14.

WATERCOOLING - P17.

DUAL SYSTEM - P29.

DUAL PSU - P12.

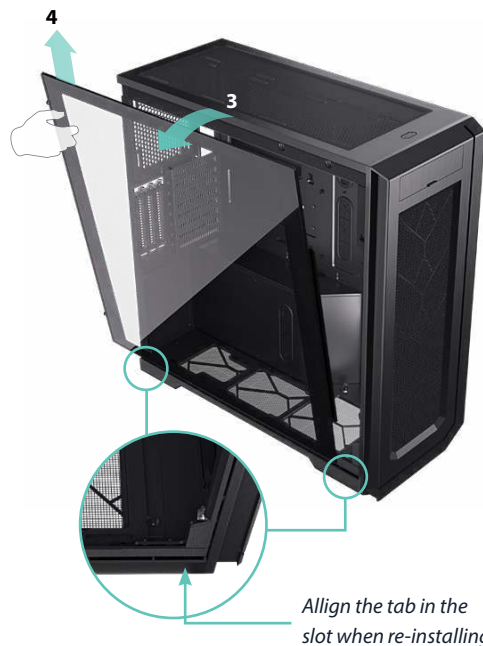
PREPARATIONS

- The Enthoo Pro 2 case is designed to support installation in a standing position.
- Don't turn on the power to your system until installation is complete.
- Discharge your body's static electric charge by touching a grounded surface before performing any hardware procedure.
- Make sure to consult the manuals of your hardware before installation.



If you do not feel comfortable with performing the installation procedure, consult a qualified computer technician.

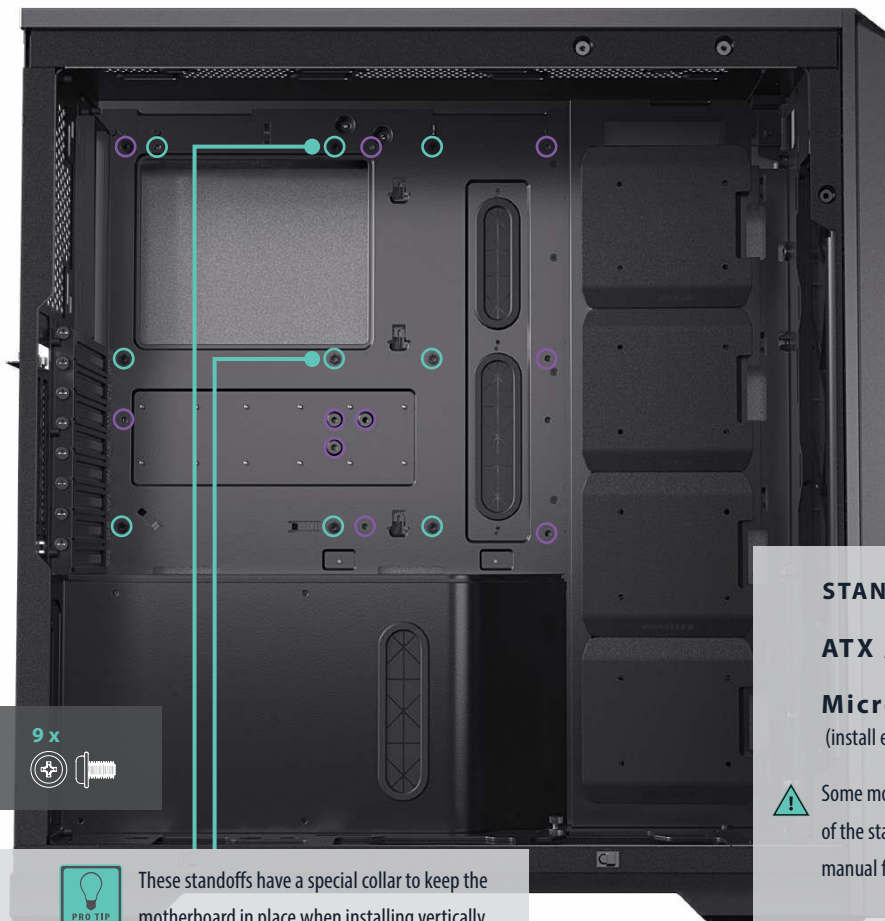
1. REMOVING FRONT PANEL

2. REMOVING LEFT SIDE PANEL***3. REMOVING RIGHT SIDE PANEL**

** Only PH-ES620PTG model is equipped with a Tempered Glass sidepanel*

Use the motherboard screws from the toolbox to install your motherboard on the pre-installed standoffs.

REQUIRES:



STANDOFF POSITIONING

ATX / E-ATX (Pre-installed)

Micro ATX/SSI-EEB
(install extra standoffs)

Some motherboards require installation or repositioning of the standoffs. Please consult your motherboard manual for the correct standoff positioning.

For repositioning standoffs

9 x



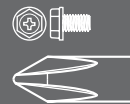
These standoffs have a special collar to keep the motherboard in place when installing vertically.



The power supply can be installed by opening the cable cover.

1. Open the Cable Cover.
2. Place the Power Supply.
3. Secure the Power Supply with 4x PSU screws.

REQUIRES:



LOOSEN:



2 x



4 x



A second power supply can be installed by removing the cover in the rear panel.

1. Remove the rear PSU Cover.
2. Place the 4x rubber pads from the toolbox.
3. Place the Power Supply.
4. Secure the Power Supply with 4x PSU screws.

REQUIRES:



REMOVE:

2 x



4 x



4 x



Configure your airflow-path with this overview. Some fan locations allow you to choose between storage or cooling to offer more flexibility.

The bottom radiator bracket is removed by loosening the thumb screw and sliding it forward.

TOP

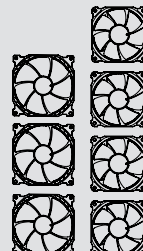
140
FAN



120
FAN



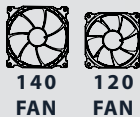
FRONT



140
FAN

120
FAN

REAR



140

FAN

120

FAN

BOTTOM

LOOSEN:

1 x



140
FAN



120
FAN



SIDE



120
FAN



2.5" SSD INSTALLATION

Three SSDs can be installed on the 3x dedicated SSD bracket and two on each of the 4x SSD covers for a total of 11 SSD drives.

SSD Cover

One SSD can be installed on the front of the cover with 4x SSD screws:



4 x

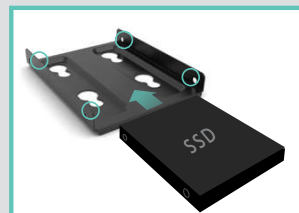


Another SSD can be placed without tools on the rear side of the cover. Press the SSD down on the bottom 2 pins and then place the SSD in the top 2 pins.



SSD Bracket

Install the SSD with 4x SSD screws and place it back on the 4x grommets.



4 x



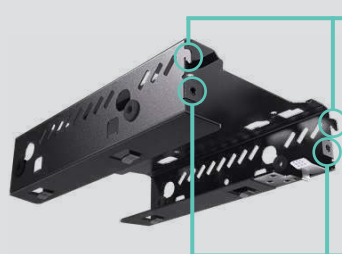
REQUIRES:



MAIN COMPARTMENT

A total of 8 Stackable HDD brackets can be installed on the side fan positions. Before installation please remove the SSD Covers.

REQUIRES:

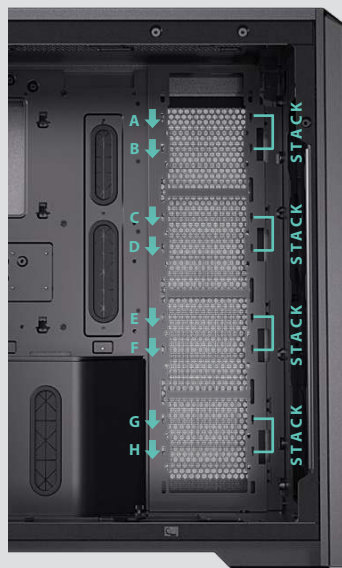


1. Mount the bracket in the chassis.

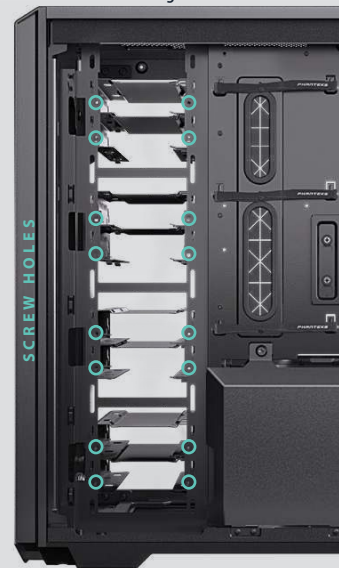
2. Secure with 2x thumb screws in the chassis.



left view



right view



Stack 2 HDD brackets before mounting if you install more than 1x bracket.

3.5" HDD INSTALLATION

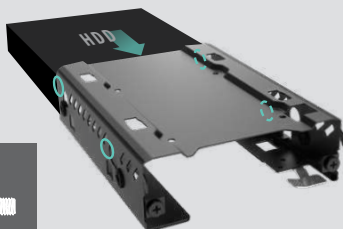
4x Phanteks Stackable 3.5" HDD Brackets are included.

Additional brackets are sold separately (*PH-HDDKT_03*).

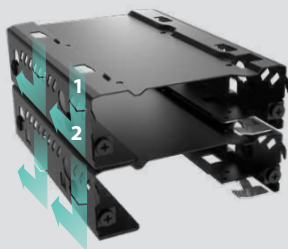
REQUIRES:



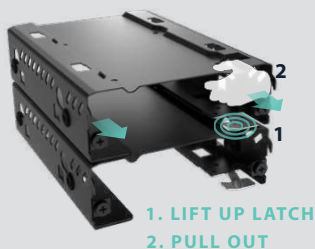
HDD INSTALLATION



STACK / INSTALL



REMOVE



BOTTOM COMPARTMENT

4x HDD Brackets can be positioned in the bottom compartment. The cables can be easily routed through the rubber grommet.



The HDD bracket can also house a 2.5" SSD instead of a 3.5" HDD.

This overview shows all possible radiator form-factors, locations and clearances.

TOP

120 FORM FACTOR

max 120x460mm

120

240

360

*max motherboard component height: 55mm

SIDE

120 FORM FACTOR

max 135x530x32mm

120

240

360

480

REAR

120 FORM FACTOR

120

140 FORM FACTOR

140

FRONT

120 FORM FACTOR

max 145x530mm

120

240

360

480

BOTTOM

120 FORM FACTOR

max 120x450mm

120

240

360

140 FORM FACTOR

max 145*x530mm

140

280

420

*160mm when SSD Covers rotated



RADIATOR CLEARANCE

Some radiator clearances depend on other hardware installed. Subtracting the radiator and fan thickness shows the remaining clearance for other radiators.

INTERNAL DIMENSIONS:

A :510mm

B :530mm



If the HDD trays are installed on the side fan locations no front radiator can be placed there.



We highly recommend installing a drain port if you plan to install a custom water-cooling configuration. This will ensure an easy maintenance in the future.

The Drain Port is installed in the Front Panel using a Passthrough Fitting and a Stop Fitting / Ball Valve. The port diameter is 20.5mm.

Phanteks Passthrough fitting:

PH-PTF_BK/CR_G1/4

Phanteks Stop fitting:

PH-PG_BK/CR

Phanteks Ball-Valve fitting:

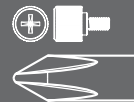
PH-BVA_BK/CR_G1/4

DRAIN PORT



To prevent your GPU from tipping down you can install the GPU Anti-Sag Bracket.

REQUIRES:



INSTALLING GPU ANTI-SAG BRACKET

1. *INSTALL ALL GPU AND PCI CARDS*
2. *PLACE THE GPU ANTI-SAG BRACKET*
3. *INSERT THE THUMBSCREWS WITHOUT TIGHTENING THEM*
4. *PRESS DOWN AND LOCK THE THUMBSCREWS IN POSITION.*



3



2 x



Always loosen the 2 thumb screws before removing any GPU or PCI cards.



Hold the GPU in the correct position when tightening the thumbscrews.

Please consult the motherboard manual for additional instructions.



Please make sure to consult your motherboard manual before connecting the front I/O.

* Only PH-ES620PTG model

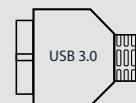


TO MOTHERBOARD

POWER BUTTON

Power SW

4X USB 3.0



D-RGB MODE BUTTON*



D-RGB COLOUR BUTTON*



RESET BUTTON

Reset SW

HDD led

HEADPHONE

MICROPHONE

HD
AUDIO

USB 3.1 GEN 2 TYPE-C



The Digital-RGB lighting can be easily controlled with the 2 buttons on the front of the chassis.

* Only PH-ES620PTG model

D-RGB MODE BUTTON*



D-RGB COLOUR BUTTON*



D-RGB CONTROLS

MODE

- Solid
- Breathing
- Radar
- Sparkle
- Rainbow

COLOR



Press & Hold MODE: Turn off Front LED's.
Press & Hold MODE 2 sec again: Turn off all LED's.
 (allows the controller to sync to motherboard input)

CONNECT MORE D-RGB PRODUCTS

To DIGITAL-RGB Products



SYNC TO MOTHERBOARD

To D-RGB Motherboard (optional)



Compatible with:



addressable



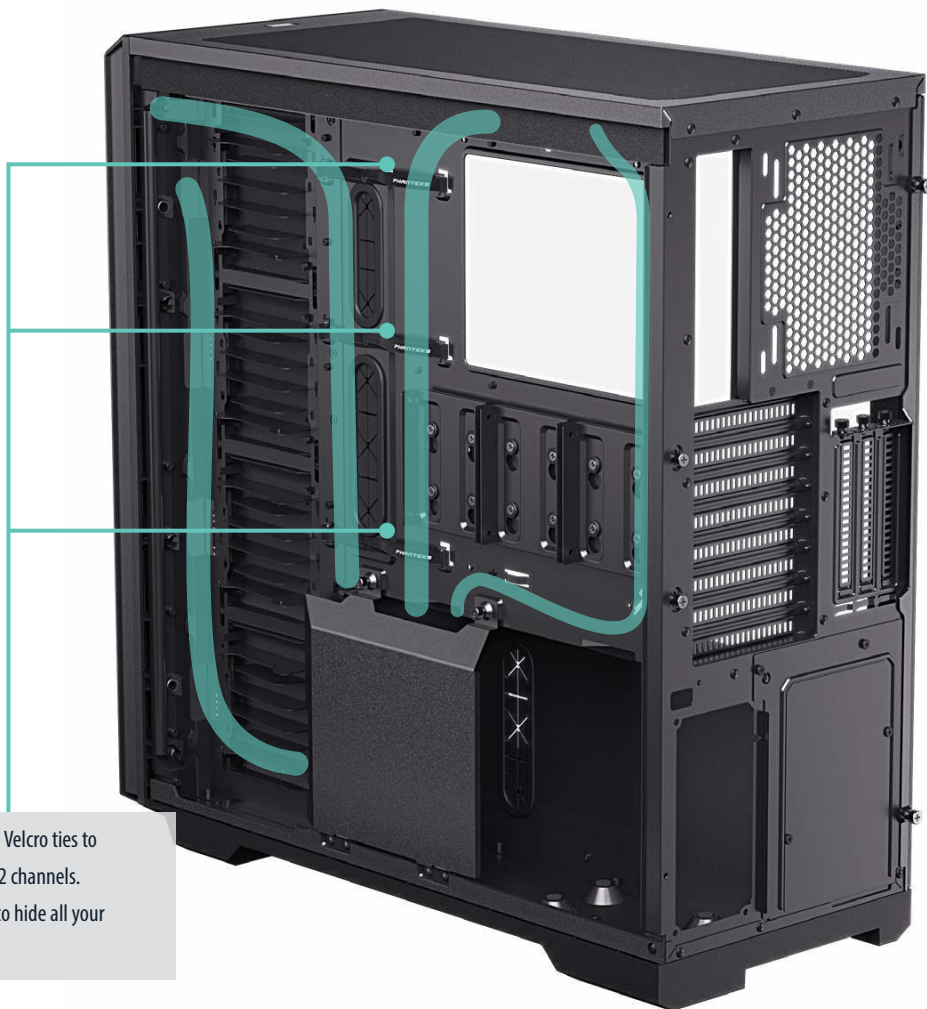
addressable



rainbow



Use the double-loop Velcro ties to route your cables. Zip ties are included in the accessory bag to manage any excess cables.



Use the double-loop Velcro ties to split the cables into 2 channels.
Use the cable cover to hide all your excessive cables.

The Enthoo Pro 2 is equipped with a front, bottom, side, top and PSU filter. We recommend to clean these filters every month to keep your cooling performance optimized.



If cleaning the dust filters with water, make sure to properly dry them before placing them back.

CABLE EXTENSION SET

PH-CBCMBO

- Available in multiple colors
- Includes clear cable combs
- Also available as separate cables



Included cables: Motherboard 24-pin / CPU 4+4-pin / 2x GPU 6+2-pin

UNIVERSAL FAN CONTROLLER

PH-PWHUB_02

Conveniently control both 4-pin PWM and 3-pin DC fans with a single controller. Control the speed with the manual remote (software-free) or synced to your motherboard.



HIGH STATIC PRESSURE MP FAN

PH-F120MP / PH-F140MP

The MP fan is optimized for high static pressure to deliver the highest performance for a water cooled setup.



NEON STRIPS

PH-NELEDKT_M5 / PH-NELEDKT_CMB0 / PH-NELEDKT_M1

Phanteks' NEON Digital-RGB LED STRIPS provide the smoothest lighting effect with many mounting positions to highlight your system. Its easy to use and secure mounting set lets you choose which hardware to highlight with a diffuse ray of light from the NEON LED strip.



3.5" STACKABLE HDD BRACKETS

PH-HDDKT_03

For 3.5" or 2.5" Drive
Upgrade up to 6x additional 3,5" HDDs with the optional HDD brackets.
Contains 2x Stackable HDD Brackets.



Y-SPLITTER CABLES

PH-CB-Y4P / PH-CB-Y3P

4-pin / 3-pin Fan splitters
Using splitter-cables you can install more than 8 fans to the Universal Fan Hub.



HIGH AIRFLOW SK PWM FAN

PH-F120SK_DRGB / PH-F120SK_BBK
PH-F140SK_DRGB / PH-F140SK_BBK

The high airflow SK PWM Fans provide optimal air cooling and come in both 120mm or 140mm sizes and black or D-RGB versions.



HALOS FAN FRAMES

PH-FF120DRGBP_BK01 / PH-FF140DRGBP_BK01
PH-FF120DRGBA_BK01 / PH-FF140DRGBA_BK01

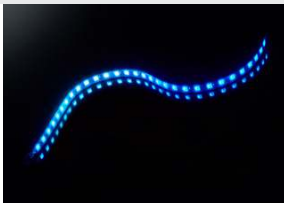
The Phanteks' Halos D-RGB fan frames complements any system build with ambient illumination. Using high density LEDs, the Halos can illuminate different varieties of fans including high performance fans made from PBT material.



D-RGB Strips

PH-DRGBLED_CMBO

Phanteks' Digital-RGB LED Combo Kit provides lighting solution that seamlessly integrate to your Phanteks' D-RGB products and compatible D-RGB motherboards to enhance your lighting experiences.



Vertical GPU Bracket

PH-VGPUKT_02

With the optional Riser Cable you can place any 2-slot or 3-slot GPU vertically. Compatible with PCI-E 3.0 standard, the riser cable features a slim cable design for more flexibility and clean aesthetics.

See page 27



220mm Flatline PCI-e x16 Riser Cable 90°

PH-CBRS_FL22

Phanteks PH-CBRS-FL22 allows to place a GPU vertically. Compatible with PCI-E 3.0 standard, the riser cable features a slim cable design for more flexibility and clean aesthetics.

See page 27



for vertical GPU installation, see page 27

150mm Flatline PCI-e x16 Riser Cable 90°

PH-CBRS_FL15

Phanteks PH-CBRS-FL15 is ideal for extending GPU performance for the second ITX system. Compatible with PCI-E 3.0 standard, the riser cable features a slim cable design for more flexibility and clean aesthetics.



for dual-system GPU installation, see page 31

Revolt X Power Supply

PH-P1000PS / PH-P1200PS

The Revolt X power supply unlocks the Dual System Configuration. But also works great as a "single system" power supply.



Revolt PRO Power Supply

PH-P850GC / PH-P1000GC

The Revolt PRO allows for a second power supply to be installed in the Enthoo Pro 2. With 2 power supplies you can either expand the maximum power output or provide redundancy to your system.



AMP Power Supply

PH-P550G / PH-P650G / PH-P750G

The AMP series offers high quality gold certified power supplies that can be connected to the Revolt PRO to increase your power output or run a power-redundant system.



Dual 5.25" Bay

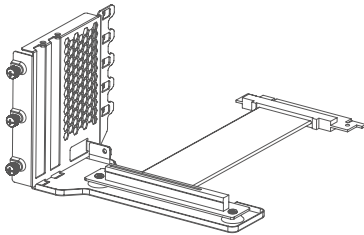
PH-ODDBAY_01

The Dual 5.25" Bay allows for 2x 5.25" devices to be installed.



There are 2 vertical GPU positions available for System 1.
We recommend the first position using the Vertical GPU Bracket.

- 1. INSTALL USING THE VERTICAL GPU BRACKET**
*Vertical GPU Bracket with riser cable included sold separately.
(PH-VGPUKT_02)*



Follow the instructions with the Vertical GPU Bracket.

- 2. INSTALL USING THE RISER CABLE ONLY**
*Riser Cable sold separately
(PH-CBRS_FL22)*



We recommend to provide extra support
for the vertical GPU during transport.

REQUIRES:



1. *INSTALL ANY 5.25" DEVICES INTO THE 5.25" BAY FIRST*
2. *PLACE THE 5.25" BAY INTO THE CHASSIS AND SECURE WITH 3X PSU SCREWS*

3 x



1. REMOVE THE PRE-INSTALLED PSU BRACKET

REMOVE:



2. INSTALL THE DUAL-SYSTEM BRACKET

2 x



The Revolt X power supply from Phanteks is required for this configuration.

3. INSTALL 4X MOTHERBOARD STAND-OFFS

4 x



4. INSTALL THE MOTHERBOARD WITH 4X MOTHERBOARD SCREWS

4 x



The reset button and HDD led can be used as power button and power led for the second system.

5. CONNECT THE POWER BUTTON AND POWER LED TO THE MOTHERBOARD

TO ITX MOTHERBOARD

Reset SW -> Power SW system 2

HDD LED -> Power LED system 2

REQUIRES:



1. INSTALL RISER CABLE ON THE VERTICAL GPU MOUNT

Riser Cable sold separately

(PH-CBRS_FL15)

REQUIRES:



2. INSTALL VERTICAL GPU MOUNT WITH 2 X SCREWS



The GPU Mount has two mounting positions. Position A allows for better air cooling and 3-slot GPU cards.



Depending on your needs, it's not always necessary to install a GPU for your second system when your CPU is equipped with an integrated GPU.



As a Phanteks customer, you are priority number one. We have a dedicated team of employees across the globe working hard every day to make sure we deliver the superior experience you deserve. We are here for you. If you have a question or a concern about our products, we have numerous ways you can reach us. Please choose one most convenient for you to connect with our team.

CUSTOMER CARE

RMA AND TECHNICAL SUPPORT INTERNATIONAL

Email : support@phanteks.com

Facebook : @Phanteks

RMA AND TECHNICAL SUPPORT AMERICAS

Hours : Monday-Friday 9:00-5:00 PST

Phone number : +1(909)598-2115

Email : support@phanteksusa.com

Facebook : @Phanteks



For up-to-date information please check www.Phenteks.com

PHANTEKS ENTHOO PRO 2 PAGE



PHANTEKS FACEBOOK PAGE



PHANTEKS INSTAGRAM PAGE



PHANTEKS warrants its products to be free from defects in material and workmanship during the warranty period; when given normal, proper and intended usage. If a product proves to be defective in material or workmanship during the warranty period, PHANTEKS will, at its sole option, repair or replace the product with same product or similar product. The replacement product assumes the remaining warranty of the original product or 30 days, whichever provides longer coverage for the customer.

DURATION OF WARRANTY:

1. Fans - 5 years
2. I/O Ports - 2 years
3. LED Lighting - 2 years
4. Buttons - 2 years
5. Chassis - 5 years
6. Front and Top Panels - 5 years

Please check www.phanteks.com/Warranty for more information.

