

Stealth's User Manual and Maintenance Guide for the i-Drive Control Harness

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 show 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.

• Concept model shown on cover. Production model may vary.

## **Important Information!**

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

- Read and understand all instructions and warnings.
- Maintain our products according to our instructions on care and maintenance.
- Devices should be installed and adjusted by a trained technician.

# **Supplier Reference**

Supplier:	
Telephone:	
•	
Address:	
Purchase Date:	
Model:	
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Introduction 3.0

Before you install or begin using this product, it is important that you read and understand the content of these operating instructions. These instructions will guide you through the options and possibilities with the i-Drive Control Harness.

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: http://www.stealthproducts.com/qui/docs/?type=usr

Or search:

i-Drive Control Harness 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 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: 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:

- 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.

1.0 Customer Satisfaction	i
2.0 Important Information	ii
3.0 Introduction	iii
4.0 Warranty	iv
5.0 Table of Contents	v
6.0 Warning Labels	vii
6.1 Warning Labels	vii
6.2 Limited Liability	vii
6.3 Testing	vii
7.0 Design and Function	1
7.1 Intended Use	1
7.2 Features	1
7.3 Mounting	1
8.0 Parts and Accessories	2
8.1 IDCH Package	2
8.2 IDCH Accessories	3
8.3 IDCH Replacement Parts	4
8.4 Accessories	6

9.0 Mounting	8
10.0 Features	11
10.1 Adjustment	11
11.0 Installation Instructions	14
11.1 Tools	14
11.2 Installation Plan	14
11.3 Joystick Installation	14
11.4 Installation	15
12.0 First Time Use	16
12.1 Dealer Assistance	16
12.2 User Testing	16
12.3 Conditions of Use	16
13.0 Maintenance	17
13.1 Cleaning	17
13.2 Monthly	17

Warning Labels 6.0

# 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.

<u> </u>	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> .
▲ 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> .
⚠ 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 6.2

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

## Testing 6.3

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

The i-Drive Control Harness and joystick should be tested by the care giver and end user and adjusted specifically to their needs.

Intended Use 7.1

The i-Drive Control Harness is a versatile mounting harness for the mo-Vis Micro and Multi joysticks as well as Stealth's IDPMP joysticks. The i-Drive Control Harness offers height, depth, and angle adjustments that allows for unmatched, targeted positioning for the user.

Features 7.2

The i-Drive Control Harness:

- Is lightweight and discreet.
- Compatible with the mo-Vis Micro and Multi joysticks, and the IDPMP joysticks.
- Height, depth, and angle changes available through easily adjustable tracks, swivel mounts, and links.
- Twister switches and fiber optics can be attached to the IDCH using Loc-Line as an additional accessory.
- An i-Fit body securement belt, supplied in each order, ensures the IDCH remains secure and stable.

Mounting 7.3

The harness is designed for joysticks to be easily interchangeable and additional access points from the use of switches and/or fiber-optics to be utilized if needed.

- mo-Vis Multi and Stealth's IDPMP joysticks require the same mounting hardware.
- mo-Vis Micro joystick is mounted by removing the joystick mount used by the Multi and IDPMP joysticks and adding Stealth's joystick strap.
- The use of switches attached to Loc-Line and track versatility provides unlimited adjustability and location points for the user.

# IDCH Package 8.1

The i-Drive Control Harness part numbers/descriptions are as follows:

Pediatric i-Drive Control Harness  Small i-Drive Control Harness  Medium i-Drive Control Harness  Large i-Drive Control Harness  IDCH-N  IDCH-H  IDCH-L	Product Description	Part Number	
	Pediatric i-Drive Control Harness Small i-Drive Control Harness Medium i-Drive Control Harness	IDCH-S IDCH-M	







<sup>\*</sup> All belts are universal

# IDCH Accessories 8.2

The IDCH accessories include switches and fiber-optics on Loc-Line. The part numbers/descriptions are as follows:

Product Description	Part Number	
Left Side Single Twister Basic Button on Loc-Line– Specify Color *See colors below	IDCH-A1L	
Right Side Single Twister Basic Button on Loc-Line— Specify Color *See colors below	IDCH-A2R	
Left Side Fiber-Optic on Loc-Line (Requires IC24F-1)	IDCH-AFL	
Right Side Fiber-Optic on Loc-Line (Requires IC24F-1)	IDCH-AFR	

IDM-24	Twister Basic Button– Yellow	
IDM-25	Twister Basic Button– Black	
IDM-26	Twister Basic Button– Red	
IDM-27	Twister Basic Button– Blue	
IDM-28	Twister Basic Button– Green	

# **IDCH Replacement Parts**

8.3

Additional/Replacement parts can be ordered if necessary. The part numbers descriptions are as follows:

Product Description	Part Number	
Additional Link for Harness	IDCH-LINK	
Replacement Cover for Control Harness	IDCH-PC IDCH-SC IDCH-MC IDCH-LC	
6" Loc-Line for Mounting Accessories to the Control Harness	IDCH-FL6*	

<sup>\*</sup> Must be ordered at the time of purchase.

Parts and Accessories 8.0

Pediatric i-Drive Control Harness Collar Small i-Drive Control Harness Collar Medium i-Drive Control Harness Collar Large i-Drive Control Harness Collar	IDCH-PNC IDCH-SNC IDCH-MNC IDCH-LNC	
Mount for IDM-MULTI-9 & IDPMP-1,9	IDCH-JM01	
Mount for IDM-MICRO-9	IDCH-JM02	

Parts and Accessories 8.0

Accessories 8.4

i-Drive Control Harness Belt (provided with IDCH order):

- Two sizes are available.
- Standard belt size– 16" x 3<sup>3/4"\*</sup> (for Pediatric, Small, and Medium IDCH's)
- Extra Large belt size– 18<sup>1/2"</sup> x 4" (for Large IDCH)

**NOTICE** Measurements shown include pad sizes only.

- The belt is attached at the front of the collar, via buckles, and provides support along the client's back. The belt will help prevent the harness from shifting out of its proper place.
- Easily adjustable, side release, dynamic i-Fit material.

NOTICE

Webbing can be trimmed to size if necessary.

**⚠** CAUTION

Do not overtighten belt straps.

Size	Chest Circumference Minimum*	Chest Circumference Maximum*
Pediatric	27"	42"
Small	30"	45″
Medium	33"	48"
Large	36"	66"

### Additional Link for IDCH (IDCH-LINK)

- If additional height is required for proper positioning, the IDCH-LINK can be ordered and easily attached.
- An additional link will provide 1<sup>3/4"</sup> of adjustment.

<sup>\*</sup> Measurements are approximate

Parts and Accessories 8.0

#### Loc-Line with Twister Basic Button/Fiber Optic Switch

- Switches, attached by Loc-Line tubing, can be ordered for the IDCH.
- Approximately 12in. of Loc-Line is provided.
- Loc-Line will be secured via M5 x .8 x 25mm SHS & M5 locknuts and share the same track as the swivel mount.
- Fiber optic switches require the IC24F-1.
- The Loc-Line can be easily adjusted and oriented to client's needs

#### Replacement Neck Cover (IDCH-PC, SC, MC, LC)

Neoprene fabric (standard).

#### Loc-Line for Mounting Accessories (IDCH-FL6)

- All switches are mounted standard on 12" of Loc-Line.
- Additional Loc-Line can be ordered in 5<sup>3/4"</sup> increments
- The depth position of the switches can be adjusted on the track by loosening the nut under the track. Slide Loc-Line along the track until you have reached the desired position and retighten.



Do not overtighten nut. Loc-Line could crack.

#### NOTICE

When a switch has been installed onto the Loc-Line, the length cannot be altered. If there is a possibility that more length for the switch site will be necessary, we advise that additional Loc-Line (IDCH-FL6) be ordered at the time of purchase.

Mounting 9.0

## To mount the mo-Vis Multi joystick:

• Use the four screws provided in the Multi Accessory Pack to mount the joystick.

- The screws will travel through the joystick mount on the IDCH and into the base of the Multi Joystick.
- USB ports should be oriented to the client's right side for standard configuration of the joystick.



Mounting 9.0

## Mounting the IDPMP joystick:

- Use the screws provided in the IDCH kit to mount the IDPMP joystick.
- Screws will travel through the base of the mount on the IDCH and into the base of the IDPMP joystick.
- For standard configuration of the joystick, orient the dimple to the front, facing away from the client.



Mounting 9.0

## When mounting a mo-Vis Micro joystick:

• The Multi/IDPMP mount on the IDCH will be removed. Replace the mount with the i-Drive Control Harness Micro joystick mount.

• The arrow on the base of the joystick should be pointing away from the client for standard configuration of the joystick.



Features 10.0

The IDCH has multiple points of adjustment. The sizes of the IDCH are as follows:

To determine the size needed, measure the circumference of the client's neck. Reference the table below for sizing information.

്വ	lar	Size	

Part Number	Size	Width	Circumference
IDCH-P	Pediatric	3 <sup>1/2</sup> "	11"
IDCH-S	Small	4 <sup>1/2</sup> "	14 <sup>1/8"</sup>
IDCH-M	Medium	5 <sup>1/2</sup> "	17 <sup>1/4"</sup>
IDCH-L	Large	6 <sup>1/2</sup> "	20 <sup>1/2"</sup>

Arm Lengths	
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Size	Inches
Pediatric	7"
Small	9"
Medium	10"
Large	11"

Adjustment 10.1

## **Height Adjustment**

- The arm lengths are determined by the size of the collar that is ordered. The mount can be moved closer to the client by moving the latch up the arms.
- If the distance to the joystick is still not to the client's needs, the arms can be shortened by cutting them.
- Height can be adjusted in 1/2" increments.

NOTICE

Measure to the desired length before cutting the arms.





Features 10.0

## **Lateral Adjustment & Depth Adjustment**

• Lateral adjustment of the track and joystick mount is determined by the size of the collar.

• 3<sup>1/4</sup>" of depth adjustment is available for all harnesses.





Size	Inches of Lateral Adjustment
Pediatric	3"
Small	4"
Medium	5"
Large	6"

Features 10.0

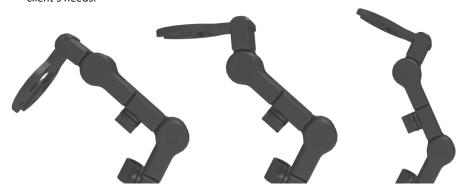
### **Angle & Link Adjustment**

 The swivel link, featured at the base of the joystick mount, offers 360° of adjustment for the user.

- 90° of adjustment forward and backward provides the client with the ability to move the joystick as close to them as necessary.
- Quarter turn in a downward direction will release the locking mechanism and allow the client to adjust the swivel mount. Quarter turn in an upward direction locks the swivel mount.



• The links and joystick mounts can be adjusted in various angles to best fit the client's needs.



Installation Instructions 11.0

#### **A** WARNING

Only a qualified service technician may install the i-Drive Control Harness.

Tools 11.1

- 2mm T-Handle
- 3mm T-Handle
- 4mm T-Handle
- Phillips Head screwdriver

#### **A** CAUTION

Use the proper tools to install and adjust the i-Drive Control Harness. The use of improper tools may cause damage to the device.

Installation Plan 11.2

Set up an installation plan before starting the installation. Based on the users' needs, this plan should specify:

- Which joystick is necessary for the client to operate.
- What height the links should be adjusted to.
- At what angles the links need to be place.

# **Joystick Installation**

11.3

To install the mo-Vis Micro, Multi, or Stealth IDPMP joysticks, follow the instructions in the IDCH Installation Manual. To program these joysticks, look at the corresponding user manual, sent with the joystick, and carefully follow the instructions.

Installation Instructions 11.0

Installation 11.4

• Determine the correct height of the links on the collar for the user. If additional height is necessary, links can be purchased.

• Adjust the links to the proper angles and secure the screws.

#### **A** CAUTION

Tighten the screws firmly, but not excessively. Excessive force may damage the unit.

- The joystick mount on the collar is for mounting the Multi Joystick or IDPMP Joystick with
  the proper screws. To use the Micro Joystick, remove the joystick mount from the collar.
  Use the mounting strap to mount the Micro Joystick to the links on the IDCH.
- Place IDCH on client and make any final adjustments with the joystick and the angle at which it is mounted for the client.
- Wrap belt around the back of the client and secure to the front of the IDCH.

#### **A** CAUTION

Use caution around feeding tubes, wounds, or sensitive areas.

#### **ACAUTION**

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

### **A** WARNING

Discontinue use if any product's function becomes compromised, loose, shows signs of excessive wear, missing parts, or does not function as intended.

First Time Use 12.0

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 configurations to the client. 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 the collar, and what can be adjusted on the collar in order to have the joystick in the best position for the user. As a dealer, proceed as follows:

Have the user test the position of the collar:

- Is the joystick within easy reach?
- Can the user safely operate the joystick on the collar with minimal effort?
- Is the placement of the collar and the joystick on the collar available in an optimal position for the user?

If needed, adjust the joystick and the collar to the proper position.

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

Conditions of Use 12.3

The i-Drive Control Harness is intended for use as installed by the dealer, in accordance to the installation and 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 a qualified service technician to avoid excessive wear and tear or unintended damage.

#### A DANGER

Failure to comply with these warnings could result in serious bodily harm.

Maintenance 13.0

#### **Care and Maintenance**

13.1

We recommended that all products be checked for wear and function on a periodic basis and replaced, if necessary, by a wheelchair professional.

- Repairs should be done with Stealth parts, fasteners, or items appropriate for the service needed.
- Discontinue use after identifying loose or broken components.
- Check and retighten all fasteners according to the installation instructions.

**SAFETY** 

Replace or repair parts as needed.

## Cleaning

13.2

- Surfaces may be wiped clean with a damp cloth and mild, nonabrasive cleaner.
- Ensure all cleaners are approved for finished steel, aluminum, plastic and upholstered surfaces.

#### **Machine Wash**

13.3

The belt may be machine washed warm (40°), permanent press, mild process.

**▲** WARNING

Do not bleach.

**MARNING** 

Do not tumble dry. Dry flat.

**A** WARNING

Do not iron.

Notes	14.0

Notes	14.0





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

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