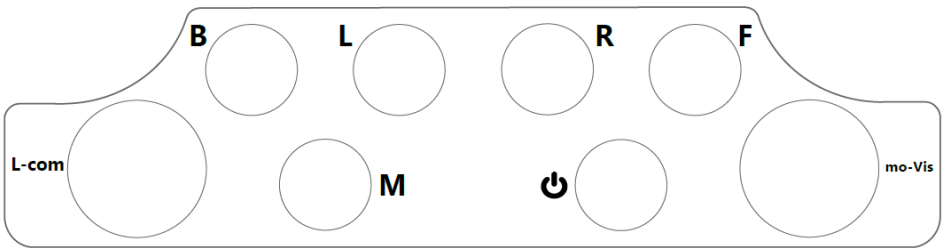




**OWNERS MANUAL**



# i-Connect

---

## 5 & 6 Switch Box Owner's Manual

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:



Stealth Products, LLC

104 John Kelly Drive, Burnet, TX 78611

Phone: (512) 715-9995

Toll Free: 1(800) 965-9229

Fax: (512) 715-9954

Toll Free: 1(800) 806-1225

info@stealthproducts.com

www.stealthproducts.com



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 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.

## 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.

All programming and configurations **MUST** be completed by a certified ATP or trained technician.

This manual contains programming instructions and statements that are meant to be followed by a certified ATP or trained technician.

## Supplier Reference

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

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

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

\_\_\_\_\_

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

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

Before you install or begin using this product, it is important that you read and understand the content of these operating instructions.

The installation and programming instructions will guide you through the options and possibilities with the product.

Instructions are written with the expressed intent of use with standard configurations. They also contain important safety and maintenance information, as well as describe possible problems that can arise during use. For further assistance, or more advanced applications, please contact your supplier or Stealth Products at (512) 715-9995 or toll free at 1-800-965-9229.


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

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

## Ordering Documentation

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



Search:  **57430** in the search bar at the top of the page.

Our products are designed, manufactured, and produced to the highest of standards. If any defect in material or workmanship is found, Stealth Products will repair or replace the product at our discretion. Any implied warranty, including the implied warranties of merchantability and fitness for a particular purpose, shall not extend beyond the duration of this warranty. Stealth Products, LLC does not warrant damage due to, but not limited to:

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

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

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

Covers: 2 years

Hardware: 5 years

Electronics: 3 years

## In Case of Product Failure

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

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

<b>1.0 Customer Satisfaction .....</b>	<b>i</b>
<b>2.0 Important Information.....</b>	<b>ii</b>
<b>3.0 Introduction .....</b>	<b>iii</b>
<b>4.0 Warranty .....</b>	<b>iv</b>
<b>5.0 Table of Contents.....</b>	<b>v</b>
<b>6.0 Warning Labels.....</b>	<b>viii</b>
6.1 Warning Labels.....	viii
6.2 Limited Liability.....	viii
6.3 Testing.....	viii
<b>7.0 Safety Precautions .....</b>	<b>ix</b>
<b>8.0 Design and Function.....</b>	<b>1</b>
8.1 Intended Use.....	1
8.2 Features.....	1
8.3 Mounting.....	1
<b>9.0 5 Switch Box Programming .....</b>	<b>3</b>
9.1 Layout .....	3
9.2 Q-Logic Setup.....	4
9.3 R-Net Programming.....	6
<b>10.0 6 Switch Box Programming.....</b>	<b>9</b>
10.1 Layout.....	9
10.2 Q-Logic Setup .....	10
10.3 R-Net Programming .....	12
<b>11.0 Testing.....</b>	<b>14</b>
11.1 Operational Test .....	14
11.2 Test Drive.....	14

<b>12.0 First Time Use</b> .....	<b>15</b>
12.1 Dealer Assistance.....	15
12.2 User Testing.....	15
12.3 Conditions of Use.....	15
<b>13.0 Maintenance</b> .....	<b>16</b>
13.1 Cleaning.....	16
13.2 Monthly Check.....	16
13.3 i-Connect Maintenance.....	16
<b>14.0 Settings</b> .....	<b>17</b>
14.1 Settings.....	17
<b>15.0 Technical Data</b> .....	<b>18</b>
19.1 5 Switch Box.....	18
19.2 6 Switch Box.....	18
<b>16.0 Notes</b> .....	<b>19</b>

## Warning Labels

## 6.1

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

### **DANGER**

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



### **WARNING**

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



### **CAUTION**

Identifies an **potential** situation which (if not avoided) will result in **minor to moderate injury, and property damage**.

### **NOTICE**

Identifies important information not related to injury, but possible **property damage**.

### **SAFETY**

Indicates steps or instructions for safe practices, reminders of safe procedures, or important safety equipment that may be necessary.

## Limited Liability

## 6.2

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

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.

## Testing

## 6.3

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



- The switch boxes are intended to be fitted on any power wheelchair with DB9 connection.
- Incorrect use or installation may lead to risk of injury to the user and damage to the wheelchair or other property.
- In order to reduce these risks, you should carefully read this manual, paying attention to the safety instructions and warnings.
- Any unauthorized use of the product may lead to increased risk of accident. Carefully follow the recommendations in this manual in order to prevent accidents from use.
- The switch boxes are non-serviceable parts.
- Always contact your dealer or service technician for questions concerning the operation or adjustment of the i-Connect Switch Boxes.

 **CAUTION**

Ensure the coupling nuts on the D-sub are not lost on the female side or you will be unable to permanently affix the D-sub male and female.

 **WARNING**

Ensure that all wires are routed in a way which prevents them from being crushed, pinched, stretched, or sliced. Watch for wear and tear. Damaged wires can make the box inoperable.

 **WARNING**

Be sure the I-Connect is in a place where it will not be crushed or damaged by operation of the wheelchair.

 **WARNING**

Ensure that mono-jacks are correctly inserted and all directions work as intended. Be sure that the user understands what each control does.

 **WARNING**

During install, it is recommended that the device is installed so that the mono jack ports are not facing up to prevent ingress of water.

## Intended Use

## 8.1

### 5 Switch Box

The 5 Switch Box allows the four directional commands and the mode command to be controlled by five switches with 1/8" mono plugs. This box is compatible with most wheelchair electronics and/or other devices that allow for switch control. It is also compatible with all i-Connect products. Power is supplied through the DB9 connection to the wheelchair.

### 6 Switch Box

The 6 Switch Box allows the four directional commands, mode command, and Power to be controlled by six switches with 1/8" mono plugs. This box is compatible with most wheelchair electronics and/or other devices that allow for switch control. It is also compatible with all i-Connect products. Power is supplied through the DB9 connection to the wheelchair. Built into the cabling is a male 1/8" mono jack to power a chair on or off. This power plug can also be used to control other devices, such as a communication device.

## Features

## 8.2

The i-Connect Switch Boxes are:

- Four directional command
- Compatible with all wheelchair electronics and switch control devices
  - Anything with a 1/8" mono plug such as mo-Vis accessories, the Twister, etc.
- Compatible with all i-Connect products
- Power supplied by a D89 connection
- 6 Switch Box can power chair on/off or control other devices such as a communication device

## Mounting

## 8.3

The i-Connect Switch Boxes can be mounted by:

- Using the included butterfly mount.
- Can be mounted onto most tracks.
- Recommended mounting location is on the back of the chair.

## Preparations

### 10.1

Only a qualified service technician may install the i-Connect switch box.

#### **WARNING**

An incorrect programming of the switch box or chair electronics may cause damage to the devices or injury to the user.

## Tools

### 10.2

Use the proper tools to install and adjust the i-Connect switch box to the chair.

#### **CAUTION**

Use the proper tools to install and adjust the switch box. The use of improper tools may cause damage to the device.

## Installation Plan

### 10.3

Set up an installation plan before starting the installation of the switch box. This plan should be based on the users' needs:

- Where the switch box should be placed.
- How the switch box will be operated
- The switch box parameter settings.
- The intended switches to be installed with the box

#### **CAUTION**

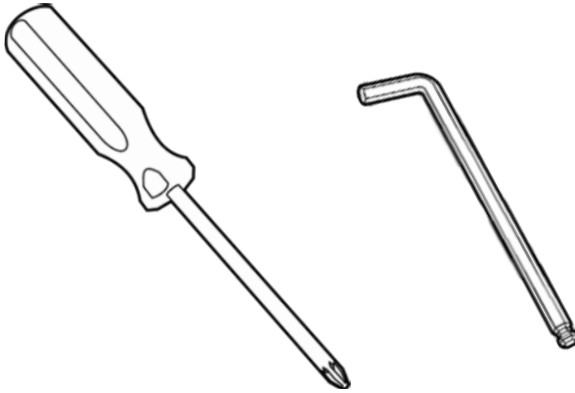
Any connection must always be secured with all delivered screws. Only use the screws provided in the package.

#### **CAUTION**

The recommended mounting location is on the back of the chair.

**Tools****10.2**

The tools you will need to complete installation are as follows:



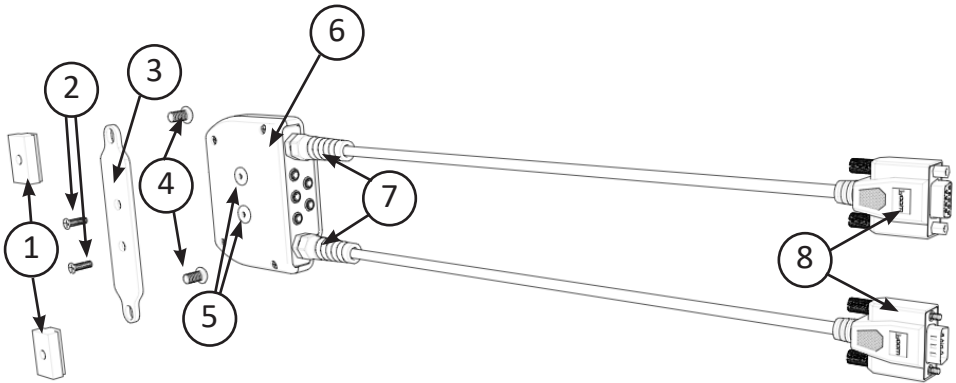
Hardware	Description
Phillips Screwdriver	Phillips Machine Screws mounting Box to Bracket
5/32" T-Handle	Button Head Screws on T-Nuts

Tools are not provided.

Screw	Torque Specification
1/4-20 x 1/2" Button Head Screws	125 in-lbs

Parts Layout

10.2



	Item	Description	Qty
1	TWBA00-60	T-Nut	2
2	6-32 X 1/2" PHILLIPS MACHINE SCREW	6-32 X 1/2" FLAT HEAD PHILLIPS MACHINE SCREW	2
3	IDH100-84	BUTTERFLY WING FOR ICONNECT 5-6 SWITCH	1
4	1/4-20 X 1/2" BHS	1/4-20 X 1/2" BUTTON HEAD CAP SCREW	2
5	6-32 JACK NUT	#6-32 Thread Well Nut .468 Head Diameter	2
6	IDH100-71	5 Switch Box*	1
7	2751	Del City Strain Relief Cord Connector-PG 7 Flex	2
8	CSMNB9MF-5	DELUXE MOLDED BLACK D-SUB DB9 MALE/FEMALE- 5	2

\*5 Switch Box shown, for the 6 Switch Box all other components are the same

## Installing Switch Box to the Chair

## 10.3

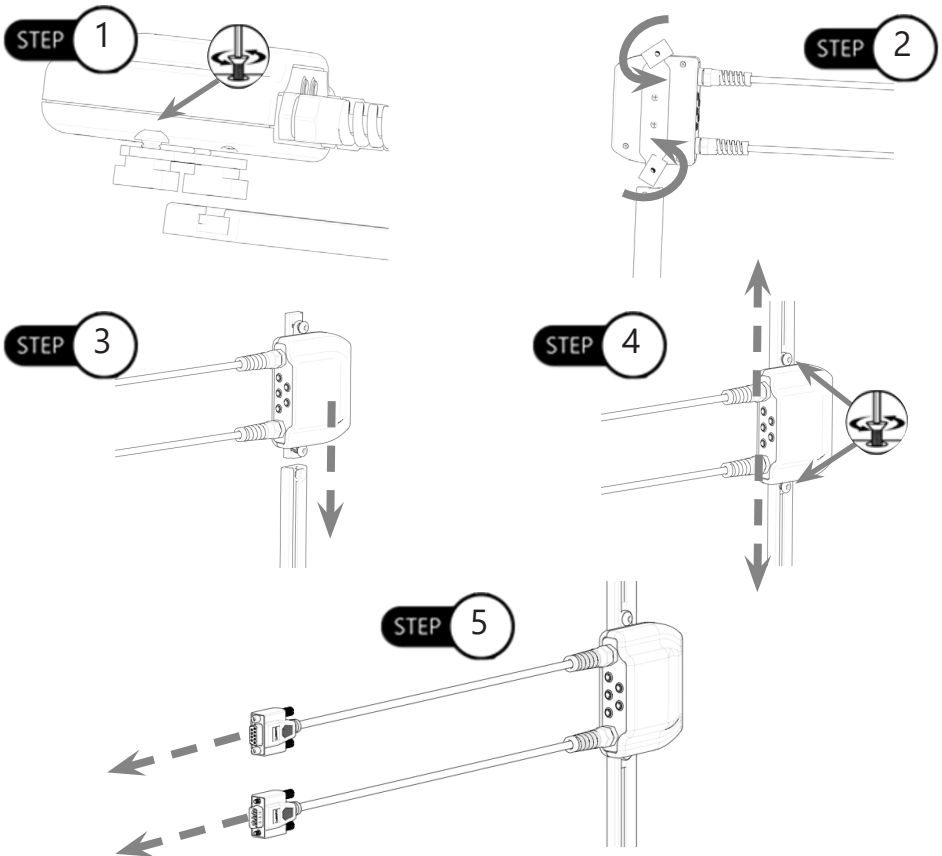
**Step One:** Using a 5/32" T-Handle, loosen the 1/4-20 x 1/2" Button Head Screws (4).

**Step Two:** Angle the T-Nuts (1) so that they are parallel with the desired track location.

**Step Three:** Slide the I-Connect through the track.

**Step Four:** Align the I-Connect on the correct location on the track, tighten the 1/4-20 x 1/2" BHS (4) with the 5/32" T-Handle to 125in-lbs of torque.

**Step Five:** Route the wires as needed being sure that they will not be located in a path which will cause them to be crushed, stretched, or sliced.



### **WARNING**

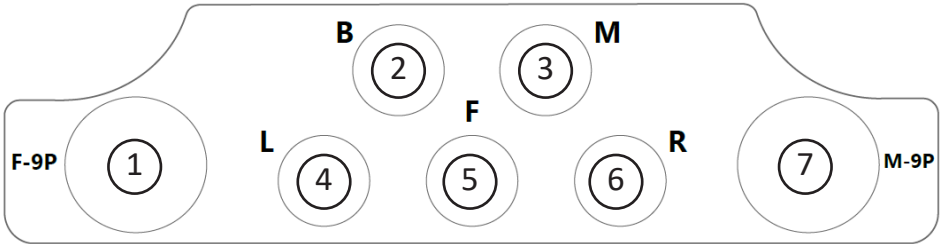
Ensure that excess wires do not hang or could be tangled with the user or other equipment.

# **5 Switch Box**

## Layout

## 9.1

### 5 Switch Box



- 1) 9-Pin (Female)
- 2) 1/8" mono for Reverse
- 3) 1/8" mono for Mode function
- 4) 1/8" mono for Left
- 5) 1/8" mono for Forward
- 6) 1/8" mono for Right
- 7) 9-Pin (Male)



## Q-Logic Setup

## 9.2

### Q-Logic Programmer

### Bookmark Buttons

Select *Options* in the main menu. Button actions are displayed on screen above corresponding buttons. In other menus, hold button to *Bookmark Settings*, and 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.

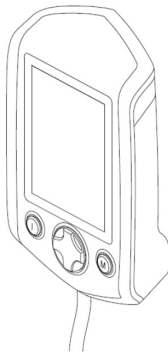


### Plus & Minus

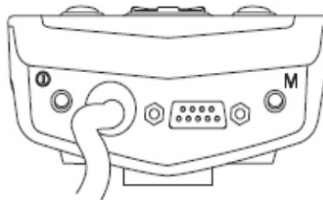
Toggle settings or changes values of the highlighted parameter.

### Help Button

Displays information about options selected on screen.



### Q-Logic Enhanced Display



**Note:** Q-Logic Enhanced Display and Q-Logic Handheld Programmer required.

## Q-Logic 2

Install the 5 Switch Box and secure to the chair. Plug the female 9-Pin into the Enhanced Display. If using a SCIM, plug the 9-Pin into the SCIM module.

1. Plug the Q-Logic programmer (HHP) into the back of the display.
2. On the HHP, select *Program Adjustments*.
3. In the *Program Adjustments* menu, select *Specialty Control*.
4. Set *Active Device* to one of the following according to the number of switches and locations installed:
  - a) 2 Switch
  - b) 3 Switch
  - c) 4 Switch
  - d) 5 Switch
  - e) 3 Switch Head
  - f) 4 Switch Head
  - g) 5 Switch Head

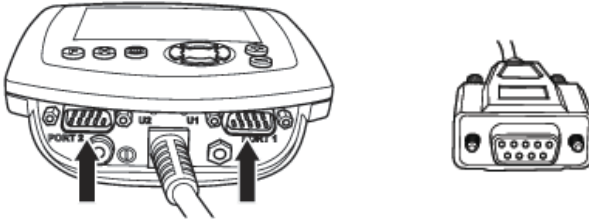
## Q-Logic 3

Install the 5 Switch Box and secure to the chair. Plug the female 9-Pin into the Enhanced Display. If using a SCIM, plug the 9-Pin into the SCIM module.

1. Plug the Q-Logic programmer (HHP) into the back of the display.
2. On the HHP, select *Program Adjustments*.
3. In the *Program Adjustments* menu, select *Enhanced Display* or *SCIM*.
4. Go to *Input Configuration*. Set this to one of the following according to the number of switches and locations installed:
  - a) 2 Switch
  - b) 3 Switch
  - c) 4 Switch
  - d) 5 Switch
  - e) 3 Switch Head
  - f) 4 Switch Head
  - g) 5 Switch Head

## R-Net Programming

## 9.3



### Mode

Switch mode to drive, power seating, or OBP (onboard programming)

### Profile

Switch between preset drive profiles and activate device as control.

### Power

Turns chair *ON/OFF*.

### Navigation

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

### Plus & Minus

Toggle settings or changes value of the highlighted parameter.

## R-Net

Install the 6 Switch Box and secure to the chair. Plug the female 9-Pin into Port 1 or Port 2 on the Omni display.

1. Connect the programming dongle.
2. Press *Mode (M)* on the Omni until you reach the *On Board Programming (OBP)*.
3. Select *Omni*.
4. Select *Port 1* or *Port 2*.
5. Set *SID* to one of the following:
  - a) *Swi-* if using switches for both *Forward & Reverse*.
  - b) *3Swi-* if not using a reverse switch.

## MK6i

Plug the female 9-Pin into the digital input on the Sip 'N Puff with digital interface.

1. Plug the MK6i hand held programmer (HHP) into the chair.
2. Turn on the chair.
3. Turn on the MK6i hand held programmer (HHP).
4. Select *Performance Adjust*.
5. In the *Performance Adjust* menu, scroll to *Input Type*:
  - Set this to *Digital* for each drive profile using the 5 Switch Box.
6. Use the *Save* key to save the changes.

### ***NOTICE***

If not using a switch for reverse, enable RIM Control to allow for reverse driving using the following steps.

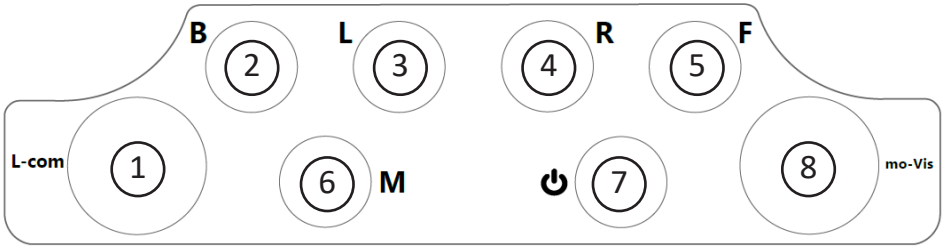
- Return to the *Home* screen.
- Select *Performance Adjust*.
- Scroll down to *RIM Control*.
  - Set the desired drive profiles to *On*.
- Use the *Save* key to save the changes.

# **6 Switch Box**

## Layout

## 10.1

## 6 Switch Box



- 1) 9-Pin (Female)
- 2) 1/8" mono for Reverse
- 3) 1/8" mono for Left
- 4) 1/8" mono for Right
- 5) 1/8" mono for Forward
- 6) 1/8" mono for Mode function
- 7) 1/8" mono for Power
- 8) 9-Pin (Male)

## Q-Logic Setup

## 10.2

### 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.



### Bookmark Buttons

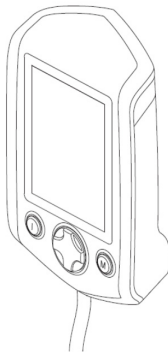
Select *Options* in the main menu. Button actions are displayed on screen above corresponding buttons. In other menus, hold button to *Bookmark Settings*, and press button to quickly go to bookmark.

### Plus & Minus

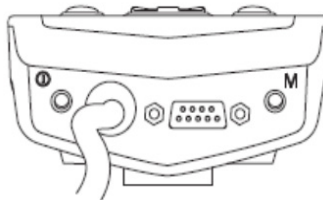
Toggle settings or changes values of the highlighted parameter.

### Help Button

Displays information about options selected on screen.



### Q-Logic Enhanced Display



**Note:** Q-Logic Enhanced Display and Q-Logic Handheld Programmer required.

## Q-Logic 2

Install the 6 Switch Box and secure to the chair. Plug the female 9-Pin into the Enhanced Display. Plug the power mono plug into the *On/Off* mono port on the enhanced display. If using a SCIM, plug the 9-Pin into the SCIM module. Plug the power mono plug into the *On/Off* jack on the hand control.

1. Plug the Q-Logic programmer (HHP) into the back of the display.
2. On the HHP, select *Program Adjustments*.
3. In the *Program Adjustments* menu, select *Specialty Control*.
4. Set *Active Device* to one of the following according to the number of switches and locations installed:
  - a) 2 Switch
  - b) 3 Switch
  - c) 4 Switch
  - d) 5 Switch
  - e) 3 Switch Head
  - f) 4 Switch Head
  - g) 5 Switch Head

## Q-Logic 3

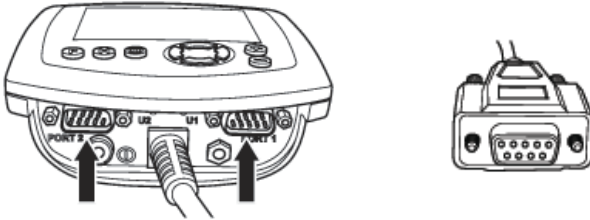
Install the 6 Switch Box and secure to the chair. Plug the female 9-Pin into the On/Off mono port on the enhanced display. If using a SCIM, plug the 9-Pin into the SCIM module. Plug the power mono plug into the On/Off jack on the hand control.

1. Plug the Q-Logic programmer (HHP) into the back of the display.
2. On the HHP, select *Program Adjustments*.
3. In the *Program Adjustments* menu, select *Enhanced Display* or *SCIM*.
4. Go to *Input Configuration*. Set this to one of the following according to the number of switches and locations installed:
  - a) 2 Switch
  - b) 3 Switch
  - c) 4 Switch
  - d) 5 Switch
  - e) 3 Switch Head
  - f) 4 Switch Head
  - g) 5 Switch Head



## R-Net Programming

## 10.3



### Mode

Switch mode to drive, power seating, or OBP (onboard programming)

### Profile

Switch between preset drive profiles and activate device as control.

### Power

Turns chair ON/OFF.

### Navigation

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

### Plus & Minus

Toggle settings or changes value of the highlighted parameter.

## R-Net

Install the 6 Switch Box and secure to the chair. Plug the female 9-Pin into Port 1 or Port 2 on the Omni display. Plug the power mono plug into the power port on the Omni.

1. Connect the programming dongle.
2. Press *Mode (M)* on the Omni until you reach the *On Board Programming (OBP)*.
3. Select *Omni*.
4. Select *Port 1* or *Port 2*.
5. Set *SID* to one of the following:
  - a) *Swi-* if using switches for both *Forward & Reverse*.
  - b) *3Swi-* if not using a reverse switch.

## MK6i

Plug the female 9-Pin into the digital input on the Sip 'N Puff with digital interface. Plug the Power mono jack into the remote On/Off port (Port A) on the MK6i Display or Joystick.

1. Plug the MK6i hand held programmer (HHP) into the chair.
2. Turn on the chair.
3. Turn on the MK6i hand held programmer (HHP).
4. Select *Performance Adjust*.
5. In the *Performance Adjust* menu, scroll to *Input Type*:
  - Set this to *Digital* for each drive profile using the 6 Switch Box.
6. Use the *Save* key to save the changes.

### ***NOTICE***

If not using a switch for reverse, enable RIM Control to allow for reverse driving using the following steps.

- Return to the *Home* screen.
- Select *Performance Adjust*.
- Scroll down to *RIM Control*.
  - Set the desired drive profiles to *On*.
- Use the *Save* key to save the changes.

After the installation of the i-Connect Switch Box, execute the following tests before the wheelchair is delivered or put into service, in this order:

- Operational Test
- Test Drive

## Operational Test

### 11.1

1. Activate the wheelchair.
2. Check for any error messages. Do not proceed before resolving the error.

## Test Drive

### 11.2

1. Perform a test drive with the wheelchair.
  - Move all directions and use all switches to verify proper function
  - If there are any errors, stop. Do not proceed before resolving the error.
2. Check that the chair and the i-Connect and all of its operations are fully functioning.

Check that no cabling or parts may become damp.

#### **WARNING**

During install, it is recommended that the device is installed so that the mono jack ports are not facing up to prevent ingress of water.

#### **WARNING**

Check that no cabling is loose and that the user can operate the chair properly with the i-Connect Switch Box attached.

## Dealer Assistance

### 12.1

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

### 12.2

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

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

Have the user test all positions and functions of the i-Connect Switch Box:

- Is the switch box well positioned in accordance with the client's needs?
- Does the box have proper clearance to avoid damage or crushing during normal operation?
- Are all wires routed to avoid pinching, crushing, or stretching during normal operation?
- Can the user safely operate the switch box with the least effort?

If needed, adjust the switch box and retest until it is in the optimal position and functions properly.

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

## Conditions of Use

### 12.3

The i-Connect Switch Box is intended for use as installed by the dealer, in accordance to the instructions in this manual.

- The foreseen conditions of use are communicated by the dealer or service technician to the user and/or attendant during the first time use.
- If the conditions of use change significantly, please contact your dealer or a qualified service technician to avoid excessive wear and tear or unintended damage.

## Cleaning

### 13.1

Clean all parts of the i-Connect Switch Box and its connections on a regular basis, or when needed.

- Gently remove dust and dirt with a dry cloth.
- Use only non-aggressive disinfectant cleaning agents.
- Tighten screws as necessary if box becomes loose.
- Check that connections are tight and tighten the coupling nuts on the 9 Pin cables as needed.

#### **WARNING**

Do not immerse the switch box or any of its components in water or use excessive amounts of liquid near the switch box.

## Monthly Check

### 13.2

Monthly, or when needed, check that:

- All bolts and screws are firmly tightened.
- There is no damage to any wiring.
- There is no excessive wear to any of the parts or wires.
- Check condition of the housing.

## i-Connect Maintenance

### 13.3

The i-Connect is maintenance free. Under regular use circumstances, the i-Connect unit does not require additional maintenance.

If there is intermittent failure for one of the connected devices, test the mono jack port with a new mono jack wire to isolate the failing component.







Stealth Products, LLC. • [info@stealthproducts.com](mailto:info@stealthproducts.com) • [www.stealthproducts.com](http://www.stealthproducts.com)  
+1(800) 965-9229 | +1(512) 715-9995 | 104 John Kelly Drive, Burnet TX 78611