

# Owner's Manual Havis Docking Station For Dell Latitude Rugged Notebooks

## DS-DELL-430 Series

DS-DELL-431

DS-DELL-433

DS-DELL-435

DS-DELL-431-3

DS-DELL-433-3

DS-DELL-435-3



DS-DELL-430-SERIES\_OMN\_10-24

# Before Beginning

Havis is pleased to provide this Owner's Manual to aid in the proper installation and use of the DS-DELL-430 Series Docking Station for the Dell Latitude Rugged Notebooks.

For questions regarding the set-up of your DS-DELL-430 Series Docking Station, please contact Havis at 1-800-524-9900 or visit [www.havis.com](http://www.havis.com) for additional product support and information.

## **WARNING**

## **AVERTISSEMENT**

- NEVER STOW OR MOUNT THE DOCKING STATION DIRECTLY IN A VEHICLE AIRBAG DEPLOYMENT ZONE.
- DO NOT USE THE COMPUTER WHILE DRIVING.
- DO NOT PLACE METAL OBJECTS OR CONTAINERS OF LIQUID ON TOP OF THE DOCKING STATION.
- IF A MALFUNCTION OCCURS, IMMEDIATELY UNPLUG THE POWER SUPPLY AND REMOVE THE TABLET.
- NE JAMAIS PLACER OU MONTER LA STATION D'ACCUEIL DIRECTEMENT DANS LA ZONE DE DÉPLOIEMENT DES COUSSINS GONFLABLES D'UN VÉHICULE.
- NE PAS UTILISER L'ORDINATEUR EN CONDUISANT.
- NE PLACEZ PAS D'OBJETS MÉTALLIQUES OU DE CONTENANTS DE LIQUIDE SUR LE DESSUS DE LA STATION D'ACCUEIL.
- EN CAS DE DYSFONCTIONNEMENT, DÉBRANCHEZ IMMÉDIATEMENT LE BLOC D'ALIMENTATION ET RETIREZ LA TABLETTE.

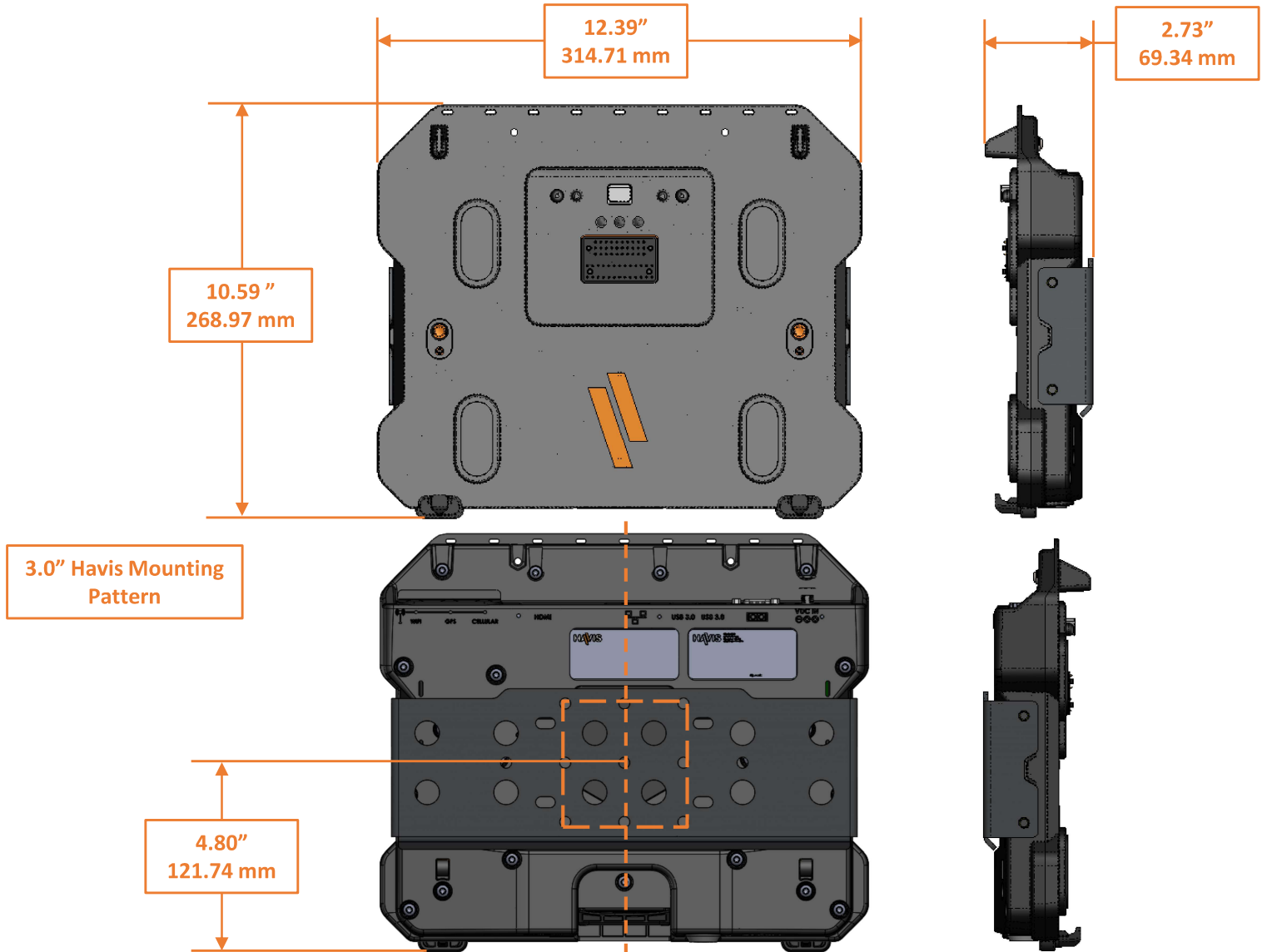
## **CAUTION**

## **ATTENTION**

- READ ALL INSTRUCTIONS THOROUGHLY BEFORE BEGINNING INSTALLATION.
- THIS PRODUCT IS NOT CLASSIFIED WITH AN IP (INGRESS PROTECTION) RATING. DO NOT STORE, INSTALL, OR OPERATE THE DOCKING STATION WHERE WATER, MOISTURE, STEAM, DUST, ETC. ARE PRESENT.
- FOR THE DS-DELL-431, DS-DELL-431-3, DS-DELL-435, & DS-DELL-435-3 DOCKING STATIONS: DO NOT CONNECT DIRECTLY TO VEHICLE VOLTAGE SOURCE: THIS PRODUCT REQUIRES A CERTIFIED, AUTOMOTIVE GRADE, DELL APPROVED 120W POWER SOURCE RATED FOR A CONTINUOUS, REGULATED 19.5 VDC OUTPUT (*HAVIS PART NUMBER LPS-196 OR EQUIVALENT*). FAILURE TO COMPLY WITH THIS REQUIREMENT WILL CAUSE PRODUCT DAMAGE THAT IS NOT REPAIRABLE AND IS NOT COVERED UNDER WARRANTY.
- FOR THE DS-DELL-433 & DS-DELL-433-3 DOCKING STATIONS (CRADLES): DO NOT CONNECT DIRECTLY TO VEHICLE VOLTAGE SOURCE: THE DELL LATITUDE REQUIRES A CERTIFIED, DELL APPROVED USB-C POWER SOURCE (*HAVIS PART NUMBER LPS-182 OR EQUIVALENT*). FAILURE TO COMPLY WITH THIS REQUIREMENT WILL CAUSE PRODUCT DAMAGE THAT IS NOT REPAIRABLE AND IS NOT COVERED UNDER WARRANTY.
- THE DS-DELL-430 SERIES DOCKING STATION IS ONLY COMPATIBLE WITH THE DELL LATITUDE RUGGED FAMILY OF NOTEBOOKS.
- USE ONLY THE SPECIFIED POWER SUPPLY (PART # LPS-196, LPS-197 & LPS-182) WITH THIS DOCKING STATION.
- DO NOT CONNECT CABLES INTO PORTS OTHER THAN WHAT THEY ARE SPECIFIED FOR.
- DO NOT LEAVE THE DOCKING STATION IN A HIGH TEMPERATURE ENVIRONMENT (GREATER THAN 85°C, 185°F) FOR AN EXTENDED PERIOD OF TIME (MORE THAN 72 HOURS).

# Specifications

	Configuration	Description	Power Options	Dock Input Voltage Requirement
Docking Station Information	DS-DELL-431	Advanced Electronics	External Power Supply	19.5 (± 5%) VDC
	DS-DELL-431-3	Advanced Electronics, Antenna Pass-Thru		
	DS-DELL-435	Standard Electronics	None	None
DS-DELL-435-3	Standard Electronics, Antenna Pass-Thru			
Dimensions	2.73" (6.93 cm) H x 12.39" (31.47 cm) W x 10.59" (26.90 cm) D			
Weight	Dock: 3.30 lbs. (1.50 kg)   Mounting Bracket: 1.42 lbs. (0.64 kg)			
Operating	-20° C to 63° C (-4° F to 145° F)			
Storage	-40° C to 85° C (-40° F to 185° F)			



# Computer Set-Up and Port Specifications

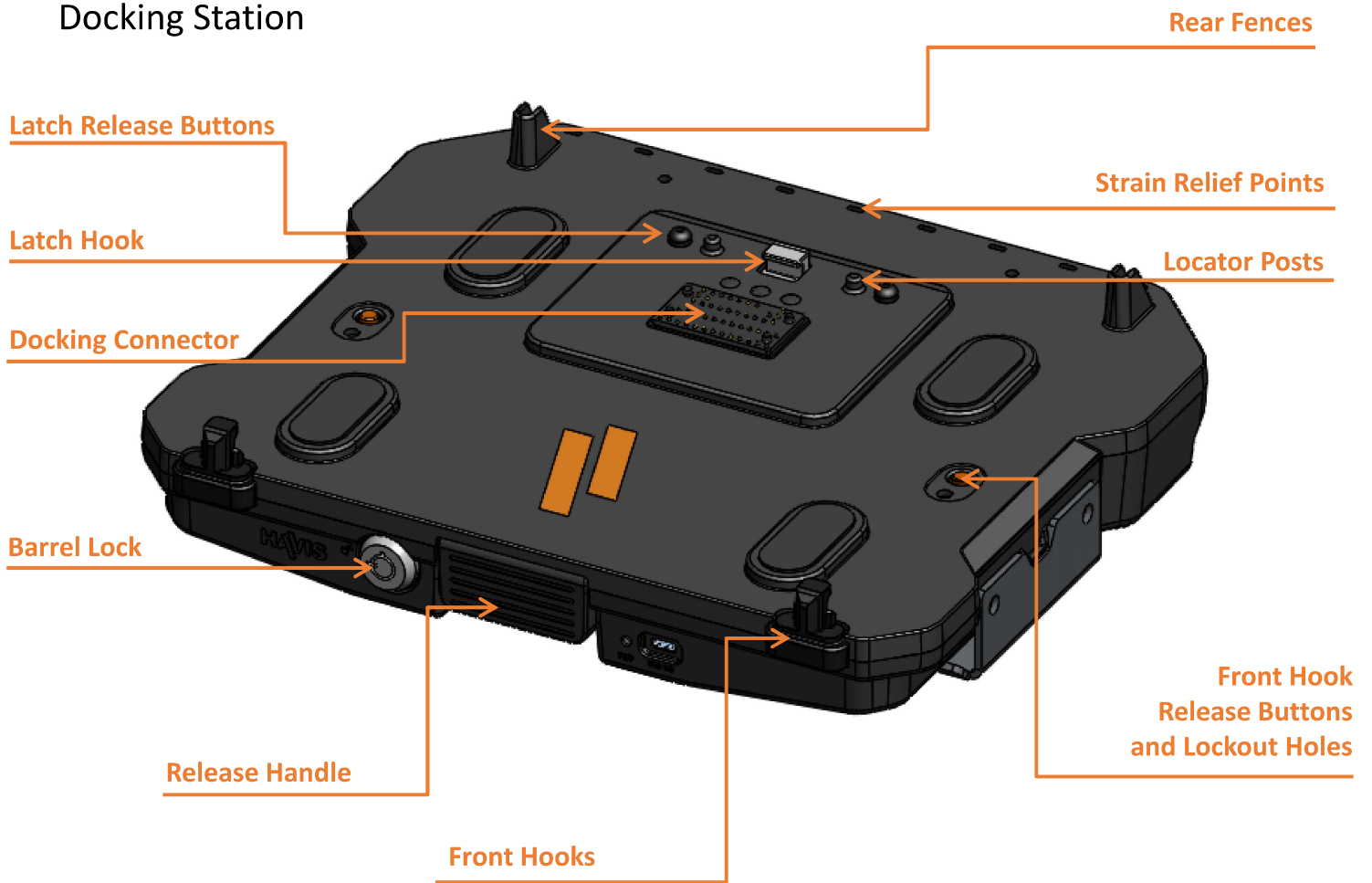
Drivers for the Dell Pro Rugged 13 and 14 Notebooks when used with the Havis DS-DELL-430 docking station:

ITEM	DESCRIPTION	VENDOR	DEVICE DRIVER DOWNLOADS	Version	Specification
1	HDMI	Synaptics	<a href="https://www.synaptics.com/products/displaylink-graphics/downloads">https://www.synaptics.com/products/displaylink-graphics/downloads</a>	Ver 11.4.9842.0 for Windows (or later)	HDMI Rev 1.3a Max Resolution: 2560x1440@50Hz
2	Serial Port	FTDI	<a href="https://ftdichip.com/drivers/vcp-drivers/">https://ftdichip.com/drivers/vcp-drivers/</a>	Ver 2.12.36.4U for Windows (or later)	Pin 9 (5V/1A)
3	Front USB	Microchip	WIN OS PnP	-	USB 3.2 Gen 1 (5V/1.5A)
4	Rear USB (3x)	Microchip	WIN OS PnP	-	USB 3.2 Gen 1 (5V/0.9A)
5	Ethernet	Realtek	<a href="https://www.realtek.com/Download/List?cate_id=585">https://www.realtek.com/Download/List?cate_id=585</a>	Ver 1153.15.20.327 for Windows	1 Gbps MAX

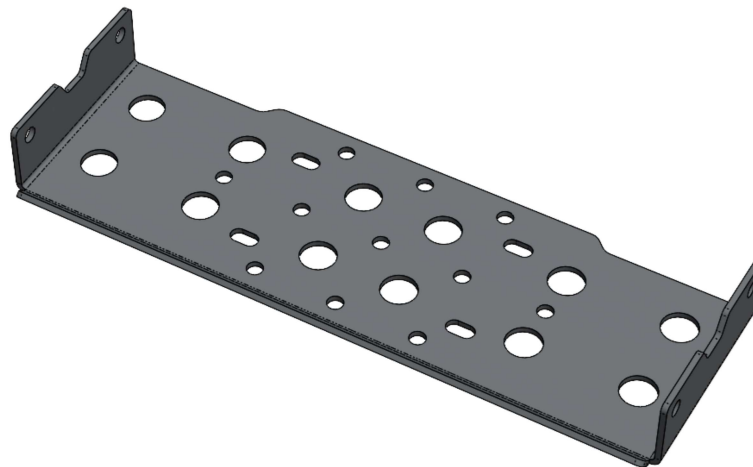


# Parts Included

## Docking Station



## Mounting Bracket (No. 24565)



## Parts Included (continued)

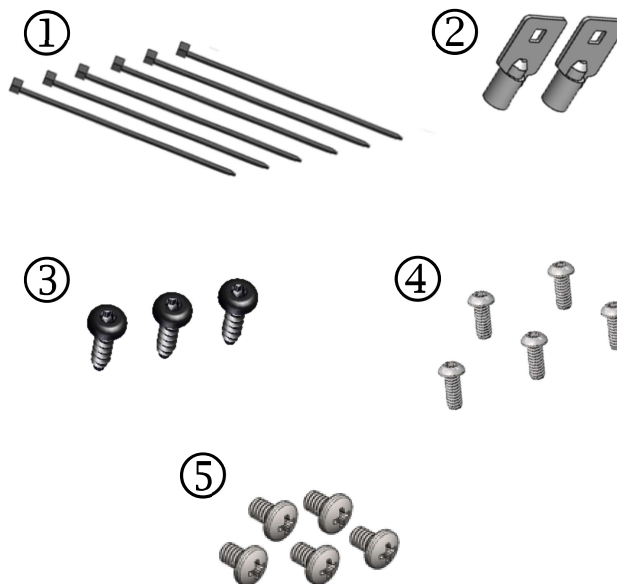
### Hardware Kit (No. 25296)

This Hardware Kit includes:

1. Zip Ties (4)
2. Keys (2)
3. 12mm long Pan Head Lockout Screws (3)
4. 1/4" – 20 x 5/8" Long Button Head Screws (5)
5. 1/4" – 20 x 3/8" Long Pan Head Screws (5)

Tools required for installation:

- 5/32" Hex Drive  
(For attaching Mounting Bracket to Motion Device with Button Head 1/4"-20 Screws)
- #3 Phillips Drive  
(For attaching Docking Station to Mounting Bracket with Pan Head 1/4"-20 Screws)
- T10 Torx Drive  
(For 12mm long Lockout Screws)



## Antenna Identification

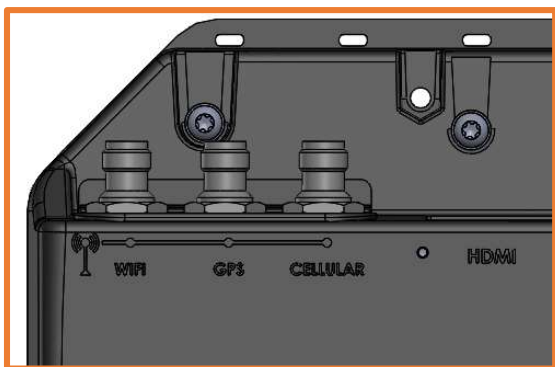
DS-DELL-431-3, DS-DELL-432-3, DS-DELL-433-3, DS-DELL-435-3, DS-DELL-436-3

**A – WIFI**

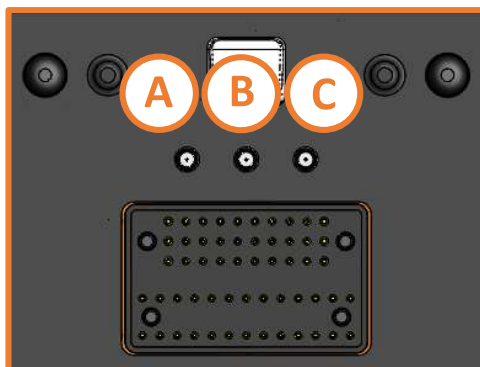
**B – GPS**

**C – CELLULAR**

Rearward Facing  
Antenna Connectors (TNC)



Laptop Interface



Note: Antenna connectivity for this system is controlled in the computer BIOS

# Port Replication Capability

## Forward Facing Ports

(DS-DELL-431, DS-DELL-431-3, DS-DELL-435, DS-DELL-435-3)

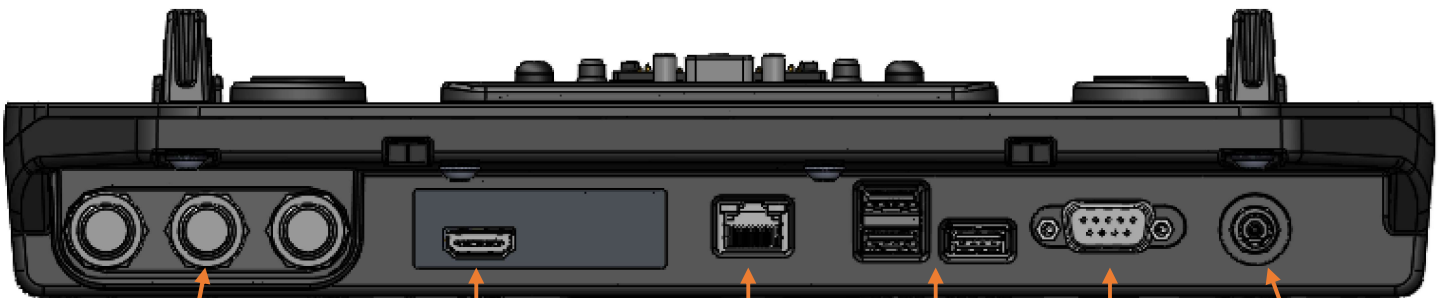


Power LED Indicator  
Powered (Undocked): Red  
Powered (Docked): Green

USB Type C  
3.2 Gen 1  
Data & Charge (1.5A MAX)  
[No Display, Thunderbolt, or USB-PD]

## Rearward Facing Ports – Advanced Port Replication

(DS-DELL-431, DS-DELL-431-3)



Antenna (TNC)  
Optional: Part IDs  
DS-DELL-431-3

HDMI 1.3a

Ethernet RJ45  
Gigabit LAN  
10/100/1000Mb/s



USB Type A  
3.2 Gen 1  
(0.9A MAX)  
(x3)

Serial  
Power On PIN #9  
(5V/1A)



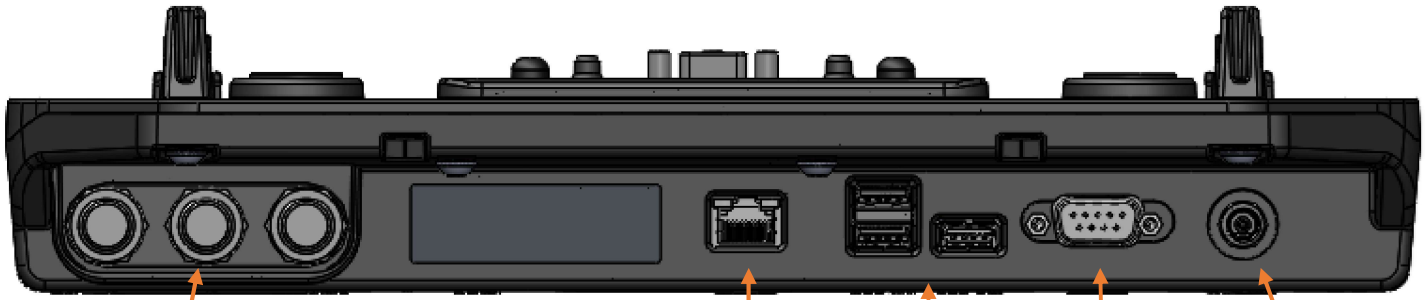
Power Input  
19.5 VDC IN



Ethernet Port	LINK	ACTIVITY
No Connection	OFF	OFF
10/100/1000Mb/s Connection, No Traffic	GREEN	OFF
10/100/1000Mb/s Connection, Traffic	GREEN	YELLOW BLINKING

# Port Replication Capability

Rearward Facing Ports – Standard Port Replication  
(DS-DELL-435, DS-DELL-435-3)



Antenna (TNC)  
Optional: Part IDs  
DS-DELL-435-3

Ethernet RJ45  
Gigabit LAN  
10/100/1000Mb/s



USB Type A  
3.2 Gen 1  
(0.9A MAX)  
(x3)

Serial  
Power On PIN #9  
(5V/1A)



Power Input  
19.5 VDC IN

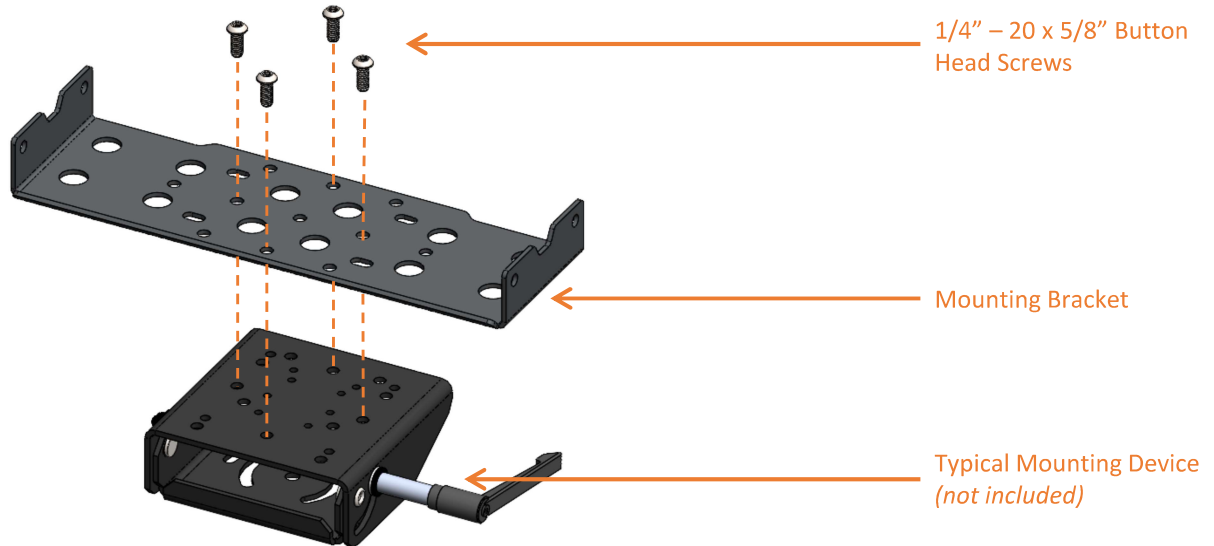


Ethernet Port	LINK	ACTIVITY
No Connection	OFF	OFF
10/100/1000Mb/s Connection, No Traffic	GREEN	OFF
10/100/1000Mb/s Connection, Traffic	GREEN	YELLOW BLINKING

# Installation

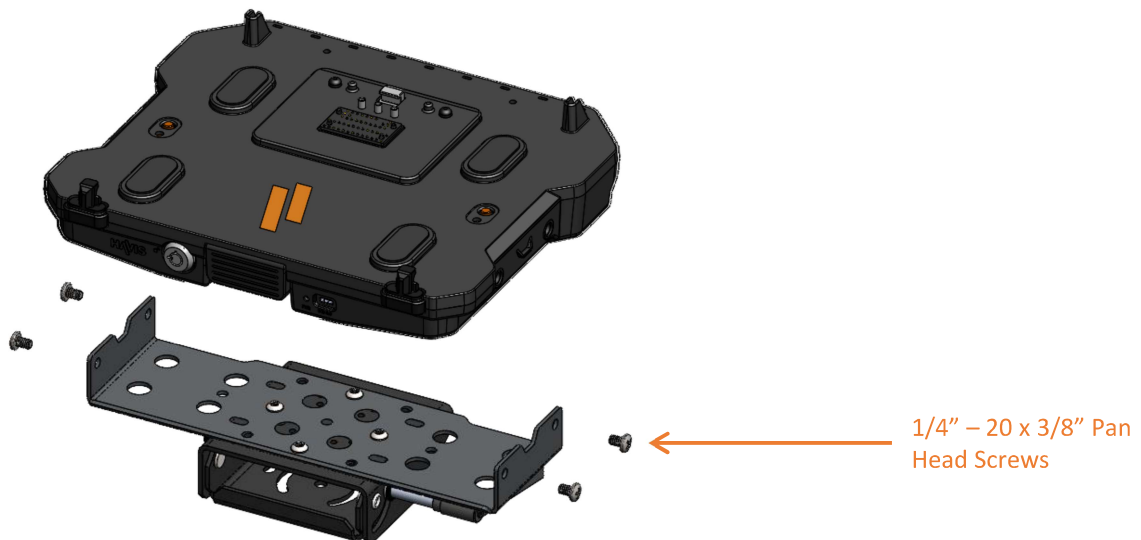
- 1) Remove the Mounting Bracket from the packaging. Install the Mounting Bracket to the Motion Device using (4) 1/4"-20 x 5/8" long button head screws (Hardware Kit Item 4). Torque screws to 80 in-lbs (9.0Nm)  $\pm$  10%.

**NOTE:** Numerous hole patterns present in Mounting Bracket will accommodate Havis Motion Devices as well as most competitors'. Additional hardware may be required for mounting depending on the mounting device selected.



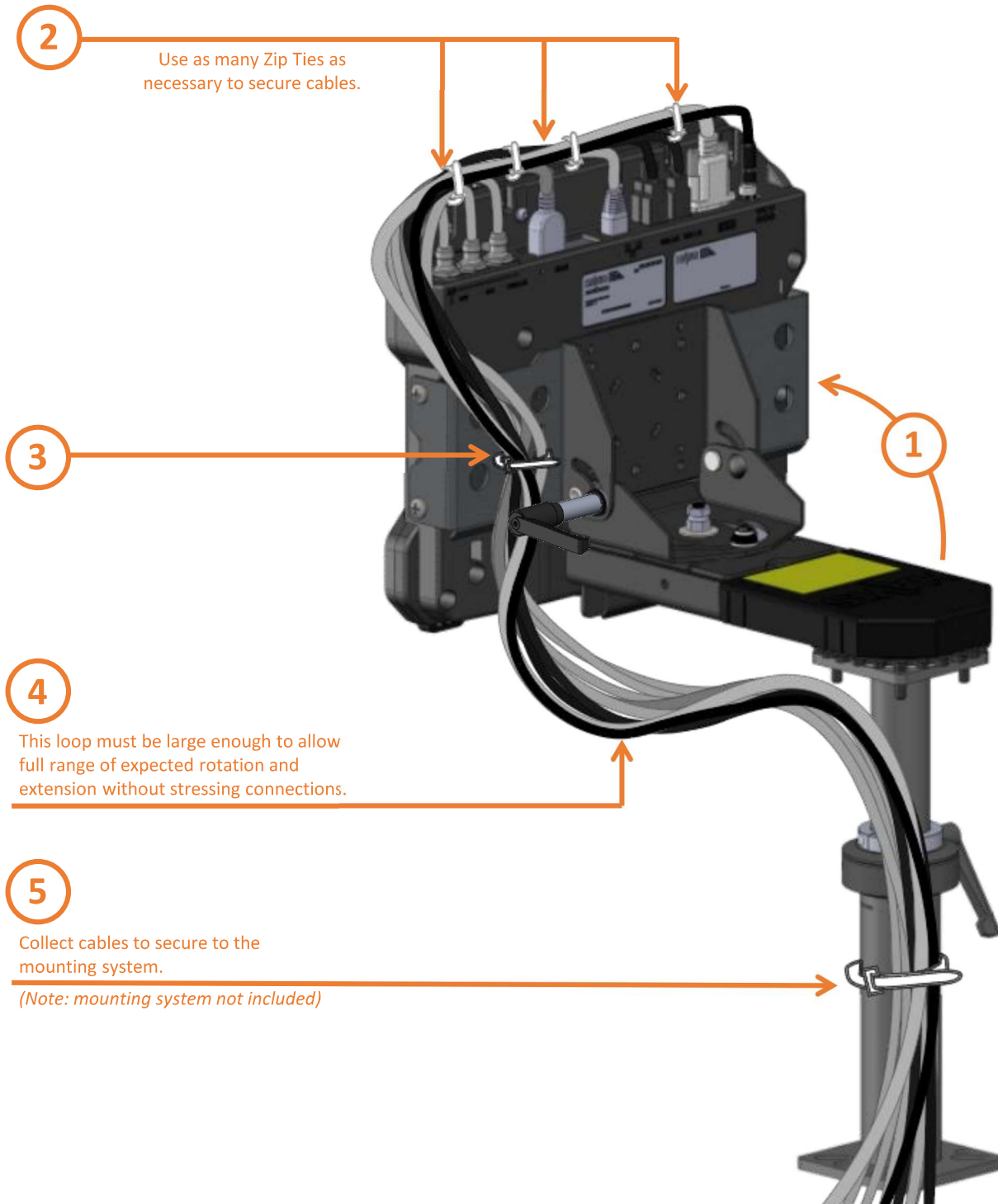
**NOTE:** We recommend applying a drop of medium strength (blue) thread locking adhesive to the threads of all fasteners.

- 2) Lower the Docking Station to the Mounting Bracket as shown and secure with (4) 1/4"-20 x 3/8" long pan head screws (Hardware Kit Item 5). Torque screws to 80 in-lbs (9.0Nm)  $\pm$  10%.



# Cable Management

- 1) Orient the Docking Station in a position that is comfortable to work with.
- 2) Install all cables that are necessary for computing needs.
- 3) Use Zip Ties (Hardware Kit Item 1) to strain relieve cables to the Strain Relief Points, routing all cables together to the front of the Docking Station.
- 4) Secure cable bundle to the Mounting Bracket with a supplied Zip Tie.
- 5) Create a service loop with cable bundle to ensure that no tension is on the connectors and to enable intended motion.
- 6) Tie off cables onto a stationary part of the mounting system.  
(Mounting system not included with Docking Station)





# Operation – Initial Laptop Adjustment

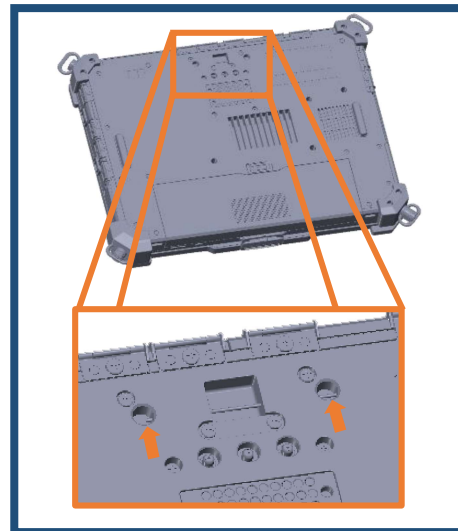
## CAUTION

BECAUSE DOCKING STATION IS COMPATIBLE WITH MULTIPLE COMPUTER MODELS, FAILURE TO PROPERLY ADJUST FOR YOUR SPECIFIC COMPUTER MODEL MAY RESULT IN LOSS OF PROPER FUNCTION OR DAMAGE TO LAPTOP OR DOCKING STATION.

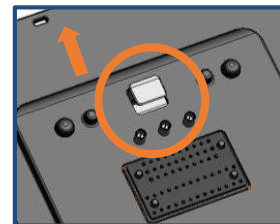
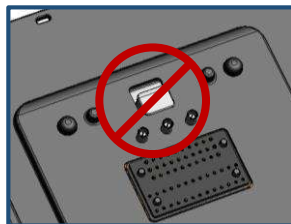
DO NOT FORCE LAPTOP ONTO DOCKING STATION. IF THERE IS RESISTANCE, CHECK THE ALIGNMENT OF LAPTOP ON DOCKING STATION.



Your notebook's Alignment Sockets will align with the Docking Station's Locator Posts.

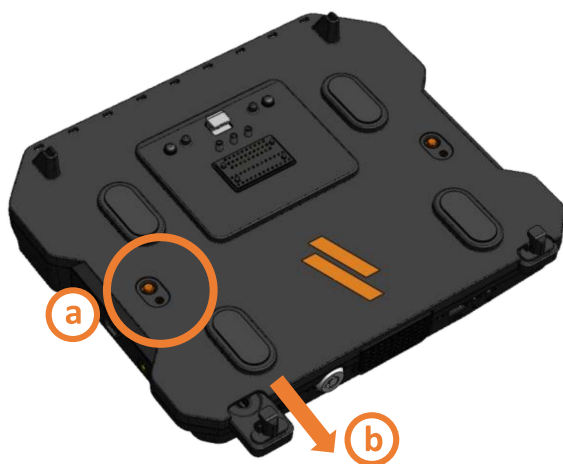


- 1) Ensure the Rear Latch is in the fully released position prior to docking. Hook should be towards the rear of the docking station. If hook is not in the fully released position, pull the Release Handle.



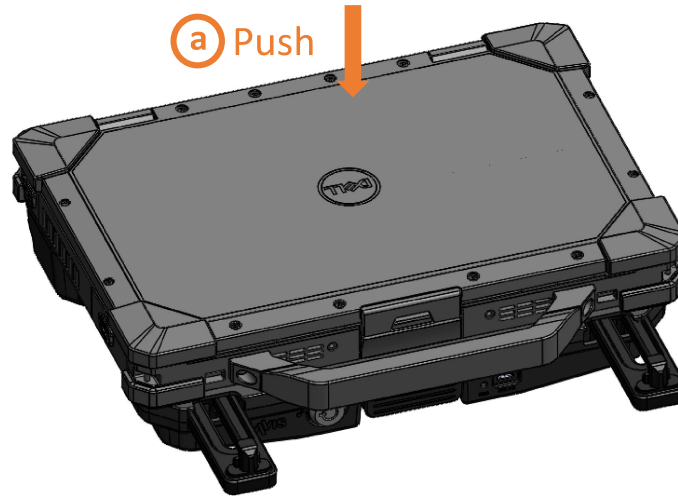
There will be an audible 'click' and Latch Hook will remain in the unlatched position.

- 2) Release each Front Hook individually by; **(a)** - pressing and holding the Front Hook Release Button and, **(b)** - pulling the Front Hook to its fullest extension.

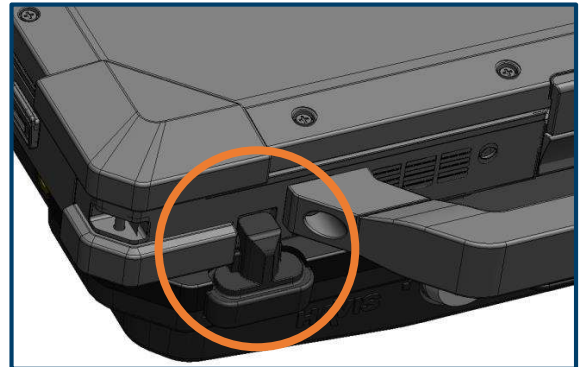
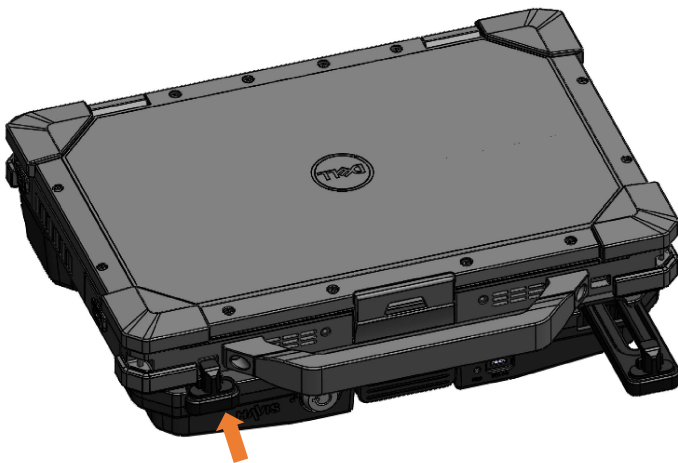


## Operation – Initial Laptop Adjustment *(continued)*

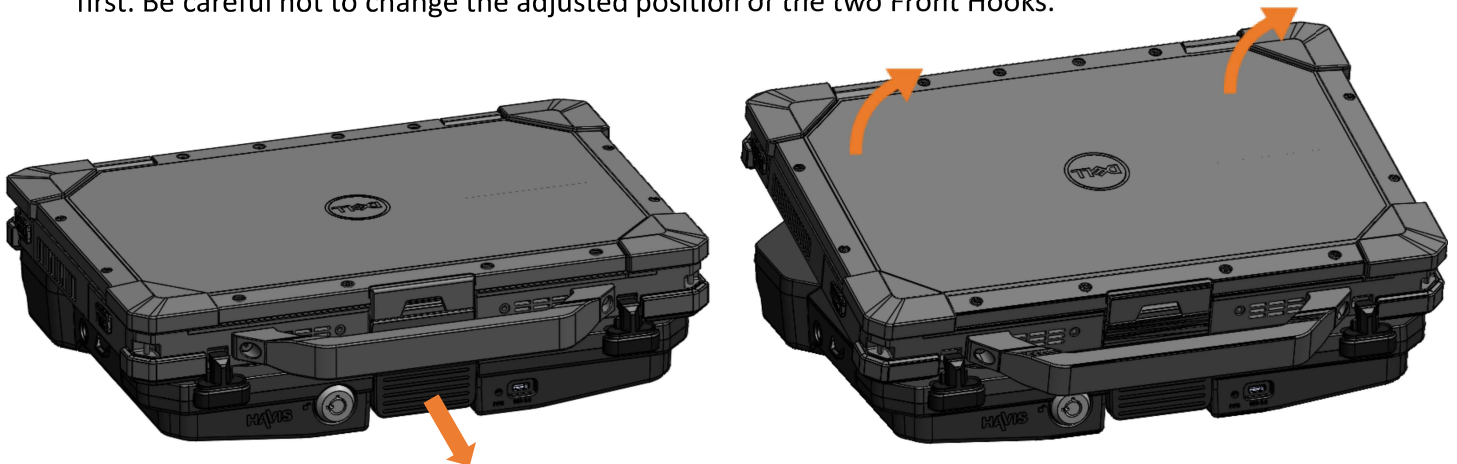
- 3) Lower the laptop onto the Docking Station, ensuring Docking Connector and Locator Posts are aligned. Engage the Rear Hook by; **a** - applying firm, downward pressure to rear center of laptop until Rear Hook is fully engaged. There will be an audible 'click' when Rear Hook is fully engaged to computer.



- 4) Press in the Front Hooks until each hook is secure in the computer recess. You will hear an audible clicking noise as the Front Hooks ratchet into engagement. Complete process for both Front Hooks. **DO NOT** force Front Hooks into the computer recess, as this may result in improper setting.



- 5) Remove the Laptop from Docking Station by pulling the Release Handle to release the Rear Hook. Once Rear Hook is released, grab both sides of the laptop and lift out of Docking Station, rear end first. Be careful not to change the adjusted position of the two Front Hooks.





## Operation – Initial Laptop Adjustment *(continued)*

- 6) This step is optional. Set the Front Hooks in place to avoid movement during Docking and Undocking by inserting (2) 12mm long Pan Head Lockout Screws (Hardware Kit Item 3) into the Lockout Holes. Torque to 6 in-lbs. (0.7Nm)  $\pm 10\%$ .

**CAUTION: DO NOT OVERTIGHTEN OR DAMAGE MAY OCCUR**

Your Docking Station is now configured to secure your computer model. No further adjustments are necessary unless you switch computer models. If you change computer models, return to Step 1 of Initial Laptop Adjustment

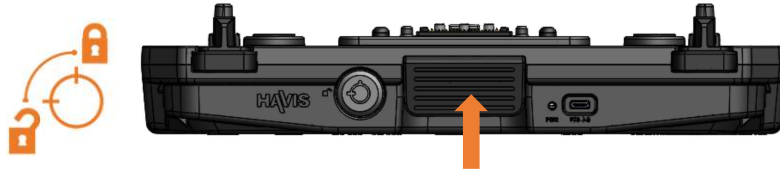


# Operation – Docking

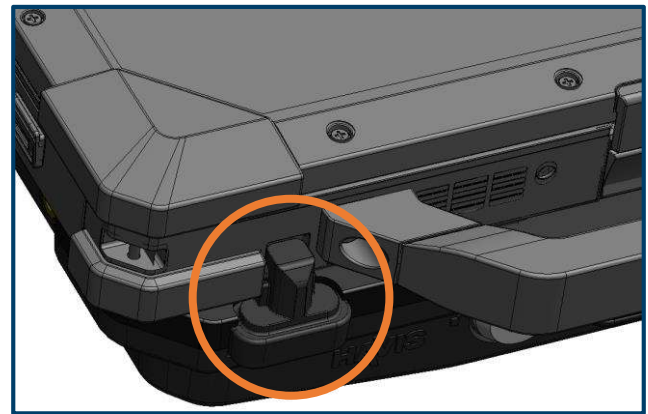
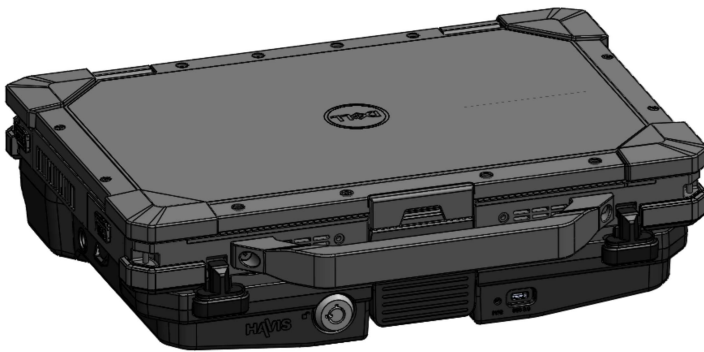
## **CAUTION**

**DO NOT FORCE LAPTOP ONTO DOCKING STATION. IF THERE IS RESISTANCE, GO BACK TO THE INTIAL LAPTOP ADJUSTMENT STEPS HIGHLIGHTED ON PAGES 11-13.**

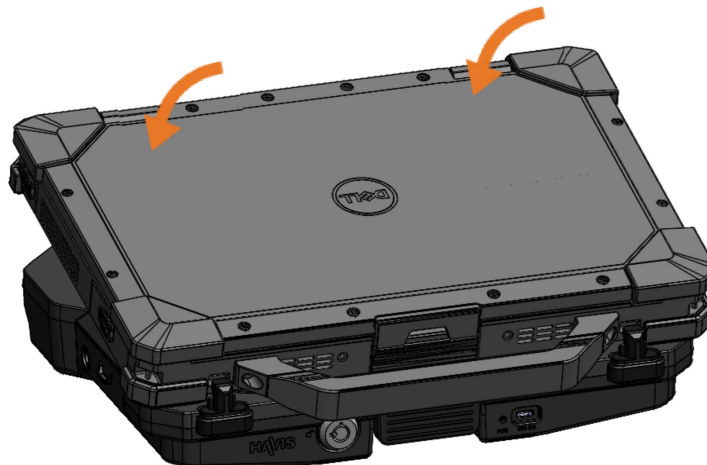
- 1) Once Docking Station is adjusted to your computer model, ensure the Rear Hook is in the fully released position by pulling the Release Handle.



- 2) With rear of computer elevated, load front of computer into Docking Station by aligning Front Hooks with the appropriate recesses in the computer.



- 3) Slowly lower back of laptop onto the Docking Station, ensuring Docking Connector and Locator Posts are aligned.

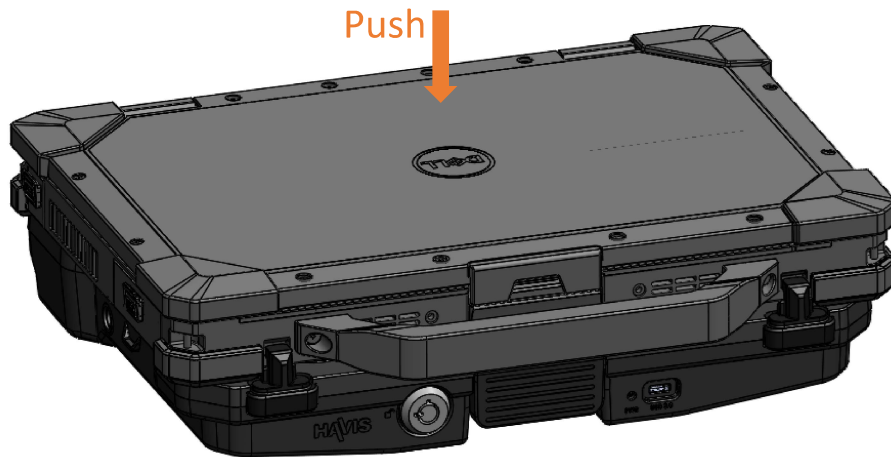


## Operation – Docking

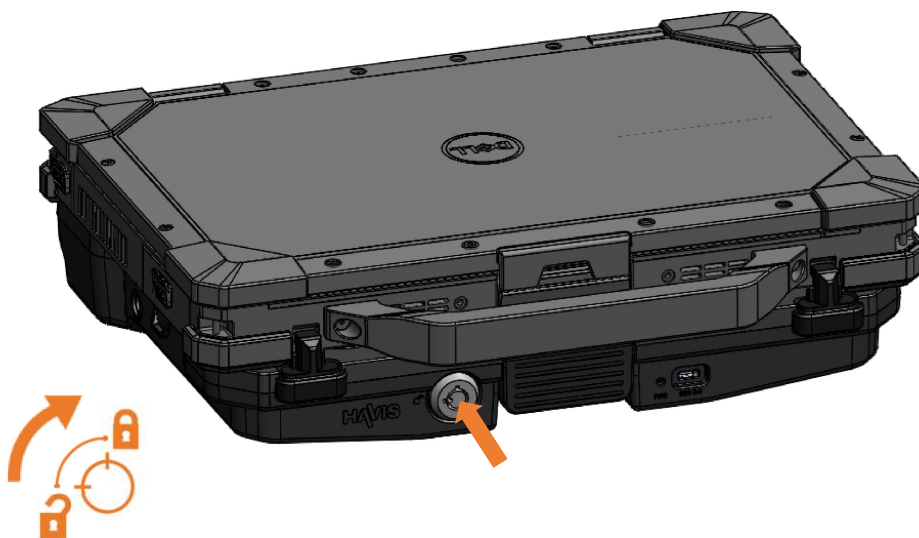
### **CAUTION**

**DO NOT FORCE LAPTOP ONTO DOCKING STATION. IF THERE IS RESISTANCE, GO BACK TO THE INTIAL LAPTOP ADJUSTMENT STEPS HIGHLIGHTED ON PAGES 11-13.**

- 4) With computer seated on the Docking Station; apply downward pressure to rear center of laptop until Rear Hook engages. There will be an audible 'click' when Rear Hook is fully engaged to computer.

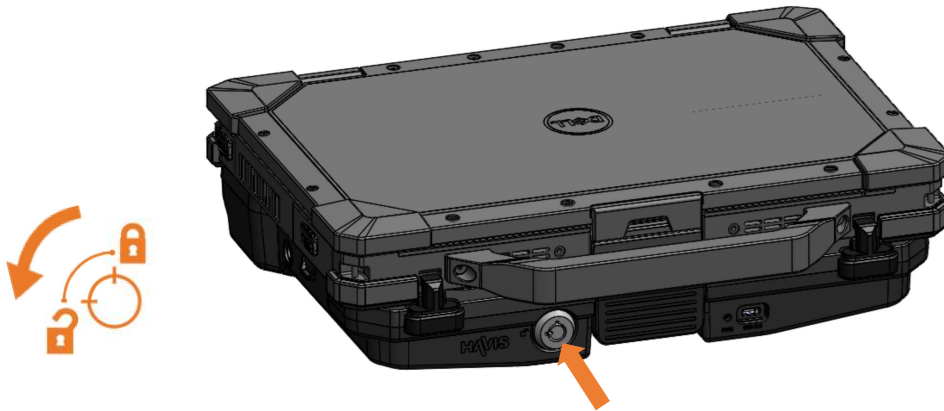


- 5) For **OPTIONAL** theft deterrence, secure laptop by locking Docking Station with supplied key (Hardware Kit Item 2).

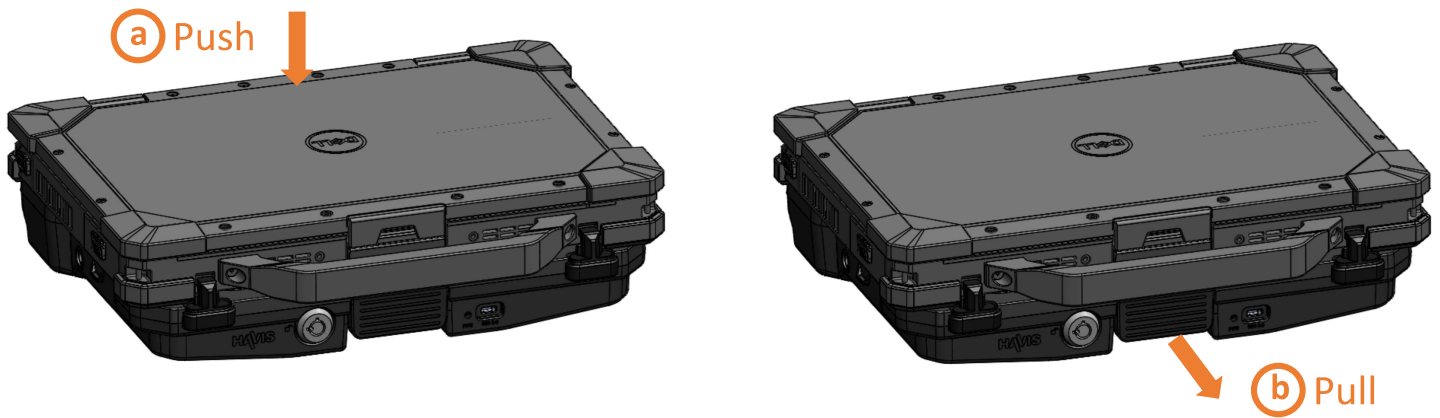


# Operation - Undocking

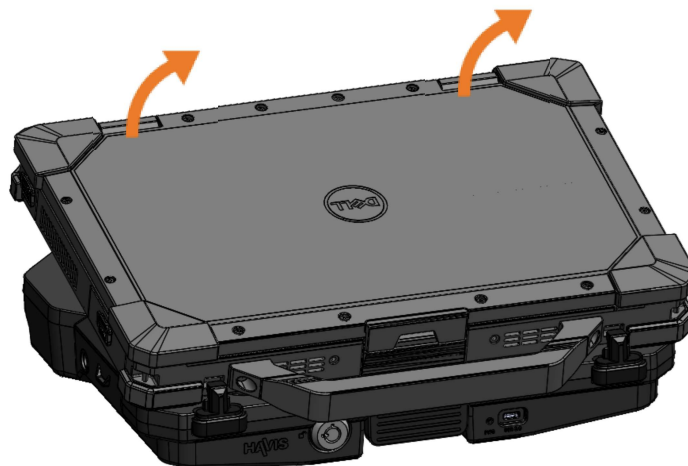
- 1) If previously locked, unlock Docking Station using supplied key.



- 2) To release Latch Hook, push down Rear Center of computer and pull the Release Handle until computer undocks.



- 3) Once Latch Hook is released, grab both sides of laptop and lift out of Docking Station, rear end first.  
**CAUTION: Laptop must be tilted as shown before removal from Docking Station.  
Do not pry the laptop off or damage to Docking Station may result.**



# Regulatory Information

## Canada

### **CAN ICES-3 (A) / NMB-3 (A)**

Class A equipment

This class A digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Équipement de classe A

Cet appareil numérique de la classe A respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

## United States of America

### **FCC Compliance**

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

*Note:* This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

**Warning:** Operation of this equipment in a residential environment could cause radio interference.

Responsible party (contact for FCC matters only):

Havis, Inc.

75 Jacksonville Road

Warminster, PA 18974

[havis.com/contact-us](http://havis.com/contact-us)

# Regulatory Information *(continued)*

## European Union

### **Waste Electrical and Electronic Equipment (WEEE)**

Electrical and electronic equipment (EEE) contain materials, components and substances that can be hazardous and harmful to human health and the environment when WEEE is not disposed of properly.

Products marked with the "crossed-out wheeled bin" symbol are EEE. The crossed-out wheeled bin symbolizes that WEEE must not be disposed of together with unsorted household waste, but must be collected separately.

For this purpose, all municipalities have established collection schemes where WEEE can be handed in, free of charge, by citizens at recycling stations or other collection points or collected directly from households. Further information should be obtained from the municipality's technical administration.



This symbol on the product or on its packaging indicates that the product must not be disposed of with normal household waste. Instead, it is your responsibility to dispose of your waste equipment by arranging to return it to a designated collection point for the recycling of WEEE. By separating and recycling your waste equipment at the time of disposal, you will help to conserve natural resources and ensure that the equipment is recycled in a manner that protects human health and the environment. This product is EEE and shall not be placed in the municipal waste after end of its life. This device should be handled properly and handed over to appropriate collection places or to authorized companies.

### **Conformité Européene (CE) Mark**



The CE marking on a Havis product indicates conformity to the provisions of applicable European Union (EU) directives. The EU Declaration of Conformity (DoC) is the manufacturer's declaration that the product complies with those directives.

**Warning:** Operation of this equipment in a residential environment could cause radio interference.



## Related Products

Havis offers a wide variety of accessory products specifically for use with your Docking Station. For more information or to order, please visit [www.havis.com](http://www.havis.com).



### LPS-196

#### **External Power Supply**

External power supply and cable for Dell Laptops with cigarette lighter adaptor for DS-DELL-431, DS-DELL-431-3, DS-DELL-435, and DS-DELL-435-3 Docking Stations. Visit [www.havis.com](http://www.havis.com) for specific information on Power Supply options.



### LPS-182

#### **Cradle Power Supply**

External power supply and cable for Dell Laptops with cigarette lighter adaptor for DS-DELL-433, DS-DELL-433-3. Visit [www.havis.com](http://www.havis.com) for specific information on Power Supply options.



### LPS-197

#### **AC Power Supply**

AC power supply and cable for Dell Laptops for DS-DELL-431, DS-DELL-431-3, DS-DELL-435, and DS-DELL-435-3 Docking Stations. Visit [www.havis.com](http://www.havis.com) for specific information on Power Supply options.



### LPS-211

#### **Power Supply Mounting Bracket**

Mount a power supply directly to your Docking Station with this versatile bracket. For use with external power supplies.



### DS-DA-102

#### **Night Eyes II**

In-vehicle nighttime viewing from six long lasting, soft true, red LED lights on a flexible steel gooseneck.



### DS-DA-412

#### **Screen Support**

Secure your laptop screen to prevent excess wear and reduce vibration while in use.



### DS-DA-501

#### **Replacement Keys**

Set of two (2) replacement keys for DS-DELL-420 Series Docking Stations.

