

I-Drive Tray Array

Owner's Manual - Maintenance Guide IDT100-1 Tray Array with Capacitive Proximity Sensors



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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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EC REP

MDSS GmbH Schiffgraben 41 30175 Hannover, Germany

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.

ACAUTION

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:

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

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.

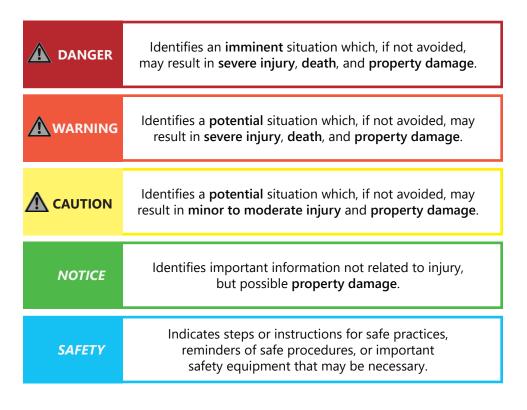
You can download additional copies of this manual by accessing the Stealth website (https://stlpro.site/stealth-docs) and searching "P137D588" in the search bar at the top of the page.

Supplier Reference

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.



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.

Design & Function

Intended Use

An **i-Drive Tray Array** is intended for use as an alternative drive control solution for power wheelchairs. The **i-Drive Tray Array** is uniquely beneficial to individuals who, due to poor tone or head control, would be otherwise unable to successfully operate other i-Drive configurations, such as the i-Drive Head Arrays.

The **i-Drive Tray Array** is offered with capacitive and fiber optic proximity sensor options, as well as mounting solutions customized to maximize user comfort and accessibility.

Features

An **i-Drive Tray Array** offers:

- adjustable capacitive proximity sensors;
- swing-away or locking mounting options;
- an easy installation process; and,
- a hollow body to allow for unhindered cable configuration.

Mounting Options

i-Drive Tray Arrays are offered with the following mounting options:

- Gatlin 400 Series (eight locking positions)
- Gatlin 405 Series (three locking positions/swing-away)

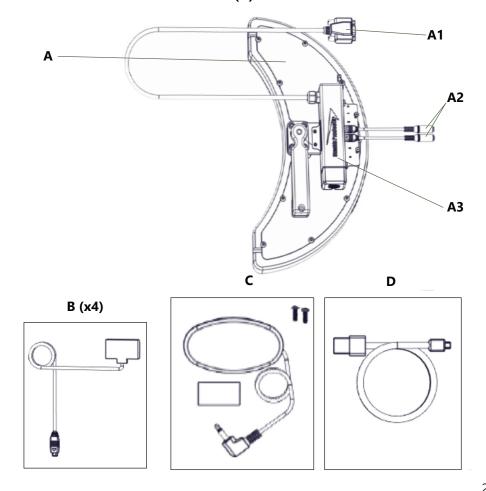
The Gatlin 400 and Gatlin 405 Series will mount to the wheelchair via the ARM240 or the ARM250 mounting clamps. Further installation information can be found in each mount's owner's manual.

(Note: All Eclipse trays come standard with the GAT419 tray mount. A GAT413 is available upon request.)

IDT100-1 Package Components

The IDT100-1 package is comprised of the following parts:

- GAT400 Eclipse Tray (A) with
 - Nine Pin (DB9) Male/Female Extension, 5" (Not shown, extends A1)
 - Two Hirose Micro-Mini Interface Connector to Female Mono Input Dongles (A2)
 - Mounted i-Drive Interface (A3)
- Four Capacitive Proximity Sensors (B)
- Egg Switch (C) with Hook-and-Loop Application Patches
- USB-to-Mini USB Connector Cord (D)



Installation Information

Preparations

Only a qualified service technician should install i-Drive tray arrays.



An incorrect installation of the tray array or its accessories may cause damage to the hardware and/or injury to the user.

Tools

Use the proper tools to install and adjust the i-Drive tray to the desired position for the user. Ensure all torque specifications are followed.



The use of improper tools may damage the device. Not tightening to the torque specification can cause components to fail or cause the user discomfort.

Installation Plan

Set up an installation plan before beginning the installation. This plan should take into account:

- Where the i-Drive Tray Array will be placed;
- How the tray will be operated; and,
- The amount of necessary clearance for other hardware and accessories.



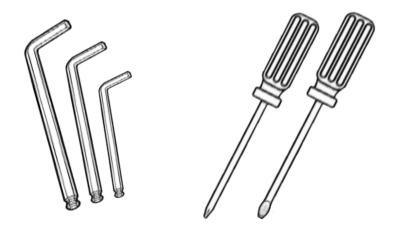
Ensure the wheelchair is completely powered off before installing the **i-Drive Tray Array**.



Connections should always be secured with all delivered screws. Only use the screws provided in the package.

Required Tools

The tools required to install an IDT100-1 Tray Array are:



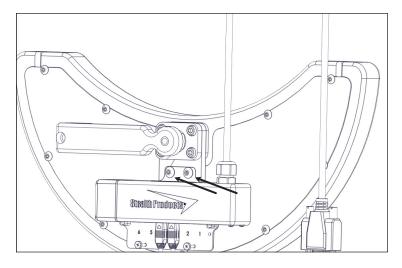
Tool:	Used on:	
1/8" Hex Key M5 x 0.8 x 6mm Button Head Screws		
5/32" Hex Key	#10-32 x 1" Socket Head Screws (4)	
3/32" Hex Key #6-32 x 7/8" Button Head Screws (
#1 Phillips Screwdriver	Phillips Head Screws (2)	
#1 Slotted Screwdriver	Sensor Sensitivity Screws	

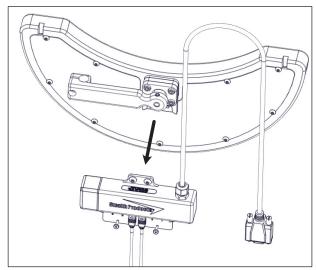
Installation Instructions

Installing the IDT100-1

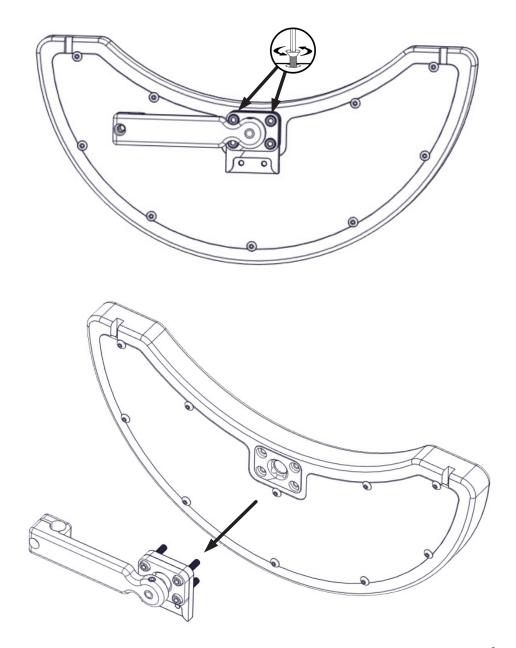
Step One: Prior to installation, carefully consider and select the ideal locations in the tray for the proximity sensors.

Step Two: Using the 1/8" hex key, loosen and remove the two (2) M5 x 0.8 x 6mm button head screws attaching the i-Drive to the tray. Detach the i-Drive interface from the tray.



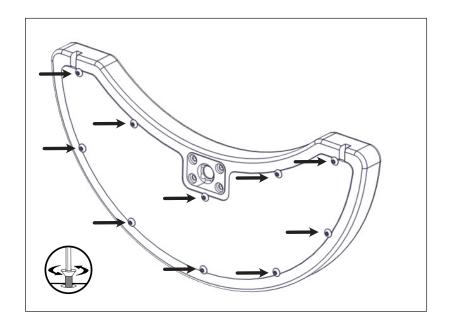


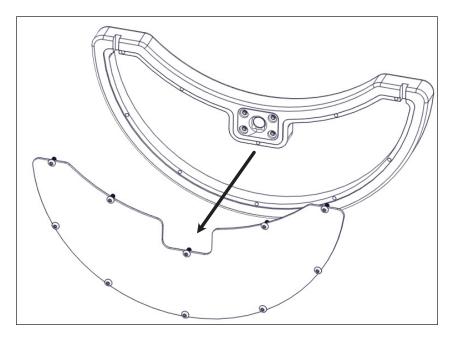
Step Three: Using the 5/32" hex key, loosen and remove the four (4) #10-32 x 1" socket head screws attaching the tray mount to the tray. Detach the tray mount from the tray.



Installation Instructions

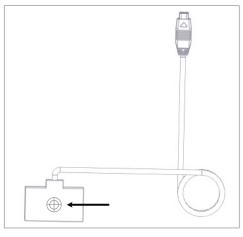
Step Four: Using the 3/32" hex key, loosen the ten (10) #6-32 x 7/8" button head screws attaching the back plate to the tray. Remove the back plate from the tray.



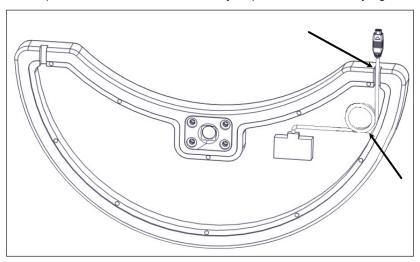


Step Five: Using the hook-and-loop patches, attach each proximity sensor to its desired location inside the hollow tray body.

Each proximity sensor has a bulls-eye on it that, when installed correctly, should face upward inside the tray body.



When installing the proximity sensors inside the tray body, ensure each sensor's cable has been fed through the cable slots cut into the tray. Gently loop the excess cable inside the tray to prevent wear or fraying.



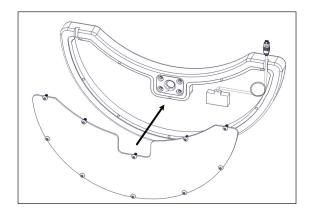
NOTE: Prior to installation of the cover in the next step, it is recommended to connect the sensors to the i-Drive interface and adjust the sensitivity screws located on each sensor to achieve the desired response. Initial software configuration can be found in the section 'Software Configuration'. Future hardware sensitivity adjustments will require removal of the interface and cover to access the sensors.



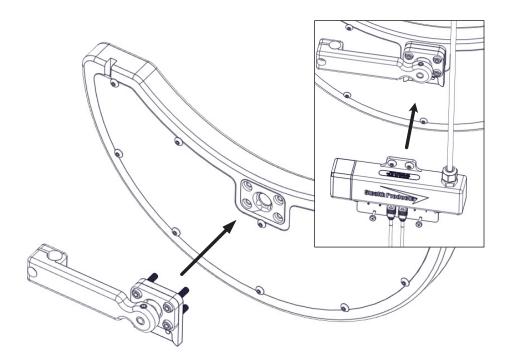
To avoid unintentional sensor activation, ensure the sensor wires do not come into contact with any part of a sensor body.

Installation Instructions

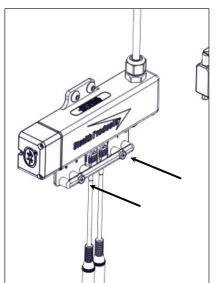
Step Six: Once the sensors are installed in the tray and sensitivity has been adjusted, replace the tray's back plate and secure with the ten (10) $\#6-32 \times 7/8$ " button head screws.

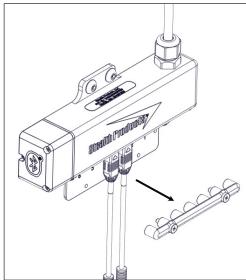


Step Seven: Using the 5/32" hex key, install the four (4) #10-32 x 1" socket head screws, attaching the tray mount to the tray. Using the 1/8" hex key, install the i-Drive interface with the two (2) M5 x 0.8 x 6mm button head screws.

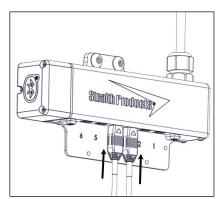


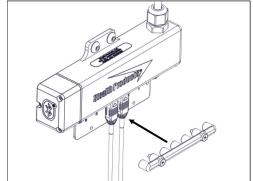
Step Eight: Locate the two (2) Phillips head screws on the i-Drive's input plug bar. Using the #1 Phillips screwdriver, loosen both screws and detach the input plug bar from the i-Drive interface.





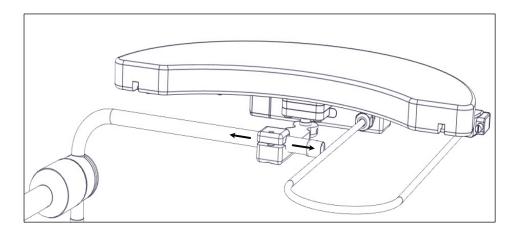
Step Nine: Plug the sensors into the proper input channels on the i-Drive interface and replace the input plug bar. Tighten both screws to secure it and the sensor plugs in place.



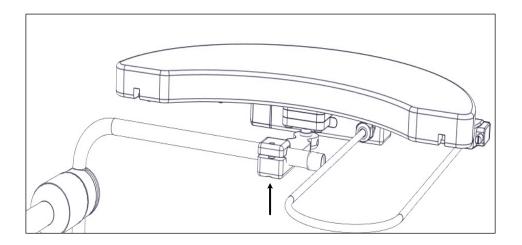


Installation Instructions

Step Ten: Slide the tray assembly onto the arm of the Gatlin mounting system, moving the tray assembly into the desired position.



Step Eleven: Use the 3/16" hex key to tighten the $1/4-20 \times 1/4$ " set screw on the clamp and secure the tray assembly in place.



Configurator Software for Windows

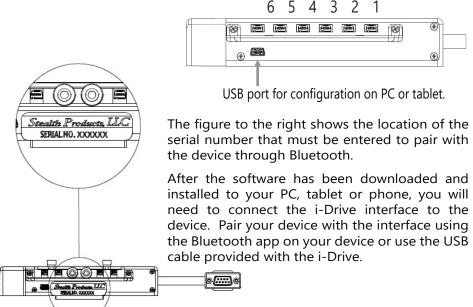
Configuration software for Windows ("i-Drive Config") is not required to operate the drive control, but is available to ensure a customized fit and driving experience. Programming the i-Drive is simple. By connecting a computer, tablet, or smartphone, and using i-Drive Config, you can:

- · control any of the outputs via any port;
- · change the range of motion required for switch activation;
- provide an adjustable double-tap feature that extends chair double-tap limits; and/or
- use Bluetooth or USB to configure and program.

Getting Started

The first step to begin use of the i-Drive 4.0 is to download i-Drive Config to your PC, tablet, or phone. It is available at the Microsoft Store, Apple's App Store, or Google Play. If you experience difficulties obtaining the software, please contact Stealth Products, LLC.

The next step is to establish a link between your PC, tablet or phone and the i-Drive interface. The included USB cable enables your device to communicate with the i-Drive interface via a virtual communications port. Bluetooth enables your device to communicate with the i-Drive via a secure wireless connection. In either case, authentication is required to gain access.



NOTICE

Contact Stealth Products Customer Service to obtain your specific login information.

Connecting to the i-Drive

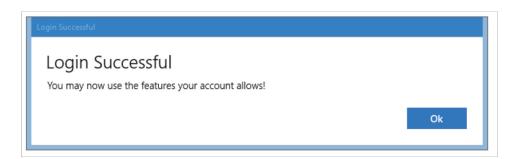


After connecting the i-Drive interface to your computer through USB or Bluetooth, start the app and click the Connect button.

The software will locate your interface and display the port to which the device is connected. Select the port device and select 'Connect'.



You will then be prompted to log in. Input the login information obtained from Stealth Products to log in to the software.



Once you have successfully logged in, you may use the features allowed by your account type. Click 'Ok' to be directed to the home screen and to access available adjustment features.

Connect

Log Out

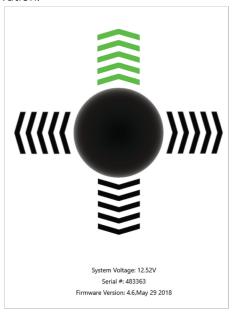
Diagnostics

Configuration

Legal

Diagnostics

The 'Diagnostics' feature shows the user the i-Drive's input activations, enabling real-time diagnoses of potential input issues. It also aids in finding and improving the location of switches to maximize the efficacy and consistency of switch activation.

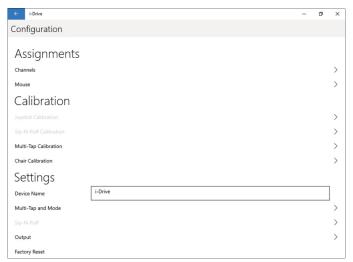


The activation of an i-Drive's connected input through the 'Diagnostics' feature is shown here.

Software Configuration

Configuration

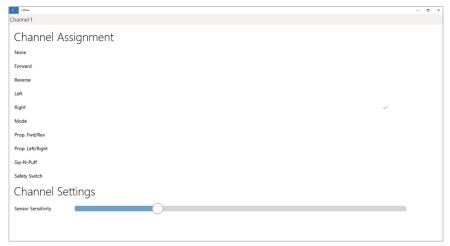
The 'Configuration' page of the software provides users with options for altering channel assignments, calibrations, and other items.



Assignments: Change the input channel assignments for any devices connected to the i-Drive.

Calibration: Calibrate the chair and the i-Drive to the same neutral state.

Channel Assignment



After having selected a particular channel, a screen will pop up listing the available selections for that channel, along with an adjustment bar for the input sensor sensitivity.

Chair Calibration



Selecting 'Chair Calibration' allows a user to calibrate the chair with the i-Drive, leveling both to the same neutral position. To get the best performance from the i-Drive interface, it is important to calibrate the interface to the wheelchair electronics. It is important to note that calibration is required even if the interface is using switched inputs.

To properly calibrate the chair, follow the on-screen prompts after having selected 'Chair Calibration'. Note that only users with with appropriate access rights may perform a chair calibration.



Calibrations should not be performed with a user in the chair.



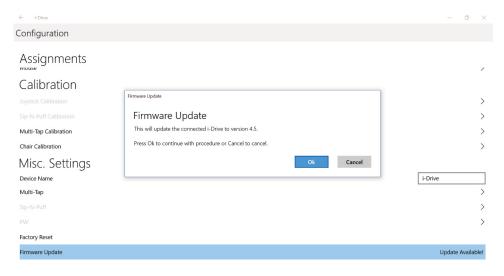
To prevent motion during calibration, disengage the motors of the power chair prior to starting the calibration procedure.

SAFETY

Chair calibration has been successfully tested on Q-Logic 2, Q-Logic 3, and R-net Omni enhanced displays. Call your sales representative to ask about compatibility with other electronics

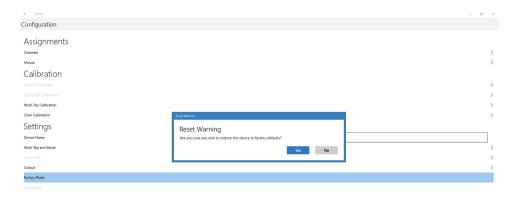
Software Configuration

Firmware Update



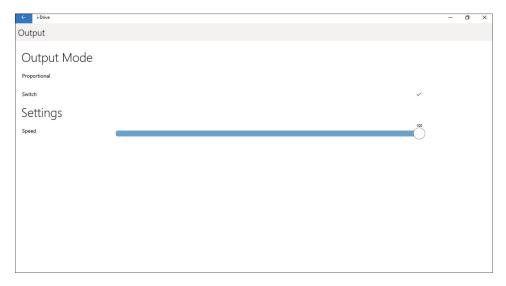
Updates for the i-Drive's firmware are sometimes made available. In order to update the firmware for your device, select 'Firmware Update' in the 'Configuration' menu (as pictured above) and follow the on-screen prompts.

Factory Reset



Selecting 'Factory Reset' allows a user to restore all i-Drive settings to their original out-of-the-box, preset assignments.

Output Mode



Selecting 'Output' allows a user to change the i-Drive's output mode from proportional to switched, or vice-versa. It also allows a user to adjust the output speed.

The latest version of the i-Drive firmware allows for either proportional or switched output, which improves functionality and compatibility with multiple wheelchair electronics systems.

The output mode capabilities for each electronics system are as follows:

SYSTEM	SYSTEM PROPORTIONAL	
Q-Logic 2	Yes*	Yes
Q-Logic 3	Yes*	Yes
R-Net	Yes	Yes*
MK6i	No	Yes
DX	No	Yes

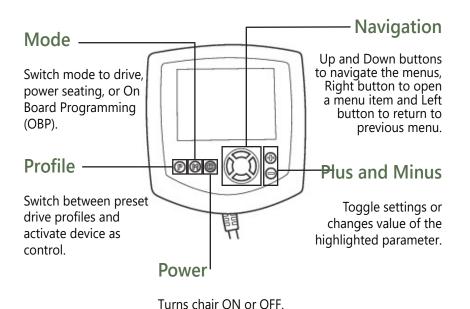
^{*} Optimal output mode for this system.

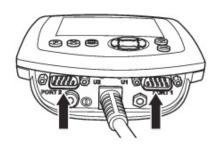
The i-Drive plugs into the 9-pin port on the power chair's control interface. The location of the port depends on the manufacturer of the interface. In the next sections, follow the instructions provided by your interface provider.

R-net™ Omni Setup

NOTICE

An R-net[™] programming dongle is required.









ALWAYS disengage motors completely before programming a wheelchair. Failure to do so may lead to serious injury and/or property damage.

R-net Setup: Switched Output



Manually disengage both drive motors before utilizing the Setup Wizard, Diagnostics, and/or Config. If the motors are not disengaged, the chair could move during setup.

- 1. Power off the chair using the power button on the joystick or display.
- 2. Connect the R-net programming dongle into the system.
- 3. Ensure all display cords 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 a 9-pin connector.
- 5. With the chair powered off, open 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 button until you enter the On Board Programming (OBP) menu.
- 7. In the *OBP* menu, use the *Up* and *Down* buttons to navigate to the *Omni* menu option. Use the *Right* button to select this option.
- 8. In the *Omni* menu, use the *Up* and *Down* buttons to navigate to the *Port 1* or *Port 2* option. Use the *Right* button to select this option. Ensure your chair is programmed for the port to which your i-Drive is connected.
- 9. In the *Omni* menu, navigate to the port to which you have the i-Drive connected (*Port 1* or *Port 2*).
- 10. In the Port menu, use the Up and Down buttons to navigate to the SID option, toggle to:
- 11. In the *Port* menu, use the *Up* and *Down* buttons to navigate to the *Switches* option. Use the *Right* button to select this option.
 - a) "3swi" for any configuration that does not have a reverse direction, such as a 3-switch head array or linked left/right driving.
 - b) "Swi" for any configuration that includes an assigned reverse direction, such as a 5-switch head array, a Sip 'n' Puff combo, or a PMPJ-1.
- 12. In the Switches menu, use the Up and Down button to navigate to the Switch Detect option. Use the Up and Down buttons to set this option to Off
- 13. Press the *Left* button to return to the *Port* menu. Use the *Up* and *Down* button to navigate to the Controls option, then use the *Right* button to select it.
- 14. Scroll to the Actuator Axis option. Use the (+) and (-) buttons to set the appropriate selection:
 - a) L/R a left SID command will select the available actuator axes and a right SID command will move the selected axis. The direction of movement is changed via a short operation by a right SID command.
 - b) R/L a right SID command will select the available actuator axes and a left SID command will move the selected axis. The direction of movement is changed via a short operation by a left SID command.
 - c) Swap forward and reverse SID commands will select the available actuator axes, and left and right commands will move the selected axis.
 - d) *Normal* left and right SID commands will select the available actuator axes. Forward and reverse commands will move the selected axis

Q-Logic[™] Setup

Bookmark Buttons

Navigation

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

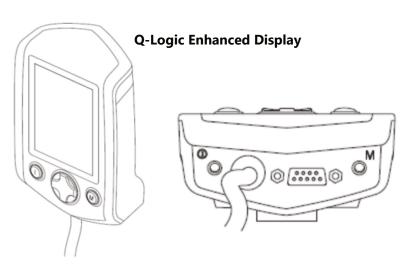
Plus and Minus

Toggle settings or changes values of the highlighted parameter

Help Button

Displays information about options selected on the display.





(**Note:** Q-Logic[™] Enhanced Display and Q-Logic[™] Handheld Programmer Required)

Q-Logic™ 2 Setup: Proportional Output



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

- 1. Power off the chair using the power button on the joystick or display.
- 2. Ensure all display cords 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 the app on a Bluetooth-enabled device and log in using the email and password provided to you. Power on the chair and connect to the application.
- 5. Plug in the Q-Logic Programmer (HHP) to the back of the Q-Logic display.
- 6. On the HHP, select the *Program Adjustments* option.
- 7. In the *Program Adjustment* menu, use the *Up* and *Down* buttons to navigate to the *Specialty Control* option. Use the *Right* button to select this option.
- 8. In the Specialty Control menu, use the Up and Down buttons to navigate to the Active Device option. Use the Plus and Minus buttons to toggle to:
 - a) *Proportional Head 3-Direction* for any configuration that does not have a reverse direction assigned, such as a 3-switch head array or linked left/right driving.
 - b) *Proportional* for any configuration that includes an assigned reverse direction, such as a 5-switch head array, a Sip 'n' Puff combo, or a PMPJ-1.
- 9. Use the *Up* and *Down* buttons to scroll to the *Proportional Head-3 Direction* folder. Use the *Right* button to select and enter the folder. Scroll down to the *Joystick Setup* folder and use the *Right* button to select it.
- 10. In the *Joystick Setup* menu, use the *Up* and *Down* buttons to scroll down to the *Calibrate* option. Select this option and click *OK*.
- 11. The Q-Logic programmer will read, "Roll around joystick in two full circles."
- 12. On the phone, tablet or PC device, go to the i-Drive application. Select the *Config Mode* option. Select *Calibrate Chair* and click *OK*.
- 13. Wait until the calibration finalizes, then select *OK* 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 off the chair.
- 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 everything is working correctly, your i-Drive is ready for use. Re-engage your motors.



The chair *must* be completely powered off before operation.

Software Configuration

Back Pad Toggle

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

- Reconnect the Q-Logic handheld programmer. Follow steps 1-5 from Setup.
- On the Q-Logic Programmer, select the *Program Adjustments* option.
- In the *Program Adjustments* folder, use the *Up* and *Down* buttons to navigate to the *Specialty Control* option, and use the *Right* button to select it.
- In the Specialty Control menu, use the Up and Down buttons to navigate to the Proportional Head 3-Direction option. Use the Right button to select it.
- In the 3-Switch Head menu, use the Up and Down buttons to navigate to the Back Switch Toggle option. Use the Right button to select it.
- In the *Back Switch Toggle* menu, use the *Up* and *Down* buttons to navigate to the *m: Back Toggle* option, and use the *Plus* and *Minus* buttons to toggle to and select the *Enable* option. To disable, toggle to the *Disable* option and select it.
- After configuring the back pad, disconnect the Q-Logic programmer and restart the chair's electronics, or continue to configure other operations.

Side Pad Toggle/Control

To disable or enable mode switching with the side pad.

- Reconnect the Q-Logic handheld programmer. (Follow steps 1-5 from Setup.)
- On the Q-Logic Programmer, select the *Program Adjustments* option.
- In the Program Adjustments menu, use the Up and Down buttons to navigate to the Specialty Control option, and use the Right button to select it.
- In the Specialty Control menu, use the Up and Down buttons to navigate to the Proportional Head 3-Direction option, and use the Right button to select it.
- In the 3-Switch Head menu, use the Up and Down buttons to navigate to the Device Options/ Timing option, and use the Right button to select it.
- In the *Device Options/Timing* menu, use the *Up* and *Down* buttons to navigate to the *m:Device Double Command* option. Use the *Plus* and *Minus* buttons to toggle to the *Enable* option. To disable, toggle to the *Disable* option and select it.

Egg Switch Function

If you would like to change the function of the Egg Switch to Mode or Toggle Forward and Reverse:

- Reconnect the Q-Logic handheld programmer. (Follow steps 1-5 from Setup.)
- On the Q-Logic Programmer, select the *Program Adjustments* option.
- In the Program Adjustments menu, use the Up and Down buttons to navigate to the Specialty Control option, and use the Right button to select it.
- In the Specialty Control menu, use the Up and Down buttons to navigate to the Proportional Head 3-Direction option, and use the Right button to select it.
- In the Proportional Head 3-Direction menu, use the Up and Down buttons to navigate to the Switch Options option, and use the Right button to select it.
- In the Switch Options/Timing menu, use the Up and Down buttons to navigate to the m:Mode Jack Switch Type option. Use the Plus and Minus buttons to toggle to *Mode* to enable mode switch with the Egg Switch, or *Toggle* for forward/reverse toggle.
- After configuring the Egg Switch, disconnect the Q-Logic programmer and restart the chair's electronics, or continue to configure other operations.

Q-Logic™ 3 Setup: Proportional Output



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

- 1. Power off the chair using the power button on the joystick or display.
- 2. Ensure all display cords are properly connected to the chair.
- 3. Connect the i-Drive 9-pin connection into the port on the bottom of the Enhanced Display.
- 4. With the chair powered off, open the i-Drive mobile 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 (HHP) to the back of the Q-Logic display.
- 6. On the Programmer, navigate to *Program Adjustments* option and use the *Right* button to select it.
- 7. In the Program Adjustment menu, navigate to the Enhanced Display option and select it.
- 8. In the *Enhanced Display* folder, use the *Up* and *Down* buttons to navigate to the *Input Configuration* option. Set this to:
 - a) 3-Direction Proportional Head for any configuration that does not have a reverse direction assigned, such as a 3-switch head array or linked left/right driving.
 - b) *Proportional* for any configuration that includes an assigned reverse direction, such as a 5-switch head array, a Sip 'n' Puff combo, or a PMPJ-1.
- 9. Use the *Left* navigation button to go back into the *Enhanced Display* folder.
- 10. Use the *Up* and *Down* buttons to scroll to the *Proportional Input* folder and use the *Right* button to select it.
- 11. In the *Proportional Input* folder, use the *Up* and *Down* buttons to navigate to and select the *Proportional Calibrations* option. Select *OK*. The programmer will read, "*Roll around joystick in two full circles*".
- 12. On your i-Drive mobile app, go to Config Mode, then select Calibrate Chair.
- 13. Note the warning that appears and select *OK*. The app will now automatically begin calibration. Once calibration is complete, the app will automatically return to *Config Mode*.
- 14. Using the Q-Logic programmer, select OK and verify that calibration was successful.
- 15. Exit the programming. Unplug the programmer and cycle power.
- 16. Check your configuration on the app's *Diagnostics* tab. If everything is functioning correctly, your i-Drive is ready to use.



The chair must be completely powered off before operation.



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

Q-Logic™ 3 Setup: Switched Output

- 1. Power off the chair using the power button on the joystick or display.
- 2. Ensure all display cords 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 the app on a Bluetooth-enabled device and log in using the email and password provided to you. Power on the chair and connect to the application.
- 5. Plug in the Q-Logic Programmer (HHP) to the back of the Q-Logic display.
- 6. On the HHP, select the *Program Adjustments* option.
- 7. Use the Up and Down buttons to navigate to the *Enhanced Display* (or SCIM) option, then select it with the *Right* button.
- 8. Scroll down to reach the *Input Configuration* option, then use the *Right* button to select it. Use the navigation buttons to set this option to the setting that most closely matches the desired input configuration:
 - a) 2-Switch for any configuration utilizing Linked L/R mode.
 - b) 3-Switch for any tray array or IDPMPJ-1 combination with no assigned reverse, and for Linked L/R mode.
 - c) 4-Switch for any IDPMPJ-1 combination or a tray array with an assigned reverse.
 - d) 5-Switch for any IDPMPJ-1 combination or a tray array with an assigned reverse.
 - e) 3-Switch Head for any 3-switch head array or a head array with Sip 'n' Puff and and no assigned reverse.
 - f) 4-Switch Head for any 4-switch head array, a head array with Sip 'n' Puff and an assigned reverse, or any IDPMPJ-1/head array combination.
 - g) 5-Switch Head for any 5-switch head array, a head array with Sip 'n' Puff and an assigned reverse, or any IDPMPJ-1/head array combination with a mode-change option.

Q-Logic[™] 3 Further Configuration

Back Pad Toggle

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

- On the Q-Logic Programmer, select the Program Adjustments option.
- In the *Program Adjustments* folder, use the *Up* and *Down* buttons to navigate to the *Enhanced Display* option, and use the *Right* button to select it.
- In the Enhanced Display menu, use the *Up* and *Down* buttons to navigate to the *3-Direction Arrow Toggle Settings* option. Use the *Right* button to select it.
- In the 3-Direction Arrow Toggle Settings menu, use the Up and Down buttons to navigate to the Toggle Command option. Use the Right button to select it.
- In the Toggle Command menu, use the Plus and Minus buttons to toggle to and select the Enable option. To disable, toggle to the Disable option and select it.
- After configuring the back pad, disconnect the Q-Logic programmer and restart the chair's electronics, or continue to configure other operations.

Double Command

If you wish to enable a double activation to perform a Mode command:

- On the Q-Logic Programmer, select the *Program Adjustments* option.
- In the Program Adjustments folder, use the Up and Down buttons to navigate to the Enhanced Display option, and use the Right button to select it.
- In the Enhanced Display menu, use the Up and Down buttons to navigate to the Device
 Options/Timing option. Use the Right button to select it.
- In the *Device Options/Timing* menu, use the *Up* and *Down* buttons to navigate to the *Device Double Command* option. Use the *Right* button to select it.
- In the *Device Double Command* menu, use the *Plus* and *Minus* buttons to toggle to and select either the *Enabled Right* or *Enabled Left* option.
- After configuring the back pad, disconnect the Q-Logic programmer and restart the chair's electronics, or continue to configure other operations.

Tilt Threshold Head Control

To define the angle beyond which a head input device will be changed to two-way operation:

- On the Q-Logic Programmer, select the *Program Adjustments* option.
- In the Program Adjustments folder, use the Up and Down buttons to navigate to the Seat
 option, and use the Right button to select it.
- In the Seat menu, use the Up and Down buttons to navigate to the Tilt Threshold Head Control option, and use the Right button to select it.
- Use the Plus and Minus buttons to select the desired tilt angle.

Egg Switch Function

If you would like to change the function of the Egg Switch (plugged into the Enhanced Display)*:

- On the Q-Logic programmer, select the *Program Adjustments* option.
- In the *Program Adjustments* menu, use the *Up* and *Down* buttons to navigate to the *Enhanced Display* (or SCIM) option, and use the *Right* button to select it.

The modes for switch commands can be adjusted for each jack input. The available options for switch commands are Mode, Mode Shortcut, Toggle, Sleep, Home, and Inactive**. To adjust, for example, the switch command mode for Jack 1:

- In the Enhanced Display/SCIM menu, use the Up and Down buttons to navigate to the Jack Commands option, and use the Right button to select it. Scroll to select Jack 1.
 - In the Jack 1 menu, select Mode Jack Short Command. Use the Plus and Minus buttons
 to adjust this to the desired setting.
 - In the Jack 1 menu, select Mode Jack Long Command. Use the Plus and Minus buttons to adjust this to the desired setting.
 - In the Jack 1 menu, select Mode Jack Double Command. Use the Plus and Minus buttons to adjust this to the desired setting.
 - * When switching modes through a 9-pin plug or when the switch is plugged into the i-Drive, select D-Sub (9-pin) in the Enhanced Display/SCIM menu, then proceed as detailed above.
 - ** If the option for a jack is set to Inactive, no switch command (short, long, or double) will be recognized for that parameter.

MK6i™ Programmer Setup



Completely disengage motors before programming any wheelchair. Failing to do so can cause serious injury and property damage.

PWR/INFO

Turn the programmer on and off, and display Help information while the programmer is on.

Navigation Keys

Up, Down, Left, and Right buttons scroll through menu structure and increase or decrease values.

SELECT

Display adjustable values or selection choices, choose new values, and/or begin memory card transfers.

SAVE

Press twice to save highlighted values.

MK6i™ Setup: Switched Output



Manually disengage both drive motors before utilizing the Setup Wizard, Diagnostics, and/or Config. If the motors are not disengaged, the chair could move during setup.

- 1. Power off the chair using the power button on the joystick or display. Disengage all motors.
- Ensure all display cords are properly connected to the chair. Press the chair display power button to turn the chair on.
- 3. Plug the MK6i programmer into the back of the joystick. Turn the programmer on.
- 4. On the programmer, use the *Up* and *Down* buttons to scroll to the *Performance Adjust* option, then select it with the *Right* button.
- 5. In the *Performance Adjust* menu, use the *Up* and *Down* buttons to scroll to the *Input Type* option. If you wish to select all drive profiles (D1-D4), press the *Select* button to do so. If you wish to select a specific drive profile, use the *Left* and *Right* buttons to navigate to the desired profile. Highlight the profile and press the *Select* button.
- 6. After selecting the drive profile(s), use the *Up* and *Down* buttons to scroll to the *Digital* option from the i-Drive list, then press the *Select* button to select it.
- 7. If you would like to enable *Reverse Mode* with the reset switch, access the *Performance Adjust* menu and use the *Up* and *Down* buttons to scroll to the *RIM Control* option, then set the desired drive profile's *RIM Control* to *On* or *Off.*
- 8. Use the *Save* button to save your current settings. (A prompt should appear press *Save* again to save, or to cancel, select *Cancel* with the *Select* button.)
- 9. After saving, the screen will display that the save was successful. Power off the programmer or continue to make further adjustments.
- 10. Unplug the programmer. Turn off the chair. (The chair is now programmed to recognize the i-Drive.)

Powered Seating Control

- Reconnect the MK6i programmer.
- 2. On the programmer, use the *Up* and *Down* buttons to scroll to the *Powered Seating* option, then use the Right button to select it.
- 3. In the *Powered Seating* menu, use the *Up* and *Down* buttons to scroll to the *Actuator Control* option, then set your desired drive profile's *Actuator Controls* to an actuator control type.
- 4. Use the *Save* button to save your current settings. (A prompt should appear press *Save* again to save, or to cancel, select *Cancel* with the *Select* button.)
- 5. After saving, the screen will display that the save was successful. Power off the programmer or continue to make further adjustments.
- 6. Unplug the programmer. Power off the chair.



The chair *must* be completely powered off before operation.

Troubleshooting

SYMPTOM	POSSIBLE CAUSE	POSSIBLE REMEDY	NOTES
No reaction from i-Drive	No power to i-Drive	Check Cables	 Find where power ends. Ensure all connection cables are fully connected. Check the cables for possible damage. Remove DB9 extension and plug in directly to chair. Using APS, plug in USB, go to diagnostics and see if i-Drive shows any voltage.
	i-Drive is in Config Mode	Put programming in another mode	i-Drive will not send a signal to the device in Config Mode. It must be in the Diagnostics view to send a signal.
No reaction from i-Drive; can connect	Inappropriate settings	Check Channel Assignments	Make sure that the channel is set for the appropriate assignment
to i-Drive programming		Check input settings on chair	Check the setup guide If the chair is set for a switched input device, the i-Drive may not function or may behave strangely.
	Inappropriate settings	Check channel assignments	Make sure that the channel is set for the appropriate assignment
No reaction	Inappropriate input	Check switches	Try an established, functioning switch in the place of the non-reactive switch or sensor
from channel(s)		Check dongle	Try an established, functioning dongle in the non-reactive channel
		Check location	Ensure sensors and mechanicals are in the appropriate locations for old versions of i-Drive.
	User positioning issues	Ensure user is positioned correctly	Proper and consistent user position is key to consistent successful activations.
	Switch positioning issues	Ensure switch or sensor is in the proper location	Proper and consistent switch and sensor positioning is key to consistent successful activations
Difficult or inconsistent activations from	consistent tions from lividual Joystick calibration issues	Recalibrate joysticks	Try recalibrating the PMPJ
individual channel.			Make sure all axes respond to deflections
	Sensitivity adjustment issues	Adjust sensitivity	Try slightly increasing the sensitivity on sensors, fiber optics, etc.
	Obstruction	Ensure the switch is making good contact	Is there anything the user is wearing obstructing contact?

SYMPTOM	POSSIBLE CAUSE	POSSIBLE REMEDY	NOTES
Channel(s) constantly on or activated	Cable Damage	Inspect cables and connections for damage	Look for breaks, cuts, or tears in the cable, or if the cable is being crimped or restricted. Try an established, functioning switch in the place of the non-reactive switch or sensor.
	Adjustment issues	Check the adjustment screw	i-Drive will not send a signal to the device in Config Mode. It must be in the Diagnostics view to send a signal.
	Issues with the cover	Check the cover for conductive materials	Check for moisture on the cover. Check for metallic objects or other conductive materials Remove cover fully, then fully replace it.
Difficulty calibrating i-Drive to chair Channel responds incorrectly	Inappropriate sequence	recalibrate i-Drive to the chair	See the setup guide. Ensure that the chair is placed into Calibration Mode, then i-Drive.
	Problem with DB-9 extension	Remove DB-9 and recalibrate i-Drive to the chair	Occasionally a DB-9 extension will cause issues with calibration. Remove the DB-9 and plug the interface straight into the 9-pin port, no extension, and recalibrate.
	Inappropriate settings	Check channel assignments	Ensure the channel is set for the appropriate assignment
	Calibration issue	Recalibrate i-Drive to chair	Calibration might have been effective enough for the chair to function, but not precise enough
PMPJ-1 causes out of center error on chair	Calibration issue	Calibrate joystick	Calibrate joystick to i-Drive (Config Mode > Calibrate joystick)

SYMPTOM	POSSIBLE CAUSE	POSSIBLE REMEDY	NOTES
			See setup guide
Difficulty toggling	Inappropriate settings	Check input settings on chair	 If the chair is set for a switched input device, the i-Drive may not function correctly
forward/reverse in Linked L/R Mode	Problem with R-net system	N/A	 R-net requires an extremely quick and accurate click for reverse. It is highly difficult to consistently toggle forward/ reverse
Invalid login	Inaccurate entry	Ensure client has correct login information	 Ensure the information provided and entered is accurate
credentials	Issues with local app data	Manually remove login credentials for Windows Configurator	Delete any folders that begin with 'iDrivearray.exe'
	Device not recognized	Update PC drivers	Download and install the USB drivers available from the download page
426.047 1 311	APS is out of date	Download newest software	Older versions will not connect to 4.0 interfaces
APS/Windows app will not connect		Cycle power	'Wait 10 min' error displays if software does not receive an i-
	Communication error	Use a new USB cable	Drive response. In the device manager,
		Establish a new COM port	In the device manager, uninstall the current i-Drive COM port.
Windows app/APS USB will not display a connectable device	Device not recognized	Update PC drivers	Download and install the USB drivers from the download page
APS Bluetooth will not	Device not connected	Pair device to PC Bluetooth	First connect with the PC Bluetooth, then connect in APS
display a connectable device	i-Drive is paired elsewhere	Disconnect and reconnect device	Disconnect from all mobile apps and PC's in range, then cycle the power and retry
PC Bluetooth will not	Incorrect entry of serial number	Enter serial number again	"Forget" the device, reconnect and try again
pair with i-Drive		number Adjust hard detection time	Adjust hard detection time
Mobile app will not display a connectable device	i-Drive is paired elsewhere	Disconnect and reconnect device	Disconnect from all mobile apps and PC's in range, then cycle the power on the i-Drive and retry
	Location services disabled	Enable location services	Go to your phone settings, then the app settings, then 'i- Drive Mobile', and enable location services.
Mobile app will not connect to system		Enter serial number again	"Forget" the device, reconnect and try again
		Connect to the device via USB	Go to Diagnostics and ensure the serial number programmed matches the serial number sticker

SYMPTOM	POSSIBLE CAUSE	POSSIBLE REMEDY	NOTES
Mobile app will not	Incorrect entry of serial number	Enter serial number again	"Forget" the device, reconnect, and try again
allow for changes		Connect to the device via USB	Go to diagnostics and ensure that the serial number programmed matches the serial number sticker
Mobile app crashes	Incorrect entry of	Enter serial number again	"Forget" the device, reconnect, and try again
when used	serial number	Connect to the device via USB	Go to diagnostics and ensure that the serial number programmed matches the serial number sticker
	Problem with firmware	Use latest version of firmware	Update to latest version of Windows Configurator, if necessary
'Loonz' will not connect to i-Drive	'Loonz' not connected	Pair device to PC Bluetooth	Connect with the PC Bluetooth first then connect with the APS
	Mouse emulation connected	Disconnect mouse	These two features cannot be paired simultaneously
'Loonz' has no reverse	Reverse has not been assigned	Double Tap	A double tap will toggle to reverse if no reverse is assigned in 'Loonz'
Mouse emulation will not pair with system	'Loonz' connected	Disconnect from Loonz'	These two features cannot be paired simultaneously
	Multi Tap currently off	Enable Multi Tap	Multi tap enables the ability to put an i-Drive into
Mouse emulation will	Triple click time too fast	Extend the Multi Tap time	It might be necessary to use the Calibrate Multi
not connect once paired	issues with .net framework	Download the correct .net framework	Check that the framework level matches the requirements in the manual
	Not reconnected after update	Reconnect to the Windows app	The app will store the settings and push them onto the next interface recognized with a serial number of 0

First Time Use

Dealer Assistance

During first-time use by the client, it is advised that the dealer or service technician not only assemble the component, but also explain the configuration or user positioning to the customer (i.e., the user and/or the attendant). If needed, the dealer or service technician can make final adjustments.

User Testing

It is important that the customer is fully aware of the installation of the i-Drive tray array, how to operate it, and how it can be adjusted according to the needs of the client. A dealer should explain and demonstrate the necessary installation steps, and should explain the functions of the device's components.

Have the user test the position of the i-Drive tray array.

- Is the hardware in the proper position for the client?
- Can the user safely operate all controls with minimal effort?

If necessary, make adjustments to the positioning. Explain potential problems to the customer and how best to address them.

Conditions of Use

i-Drive tray arrays are intended for use as installed by the dealer or service technician, in accordance with 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 usage conditions change significantly, please contact your dealer or qualified service technician to avoid unintended damage.

Cleaning

Use a soft, damp cloth to clean the hardware and its components. Ensure all cleaners are approved for finished steel and aluminum.

Disinfecting

Gently wipe the hardware with a soft cloth dampened with a household disinfectant.

General Maintenance

These care and use guideline instructions will keep the hardware in good condition for a longer period of time and will prevent damage:

- Check and tighten all fasteners to the proper torque specifications on a regular basis. Reference the installation manual to find the proper torque specifications.
- Check components for any breakdown.
- Repair or replace parts as needed.
- Gently remove dust and dirt from hardware with a soft, damp cloth.

SAFETY	Replace or repair parts as needed.	
NOTICE	Alteration or improper installation of the components included in i-Drive tray arrays will void their warranties.	



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