

# VisionTek<sup>®</sup>

## VT4900 USB-C KVM Docking Station



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## User Manual

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## **ABOUT THIS MANUAL**

This manual is designed for use with the **VT4900 Docking Station**. Information in this document has been carefully checked for accuracy; however, no guarantee is given to the correctness of the contents. The information in this document is subject to change without notice. The manufacturer does not make any representations or warranties (implied or otherwise) regarding the accuracy and completeness of this document and shall in no event be liable for any loss of profit or any commercial damage, including but not limited to special, incidental, consequential, or other damage.

## **SAFETY INSTRUCTIONS**

Always read the safety instructions carefully:

- Keep this User Manual for future reference.
- Keep the Dock away from liquid and humidity.
- ◆ If any of the following situations arise, please contact support:
  - ◆ The equipment has been dropped and damaged.
  - ◆ The equipment has obvious signs of breakage.
  - ◆ You cannot get it to work according to the User Manual.

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## OVERVIEW

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Thank you for purchasing this product. Please read these instructions carefully before connecting or operating this product.

Please keep this manual for future reference.

The **VT4900** - USB-C KVM Docking Station merges cutting-edge technology and high-quality hardware with innovative design.

With the KVM Sharing features, the **VT4900** allows a user to switch their display (HDMI / DP / DP) monitors / USB – Peripherals by using multi-switch mode, with Dual Host (Desktop / Laptop / Tablet) at the same time.

With the KM Sharing feature, the **VT4900** allows the user to move their mouse / touch pad cursor between multiple systems.

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## REQUIREMENTS

### Operating System:

- Windows® 10/8.1/8/7
- macOS 10.12/10.11/10.10

### Host Computer:

- An available USB-C Port

**Note:** Not all USB-C Ports will support the full functionality of the USB-C standard required by this docking station. Ensure that the Host Computer's USB-C Port supports DP Alt Mode, as well as USB Power Delivery. In order to output to 4K 60Hz over HDMI, the Host Computer must support DP 1.4.

### Display:

- An HDMI® Display
- Two DisplayPort Displays

**Note:** A 4K-capable display is required to achieve a 4K resolution.

(Alt Mode resolutions may vary depending on the compatibilities between Host and Monitor)

### Cables:

Cable requirements are optional and will depend on the port configuration of the connected Host Computer.

- USB Keyboard / Mouse
- USB-A Cables
- USB-C Cables
- HDMI Cable
- DisplayPort Cables
- CAT5e/CAT6 Cable

### Optional Accessories:

- Laptop Lock
- Microphone
- Speakers
- Headset

# 1 Quick Installation / Setup

## 1.1 Key Features

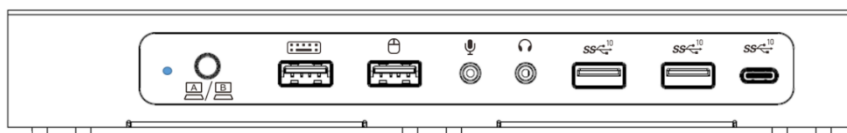
- USB 3.2 Gen 2 Data Transfer up to 10 Gbps
- KVM - (Keyboard & Mouse) Sharing & Display Switch
- LED Indicator
- Power On/Off Switch
- 1 x KVM Switch // KVM \*\*Host switch by Hot Key (111 / 211 / 222 / 122)
- 2 x DP Ports 4K @ 60Hz, 1 x HDMI - 4K/ 60Hz (When host system supports DP 1.4)
- Supports Dual Power Delivery – PD 3.0, up to 100W Per System

## 1.2 Box Contents

- 1 x VT4900 USB-C KVM Docking Station
- 2 x USB-C to C Full Pin Cables
- 1 x Power Adapter -230W (**20V/11.5A**)
- 1 x Quick Start Guide

## 1.3 I/O Description

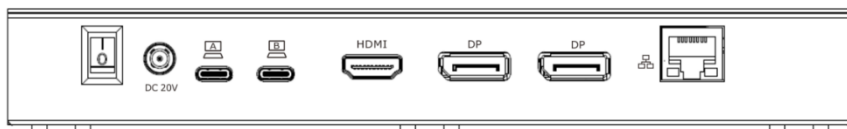
### Front Panel



### Side

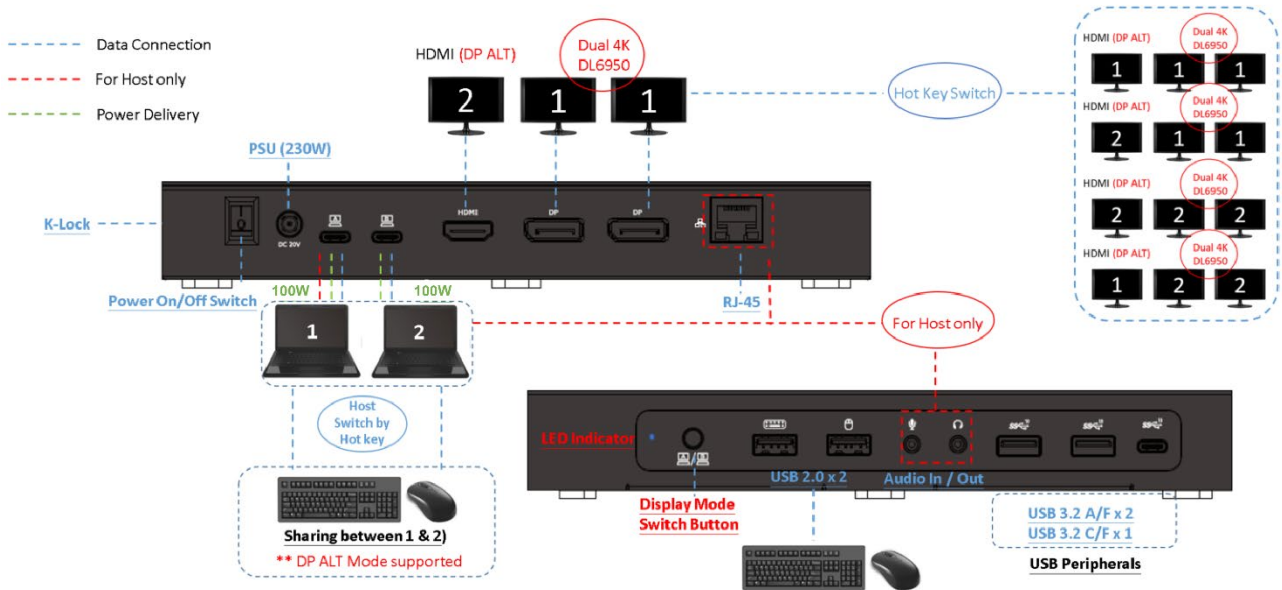


### Rear Panel



Icon	I/O	Description
●	LED Indicator	Shows <b>Power On / Off</b>
A/B	Switch Button	To switch different Display Mode / Ethernet / Audio / Down Stream Ports Between <b>Host 1 and Host 2</b>
Keyboard/Mouse	USB 2.0 Port	To connect with <b>Keyboard / Mouse</b>
Microphone/Headset	Audio In/Out	To connect with <b>Microphone and Speaker</b> or Headset
SS 10	USB Down Stream	USB 3.2 Gen 2 x 1 A/F& C/F Ports ( <b>Down Stream</b> )
A/B	USB Up Stream	USB 3.2 Gen 2 x 1 C/F ( <b>Up Stream</b> ) For (Host 1 & Host 2)
HDMI	HDMI	To connect with <b>HDMI</b> Monitor
DP	DP	To connect with <b>DisplayPort</b> Monitor
RJ-45	RJ-45 (GigaLAN Port)	Connect with Cat.5 / Cat.6 Cable ( <b>10/100/1000 Ethernet</b> )
DC 20V	DC Jack	Connect with <b>External Power Adapter</b> (PSU)
Lock Slot	Lock Slot	The Lock Slot is used in combination with a <b>Laptop Lock</b> to secure the Docking Station

## 1.4 Hardware Installation



1. **Download** the latest drivers for Windows, macOS and Android OS from the following link: <http://www.display-link.com/downloads/>
2. **Connect** the Power adapter (PSU) to the DC power jack on the VT4900 Docking Station.
3. **Connect** the included 2 x USB-C to C cables to USB-C (Upstream) Ports (Host A / B) on the Docking Station and then to an available USB-C Port on each Host computer.
4. **Connect** your DisplayPort / HDMI displays to the corresponding ports on the VT4900 Docking Station.
5. **Connect** any other devices to the Docking Station, including an RJ-45 (Gigabit) for network connection, USB peripherals, speakers and microphones.
6. **Power On** the Docking Station.

## 1.5 Host (Display) Switch Mode

### - Switch by Button



Press once = Switch to next display mode

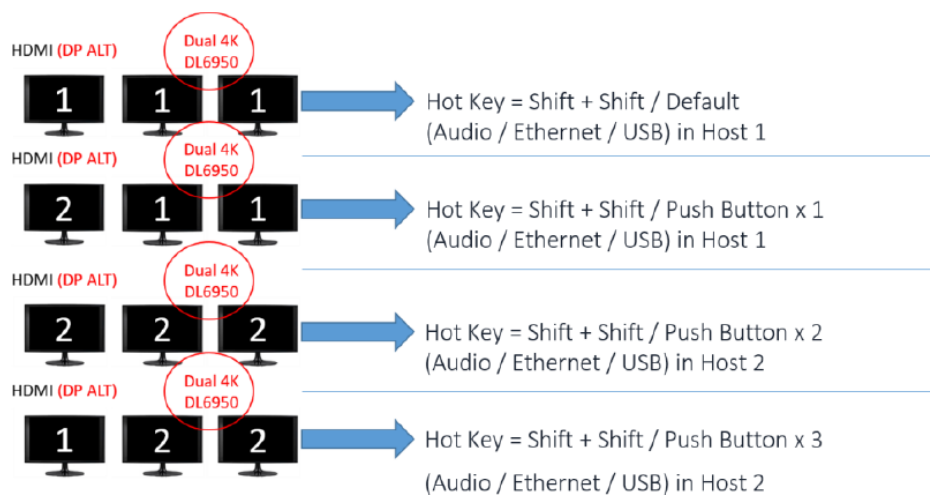
### - Switch by Utility

As of version [3.2.5](#) Select “Switch UFP” = Switch to next display mode

### - Switch by Hot Key

Press “Shift” (Default) two times = Switch to next display mode

 = Display from Host 1 /  = Display from Host 2



## 1.6 Specifications

Model Number	VT4900		
Interfaces	Upstream:	USB 3.2 Gen 2 USB Type-C Cable (1M/5A) x2	
		USB Type-C × 2 (3.2 Gen 2 x1)	
	Downstream:	USB 3.2 Gen 2 Type-A ×2 / USB 2.0 Type-A x2	
		USB 3.2 Gen 2 Type-C x1   Audio x2 (In and Out)	
		HDMI ×1 / DP x2	
Data Transfer Rates	USB 3.2 Gen 2 x1 10Gbps		
Max. Resolutions	HDMI : 4096 x 2160 / 60Hz (when supported by host and display)		
	DP: 4096 x 2160 / 60Hz		
Power - ( PD 3.0 )	100W x 2		
OS Support	Windows 10 and later, Mac OS X 10.10.2 and later		
Environmental	Operating temperature: 0°C~60°C		
	Storage temperature: -20°C~60°C		
	Humidity: <90% RH		
Weight	676g		
Dimensions (W x L x H)	219mm x 88.2 x 32.5mm		

## 2 Driver Installation

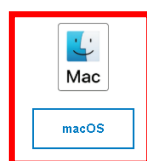
Download the latest drivers (Installation Tool) for Windows, Mac OS and Android OS from the following link: <http://www.displaylink.com/downloads/>

# Downloads

Home | Downloads

## Supported Operating Systems


### INDIVIDUAL INSTALLERS



### 2.1 [DisplayLink Driver – Windows](#)

Download the latest official drivers from the “DisplayLink Website”

## Latest Official Drivers



Windows

DisplayLink USB Graphics Software for Windows

Windows 10, 8.1, 7

Release: 9.3 M2 | 30 Apr 2020


[Download](#)

[Release Notes](#)

### 2.2 [DisplayLink Driver – MAC OS](#)

Download the latest official drivers from the “DisplayLink Website”

## Latest Official Driver



macOS

DisplayLink USB Graphics Software for macOS

Catalina 10.15, Mojave 10.14

Release: 5.2.4 | 26 May 2020

[Download](#)

[Release Notes](#)

Follow the instruction to finish the installation process.

**\*\* (Refer to the page 10, 11 in this User Manual)**



## 2.3 DisplayLink USB Graphics software

### 2.3.1 Introduction

Welcome to the DisplayLink USB Graphics software. This software along with the VT4900 allows you to easily connect extra monitors to your laptop or desktop PCs USB port.

The connected monitors can be configured to either mirror your main screen, or extend the Windows desktop allowing visibility of more applications at the same time. The DisplayLink USB Graphics devices can also be configured to be the primary display.

DisplayLink's Graphics Host Software allows full configuration of all additional USB displays, including:

- Support for Windows 8.1– Windows 10 Update 2020
- Support for up to 6 additional USB Displays
- Resolutions up to 4K / 60Hz (Product dependent)
- Rotation
- Layout of displays

DisplayLink software also provides drivers for Audio and Ethernet built into the **VT4900 USB-C KVM Docking Station**.

### 2.3.2 PC Requirements

The DisplayLink software can be utilized with any Ultrabook, Windows Tablet, Notebook/Laptop or Desktop systems.

The performance of the software is dependent upon the processing power available, as well as the operating system in use. More capable systems will provide overall better performance.

Please find detailed information about the minimum and recommended system specifications needed to run this software in the DisplayLink Knowledge Base

<http://support.displaylink.com/knowledgebase/articles/524951>

### 2.3.3 Installation Setup – Windows 10/8.1/8/7 Setup

**Step 1.** Connect the Docking Station to your Laptop

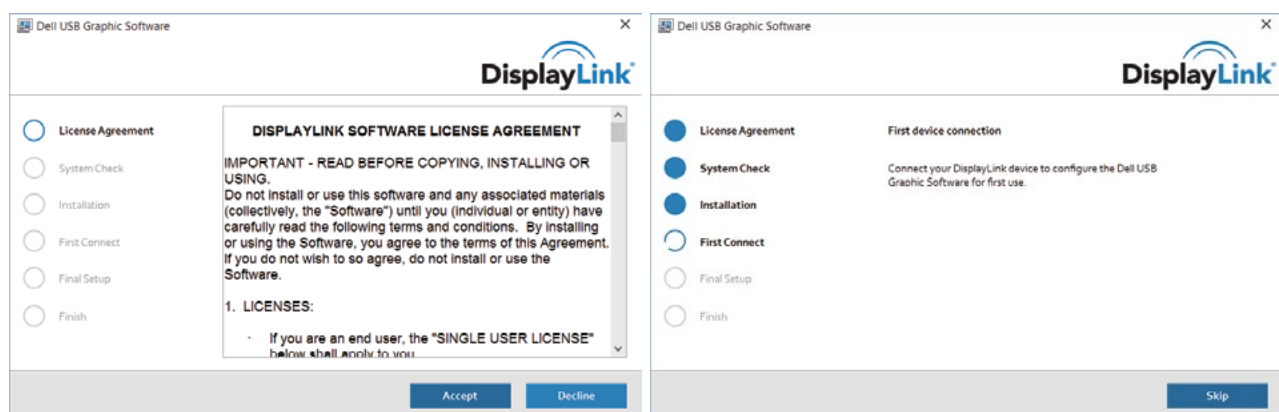
Noted: Note: It is recommended to download the latest drivers from the DisplayLink support website at:

[www.displaylink.com/support](http://www.displaylink.com/support)

**Step 2.** Execute the Setup File which is download from DisplayLink website:



**Step 3.** Follow the screen instructions until the installation is complete.



**Step 4.** Connect your Docking Station and peripherals to your PC (Host)

### 2.3.4 [Installation Setup – macOS 10.12, 10.11, and 10.10](#)

DisplayLink software can be downloaded and installed from the DisplayLink website following the steps below.

Select the 'DisplayLink Software Installer' to begin installation of the DisplayLink driver on your Mac.



This will run a standard Mac installer and will require a reboot once it has completed.



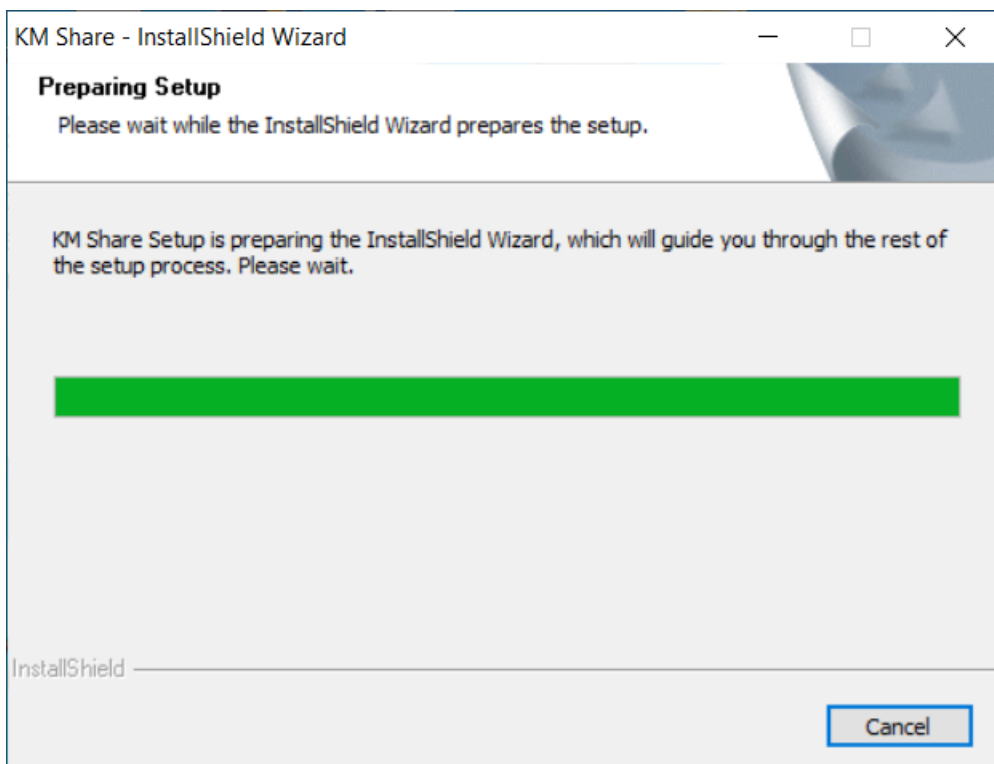
### 3 Host Bridge (Docking Center) Utility (Windows)

#### 3.1 Setup and Installation

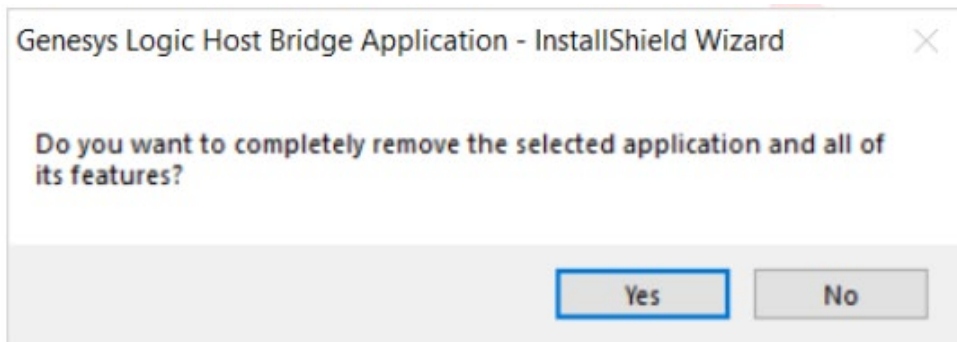
Please follow the steps for the installation.

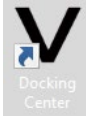
- a. Connect HOST 1 Upstream port  (On Docking Station) to the USB-C port of Host 1, and connect the HOST 2 Upstream port  (On Docking Station) to the USB-C port of Host 2

- b. Double click **DockingCenterAppInstall.exe** to start the installation, as shown below.




c. If previous version of App is installed on your PC, App will ask users to uninstall it. Please uninstall the previous version and get back to this step to reinstall this version.





d. After the installation is completed, double click  icon to start the application.


e. If “User Account Control” (UAC) is shown, please click “Yes”

f. Please run the above steps on a second PC. If the second PC is a Mac, please refer to the Mac user guide.

g. If hub cannot connect to two PCs, or the software is not executed, this icon  indicates NOT connected.

h. If two PCs are running different versions of software, this icon  indicates NOT able to run.

i. This icon  indicates the connection is completed.

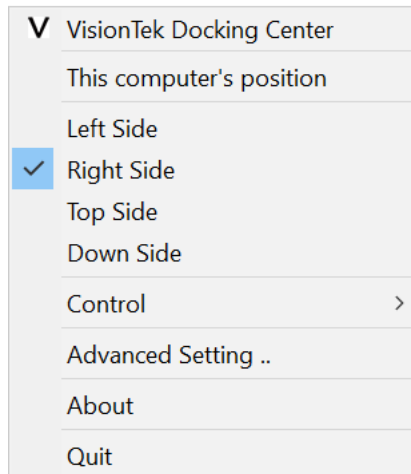
j. This icon  indicates KM Master mode (Host can control client’s keyboard and mouse)

## 3.2 Functions

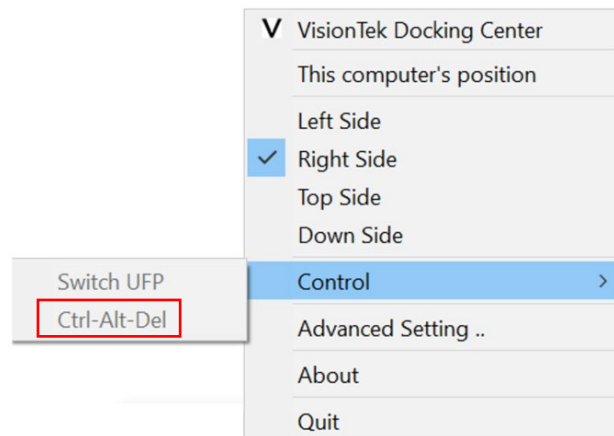
### 3.2.1 Mouse and Keyboard

After connection is successfully configured, the mouse connected to the hub can be moved between the two PCs. Your Keyboard connected to the HUB can also be used to input on the PC that the mouse focuses on.

Users could right click this icon  to setup the relative position of PCs.

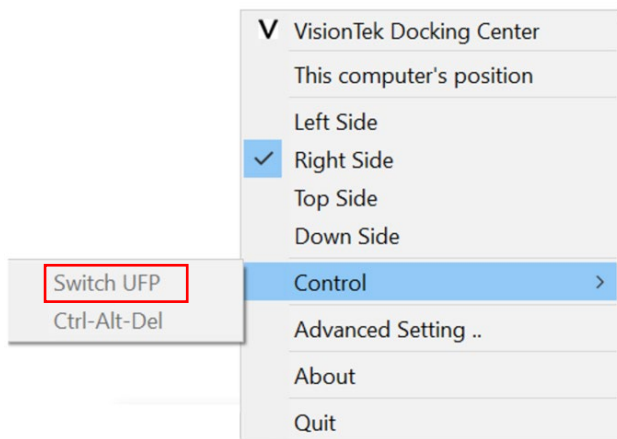


### 3.2.2 Ctrl + Alt + Del



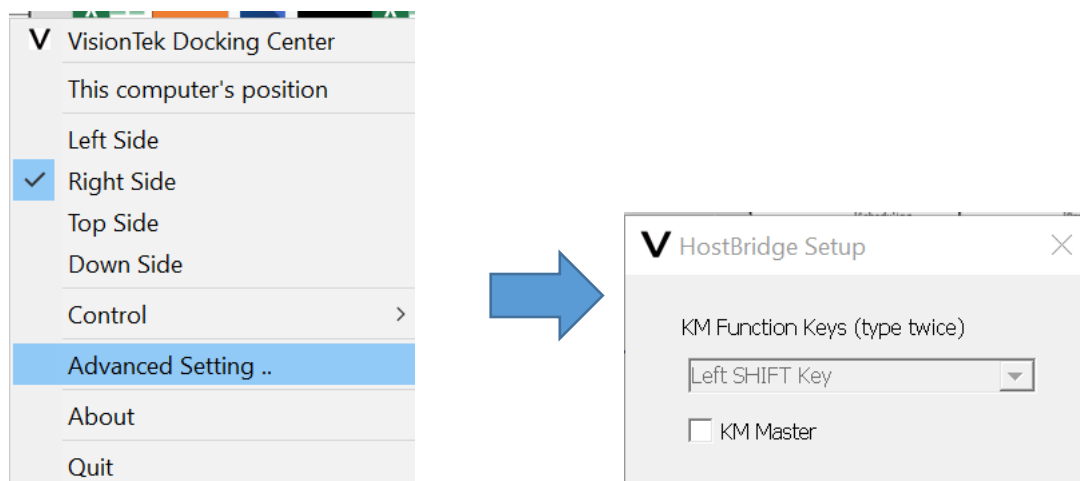
Ctrl + Alt + Del is Windows reserved combination keys, and the combination keys will only work on the PC that the keyboard is connected to.

### 3.2.3 Switch UFP



When the Hub connects to two PCs, devices under the hub will be recognized and enumerated by the Master host, for example, the storage devices will only be shown on the Master PC, while the other PC is set as the slave PC. Switch UFP function will allow users to switch the role of Master and Slave PCs.

### 3.2.4 Advanced Settings



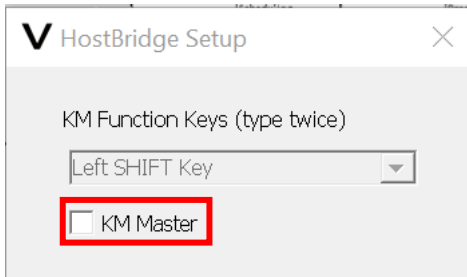
You could set a hot-key to switch UFP, and this key will allow you to switch the roles of PCs quickly.

You can switch the function of KM Master as well.

### 3.2.5 KM Master

KM Master is a setting where you can share the keyboard/mouse from the host side to the client side, even if the software is not installed on the client side.

In this case, you can use “**Left ALT**” + “**Left SHIFT**” to return to the host side.



### 3.2.6 About

Software Information







## 4 Host Bridge (Docking Center) Utility (MAC OS)

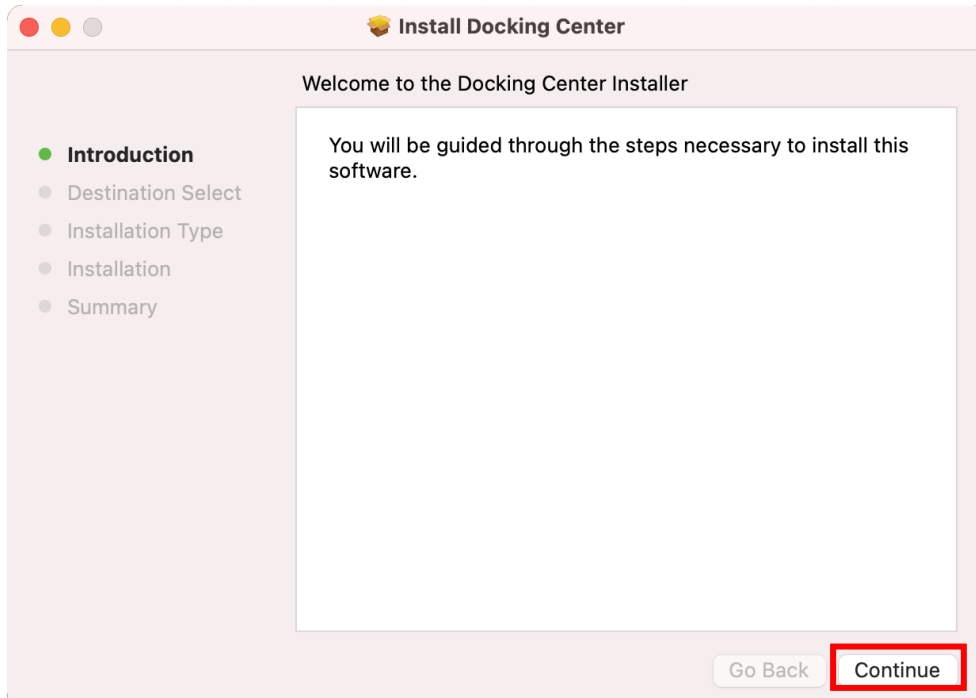
### 4.1 Limitations

1. Not supported by VM simulation systems.
2. KM Share Hub only works on USB3.0/USB3.1 host ports.
3. If one PC/MAC has an abnormal KM Share operation caused by entering sleep, suspend or restart, please unplug both upstream ports, restart the software on both PC and MAC, and re-plug both upstream ports to get back to normal operation.

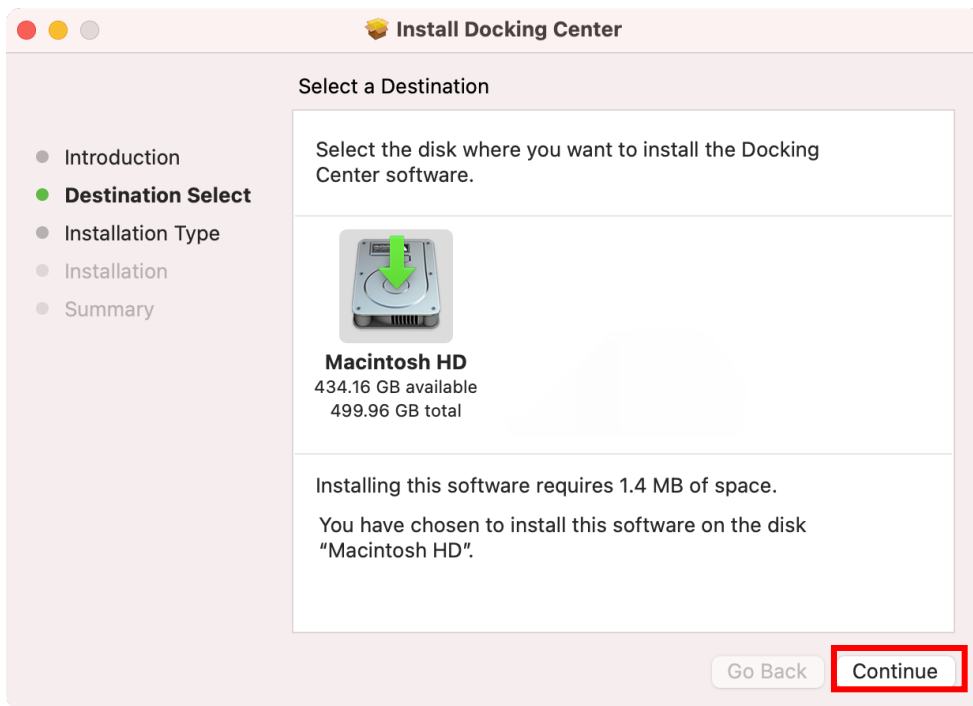
### 4.2 Setup and Installation

Please follow the steps below for the installation.

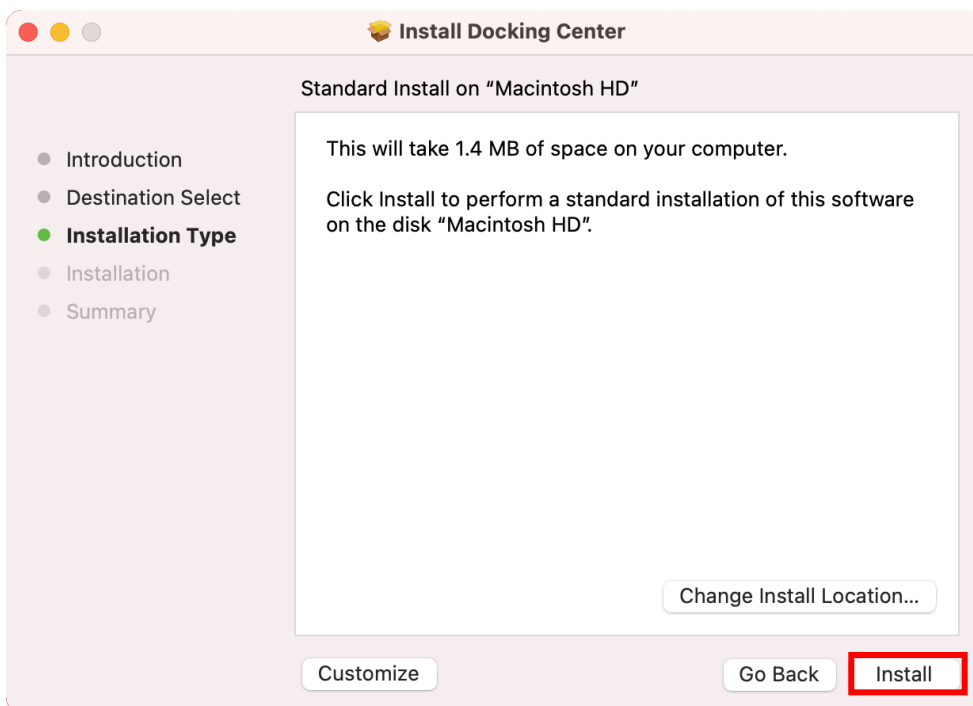
- a. Connect HOST 1 Upstream port  (On Docking) to the USB-C port of Host 1, and connect the HOST 2 Upstream port  (On Docking) to the USB-C port of Host 2
- b. Click **DockingCenterMac.pkg** to start the installation, as shown below.



- c. Click **“Continue”**

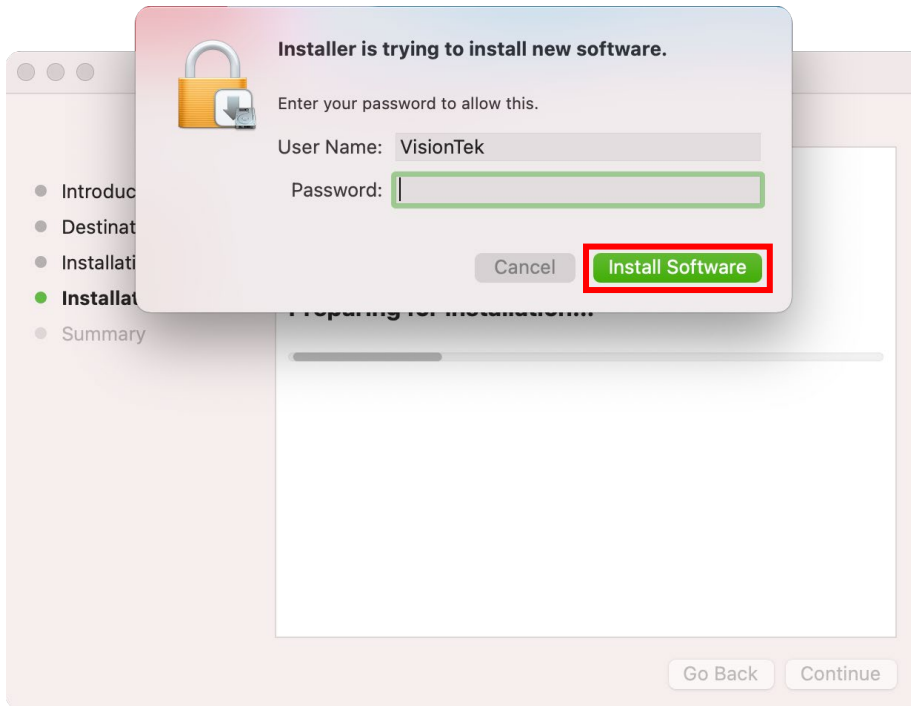


d. Click **"Continue"**

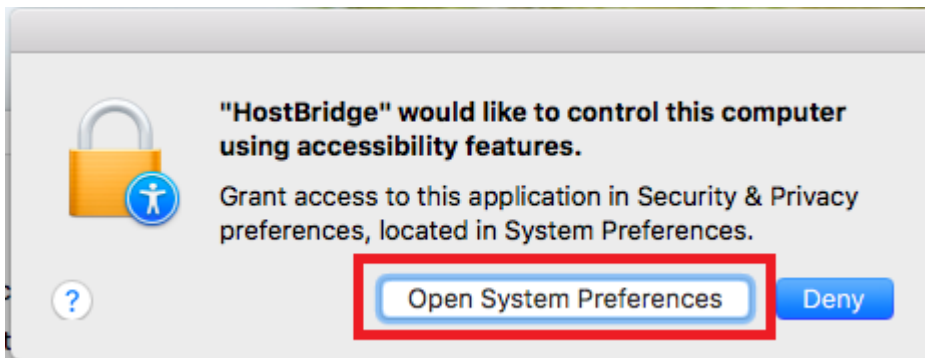


e. Click **"Install"**

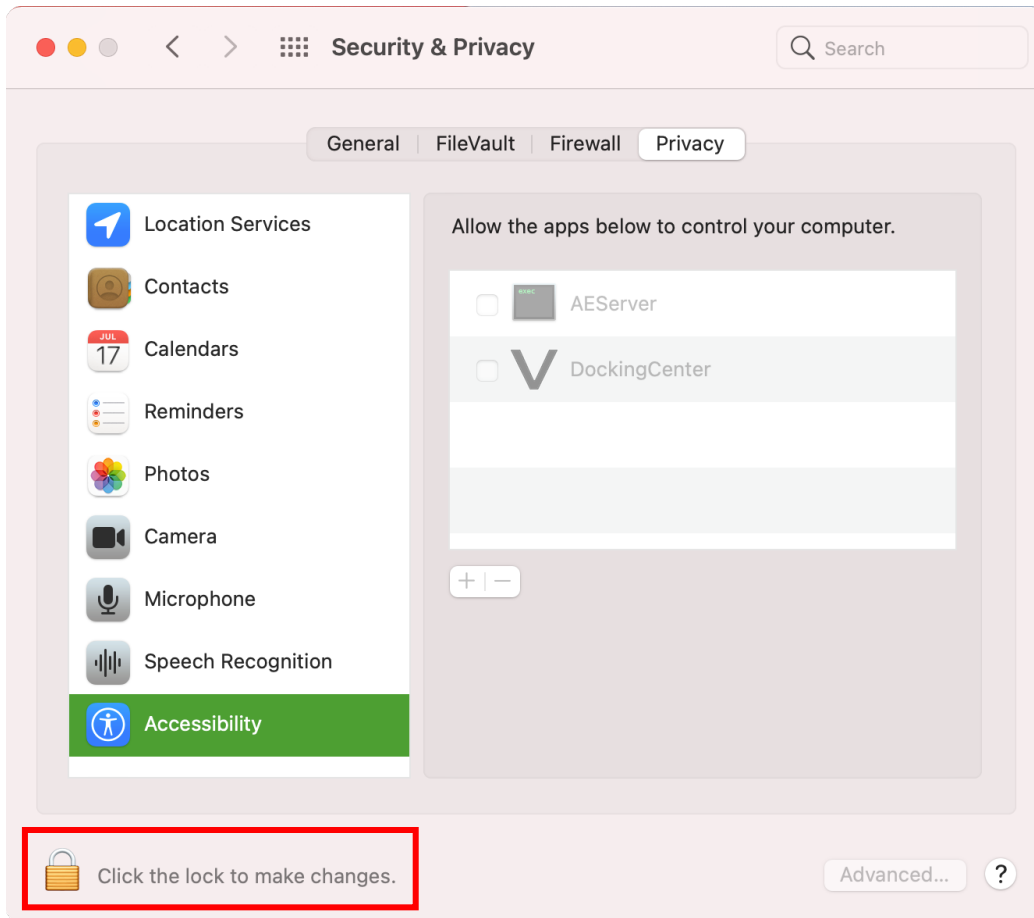
f. Input **“User Name”** and **“Password”**, and press enter or click **“Install Software”**.



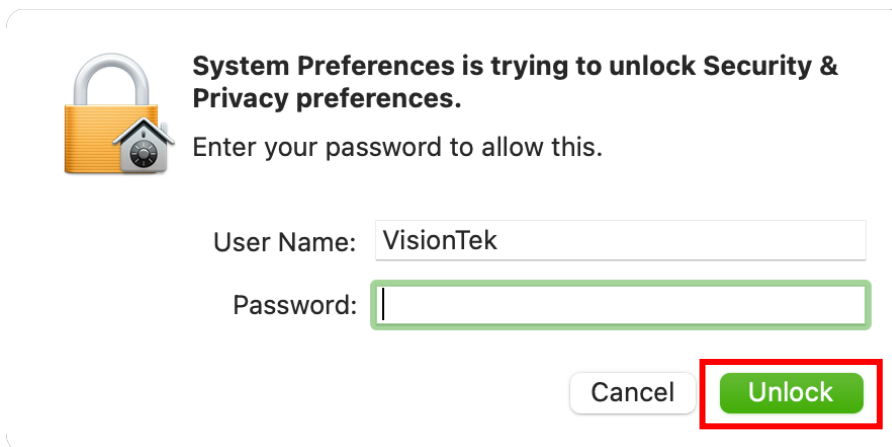
g. Click **“Open System Preferences”**



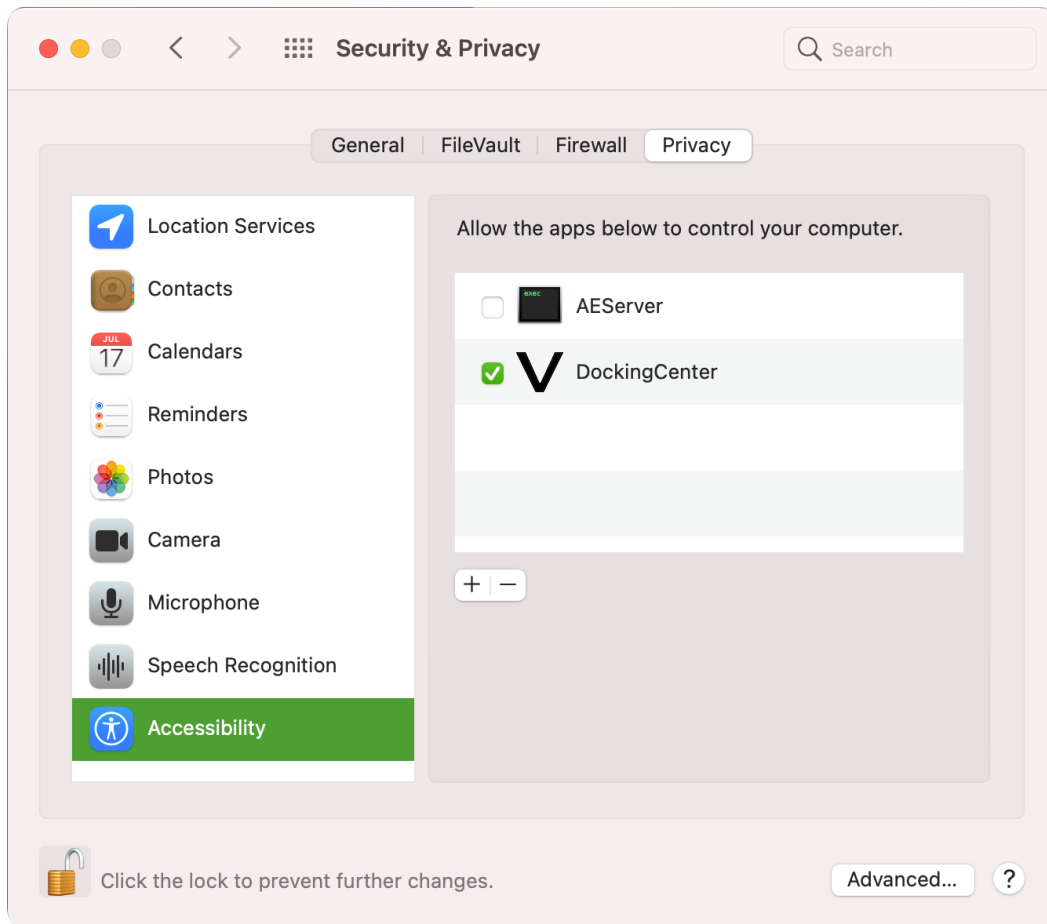
h. Click **“Lock”**



i. Input **“User Name”** and **“Password”**, and press enter or click **“Unlock”**

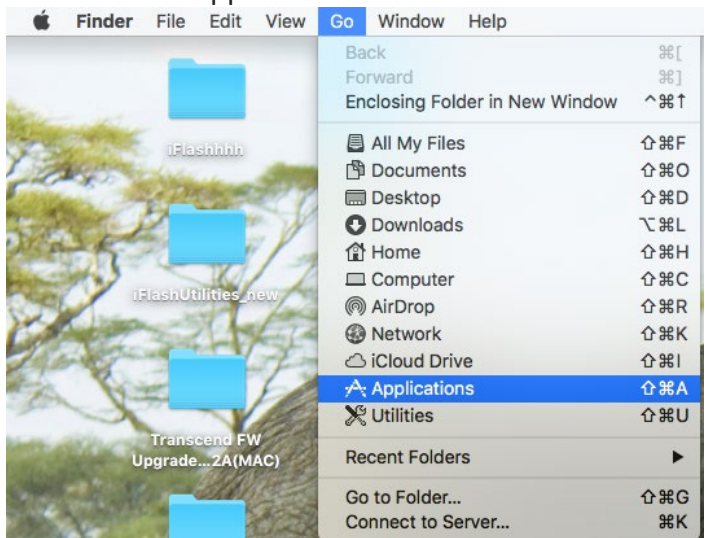


j. Click “**DockingCenter**” and close the window.

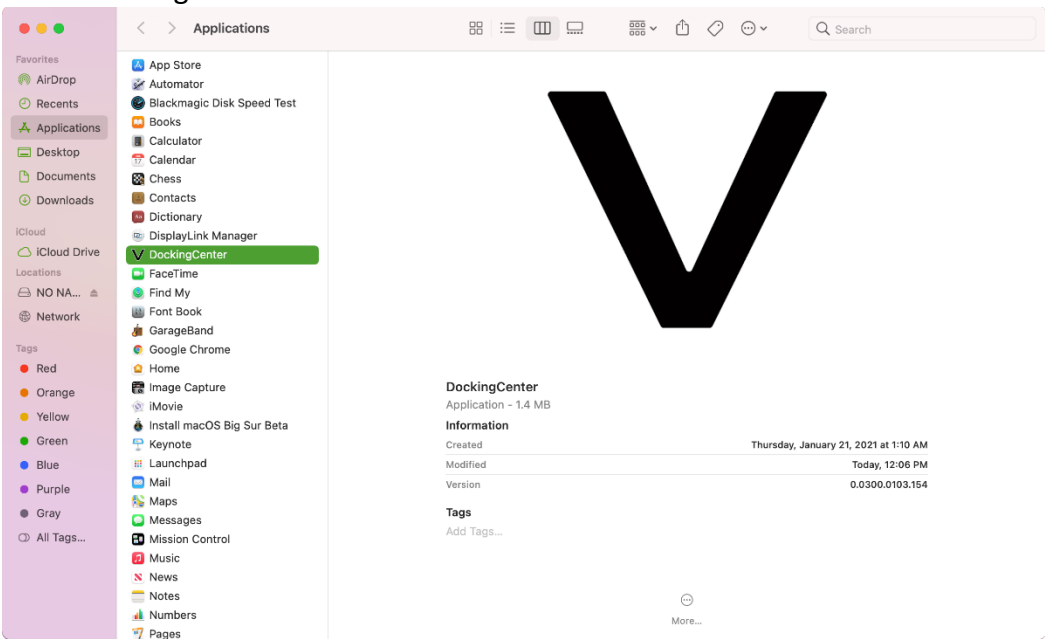


### 4.3 Ready to Use

Click “GO” ➤ “Applications”.



Start “DockingCenter”.



## 4.4 Functions

When KM Share is started, there are four statuses.



Indicates NON-Connected



Indicates Connected



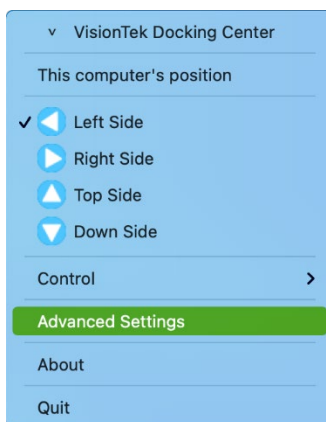
Indicates ERROR (it may be caused by mismatched hardware or software)



Indicates KM Master mode (Host can control client's keyboard and mouse)

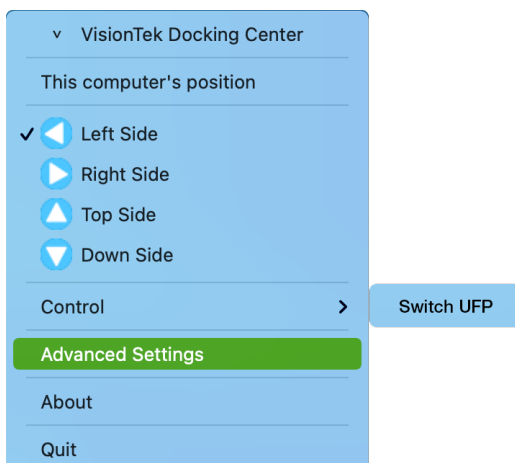
### a. Mouse and Keyboard

After the connection has been successfully built-up, the mouse on both computers or on the Hub can be moved over between the two computers, and the Keyboard can be used to input on the computer that mouse focus on.



### b. Switch UFP

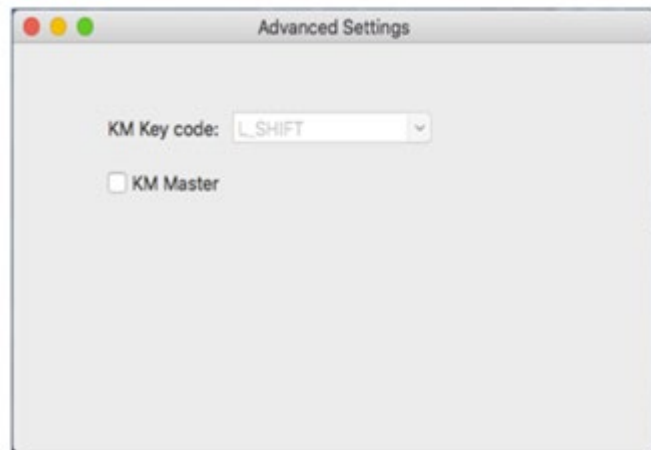
When the Hub connects to two host platforms, devices connected to the hub will be recognized and enumerated by the master host, for example, the storage devices will only be shown on Master side, with the other side being set to slave or client host. Switch the UFP function to allow you to switch the roles of master and client host



### c. Advanced Settings

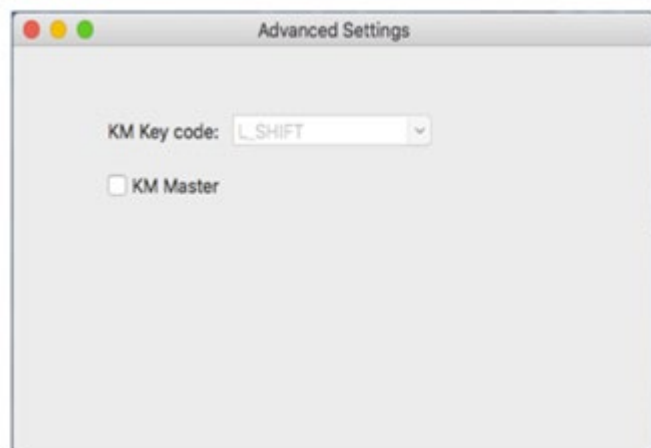
#### - UFP Switch Hotkey Setting

You can set a hot-key to switch UFP, and this will allow you to switch the role of the hosts.



#### - **KM Master**

KM Master Mode can only be enabled by the master host platform. When “KM Master” mode is enabled, the application icon becomes yellow. At this time, you can use the host’s keyboard and mouse to control the client’s side without requiring the KM Share application. You can also press the hot key (left ALT + left SHIFT) to move cursor back to the master host side from the client side.



#### - **About**

Software Information





## 5 Trouble Shooting

SYMPTOM	POSSIBLE SOLUTION
Display Mode Switch is not functioning	Unplug from the Host 1 / 2 wait 10 seconds, and then reconnect
“Utility” is disconnected or shows abnormal information	Close the Utility and reactive again
There is no video on the monitor that is attached to the dock.	Check the video connection cables Unplug the power, wait 10 seconds, and then reconnect
The video on the attached monitor is distorted or corrupted.	Check video connection cables Check the video resolution under Control Panel\Display\Change Display Setting
The video on the attached monitor is not displaying in extended mode.	Press Windows logo key and P Toggle the display mode
The audio jacks are not functioning.	Right-click the Sound icon on the System Tray Select Playback devices Right-click and check both Show Disconnected Devices and Show Disabled Devices Right-click USB Audio device and select Set as default
USB ports are not functioning on the dock.	Turn off the dock and unplug from the power, wait 10 seconds, turn on the power and then reconnect again
DisplayLink Driver is not able to install.	You can download the latest DisplayLink driver from: <a href="http://www.displaylink.com/downloads/">http://www.displaylink.com/downloads/</a>
Laptop failed to wake up from Ethernet port	Check the settings under BIOS Items to make sure laptop supports wake-up-from-Ethernet port function

\*\* Other issues on Display might refer to DisplayLink Troubleshooting: General:

<https://support.displaylink.com/knowledgebase/topics/80206-troubleshooting-general>

## 6 Regulatory Compliance

### FCC Conditions

This equipment has been tested and found to comply with Part 15 of the FCC Rules.

Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference
- (2) This device must accept any interference received. Including interference that may cause undesired operation.

### CE

This equipment is in compliance with the requirements of the following regulations:

EN 55 022: CLASS B

### WEEE Information

For EU (European Union) member users:

According to the WEEE (Waste Electrical and Electronic Equipment) Directive, do not dispose of this product as household waste or commercial waste. Waste electrical and electronic equipment should be appropriately collected and recycled as required by practices established for your country. For information on recycling of this product, please contact your local authorities, your household waste disposal service or vendor where purchased.

