

CalDigit

Thunderbolt™ 4 / USB4
Element Hub



USER GUIDE

For more information visit www.CalDigit.com

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1. General Information

Introduction

The CalDigit Thunderbolt 4 Element Hub is the first of its kind, offering 4x the performance of traditional USB-C hubs, whilst harnessing the power of Thunderbolt 4 in order to create a device without compromises.

Every Element Hub workflow will be different from the next, bringing with it the potential for incredibly unique set-ups, only limited by your imagination.

Connect what you need, when you need.

General Use Warnings

- Please read the Element Hub manual thoroughly and familiarize yourself with the product before use.
- Avoid using the Element Hub in extremely hot and cold environments. A safe temperature range is between 50° to 95° F (10° to 35° C).
- Avoid using the Element Hub in humid environments. Moisture and condensation can accumulate in the device and cause damage to the electrical components.
- Only use the power adapter that has been supplied with the Element Hub. An excessive or inadequate power supply can result in unstable performance or device failure.

Safety Warnings

- Keep the Element Hub away from liquids and moisture. Exposure to liquids can result in damaging the unit, electric shock, and result in a fire hazard.
- If your Element Hub gets wet while it is still off, do not turn it on. In the case of any issue with the device, do not attempt to repair or open the device yourself. Doing so can result in personal injury, damage the device, and will void the warranty.

If you have any issues, please contact CalDigit Technical Support.

System Requirements

macOS 11 or above

Windows 10 or above

Thunderbolt 4 Computer

Thunderbolt 3 Computer

USB-C ChromeBook

USB-C (USB 4) Computer

USB-C (USB 3.1) Computer

iPad Pro

iPad Air (4th Gen)

Windows Tablet

In the Box

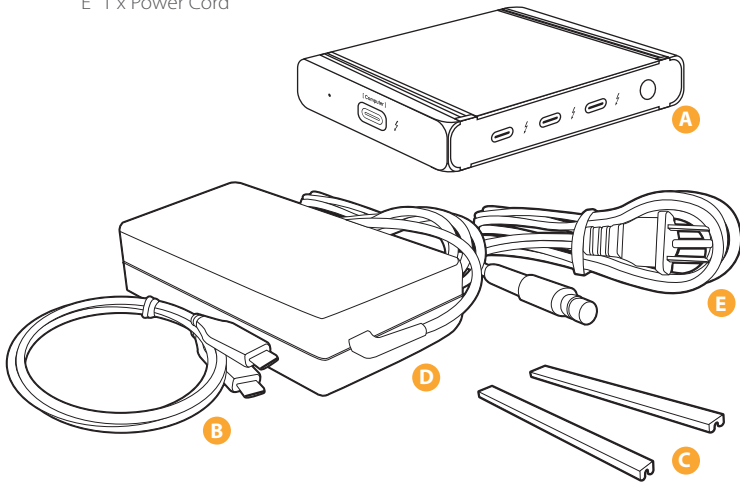
A 1 x Thunderbolt 4 Element Hub

B 1 x Thunderbolt 4 Cable 0.8m (Passive)

C 2 x Rubber Feet Strips

D 1 x Power Supply (150W)

E 1 x Power Cord



2. Feature Compatibility

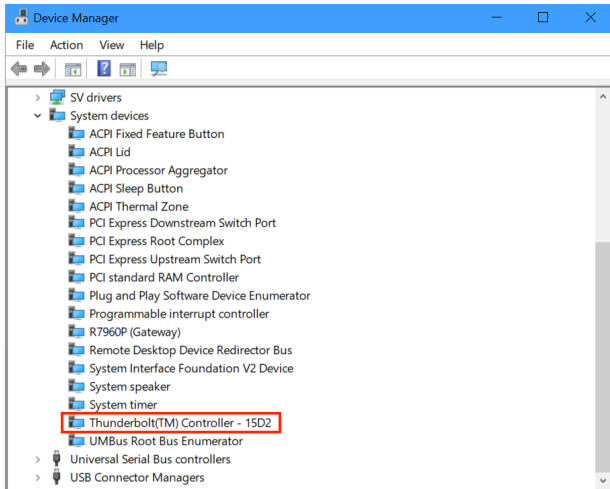
Laptop Compatibility

The Element Hub is a Thunderbolt 4 device. This means that it is compatible with all Type-C laptops and tablets by adapting to the performance available from your Type-C port.

The Element Hub is compatible with Thunderbolt 4, Thunderbolt 3, USB4 (Type-C), and USB-C 10Gb/s and 5Gb/s host devices.

Computer	Performance	Element Hub Compatible
Thunderbolt 1*	10Gb/s	✓
Thunderbolt 2*	20Gb/s	✓
Thunderbolt 3***	40Gb/s	✓
Thunderbolt 4	40Gb/s	✓
USB-C**	5Gb/s or 10Gb/s	✓
USB4	40Gb/s	✓
Legacy USB-A 3.0 or 2.0****	5Gb/s or 480Mb/s	✓

- * With use of the Apple Thunderbolt 3 to 2 Adapter. User will see a performance decrease.
- ** USB-C users will see a performance decrease.
- *** Some Windows PC manufacturers have decided to restrict functionality on their Thunderbolt 3 ports such as charging and monitor compatibility.
- **** USB-A to USB-C cable is required (sold separately). Laptop charging and external monitor are not supported when connecting Element to USB-A host.
- ***** Some early Thunderbolt 3 computers (based on Intel Alpine Ridge) can only use two Thunderbolt ports on Element Hub. The rest two Thunderbolt ports will work as USB-C ports. This means Element's Thunderbolt ports will be limited. In this case, Both [Computer] port and the Thunderbolt 4 port next to DC port are operating as Thunderbolt ports. To identify if your Thunderbolt 3 PC is based on Intel Alpine Ridge, go to "Device Manager", Select "System Devices", and scroll down to "Thunderbolt(TM) Controller – XXXX", where XXXX is the Controller ID. If you see the Controller ID is 1575, 1577, 15BF, 15D2, or 15D9, that means you are using Alpine Ridge based Windows PC and Element's Thunderbolt ports are limited.



Monitor Compatibility

You can connect up to two external monitors to the Element Hub via the spare Thunderbolt 4 ports, as long as your laptop will support two monitors.

This can either be achieved by directly connecting a Thunderbolt 3 or USB-C monitor to the spare Thunderbolt 4 ports on the Element Hub.

Alternatively if you want to connect a HDMI or DisplayPort monitor you can use a USB-C to HDMI or USB-C to DisplayPort Adapter (Sold separately).

Apple M1 based laptops only support one external display.

	TBT4, TBT3 & USB4 PC	Intel TBT3 Macs	Apple M1 Macs	USB-C 10Gb/s PC (DP 1.4)	USB-C 5Gb/s PC (DP 1.2)
4K 30Hz	✓	✓	✓	✓	✓
4K 60Hz	✓	✓	✓	✓	
5K 60Hz Thunderbolt Display	✓	✓	✓		
6K 60Hz Apple Pro Display XDR	✓	✓	✓		
8K 30Hz	✓				
Dual 4K 60Hz	✓	✓			

	iPad Pro	iPad Air (4th Gen)	ChromeBook	Windows Tablet	iPad Pro M1-Thunderbolt
4K 30Hz	✓	✓	✓	✓	✓
4K 60Hz	✓				✓
5K 60Hz Thunderbolt Display					✓
6K 60Hz Apple Pro Display XDR					✓
8K 30Hz					
Dual 4K 60Hz					

NOTE

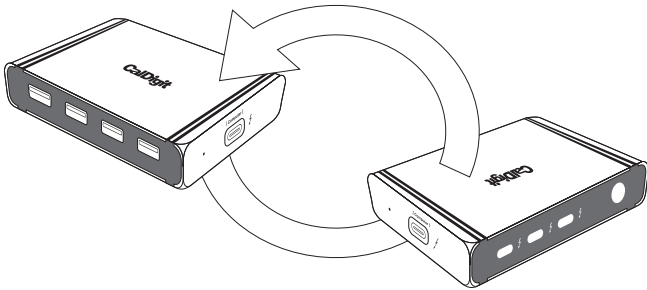
Some Windows PC manufacturers have decided to restrict functionality on their Thunderbolt 3 and USB-C ports, such as charging and monitor compatibility. Check to see if your PC supports a monitor.

3. Using the Element Hub

Reversible Design (Optional)

The Element Hub has been designed in order to be easily configured on either side of a laptop with the spare Thunderbolt 4 ports and power cable facing away from the laptop in order to provide optimum cable management.

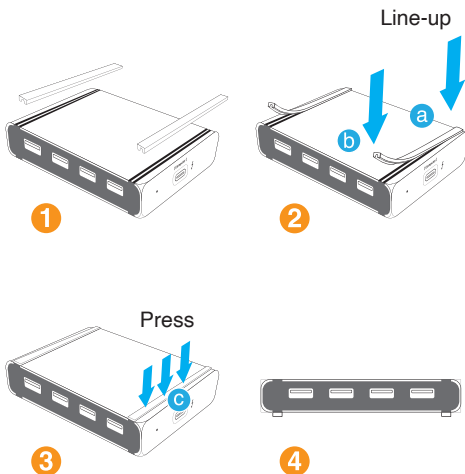
Choose which side of your laptop you would like to place the Element Hub, and flip over the the Element Hub if required so that the Thunderbolt 4 ports, and power supply cable will be facing away from you.



Placing the Rubber Foot Strips on the Element Hub (Optional)

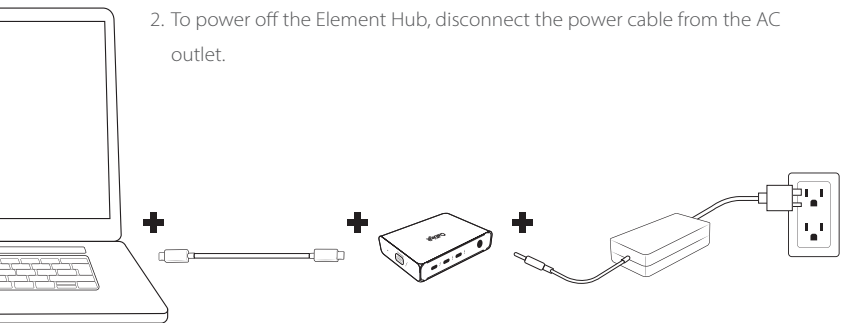
Use the supplied Rubber Foot Strips in order to prevent the Element Hub from scratching your desk.

1. Choose which side of your laptop you would like to place the Element Hub.
2. Flip over the Element Hub.
3. Align the two Rubber Foot Strips so that they fit into the slots on either side of the Element Hub.
4. Place the Element Hub on your desk with the Rubber Foot Strips facing downwards.



Powering the Element Hub

1. The Element Hub requires power from the AC adapter to operate.
Connect the AC adapter connector to the DC jack on the back of the Element Hub and the other side to an AC outlet.
2. To power off the Element Hub, disconnect the power cable from the AC outlet.

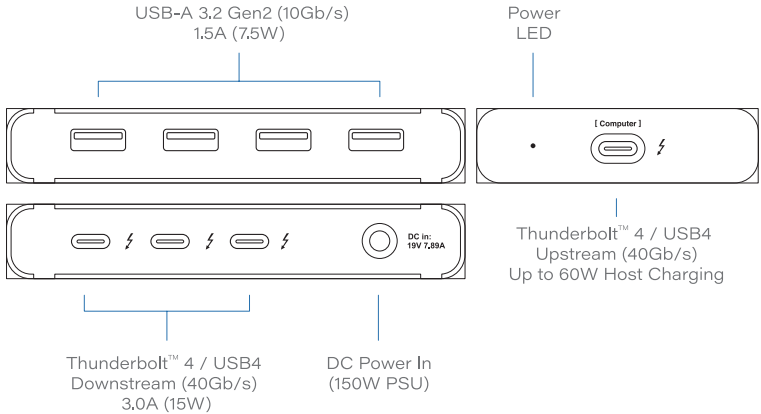


Connecting the Element Hub to your computer

The supplied Thunderbolt 4 cable is compatible with Thunderbolt 4, Thunderbolt 3, USB4 (Type-C), and USB-C host computers or tablets.

1. Connect one side of the supplied Thunderbolt 4 cable to the port labelled [Computer] on the Element Hub.
2. Connect the other side of the Thunderbolt 4 cable to the Thunderbolt 4, Thunderbolt 3, or USB-C port on your computer or tablet.
3. The Element Hub is powered and ready to use.

4. Interface Summary





Thunderbolt 4 (Host Connection)

The Thunderbolt 4 port labeled [Computer] offers up to 40Gb/s performance and is intended to be used for connecting the Element Hub to your host computer or tablet.

This Thunderbolt 4 port will adapt to the Type-C host device it is connected to. If it is connected to a Thunderbolt 4, Thunderbolt 3, or USB4 (Type-C) host device it will provide up to 40Gb/s performance.

If it is connected to a 10Gb/s or 5Gb/s USB-C host device it will provide those performance levels.



Thunderbolt 4 (Downstream Ports)

The 3 remaining Thunderbolt 4 downstream ports supply up to 15W of power and can be used for connecting various Thunderbolt 4, Thunderbolt 3, USB4 (Type-C), or USB-C devices to the Element Hub.

The types of devices that can be attached include monitors, external storage devices, eGPU, 10GbE adapters, and more.



USB-A (10Gb/s)

The 4 USB-A ports on the Element Hub each provide up to 10Gb/s performance. These ports can be used for connecting fast USB-C storage devices or any USB-A accessories to the Element Hub.

Laptop Charging

The Element Hub can provide up to 60W power delivery to the attached host laptop or tablet.

For users on larger laptops that are using CPU and GPU intensive applications we recommend to plug in your laptop's charger directly to your laptop.

NOTE

Some Windows PC manufacturers have chosen to limit their Thunderbolt 3 or USB-C port to not allow charging through the port. Please check to see if your PC's port supports charging.

5. CalDigit Element Hub Specifications

Interface:

Thunderbolt 4
USB-A 3.2
AC Power IN

Power:

AC Input : 19V 7.89A

Power Delivery:

60W to Host Laptop

Dimensions & Weight:

Length: 4.48" (114mm)
Width: 2.75" (70mm)
Height: 0.7" (18mm)
Weight: 0.39lbs (0.18kg)

System Requirements:

macOS 11.0 or above
Windows 10 or above
iPadOS 13.6 or above

Thunderbolt 4 Computer
Thunderbolt 3 Computer
USB-C(USB4) Computer
USB-C Computer
iPad Pro/iPad Air 4(4th Gen.)
Windows Tablet

In The Box:

1 x Thunderbolt 4 Element Hub
1 x Thunderbolt 4 Cable (0.8m)
2 x Rubber Feet Strips
1 x Power Adapter (150W)
(5.94" x 2.97" x 0.99")
(151mm x 75.6mm x 25.4mm)
1 x Power Cord (1m)

Warranty:

2 Year Limited Warranty

* Type-C charging cable & charger not included.

6. Optional Accessories

(available on CalDigit online store)

Thunderbolt™ 4 / USB4 Cables

- Thunderbolt™ 4 Cable 0.8m (40Gb/s)
- Active Thunderbolt™ 4 Cable 2m (40Gb/s. Compatible with Thunderbolt™ 3 and USB-C computers.)

Video Adapters

USB-C to HDMI 2.0 Adapter

USB-C to DisplayPort Adapter

USB-C to VGA Adapter

Power Supply

CalDigit Thunderbolt 4 Element Hub 150W PSU

7. Technical Support and Warranty Information

Technical Support

If you run into any issues while using your Element Hub, please contact CalDigit Technical Support.

- Email (US): support@caldigit.com
- Email (UK/EU): eusupport@caldigit.com
- Phone (US): (714) 572-6668
- Phone (UK/EU): +44 (0) 1993 700 972
- Website: <https://www.caldigit.com/support>

When contacting CalDigit Technical Support, make sure to be at your computer and have the following information available:

1. Your Element Hub serial number
2. Operating system and version
3. Computer make and model

Warranty Information

- The Element Hub is covered by a 2-year limited warranty.

Please visit www.caldigit.com for more information on all CalDigit products. Specifications and package contents are subject to change without notice.

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