# Invacare Power Interface

Owner's Manual - Maintenance Guide
IDH520 i-Drive Power Interface for Invacare

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**Stealth Products** is committed to 100% customer satisfaction. Your complete satisfaction is important to us. Please contact us with feedback or suggestions to help us improve the quality and usability of our products.

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|---|---|---|
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# General

Read and understand all instructions prior to the use of the product. Failure to adhere to instructions and warnings in this document may result in property damage, injury, or death. Product misuse or failure to follow instructions will void the warranty.

Immediately discontinue use if any function is compromised, if parts are missing or loose, or if any component shows signs of excessive wear. Consult with your supplier for repair, adjustment, or replacement.

All persons responsible for fitting, adjustment, and daily use of the devices discussed in the these instructions must be familiar with and understand all safety aspects of the devices mentioned. In order for our products to be used successfully, you must read and understand all instructions and warnings, and maintain our products according to our instructions on care and maintenance.

The installation instructions will guide you through this product's options and possibilities.

Instructions are written with the expressed intent of use with standard configurations. They also contain important safety and maintenance information, as well as describe possible problems that can arise during use. For further assistance, or more advanced applications, please contact your supplier or **Stealth Products** at (512) 715-9995 or toll free at (800) 965-9229.

Always keep the operating instructions in a safe place so they may be referenced as necessary.

All information, pictures, illustrations, and specifications are based on the product information that was available at the time of printing. Pictures and illustrations shown in these instructions are representative examples and are not intended to be exact depictions of the various parts of the product.

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## ⚠️ CAUTION

These products are designed to be fitted, applied, and installed exclusively by a healthcare professional trained for these purposes. The fitting, application, and installation by a non-qualified individual could result in serious injury.

## Warranty

Our products are designed, manufactured, and produced to the highest of standards. If any defect in material or workmanship is found, **Stealth Products** will repair or replace the product at our discretion. Any implied warranty, including the implied warranties of merchantability and fitness for a particular purpose, shall not extend beyond the duration of this warranty. **Stealth Products** does not warrant damage due to, but not limited to: misuse, abuse, or misapplication of product, and/or modification of product without written approval from **Stealth Products, LLC**. Any alteration or lack of serial number, where applicable, will automatically void all warranty.

**Stealth Products, LLC** Is liable for replacement parts only. **Stealth Products, LLC** is not liable for any incurred labor costs.

**Stealth Products** warrants against failure due to defective materials or workmanship:

<div align="center">

**Covers: 2 years**
**Hardware: 5 years**
**Electronics: 3 years**

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In the event of a product failure covered by our warranty, please follow the procedures outlined below:

Call Stealth Products at (512) 715-9995 or toll free at (800) 965-9229.

Request a Return Authorization (RA) form from the Returns Department and follow the documentation instructions. Additional warranty information may be found by visiting the website at *https://stlpro.site/returns-n-warranty,* or by scanning the Warranty Information QR code on the back of this manual.

Copies of this manual may be downloaded by accessing the Stealth website (*https://stlpro.site/stealth-docs*) and searching "P91D11" in the search bar, or by scanning the Online User Manual QR code on the back of this manual.

## Supplier Reference

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| **Supplier:** | |
| **Telephone:** | |
| **Address:** | |
| | |
| **Purchase Date:** | |
| **Model:** | |

# Warning Labels

Warnings are included for the safety of the user, client, operator, and property. Please read and understand what the signal words **DANGER**, **WARNING**, **CAUTION**, **NOTICE**, and **SAFETY** mean, and how they could affect the user, those around the user, and property.

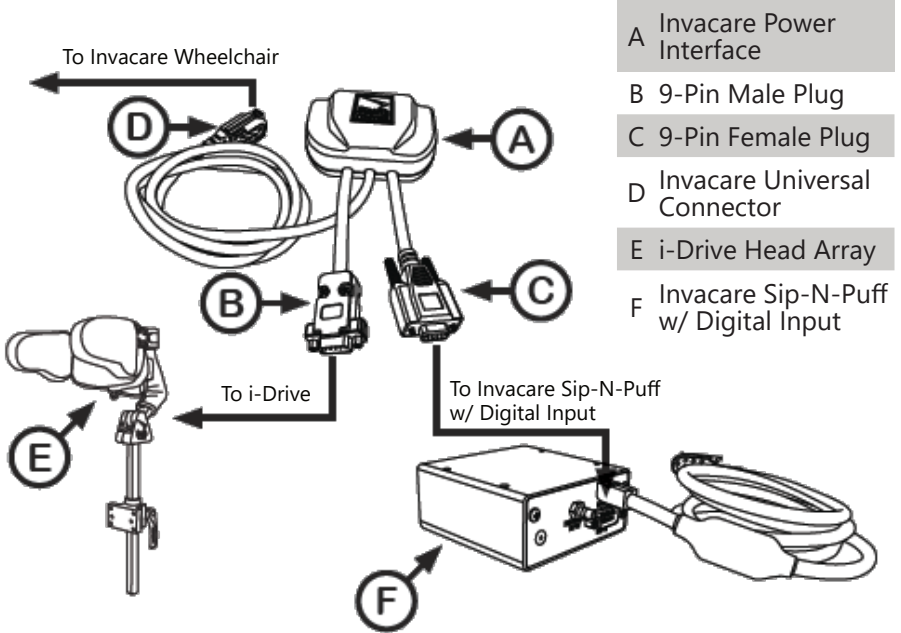| ⚠ **DANGER** | Identifies an **imminent** situation which, if not avoided, may result in **severe injury**, **death**, and **property damage**. |
|---|---|
| ⚠ **WARNING** | Identifies a **potential** situation which, if not avoided, may result in **severe injury**, **death**, and **property damage**. |
| ⚠ **CAUTION** | Identifies a **potential** situation which, if not avoided, may result in **minor to moderate injury** and **property damage**. |
| *NOTICE* | Identifies important information not related to injury, but possible **property damage**. |
| *SAFETY* | Indicates steps or instructions for safe practices, reminders of safe procedures, or important safety equipment that may be necessary. |

# Limited Liability

**Stealth Products, LLC** accepts no liability for personal injury or damage to property that may arise from the failure of the user or other persons to follow the recommendations, warnings, and instructions in this manual.

**Stealth Products** does not hold responsibility for final integration of final assembly of product to end user.  **Stealth Products** is not liable for user death or injury.

# Invacare Power Interface

The digital input on Invacare's Sip N' Puff with Digital Interface (seen below), is unpowered.  To provide the i-Drive with the required 12 volts, Stealth Products' Invacare Power Interface is used to convert 24 volts from Invacare's Universal Connectors to 12 volts for Stealth Products i-Drive Alternative Control.



| | |
|---|---|
| A | Invacare Power Interface |
| B | 9-Pin Male Plug |
| C | 9-Pin Female Plug |
| D | Invacare Universal Connector |
| E | i-Drive Head Array |
| F | Invacare Sip-N-Puff w/ Digital Input |

# Installation

To install the Invacare Power Interface, the male 9-pin plug (B) connects to the i-Drive Head Array.  The female 9-pin plug (C) connects to the Digital Input on Invacare's Sip 'N Puff with Digital Interface (F). Invacare's Universal Connector (D) connects to the Invacare electronics.

# Invacare Universal Connector

Please follow all safety procedures and instructions from the manufacturer when connecting Invacare's Universal Connector and Locking Securement Tab.

# Operation

After installation, the i-Drive Head Array will be ready for normal operation.  Please refer to the i-Drive User Manual for information on i-Drive operations and setup.  The Invacare Power Interface comes with a Power button to toggle power to the Head Array and a signal light that displays when the power is turned on.

| ⚠ **CAUTION** | Invacare's Universal Connector provides power for the i-Drive Electronics.  For extra precaution, it is advised to connect the Universal Connector last in order to avoid any possibility of product damage, shock, or personal injury. |
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| *NOTICE* | Invacare's Sip 'N Puff with Digital Interface (SNPM6/1139973) is required to install the Invacare Power Interface and Stealth Products' i-Drive onto an Invacare-powered wheelchair. |
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# Invacare MK6i Electronics

After having your i-Drive and Invacare Power Interface connected to the seating system, programming the MK6i Electronics is required.  Install and set up with the following instructions:

| *NOTICE* | Invacare MK6i Programmer required. |
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# Menu Navigation

- Navigate with the Up and Down navigation buttons.
- Return to the previous menu or exit with the Left navigation button.
- Select a menu item for more options with the Right navigation button.
- Toggle highlighted menu items with the Select button.
- Save the programmer's changes with the Save button.

# Installation

1. Power off the chair with the Power <span>PWR INFO</span> button on the joystick or display.

2. Disengage the motors.

3. Power on the chair from the display's Power <span>PWR INFO</span> button.

4. Plug the Programmer into the back of the Invacare MK6i joystick.

5. Power on the MK6i Programmer.

6. On the MK6i Programmer, navigate with the Up and Down <span>▲▼</span> buttons to "Performance Adjust" and select with the Right <span>▶</span> navigation button.

7. In the Performance Adjust menu, navigate with the Up and Down <span>▲▼</span> buttons to "Input Type" and either press the Select <span>SELECT</span> button to select "All Drive Profiles (D1-D4)", or navigate with the Left or Right <span>◀▶</span> navigation buttons to the Drive Profile you want to change and use the Select <span>SELECT</span> button.

8. After selecting the drive profile(s), navigate with the Up and Down <span>▲▼</span> buttons and use the Select <span>SELECT</span> button to select "Digital" from the list for the i-Drive.

9. If you would like to enable "Reverse Mode" with the reset switch, in the "Performance Adjust" menu, navigate with the Up and Down <span>▲▼</span> button to "RIM Control" and set your desired drive profile(s) RIM Control to "On" or "Off".

10. Now that you have programmed for digital input and RIM Control, save your settings with the Save <span>SAVE</span> button. A Save prompt should appear. Press Save <span>SAVE</span> again to save, or select "Cancel" with the Select <span>SELECT</span> button.

11. After saving, the screen should show that you have saved this information successfully. After saving, either Power Off the MK6i Programmer, or continue with further adjustments.

12. Unplug the MK6i Programmer.

13. Power off the chair to cycle the power.

14. The chair may prompt to "Press Reset" after the programmer is disconnected or when turning on. Press the reset switch on the i-Drive to clear the prompt.

15. The chair is now programmed to recognize the i-Drive.

| NOTICE | Reengage motors before operation. |
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## Powered Seating Control

1. Reconnect the MK6i Programmer (follow Steps 1-3 from installation)

2. On the MK6i Programmer, navigate with the Up and Down 🔘 buttons to Powered Seating and select with the Right button.

3. In the Powered Seating menu, navigate with the Up and Down 🔘 buttons to "Actuator Control" and set your desired drive profile(s) Actuator Control to an actuator control type.

4. After you are finished configuring the chair, save your settings with the Save 🔵 button. A save prompt should appear. Press Save 🔵 again to save, or press the Select 🔘 button to cancel.

5. Disconnect the MK6i Programmer (follow steps 11-15 from the Installation section).

# Testing

After installation of the Invacare Power Interface, execute the following tests before the wheelchair is delivered or put into service.

• Check the interface for intactness

• Operational Test

• Test Drive

• Stop Test

## Prior to Operation

• Ensure that the housing, cabling, and all connectors are intact and undamaged.

| ⚠ WARNING | Execute this test only on a level surface, in an open area free of obstacles |
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## Operational Test

1. Activate the wheelchair operating system.
2. Check for any error messages.
3. Activate the chair to move forward until you hear the parking brakes switch off.

| ⚠ CAUTION | The wheelchair may start moving. |
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4. Immediately release pressure from the drive control. You should hear the parking brake react within a few seconds.
5. Repeat this step 3 to 4 times to ensure all connections are correct.

## Test Drive

• Perform a test drive with the wheelchair

• Check whether the wheelchair and all of its operations are fully functioning.

• Check that no cabling or parts may become damaged or hindered in any position of the chair.

## Stop Test

Drive full speed and shut down the wheelchair with your drive control.

The wheelchair must not stop suddenly. Instead, it should slow to a gradual stop.

## Dealer Assistance

During first time use by the client, it is advised that the dealer or service technician assists and explains the product to the customer (the user and/or attendant). If needed, the dealer can make final adjustments.

## User Testing

It is important that the customer is fully aware of the installation, how to use it, and what can be adjusted in order to gain as much mobility as possible. As a dealer, proceed as follows:

- Explain and show the customer how you have executed the installation, and explain every function.

- Can the user safely operate the wheelchair with minimal effort.

- Is the placement of the interface in an optimal position on the chair.

## Conditions of Use

The interface is intended for use as installed by the dealer, in accordance to the installation instructions in this manual.

- The foreseen conditions of use are communicated by the dealer or service technician to the user and/or attendant during the first time use.

- If the conditions of use change significantly, please contact your dealer or a qualified service technician to avoid excessive wear and tear or unintended damage.

## Cleaning

Ensure the hardware you are using stays in working order by keeping it cared for and maintained.

- Keep electronics dry and out of the water.

- Periodically check the hardware for loose screws or worn parts. Replace or repair the parts as needed.

- To clean, use a mild, non-abrasive household cleaner

| ⚠ WARNING | Exposing electronics to damp or wet conditions can cause personal injury, electric shock, and/or irreversible damage to the circuitry. |
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| Warranty Information | Home Page | Online User Manual |
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