

# LIBERTYcontrol-2M3-LAZ

Product Rev 7  
Document Rev 1

Datasheet

LOGIC  
home

Control unit for Electrically  
Height-Adjustable Furniture

Part number: 10.000086



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## Changelog

Revision	Change Log	Date
Rev0	Initial Revision	27.10.2014
Rev1	Standby power < 0.5W ESD caps removed	24.11.2014
Rev2	Improved software: - Support for other power supplies - General software improvements	18.06.2015
Rev3	Improved hardware: - Securely suppress ringing	18.06.2015
Rev4	LibertyControl-XM3-LAZ separated by La-Z-Boy part number Firmware update for LCPLUS System	07.09.2015
Rev5	Firmware update, Improved cooling concept of the output circuit, Improved switching behaviour of the Mosfets	21.11.2016
Rev6	Microcontroller update: Cypress MB9BF166NPMC (Fujitsu) replaced by Cypress S6E2H16F0A, LQFP100	07.09.2018
Rev7	New production site (SIIX Hungary) New serial number structure (updated in Datasheet) Warranty seal repositioned. Seal will now be broken if the product is opened. Bar Code added to warranty seal	22.02.2019

## 1 Features

- Control of 2 actuators (up/down) with soft start and stop
- Control of 1 massage group with up to 6 massage units with 3 intensity levels (**HM-system only**)
- Control of 2 heating pads with 2 intensity levels each (**HM-system only**)
- Intelligent duty cycle management
- Colour coded plugs



**Attention:** Do not open the device! Risk of electric shock!

### **WARNING**

Avoid damaging the plugs and cables. Never operate this unit if cables are damaged. Use only the provided cables.

Connect the plug only to an electrical source matching the type label.

Never operate the control box until it is mounted and fully installed.

### **CAUTION**

Do not open this unit. Uninsulated parts within the products enclosure may expose you to dangerous voltage. Servicing may only be carried out by qualified personnel. Contact **LOGICDATA**.

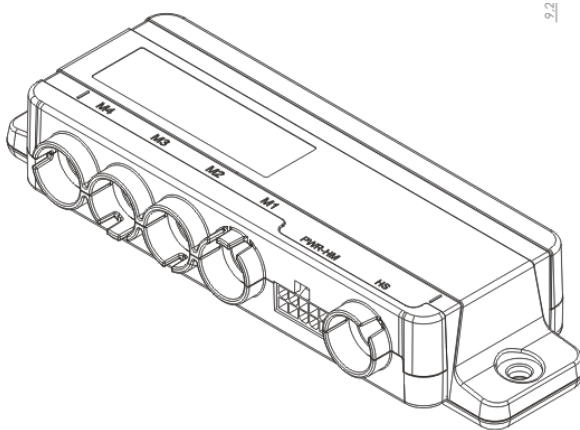
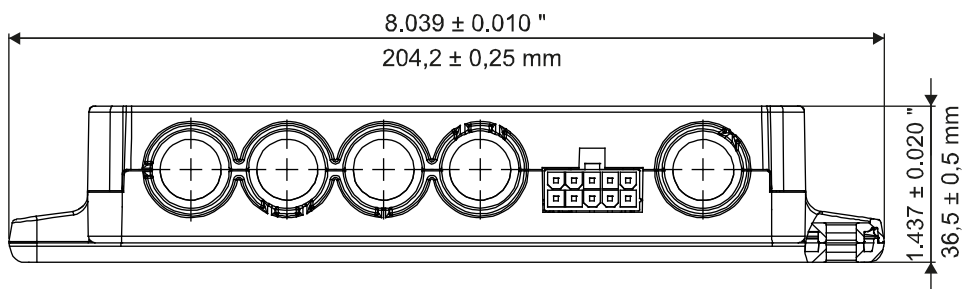
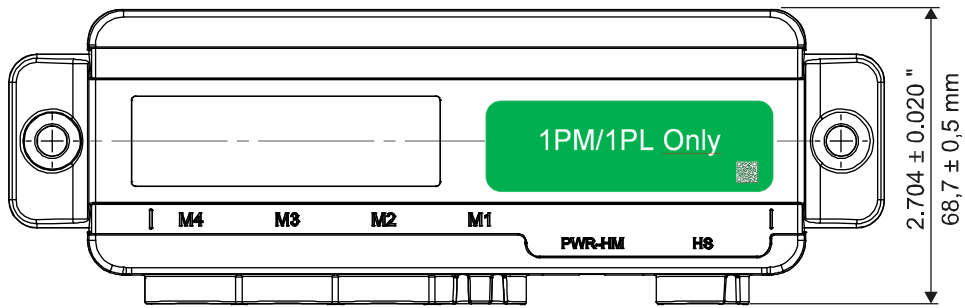
To prevent fire or shock hazard, do not expose this device to rain or moisture.

Unplug the power cord before cleaning this unit. Only use a soft cloth, avoid abrasive cleaners.

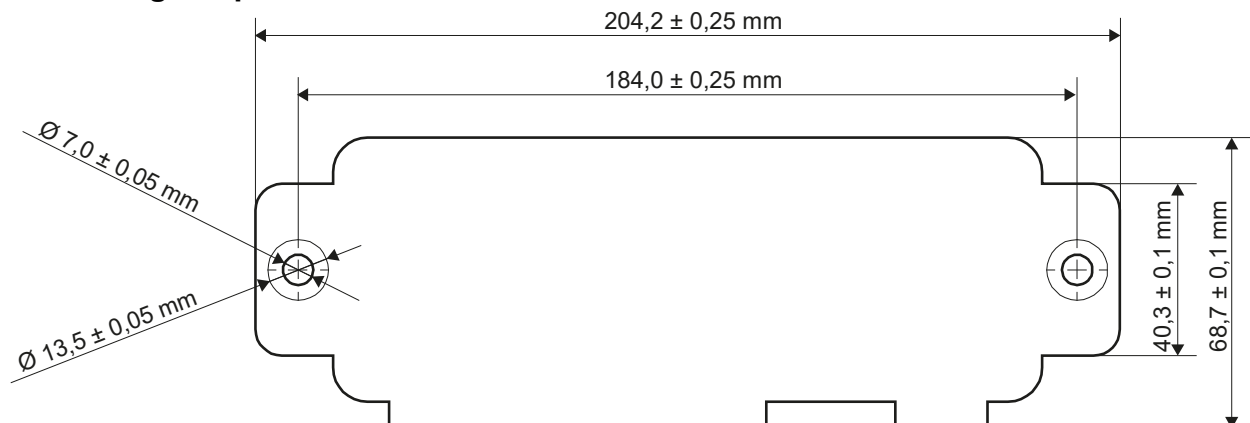
If you are not using the device for a long period of time, it is recommended to unplug the power cord.

If strange smells or fume occur, unplug the power cord immediately. Contact **LOGICDATA**.

## 2 Dimensions



## 3 Drilling template



## 4 Technical Data

Input (Power circuit)	29 V DC / max. 8 A
Input (18V emergency circuit) (typical) (maximum) (max. continuous load) (peak load <100ms)	18 V DC 19 V DC 2.5 A 4.5 A
Standby power	< 0.5 W
Output (Motor channels M1-M4)	Max. 6 A @ 29 V DC output voltage, 10% duty cycle (2 min on / 18 min off)
Output (Combination KM1-KM3)	Max. 1A (RMS) @ 29VDC output voltage, 75% duty cycle (90 min on / 30 min off)
Operating voltage for electronics	5 V DC $\pm$ 10%
Hall sensor supply voltage	5 V DC $\pm$ 10%
Ambient conditions during operation	5 °C to +40 °C at 10 % to 85 % relative humidity (non-condensing) with +27 °C max. dew point
Ambient conditions during storage	-25 °C to 70 °C at 5 % to 90 % relative humidity (non-condensing) with +38 °C max. dew point; temperatures above +55 °C only for short periods not exceeding 24 h
Dimensions (l x w x h) Tolerances according to DIN 16742 TG3	204.2 mm $\times$ 68.7 mm $\times$ 36.5 mm
Weight (typical)	200g

## 5 Parameter Settings

Motor channel current thresholds:

System	M1 Legrest	M2 Lift/Recline	M3 Lumbar	M4 Headrest	Massage	Heating
Basic	3.2 A	3.5 A	N/A	N/A	N/A	N/A
HM	3.2 A	3.5 A	N/A	N/A	2 A	3 A

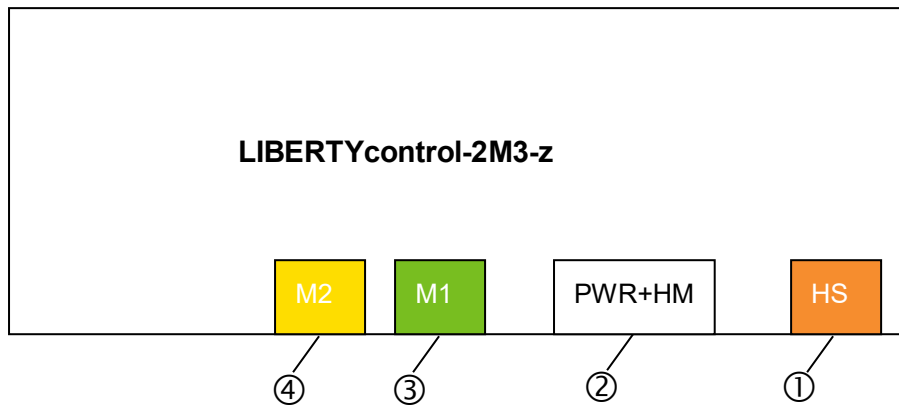


**Note:** If loads attached to the LIBERTYcontrol-2M3-LAZ shall operate at the same time, the maximum current must not exceed 8 A. Exceedance will be prevented by the current measurement inside the LIBERTYcontrol-2M3-LAZ. Additionally, the current is limited by the rating of the power supply attached to the LIBERTYcontrol-2M3-LAZ and this limit can be lower than 8 A.

## 6 Pin assignment

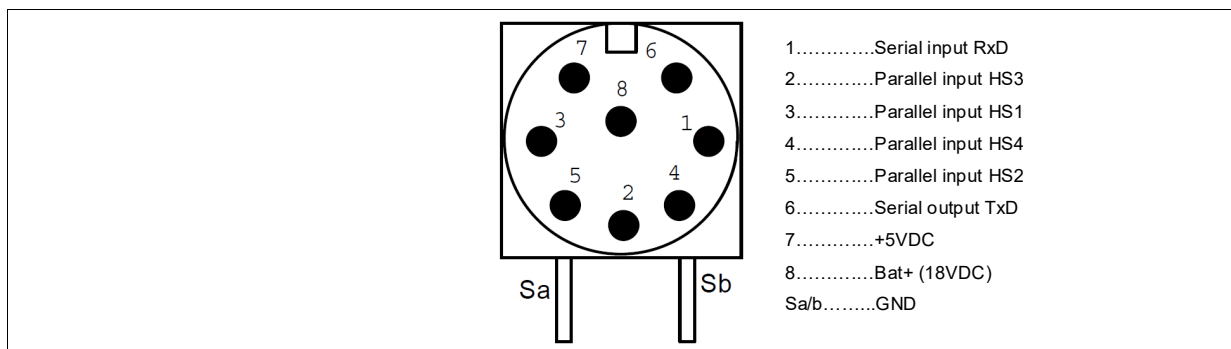
The LIBERTYcontrol-2M3-z unit has the following sockets:

### 6.1 Interface description

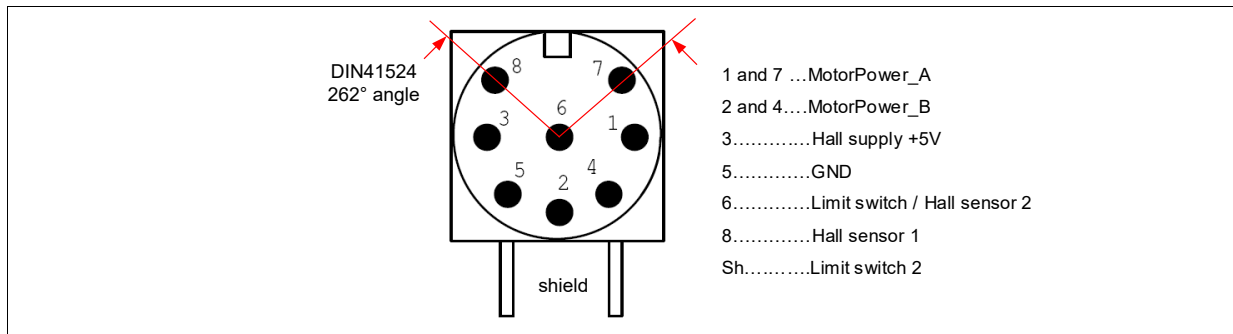


- ① Hand wand socket
- ② Power socket + combination outputs (KM1-KM3)
- ③ M1: Legrest Actuator socket
- ④ M2: Lift/Recline Actuator socket

### 6.2 Hand wand socket

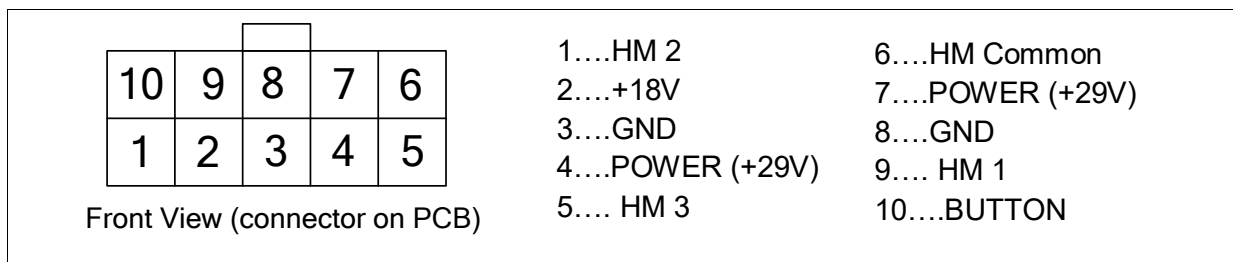


### 6.3 Actuator socket



**Caution:** To prevent damage of the unit, use only motors/ motor cables suitable for LOGICDATA motor controls.

### 6.4 Power socket + Combination outputs



7 Type Label

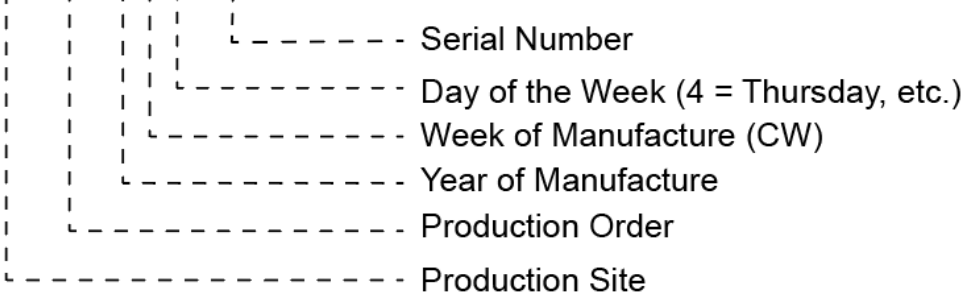
**LOGICDATA**  
**LIBERTY System**  
 Made in Country

Type: LIBERTYcontrol-2M3-LAZ Rev.:X/X.X.X  
 P/N: 10.000086  
 Duty cycle: Move 2min on/18min off  
 Oscillating mode 30 min on/30min off  
 Input: 29V --- 8A  
 Output Move: 29V --- 3.2A  
 Output Oscillating mode: 29V --- 1A  
 Ser. No.: 030XXXXXXXXXXXXXXXXXX



The S/N number contains:

S/N: 0302830532400002



8 Order Code

LIBERTYcontrol – 2M3 – LAZ



## 9 Final disposal

When you no longer require the system, please note the following for disposal:



**Note:** ensure eco-friendly disposal of all the control unit components (separate the plastic and electronic parts for collection).

Also ensure eco-friendly disposal of all the other components (pinch protection strip, drives, cables, etc.).

## 10 Manufacturer Information

<p><b>LOGICDATA North America, Inc.</b>          1525 Gezon Parkway SW, Suite C          Grand Rapids, MI 49509          USA</p>	<p>Tel: +1 (616) 328 8841          E-mail: <a href="mailto:office.na@logicdata.net">office.na@logicdata.net</a>  <a href="http://www.logicdata.net/na">http://www.logicdata.net/na</a></p>
<p><b>LOGICDATA</b>  <b>Electronic &amp; Software Entwicklungs GmbH</b>          Wirtschaftspark 18          8530 Deutschlandsberg          Austria</p>	<p>Tel: +43 (0)3462 5198 0          Fax: +43 (0)3462 5198 1030          E-mail: <a href="mailto:office@logicdata.net">office@logicdata.net</a>  <a href="http://www.logicdata.net">http://www.logicdata.net</a></p>