

Owner's Manual

14" Touch Screen Display with Integrated HUB

TSD-300 Series

This Owner's Manual applies to the following Part Numbers:

TSD-301

TSD-302



Before Beginning

Havis is pleased to provide this Owner's Manual to aid in the proper installation and use of the TSD-300 Series Touch Screen Display.

For questions regarding the set-up of your TSD-300 Series Display, please contact Havis at 1-800-524-9900 or visit www.havis.com for additional product support and information.

WARNING

- NEVER STOW OR MOUNT THE TOUCH SCREEN DISPLAY DIRECTLY IN A VEHICLE AIRBAG DEPLOYMENT ZONE.
- DO NOT USE 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 LAPTOP.

CAUTION

- 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 TOUCH SCREEN DISPLAY WHERE WATER, MOISTURE, STEAM, DUST, ETC. ARE PRESENT.
- USE ONLY THE SPECIFIED POWER SUPPLY (120N-D01-T01-1).
- DO NOT CONNECT CABLES INTO PORTS OTHER THAN WHAT THEY ARE SPECIFIED FOR.
- DO NOT LEAVE THE TOUCH SCREEN DISPLAY IN A HIGH TEMPERATURE ENVIRONMENT (GREATER THAN 70°C, 158°F).

NOTICE

- REFER TO THE PROVIDED POWER SUPPLY REFERENCE GUIDE FOR POWER SUPPLY INSTALLATION AND OPERATING INSTRUCTIONS.

Avant de commencer

Havis est heureux de vous fournir ce manuel d'utilisation afin de faciliter l'installation et l'utilisation correctes de l'écran TSD-300.

Pour toute question concernant la configuration de votre TSD-300, veuillez contacter Havis au 1-800-524-9900 ou consulter le site www.havis.com pour obtenir une assistance et des informations supplémentaires sur le produit.

AVERTISSEMENT

- **NE JAMAIS RANGER OU MONTER L'ÉCRAN TACTILE DIRECTEMENT DANS LA ZONE DE DÉPLOIEMENT D'UN COUSSIN GONFLABLE DU VÉHICULE.**
- **NE PAS UTILISER L'ORDINATEUR EN CONDUISANT.**
- **NE PAS PLACER D'OBJETS MÉTALLIQUES OU DE RÉCIPIENTS CONTENANT DU LIQUIDE SUR LA STATION D'ACCUEIL.**
- **EN CAS DE DYSFONCTIONNEMENT, DÉBRANCHEZ IMMÉDIATEMENT L'ALIMENTATION ÉLECTRIQUE ET RETIREZ L'ORDINATEUR PORTABLE.**

ATTENTION

- **LISEZ ATTENTIVEMENT TOUTES LES INSTRUCTIONS AVANT DE COMMENCER L'INSTALLATION.**
- **CE PRODUIT N'EST PAS DOTÉ D'UN INDICE DE PROTECTION IP (PROTECTION CONTRE LES INFILTRATIONS). NE PAS ENTREPOSER, NE PAS INSTALLER ET NE PAS UTILISER LA STATION D'ACCUEIL DANS UN ENDROIT OÙ DE L'EAU, DE L'HUMIDITÉ, DE LA VAPEUR, DE LA POUSSIÈRE, ETC. SONT PRÉSENTS.**
- **UTILISER UNIQUEMENT LE BLOC D'ALIMENTATION SPÉCIFIÉ (120N-D01-T01-1).**
- **NE PAS BRANCHER DE CÂBLES DANS D'AUTRES PORTS QUE CEUX AUXQUELS ILS SONT DESTINÉS.**
- **NE LAISSER PAS LA STATION D'ACCUEIL DANS UN ENVIRONNEMENT À HAUTE TEMPÉRATURE (PLUS DE 70°C, 158°F) POUR UNE PÉRIODE PROLONGÉE.**

NOTICE

- **VEUILLEZ CONSULTER LE GUIDE DE RÉFÉRENCE DE L'ALIMENTATION ÉLECTRIQUE FOURNI POUR LES INSTRUCTIONS D'INSTALLATION ET DE FONCTIONNEMENT DE L'ALIMENTATION.**

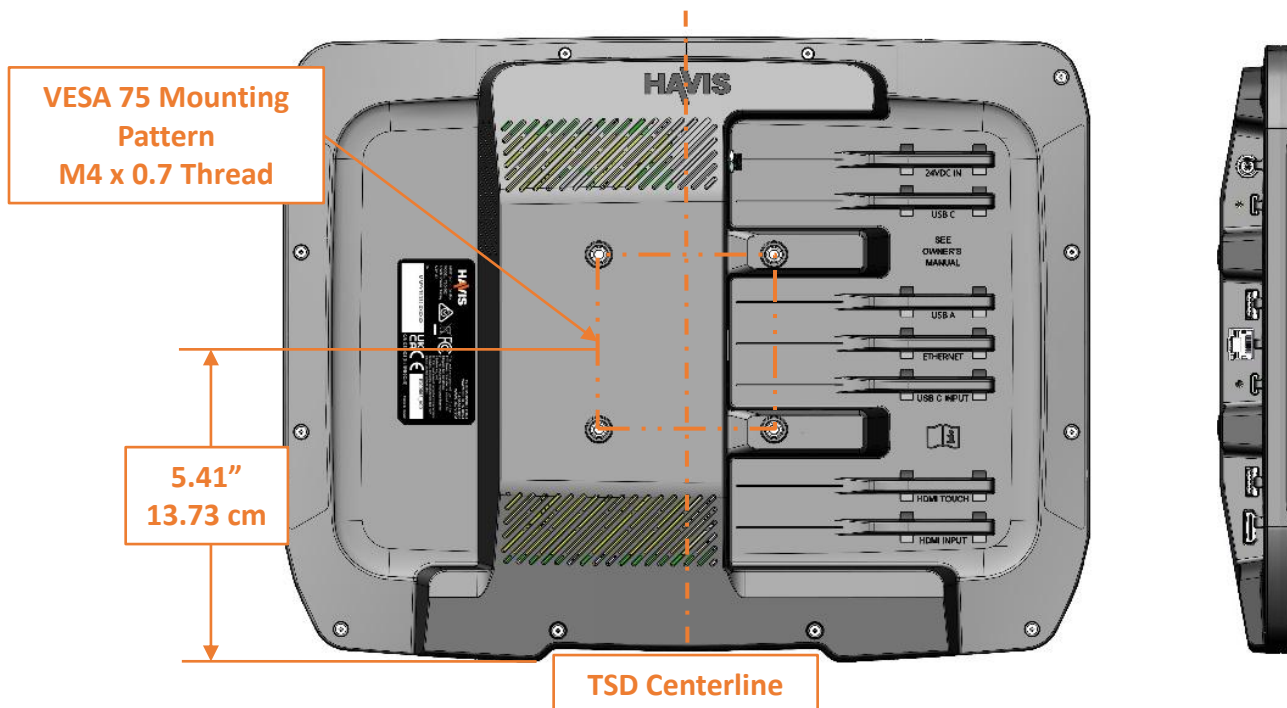
Specifications

Configuration (SKU)	Description	Power Options	Display Input Voltage Requirement	Weight
TSD-301	Standard I/O; USB-C Input	24.0 VDC External	24.0 VDC	3.7 lbs (1.68 kg)
TSD-302	Advanced I/O; USB-C & HDMI Input			
Dimensions	10.56'' H x 13.62'' W x 1.39'' D (26.8 cm H x 34.6 cm W x 3.5 cm D)			
Operating Environment	-29° C to 63° C (-20° F to 145° F)			
Storage Environment	-51° C to 70° C (-59.8° F to 158° F)			
Display Size	14.0'' (35.6 cm) Diagonal			
Display Material	Impact Resistant Glass			
Max Resolution (Aspect Ratio)	1920 x 1200 (16:10)			
Brightness	1200 NITS			
Viewing Angle	85° from all sides			
Contrast Ratio	1500:1			
Display Color	16.7M			

Port Specifications

Description	Configured On	Driver	Specification
USB-C 3.2 INPUT	TSD-301/302	WIN OS PnP	5V/9V/15V/20V @ 3A
USB-A 3.2	TSD-301/302	WIN OS PnP	5V/0.9A
ETHERNET	TSD-301/302	WIN OS PnP	1 GIGABIT MAXIMUM
HDMI INPUT	TSD-302	WIN OS PnP	V2.0
USB-A 3.2 (HDMI TOUCH)	TSD-302	WIN OS PnP	5V/0.9A
USB-C 3.2 (PERIPHERAL)	TSD-302	WIN OS PnP	5V/1.5A

Specifications



Parts Included

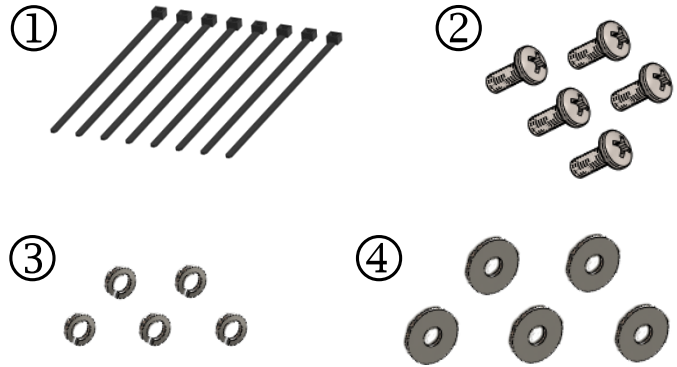
Hardware Kit (No. HWK-0043)

This hardware kit includes:

1. Zip ties (8)
2. M4 x 10 mm pan head screws (5)
3. Split lock washers (5)
4. Flat washers (5)

Tools required for installation:

- #2 Phillips



Cables (TSD-R-0001)

(Included with the TSD-302)



USB 2.0 extension cable (type A, male – female). 2m long. For optional keyboard or accessory.

USB 2.0 cable (type A, male – male). 20ft long. For connecting to upstream external PC.

HDMI cable (male – male). 20ft long. For connecting to upstream external PC.

NOTICE

EXTENDING THE 20 FOOT USB CABLE IS NOT RECOMMENDED UNLESS AN ACTIVE (AND INDEPENDENTLY POWERED) REPEATER IS USED.

Cables (DS-DA-331)

(Included with the TSD-301 & TSD-302)



USB 3.1 cable (type C, male – male). 6.6ft long. For connecting to upstream external PC.

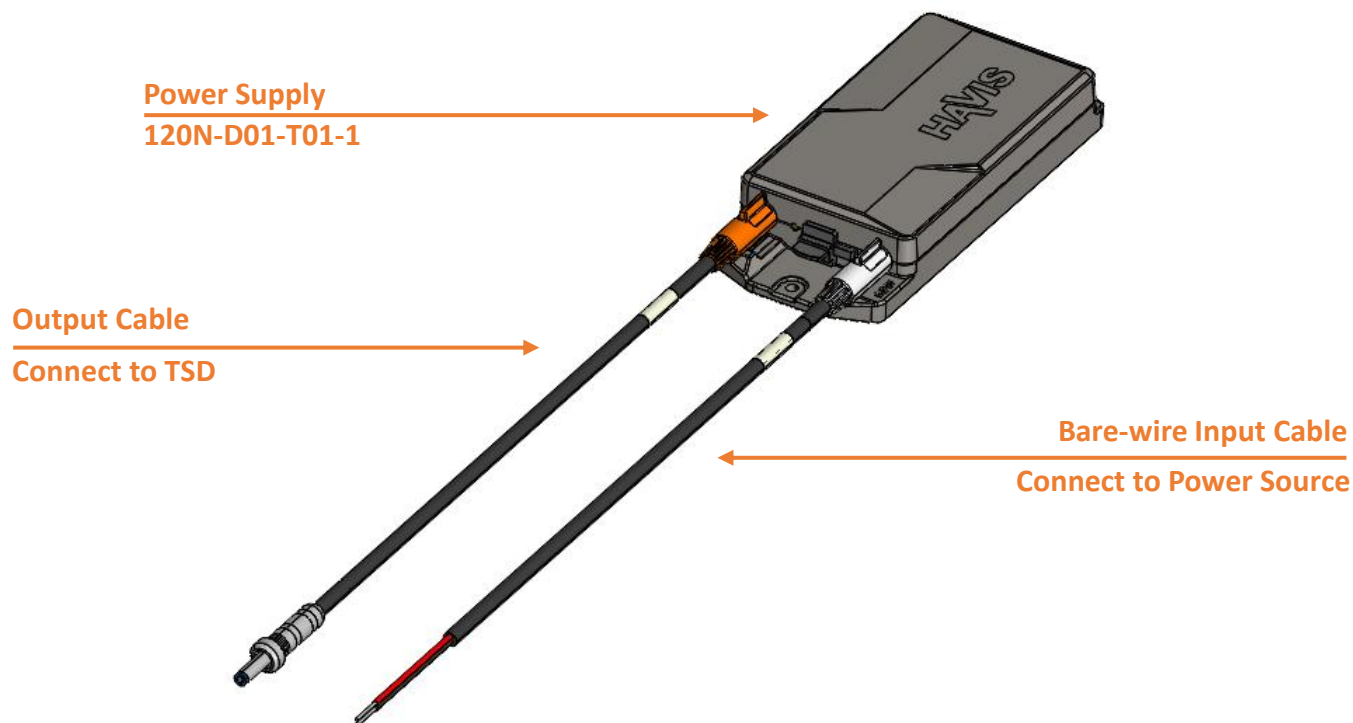
NOTICE

A USB 3.1 TYPE-C CABLE IS THE MINIMUM CABLE REQUIREMENT FOR FULL FUNCTIONALITY WITH CONNECTED PC, TABLET, OR PHONE. A USB-C CABLE WITH THUMBSCREW IS RECOMMENDED FOR THE MOST SECURE CONNECTION

Parts Included *(continued)*

Power Supply With Cables and Mounting Hardware

(Included with TSD-301, TSD-302)



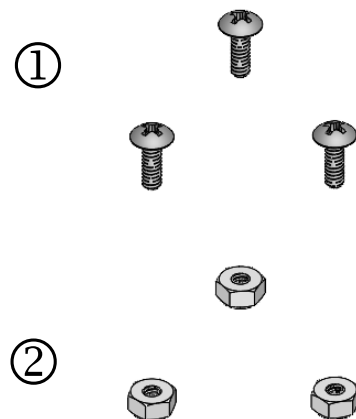
Power Supply Hardware Kit (No. 41933)

This Hardware Kit includes:

1. #6-32 x 0.4375" Long Machine Screw (QTY 3)
2. #6-32 NUT with Nylon Insert (QTY 3)

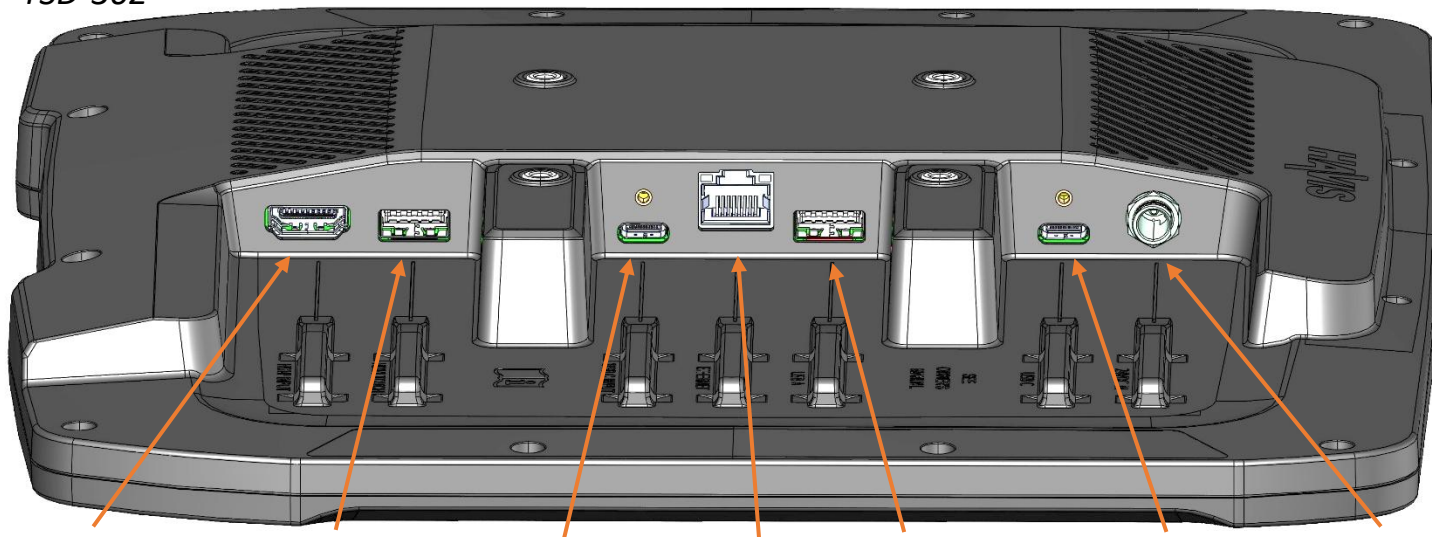
Tools required for installation:

- PH2 Drive
(For attaching the #6-32 machine screws)
- 5/16" Socket or Wrench
(For securing they #6-32 Nut)



Port Replication Capability

Advanced I/O TSD-302

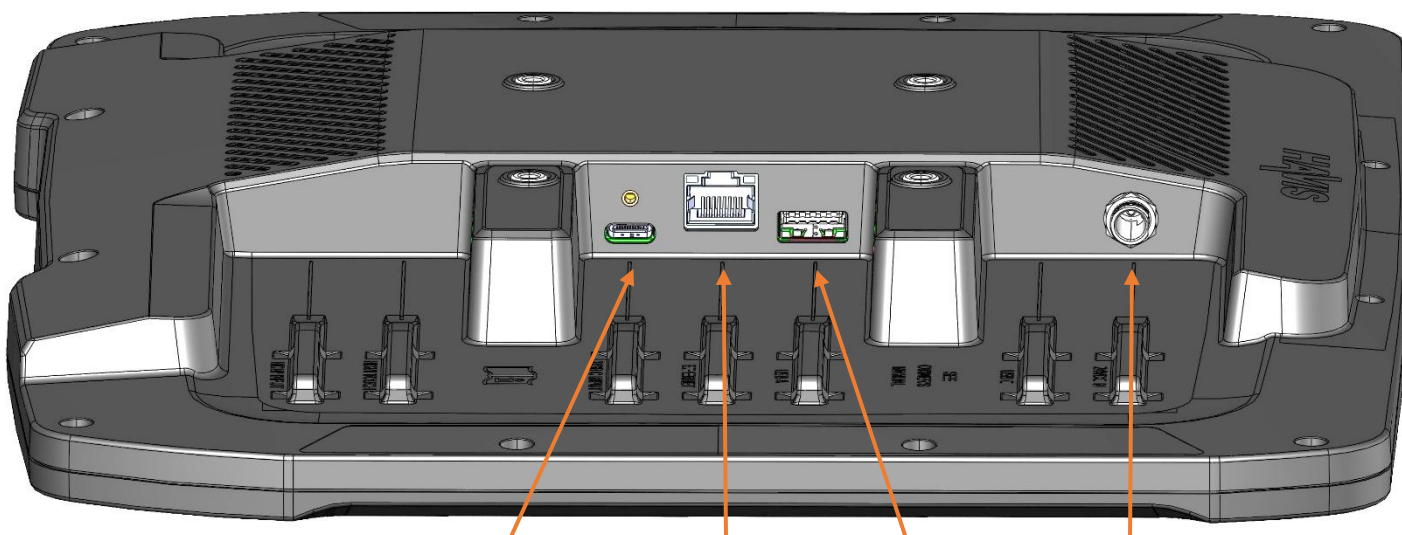


HDMI 2.0 INPUT (to Upstream External PC)	HDMI TOUCH USB-A 3.2 5V/0.9A (to Upstream External PC)	USB-C 3.2 INPUT 5V, 9V, 15V, 20V @3A (to Upstream External PC/Device)	ETHERNET (1 Gbps)	USB-A 3.2 5V/0.9A (to Peripheral)	USB-C 3.2 5V/1.5A (To Peripheral Data Only, No Video)	POWER (24V DC)
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NOTICE

BE CERTAIN TO CONNECT THE USB CABLES TO THE CORRECT
USB PORTS ON THE TOUCH SCREEN DISPLAY, AS OUTLINED ON
INSTALLATION EXAMPLE ON PAGE 11.

Standard I/O TSD-301



USB C 3.2 INPUT 5V, 9V, 15V, 20V @3A (to Upstream External PC/Device)	ETHERNET (1 Gbps)	USB A 3.2 5V/0.9A (to Peripheral)	POWER (24V DC)
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NOTE: ALL PORTS USE WINDOWS OS PnP DRIVERS

Features

Speakers and Microphone

1. The TSD-300 is equipped with 2 internal speakers .
2. The TSD-300 is equipped with an internal microphone.

Front-Facing Camera (TSD-302)

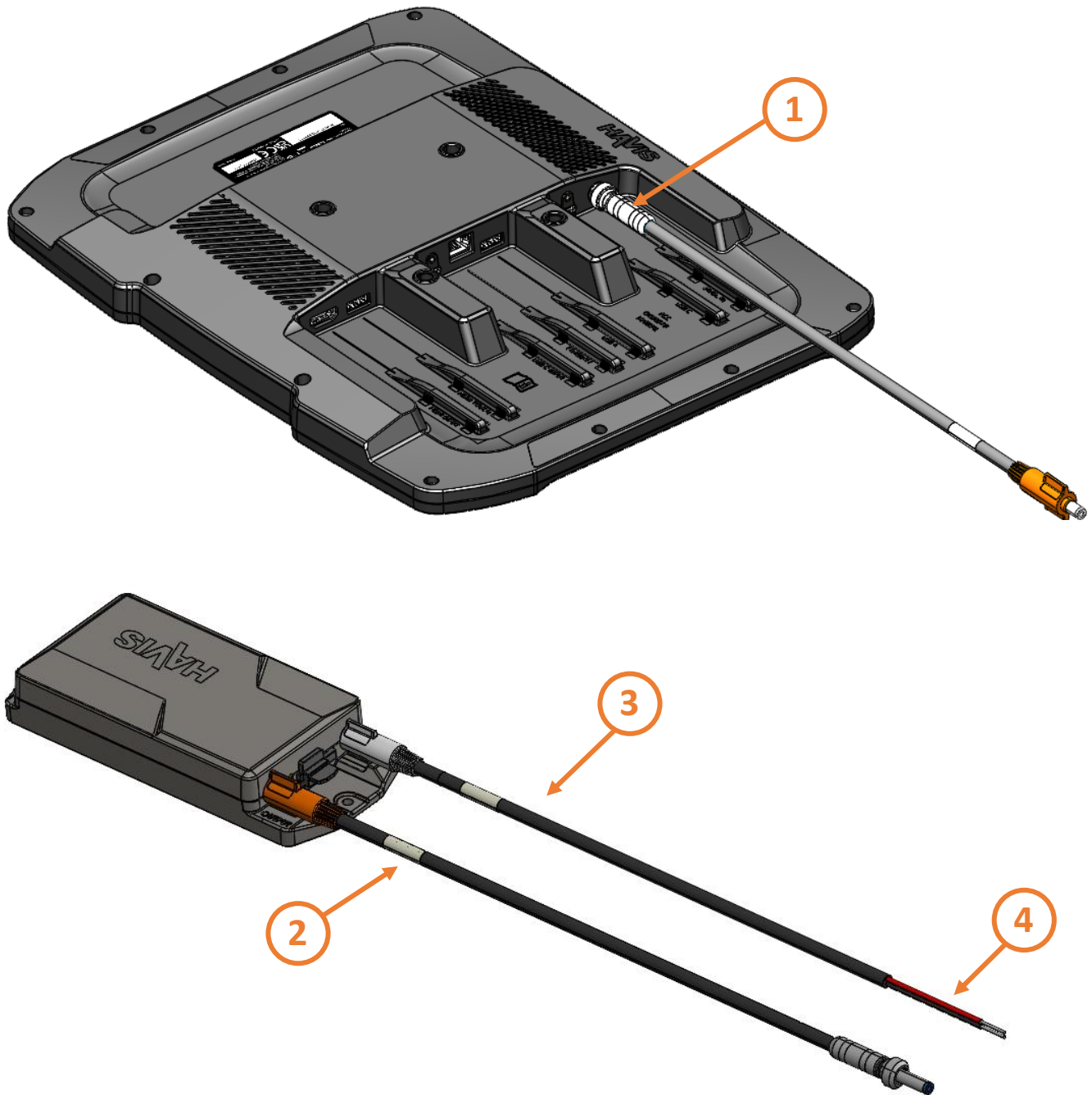
3. The TSD-302 has a 1080p front-facing camera.



Installation

Connecting to Power

- 1) Connect threaded end of DC Output cable to touch screen display.
- 2) Connect other end of DC Output cable to power supply.
- 3) Connect Input Cable (white over-mold) power cable to power supply.
- 4) Connect Input Cable bare wire to vehicle power supply. See Owner's Manual for your Power Supply for specific installation instructions.
- 5) When power is connected, the LED on the power supply will illuminate green and the power indicator on the touch screen display will illuminate amber.



Installation *(continued)*

Connecting to External PC, Phone, and Optional Keyboards/Accessories (Not Included with TSD-300 Series)

FOR HDMI INPUT *(TSD-302 ONLY)*

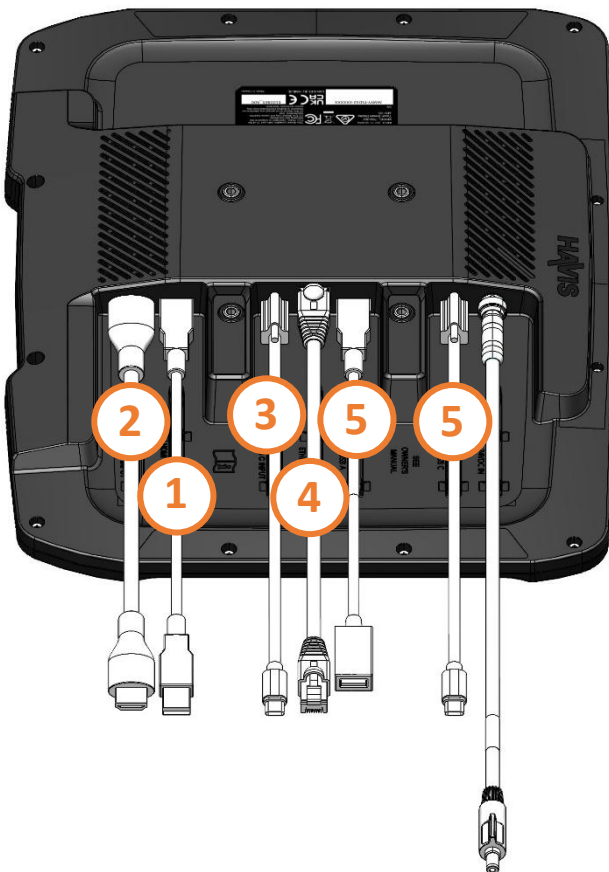
- 1) Connect one end of the USB 2.0 cable (type A, male – male) to the touch screen display and the other end to the external PC. This is the upstream USB connection to the HDMI input for all downstream USB peripheral devices attached to the TSD-300.
- 2) Connect one end of the HDMI cable to the touch screen display and the other end to the external PC.

For USB C INPUT

- 3) Connect one end of the USB Type C cable (not included) to the touch screen display and the other end to the phone, tablet, or PC. See notice below for USB C cable requirements.

PERIPHERAL CONNECTIONS & ETHERNET

- 4) Connect one end of the Ethernet cable to the touch screen display and the other end to the accessory (i.e., network adapter/router).
- 5) The downstream USB Type C Port or USB-A Port can be used to connect additional downstream peripherals, including keyboards or other accessories, by connecting the USB Type C cable (not included) and/or the USB-A Cable to the touch screen display and the other end to the downstream accessory. See notice below for USB C cable requirements.



NOTICE

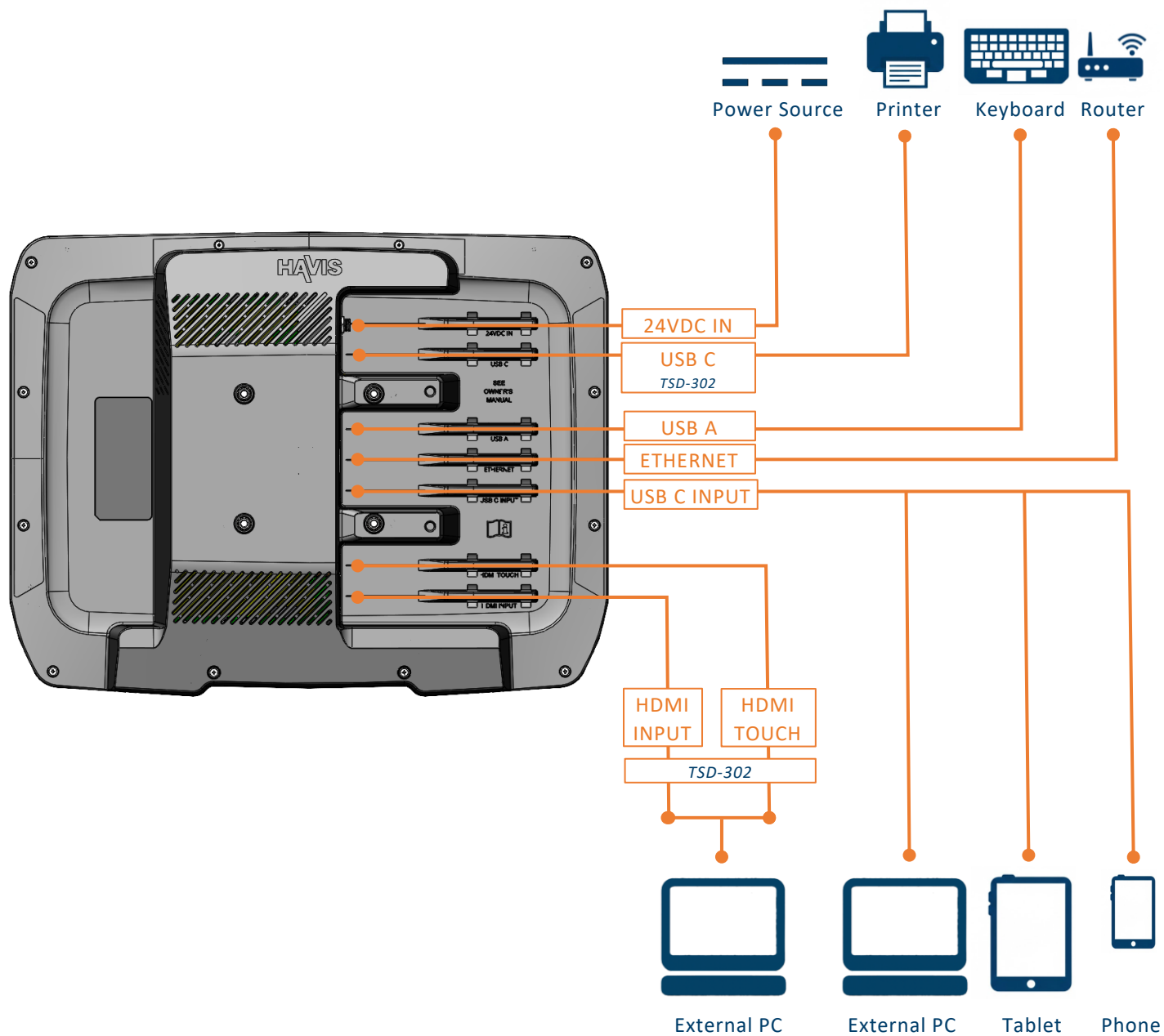
A USB 3.1 TYPE-C CABLE IS THE MINIMUM CABLE REQUIREMENT FOR FULL FUNCTIONALITY WITH CONNECTED PC, TABLET, OR PHONE. A USB-C CABLE WITH THUMBSCREW IS RECOMMENDED FOR THE MOST SECURE CONNECTION

NOTICE

BE CERTAIN TO CONNECT THE USB CABLES TO THE CORRECT USB PORTS ON THE TOUCH SCREEN DISPLAY, AS OUTLINED IN PORT REPLICATION CAPABILITY PAGE.

Installation *(continued)*

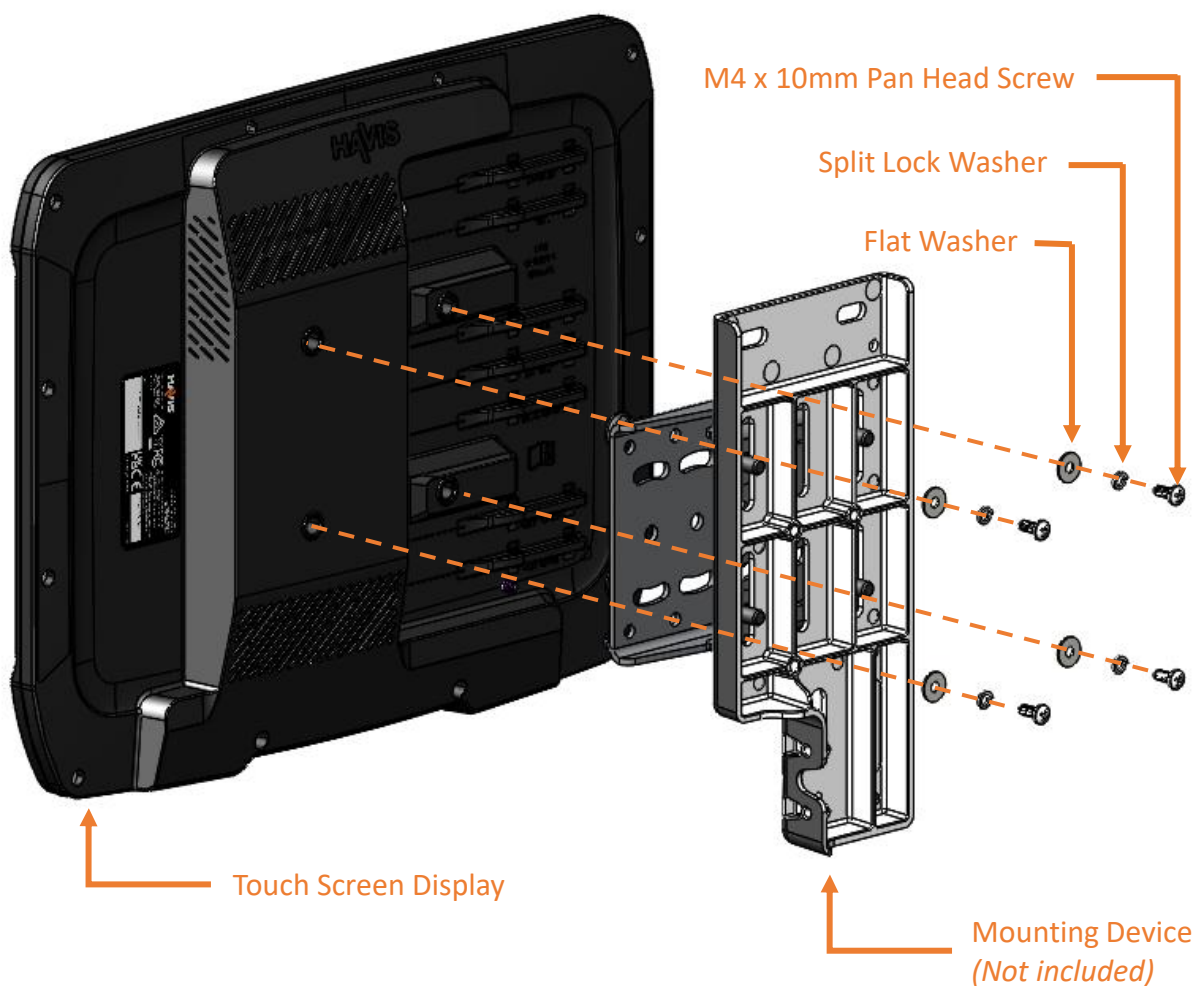
Example of an Installation Set Up



Installation *(continued)*

Vehicle Mounting

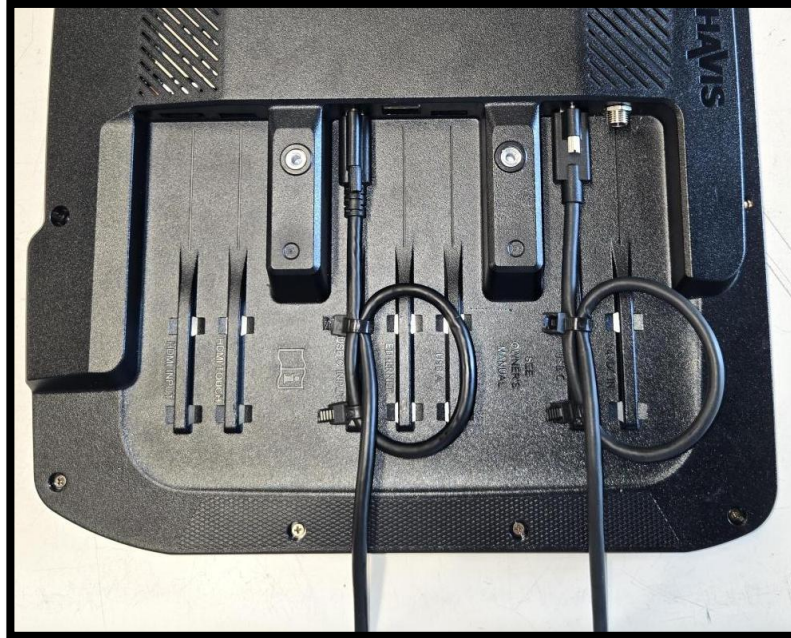
- 1) Align the touch screen display mounting holes with the hole pattern on the mounting device. Using the four (4) M4 x 10mm pan head screws, four (4) flat washers, and four (4) split lock washers, secure the touch screen display to the mounting device. Torque the screws to 20 in-lbs (2.3Nm) $\pm$ 10%.



Installation *(continued)*

Cable Management

- 2) Make a loop with the USB-C Cables and use the provided zip ties to secure them like shown to reduce the likelihood of disconnects.



NOTICE

DO NOT OVERTIGHTEN USB-C THUMB SCREW CONNECTORS.

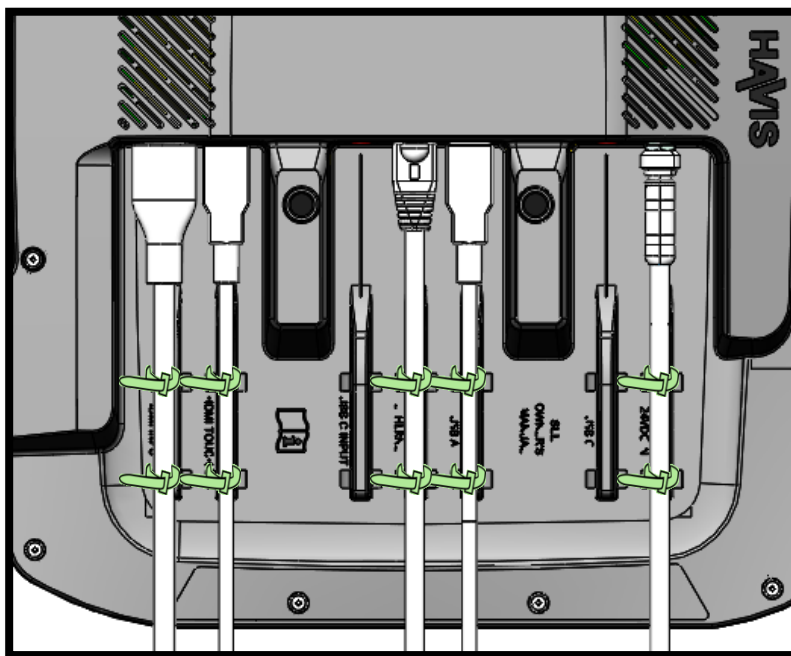
There should be a gap between the thumb screw over-mold and the dock housing.



Installation *(continued)*

Cable Management

- 3) The remaining cables can be tied down in a similar fashion as needed depending on your application.



Operation

Turning On/Off

- When the TSD-300 is off, a momentary press of the POWER button will turn the TSD-300 on.
- If a functioning input device is connected to the selected input (USB-C or HDMI), the LED will illuminate WHITE.
- If there is not a functioning input device connected to the selected input, the LED will illuminate AMBER.
- A long press of the POWER button (greater than 8 seconds) will perform a hard reset of the TSD-300 electronics.



Activating Blackout Mode

1. When the display is on, press the power button to enter Blackout Mode. Blackout Mode blanks the screen and turns off all LED indicators.
2. A second press of the power button will allow the display to resume from the previous state.

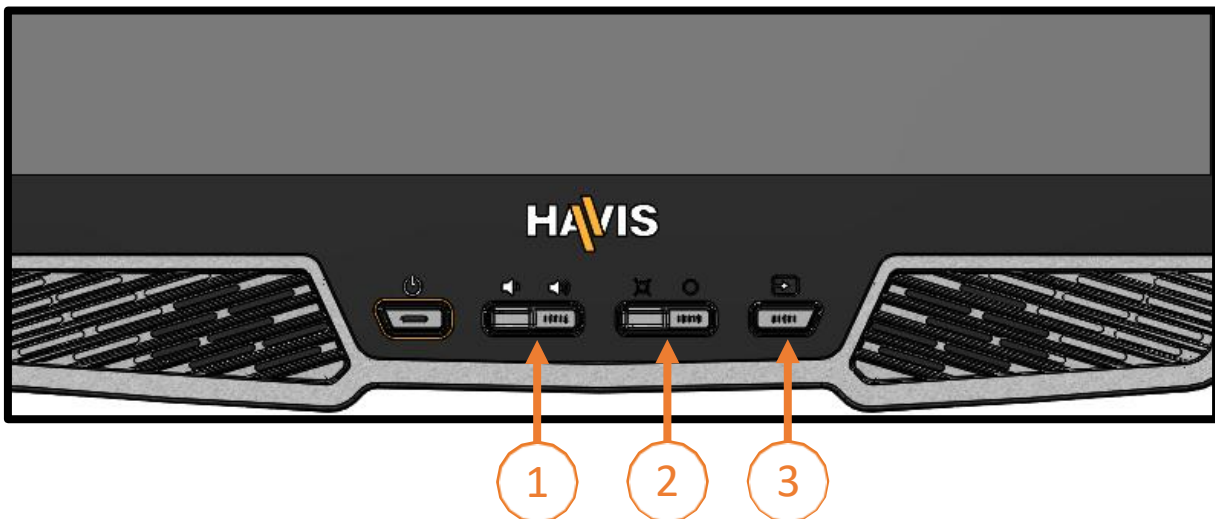
Using the Touch Screen

- Tap the screen with your finger to communicate with the system.
- The TSD-300 has a pinch-zoom capable screen.

Operation *(continued)*

Using Control Buttons

1. **Volume:** Press and hold either button ( or ) until the volume OSD appears on the screen. Then, press () to increase, or () to decrease the volume.
2. **Brightness:** Press and hold either button ( or ) until the brightness OSD appears on the screen. Press () to increase, or () to decrease the brightness.
3. **Input (TSD-302 ONLY):** Press to toggle between input source. Notification on touch screen will identify which input source is selected (HDMI or USB-C).
 - Any USB peripheral connected to the TSD-300 will follow the selected input. For example, a keyboard will automatically connect to the HDMI device when the HDMI input is selected, and it will automatically move over to the USB-C device when the USB-C input is selected.



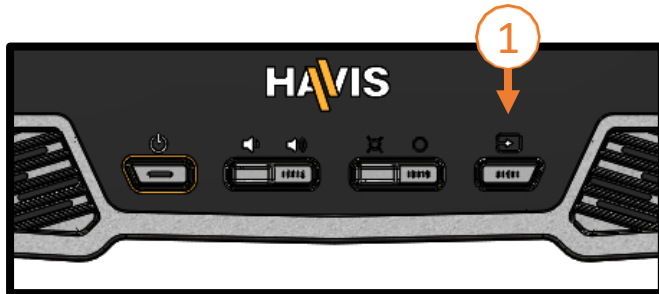
Activating Night Mode

- Press the () and () brightness buttons simultaneously to activate and deactivate Night Mode.
- In Night Mode, the display will switch to a red monochrome color scheme and all indicator LEDs will be red to reduce eye strain in dark environments.

Operation *(continued)*

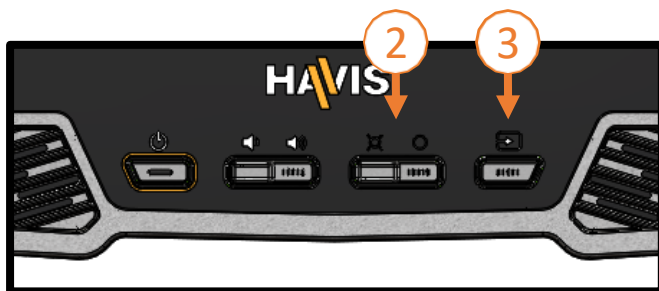
Locking/Unlocking the Input Source *(TSD-302 ONLY)*

1. Press and hold the INPUT button for 3 seconds to bring up the Input Lock Menu. The on-screen message will display for 5 seconds.



INPUT Lock Menu	–	⊙	+
Unlock – Default			
Lock to USB-C Input			
Lock to HDMI Input			

2. Press the (⊙) and (⊙) brightness buttons to navigate the menu and either lock or unlock the input setting.
 - By default, the setting will be set to unlocked.
 - When the input source is locked, then a momentary press of the INPUT button will not change the input selection.
3. Press the INPUT button to accept your selection.



INPUT Lock Menu	–	⊙	+
Unlock – Default			
Lock to USB-C Input			
Lock to HDMI Input			

Regulatory Information

Canada

CAN ICES (B) / NMB (B)

Class B equipment

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Équipement de Classe B

Cet appareil numérique de la Classe B 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 B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

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

Responsible party (contact for FCC matters only):

Havis, Inc.
75 Jacksonville Road
Warminster, PA 18974
havis.com/contact-us

Regulatory Information *(continued)*

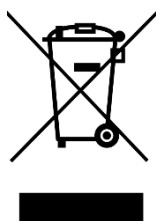
European Union

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.

EU Authorized Representative:

Alura Group B.V.
Kroonwiel 2
6003 BT Weert
Netherlands

United Kingdom

United Kingdom Conformity Assessed (UKCA) Mark



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

UK Authorized Representative:

Tailwind Solutions Limited
Unit 2a Castle Business Centre, Queensferry Road, Pitreavie Business Park
Dunfermline Fife, KY11 8NT
Scotland, United Kingdom

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.



TSD Mounting Solutions

Havis offers a variety of mounting solutions, including light-weight motion devices and vehicle-specific mounting solutions for the TSD-301, 14" Touch Screen Display with Integrated Hub. Visit www.havis.com or call 1-800-524-9900 to browse available mounting solutions, including our vehicle-specific C-DMM series.



KB-1001

Rugged Keyboard

Havis Rugged Backlit USB Keyboard with Integrated Touch Pad and Emergency Key.



PD-1001

Rugged Phone Dock

Robust Docking Solution Designed for Consumer Sized USB-C Phones. Requires a Compatible Havis Phone Case (Sold Separately).



DS-DA-604

Rugged USB-C Port Replication Hub

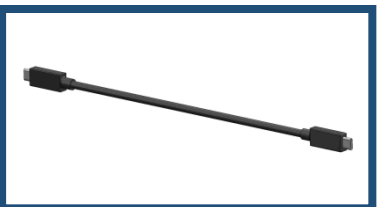
Two Type C and Two Type A USB 3.1 Ports and a Gigabit RJ45 Port.



TSD-R-0001

Replacement Cable Kit for the TSD-302

Contains a 20ft Male to Male USB-A Cable, a 20ft HDMI Cable, and a 2m Male to Female USB-A Cable.



DS-DS-331

USB 3.1 USB-C Cable

6.6 ft Long. 5 Gb/s Speed. Male to Male. Recommended USB-C Cable for the TSD-301.