

# Manual Swing

Versatile mounting device



Manual Swing Right Arm (P001-21)

Manual Swing Right Arm Bundle (P001-22)

Manual Swing Left Arm (P001-23)

Manual Swing Left Arm Bundle (P001-24)

# Contact & Product

mo-Vis bvba



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Manual Swing User & Installation manual

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## Important information about this Manual

Congratulations for choosing a mo-Vis product! If you would like to learn more about mo-Vis and its products, we invite you to visit our website: [www.mo-vis.com](http://www.mo-vis.com).

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

The installation instructions will guide you as an installer through the options and possibilities with the mo-Vis product. The mo-Vis product should be adjusted with the mo-Vis Configurator software.

The operating instructions are primarily intended to acquaint you with the functions and characteristics of the mo-Vis product and how you can use it in the best manner possible. They also contain important safety and maintenance information, as well as describe possible problems that can arise during use.

Always keep the operating instructions handy in connection with your wheelchair, since the need for important information can arise concerning its use, safety and maintenance.

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.

We reserve the right to make changes to the product without prior notice.

### ***Ordering documentation***

You can download additional copies of this User & Installation manual on the mo-Vis website: [www.mo-vis.com](http://www.mo-vis.com).

## Support, scrapping and spare parts

### ***Technical support***

In case of technical problems, we advise you to contact your dealer.

If the dealer is not available, or unknown, please contact mo-Vis bvba by email [support@mo-vis.com](mailto:support@mo-vis.com) or by phone +32 9 335 28 60.

Always state the device serial number when contacting mo-Vis. This ensures you are provided with the correct information.

### ***Spare parts and accessories***

Spare parts and accessories must be ordered by the dealer at mo-Vis bvba.

### ***Scrapping & recycling***

For scrapping, adhere to your local waste legislation.

Dispose of obsolete electronic parts responsibly in accordance with local recycling regulations.

# Warranty

mo-Vis bvba warrants the Manual Swing to be free from defects in material and workmanship for a period of 2 years under proper use, care and service.

All warranties only cover parts and do not extend beyond the initial purchaser from an authorised mo-Vis dealer.

## ***Start of the warranty period***

Each warranty shall begin on the date the product is first delivered to the customer.

## ***Repair and replacement***

For warranty service, we advise you to contact the dealer from whom the product was purchased. In the event of a defect in material or workmanship, the dealer must obtain a return authorisation (RA) number from mo-Vis and the product must be shipped to a service centre designated by mo-Vis. mo-Vis will repair or, at mo-Vis' option, replace any product covered by the warranty.

## ***Disclaimer and Limitations of Remedies***

The express warranties set forth in this agreement are in lieu of all other warranties of merchantability or fitness of purpose. In no event shall mo-Vis be liable for any direct, indirect, incidental or consequential damages resulting from any defect in this product. Warranty of parts subject to "normal wear and tear" (e.g. pads, joystick balls, batteries ...) are not covered in the warranty except as it applies to defects in material or construction.

## ***Amendments***

No person is authorised to alter, extend or waive the warranties of mo-Vis.

## ***Voiding of warranties***

The foregoing warranties are contingent upon the proper installation, use, maintenance and care of the product. The warranty will be void if the product has been installed or used improperly, or if it has been repaired or any part replaced by persons other than mo-Vis or an authorised dealer.

The addition of equipment or features that are not manufactured or recommended by mo-Vis could affect the intended function of the mo-Vis product and may invalidate the warranty.

### ***Understanding usage***

The health care professional (authorised installer) is responsible for understanding the intended use of the mo-Vis equipment, the specifications and its programming parameters. mo-Vis cannot be held responsible for damage caused by incorrect installation or incorrect use of the product. Misuse, mishandling or storage is not covered by this warranty.

# Safety precautions

## **General**

The Manual Swing is intended to be fitted on any wheelchair.

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 instruction manual, paying particular attention to the safety instructions and warning texts.

Only install this product on a wheelchair where the wheelchair manufacturer allows the installation of third party parts.

Any unauthorised 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.

In case of doubt for alterations and adjustments, always contact a qualified service engineer.

In case any serious incident occurs in relation to this device, this should be reported immediately to mo-Vis and the competent authority of the Member State in which the user is established.

## **Warning labels**

This manual contains the following warning labels, which are intended to draw attention to situations that could lead to unwanted problems, e.g. personal injury or damage to the wheelchair.



### **CAUTION!**

*Please use caution where the symbol appears.*



### **WARNING!**

*Please use extreme caution where the symbol appears. Failure to observe warnings can lead to personal injury or property damage.*



### **CAUTION!**

#### **Limited liability**

*mo-Vis 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.*



### **WARNING!**

#### **Assembly**

*The Manual Swing should only be installed or adjusted by a qualified service engineer or someone with adequate knowledge to perform the adjustment in an expert manner.*

#### **Maintenance and service**

*Carry out only the service and maintenance activities specified in this manual, as long as you comply with the demands stated in this manual for a specific action. All other service, alterations to and interventions on the Manual Swing must be carried out by a qualified service engineer or someone with adequate knowledge to perform the adjustment in an expert manner. In case of doubt, contact a qualified service engineer or mo-Vis.*

*Use only spare parts or accessories approved or recommended by mo-Vis. All other use could lead to changes which might impair the function and safety of the product. It could also lead to the warranty becoming void.*



### **CAUTION!**

#### **Testing**

*The Manual Swing should always be tested without any person sitting in the wheelchair after every alteration to the physical swing.*

*Make sure that no part, cables or options of the wheelchair or a person may get blocked by the movements of the swing.*

# Design and function of the Manual Swing

## *Purpose*

The Manual Swing is a versatile arm to mount on a wheelchair. With this arm, devices such as a chin joystick can be positioned to drive, and the arm can be moved upwards or sideways whenever needed.

## *General*

The Manual Swing is attached to the rear of the wheelchair's backrest with the Q2M Universal Clamp (included in the Bundle version). The Q2M Universal Clamp is also available as a separate product.

- With the different included installation parts, the Manual Swing arm can be optimally positioned for each individual user.

## Parts and accessories

### *Available versions*

- **Manual Swing Right Arm (P001-21)**: for installation at the right side of the wheelchair
- **Manual Swing Right Arm Bundle (P001-22)**: for installation at the right side of the wheelchair, incl. mo-Vis Manual Swing Mounting Set
- **Manual Swing Left Arm (P001-23)**: for installation at the left side of the wheelchair
- **Manual Swing Left Arm Bundle (P001-24)**: for installation at the left side of the wheelchair, incl. mo-Vis Manual Swing Mounting Set

### *Manual Swing Package*

A Manual Swing package consists of the following parts:

	Product description	Product code
	Multi Swing T-connection	M001-12
	Multi Swing arm to rod Interconnection Assembly	M001-13
	Multi Swing Right arm (for packages P001-21 and P001-22)	M001-01
	Multi Swing Left arm (for packages P001-23 and P001-24)	M001-10
	Multi Swing T-bar Rod	M001-05
	Manual Swing pivot unit	P001-20
	Swing C-rod	M001-02
	Swing S-rod	M001-03

	Product description	Product code
	Swing pulling wire	M001-14
	Swing end stop	M001-15
	Manual Swing manual, with Serial number sticker	D-P001-20-70

### ***Manual Swing Mounting Set***

The Manual Swing Mounting Set (M004-17) is included in the Bundle versions P001-22 and P001-24.

The Manual Swing Mounting Set or its different parts can also be ordered separately.

	Product description	Product code
	Q2M Universal Clamp	M007-01
	Q2M Dogbone Slide In (200 mm)	M004-11
	Q2M Dogbone Extension Straight (incl. mounting screws)	M004-12

	Product description	Product code
	Q2M Dogbone Extension Right Angled (incl. mounting screws)	M004-13
	Q2M Manual Swing Bracket Ass. (incl. mounting screws)	M004-16

### ***Complete installation***

Below, you see a picture of a completely installed Manual Swing arm, with a Manual Swing Mounting Set.



### ***Ordering spare parts***

Spare parts and accessories must be ordered by the dealer at mo-Vis bvba.

Always mention Product code & Product description of items to be ordered.

The different parts of the Manual Swing can be installed in different ways, allowing a flexible placement for any user.

### ***Left or right installation***

The Manual Swing can be installed at the right side or left side of the wheelchair, depending on the product version.

- For installation at the right side of the wheelchair: use the Manual Swing Arm Right (P001-21) or Manual Swing Arm Right Bundle (P001-22).
- For installation at the left side of the wheelchair: use the Manual Swing Arm Left (P001-23) or Manual Swing Arm Left Bundle (P001-24).

### ***Manual Swing Arm positioning***

The T-connection and T-bar rod is used to connect the Manual Swing arm to the Manual Swing pivot unit. To attach the device to the Manual Swing arm, use either the S-rod or C-rod.

# Installation instructions

## Preparations

### ***Qualified service engineer***

Only a qualified service engineer may install the Manual Swing.

### ***Tools***

Use an Allen wrench to install the Manual Swing Mounting Set and Manual Swing.



#### ***CAUTION!***

*Use the proper tools to install and adjust the Manual Swing. The use of improper tools may cause damage to the device.*



#### ***CAUTION!***

*Do not tighten screws with an excessive force.*

### ***Installation plan***

Set up an installation plan before starting the installation. Based on the users' needs and with actual measurements of the wheelchair and the user, this plan should specify:

- Where which part of the Manual Swing should be placed
- How the Manual Swing will move

### ***Serial number sticker***

The additional serial number sticker (included in the package) has to be adhered to the back of this manual.

## Installation of the Manual Swing pivot unit



#### ***CAUTION!***

*Any connection must always be secured with supplied screws.*

To install the Manual Swing pivot unit, proceed as follows – according to your installation plan:

1. Place the Q2M Universal Clamp left or right on the wheelchair and secure it firmly.
2. Place and secure the Q2M Dogbone Slide In in the Universal Clamp.

3. Place and secure the Q2M Dogbone Extension Right Angled on the Q2M Dogbone Slide In.
  - Do not mount the Q2M Dogbone Extension Right Angled if the arm must be able to move upwards. We advise to use at least one Q2M Dogbone Extension Straight instead.
  - If the user is hindered by the upward swing, mount the Manual Swing pivot unit at higher position.
  - Other configurations can be made, depending on the placement.
  - If needed, additional mounting parts can be ordered at mo-Vis.
4. Place and secure Manual Swing pivot unit and the Manual Swing Bracket.

**CAUTION!**

*The connections must be at the bottom (default position) or at the lower part (tilted position).*

## Installation of the arm

Make sure the Manual Swing pivot unit is properly installed, before starting installation of the Manual Swing arm.

**CAUTION!**

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

To install the arm, proceed as follows – according to your installation plan:

1. Attach the T-connection to the Manual Swing pivot unit.
2. Insert the Manual Swing arm into the T-connection.

**CAUTION!**

*The dog-tip screws should fit into the slots of the arm. Select the appropriate screw location in the T-connection. Screws should be placed in such a way that they do not enter the cable throughputs in the arm.*

3. Place the C-rod or S-rod for attaching the device.
4. If needed, cut off excessive piping at the back of the arm (behind the T-connection).

Remember to keep a small excess of piping in order to be able to make readjustments.

**CAUTION!**

*When cutting off piping, always deburr the cut-off end to avoid injury or cable damage.*

5. Use the pulling wire to insert the connection cable for the device into the arm.  
The connection cable enters at the C-rod or S-rod and leaves the arm just past the T-connection.
6. Place the device on the C-rod or S-rod and secure it firmly.

**CAUTION!**

*The maximum device weight is 500 gr at a distance of 65 cm from the pivot point at the Manual Swing pivot unit connection.*

7. Attach and secure all cables.
8. Mount the end stop.

## Testing

After installation of the Manual Swing arm, test the positioning and movements of the arm.

**WARNING!**

*First test without any person sitting in the wheelchair.*

Check the following items:

- Is the arm moving in accordance with the intended movements?
- Can the arm move freely without hindering any wheelchair item or cable?
- Can the arm move without hindering a person in the wheelchair?
- Can all cables move freely while being securely attached?

If needed, adjust the positioning of the arm and retest until optimal and secure functioning.

# First time use

## ***Dealer assistance***

During first time use by the user it is advised that the dealer or service engineer assists and explains the different possibilities to the customer (the user and/or his attendant).

If needed, the dealer can make final adjustments.

## ***User testing***

It is important that the customer is fully aware of the installation, how to use it and what can be adjusted to optimise his experience.

As a dealer, proceed as follows:

- 1.** Explain and show the customer how you have executed the installation.
- 2.** Have the user test all positions of the Manual Swing arm:
  - Can the arm move freely without hindering the person in the wheelchair?
  - Is the placement of the arm and in all available positions optimal for the user?
- 3.** If needed, adjust the Manual Swing and retest until optimal position and functioning.

# Using the Manual Swing

## Conditions of use

The Manual Swing is intended for use as installed by the dealer, in accordance to the installation instructions in this manual.

The foreseen conditions of use are communicated by the dealer or service engineer 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 engineer to avoid excessive wear and tear or unintended damage.

## Maintenance

### *Cleaning*

Clean all parts of the Manual Swing on a regular basis (monthly), or whenever needed.

- Gently remove dust and dirt with a damp cloth.
- Use only non-aggressive disinfectant cleaning agents

### *Monthly check*

Monthly, or whenever needed, check whether:

- All bolts and screws are still firmly tightened
- There is no excessive wear to any of the parts



### ***Product description & code***

- Manual Swing Right Arm (P001-21):
- Manual Swing Right Arm Bundle (P001-22):
- Manual Swing Left Arm (P001-23)
- Manual Swing Left Arm Bundle (P001-24)

### ***Maximum torque arm***

3,25 Nm (500 gr load at 65 cm from pivoting point)

Installation date: . . / . . / . . . . .

Dealer: . . . . .



***Dealer stamp:***

***Serial number sticker***