GENERAL INFORMATION

The motor unit types C and D are designed to operate all Ergoswiss hydraulic systems. The operation of the unit works by a cable remote controller.

Before starting the system, please read this manual and keep it safely for any future references.

CHARACTERISTICS AND FUNCTION

Moving up and down are the basic functions of the desk.
Additional functions are: memory function for positions, drive to these positions and digital numbers to show the height of the desk.

CONTENTS

SAFETY / WARNINGS

The safety instructions are to be observed under all circumstances! If the system is inappropriately operated, it might cause danger for persons and objects!
Before installing or operating the LogicS control you must read the user manual carefully!
Do not open the LogicS control unit under any circumstances! There is a danger of electric shock.
The LogicS control unit may only be operated with mains voltage as specified on the type plate. Control units are also available for the mains voltages used in other countries. The above values do not apply to them. But you will find detailed information in the relevant user manual! The power-on time of 1 minute "ON" and 9 minutes "OFF" may not be exceeded!
Only use the power cord supplied with the control unit. Check that it is not damaged. Do not ever operate the LogicS control unit if the power cord is damaged.
Before connecting and disconnecting handswitches, you must unplug the power cord.
Electric supply lines may not be exposed to danger of pinching, bending or tensile stress.
When operating the drive it must be watched that no objects (e.g. furniture) get caught!
In even of a malfunction (e.g. if the control unit keeps adjusting the desk because a movement key has jammed), please unplug the unit immediately.
Do not expose the LogicS control unit to moisture, drips or splashes.
When changing the desktop position (especially without using pinch protection), there is a risk of pinching. You must therefore ensure that no people or objects are located in the hazardous area or can reach into it.
Do not modify or make any changes to the control unit, the controls themselves or handswitches.
Do not operate the LogicS control unit in a potentially explosive atmosphere.
This device is not intended for use by individuals (including children) with limited physical, sensory or mental abilities or with a lack of experience and/or lack of expertise, unless they are supervised by a person responsible for their safety or have received instructions from that person on how to use the control unit.
Children must be supervised at all times to ensure that they do not play with the control unit.
If the control unit's power cord is damaged, it must be replaced by the manufacturer or customer service or similarly qualified person in order to prevent any risks.
Only clean the LogicS control unit with a dry or slightly moist cloth. Before cleaning, you must always unplug the power cord.

INSTALLATION

CONTROL UNIT

Mount the LogicS control unit on the underside of the desktop.

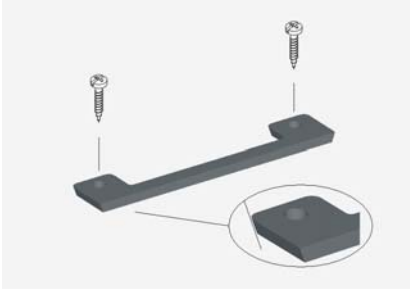
CAUTION:
The power cord must be unplugged while the LogicS control unit is being mounted.

To mount the LogicS control unit, proceed as follows:

NOTE:
We recommend using the drill template to help with mounting. You will find the template on page 5. If you do not wish to use it, please follow the mounting instructions carefully.

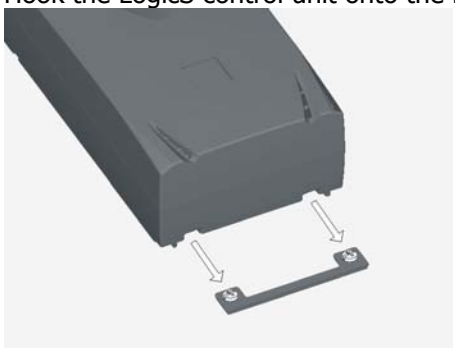
1. Attach the mounting plate and position the control unit where you want it under the desktop.
2. Mark the edge of the mounting plate with a pencil.

3. Remove the mounting plate again.
4. Align the mounting plate along the pencil line and mark the two drill holes with a pencil.
5. Pre-drill these two holes.
6. Fix the mounting plate with two screws in the pre-drilled holes.



NOTE:
The mounting plate is wedge shaped.

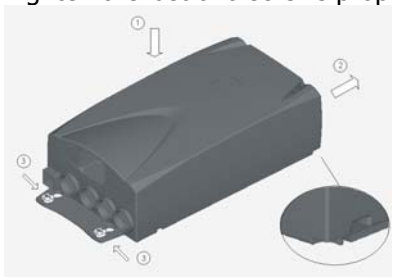
7. Hook the LogicS control unit onto the mounting plate sliding it in as far as it will go.

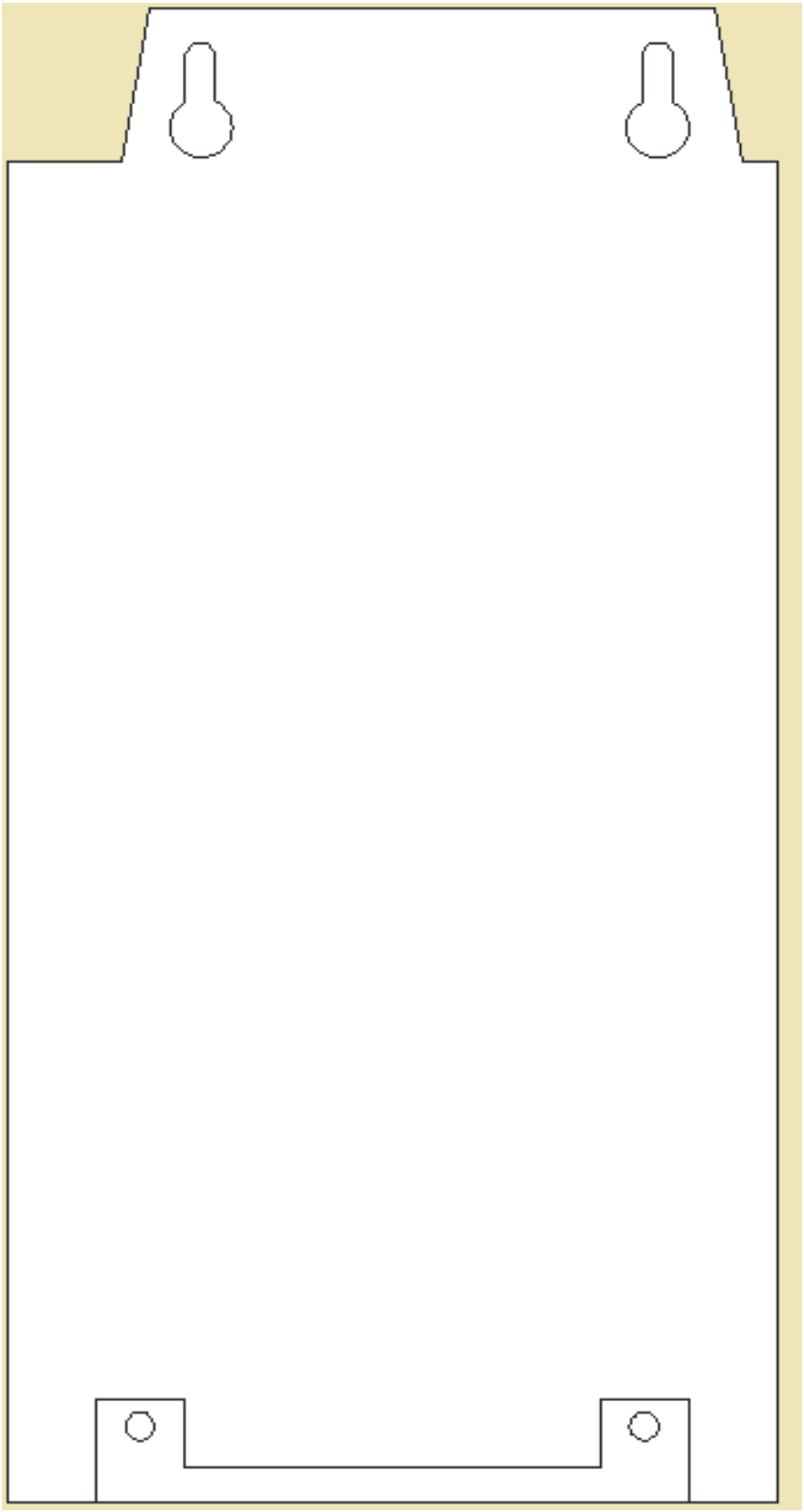


8. Mark the drill holes for the mounting link with a pencil.

9. Remove the control unit again.
10. Pre-drill these two holes.
11. Screw the remaining two screws **halfway** into these two holes.

12. Hook the control unit onto the screws you have just inserted.
13. Slide the unit onto the mounting plate as far as it will go (ensuring that it fits properly on the plate).
14. Tighten the last two screws properly.





MOTOR UNIT TYPE C

CAUTION:
Before starting up please ensure that the cylinders are connected to the pump.

1. Push the coupling over the pump shaft.

2. Drill a hole completely through the coupling and pump shaft (ø 3mm).

3. Put the pin into the drilled hole.

4. Push the motor onto the coupling.

5. The picture shows the mounted motor at the pump. The following steps to connect the motor cable to the control box are written in the "Operating Instructions".

MOTOR UNIT TYPE D

CAUTION:
Before starting up please ensure that the cylinders are connected to the pump.

1. Push the coupling over the pump shaft.

2. Drill a hole completely through the coupling and pump shaft (ø 3mm).

3. Put the pin into the drilled hole.

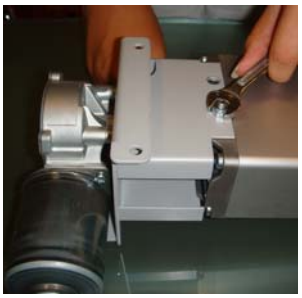
4. Turn the coupling about 90 degrees and drill another hole completely through the coupling and pump shaft (ø 3mm).
Important: Drill the second hole displaced to the first!

5. Put the second pin into the drilled hole.

6. Use a punch or a centre punch to push the openings of the holes inside so that the pin can not drive out.

7. Push the motor onto the coupling.

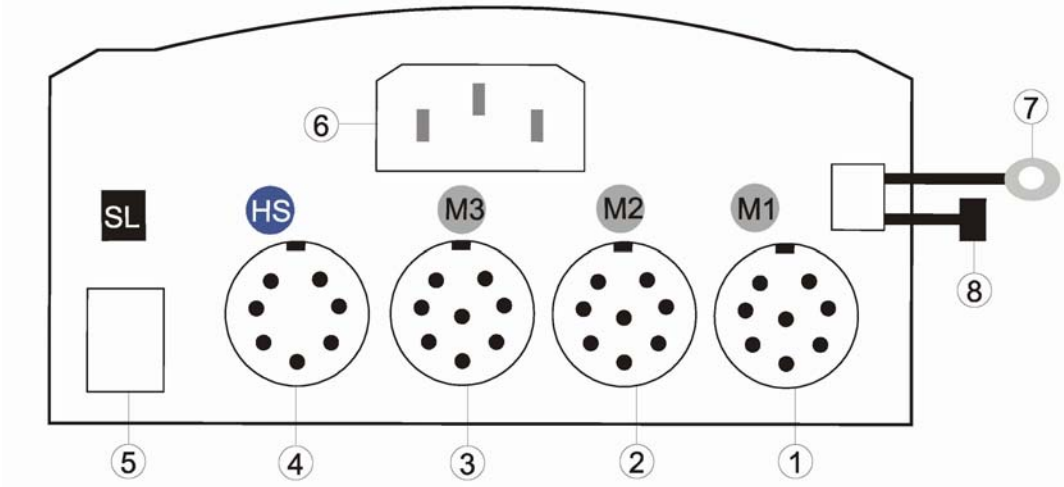
8. Use the two screws M6 to connect the motor to the pump.



9. The picture shows the mounted motor at the pump. The following steps to connect the motor cable to the control box are written in the "Operating Instructions".

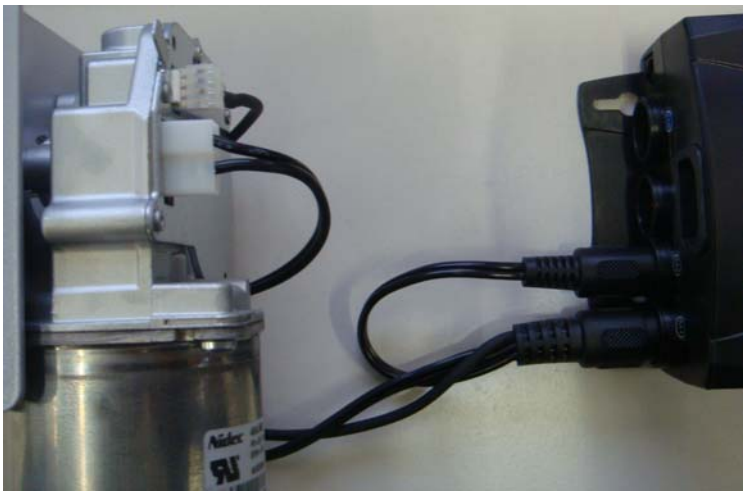
COMMISSIONIG

The LogicS control unit has the following sockets:



① Motor socket 1 (M1)
② Motorsocket 2 (M2)
③ Motor socket 3 (M3) is not attached at this control unit
④ Handswitch socket (HS)
⑤ Pinch protection strip socket
⑥ Mains socket
⑦Cable lug for earthing the desk frame (optional)
⑧ Connector for mains cut-off (optional)

1. Connecting the motor
   Type C: plug the 8-poled motor cable into the motor socket
   Type D: plug the continous cable into the motor socket M1, the split cable into motor socket M2



NOTE:
When connecting the motor cables, you must strictly adhere to the sequence M1, M2.

2. Connecting the handswitch
   Plug the 7-poled handswitch cable into the handswitch socket (HS)

3. Connecting the pinch protection strip
   If you are using a pinch protection strip, plug it into the socket (SL)

NOTE:
By using a pinch protection strip , the software of the control unit has to be changed. Please get informed by our engineers befor purchase.

CAUTION:
The pinch protection strip is equipped with a cable burst monitoring. That is why you may not unplug the cable pinch strip during operation.

4. Connecting the main plug

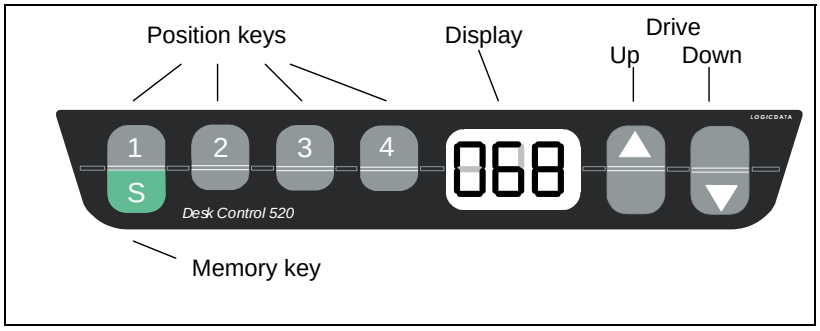
CAUTION
Before connecting the main plug check again:
- that the operating voltage of the system confirms with the local power supply
- that all component are plugged in at the correct socket

The control unit is ready as soon as the main plug is connected to the power supply.

OPERATION

HAND SET / MEMORY BOARD

The Memoryboard is used to control the motor.



FIRST START UP (QUICKSTART - MANUAL)

At the first power-on the following steps are necessary:

The display flashes "068".

⇨ Press ▼ until the lower end position is reached.
The desk moves down with half speed. Moving up is not possible.

⇨ adjust the read out to reflect the actual height with 1 (plus) and 2 (minus).
Moving up or down is not possible.

⇨ press S to confirm.
After the confirmation the display flashes "088".

⇨ Move with ▲ to the desired upper limit.
You do not have to move to the absolute limit of travel.

⇨ adjust the read out to reflect the upper position with the button 1 (plus) and 2 (minus).

⇨ Confirm with S .

After the confirmation the height is shown and the control box is ready for normal operation.

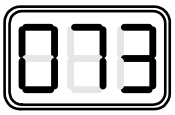
OPERATION UP / DOWN

This function serves for an easy height adjustment of the desk.

⇨ Press ▲ or ▼ .
The key has to be pressed until the desired height of the desk has been reached.

The display always shows the actual height.

Example:



The desk moves as long as the key is pressed, or until the end position is reached.

SAVING OF A POSITION

This function allows the saving of a certain desk height. With handsets with 4 position keys 4 different heights can be saved. These saved positions can be set later again (See moving to a saved position).

⇨ Press S .
Display:

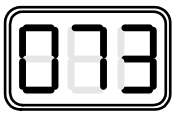
⇨ Press one of the keys 1 2 3 4.

After having pressed the position key, a "S" and the number of the position key is read on the display.

Example:

At the end of the memory procedure a double 'Click' is heard and after 2 seconds the actual height is read again.

Example:



ATTENTION:
If the position key is not pressed again within 5 seconds after having pressed the memory key, the actual height is read again on the display and nothing is saved.

MOVING TO A SAVED POSITION

If the desk is turned on for the first time, all positions are corresponding with the lower en position. This function allows the desk to move to a saved height again.

OPTION A

⇨ Press and hold one of the keys 1 2 3 4.
The desk moves towards the position as long as the key is pressed. If the key is not pressed anymore, the desk stops.
If the key is pressed, the deskt moves until the saved position is reached.

ATTENTION
If any other key is pressed while the desk is moving towards the saved position, the desk stops.

OPTION B (double-click function)

⇨ Double click on one of the keys 1 2 3 4.
After the double click, the desk moves automatically on the saved position.
On the display it is shown the actual (saved) position.

ATTENTION
By changing the desk position automatically (especially without using pinch protection), there is a risk of pinching. You must therefore ensure that no people or objects are located in the hazardous area or can reach into it.

NOTE
If any other key is pressed while the desk is moving towards the saved position, the desk stops.

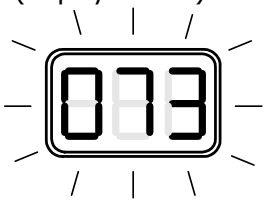
SETTING OF INDICATED HEIGHT

With this function the indicated height can be changed.

⇨ Press S .
Display:

If the next key is not pressed within 5 seconds, the control returns to standard mode again.

⇨ Press ▼ now for about 5 seconds until the display starts flashing.
Example (display flashes):



⇨ You can set the height with ▲ (plus) or with ▼ (minus).
During this procedure the desk does not move.

⇨ If the position is correctly set, the new height can be saved by pressing S.
The position is saved and the display stops flashing.

The new height is also saved, if no key is pressed within 5 seconds and the display stops flashing automatically.

NOTE
Please note, that at this adjusting procedure the deskposition will not change. Only the display changes.

ALIGNMENT OF LIMIT OF TRAVEL

If the desk gets misaligned, or if you would like to use the set control with another desk of the same type, the lower limit of travel is to be reset (like first start up).

The display shows any height, the table drives with normal speed upwards and downwards.

⇨ Press 1, 2 and ▲ at the same time and hold this combination until the display shows „S 0".
The control is now in the adjustment mode

⇨ Press ▲ as often until the display shows "S 7".

⇨ Press S .
The display flashes „068", continue like "first start up".

NOTE
It is addicted of the adjusted parameters if the function "S7" is available.

PLUG DETECTION

The control unit LogicS detect, if a Motor is plugged in at the particular socket. Further, it detects if a motor has been changed.

DRIVE BACK FUNCTION

NOTE:
The Drive Back function is only enabled if the ISP (intelligent system protection) or a pinch protection strip is used.

After a safety function is triggered (by ISP or the pinch protection strip), the desktop automatically moves a defined distance in the opposite direction. This immediately prevents any possible risk of pinching.

DANGER
In spite of ISP being in place, there may still be a risk of pinching in exceptional cases, as it is not only the control unit, but also the interaction between all the components in the electric height adjustable desk that is responsible for cutting out the motor. In addition, the mechanical components, motor and ambient conditions all affect cutout sensitivity.

As motor manufacturer, Ergoswiss does not have an effect on this residual risk and cannot therefore accept any liability.

Please follow the safety instructions in the manual and treat our product with due care.

POWER-ON TIME CONTROL

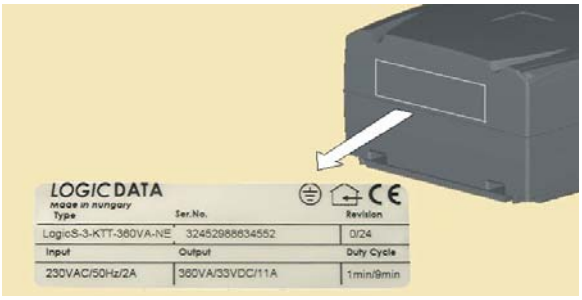
If the selected power-on time is reached, the power-on time control switches the control unit off for a defined time (e.g. after two minutes of continuous operation the control unit will be switched off for about 18 minutes).

In case the control unit overheats before the power-on time is reached „HOT" will appear on the display. Wait until the control unit cooled down and "HOT" is no longer displayed.

SPECIFICATIONS

Supply voltage	230 +/- 6 %; 50 Hz
Standby rating primary	1.1 W
Operating voltage electronic circuit	5 VDC +/- 5 %; 150 mA
Hall Sensor supply voltage	5 VDC +/- 10 %; 150 mA
Surrounding temperature	0 – 35 °C
Humidity (at operating)	5 – 85 % (non-condensing)
Humidityt (at stocking)	5 – 90 % (non-condensing)
Protection class (with grounding connection)	I
Protection class (without grounding connection)	II
Power supply cable (length)	3m
Dimension (L, B, H)	214 x 109 x 62 mm
Weight	2.1 kg
Switching capacity 10 % (1 min on / 9 min off)	340 VA; 11 A, 31 V @ 25 °C
Switching capacity 10 %	13 A upwards; 2 A downwards

Label:



APPENDIX

WATER PROTECTION, CLEANING

ATTENTION
The control and the handset may only be cleaned with a dry or a slightly wet cloth.
Otherwise Danger for persons!

ATTENTION
There should no liquid get into the plug-in connection.
Otherwise Danger for persons!

TROUBLE - SHOOTING

Error	Reason	Corrective Measure
Drives do not work	Control not plugged in	Plugging in mains cable
	Drive not plugged in	Plugging in motor cable
	Insufficient plug contact	Plugging in mains cable, or cables of handset or of motor correctly
	Defective drive	Ask customer service
	Defective control	Ask customer service
	Defective handset	Replace handset
Drive moves in one direction only	Defective control	Ask customer service
	Defective handset	Replace handset
Control or handset do not work	Control not plugged in	Plugging in mains cable
	Handset not plugged in	Plugging in handset
	Defective control	Ask customer service
	Defective mains cable	Ask customer service
	Defective handset	Replace handset
	Insufficient plug contact	Plugging in plug correctly

ERROR MESSAGES

Display	Cause	Remedy
	The LogicS cotrol unit is fitted with overheating protection. Overheating has caused it to stop the control unit.	Wait until the control unit has cooled down and **HOT** is no longer displayed. The LogicS control unit is then operational again.
		
00	No fault / Example	
01	M1 relay is stuck	Switch the control unit off. Contact customer service.
02	M2 relay is stuck	Switch the control unit off. Contact customer service.
06	M1 MOS FET is defective	Switch the control unit off. Contact customer service.
07	M2 MOS FET is defective	Switch the control unit off. Contact customer service.
11	Short circuit in M1 Mmotor socket	Unplug the control unit. Fix the external short circuit. Start the control unit again.
12	Short circuit in M2 motor socket	Unplug the control unit. Fix the external short circuit. Start the control unit again.
16	Plug detection in M1 motor socket	Plug a motor into the corresponding socket.
17	Plug detection in M2 motor socket	Plug a motor into the corresponding socket.
21	External oscillator defect	Change the control-box.
29	Impulse timeout of motor 1	Reset the control unit.
30	Impulse Timeout of motor 2	Reset the control unit.
39	ISP Stop motor 1	Check if any objects are blocking the movement. Remove load from desk.
40	ISP Stop motor 2	Check if any objects are blocking the movement. Remove load from desk.
44	Overcurrent of motor 1	Remove load from desk.
45	Overcurrent of motor 2	Remove load from desk.
54	Total current cut-off	Change motor.
55	Motor 1 is missing	Check if motor 1 is connected.
56	Motor 2 is missing	Check if motor 2 is connected.
60	Squeeze line	Check if squeeze line is connected. Replace the squeeze line.