DS-PAN-110 Series
Havis Rugged Mobile Docking Station
For Panasonic CF-30 & CF-31 Toughbooks

Owner's Manual

DS-PAN-111 DS-PAN-112 DS-PAN-113
DS-PAN-111-1 DS-PAN-112-1
DS-PAN-111-2 DS-PAN-112-2

Havis is pleased to provide this Owner's Manual to aid in the proper installation and use of the DS-PAN-110 Series Docking Station for the Panasonic CF-30 & CF-31 laptop computers.

For questions regarding the set-up of your DS-PAN-110 Series Docking Station, please contact Havis at 1-800-524-9900 or visit www.havis.com/CF31 for additional product support and information.

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

DS-PAN-111   DS-PAN-112   DS-PAN-113
DS-PAN-111-1   DS-PAN-112-1
DS-PAN-111-2   DS-PAN-112-2

⚠ WARNING

• **NEVER STOW OR MOUNT THE DOCKING STATION DIRECTLY IN A VEHICLE AIRBAG DEPLOYMENT ZONE.**

• **DO NOT USE COMPUTER WHILE DRIVING.**

⚠ CAUTION

• **READ ALL INSTRUCTIONS THOROUGHLY BEFORE BEGINNING INSTALLATION.**

• **DO NOT MATE COMPUTER TO DOCKING STATION UNLESS COMPUTER'S DOCKING CONNECTOR ACCESS DOOR IS FULLY OPEN OR DAMAGE MAY RESULT.**

NOTICE

• **FOR PROPER SYSTEM FUNCTION, THIS DOCKING STATION SHOULD BE USED ONLY WITH PANASONIC CF-30 AND CF-31 MODEL COMPUTERS. PANASONIC CF-29 AND EARLIER MODELS ARE NOT COMPATIBLE.**

• **FOR PROPER SYSTEM FUNCTION, PANASONIC RECOMMENDS USING A 120W POWER SUPPLY** *(LPS-104 OPTIONAL)* **WITH A CF-31 HIGH POWER (2.5GHz) COMPUTER.**

• **FOR CF-31 MEDIUM (2.4GHz) AND LOW (2.2 GHz) POWER COMPUTERS, A 90W POWER SUPPLY** *(LPS-101 OPTIONAL)* **IS ACCEPTABLE, HOWEVER A 120W POWER SUPPLY** *(LPS-104 OPTIONAL)* **MAY ALSO BE USED.**

Table of Contents

Precautions

- Do not place containers of liquid or metal objects on top of the Docking Station
- If a malfunction occurs, immediately unplug the Power Supply and remove the laptop
- Use only the specified Power Supply with this Docking Station
    Recommended: Part # LPS-101 (90W) for CF-30, CF-31 Medium & Low Power Computers
    Recommended: Part # LPS-104 (120W) for CF-31 High Power Computers
- Do not store the Docking Station where water, moisture, steam, dust, etc. are present
- Do not connect cables into ports other than what they are specified for
- Do not leave the Docking Station in a high temperature environment for a long period of time (greater than +60°C, 140°F)

Specifications

Power Supply Input	15.6V DC-In
Dimensions*	12.4" (31.5 cm) W x 11.9" (30.2 cm) D x 4.0" (10.2 cm) H
Weight*	4.6 lbs (2.1 kg)
Operating Environment	5° C to 35° C (41° F to 95°F)
Storage Environment	-20° C to 60° C (-4° F to 140° F)

* DS-PAN-111

DECLARATION OF CONFORMITY FOR CE MARKING

Havis, Inc. declares that their DS-PAN-110 SERIES DOCKING STATIONS:
Are classified within the following EU Directives:
EU Electromagnetic Compatibility Directive 2004/108/EC

And further conform with the following EU Harmonized Standards:
EN 55022 (2006) + A1 2007, EN 55024 (1998) + A2: 2003
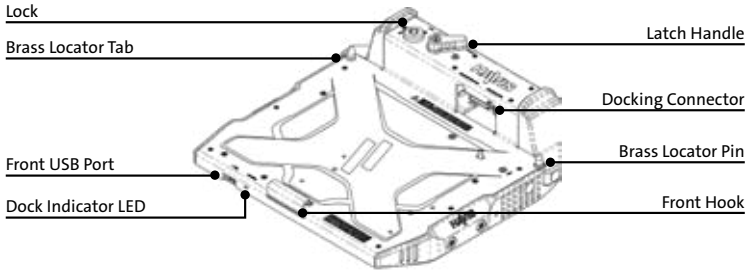
Dated: August 19, 2010
Position of signatory: Chief Information Officer / Chief Financial Officer
Name of signatory: Steve Ferraro

Signed:

Parts Included

Docking Station

Lock

Brass Locator Tab

Latch Handle

Docking Connector

Brass Locator Pin

Front USB Port

Dock Indicator LED
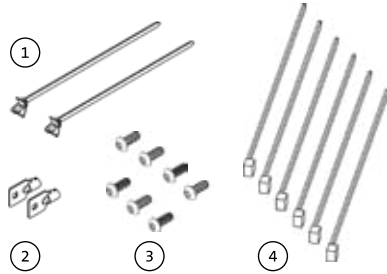
Front Hook

Mounting Bracket

Hardware Kit

This Hardware Kit includes:

1. Zip Ties/Push Pins (2)
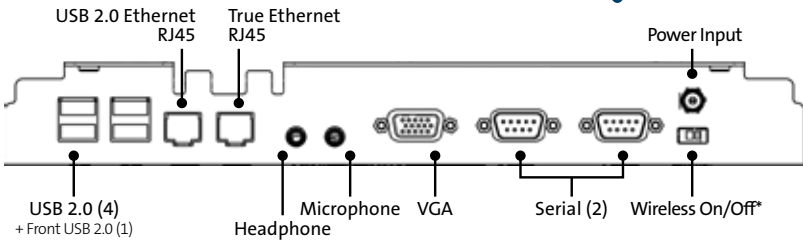2. Keys (2)
3. 1/4"-20 Screws (7)
4. Zip Ties (6)

Tools required for installation:

- 5/32" Hex Drive
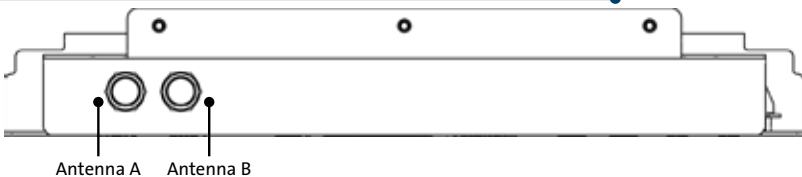*(For securing 1/4"-20 Screws)*

1

2

3

4

Port Replication Capability

Forward Exiting Connectivity

USB 2.0 Ethernet RJ45

True Ethernet RJ45

Power Input

USB 2.0 (4)
+ Front USB 2.0 (1)

Headphone

Microphone

VGA

Serial (2)

Wireless On/Off*

* NOTE

For CF-30 computers, WWAN pass-through can be controlled according to Wireless On/Off switch setting.
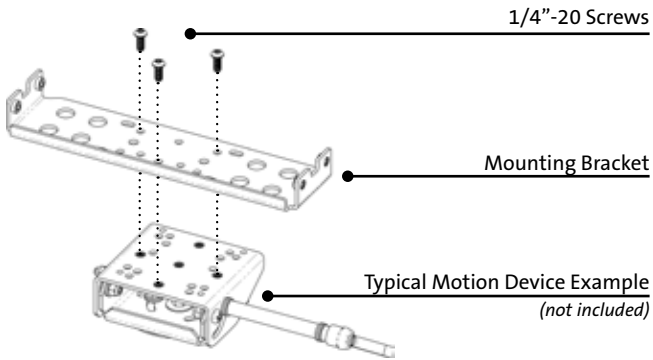For CF-31 computers, WWAN will always function as pass-through regardless of switch setting.

Rearward Exiting Connectivity *(Optional Single or Dual Antenna)*

Antenna A

Antenna B

Installation & Cable Management

1). Install the Mounting Bracket to the Motion Device using (3) 1/4"-20 screws *(Hardware Kit Item 3)*. Torque screws to 13.4Nm (120 in-lbs) ± 10%.

   NOTE: Numerous hole patterns present in Mounting Bracket should accommodate most competitor's motion devices.
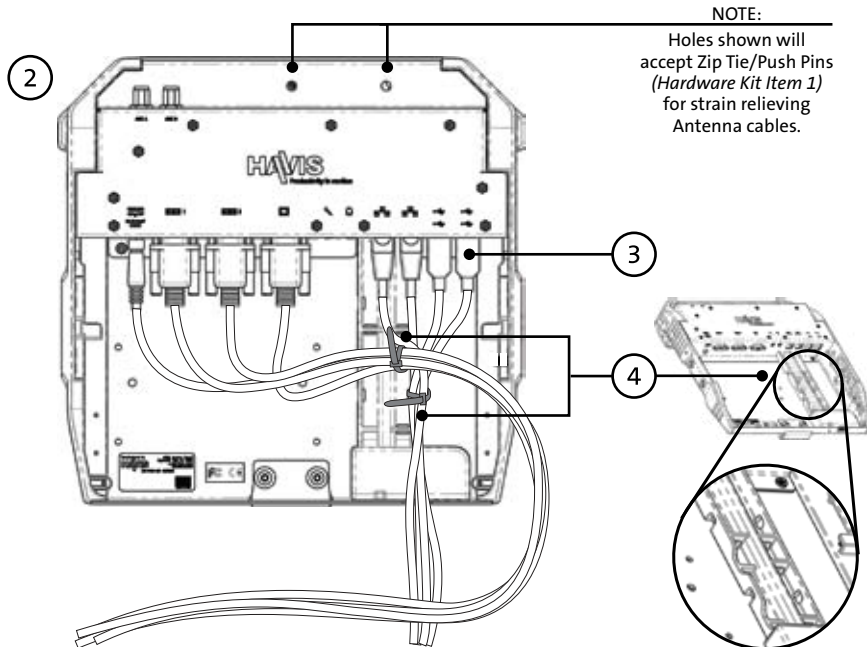
1/4"-20 Screws

Mounting Bracket

Typical Motion Device Example
(not included)

2). Orient the Docking Station in a position that is comfortable to work with.

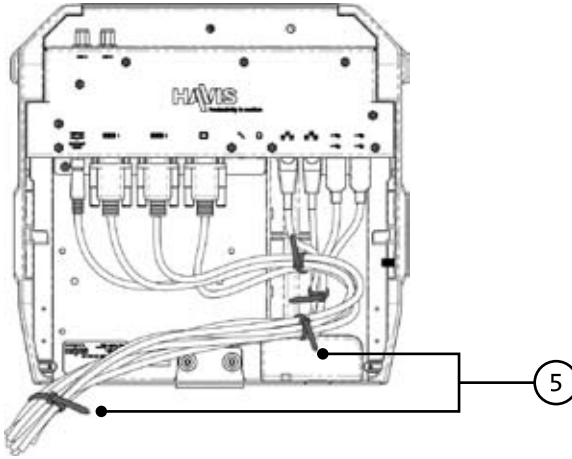3). Install all cables that are necessary for computing needs.
NOTE: If mounting Power Supply to Docking Station, go to Page 10 before completing Step 3

4). Use Zip Ties *(Hardware Kit Item 4)* to strain relieve cables to the Strain Relief Loops at front of Docking Station.
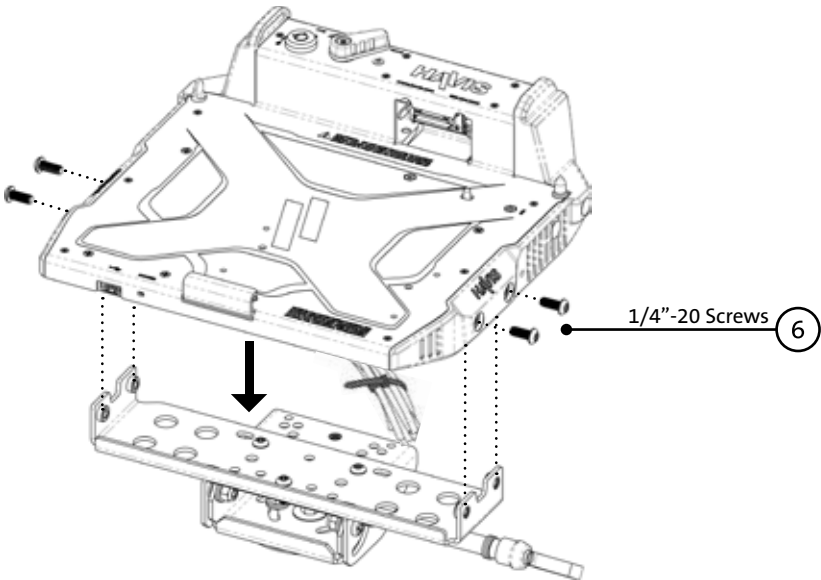
NOTE:
Holes shown will accept Zip Tie/Push Pins *(Hardware Kit Item 1)* for strain relieving Antenna cables.

5). Gather all strain relieved cables into a single bundle and secure with Zip Ties to facilitate routing in later installation steps.
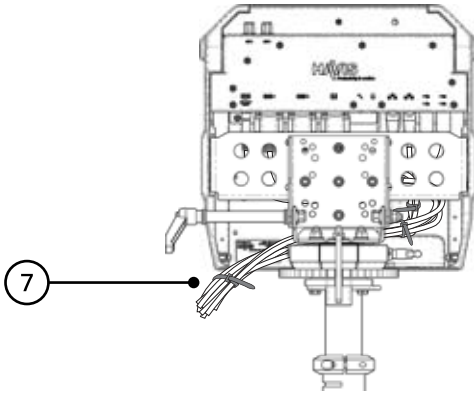

6). Lower the Docking Station onto the Mounting Bracket as shown, being cautious not to pinch the cable bundle. Secure with (4) 1/4"-20 screws (supplied). Torque screws to 13.4 Nm (120 in-lbs) ± 10%.
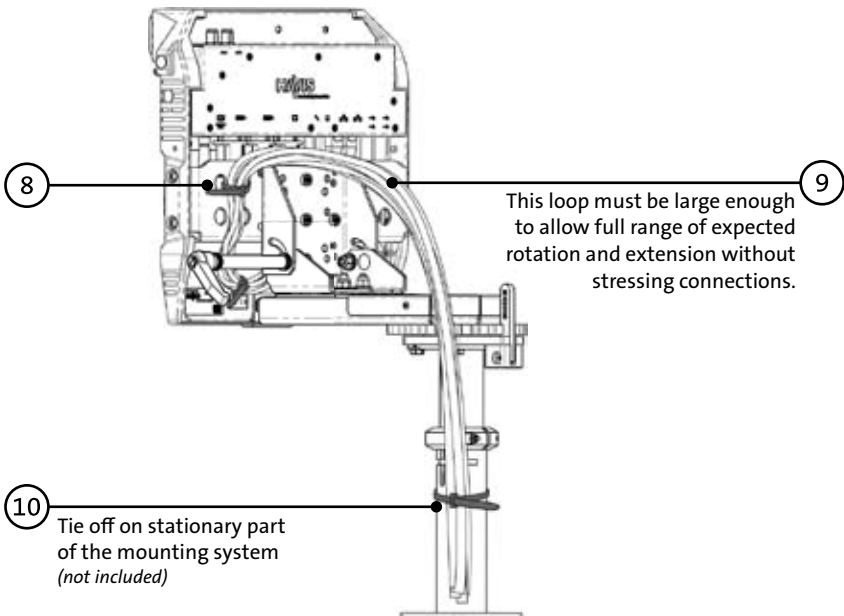

1/4"-20 Screws (6)

NOTE: It is recommended to use a drop of medium strength (blue) thread locking adhesive applied to the threads of all fasteners.

7). Tilt the Motion Device to a position allowing you access to the back side of docking station and route cables out the side as shown.

8). Route cable bundle and tie off to Mounting Bracket with Zip Tie *(Hardware kit Item 4).*

9). Create a service loop with cable bundle to ensure that no tension is on the connectors and to enable intended range of motion.

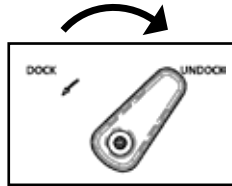10). Tie off cables onto a stationary part of the mounting system.

This loop must be large enough to allow full range of expected rotation and extension without stressing connections.

Tie off on stationary part of the mounting system *(not included)*

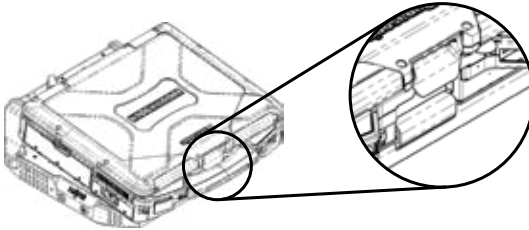11). Position Docking Station as desired for use inside mobile workspace.

⚠CAUTION

- **DO NOT MATE COMPUTER TO DOCKING STATION UNLESS COMPUTER'S DOCKING CONNECTOR ACCESS DOOR IS FULLY OPEN OR DAMAGE MAY RESULT.**

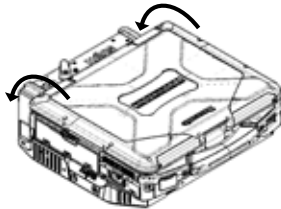- **DO NOT FORCE LAPTOP ONTO DOCKING STATION. IF THERE IS RESISTANCE, CHECK ALIGNMENT OF COMPUTER ON DOCKING STATION.**

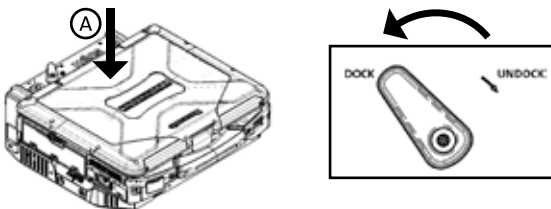1). Ensure Docking Station is unlatched by positioning the Latch Handle to the "UNDOCK" position.

2). With rear of computer elevated, load front of computer into Docking Station by aligning Front Hook with the appropriate recess in the computer case.

3). Lower back of computer onto Brass Locator Pins.

4). Apply light downward pressure over rear of computer as indicated by Arrow A and rotate Latch Handle counter-clockwise to the "DOCK" position.
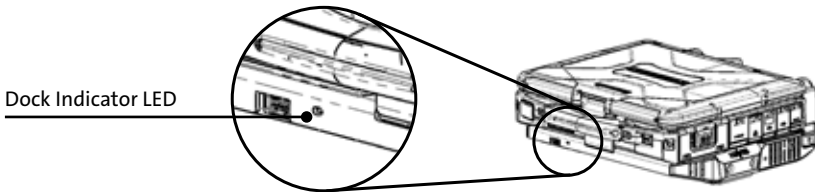
5). For theft deterrence, secure computer by locking Docking Station with supplied key.

6). Power on computer. The Dock Indicator LED will light up green to indicate proper system function.

Dock Indicator LED

DOCK INDICATOR LED DIAGNOSTICS:

GREEN: Computer docked, all ports ready for use.

ORANGE: USB and LAN ports are not functioning.

RED: Computer is not supported or a connection is not made.

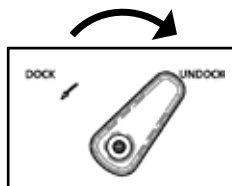**RED (Blinking):** Firmware error has occurred.

NOT LIT: Computer is not installed, is turned off, or in standby or sleep mode.

Operation - Undocking

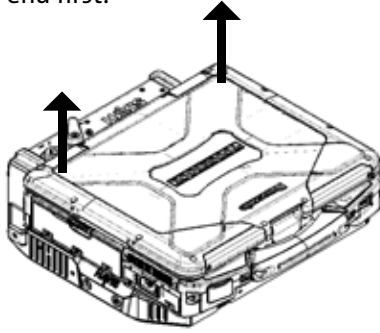1). If previously locked, unlock Docking Station using supplied key.

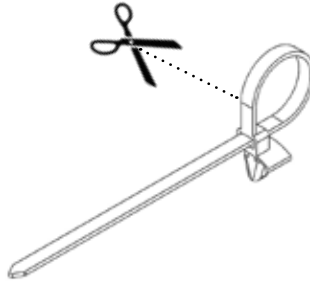2). Rotate Latch Handle clockwise to the "UNDOCK" position.

3). Once unlatched grab both sides of computer and carefully lift out of
Docking Station, rear end first.

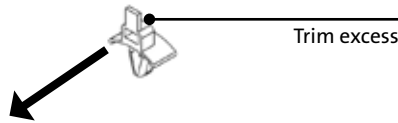## Zip Tie/Push Pin Information

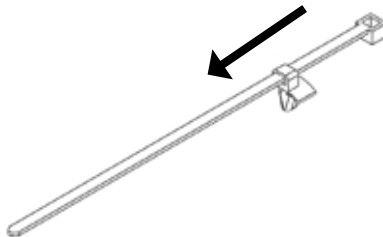1). In the event that a strain relieved cable needs to be removed or replaced,
do not attempt to remove entire Zip Tie/Push Pin. Cut Zip Tie as shown,
taking care to not damage the cables.

2). Pull the cut Zip Tie through the Push Pin housing. Trim excess so sharp
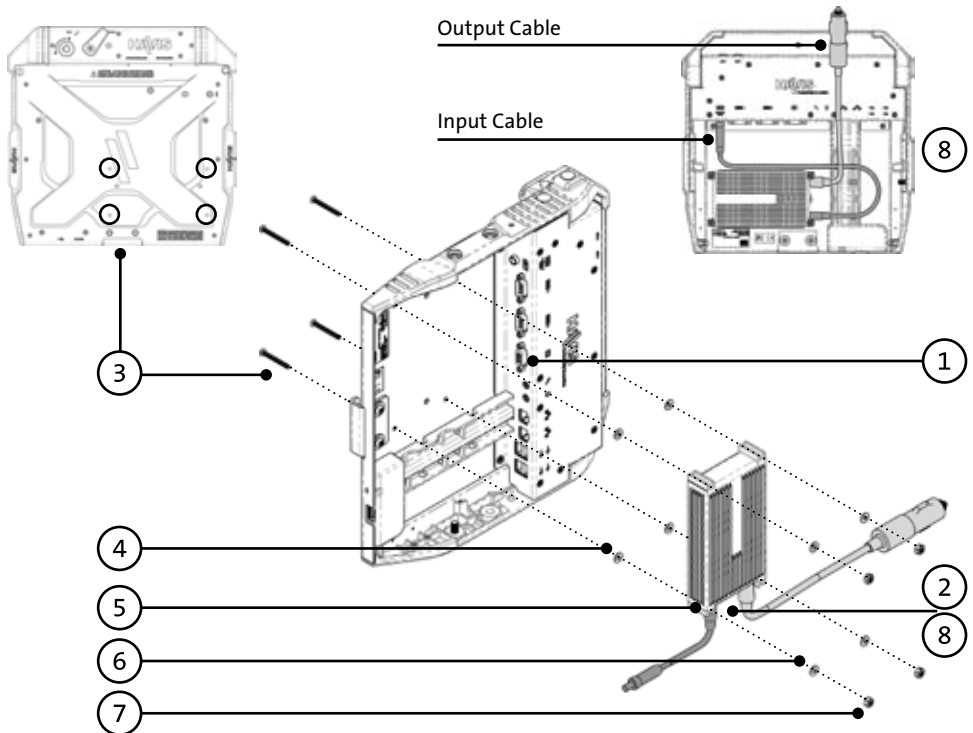edge does not damage reinstalled cables.

Trim excess

3). Insert a new Zip Tie into the Push Pin housing and strain relieve cables.

Installation of Power Supply *(LPS-101/LPS-104 - Optional)*

NOTE: Refer to Page 1 to ensure that you have the appropriate Power Supply for your Specific computer model.

1). Power off computer and ensure all cables are disconnected from computer.

2). Plug in both input and output cables (supplied with LPS-101/LPS-104) into the Power Supply brick.

3). With the Docking Station right side up, drop (4) #6-32 screws (supplied with LPS-101/LPS-104) through the holes in Docking Station as shown.

4). While supporting the (4) #6-32 screws, flip the Docking Station upside down and place (1) flat washer over each of the (4) #6-32 screws.

5). Place the Power Supply brick over the (4) #6-32 screws ensuring that the screws pass through all of the bosses on the Power Supply brick and the cables are pointing in the direction shown.

6). Place the remaining (4) flat washers over each of the #6-32 screws and hand start a #6-32 locking nut onto each of the screws.

7). Torque all (4) #6-32 locking nuts to 0.9 Nm (8.0 in-lbs) ±10% ensuring that the #6-32 screws stayed properly aligned with the bosses of the Power Supply brick.

8). Route the Power Supply output cable as shown and secure connector to power input port on Docking Station. Be sure to coil and strain relieve excess cabling.

9). Return to Installation & Cable Management Step #3 on Page 4.

Output Cable

Input Cable

Related Products

Havis offers a wide variety of accessory products for use with the DS-PAN-110 Series Docking Station.
For more information or to order please visit www.havis.com.

LPS-104
120W Power Supply
External power supply and cable for Panasonic CF-31 Toughbooks with cigarette lighter adaptor.

DS-DA-409
Screen Stiffener
Secure your laptop screen to prevent excess wear and reduce vibration while in use.

DS-DA-601
Rugged Communications Hub
Rugged USB/Ethernet hub makes adding peripherals to your mobile workspace easy and safe.

DS-DA-102
USB Powered Keyboard Light
Soft red LED light illuminates the laptop keyboard for night viewing.

DS-DA-207
Card Reader Mounting Bracket
Mount an E-Seek Model 250 card reader to the side of the Docking Station.
(Bracket can be customized for other Card Reader Models)

Interactive Online Catalog

This new and exciting interactive catalog is an easy to use, full color, online version of our printed catalog.

Visit www.haviscatalog.com for direct access to the Interactive Catalog!

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