# MC Standard Hand User Manual



# **Special Precautions**



## **Risk Management**

To minimize the risk of device damage or injury to the user while maximizing the functions of this device, follow the instructions for installation, and use this device as described in this manual.



## The MC Hand is water-resistant, not waterproof

While the Motion Control Hand is water-resistant, the quick disconnect wrist is not. Do not submerge the MC Hand beyond the wrist.



#### **Flammable Gases**

Caution should be used when operating the MC Hand around flammable gases. The MC Hand utilizes an electric motor that can ignite volatile gases.



## Do not bend fingers

While the MC ETD is robust, body weight represents a great deal of force. Do not apply full body weight on the fingers. Additionally, a fall with the force directed to the fingers could cause damage. If the fingers do become bent or out of alignment, return the MC Hand to your prosthetist.



## **Safety Release**

Do not force the fingers and/or thumb opened or closed. This will result in serious damage to the device. The safety release will allow easy opening and closing of the hand. If the release mechanism does not allow motion, the device requires service.



# **Setup Using the User Interface**

While the default settings in the MC Hand may allow the patient to operate the system, it is highly recommended the prosthetist utilize the User Interface to customize the settings for the wearer.



## **Safety Caution**

Use caution when using this device in situations where injury to yourself or others may occur. These include but are not limited to activities such as driving, operating heavy machinery, or any activity where injury may occur. Conditions such as a low or dead battery, loss of electrode contact, or mechanical/electrical malfunction (and others) may cause the device to behave differently than expected.



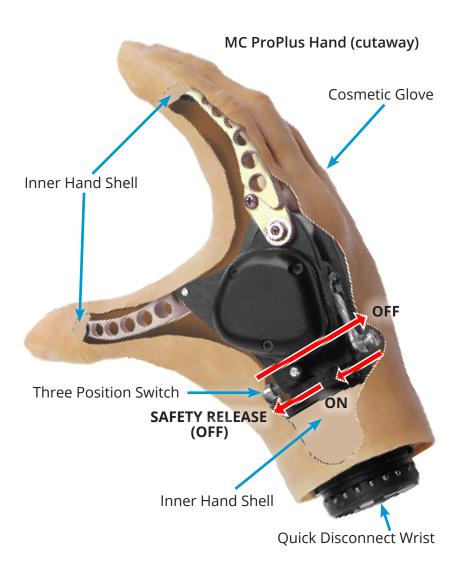
# **Repairs or Alterations**

Do not attempt to repair or alter any of the mechanical or electronic components of the MC Hand. This will likely cause damage, additional repairs and void the warranty.



#### Serious Incidents

In the unlikely event a serious incident occurs in relation to the use of the device, users should seek immediate medical help and contact their prosthetist at the earliest possible convenience. Clinicians should contact Motion Control immediately in the event of any device failure.



### Introduction

The Motion Control (MC) Standard Hand is a high performance electric hand for persons with upper extremity limb loss. The MC Hand is available in three sizes and several lengths to accommodate a variety of individuals. It contains a battery-saver circuit for longer battery life, wide-opening fingers, heavy-duty machined frame and fingers, and a unique safety release. This results in a robust, efficient, high-speed terminal device for an upper extremity prosthesis.

#### **Three Position Switch**

The MC Hand has a three position sliding switch located in the middle of the back of the hand. On the palm side, it is located at the base of the thumb. With the switch pushed all the way toward the back of the hand, the hand is OFF. Pushing from the back of the hand towards the palm, the first click turns the hand ON. Pushing completely toward the palm is the SAFETY RELEASE position, releasing the fingers. In the Safety Release position, the hand is also turned OFF.

# **Quick Disconnect Wrist**

The Quick Disconnect wrist is a universal design that allows interchangeability with our other terminal devices (such as the Motion Control ETD) and other manufacturers' devices. Consult with your prosthetist to ensure the specifications of your hand before interchanging it with other terminal devices.

# **Inner Hand Shell**

This durable glove is installed at the factory and is not meant to be removed except by trained personnel. This shell provides protection for the hand along with some moisture resistance. If a hole or damage is discovered, the hand shell should be replaced. Some smaller sized hands do not have an inner hand shell, they have only a cosmetic glove. This requires a special order from Motion Control.

# **Cosmetic Glove**

This glove should be chosen in conjunction with your prosthetist, examining the color swatches compared to your skin tone. The glove should also remain intact to prevent damage to the hand. Holes or damage to the glove could allow liquids to enter the hand, and cause damage. Always maintain an intact glove.

## Instructions for Use

Before attaching the MC Hand to the forearm, locate the switch on the palmar side of the hand at the base of the thumb. Ensure it is pushed completely to the back of the hand (the OFF position).

Insert the quick disconnect wrist on the hand into the wrist on the forearm. While pushing it in firmly, rotate the hand until an audible click is heard. It is advisable to rotate the hand both directions several clicks, then attempt to pull the hand off to ensure it has attached firmly.

Now push the switch on the back of the hand toward the palmar surface to the second (middle) position and the hand is now ON and ready for use.

To disconnect the hand, first turn it OFF (by pushing the switch all the way to the back of the hand), then rotate it either direction until a slightly more difficult click is felt. Overcoming this click will disconnect the hand from the forearm. This allows interchangeability with another terminal device, such as the MC Standard ETD.

# **Water Damage**

The Motion Control Hand is not waterproof. If water or other liquid should enter the hand, remove the hand at the quick disconnect (or turn the hand off if there is no quick disconnect). If the hand is only slightly wet (has not been submersed), dry it as much as possible, and attempt to power it up and operate. If it does not operate, or if the hand has been submersed, see your prosthetist.

#### Single Patient Use

Each amputee is unique. The shape of their residual limb, the control signals each generates and the tasks an amputee performs during the day require specialized design and adjustment of the prosthesis. Motion Control products are manufactured to be fit to one individual.

#### **Disposal/Waste Handling**

This device, including any associated electronics and batteries should be disposed of in accordance with applicable local laws and regulations. This includes laws and regulations regarding bacterial or infectious agents, if necessary.

## **Limited Warranty**

Seller warrants to Buyer that the equipment delivered hereunder will be free from defects in materials and manufacturing workmanship, that it will be of the kind and quality described and that it will perform as specified in Seller's written quotation. The limited warranties shall apply only to failures to meet said warranties that appear within the effective period of this Agreement. The effective period shall be one year (12 months) from the date of delivery to the fitting center that has purchased the components. Refer to the shipping receipt for the date of shipment.

For more information regarding the Limited Warranty, see the MC FACT SHEET - Limited Warranty.

#### **Return Policy**

Returns are accepted for a full refund (not including any repairs that may be required) for up to 30 days from date of shipment. Returns 31-60 days from date of shipment will be accepted, subject to a 10% restocking fee. Returns 61-90 days from date of shipment will be accepted, subject to a 15% restocking fee. Returns must be in re-saleable condition. Beyond 90 days, returns are not accepted.

#### **Technical Specifications**

Operating Temperature: -5° to 60° C (23° to 140° F)

**Transport & Storage Temperature:** -18° to 71° C (0° to 160° F) **Pinch Force:** At 7.2 volts nominal: 10 kg (22 lbs, or ~ 100N) **Operating Voltage Range:** 6 to 8.2 Vdc - MC ProPlus Hand

Load Limit: 22 kg / 50 lbs in all directions (+/- 10%)

#### **Declaration of Conformity**

The product herewith complies with Medical Device Regulation 2017/745 and is registered with the United States Food and Drug Administration. (Registration No. 1723997)





# **Customer Support**

## Americas, Oceania, Japan **Fillauer Motion Control**

115 N. Wright Brothers Drive Salt Lake City, UT 84116 801-326-3434

motioninfo@fillauer.com

# Europe, Africa, Asia

#### Fillauer Europe

Kung Hans väg 2 192 68 Sollentuna, Sweden +46 (0)8 505 332 00 support@fillauer.com





#### **Fillauer**

2710 Amnicola Highway Chattanooga, TN 37406 423.624.0946 www.fillauer.com



## Fillauer Europe

Kung Hans väg 2 192 68 Sollentuna, Sweden +46 (0)8 505 332 00

