

**Stealth Products**

Alternative Drive Controls



**USER MANUAL**



**IDH520**

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User Guide and Maintenance Manual for Invacare  
Power Interface

Stealth Products strives for 100% customer satisfaction. Your complete satisfaction is important. Please contact us with feedback or suggested changes that will help improve the quality and usability of our products.

You may reach us at:



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## General

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

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

If this document contains information you do not understand, or there are concerns about safety or operation, contact your supplier.

## Important Information!

All persons responsible for fitting, adjustment, and daily use of the devices discussed in 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.
- Maintain our products according to our instructions on care and maintenance.
- Devices should be installed and adjusted by a trained technician.

## Supplier Reference

Supplier: \_\_\_\_\_

Telephone: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

Purchase Date: \_\_\_\_\_

Model: \_\_\_\_\_

- i-Drive™ is a trademark of Stealth Products, LLC
- Stealth Products® is a registered trademark of Stealth Products, LLC

Before you install or begin using this product, it is important that you read and understand the content of these installation and operating instructions. The installation instructions will guide you through the options and possibilities with the product.

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 1-800-965-9229.

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.

## Ordering Documentation

You can download additional copies of this user manual on the Stealth website:

<https://stlpro.site/stealth-docs>

and search: *IDH520 User Manual* in the search bar at the top of the page.

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, LLC does not warrant damage due to, but not limited to:

- Misuse, abuse, or misapplication of products.
- Modification or product without written approval from Stealth Products, LLC.
- Any alteration or lack of serial number, where applicable, will automatically void this warranty.
- Stealth Products, LLC is liable for replacement parts only.
- Stealth Products, LLC is not liable for any incurred labor costs.

No person is authorized to alter, extend, or waive the warranties of Stealth Products, LLC.

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

Covers: 2 years

Hardware: 5 years

Electronics: 3 years

## **In Case of Product Failure**

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

1. Call Stealth at +1 (512) 715-9995 or toll free +1-800-965-9229.
2. Request the Returns Department or obtain an RA from the Returns Department and follow department or documentation instructions.

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## Warning Labels

### 6.1

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

#### **DANGER**

Identifies an **imminent** situation which (if not avoided) will result in **severe injury, death, and property damage**.

#### **WARNING**

Identifies a **potential** situation which (if not avoided) will result in **severe injury, death, and property damage**.

#### **CAUTION**

Identifies a **potential** situation which (if not avoided) will 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

### 6.2

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.

## Testing

### 6.3

Initial setup and driving should be done in an open area free of obstacles until the user is fully capable of driving safely.

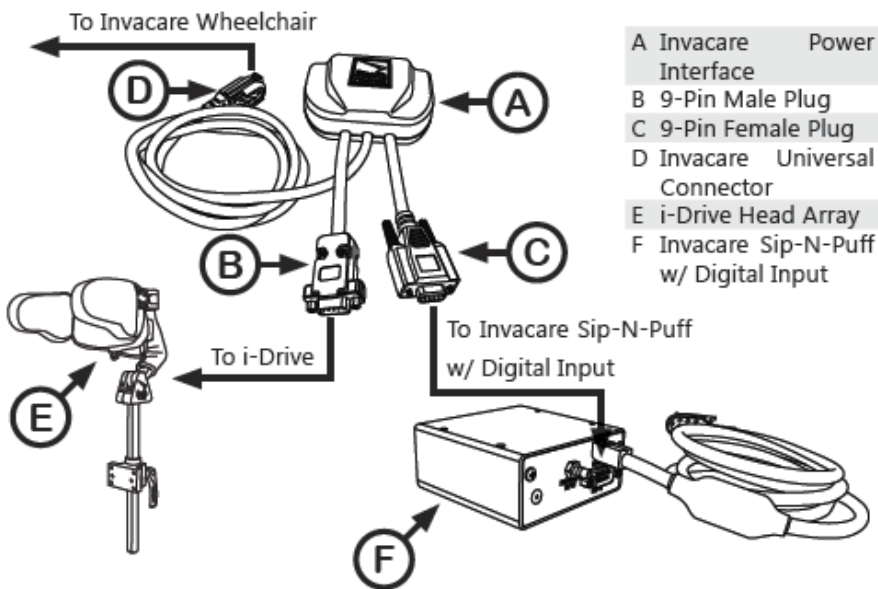
The IDH520 Power Interface should always be tested without any person sitting in the wheelchair until every alteration of the physical installation or adjustment is complete.



## Invacare Power Interface

### 7.1

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 Product’s Invacare Power Interface is used to convert 24 volts from Invacare’s Universal Connectors to 12 volts for Stealth Product’s i-Drive Alternative Control.



## Installation

### 7.2

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's Universal Connector

### 7.3

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



## Operation

### 7.4

After installation, the i-Drive Head Array will be ready for normal operation. Please refer to the i-Drive User Manual for information on r-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.

#### **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.

## Invacare MK6i Electronics






## 8.1

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.

### Menu Navigation

- Navigate with the *Up & 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 button on the joystick or display.
2. Disengage the motors.
3. Power on the chair from the display's power 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 & Down* buttons  to *Performance Adjust* and select with the *Right*  navigation button.
7. In the *Performance Adjust* menu, navigate with the *Up & Down*  buttons to *Input Type* and either press the *Select* button to select all drive profiles (D1-D4), or navigate with the *Left* or *Right*  navigation buttons to the Drive Profile you want to change and use the *Select* button.
8. After selecting the drive profile (s), navigate with the *Up & Down* buttons  and use the *Select* 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 & Down* buttons  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* button. A save prompt should appear. Press *Save* again to save, or select cancel with the *Select* button.

11. After saving, the screen should show that you have saved this information successful. After saving, either the *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 a *Press Reset* after the programmer is disconnected of 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.

**Powered Seating Control**

1. Reconnect the MK6i Programmer (follow *Steps 1-3* from *Installation*).
2. On the MK6i Programmer, navigate with the *Up & Down*  buttons to *Powered Seating* and select with the *Right* button. 
3. In the *Powered Seating* menu, navigate with the *Up & 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).

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

## Check that the Interface

9.1

- Is not bent or damaged.
- Housing, cabling, and all connectors are not damaged.

## Operational Test

9.2

### **WARNING**

Execute this test only on a level surface, in an open area free of obstacles.

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

### **CAUTION**

The wheelchair may start moving.

4. Immediately release pressure from the drive control. You should hear the parking break react within a few seconds. Repeat this step 3 to 4 times to ensure all connections are correct.

## Test Drive

9.3

- 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 damages or hindered in any position of the chair.

## Stop Test

9.4

- Drive full speed ahead and shut down the wheelchair with your drive control.
- The wheelchair may not suddenly stop, but must slow down to a gradual stop.

## Dealer Assistance

### 10.1

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 the attendant). If needed, the dealer can make final adjustments.

## User Testing

### 10.2

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?

If needed, adjust the interface to the best position on the chair.

Explain to the customer possible problems and how to address them.

## Conditions of Use

### 10.3

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

### 11.1


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.

#### **WARNING**

Getting electronics wet will cause irreversible damage to the circuitry.

- Periodically check the hardware for loose screws or worn parts. Replace or repair the parts as needed.
- To clean, use a mild, nonabrasive household cleaner.

 **WARNING** Do not get electronics wet.

## Safety

### 11.2

Avoid getting electronics wet and working on electronics with wet or damp hands. This could cause minor to severe electrocution, resulting in personal injury and/or product damage.













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