

Studio-G Ultra 850

TBX-850FA

Thunderbolt™ eGPU BOX Quick Installation Guide

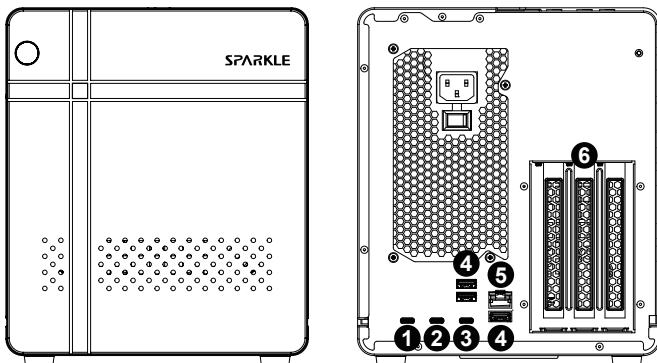
Technical Specs

MODEL NAME	Studio-G Ultra 850
P/N	TBX-850FA
CERTIFICATION	CE / FCC / VCCI
CONNECTIVITY	1 x Thunderbolt™ 5 (USB-C) Upstream with up to 96W PD 1 x Thunderbolt™ 5 (USB-C) Downstream with up to 15W PD 1 x USB-C 3.2 Gen2 (10Gbps, 15W) 3 x USB-A 3.2 Gen2 (10Gbps, 7.5W) 1 x 2.5 Gb Ethernet port
EXPANSION SLOTS	PCIe 4.0 x16 slot (supports x4 mode)
POWER SUPPLY	850W 80 PLUS GOLD ATX 3.1 Input: AC 100-240V, 50Hz-60Hz Connectors: 1 x ATX 24 PIN / 1 x 12V-2x6 (600W) / 3 x PCIe 8 PIN (6+2) Certification: CE / FCC / CB / cTUVus / CCC / BSMI / ICES
SYSTEM REQUIREMENTS	Windows® 10 and later Computer with Thunderbolt™ 4 / 5 port
DIMENSIONS (L x W x H)	403 x 200 x 237 mm 15.9 x 7.9 x 9.3 inches
GRAPHICS CARD DIMENSIONS (L x W x H)	346 x 170 x 77 mm (Max) 13.6 x 6.7 x 3.0 inches (Max)
WEIGHT (W/O OUT GRAPHICS CARD)	7.2 kg 15.75 lbs

Package contents

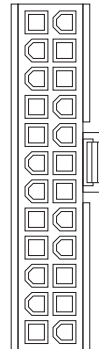
- 1 x Studio-G Ultra 850 Thunderbolt eGPU Box
- 1 x Power Cord
- 1 x Thunderbolt 5 (USB-C) cable (0.8m)
- 1 x Quick installation guide

Studio-G Ultra 850 Interface Overview



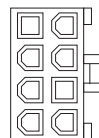
- | | |
|---|-------------------------------|
| 1 Thunderbolt™ 5 upstream port | 4 USB-A 3.2 Gen2 port |
| 2 Thunderbolt™ 5 downstream port | 5 2.5 Gb Ethernet port |
| 3 USB-C 3.2 Gen2 port | 6 PCIe expansion slot |

ATX 24 PIN



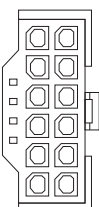
Pin	Signal	AWG	Pin	Signal	AWG
1	+3.3VDC	18	[13]	RS+	22
2	+3.3VDC	18	14	-12VDC	18
3	COM	18	15	COM-	18
4	+5VDC	18	16	PS-ON	22
5	COM	18	17	COM	18
6	+5VDC	18	18	COM	18
7	COM	18	19	COM	18
8	PWR-OK	22	20	Reserved	--
9	+5VSB	18	21	+5VDC	18
10	+12VDC	16	22	+5VDC	18
11	+12VDC	16	[22]	RS+	22
12	+3.3VDC	18	23	+5VDC	18
13	+3.3VDC	18	24	COM	18

PCI-E (6+2) PIN



Pin	Signal	AWG
1	+12VDC	16
2	+12VDC	16
3	+12VDC	16
4	COM	16
5	COM	16
6	COM	16
7	COM	16
8	COM	16

12V-2x6(600W)

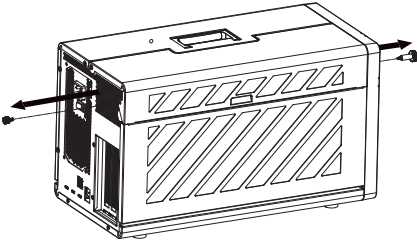


Pin	Signal	AWG	Pin	Signal	AWG
1	+12VDC	16	7	COM	16
2	+12VDC	16	8	COM	16
3	+12VDC	16	9	COM	16
4	+12VDC	16	10	COM	16
5	+12VDC	16	11	COM	16
6	+12VDC	16	12	COM	16
S1	NA	--	S3	SENSE0	24
S1	NA	--	S4	SENSE1	24

Add-in Card Installation Steps

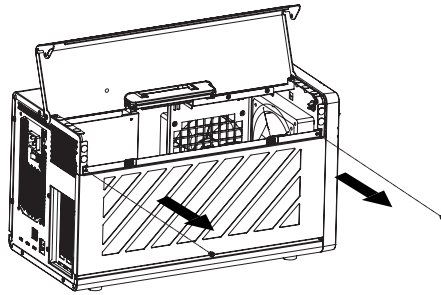
STEP 1

Remove the front and rear thumb screws.



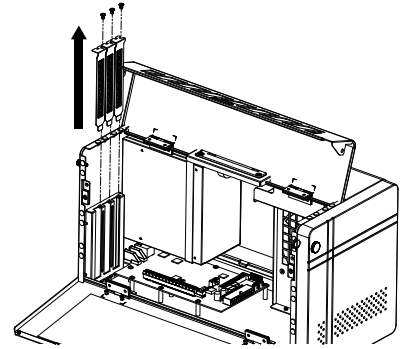
STEP 2

Open the top cover and remove the two screws on the side panel.



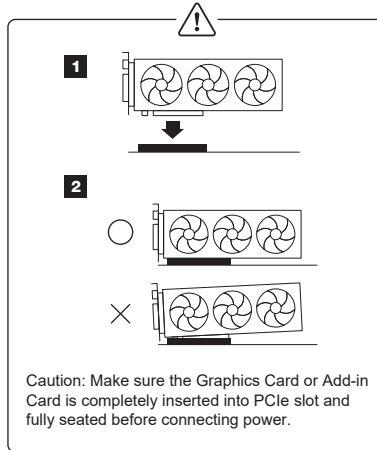
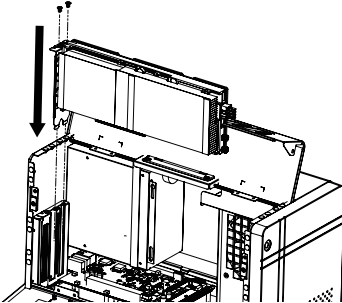
STEP 3

Remove the PCIe slot screws and brackets to install the Add-in Card.



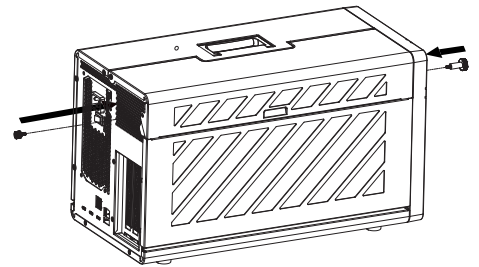
STEP 4

- Install Add-in Card into PCIe slot, make sure it is fully seated, then connect power cables (PCIe 8 Pin or 12v-2x6) if necessary.
- Tighten screws to secure Add-in Card.



STEP 5

Close the side panel and top cover, then tighten the front and rear thumb screws.



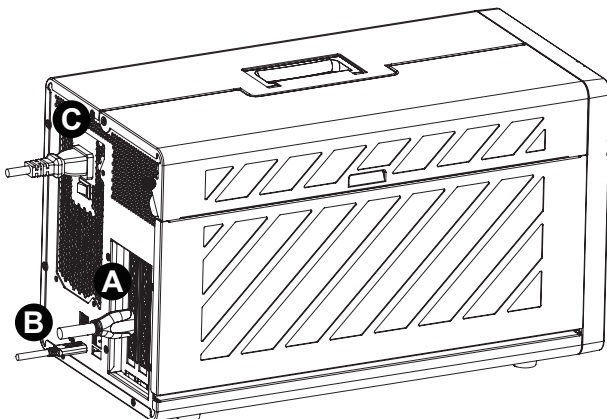
Hardware Installation & Thunderbolt™ Setup

STEP 1

- Connect the display cable from monitor to the Graphics Card (Add-in Card).
- Connect the Thunderbolt 5 cable from Studio-G Ultra 850 to your computer's Thunderbolt 4 or Thunderbolt 5 port.
- Connect the power cord and turn on the Studio-G Ultra 850 power supply switch.

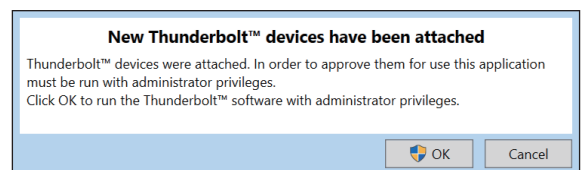


Connect the power cord to a grounded (earthed) socket-outlet.



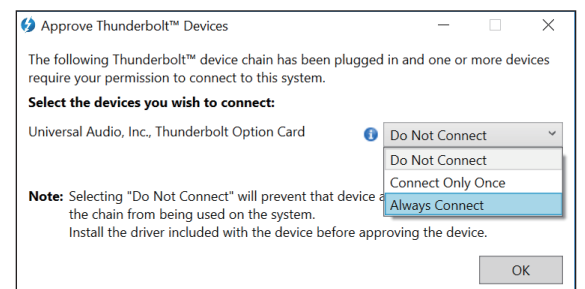
STEP 2

Power on your computer. When the Thunderbolt™ authorization dialog appears, click "OK" to continue.



STEP 3

When the following dialog appears, select "Always Connect" and then click "OK" to complete the setup.



STEP 4

Visit your Graphics Card or Add-in Card manufacturer's website to download and install the latest driver.