

# Stealth Products

Alternative Drive Controls



i-Drive® 4.0

Stealth's User Manual and Maintenance Guide for i-Drive 4.0 Alternative Control with *Bluetooth®* Wireless Technology



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 product. 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.

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# **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**

upplier:
elephone:
ddress:
urchase Date:
lodel:

Introduction 3.0

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.

#### NOTICE

Instructions are designed with the intended purpose of use with the standard configurations of i-Drive. Further assistance or more advanced steps in setup, please contact Stealth Products, LLC.

# **Ordering Documentation**

You can download additional copies of this user manual on the Stealth website: www.stealthproducts.com

Or search:

i-Drive 4.0 User Manual in the search bar at the top of the page.

Warranty 4.0

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: 180 days

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.
- Request the Returns Department or obtain an RA from the Returns Department and follow department or documentation instructions.

FCC Statement 5.0

### Federal Communications Commission (FCC) Statement (USA)

FCC ID: 2AJXV\_2AJXVIDHBT500

### **FCC RF Exposure Statement**

This device meets the FCC requirements for RF exposure in public or uncontrolled environments.

This device complies with FCC part 15 FCC part 15 FCC Rules. Operation is subject to the following two conditions:

- 1. This device may not cause harmful interference, and
- This device must accept any interference received, including interference that may cause undesired operation.

#### **FCC Warning**

Changes or modifications not approved by Stealth Products, LLC could void the user's authority to operate the equipment.

**Note:** This equipment has been tested and found to comply with the limits for 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

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Warning Labels 7.0

# **Warning Labels**

7.1

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.

<b>▲</b> DANGER	Identifies an <b>imminent</b> situation which (if not avoided) will result in <b>severe injury</b> , <b>death</b> , and <b>property damage</b> .
<b>≜</b> WARNING	Identifies a <b>potential</b> situation which (if not avoided) will result in <b>severe injury</b> , <b>death</b> , and <b>property damage</b> .
<b>↑</b> CAUTION	Identifies a <b>potential</b> situation which (if not avoided) will result in <b>minor</b> to <b>moderate injury</b> , and <b>property damage</b> .
NOTICE	Identifies important information not related to injury, but possible <b>property damage</b> .
SAFETY	Indicates steps or instructions for safe practices, reminders of safe procedures, or important safety equipment that may be necessary.

### **Limited Liability**

7.2

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 7.3

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

The i-Drive should always be programmed and tested without any person sitting in the wheelchair until every alteration of the physical installation or adjustment is complete.

Intended Use 8.1

The i-Drive 4.0 with *Bluetooth* wireless technology provides the ultimate head support and has a sophisticated setup within its technology that allows the end user to program the device in diverse ways. An integrated circuit board and microprocessor gives the new i-Drive 4.0 this *Bluetooth* wireless technology capability.

Features 8.2

- Bluetooth® Programming App with full wireless programming capabilities.
- Smart Input Connections-sensors and mechanical switches can now be placed at any port.
- Easy interface exchange capability
- Waterproof interface box

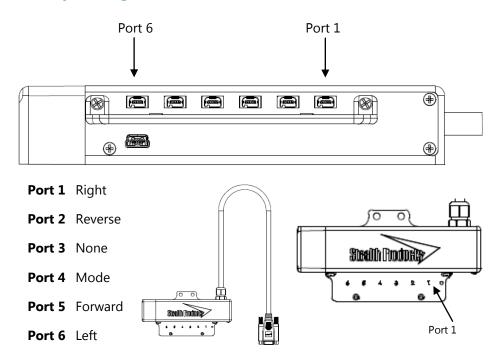


#### NOTICE

Existing dongles will not work with the new 4.0 interface, however 4.0 dongles will work with the 3.0 interface.

# **Factory Settings**

8.3



The i-Drive 4.0 has the capability of taking inputs from mechanical switches, proximity sensors, fiber optic sensors, joysticks, and Sip & Puff modules. With the new i-Drive interface, there is the capability of programming the interface with the associated Advanced Programming Software from your PC, and now also includes the option to download the i-Drive App and program the interface directly from your phone via *Bluetooth*® wireless technology.

#### NOTICE

The software will not read correctly if a non Bluetooth  $^{\$}$  dongle is plugged into a port . Any dongle plugged into the interface MUST be Bluetooth  $^{\$}$  .

#### NOTICE

All connectors have blue heat shrink on the cord for visual reference and easy recognition.

# i-Drive 4.0 Packages Available

### 9.1

Part Number	Description
IDHBT200-1	i-Drive Tri-Array Head Support, includes 3 Proximity Sensors, non-proportional, with egg switch for reset mode change and i-Drive Bluetooth® Interface
IDHBT210-1	i-Drive Tri-Array Head Support with Sip & Puff, includes 3 Proximity Sensors, with egg switch for reset mode and i-Drive Bluetooth <sup>®</sup> Interface
IDHBT250-1	i-Drive Pediatric Tri-Array Head Support, includes 3 Proximity Sensors, non-proportional with egg switch for reset mode change and i-Drive Bluetooth® Interface
IDHBT260-1	i-Drive Pediatric Tri-Array Head Support with Sip & Puff, includes 3 Proximity Sensors, non-proportional, with egg switch for reset mode change and i-Drive Bluetooth® Interface
IDHBT300-1	i-Drive Pro Series Head Support, includes 3 Proximity Sensors, occipital pad, swing away hardware for left and right side, 2 spot pads with egg switch for reset mode change and i-Drive Bluetooth® Interface
IDHBT310-1	i-Drive Pro Series Head Support with Sip & Puff, includes 3 Proximity Sensors, non-proportional, with egg switch for reset mode change and i-Drive Bluetooth® Interface
IDHBT350-1	i-Drive Pediatric Pro Series Head Support, includes 3 Proximity Sensors, non-proportional, with egg switch for reset mode change and i-Drive Bluetooth <sup>®</sup> Interface
IDHBT360-1	i-Drive Pediatric Pro Series Head Array with Sip & Puff, includes 3 Proximity Sensors, non-proportional, with egg switch for reset mode change and i-Drive Bluetooth® Interface

# **Replacement/Additional Parts Available**

# 9.2

Part Number	Description
IDHBT500-17MM*	i-Drive Bluetooth <sup>®</sup> Interface for 17mm Ball Mount
IDHBT500-1*	i-Drive Bluetooth <sup>®</sup> Interface for 1" Ball Mount
IDHBT500*	i-Drive Bluetooth <sup>®</sup> Interface

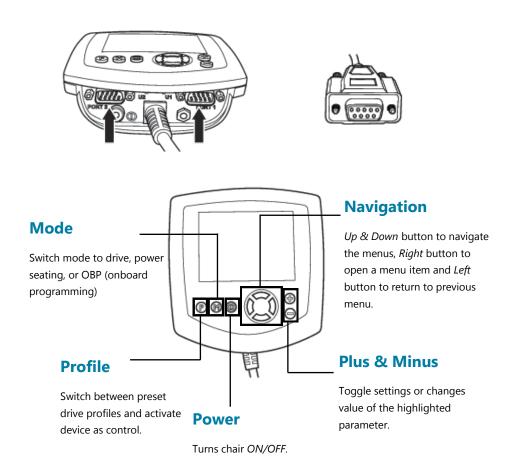
<sup>\*</sup> These packages include 2 mono plug dongles

R-Net™ Installation 10.0

The i-Drive plugs into the 9 pin port on the power chair's control interface. The location of the port depends on the manufacturer of the interface. Follow the instructions for your interface manufacturer in these next sections.

# R-Net™ Omni Setup

10.1



NOTICE

An R-Net™ Programming Dongle is required.

R-Net™ Installation 10.0

#### Setup

1. Power off the chair with the power button on the joystick or display.



Disengage the motors before programming the chair.

- 2. Connect the R-NET programming dongle into the system.
- 3. Ensure all the cords for the display are properly connected to the chair.
- 4. Connect i-Drive Alternative Control into *Port 1* or *Port 2* on the bottom of the display with 9 pin connector.
- With the chair powered off, open up the app on a Bluetooth enabled device and log in using the email and password provided to you. Power the chair on and connect to the application.
- 6. Press the Mode 'M' button until you enter the OBP menu.
- 7. In the *OBP* menu, navigate with the *Up & Down* buttons  $\stackrel{\Delta}{\nabla}$  to the *Omni* menu option and select with the *Right* button.  $\Sigma$
- 8. In the *Omni* menu, navigate with the *Up & Down* buttons  $\d$  to *Global* on the menu and select with the *Right* button.  $\D$
- In the Global menu, navigate with the Up & Down buttons <sup>↑</sup> to Sleep 12V then toggle to On with the Right button. D
- 10. Press the *Left* button  $\Box$  until you return to the *Omni* menu.
- 11. In the *Omni* menu, navigate with the *Up & Down* buttons  $\overset{\Delta}{\mathbf{v}}$  to *Profiled* and select with the *Right* button.  $\Sigma$  Ensure your chair is programmed for the port your i-Drive is connected to.
- 12. In the Omni menu, navigate to the port you have the i-Drive connected to (Port 1 or Port 2).
- 13. In the *Port* menu, navigate with the *Up & Down* buttons  $\frac{1}{2}$  to *SID*, toggle to *Prp*, and with the *Right* button,  $\Sigma$  select. For 3 switch head array applications, set *SID* to 3-Prp.
- 14. Press the *Left* button  $\ \ \, \square$  to back out of the *OBP* menu. Scroll down to *Systems* and select with the *Right* button.  $\ \ \, \square$
- 15. Scroll down to *Joystick Calibration* and with the *Right* button, ∑ select. After you select *Joystick Calibration*, toggle with the *Up & Down* buttons † to the port you have the i-Drive plugged in to. After you select, your chair will automatically go in to calibration mode. The chair display will ask you to move the chair joystick forward.
- 16. Go to the i-Drive application on the Phone/Tablet/PC Device. Select *Config Chair* tab. Select *Calibrate Chair*. Click *Okay*.
- 17. Wait until the calibration finalizes. Your chair display will show a green checkmark meaning calibrations was a success.
- 18. On the Omni display you will need to exit the *OBP* menu and power the chair off. Now you will be able to set up the chair as required.
- 19. Check your configuration on the *Diagnostics* tab. If all is working correctly, your i-Drive is ready for use. Re-engage your motors.

# Q-Logic™ Setup

11.1

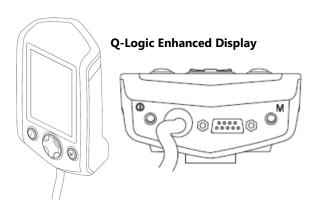
# **Bookmark Buttons**

Select *Options* in the main menu. Button actions are displayed on screen above corresponding buttons. In other menus, hold press button to quickly go to bookmark.

# **Navigation**

Arrows navigate the main menu. Up & Down to navigate the menus, Right to open a menu item and Left to return to the previous menu.





**NOTE:** Q-Logic<sup>™</sup> Enhanced Display and Q-Logic<sup>™</sup> Handheld Programmer required.

#### Setup

1. Power off the chair with the power button on the joystick or display.

**A** DANGER

Disengage the motors before programming the chair.

- 2. Ensure all the cords for the display are properly connected to the chair.
- 3. Connect the i-Drive Alternative Control into the port on the bottom of the display with the 9-pin connector.
- 4. With the chair powered off, open up the app on a Bluetooth enabled device and log in using the email and password provided to you. Power the chair on and connect to the application.
- 5. Plug in the Q-Logic Programmer to the back of the Q-Logic Display.
- 6. On the Programmer, select the Program Adjustment option.
- 8. In the Specialty Control menu, navigate with the Up & Down buttons  $\frac{4}{7}$  to Active Device and toggle with the Plus & Minus buttons  $\pm$  to Proportional Head 3-Direction.
- 9. With the Up & Down buttons,  $\frac{1}{4}$  scroll down to *Proportional Head-3 Direction* folder. With the *Right* button,  $\sum$  select and enter folder. Scroll down to *Joystick Setup* folder and select.
- 10. In the *Joystick Setup* menu, with the *Up & Down* buttons,  $\stackrel{\triangle}{\nabla}$  scroll down and select *Calibrate*. Select *Okay*.
- 11. The Q-Logic programmer will read, Roll around joystick in two full circles.
- 12. Go to the i-Drive application on the Phone/Tablet/PC Device. Select *Config Chair* tab. Select *Calibrate Chair*. Click *Okay*.
- Wait until the calibration finalizes, then select Okay with the Q-Logic programmer and verify the calibration was successful. (If calibration was not successful, power off the chair and repeat Steps 5-12.)
- 14. Return to the Main Menu and exit the Q-Logic programming.
- 15. Unplug the Q-Logic handheld programmer.
- 16. Power chair off.

#### **A** WARNING

Powering off the chair completely before operation is mandatory.

- 17. The chair is now programmed to recognize the i-Drive. Power the chair back on.
- 18. Check your configuration on the diagnostics tab. If all is working correctly, your i-Drive is ready for use. Re-engage your motors.

# **Q-Logic™ Drive Control System Further Configuration**

11.2

### **Back Pad Toggle**

If you want to disable or enable the back pad's ability to toggle into forward and reverse:

- 1. Reconnect the Q-Logic Handheld Programmer. Follow Steps 1-7 from Setup.
- 2. On the Q-Logic Programmer, select the *Program Adjustments* option.
- 3. In the *Program Adjustments* menu, navigate with the *Up & Down* buttons  $\d$  to *Specialty Control*, and with the *Right* button,  $\D$  select.
- 4. In the Specialty Control menu, navigate with the Up & Down buttons  $\stackrel{\triangle}{\nabla}$  to Proportional Head 3-Direction, and with the Right button,  $\Sigma$  select.
- 5. In the 3 Switch Head menu, navigate with the Up & Down buttons  $\overset{\Delta}{\nabla}$  to Back Switch Toggle and select with the Right navigation button.  $\Sigma$
- 6. In the Back Switch Toggle menu, navigate with the Up & Down buttons <sup>↑</sup> to m: Back Toggle and with the Plus & Minus buttons ±, toggle to Enable. This will implement the forward/reverse toggle with the back pad, or with the Plus & Minus buttons ±, toggle to Disable to disable toggle.
- After configuring the back pad, disconnect the Q-Logic™ Programmer and restart the chair's electronics (follow Steps 10-13), or continue to configure other operations.

### **Side Pad Toggle/Control**

To disable or enable *Mode* switching with the side pad:

- 1. Reconnect the Q-Logic Handheld Programmer (follow *Steps 1-7* from *Setup*).
- 2. On the Q-Logic Programmer, select the *Program Adjustments* option.
- 3. In the Program Adjustments menu, navigate with the Up & Down buttons  $\stackrel{\clubsuit}{\nabla}$  to Specialty Control and with the Right button,  $\stackrel{D}{\Sigma}$  select.
- 4. In the Specialty Control menu, navigate with the Up & Down buttons  $\frac{1}{2}$  to Proportional Head 3-Direction and with the Right navigation button,  $\Sigma$  select.
- 5. In the 3 Switch Head menu, navigate with the Up & Down buttons  $\stackrel{\triangle}{\forall}$  to Device Options/Timing and select with the Right button.  $\Sigma$
- 6. In the *Device Options/Timing* menu, with the *Up & Down* buttons, <sup>♠</sup> navigate to *m:Device Double Command* and with the *Plus & Minus* buttons ± toggle to *Enable*. This will set up the mode switch with the side pad, or with the *Plus & Minus* buttons ± toggle to *Disable* to disable the mode switch.
- 7. After configuring the back pad, disconnect the Q-Logic™ Programmer and restart the chair's electronics (follow *Steps 10-13* from *Setup*), or continue to configure other operations.

#### **Egg Switch Function**

If you would like to change the function of the egg switch to *Mode* or *Toggle Forward* and *Reverse*:

- 1. Reconnect the Q-Logic Handheld Programmer (follow Steps 1-7 from Setup).
- 2. On the Q-Logic Programmer, select Program Adjustments option.
- 3. In the *Program Adjustments* menu, with the *Up & Down* buttons,  $\stackrel{\Delta}{\mathbf{v}}$  navigate to *Specialty Control* and select with the *Right* button.  $\Sigma$
- 4. In the Specialty Control menu, navigate with the Up & Down buttons  $\d$  to Proportional Head 3-Direction and with the Right button,  $\D$  select.
- 5. In the Proportional Head 3-Direction menu, navigate to Switch Options/Timing with the Up & Down buttons  $\frac{1}{2}$  and select with the Right button.  $\Sigma$
- 6. In the Switch Options/Timing menu, navigate with the Up & Down buttons <sup>↑</sup> to m:Mode Jack Switch Type and toggle with the Plus & Minus buttons ± to Mode to enable mode switch with the egg switch, or Toggle for forward/reverse toggle.
- After configuring the back pad, disconnect the Q-Logic™ Programmer and restart the chair's electronics (follow Steps 10-13 from Setup), or continue to configure other operations.

Seating Functions 12.0

# **Programming Seating Functions**

12.1

#### R-Net

To setup the chair's seating functions, follow the instructions below:

- 1. Reconnect the R-Net programming dongle.
- 2. On the Omni display, enter into the OBP menu.
- 3. In the *OBP* menu, navigate with the *UP & Down* buttons  $\stackrel{\clubsuit}{\nabla}$  and select *Omni* with the *Right* button.  $\stackrel{D}{\nabla}$
- 4. In the *Omni* menu, select *Port 1* or *Port 2* with the *Right* button.  $\Sigma$
- 5. After selecting the port, select Controls.
- 6. Once in the Controls menu, select Actuator Axis and switch to either L/R or R/L.

#### NOTICE

The left/right pads on the headrest control the seating. One side will toggle between seat functions while the other side will activate the function and toggle directions.

### Q-Logic

When the option of *Proportional Head-3 Direction* is chosen during the setup of the chair, seating functions will automatically default to *left/right* and the back pad will be deactivated. By double tapping the left pad, mode settings can be chosen.

No further programming will be needed.

# i-Drive Advanced Programming Software

**13.1** 

The i-Drive's Advanced Programming Software is not required to operate the drive control, but is available to ensure a customized fit and driving experience. Programming the i-Drive is simple. By connecting a tablet or smartphone and using the i-Drive Advanced Programming Software application you can:

- Dynamic Channel Assignment any port can control any of the outputs
- Adjust Activation Proximity—Change the range of motion required for switch activation
- Provide an adjustable double tap feature that extends chair double tap limits
- Configuration—Programmed by Bluetooth or PC

### **Getting Started**

13.2

The first step to begin use of the i-Drive 4.0 is downloading the software. The link to download the software is listed on pg. 11. If there are any difficulties obtaining the software, contact Stealth Products, LLC.

After the software has been installed onto your device, you can begin utilizing the Advanced Programming Software. Launch the "i-Drive Programmer" application on your device, and with a USB to Mini-USB cable, connect the i-Drive to your PC or Tablet. Allow time for the i-Drive to make a full connection with your computer.

#### NOTICE

Sections 12.3 through 12.1.1 will guide you on the setup and configuration processes on your PC or tablet for the i-Drive.

#### WARNING

Please manually disengage both drive motors before utilizing the *Setup Wizard, Diagnostics,* and *Config.* If motors are not disengaged, the chair could move during setup.

# **Downloading the i-Drive Software**

13.3

To program the i-Drive from your PC, the Advanced Programming Software™ will need to be downloaded from the Stealth Products website:

https://stealthproducts.com/idrive/download/



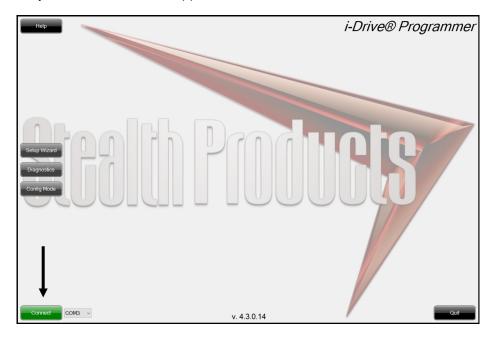
#### **▲ WARNING**

To ensure security on your i-Drive, contact Stealth Products to obtain your user name and password for the software.

# **Connecting To The i-Drive**

13.4

After adequate time is given to allow the i-Drive to connect to your computer and you have launched the application, click the *Connect* button.



#### NOTICE

If may be required to change the *COM* in the drop-down menu next to the *Connect* button.

#### NOTICE

When the i-Drive is connected to the software, the serial number of the interface, the firmware version of the software, and the system voltage should appear on the bottom of the screen.

### **Running The Setup Wizard**

13.5

The *Setup Wizard* will guide you through the initial configuration and channel assignment of the i-Drive. To begin the *Setup Wizard*, click the *Setup Wizard* button on the left of the screen.

#### **Setup Wizard Feature**

The *Setup Wizard* will guide you through the initial port configuration and channel assignment of the i-Drive. A window will pop-up on the screen and walk you through a 7 step setup process. Follow the instructions on the screen or push *Cancel* to quit the setup.



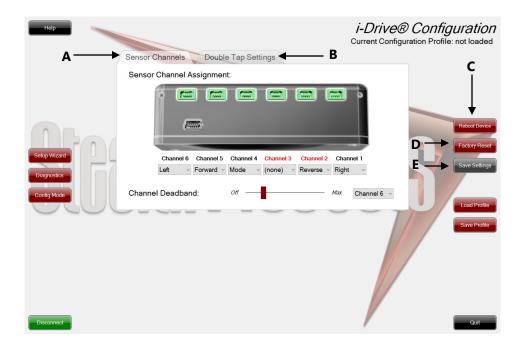
### i-Drive Configuration Settings

13.6

To begin the configuration, click the *Config Mode* button on the left of the screen.

### **Configuration Feature**

Configuration allows you to adjust the way the i-Drive activates and allows you to fine tune the function and sensitivity of the sensor/joystick/chair.



- A. Sensor Channels Tab- Navigates to the Sensor Channels menu
- B. Double Tap Settings Tab- Navigates to the Double Tap Settings menu
- C. Reboot Device Button- Reboots the i-Drive
- D. Factory Reset Button- Resets all settings to factory default
- E. Save Settings Button- Saves your settings

# **Configuration: Sensor Channels**

13.7

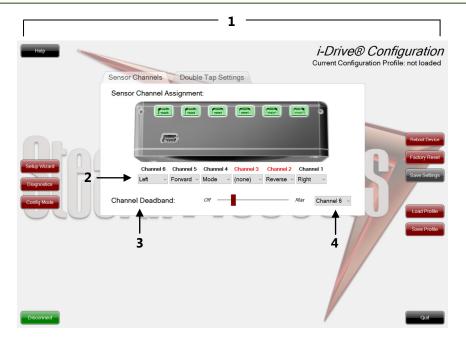
- 1-Diagram shows channel switches and channels currently in use
- 2-Drop down menus that allow you to assign function to each channel
- 3-Channel Deadband slider that allows sensitivity change of deadband
- 4-Changes the channel of which the deadband has been adjusted

#### NOTICE

Channels that are not being used will appear in red on the screen.

#### NOTICE

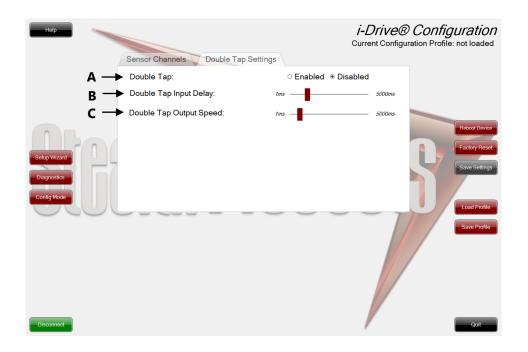
Be sure to save your settings with the *Save Settings* button after all the desired changes have been made.



### **Configuration: Double Tap Settings**

13.8

- A. Double Tap-Enabling Double Tap allows for adjustment of Double Tap input and output timing
- B. Double Tap Input Delay- Amount of time for Double Tap command capture
- C. Double Tap Output Speed—Time period between Mode output pulses. This value should match the Double Tap Input Timing of the chair



#### NOTICE

It is recommended to use *Calibrate Double Tap* option in the *Diagnostics* to get a properly timed double tap setting for the user.

# **Running Real Time Diagnostics**

13.9

To begin the *Diagnostics*, click the *Diagnostics* button on the left of the screen.

- A. Mode Switch activation
- B. Left, Right, Forward & Reverse activation
- C. Corresponding i-Drive port when switch is pressed
- D. Double Tap Calibration

### **Diagnostics Feature**

With real time *Diagnostics*, you are able to observe pad behavior as the head array is activated by the user. This is useful to fine tune the i-Drive and confirm it is operating properly.



#### **ACAUTION**

Double Tap needs to be enabled in the *Configuration* menu *Double Tap Settings* before *Double Tap Calibration* can be used.

Help Feature 13.1.0

Clicking the *Help* button will activate help. When *Help* is active, the help button will be green and a question mark (?) will be displayed next to your cursor. With *Help* active, clicking buttons and menu items will pop up with an explanation of what the clicked object is and how it can be utilized. To disable *Help*, click on the *Help* button again.



#### NOTICE

The Help button will appear black when inactive and green when active.

# **Closing the i-Drive Programming Software**

13.1.1

When you are finished configuring the i-Drive, you can click on the *Quit* button on the bottom right of the screen to close the application.



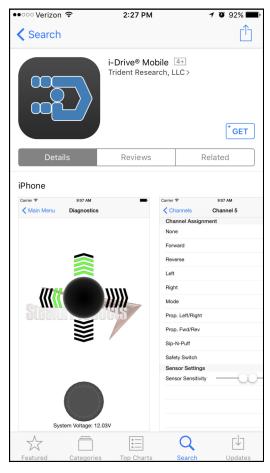
# Downloading the i-Drive Bluetooth® Application

### 14.1

### For iPhone® Users:

- Search, "Trident Research, LLC" in the Apple® App Store®
- Install the App and then "Open" once App has been successfully installed on your phone.



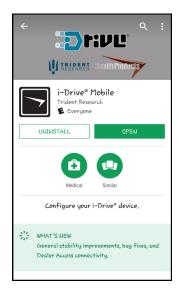


#### For Android Users:

- Search "Trident Research, LLC" in the Play Store
- Select "Install" and then "Open" when the App has been successfully installed on your phone.









### **Opening the i-Drive App**

#### 14.2

- A battery, battery charger, dongle cable, and a 9-pin pig tail plugged into the USB port on the interface is required in order to connect the i-Drive to your phone.
- 1. To Log In, enter the User Name and Password assigned to you.
- 2. When the Main Menu appears, Connect to the i-Drive device (Figure 1).
- 3. Your Bluetooth® device will search for the i-Drive device.
- 4. When you have successfully logged in and the App has located the i-Drive device, new options will appear in the Main Menu: Config Mode, Diagnostics, and About (Figure 2).

#### NOTICE

Ensure your phone or wireless device has the *Bluetooth®* option turned on.

Connect	Disconnected >
Log In	
About	>

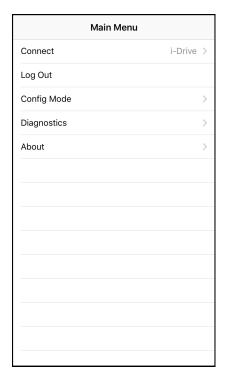


Figure 1 Figure 2

Config Mode 14.3

1. In the *Main Menu*, Select *Config Mode (Figure 3)*. Like the Advanced Programming Software on your PC or tablet, channel assignments, double tap settings, and other sensor settings are adjusted here.

2. Under the *Name* section, you have the option of renaming your i-Drive. Changing the name of your i-Drive will require a power cycle.

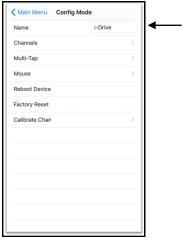


Figure 3

### **Channel Assignment**

- 1. Select the Channels tab under the Config Mode option in the App (Figure 4).
- 2. The *Channels* tab view shows the standard channel assignments on the i-Drive device, and any channels that are disconnected from the device.
- 3. To assign a function to each channel, select the channel you are wishing to modify.

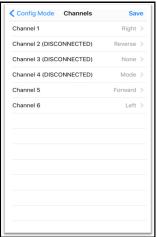
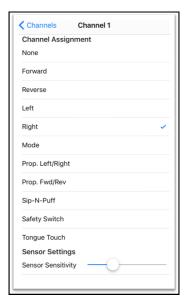


Figure 4

### **Channel Assignment Settings**

- 1. Within the channel option chosen, you will see a list of modifications and assignments that can be made to the channel.
- To select the assignment for the channel, click on the assignment. To go back to the channel options, click back on the upper left hand corner.
- Under the Sensor Settings header, the sensitivity of the sensor connected to the device can be adjusted. Slide your finger to the left or to the right to increase or decrease the sensitivity.
- 4. After channel assignments have been made, in the *Channels* tab, all of the selections will appear to the right of the channel they have been assigned to (*Figure 6*). If the channels are to the correct assignments, select *Save* in the top right hand corner.
- 5. Select back in the top left hand corner to go back to the Main Menu.



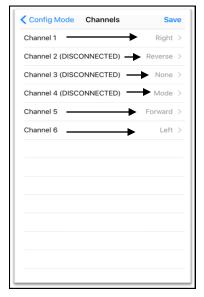
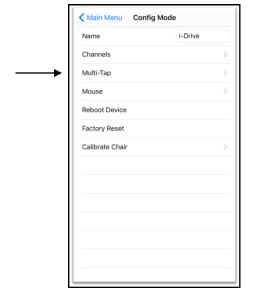


Figure 5 Figure 6

### **Multi-Tap Setting**

- 1. To activate the Multi-Tap function, select *Multi-Tap* in the *Config Mode* menu.
- 2. Under the *Multi-Tap* setting, *Input Delay* and *Output Speed* can be adjusted. Move the cursor to the right or left to make adjustments. (Figure 7)
- 3. When adjustments have been made, select the *Save* option in the upper right hand corner.



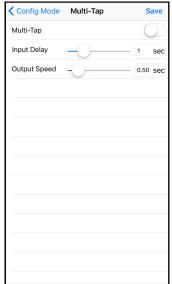


Figure 7

### Diagnostics

- After channel assignments and any other modifications necessary have been made, go back to the Main Menu.
- 2. Select Diagnostics in the Main Menu.
- Test the assignments on your i-Drive device by activating each channel. When the direction assigned to the channel has been activated, the direction should light up in green. (Figure 8)
- 4. After the diagnostics have been tested, select back in the top left hand corner to go back to the *Main Menu*.
- 5. After all updates to the interface have been made, exit the App.

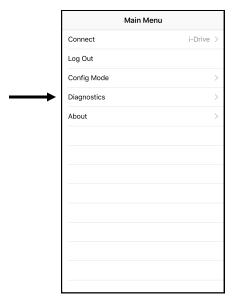




Figure 8

Testing 15.0

After the installation of the i-Drive, execute the following tests before the wheelchair is delivered or put into service:

- Operational Test
- Test Drive
- Stop Test

# **Operational Test**

15.1

#### **▲ WARNING**

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

- Activate the wheelchair operating system.
- 2. Check for any error messages.
- Apply pressure to the head pad/sensor/joystick, etc. designated for moving the chair in a forward motion until you hear the parking breaks switch off.
- **⚠ CAUTION** The w

The wheelchair may start moving.

- 4. Immediately release the pressure from the head pad/sensor/joystick, etc. You should hear the parking break react within a few seconds.
- 5. Repeat *Steps 3 & 4* three times, while carefully applying pressure to the device.
- 6. Check whether the double tap features function properly.

Test Drive 15.2

- 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 get damaged or hindered in any possible position of the wheelchair.

Stop Test 15.3

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

First Time Use 16.0

Dealer Assistance 16.1

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

User Testing 16.2

It is important that the customer is fully aware of the installation of the i-Drive, how to use it, and what settings in the software or App 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 the functions that have been assigned to the device.

Have the user test all configurations of the device:

- Is the device being used by the client within easy reach and in an optimal position for the user?
- Can the user safely operate the wheelchair with minimal effort?

# Conditions Of Use 16.3

The i-Drive 4.0 with *Bluetooth*® wireless technology 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.

#### **A CAUTION**

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

Maintenance 17.0

#### **Care And Maintenance**

17.1

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.

#### **MARNING**

Getting electronics wet will cause irreversible damage to the circuitry.

- Periodically check the hardware for looses screws or worn parts. Replace or repair the parts as needed.
- To clean the aluminum, use a mild, nonabrasive household cleaner.
- To wash covers, removed the cover from the pad, machine wash cold on a delicate cycle and drip dry afterwards.
- On the hardware, lightly tighten set screws until they are snug, then tighten an extra quarter turn.

#### **A WARNING**

Do no overtighten set screws. Over tightening set screws will prevent hardware from functioning properly and could cause irreversible damage to the hardware.

Safety 17.2

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.

Technical Data 17.3

The i-Drive Bluetooth Interface was tested and found to be in compliance with the required criteria and met the standards of IEC60601-1-2:2014 (Edition 4.0); RESNA WC-2:2009.

Notes	18.0

Notes	18.0

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