

DYNAMIC MOTION system

DMUI-HSU

User Manual



PART
OF



motion
for
your

LOGIC **OFFICE**



DMUI-HSU - Operating Manual

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1 GENERAL INFORMATION

Documentation for the DMUI-HSU consists of this Operating Manual and several other documents (Other applicable documents, page 5). Assembly personnel must read all documentation before starting assembly. Keep all documentation for as long as the product is in your possession. Ensure that all documentation is provided to subsequent owners. Go to www.logicdata.net for more information and support. This Manual may change without notice. The most recent version is available on our website.

1.1 OTHER APPLICABLE DOCUMENTS

This Operating Manual is part of the documentation required to safely assemble and operate the DYNAMIC MOTION SYSTEM (DM System). Other applicable documents include:

- DYNAMIC MOTION System Manual
- Datasheet and Operating Manual for the installed DYNAMIC MOTION Actuator
- Datasheet for the installed Power Unit

1.2 COPYRIGHT

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1.3 ROYALTY-FREE USE OF IMAGES AND TEXT

After purchase and full payment of the product, all text and images in Chapter 2 "Safety", may be used free of charge by the customer for 10 years after delivery. They should be used to prepare end user documentation for Height-Adjustable Table Systems. The license does not include logos, designs, and page layout elements belonging to LOGICDATA. The Reseller may make any necessary changes to the text and images to adapt them for the purpose of end user documentation. Texts and images may not be sold in their current state and may not be published or sublicensed digitally. The transfer of this license to third parties without permission from LOGICDATA is excluded. Full ownership and copyright of the text and graphics remain with LOGICDATA. Texts and graphics are offered in their current state without warranty or promise of any kind. Contact LOGICDATA to obtain text or images in an editable format (documentation@logicdata.net).

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2 SAFETY

2.1 TARGET AUDIENCE

This Operating Manual is intended for Skilled Persons only. Refer to [Chapter 2.8 Skilled Persons on page 9](#) to ensure that personnel meet all requirements.

2.2 GENERAL SAFETY REGULATIONS

In general, the following safety regulations and obligations apply when handling the product:

- Do not operate the product unless it is in a clean and perfect condition
- Do not remove, change, bridge, or bypass any protection, safety, or monitoring equipment
- Do not convert or modify any components without written approval from LOGICDATA
- In the event of malfunction or damage, faulty components must be replaced immediately
- Unauthorized repairs are prohibited
- Do not attempt to replace hardware unless the product is in a de-energized state
- Only Skilled Persons are allowed to work with DMUI-HSU Handsets
- Ensure that national worker protection conditions and national safety and accident prevention regulations are observed during operation of the system

2.3 INTENDED USE

The DMUI-HSU is a Handset for electrically Height-Adjustable Tables. It is installed by Resellers into Height-Adjustable Table systems. It controls Height-Adjustable Table systems via an integrated Control Unit in the connected DYNAMIC MOTION Actuator. It is intended for indoor use only. It may only be installed in compatible Height-Adjustable Tables and with LOGICDATA-approved accessories. Contact LOGICDATA for further details. Use beyond or outside the intended use will void the product's warranty.






2.4 REASONABLY FORESEEABLE MISUSE

Usage outside of the intended use for each product may lead to minor injury, serious injury, or even death. Reasonably foreseeable misuse of DMUI-HSU Handsets includes, but does not extend to:

- Connecting unauthorized parts to the product. If you are unsure as to whether a part can be used with a DMUI-HSU Handset, contact LOGICDATA for further information

2.5 EXPLANATION OF SYMBOLS AND SIGNAL WORDS

Safety Notices contain both symbols and signal words. The signal word indicates the severity of the hazard.

 DANGER	Indicates a hazardous situation which, if not avoided, will result in death or serious injury.
 WARNING	Indicates a hazardous situation which, if not avoided, could result in death or serious injury.
 CAUTION	Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.
 NOTICE	Indicates a situation which, if not avoided, could result in damage to the product through electrostatic discharge (ESD).
NOTICE	Indicates a situation that will not lead to personal injury, but could lead to damage to the device or the environment.
 INFO	Indicates the protection class of the device: Protection Class III. Protection Class III devices may only be connected to SELV or PELV power sources.
INFO	Indicates important tips for handling the product.

2.6 LIABILITY

LOGICDATA products comply with all currently applicable health and safety regulations. However, risk can result from incorrect operation or misuse. LOGICDATA is not liable for damage or injury caused by:

- Improper product use
- Disregard of the documentation
- Unauthorized product alterations
- Improper work on and with the product
- Operation of damaged products
- Wear parts
- Improperly performed repairs
- Unauthorized changes to the operating parameters
- Disasters, external influence, and force majeure

The information in this Operating Manual describes the characteristics of the product without assurances. Resellers assume responsibility for the LOGICDATA products installed in their applications. They must ensure their product complies with all relevant directives, standards, and laws. LOGICDATA shall not be held liable for any damage that is directly or indirectly caused by the delivery or use of this document. Resellers must observe the relevant safety standards and guidelines for each product in the Table System.



2.7 RESIDUAL RISKS

Residual risks are the risks that remain after all relevant safety standards have been complied with. These have been evaluated in the form of a risk assessment. Residual risks associated with assembly and installation of DMUI-HSU Handsets are listed here and throughout this Operating Manual. The risks associated with the system as a whole are listed in the System Manual. See also [Chapter 1.1 Other Applicable Documents on page 5](#). The symbols and signal words used in this Operating Manual are listed in [Chapter 2.5 Explanation of Symbols and Signal Words on page 7](#).



- ! WARNING** **Risk of death or serious injury through electric shocks**
The DMUI-HSU is an electrical device. Although you will not have to connect any products to the Power Unit during assembly, basic safety precautions must be taken at all times. Failure to observe electrical safety precautions may lead to death or serious injury through electric shocks.
- Never open a DMUI-HSU Handset
 - Ensure that the product is not connected to the Power Unit during assembly
 - Do not convert or modify the DMUI-HSU Handset in any way
 - Do not immerse the DMUI-HSU Handset or its components in liquid. Clean only with a dry or slightly damp cloth
 - Do not place the Cable of the DMUI-HSU Handset on heated surfaces
 - Check the housing and cables of the DMUI-HSU Handset for visible damage. Do not install or operate damaged products

- ! WARNING** **Risk of death or serious injury in explosive atmospheres**
Operating the Handset in potentially explosive atmospheres may lead to death or serious injury through explosions.
- Read the relevant directives to determine if an atmosphere is potentially explosive
 - Do not operate the Handset in potentially explosive atmospheres

- ! CAUTION** **Risk of minor or moderate injury through tripping**
During the assembly process, you may have to step over Cables. Tripping over Cables may lead to minor or moderate injury.
- Ensure that the assembly area is kept clear of unnecessary obstructions
 - Be careful not to trip over Cables

- ! CAUTION** **Risk of minor or moderate injury through crushing**
If any Handset Key becomes stuck while the system is in motion, the system may not stop properly. This may lead to minor or moderate injury through crushing.
- Disconnect the system immediately if any Handset Key becomes stuck

2.8 SKILLED PERSONS



- ! CAUTION** **Risk of injury through incorrect assembly**
Only Skilled Persons have the expertise to complete the assembly process safely. Assembly by Unskilled Persons may lead to minor or moderate injury.
- Ensure that only Skilled Persons are allowed to complete assembly
 - Ensure that persons with limited ability to react to danger do not take part in the assembly process

DMUI-HSU Handsets may only be installed by Skilled Persons. A Skilled Person is defined as someone who:

- Is authorized for installation planning, installation, commissioning, or servicing of the product
- Has read and understood all documentation relevant to the DYNAMIC MOTION system
- Has the technical education, training, and/or experience to perceive risks and avoid hazards
- Has knowledge of the specialist standards applicable to the product
- Has the expertise to test, assess, and manage electrical and mechatronic products and systems in accordance with the generally accepted standards and guidelines of electrical engineering and furniture manufacturing



2.9 NOTES FOR RESELLERS

Resellers are companies that purchase LOGICDATA products for installation in their own products.


INFO	For reasons of EU conformity and product safety, Resellers should provide end users with an Operating Manual in their native EU official language.
INFO	Operating Manuals must include all the safety instructions that end users require to handle the product safely. They must also include an instruction to always keep the Operating Manual in the immediate vicinity of the product.
INFO	No unauthorized persons (young children, persons under the influence of medications, etc.) should be allowed to handle the product.
INFO	Resellers must perform a risk assessment on their product that covers residual hazards. It must include measures to mitigate risk, or reference the product's Operating Manual.
INFO	<p>The Charter of the French Language (La charte de la langue française) or Bill 101 (Loi 101) guarantees the right of the population of Quebec to conduct business and commercial activities in French. The bill applies to all products sold and used in Quebec. For table systems that will be sold or used in Quebec, Resellers must provide all product-relevant texts in French. These include, but are not limited to:</p> <ul style="list-style-type: none"> • Operating Manuals • All other product documentation, including datasheets • Inscriptions on the product (such as labels), including those on product packaging • Warranty certificates <p>The French inscription may be accompanied with a translation or translations, but no inscription in another language may be given greater prominence than that in French.</p>

3 SCOPE OF DELIVERY

The standard scope of delivery for the DMUI-HSU consists of the DMUI-HSU Handset and its pre-attached cable. All other components necessary for installing the DMUI-HSU Handset (e.g. Mounting Screws) must be supplied separately by the Reseller.

4 UNPACKAGING



 NOTICE	Ensure proper ESD handling during unpackaging. Damage that can be attributed to electrostatic discharge will void warranty claims.
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To unpackage the product:

1. Remove all components from the packaging
2. Check the contents of the package for completeness and damage
3. Provide the Operating Manual to the operating personnel
4. Dispose of the packaging material

NOTICE	Dispose of the packaging material in an environmentally friendly manner. Remember to separate plastic parts from the cardboard packaging.
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5 PRODUCT

Fig.1 shows a standard model of the DMUI-HSU Handset. The exact variant of the DMUI-HSU is denoted by the product's order code. Consult the accompanying datasheet to ensure that you have received the correct variant.

5.1 KEY PRODUCT FEATURES

1	Memory Position Keys
2	Mounting Points
3	UP / DOWN Keys
4	SAVE Key
5	Display

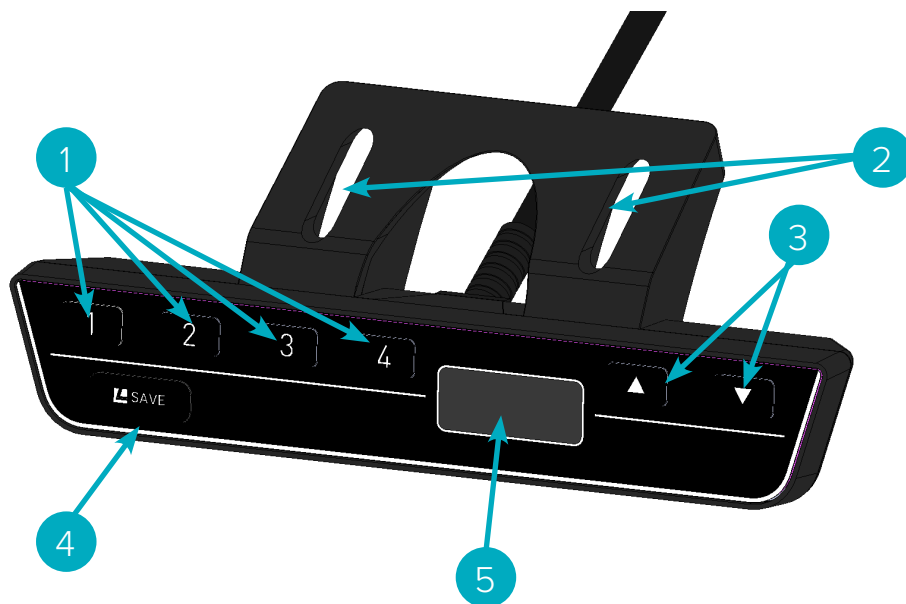


Fig. 1: Product features, DMUI-HSU



5.2 DIMENSIONS

Length	59.65 mm 2.384 "
Width	137.25 mm 5.404 "
Height (to underside of Table Top)	24.73 mm 0.974 "

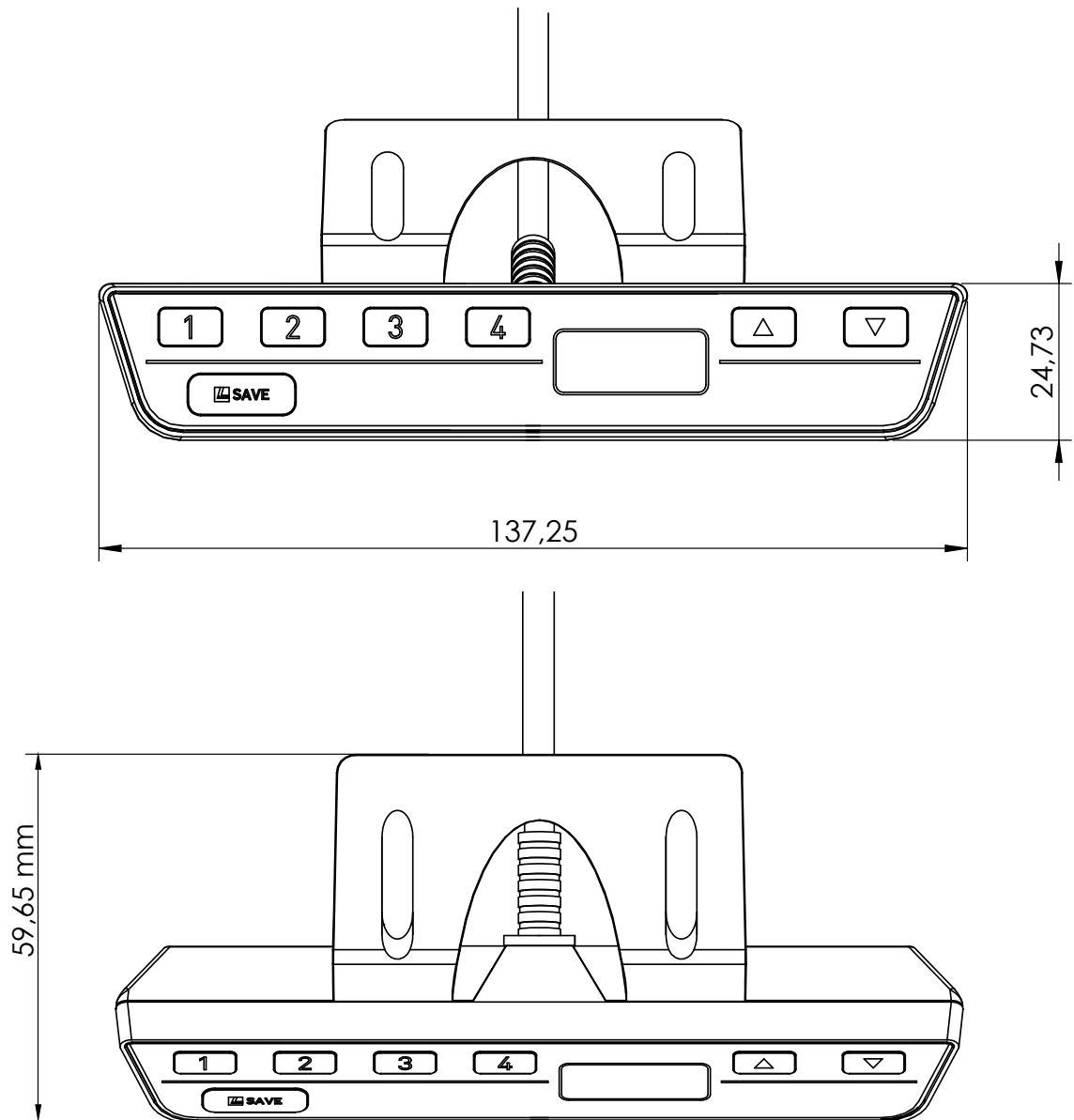


Fig. 2: Product dimensions, DMUI-HSU

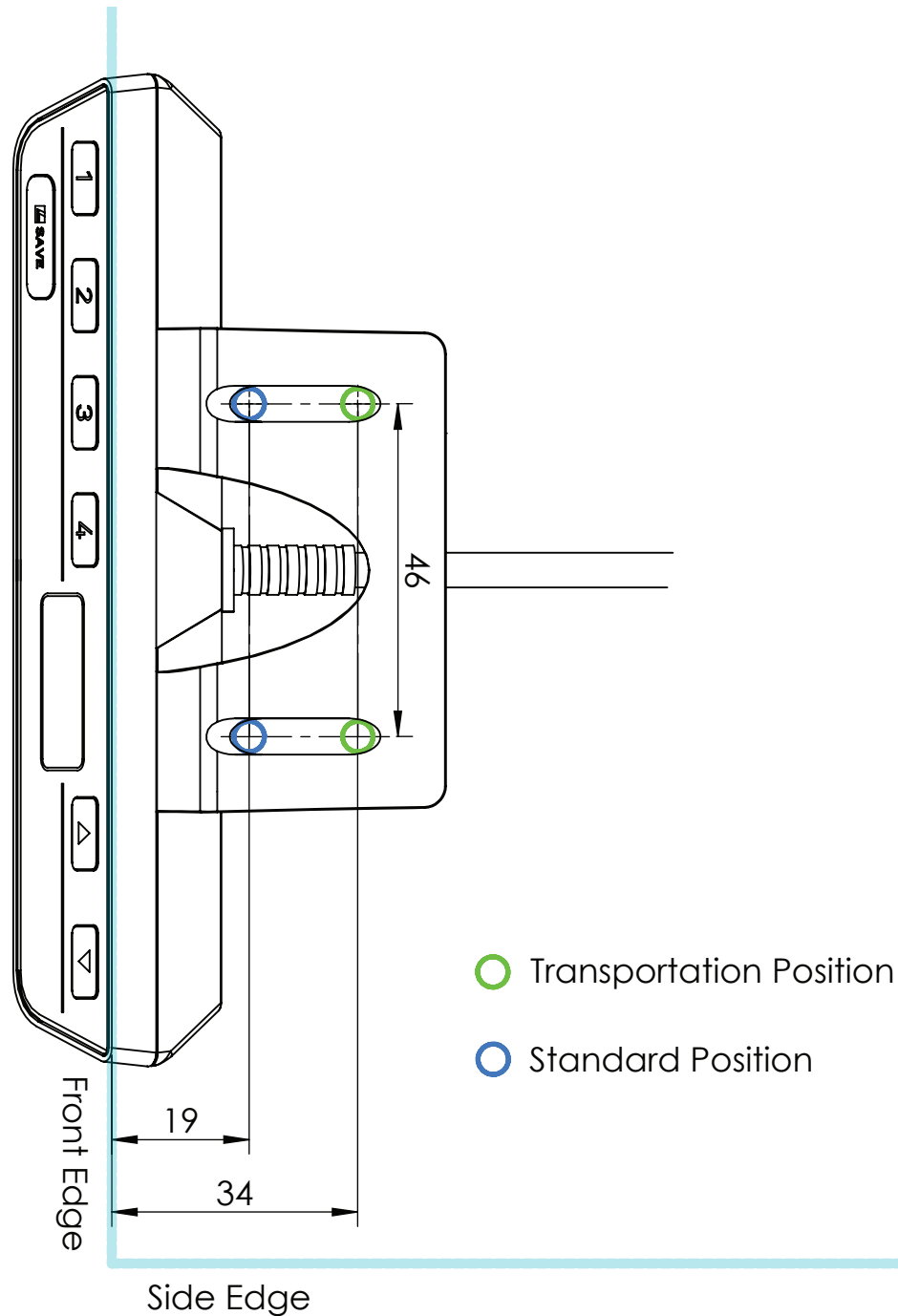


5.3 DRILLING TEMPLATE

There are two variants for mounting. In the Standard Position the drilled holes should be 19 mm from the front edge of the Table Top and 46 mm apart.

Alternatively, the drilled holes can be set to the Transportation Position, 34 mm from the front edge of the Table Top and 46 mm apart. The Transportation Position allows the DMUI-HSU to be slid backwards underneath the Table Top, so that the Handset does not protrude from the front edge of the table when in transport.


The Side Edge of the DMUI-HSU does not have to be flush with the Table's Side Edge. Leave a minimum of 60 mm between the outer hole and the Side Edge to ensure the DMUI-HSU does not protrude from the side.




6 ASSEMBLY

This chapter describes the process of installing the DMUI-HSU Handset into the DYNAMIC MOTION System.


6.1 SAFETY DURING ASSEMBLY

 **WARNING** **Risk of death or serious injury through electric shocks**
DMUI-HSU Handsets are electrical devices. Basic safety precautions must be taken at all times. Failure to observe electrical safety precautions may lead to death or serious injury through electric shocks.


- Never open the Handset
- Ensure that the Handset is not connected to the Power Unit during assembly
- Do not convert or modify the Handset in any way
- Check the housing and cables of the Handset for visible damage. Do not install or operate damaged products.

 **CAUTION** **Risk of minor or moderate injury through improper handling**
Improper handling of the product during assembly may lead to minor or moderate injury through cutting, pinching, and crushing.

- Avoid contact with sharp edges
- Be careful while handling tools that may cause personal injury
- Ensure assembly complies with the generally accepted standards and guidelines of electrical engineering and furniture manufacturing
- Read all instructions and safety advice carefully

 **CAUTION** **Risk of minor or moderate injury through tripping**
During assembly and operation, poorly routed Cables may become a trip hazard. Tripping over Cables may lead to minor or moderate injury.

- Ensure that Cables are routed properly to avoid trip hazards
- Be careful not to trip over Cables when installing the Handset

 **NOTICE** Ensure proper ESD handling during assembly. Damage that can be attributed to electrostatic discharge will void warranty claims.

NOTICE To avoid damage to the product, measure the dimensions of the Handset before assembly.

NOTICE Before assembly, all parts must be acclimatised to the ambient conditions.

NOTICE Do not lift the Handset by its cable. This will cause irreparable damage to the product.

INFO Perform a product risk assessment so that you can respond to potential residual hazards. Assembly instructions must be included in your end user Operating Manual.



6.2 REQUIRED COMPONENTS

1	DMUI-HSU Handset
2	2 Mounting Screws (supplied by Reseller)
Tool	Drill or Drilling Machine
Tool	Screwdriver

INFO **Screw specifications**
The mounting points for the DMUI-HSU have a width of 5 mm. The Mounting Screws should hold the Handset safely and securely in place. Exact specifications can be provided by LOGICDATA on request.

6.3 PROCESS

1. Position the Handset under the table top and mark the position of the Mounting Points.
2. Drill the holes for the Mounting Screws into the Table Top at the marked points.
3. Use the screwdriver and 2 Mounting Screws to attach the Handset to the Table Top at the drilled holes.

NOTICE The required tightening torque depends on the material of the Table Top. Do not exceed 2 Nm.

6.4 COMPLETING ASSEMBLY

After the DMUI-HSU is attached to the Table Top, you must connect the Cable to the Power Hub. Refer to the manual for your chosen Power Hub for instructions.



7 SYSTEM INFORMATION

When a DMUI-HSU-Handset is installed alongside the DYNAMIC MOTION system, error messages are displayed on the digital display panel. These are as follows:

Signal	Message	Required Actions
<p>The display shows "Hot".</p>	Overheating protection has been activated.	Wait for the overheated components to cool.
<p>The display shows "ISP".</p>	The system has recognized a collision.	Release all Keys and wait for the Drive Back function to be completed.
<p>The display shows "Con", then "Err".</p>	The system has recognized a connection error.	Release all Keys and wait for 5 seconds. Then, try again. Disconnect the Power Unit from the Mains. Then, disconnect System from the Power Unit. Reconnect the system again, then operate the DM System as normal.
<p>The display shows "Err", then an error number.</p>	An internal error has occurred.	Read the table below to find the correct response to the error code shown.

Code	Message	Required Actions
1	Firmware Error	Disconnect the Power Unit from the Mains. Then, disconnect System from the Power Unit. Reconnect the system again, then operate the DM System as normal.
2	Motor Over Current	Release all Keys and wait for 5 seconds. Then, try again.
3	DC Over Voltage	Release all Keys and wait for 5 seconds. Then, try again.
8	Impulse Detection Timeout	Perform a Position Reset Procedure (see System Manual)
11	Speed cannot be achieved	Release all Keys and wait for 5 seconds. Then, try again.










12	Power Stage Overcurrent	Release all Keys and wait for 5 seconds. Then, try again.
13	DC Under Voltage	Release all Keys and wait for 5 seconds. Then, try again.
14	Critical DC Over Voltage	Release all Keys and wait for 5 seconds. Then, try again.
15	Strain Gauge is defective	Release all Keys and wait for 5 seconds. Then, try again. Contact LOGICDATA if the problem persists. Do not operate the DM System if components are broken.
17	Error during pairing sequence	Disconnect the Power Unit from the Mains. Then, disconnect System from the Power Unit. Reconnect the system again, then operate the DM System as normal. If this fails, perform a factory reset (see DM System Manual).
18	Parameterization or firmware of different Actuators in the Table System are incompatible.	Re-paramaterize the Actuators. Contact LOGICDATA for further information.
19	Too many / too few Actuators connected	Connect the correct number of Actuators (as specified in setup).
20	Motor short circuit and/or open load	Contact LOGICDATA.
21	Firmware Error	Disconnect the Power Unit from the Mains. Then, disconnect System from the Power Unit. Reconnect the system again, then operate the DM System as normal.
22	Power Unit overload	Release all Keys and wait for 5 seconds. Then, try again.
23	Motor Under Voltage	Release all Keys and wait for 5 seconds. Then, try again.

NOTICE Do not operate the DYNAMIC MOTION system if problems persist. Contact LOGICDATA for further information.



8 OPERATION

Instructions for operating the system can be found in the DYNAMIC MOTION System Manual. A list of core features can be found below. Handset Keys are represented as follows for further description:

	UP Key
	DOWN Key
	SAVE Key
	Memory Position Key 1
	Memory Position Key 2
	Memory Position Key 3
	Memory Position Key 4

8.1 ADJUSTING THE TABLE TOP HEIGHT

! CAUTION **Risk of minor or moderate injury through crushing**
Your fingers may be crushed when you attempt to change the height of the table

- Keep fingers away from moving parts
- Ensure that no persons or objects are in the table's range of motion

INFO The Table Top will move up or down until the UP or DOWN Key is released, or if a pre-defined stopping point has been reached.

To move the Table Top UP:

 Press and hold the UP Key until the desired height has been reached







To move the Table Top DOWN:

 Press and hold the DOWN Key until the desired height has been reached






8.2 SAVING A MEMORY POSITION

This function saves a set Table Top position. One Memory Position can be saved per Memory Position Key.

	1. Move the table to the desired height (Chapter 5.1.1, Adjusting the Table Top height)
	▶ The display shows the Table Top height (e.g. 73 cm)
	2. Press the SAVE Key.
	3. Press the Memory Position Key (e.g. 2)
	▶ The display shows S 2
	▶ After about two seconds, the Table Top height is displayed again

8.3 ADJUSTING THE TABLE TO A MEMORY POSITION

Version A (without double-click function):

	1. Press and hold the required Memory Position Key (e.g. 2).
	▶ The Table Top will move until the saved Table Top height has been reached. If you release the Key before the Memory Position is reached, the table will stop.
	2. Release the Memory Position Key
	▶ The display shows the Table Top height (e.g. 73 cm)

Version B (Auto-Movement with double-click function):

INFO	The double-click function is available only for DM Systems sold in US markets.
INFO	If you press any Key while the table moves to a Memory Position, the Table Top will stop moving immediately. To continue, you must select the Memory Position again.



- ⚠ CAUTION Risk of minor or moderate injury through unauthorized modifications**
- The firmware is delivered with a deactivated double-click function. If you activate this function, the grading of the safety functions according to EN ISO 13849-1 PL b, Category B, are no longer valid, as the legal requirements in the standard are no longer met.
- If you activate the function, perform a new risk new assessment to meet the higher safety requirements (EN 60335-1). These cannot be met by the DM System
 - LOGICDATA is not liable for injuries or damage caused by activating the double-click function

	Double-click the required Memory Position Key (e.g. 2)
	▶ The table will move to the Memory Position. You do not have to hold the Key
	▶ The display shows the Table Top height (e.g. 73 cm)

8.4 CHANGING THE HEIGHT DISPLAY (CM/INCH)

DMUI-HSU Handsets can display the height of the Table Top in both centimeters and inches. To change the displayed unit of measurement:

	1. Press and hold Memory Position Keys 1 and 2, alongside the UP Key
	▶ The display shows S and a number , e.g. S 7 .
	2. Press the UP Key or DOWN Key until the display shows S 5 .
	▶ The display shows S 5 .
	3. Press the SAVE Key <ul style="list-style-type: none">▶ If the display was previously set to cm, it is now set to inches.▶ If the display was previously set to inches, it is now set to cm.



9 ADDITIONAL INFORMATION

9.1 DISASSEMBLY

To disassemble the DMUI-HSU Handset, ensure that it has been disconnected from the Power Unit. Then, follow the assembly instructions for your chosen product in reverse order.

9.2 MAINTENANCE

The DMUI-HSU is maintenance-free for its entire service lifetime.



- WARNING Risk of death or serious injury through electric shocks and other hazards**
- Using a DMUI-HSU Handset alongside unauthorized spare or accessory parts may lead to death or serious injury through electric shocks and other hazards.
- Only use accessory parts produced or approved by LOGICDATA
 - Only use replacement parts produced or approved by LOGICDATA
 - Only allow Skilled Persons to perform repairs or install accessory parts
 - Contact customer services immediately if the system malfunctions
- The use of unauthorized spare or accessory parts may cause system damage. Warranty claims are void in this scenario.

9.2.1 CLEANING

1. Disconnect the system from the Power Unit
2. Wait 30 seconds for residual voltage to dissipate.
3. Wipe the surface of the Handset with a dry or slightly damp soft cloth. Never immerse the Handset into liquid
4. Wait for the Handset to dry completely
5. Reconnect the Power Unit

9.3 TROUBLESHOOTING

A list of common problems and their solutions can be found in the DYNAMIC MOTION System Manual. Most errors with DMUI-HSU Handsets occur when the Control Panel is touched during calibration. Such errors can be avoided by waiting for 10 seconds to use the Control Panel after start-up. If your DMUI-HSU Handset is not functioning, a reset may be required. To reset, proceed as follows:

1. Unplug the DMUI-HSU Handset from the Power Unit.
2. Wait for 10 seconds.
3. Plug the DMUI-HSU Handset back to the motor Power Unit
4. Wait for 10 seconds.
 - ▶ The DMUI-HSU Handset is ready for operation.

9.4 DISPOSAL



All products in the DM System are subject to the WEEE Directive 2012/19/EU.

- Dispose of all components separately from household waste. Use designated collection points or disposal companies authorized for this purpose



MOTION FOR YOUR LIFE

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