

Universal Docking Station, USB Type-C™



User Manual DA-70864

Introduction

This Type-C docking offers an integrated solution for power, data, Ethernet, audio and video. It has VGA, HDMI, DisplayPort ports for video transmission, four USB-A ports for data transmission, one Type-C female for data transmission or PD charging, one stereo port to be connected to headset, one audio output to be connected to amplifier, one RJ45 port to be connected to Ethernet source (Router). Besides, it has one DC port for power supply.

Features

- Support USB-C Female input
- Support HDMI Female, DisplayPort Female, VGA Female, USB 3.0 Female, Gigabit Ethernet, Stereo, USB-C interface
- Support DC power adapter max 75W (20V/3.75A)
- Support Type-C PD power adapter max 100W
- Support HDMI resolution up to 4kx2k@30Hz
- Support DisplayPort resolution up to 4kx2k@30Hz
- Support VGA resolution up to 1920x1200@60Hz
- The USB total output of the 4xUSB-A and 1xUSB-C is 12W (5V@2.4A), 2 USB-A ports support BC 1.2, with max 7.5W (5V@1.5A)
- Support 10/100/1000Mbps bandwidth for RJ45 port
- Front stereo port supports both microphone and headphone
- Backside stereo port supports headphone & speaker box
- Supports 2 MST modes: DisplayPort and HDMI, DisplayPort and VGA

Note:

The product is a Multi-Stream-Transport (MST) hub and supports the extended desktop configuration of DisplayPort 1.2. When Mac OS is used, the same image is displayed on both ports (mirrored), it is not possible to use both ports independently of each other.

Package Contents

Before attempting to use this unit, please check the packaging and make sure the following items are contained in the shipping carton:

- Main unit x1
- User Manual x1
- USB-C connection cable (80 cm) x1

Specifications

Input/Output Connector	
Input	USB-C Female x1 DC×1
Output	HDMI Female x1
	DP Female x1
	VGA Female x1
	USB 3.0 Female x4
	RJ45 x1
	Stereo x2
	USB-C Female x1 for charging and data

Resolutions		
VGA	Max 1920x1200@60Hz	
HDMI	Max 4Kx2k@30Hz	
DisplayPort	Max 4Kx2k@30Hz	
Physical		
Size	195x85x22 (mm)	
Weight	426.6g	
Environmental		
Operating Temperature	0°C to +45°C	
Operating Humidity	10% to 90% RH (no condensation)	
Storage Temperature	-10°C to +70°C	
Storage Humidity	10% to 90% RH (no condensation)	
Power Supply		
Type-C port	Max 100W (20V/5A)	
DC port	Max 75W (20V/3.75A)	
Regulatory Approvals chipset	STM32F042	
	VL101R, VL813	
	FE1_1s	
	GL3523S, SSS1629, RTL8153, STDP4320	
	PS8339B	
	ANX9833	

Description of Power

This Type-C docking has 2 external power sources (Type-C and DC port). If the docking is connected to host PC, without being connected to any external power adapter, the five USB ports (4 USB-A port and 1 USB-C port) will not work. However, the rest of the ports will get power from host PC and will work normally. To ensure the proper functioning of USB ports, please connect it to at least one external power adapter.

Only one power port is connected

About DC Port

Power Adapter with below specifications is suggested to be connected: 5V (15W or above) 20V (75W or above)

- When a 5V (15W or above) power adapter is connected to DC port, it only supplies power to the docking. In this case, the host PC will not get any external power.
- When a 20V (75W or above) power adapter is connected to DC port, It supplies power to charge the host PC first (max 60W, 5V/2A, 9V/3A, 15V/3A, 20V/3A), the rest of the power (max 15W) will be supplied to the docking.

About Type-C Charging port

■ It supports max 100W (20V/5A) PD Charging. When PD power Adapter is connected, 15W of the total power will be reserved first to guarantee the functioning of this product, the rest of the power will be used to charge the host PC (the power that the host PC can get depends on the result of PD protocol negotiation).

e.g.: If this product is connected to 2015 Macbook model, and then connected to a 100W Power Adapter to Type-C female. Of the 100w, 15w is reserved for functioning of the docking, 85W is available for Macbook. However, after PD protocol negotiation, the host PC needs 30W, then 30W will be used to charge for the Macbook.

Two power ports are connected

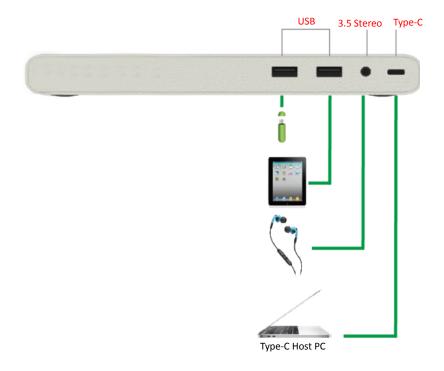
- 1) When DC port is connected (with 75W or above Power Adapter) prior to Type-C port, the docking and host PC are powered from DC port with Type-C port which like an alternative power source.
- 2) When DC port is connected (with 15W Power Adapter) prior to Type-C port, the power source will be switched on from DC port to Type-C port.
- 3) When Type-C port is connected (with PD power Adapter) prior to DC port, the docking and host PC are powered from Type-C port, with DC port as an alternative power source.
- 4) If the two power sources are connected first and then the docking is connected to the host PC
 - ① If DC port is connected with 75W or above power adapter, the docking and the host PC will be powered from DC port, with Type-C port as an alternative power source.
 - ② If DC port is connected with 15W Power Adapter, the docking and the host PC will be powered from Type-C port, with DC port as alternated power source.
 - (3) If the active power source (power source that is supplying power) is unplugged, the alternative power port will be switched on automatically to be the active power source. In this case, the connected devices will get disconnected for a few seconds and then reconnect automatically. However, unplugging the alternative power source has no effect on the connected devices.

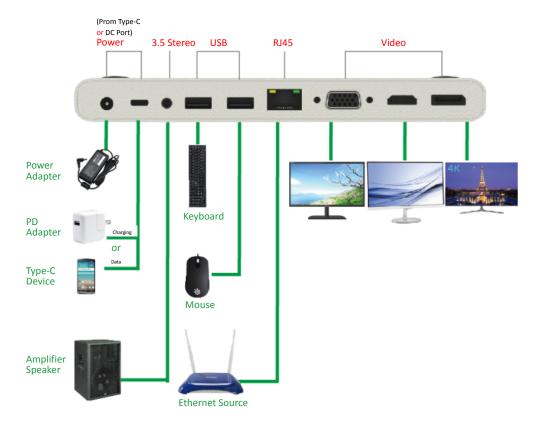
Note:

Though a 75W or above power adapter is suggested to be connected to the DC port of this product, our standard optional power adapter is 72W (20V/3.6A). The reasons for choosing a 72W power adapter are listed below:

- 1) The price of a 75W power adapter is as twice as that of a 72W power adapter
- 2) The optional 72W power adapter is testified to be able to guarantee normal functioning of this product when it is full loaded
 - 1. Mini DisplayPort and HDMI can work simultaneously; Mini DisplayPort and VGA can work simultaneously, but HDMI and VGA cannot work at the same time.
 - When connecting Mini DisplayPort and HDMI on Mac OS, the computer can read only one EDID (Extended Display Interface Data). It is recommended using two monitors which have the same highest resolution. If the resolutions are different for these two monitors, please adjust manually. On Windows OS the computer can read two different EDID's at the same time.
 - 3. When connecting Mini DisplayPort and VGA on Mac OS, the computer can read only one EDID. Please connect the Mini DisplayPort port before the VGA port; otherwise there might be no sound from the device. Please adjust the resolution for both monitors manually. This issue will not happen on Windows OS.
 - 4. While using Mac OS on the Dual Monitor Mode, the computer can read only one EDID. If you are using two monitors which do not using the same resolution, there won't be an image. Please properly reset the resolution and adjust it manually.
 - 5. Not all USB-C ports support all features of the USB Type-C ™ standard. Make sure your notebook's USB-C port supports DisplayPort Alternate Mode (DP-Alt Modi) and USB Power Delivery (PD).
 - **6.** The video output capability depends on the graphic card of your notebook and the connected monitor. Certain graphic cards have limited MST support, while some monitors also limit the available resolution.

Connection Diagram





Herby Assmann Electronic GmbH, declares that the Declaration of Conformity is part of the shipping content.

If the Declaration of Conformity is missing, you can request it by post under the below mentioned manufacturer address.

www.assmann.com Assmann Electronic GmbH Auf dem Schüffel 3 58513 Lüdenscheid Germany

