

Owner's Manual

Havis Power Supply

This Owner's Manual applies to the following Part Numbers

120N-A01-R12-1

120N-D01-S04-1

120N-A01-T01-1

120N-D01-T01-1

120N-B01-R03-1

120N-B01-S03-1



E100507_REV-E

Before Beginning

Havis is pleased to provide this Owner's Manual to aid in the proper installation and use of the Havis Power Supply.

For questions regarding the set-up or operation of your power supply, please contact Havis at 1-800-458-3410 or visit www.havis.com for additional product support and information.

WARNING

- NEVER STOW OR MOUNT THE POWER SUPPLY DIRECTLY IN A VEHICLE AIRBAG DEPLOYMENT ZONE.
- DO NOT PLACE METAL OBJECTS OR CONTAINERS OF LIQUID ON TOP OF THE POWER SUPPLY.
- IF A MALFUNCTION OCCURS, IMMEDIATELY UNPLUG THE POWER SUPPLY.
- DO NOT EXPOSE TO DIRECT WATER OR STEAM. POWER IS PRESENT IN THE UNIT AT ALL TIMES UNLESS DISCONNECTED FROM THE BATTERY.

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 POWER SUPPLY WHERE WATER, MOISTURE, STEAM, DUST, ETC. ARE PRESENT.
- VERIFY THAT THE POWER SUPPLY YOU RECEIVED IS COMPATIBLE WITH THE INTENDED DOCKING STATION/DEVICE TO PREVENT ACCIDENTAL DAMAGE.
- DO NOT CONNECT CABLES INTO PORTS OTHER THAN WHAT THEY ARE SPECIFIED FOR.
- DO NOT LEAVE THE POWER SUPPLY IN A HIGH TEMPERATURE ENVIRONMENT (GREATER THAN 85°C, 185°F) FOR A LONG PERIOD OF TIME.
- INSTALL THE POWER ADAPTER IN A LOCATION THAT ALLOWS FOR AIR FLOW AROUND THE ADAPTER. DO NOT COVER THE POWER ADAPTER AND RESTRICT AIRFLOW. RESTRICTING AIRFLOW MAY CAUSE THE ADAPTER TO OVERHEAT AND MALFUNCTION.
- THE POWER SUPPLY MUST BE USED WITH A FUSE RATED AT A MINIMUM OF 15 AMPS AND A MAXIMUM OF 20 AMPS ON THE INPUT POWER.

NOTICE

- THE POWER SUPPLY CANNOT BE MOUNTED ON THE DOCKING STATION. SELECT A REMOTE MOUNTING LOCATION SUITED TO YOUR SPECIFIC INSTALLATION ENVIRONMENT. IF MOUNTING NEAR THE DOCKING STATION IS PREFERRED OR REQUIRED THEN LPS-211 MOUNTING ACCESSORY CAN BE USED.
- IF YOU CHOOSE TO MOUNT THE POWER SUPPLY TO A SURFACE OTHER THAN SHEET METAL, PLEASE SUBSTITUTE THE APPROPRIATE HARDWARE AND FASTEN SECURELY.
- IF IT IS NECESSARY TO PRE-DRILL HOLES, THE REQUIRED DIMENSIONS ARE NOTED IN VIEW A. BE CERTAIN TO DRILL HOLES OF AN APPROPRIATE SIZE FOR THE FASTENER TYPE SELECTED.
- POWER SUPPLY MUST BE MOUNTED TO ALLOW THE POWER CABLES TO BE PLUGGED INTO THE DOCKING STATION. BE CERTAIN TO PROVIDE AN ADEQUATE SERVICE LOOP SO AS NOT TO RESTRICT THE INTENDED FULL RANGE OF MOTION OF YOUR MOUNTING DEVICE, OR ANY INSTALLED ACCESSORIES.

Avant toute utilisation

Havis a le plaisir de mettre à disposition ce manuel d'utilisation pour faciliter l'installation et l'utilisation appropriées de l'alimentation électrique Havis.

Pour toute question concernant l'installation ou le fonctionnement de votre alimentation électrique, veuillez contacter Havis au 1-800-458-3410 ou consulter le site www.havis.com pour obtenir un support produit ainsi que des informations supplémentaires.

AVERTISSEMENT

- NE JAMAIS RANGER OU INSTALLER L'ALIMENTATION ÉLECTRIQUE DIRECTEMENT DANS LA ZONE DE DÉPLOIEMENT DE L'AIRBAG D'UN VÉHICULE.
- NE JAMAIS PLACER D'OBJETS MÉTALLIQUES OU DE CONTENANTS DE LIQUIDE AU-DESSUS DE L'ALIMENTATION ÉLECTRIQUE.
- EN CAS DE DYSFONCTIONNEMENT, DÉBRANCHER IMMÉDIATEMENT LE BLOC D'ALIMENTATION.
- NE PAS EXPOSER AU CONTACT DIRECT DE L'EAU OU DE LA VAPEUR. L'ALIMENTATION EST PRÉSENTE DANS L'UNITÉ EN TOUT TEMPS SAUF SI ELLE EST DÉCONNECTÉE DE LA BATTERIE.

ATTENTION

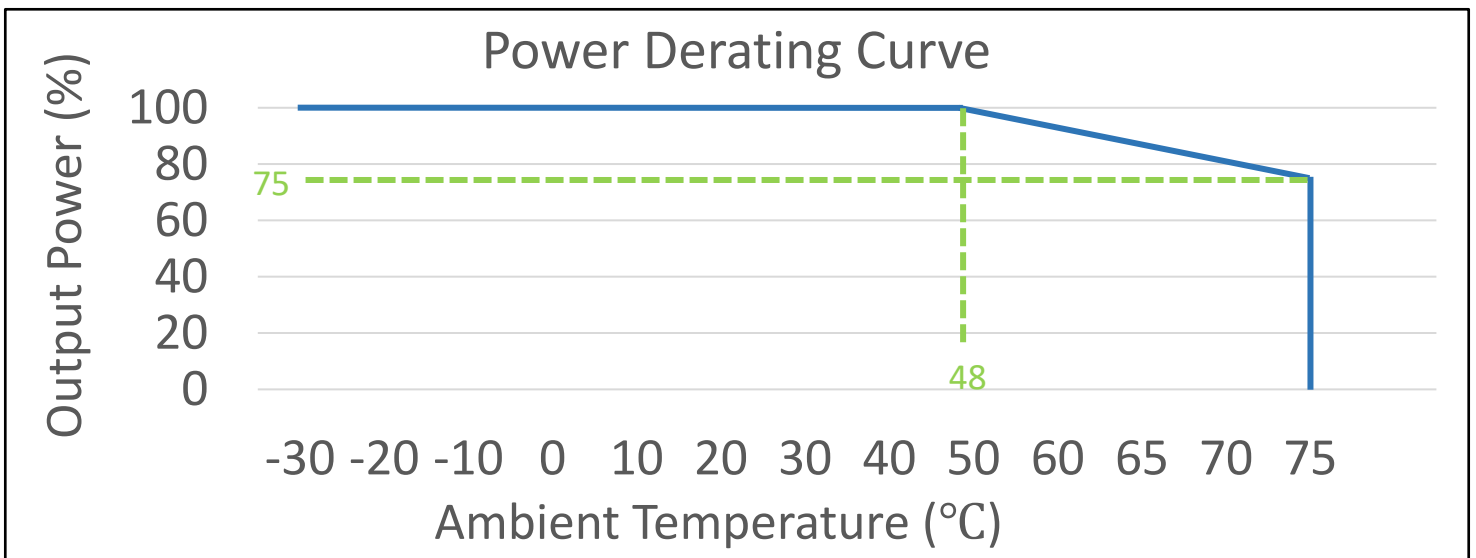
- LIRE ATTENTIVEMENT TOUTES LES INSTRUCTIONS AVANT DE COMMENCER L'INSTALLATION.
- CE PRODUIT N'EST PAS ASSORTI D'UN INDICE DE PROTECTION IP (INDICE DE PROTECTION CONTRE LES INFILTRATIONS). NE PAS RANGER, INSTALLER OU UTILISER L'ALIMENTATION ÉLECTRIQUE LÀ OÙ DE L'EAU, DE L'HUMIDITÉ, DE LA VAPEUR, DE LA POUSSIÈRE, ETC. SONT PRÉSENTES.
- VÉRIFIER QUE L'ALIMENTATION ÉLECTRIQUE REÇUE EST COMPATIBLE AVEC LA STATION D'ACCUEIL/APPAREIL PRÉVU AFIN D'ÉVITER TOUT DOMMAGE ACCIDENTEL.
- NE PAS BRANCHER DE CÂBLES DANS DES PORTS AUTRES QUE CEUX POUR LESQUELS ILS SONT SPÉCIFIÉS.
- NE PAS LAISSER L'ALIMENTATION DANS UN ENVIRONNEMENT À HAUTE TEMPÉRATURE (PLUS DE 85°C, 185°F) PENDANT UNE LONGUE PÉRIODE.
- INSTALLER L'ADAPTATEUR D'ALIMENTATION DANS UN EMPLACEMENT PERMETTANT LA CIRCULATION DE L'AIR AUTOUR DE L'ADAPTATEUR. NE PAS COUVRIR L'ADAPTATEUR D'ALIMENTATION ET NE PAS RESTREINDRE LA CIRCULATION DE L'AIR. RESTREINDRE LA CIRCULATION DE L'AIR PEUT ENTRAÎNER UNE SURCHAUFFE ET UN DYSFONCTIONNEMENT DE L'ADAPTATEUR.
- L'ALIMENTATION ÉLECTRIQUE DOIT ÊTRE UTILISÉE AVEC UN FUSIBLE D'UNE CAPACITÉ MINIMALE DE 15 AMPÈRES ET MAXIMALE DE 20 AMPÈRES SUR L'ALIMENTATION D'ENTRÉE.

AVIS

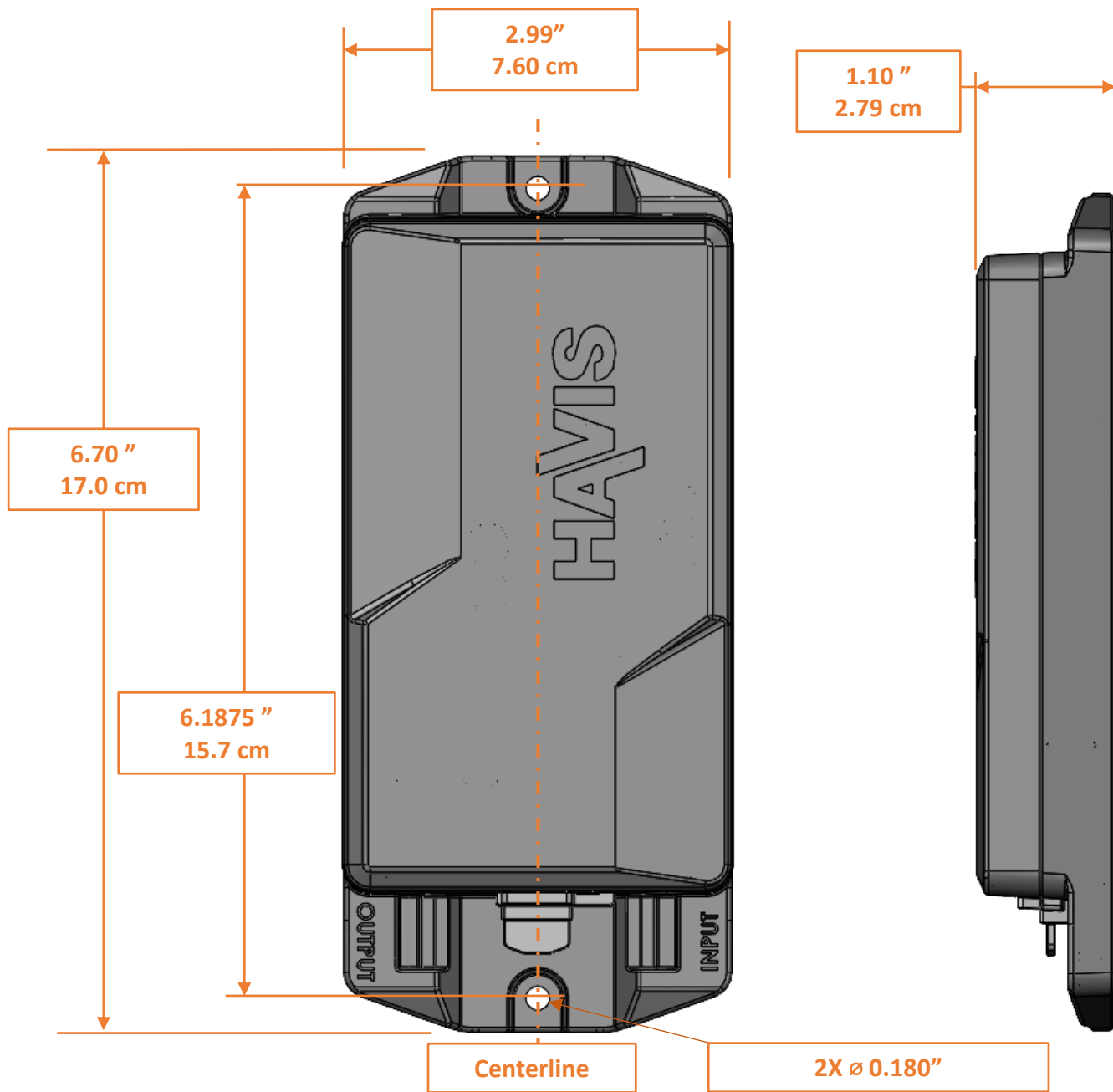
- L'ALIMENTATION ÉLECTRIQUE NE PEUT PAS ÊTRE MONTÉE SUR LA STATION D'ACCUEIL. CHOISISSEZ UN EMPLACEMENT DE MONTAGE À DISTANCE ADAPTÉ À VOTRE ENVIRONNEMENT D'INSTALLATION SPÉCIFIQUE.
- SI VOUS CHOISISSEZ DE FIXER L'ALIMENTATION ÉLECTRIQUE SUR UNE SURFACE AUTRE QUE LE MÉTAL, VEUILLEZ SUBSTITUER LE MATÉRIEL APPROPRIÉ ET LE FIXER SOLIDEMENT.
- EN CAS DE PRÉ-PERÇAGE, LES DIMENSIONS REQUISES SONT INDICUÉES DANS LA VUE A. VEUILLEZ À PERCER DES TROUS D'UNE TAILLE APPROPRIÉE POUR LE TYPE DE FIXATION CHOISI.
- L'ALIMENTATION ÉLECTRIQUE DOIT ÊTRE MONTÉE DE MANIÈRE À CE QUE LES CÂBLES D'ALIMENTATION PUISSENT ÊTRE BRANCHÉS DANS LA STATION D'ACCUEIL. VEUILLEZ À FOURNIR UNE BOUCLE DE SERVICE ADÉQUATE AFIN DE NE PAS RESTREINDRE L'AMPLITUDE DE MOUVEMENT DE VOTRE DISPOSITIF DE MONTAGE OU DE TOUT ACCESSOIRE INSTALLÉ.

Specifications

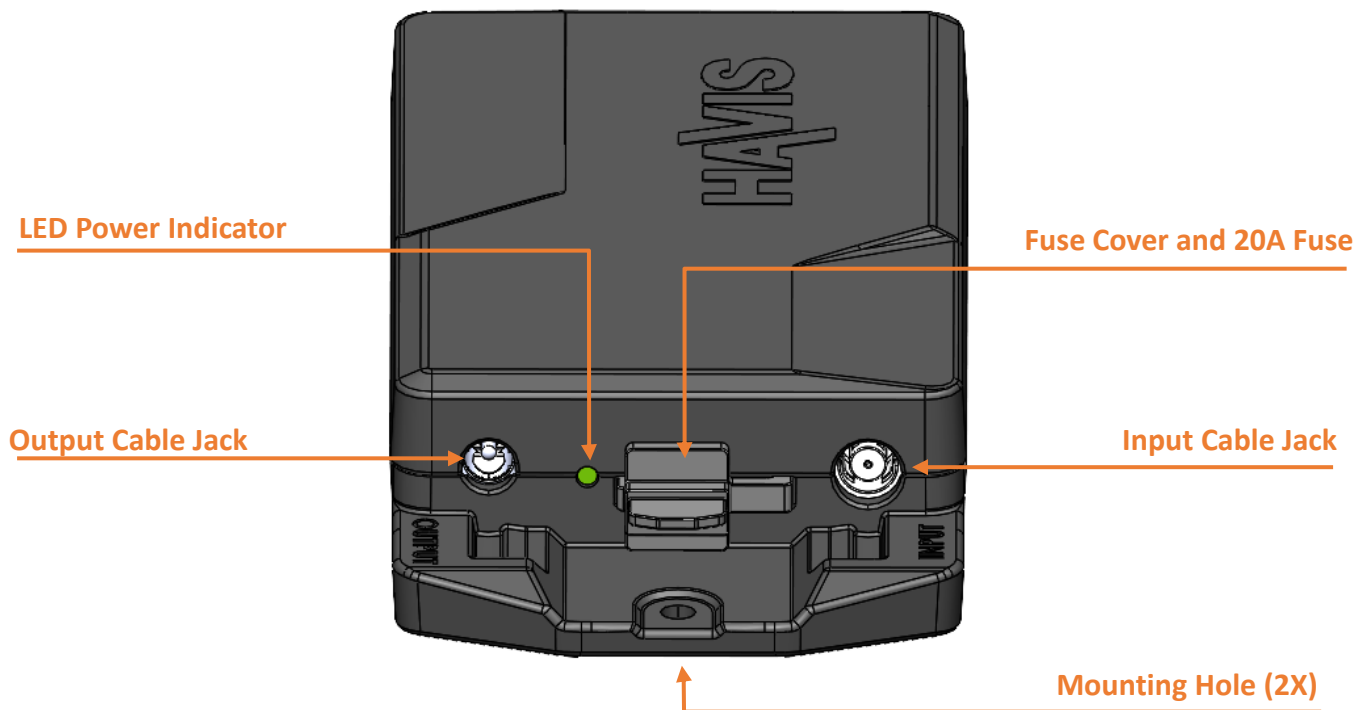
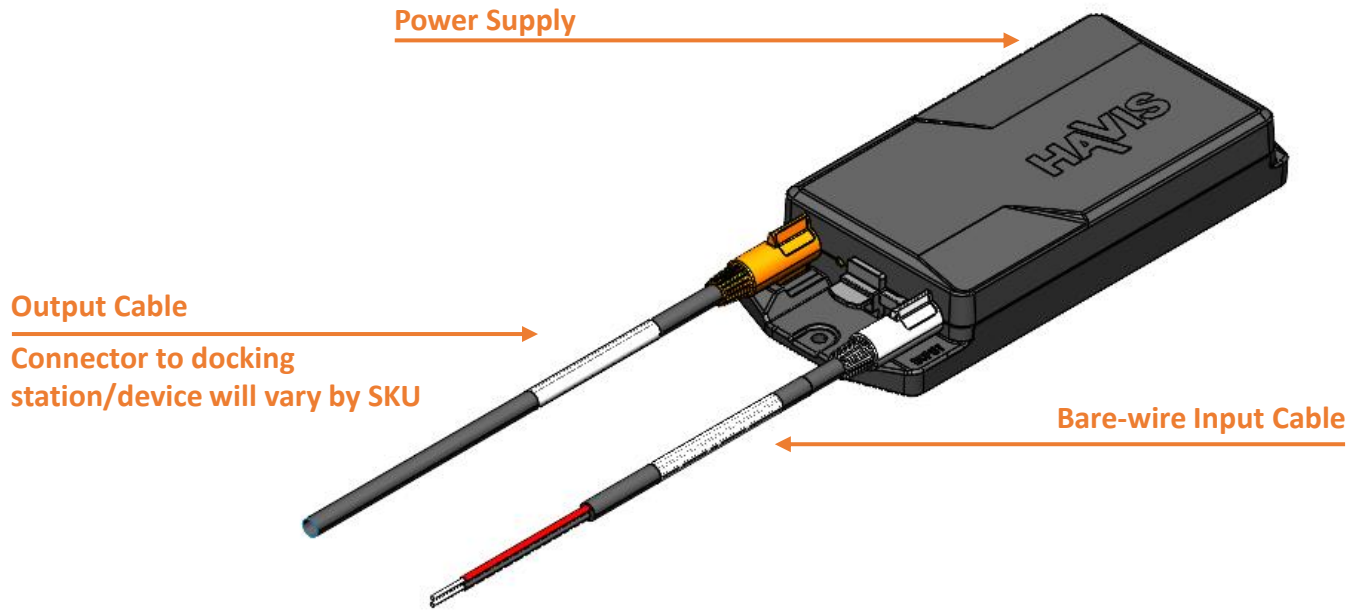
Configuration (SKU)	Description	Input Voltage Input Current	Output Voltage Output Current	Input Cable Part Number (Length ")	Output Cable Part Number (Length")
120N-A01-R12-1	120W Power Supply with Right Angle Connector (4.75mm Barrel)	12-16V DC 15A Max	19.5 V DC 6.16A	DS-DA-347 (72")	DS-DA-351 (72")
120N-A01-T01-1	120W Power Supply with Switchcraft Connector	12-16V DC 15A Max	19.5 V DC 6.16A		DS-DA-348 (72")
120N-B01-R03-1	120W Power Supply with Right Angle Connector (2.5mm Barrel)	12-16V DC 15A Max	15.6 V DC 7.7A		DS-DA-350 (36")
120N-B01-S03-1	120W Power Supply with Straight Barrel Connector (2.5mm Barrel)	12-16V DC 15A Max	15.6 V DC 7.7A		DS-DA-349 (36")
120N-D01-S04-1	120W 24V Power Supply with Straight Barrel Connector 2.5mm	12-16VDC 15A Max	24V DC 5A		DS-DA-355 (72")
120N-D01-T01-1	120W 24V Power Supply with Switchcraft Connector	12-16VDC 15A Max	24V DC 5A		DS-DA-348 (72")
Weight: Lbs. (kg)	0.59 lbs. (0.27 kg)				
Dimensions	1.10" (2.79 cm) H x 2.99" (7.60 cm) W x 6.70" (17.0 cm) D				
Operating Environment	-30° C to 48° C (-22° F to 118° F) (See the Power Derating Curve for loads with max power less than 120W).				
Storage Environment	-40° C to 85° C (-40° F to 185° F)				



Specifications



Parts Included



Parts Included (continued)

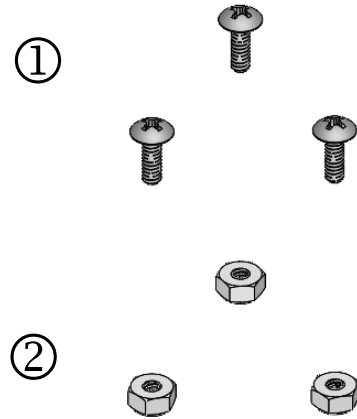
Hardware Kit (No. 41933)

This Hardware Kit includes:

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

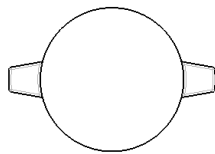
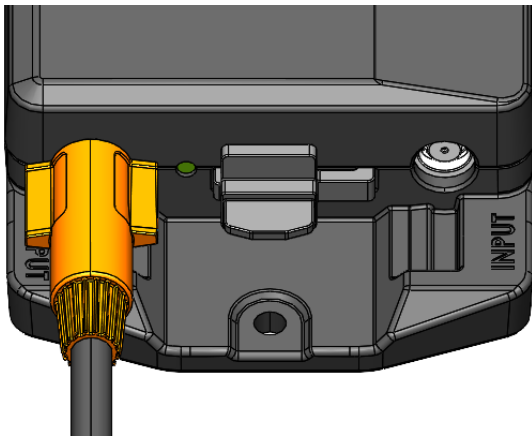
Tools required for installation:

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

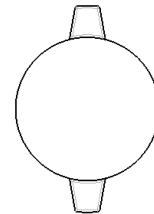
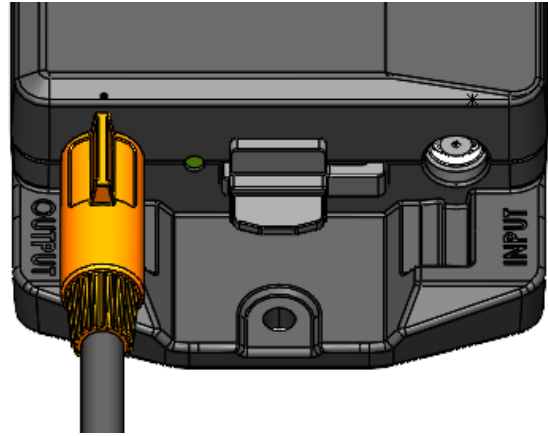


Installation – Connecting the Power Cables

- 1) Connect the Orange Output Cable into the power supply, the cable tabs should be in the unlocked position as shown. Ensure the cable is fully inserted.
- 2) Rotate the output cable tabs clockwise into the locked position.



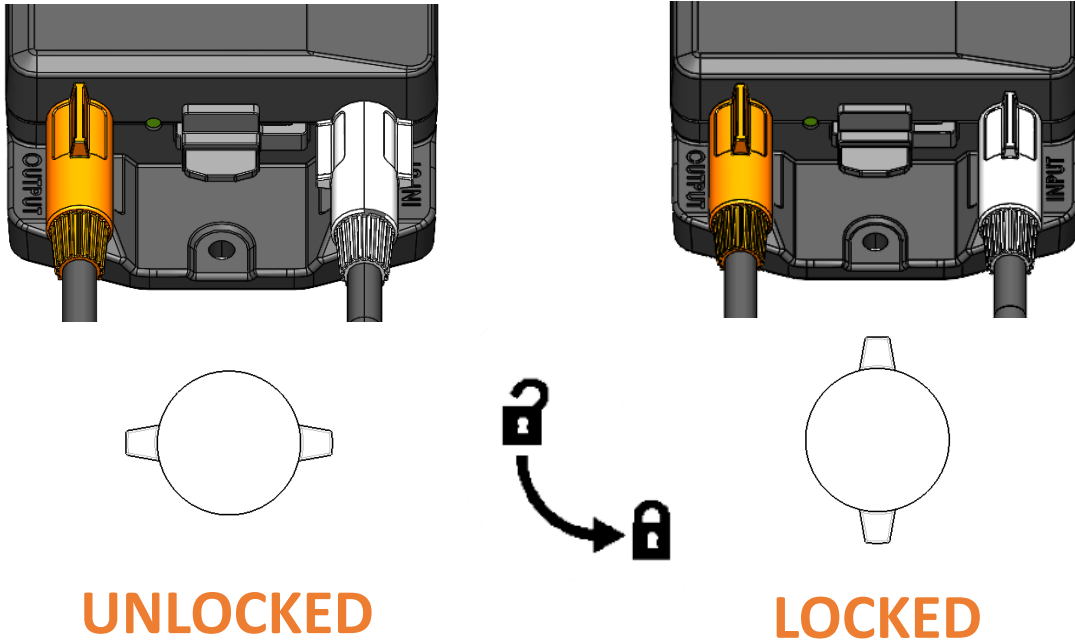
UNLOCKED



LOCKED

Installation – Connecting the Power Cables:

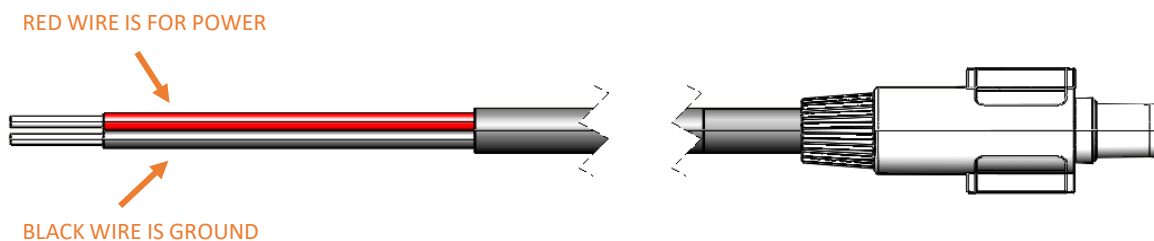
- 3) Install the White Input Cable into the power supply. Ensure the cable is fully inserted then rotate the tabs counter-clockwise into the locked position.



- 4) Ensure the DC power source is safely turned off before connecting the power supply to the vehicle power source.

Installation – Connecting the Power Cables:

5a) Connect the bare-wire input power cable to the DC power source. The Red Wire is for power (V+) and the Black Wire is ground (V-). **Note:** failure to fuse device properly or use outside of temperature operating range could result in an unsafe condition.



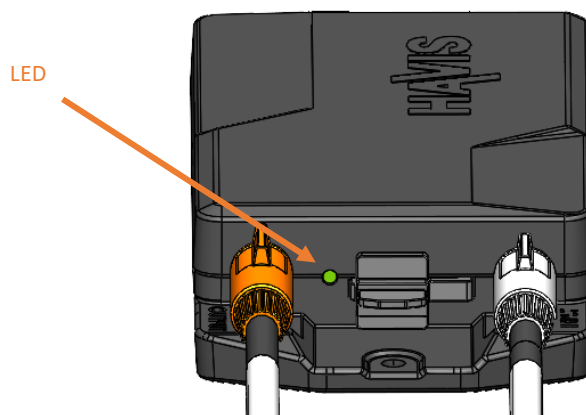
5b) If using the Lighter Plug Power Cable (DS-DA-356), ensure the plug is fully inserted into the 12V auxiliary power outlet.

Compatibility Note: This plug is designed to fit the SAE (American) standard. It is not compatible with the European DIN/ISO standard outlets found in some vehicles.

Safety Note: The Lighter Plug Power Cable (DS-DA-356) has a non-replaceable fuse.

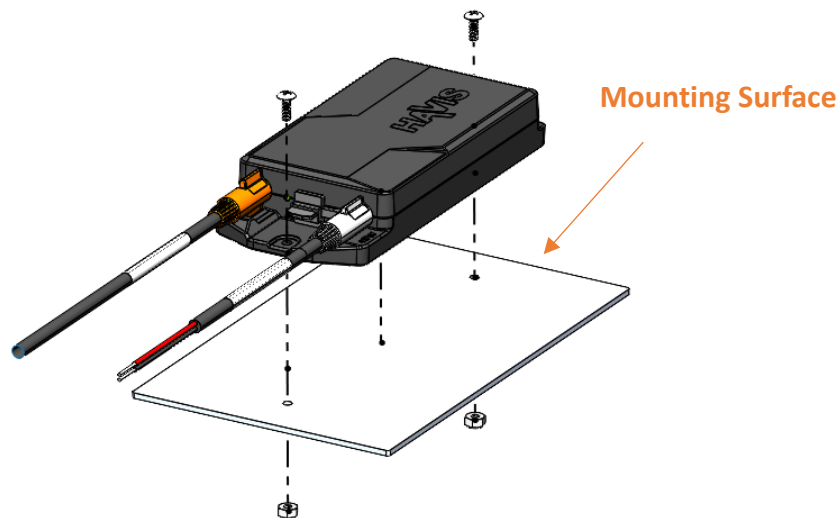


6) The green LED illuminates when input cable is secured and input voltage is within specified range.



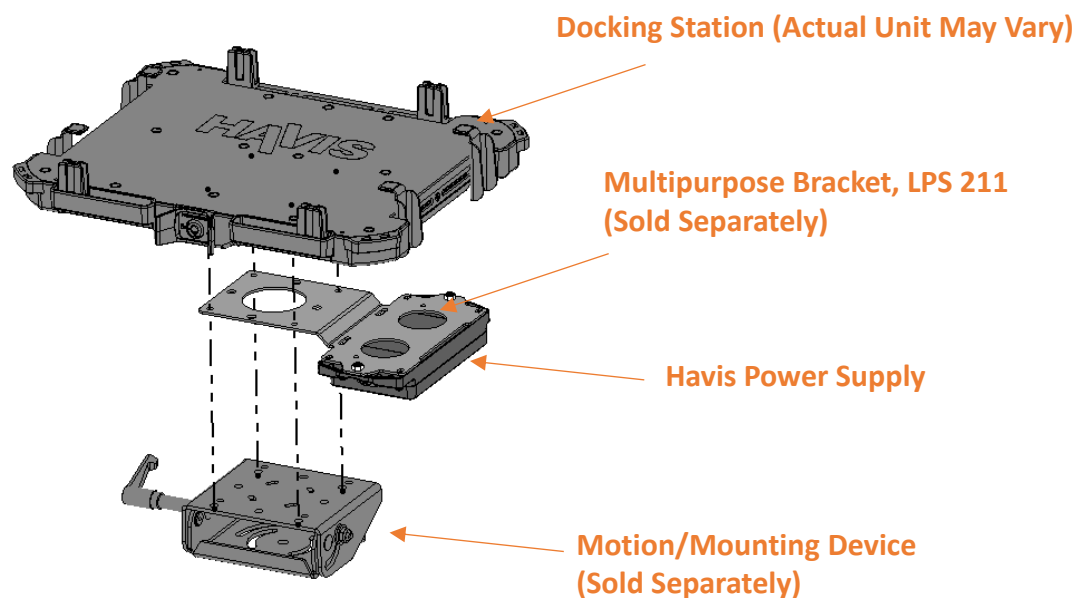
Installation – Panel Mounting

- 1) Drill two 9/64" thru holes into sheet metal mounting surface using the power supply mounting holes dimensions as reference.
- 2) Once thru holes are drilled, position the Power Supply by lining up tabs with thru holes, ensuring the flat surface of power supply is positioned against panel mounting surface.
- 3) Install the 2X #6-32 Machine Screws (Item #2) through the holes on the other side of the mounting surface and attach power supply with the 2X #6-32 Lock Nuts (Item #1) and tighten.
- 4) Torque screws/nuts to 8 in-lbs +/-10%. DO NOT OVER TORQUE THE SCREWS.



Installation – Dock/Cradle Mounting

- 1) If mounting between motion device and docking station/cradle is preferred, a Multipurpose Bracket, LPS-211, can be purchased separately.
- 2) Follow mounting instructions provided with optional LPS-211.



Fuse Replacement Instructions

The original fuse included with this adapter is **Littelfuse 0297020.WXNV**. For safety and optimal performance, it is strongly recommended that users replace the fuse with one of equivalent specifications.

The replacement fuse must meet the following requirements:

- 1) Type: Fast-acting fuse (Fast-blow fuse)
- 2) Rating: 32V, 20A
- 3) Safety Standard: At least UL94 V-2 flammability rating.

Important Notes:

- 1) Using a fuse with lower specifications or different characteristics may result in improper operation or pose a safety risk.
- 2) Ensure that the replacement fuse is securely installed in the correct orientation.

Instructions pour le remplacement des fusibles

Le fusible d'origine fourni avec cet adaptateur est un **Littelfuse 0297020.WXNV**. Pour des raisons de sécurité et de performances optimales, il est fortement recommandé aux utilisateurs de remplacer le fusible par un modèle aux caractéristiques équivalentes.

Le fusible de rechange doit répondre aux exigences suivantes :

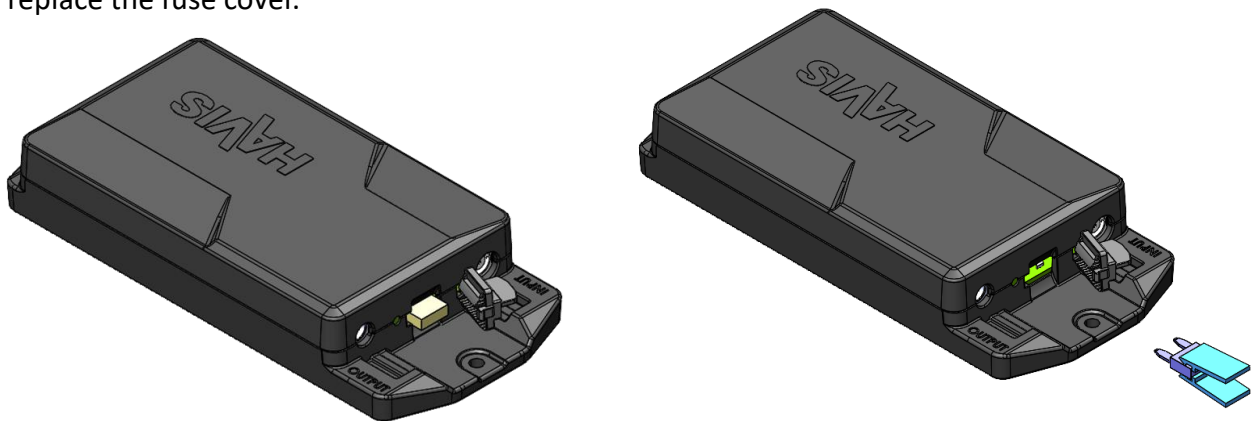
- 1) Type : Fusible à action rapide (Fusible à déclenchement rapide)
- 2) Indice nominal : 32V, 20A
- 3) Norme de sécurité : Indice d'inflammabilité UL94 V-2 au minimum.

Remarques importantes:

- 1) L'utilisation d'un fusible ayant des spécifications inférieures ou des caractéristiques différentes peut entraîner un mauvais fonctionnement ou un risque pour la sécurité.
- 2) Assurez-vous que le fusible de rechange est bien installé dans le bon sens.

Replacing the Fuse

- 1) Open the fuse cover and use a fuse puller to remove the 20A fuse.
- 2) Install the new 20A fuse which meets the requirements detailed above into the power supply and replace the fuse cover.



Regulatory Information

Canada

CAN ICES-3 (B) / NMB-3 (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.

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