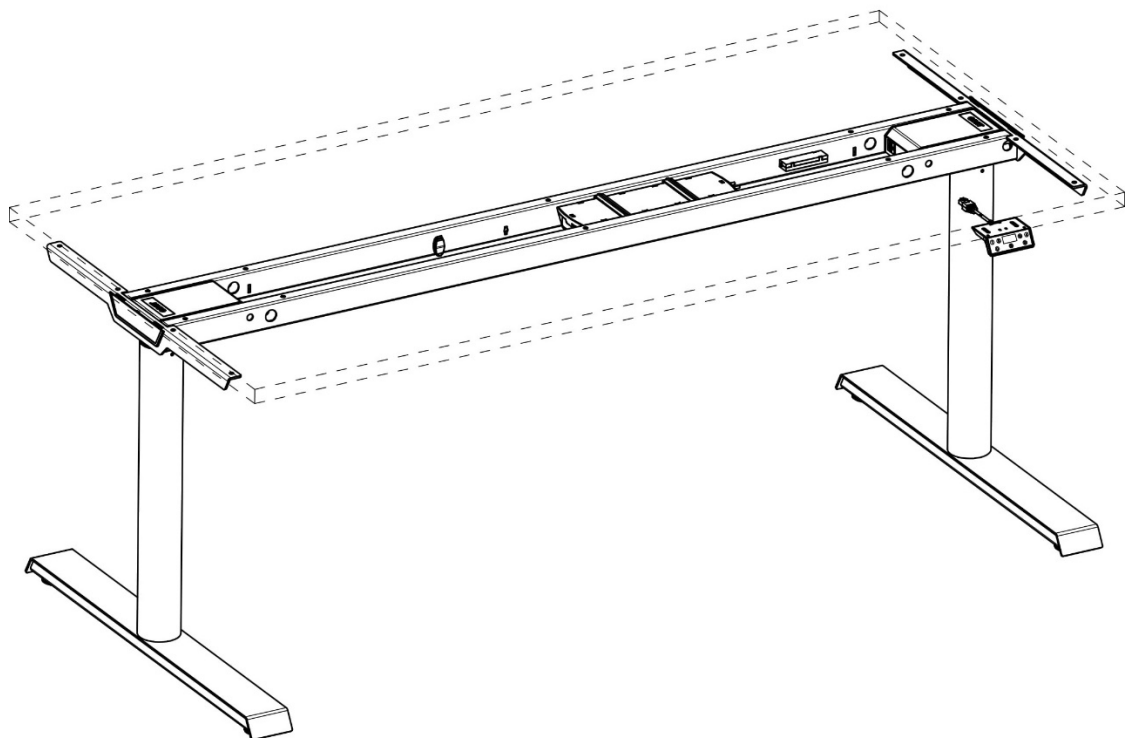


Installation and operating instructions



Electrically height-adjustable sit/stand work desks

System: FREE.STAND 9051
with motor controller STAND.CONTROL C1
(E-components 9910)

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1 Preface

Dear customer,

We are pleased that you have decided to purchase our product. These instructions explain how to assemble, use and maintain the sit/stand desk. All sit/stand desks are put through a thorough quality inspection before leaving our factory. If you ever have any problems with our desk base, feel free to contact our service department any time.

It is important to follow these instructions when assembling the desk base. Any changes on the desk base or an improper usage can have an effect on the safety, functioning and service life!

These operating instructions are intended for all sit/stand desks from the 9051 FREE.STAND system with the STAND.CONTROL C1 motor controller but, due to different versions/types, can deviate from the illustrations.

Oelschläger **Metalltechnik** GmbH

1.1 Use as intended

This sit/stand desk may be used solely as an office desk in the professional sector. Changes to the desk base are prohibited. This sit/stand desk must be assembled, put into operation and functionally checked by skilled personnel. The use of this sit/stand desk for any purpose other than the purpose stated above is only permissible with the consent of Oelschläger **Metalltechnik** GmbH.

The basic function of the desk is the electromotive height adjustment of the desktop. This function can be performed with all hand-switches that are available from us.

1.2 Target group and previous knowledge

These operating instructions are aimed at the following group of persons:

- The commissioning staff who assembles and commissions the sit/stand desks.
- Furniture installers, maintenance staff who commission the sit/stand desk in sales rooms or at the final customer.

The following knowledge is required to commission and assemble the FREE.STAND sit/stand desk:



- Mechanical and electrical basic knowledge (corresponding illustration)
- Reading the instructions

1.3 Symbols used in the safety instructions



Danger: These safety instructions point out an imminent danger for the life and health of persons!
Non-compliance with these warnings can result in danger to life, life-threatening injuries and property damage.



Attention: These safety instructions point out **possible dangers from electrical current!**
Non-compliance with these warnings can result in injuries and property damage!



Note: These safety instructions point out important information which you must follow for the safe operation of the FREE.STAND sit/stand desk.



Danger: These safety instructions point out a possible danger of crushing which exists in exceptional cases.
Non-compliance with these warnings can result in danger to life, life-threatening injuries and property damage.



Note: Warning on the obligation to read the operating instructions!



Note: Pull the power cord before going to the next step!

1.4 Safety Instructions

These operating instructions contain safety instructions which inform you about potential hazards and thus facilitate the safe operation of the FREE.STAND sit/stand desk. Please be sure you comply with these safety instructions!

This section provides you with general safety information that does not refer to any specific work step. You can find the job-specific safety instructions in the respective section of the operating instructions. You will find additional safety instructions on the individual parts of the FREE.STAND sit/stand desk.

1.4.1 General safety instructions



Note: Before assembly/commissioning, of the FREE.STAND sit/stand desk, you must read and comply with the operating instructions!



Attention: Never open the STAND.CONTROL motor controller under any circumstances! There is a danger of electric shock.



Attention: The FREE.STAND sit/stand desk is not designed for continuous duty. The desktop height must not be adjusted without interruption for a time period longer than the operating time stated on the rating plate.



Attention: The STAND.CONTROL motor controller must only be operated with the mains voltage specified on the rating plate!

Before commissioning, make sure the mains voltage on the rating plate of the motor controller matches your mains voltage!



Danger: This unit can be used by children aged 8 years and above and by persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge when they are supervised or instructed on the safe use of the device and understand the resulting risks.



Danger: Do not let children play with the device!



Danger: Cleaning and user maintenance must not be carried out by unsupervised children.



Attention: You must use the supplied power supply cable! Make sure that the power supply cable is not damaged. Operating the FREE.STAND sit/stand desk with a damaged power supply cable is prohibited!



Attention: You must disconnect the power supply cable from the mains supply before switching drives, hand-switches or any other accessories on the motor controller on or off.



Attention: Use solely original FREE.STAND accessories from Oelschläger **Metalltechnik** GmbH. Use of components and parts from third parties is prohibited! Use of unsuitable accessories can lead to damage or the destruction of the desk base.



Attention: In case of a fault (e.g. accidental operation of the desktop such as if a button on the hand-switch jams), please immediately pull the mains plug!



Danger: Protect the desk base and, in particular, all electrical components on the desk base from moisture, dripping water and spray water!



Danger: There is a danger of being crushed when the desktop position is changed! For that reason, make sure no objects and no persons are in the hazardous area and do not reach into the hazardous area.

The optionally available corrosion protection normally detects solid objects, but there is still continued danger of crushing for persons! The corrosion protection is a system safeguard and NOT personal protection!



Attention: Alterations on the components of the desk base including the motor controller and controls are prohibited!



Danger: The electromotive driven FREE.STAND sit/stand desk must not be operated in explosive atmospheres!



Danger: In case of faults it is possible that the desktop moves a bit during every start-up attempt before the safety shut-down initiates. During this process, always watch out for the possible danger of being crushed.



Danger: The optionally available corrosion protection is not activated during any reset process (Section 5). During this process, always watch out for the possible danger of being crushed.



Attention: If the product is visibly damaged, never assembly it or continue to use it!

1.4.2 Before installation, deinstallation or troubleshooting

- Stop the sit/stand desk.



Note: Switch off the power supply and pull out the power cable!

- Remove all weights from the sit/stand desk.
- Only trained electricians are permitted to open or replace electrical equipment.
- Do **not** operate the desk in moist rooms such as bathrooms.
- **Never** use the desk in explosive environments.

1.4.3 Before initial operation

- Make sure the desk is assembled in accordance with these instructions.
- Make sure that the side panels are perpendicular to the table top, after the desk is set up.
- Check to see if the operating voltage of the desk matches the local power supply. (See rating plate on the controller, standard = 230V)
- Connect the plug connectors from the actuator and the side panels to the controller.
- Connect the mains cable to the controller.

1.4.4 During operation

- If the drives or the controller make any unusual noises or cause any unusual odours during operation, interrupt the power supply.
- Make sure that the cables are not damaged.
- When operating the sit/stand desk, make sure that no objects or body parts can get trapped.
- All moving parts of the desk base must have at least 25 mm clearance to the adjoining components.

1.4.5 Important information for resellers

We consider resellers companies that purchase the FREE.STAND sit/stand desk from Oelschläger **Metalltechnik** GmbH and that resell it as their own product after adding a table surface.



Note: For reasons of EU conformity and product safety, we recommend that the users provide their products with operating instructions in the respective official EU language.



Warning: Be sure to enclose operating instructions in your finished product that include all safety instructions required by the consumer for the safe handling of your product.



Note: The operating instructions for your finished product must include the following warning: You must read these operating instructions before you start using the product (height-adjustable workstation).

Point out to your consumer that the operating instructions must be kept near the product (height-adjustable workstation).



Danger: It is mandatory that you put your product (height-adjustable workstation) through a risk analysis so that you can react to any possible residual hazards (e.g. through structural measures or warnings in the operating instructions and/or safety instructions on your product).



Warning: Make sure that no unauthorised persons (small children, persons under the influence of medication, etc.) handle your product or the FREE.STAND sit/stand desk.

1.4.6 Indication service note



Danger: Use solely genuine original accessories! Only skilled personnel are permitted to perform assembly work! Otherwise you will forfeit all claims for warranty or guarantee.



Danger: In case of a fault, please promptly contact your customer service representative! Only original FREE.STAND sit/stand desk spare parts are approved for repairs. Only skilled/authorised personnel are permitted to replace them! Otherwise you will forfeit all claims for warranty or guarantee.

1.5 Repairs

In case of a technical defect on this device, please contact an authorised customer service representative. You can find solutions for simple faults in Section 7!



Attention: In the interest of preventing malfunctions, only authorised service personnel are permitted to make any repairs.



Attention: Opening any components of this desk base produces risks for the following malfunctions.

2 Warranty

We provide a 24-month warranty on this desk base. The warranty covers all material and production errors and applies from the date of production (see rating plate). The warranty is only valid under the condition that the desk base has been properly and professionally assembled and has been used within the scope of the described parameters; that maintenance has been performed correctly and that repairs have been performed solely by authorised service staff.

The sit/stand desk must not be improperly handled or used and no changes are permitted to be made on the desk base; otherwise the warranty expires. Please refer to our General Terms and Conditions for additional information.

3 Maintenance / Cleaning

Regularly remove dust and dirt from the desk base, in particular from the guide tubes, and make sure that there are no damages and cracks.

Check all fastening screws to make sure they are securely fastened and check all plug connectors, cables and plugs including proper functioning.



Danger: Clean the controller, actuator and the desk base only with a dry or slightly moist cloth. **Danger to life!**



Attention: Aggressive cleaning agents can cause damage or discolourations on the product. Use only agents with pH-values of 6-8.



Danger: Never let any fluids get into the system (controller, actuator, cable and base). **Danger to life!**

4 Assembly

Use only screws that correspond to the enclosed base drawing for the assembly of your desk base.



Attention: Incorrect screws can cause damage to the desk.



Danger: The power cable of the motor controller must be disconnected during assembly of the desk base!



Attention: Before assembly and commissioning of the FREE.STAND sit/stand desk, make sure the product is acclimatised for the temperature and relative humidity values stated in the technical data!

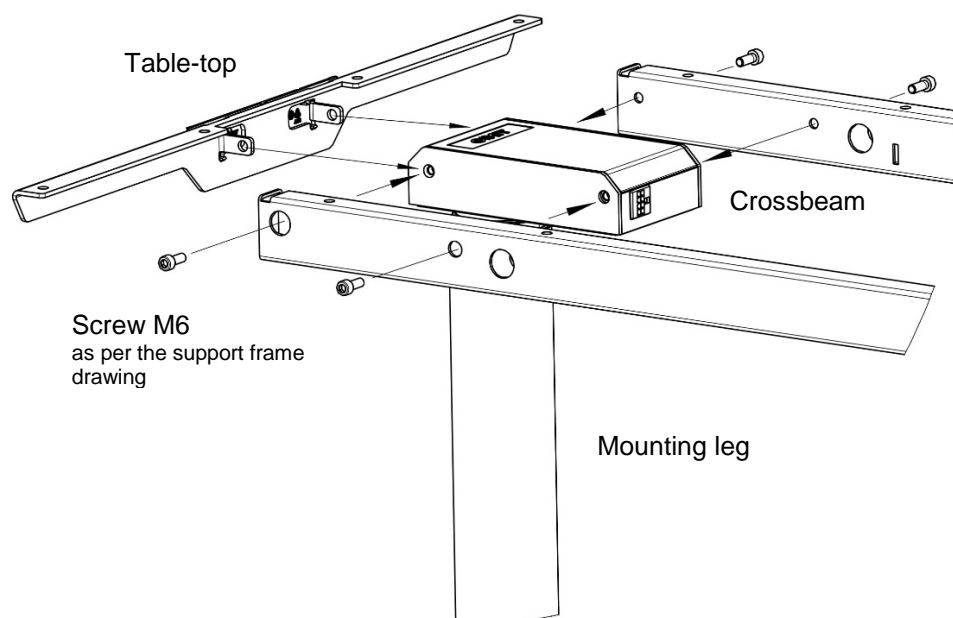
4.1 Installing the crossbeams and table-top supports or the upper frame

Now fit the two longitudinal spars on the two side frames. Ensure that you have first positioned the lugs of the table-top supports aligned to the crossbeams.

Use only the M6 screws according to the support frame drawing to do this.

The maximum tightening torque for these screws is 7.5 Nm.

The maximum screw-in depth into the motor housing is 10 mm.



4.2 Fitting the skids

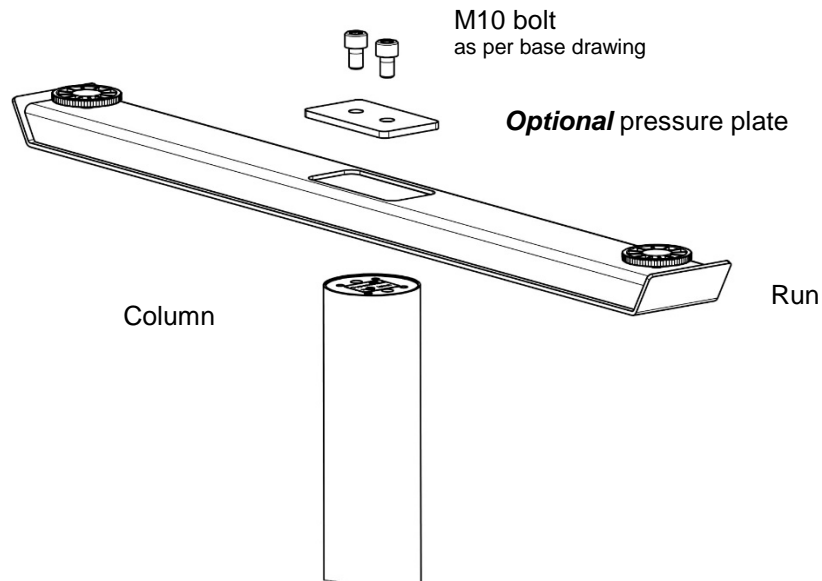
If the side frame has skids welded to it, please continue with point 4.2.

If the side frame has screwed-on skids, they must first be fitted to the mounting legs. To do so, use the screws as given in the table-top support frame drawing.

The max. tightening torque is 10 Nm!

The max. screw-in depth of the screws M10 into the drive column is 12 mm.

With asymmetric skids (C-form), keep in mind that one left and one right side frame might be required.

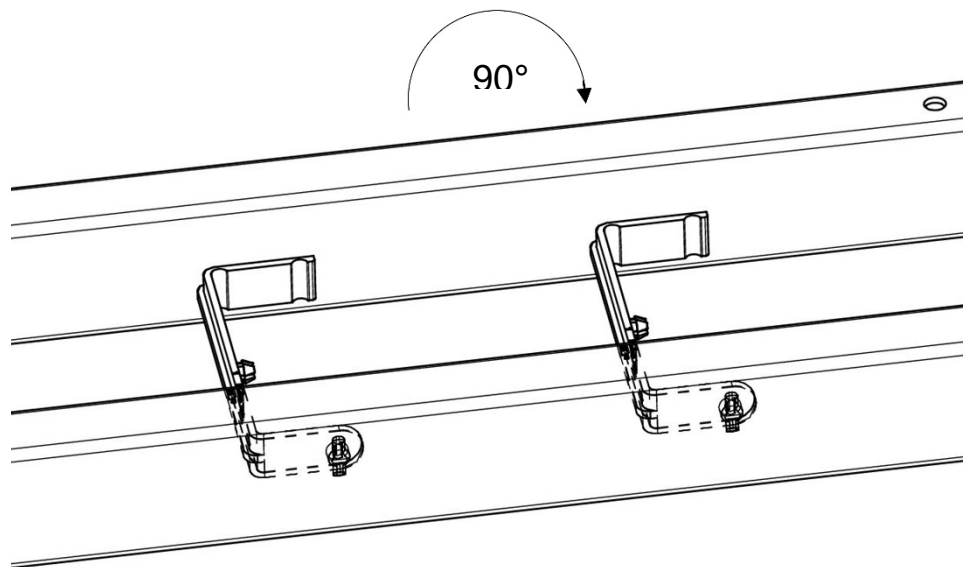


4.3 Assembly of the desktop

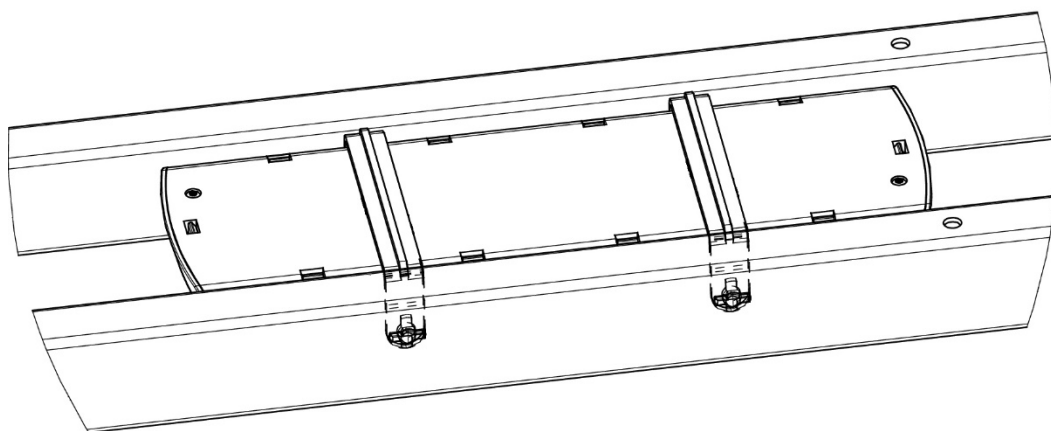
Now fasten the desktop to the desk base in accordance with the base drawing. To accomplish that, $\varnothing 7.0$ mm holes are provided on the desk frame; they are suitable for $\varnothing 5.5$ to $\varnothing 6.5$ mm bolts. Use all provided bolting points.*¹⁾

4.4 Assembly of the controller and hand-switch

First fit the two controller brackets into the keyholes in the longitudinal spar. Then turn them clockwise through 90 degrees.



Note: Ensure that the grooves for the cable guidance are on one side, so that the cables can be later laid skirting by the STAND.CONTROL C1.



Now position the locking catches of the brackets on the two holes on the rear side of the motor controller and click the brackets into place with moderate pressure on both the components on the controller.

Now fit the hand switch on the table top. There are holes of $\varnothing 5.2$ mm provided on the hand switch. The tightening torque depends on the material of the table-top but must not exceed 2 Nm. ^{*1)}

Moreover, the STAND.CONTROL C1 is equipped with threaded holes of $\varnothing 6.3$ mm and can be optionally screwed to the table-top. The tightening torque depends on the material of the table-top but must not exceed 2 Nm. ^{*1)}

^{*1)} The screws are not included in the scope of delivery since they have to be selected depending on the material and the thickness of the desktop.

5 Commissioning

Commissioning includes all jobs that are necessary for electrical height adjustment of the FREE.STAND sit/stand desk with the aid of the STAND.CONTROL motor controller. The prerequisites for commissioning are:

- complete assembly of the desk base in accordance with Section 4.1-4.3
- and correct installation of the STAND.CONTROL motor controller and hand-switch in accordance with Section 4.4!

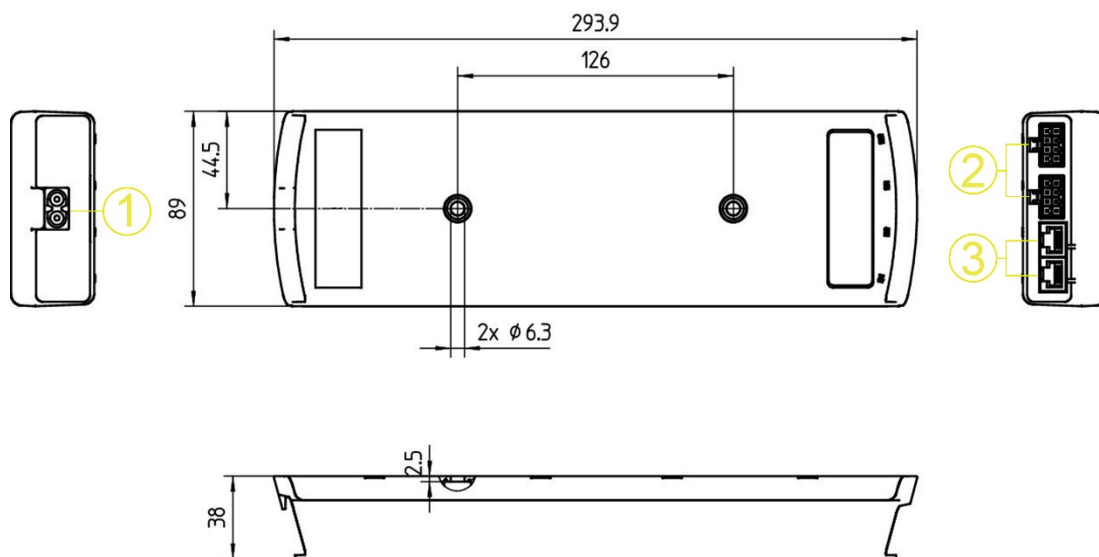


Danger: Only expert/authorised personnel are allowed to commission the motor controller! Expert/Authorised personnel have completed the required electrotechnical apprenticeship and are familiar with these operating instructions.



Attention: Before assembly and commissioning of the FREE.STAND sit/stand desk, make sure the product is acclimatised for the temperature and relative humidity values stated in the technical data!

5.1 Connections to the STAND.CONTROL C1 motor controller



- ① Socket C7 for the mains cable, 2-pole (AC)
- ② Connections 8-pole for the motors
- ③ Sockets RJ45 for hand switches (MS) and sensor



Attention: Only use 2-pole power supply cables/mains cables supplied by Oelschläger Metalltechnik. Using other power cables can cause damage to the controller.



Attention: All connectors are designed exclusively for working with the components supplied by us. If components or cables not supplied by us are connected, the motor controller or the connected component can get damaged.

5.2 Procedure during commissioning



Attention: Plug in the power supply cable/mains cable only after all other electrical connections have been made! (All motors, the hand-switch and possibly additional accessories are connected to the controller.)

To commission the FREE.STAND sit/stand desk, proceed as follows:

5.2.1 Connect the drives

Make sure that the connection cables of the drives reach from both sides up to the corresponding controller connection. For extremely long desks, it might be necessary to assemble the controller off-centre. For especially large desks, if necessary use an extension cable for the connection cable of the drives.

Connect the drives of the side element and the controller using the motor cable. The plug connectors on the 8-pin motor sockets must firmly latch!

5.2.2 Connect the hand-switch

Set up the connection from the hand switch to the RJ45 socket (D1 or D2) at the controller.



Note: You can choose from a large number of hand-switches that fit the STAND.CONTROL motor controller!
Please ask Oelschläger Metalltechnik for information on the available types!



ATTENTION: The connector (HS) serves only for operating hand switches. The RJ45 socket does not have any other functions. If the wrong components or cables are connected, there is a danger that the controller and the connected components can get destroyed.

5.2.3 Connect the power supply cable /mains cable



Attention: Before you plug in the power supply cable, check again

- to see if the mains voltage matches the rating plate of your controller
- to see if all components are plugged into the correct sockets

The STAND.CONTROL motor controller is ready for operation as soon as the power supply cable is plugged in!



Note: Initialisation of the desk base is required the first time the power supply cable is connected (Reset). This is described in Section 5.

Use only the accompanying mains power cord. The controller STAND.CONTROL C1 mandatorily needs a 2-pole mains cable.



Attention: Fasten all cables to the desk base or the desktop so they cannot get damaged during operation.

5.2.4 Installing optional accessories

There is a large number of optional accessories available for the FREE.STAND 9051 table-top support frame (for example, CPU mounting, cable ducts, screens etc.).

These accessories are to be fitted after installing the actual table-top support frame. With some of the accessories, it may be necessary to move the table up once, before they can be installed. In such a case, assemble the table-top support frame as described up to point 5.2.3, and then carry out a reset in accordance with point 5.

Thereafter, you can move the table to the required height. Isolate the table-top support frame from the mains again and continue with the installation of the accessories.

Upon completion of the accessories installation, carry out point 5.2.3 and if required, point 5.3 (Reset) once again.

5.3 Initialisation / Reset

After the installation, or if there is a fault at the table, or after disconnecting the connection between the drives and the controller, the controller of the table has to be initialised.

If the controller expects a fresh initialisation, the table can be moved only down, with a reduced speed. For hand switch versions with a display, rEF is displayed during the initialisation movement.

For initialising, move the table into the lowermost position. To that end, press the down key on the hand switch till all the drives have reached the lowermost position. Now, when you release the key, the table moves into the minimal position.

Releasing the button too early can result in a malfunction at the table. If that should happen, you must repeat the procedure.



Attention: The top limit stop of the controller is preset. For this reason, use only controllers that were supplied as suitable for the respective desk base.



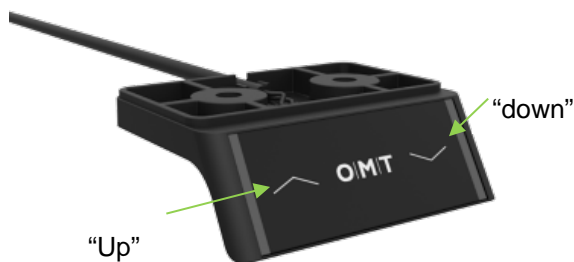
Danger: The optionally available corrosion protection is **not activated** during any reset process. During this process, always watch out for the possible danger of being crushed.

6 Control

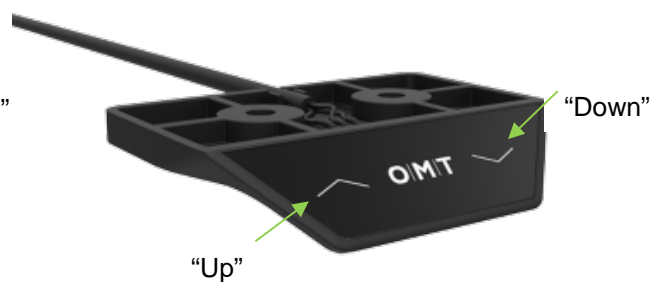
6.1 Normal operation (with all hand-switch variants)

Use the "up" and "down" buttons to move the desk up or down in the direction of the arrow. The desk stops when it reaches the limit positions. Keep the button pressed until the desired position has been reached.

6.2 Operation with STAND.MOVE M1.0 and M3.0

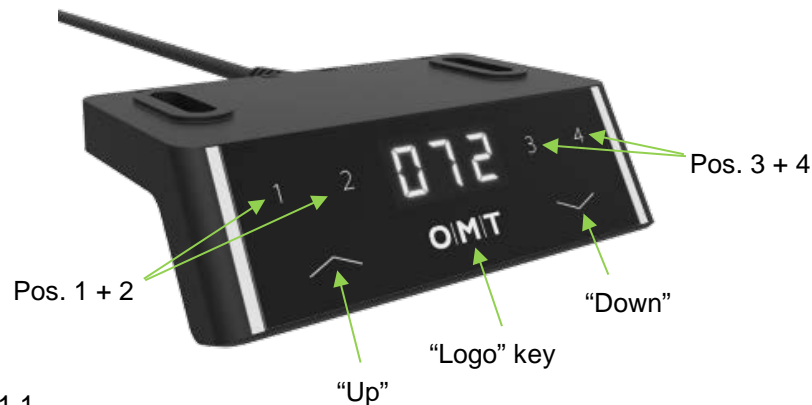


Hand switch Easy - M1.0



Hand switch Easy - M3.0

6.3 Operation with STAND.MOVE M1.1 hand switch with display and memory (optional)



Hand switch Comfort - M1.1

This hand-switch is additionally equipped with a display for indication of the current desk height in centimetres or inches.

Error messages and the status of the table are shown on the display (see Table2).

If you stop pressing the hand-switch after a while, the display turns off if no important operating condition is being displayed. As soon as you press a button, the display switches back on.

The “Up” and “Down” or “Table up” and “Table down” keys move the table as described in 6.1. Previously stored positions can be taken up with the position keys 1-4.



Note: All hand switches are plug-&-play-capable and can be operated in parallel.

6.3.1 How to save a position:

Move the table to the desired height with the “Up” or “Down” keys. Then press the “Logo” key (P _ is shown in the display) and then one of the position keys 1 to 4 (for example, P 1 appears in the display). The process of saving is now ended and after approx. 2 seconds, the current table height is once again shown in the display. 4 different positions can be saved in this manner.

6.3.2 How to retrieve a saved position:

Keep the desired memory setting pressed (1, 2, 3 or 4). The desk independently moves from the current position to the saved position. The button has to be pressed until the position is reached; if you let go beforehand, the desk stops moving.

6.3.3 Calling the menu

The Comfort hand switch provides various possibilities for settings, which can be carried out by the operator himself (F 4 and F 5 are not always enabled).

To do so, press the “Logo” key for 6 seconds till the display changes to F 1. You can navigate with the arrow keys in the menu that is displayed thereupon.

Menu structure:

F 1 – Change the height display (inches – cm)

F 2 – Adjust the height display

F 3 – Factory reset

F 4 – Set shelf and container stop

F 5 – Delete shelf and container stop

To go to the sub-menu, confirm once with the “Logo” key.

6.3.4 Changing the unit of the height display (menu F1)

The height can be shown in centimetres or inches on the hand switch. The unit can be toggled in the menu.

To change the unit, proceed as follows:

1. Press the “Logo” key for 5 seconds.
2. Confirm menu option F 1 by once again pressing the “Logo” key.
3. Now, select with the
 - a. key “Up arrow” ↑ : inches, or
 - b. key “Down arrow” ↓ : cm.
4. Confirm the selection by once again pressing the “Logo” key.

To quit the menu without making a selection, wait for about 10 seconds till the height display appears again. This setting is stored permanently.

6.3.5 Calibrating the height display (menu F2)

If the displayed height does not tally with the actual height of the table-top, the display can be corrected as follows:

1. Press the “Logo” key for 5 seconds.
2. With the “Up” and “Down” keys, select the menu option F 2. Confirm this selection by once again pressing the “Logo” key. The display and the edge lighting now start to flash.
3. Measure the actual current table height and correct the height being currently shown in the display with the “Up” or “Down” keys to the measured height.
4. Confirm the input by briefly pressing the “Logo” key.

To quit the menu without making a selection, wait for about 10 seconds till the height display appears again.

6.3.6 Factory reset (menu F3)

If you wish to reset the controller to the factory settings because you do not wish to retain the changed settings, or notice an error, or were asked by a Service employee from Oelschläger **Metalltechnik** GmbH to do so, proceed as follows:

1. Press the “Logo” key for 5 seconds.
2. With the “Up” and “Down” keys, select the menu option **F 3**.
3. Confirm the selection by once again pressing the “Logo” key.
4. The following is shown in the display **000_**
5. Press the “Logo” key once again so that all the settings are reset to the factory settings.

The program now quits the main menu and displays **038**. To complete the operation, carry out a reference movement.

6.3.7 Shelf- or Container Stop

The end positions of the table can be matched to the ambient conditions. The upper end position (shelf-stop) can be defined by an incline of the roof or a ceiling light and the lower end position by a mobile file cabinet (container stop).

6.3.7.1 Setting (menu F4)

To set a shelf- or container-stop, follow the procedure below:

1. Use the arrow keys to move to the desired position.
2. Press the “Logo” key for 5 seconds.
3. With the keys “Up” and “Down”, select the menu option **F 4**.
4. There appears a display with one bar each at the top left and bottom right.
5. To save the upper limit position, select the “Arrow up” key.
6. To save the lower limit position, select the “Arrow down” key.
7. Confirm the input with the “Logo” key.

To quit the menu without making a selection, wait for about 10 seconds till the height display appears again.

6.3.7.2 Delete (menu F5)

To delete a shelf-stop or a container-stop, proceed as follows:

1. Press the “Logo” key for 5 seconds.
2. With the keys “Up” and “Down”, select the menu option **F 5**.
3. There appears a display with one bar each at the top and bottom.
4. To delete the upper limit position, select the “Arrow up” key.
5. To delete the lower limit position, select the “Arrow down” key.
6. Confirm the input with the “Logo” key.

To quit the menu without making a selection, wait for about 10 seconds till the height display appears again.

6.4 Optional function – safety zone

The safety stop works as follows:

1. Press the desk position button downwards / down (and keep it pressed).
The desktop moves to the start of the safety zone.
2. The movement of the desktop stops above the safety zone.
3. Press the desk position downwards / down again.
The desktop moves to the lowest desktop position.



Note: It is not possible to save desktop positions in the safety zone!

7 Cascading 2 Controllers

2 drives maximum can be connected to one controller. To increase this number to 4, two controllers can be cascaded.

1. To do so, 2 controllers must be configured with a parameter set for 3 or 4 drives.
2. The two controllers are connected with the RJ45 connecting cable.
3. Insert the desired hand switch into a free port.
4. Now connect the mains cable to the sockets.
5. After a reset movement, the configured number of drives will move up and down synchronously.



Attention: Use suitably configured controllers without fail, since otherwise, the cascading is not recognised and only two drives would move, which can result in jamming of the entire system.

8 Troubleshooting

Fault	Cause	Repair
Desk does not move	No power supply	Plug in mains cable; if applicable, check the plug connector on the controller.
	No connection or loose connection to the drives/side panels	Check, if applicable fix plug connector connection from the motor cable to the controller and the drives.
	No connection to the hand-switch	Check, plug-in plug connector to the controller.
	Max. lifting force exceeded	Reduce weight.
	Max. operating time exceeded	The controller will independently reactivate after approx. 3 minutes. ATTENTION! The max. travel time of 2 minutes is only available after an idle time of at least 18 minutes.
	Drive defective	Please contact Customer Service.
	Controller defective	Please contact Customer Service.
Desk only lowers slowly	Controller expects a reinitialisation	See Section 5 Reinitialisation.
	Max. lifting force exceeded	Reduce weight.
	Desk only moves briefly on one side and then remains stationary	Check, if applicable fix plug connector connection from the motor cable to the controller and the drives.
Desk only moves briefly on one side and then remains stationary	Drive defective	Please contact Customer Service.

9 Error messages in the display of the hand switch (optional)

Display	Description	Remedy
C01	Short-circuit motor 1	Pull the mains plug. Correct the external short-circuit, check the cables to the motors for damage or connect the correct motor to the relevant socket. Start the controller again. If required, carry out a reference movement.
C02	Short-circuit motor 2	
C11	Cable of motor 1 was pulled	Check the plug/cable connection to the motors and carry out a reference movement.
C12	Cable of motor 2 was pulled	
C15	No pulses measurable	Pull the mains plug. Correct the external short-circuit, check the cables to the motors for damage or connect the correct motor to the relevant socket. Start the controller again. If required, carry out a reference movement.
SP	System protection/ System pause The controller monitors the power-on duration (time-controlled) and its maximum temperature. One of the two values was exceeded.	Wait till the controller has cooled and the display SP goes off. There is now clearance for movement for 20s. Only after 18 minutes will the table move the full 2 minutes. ATTENTION! The power-on duration is calculated even if there is no mains voltage applied.
C0L	Collision detected	
C34	Overcurrent at motor 1	Collision? If required, rectify; max. load exceeded; remove the load from the table. Motor positions too much at variance; if required, reduce the load on the table. Carry out a reference movement.
C35	Overcurrent at motor 2	
C38	The motors have lost sync.	Motor positions too much at variance; if required, reduce the load on the table. Carry out a reference movement.
C39	The controllers are out of sync (cascading).	Check whether the cascading cable between the controllers is correctly inserted and that there is a mains cable in both controllers. Carry out a reference movement.
C40	Sensor module error	Further movements are possible, but without anti-collision protection. Inspect the sensor module.
C51	Contradictory operations on two different controller devices.	Stop operation at all the available controller devices.
C52	The "Up" key on the hand switch is stuck.	Replace hand switch.
C53	The "Down" key on the hand switch is stuck.	Replace hand switch.
C81	Voltage too small	Pull the mains plug. Contact Customer Service. Mains or power supply fluctuations?
C82	Voltage too high	
C83	Discrepancy in the parameters	The parameters in one controller do not match the number of legs or the parameters are not the same in the two controllers. Contact Customer Service and have the parameter set of the table checked.
rEF	Reference movement required.	Carry out a reference movement.
00 1-999	The table moves	

Table 2: Error descriptions (Motor = drive in the mounting leg or in the side frame)



Note: If there is a power failure during the height adjustment or if the mains cable is pulled, a manual reset might be necessary.

If the error cannot be repaired as described above, pull the mains plug, wait for several minutes and try to reinitialise the desk.

If the error continues to occur, unplug the desk from the mains and contact customer service.

This error list refers to firmware A1.2 and higher.

10 Click codes of the controller

As soon as the motor controller is supplied with power, the controller uses the integrated relay to acoustically inform the user about the system status and the reason for the most recent shut-down.

Click = Relay actuated, Clack = Relay dropping

Number of click-clacks	When	Status Information
1x	If the mains is on	Normal operation: The system works without any problem.
1x	Up key pressed	Reset: Initialisation movement required
7x	During the movement, the connection to a drive is lost.	Error: Table cannot be moved any more
2x	Setting a container- or shelf-stop	Confirmation of the limit position having been successfully saved (only with the simple hand switch without a display)
4x	Delete container- or shelf-stop.	Confirmation of the limit position having been successfully deleted. (only with the simple hand switch without a display)
7x	Table moves at an angle	Error: The drives do not have the same height, initialisation movement required

11 Technical Data

System: 9051 FREE.STAND with motor controller STAND.CONTROL C1

Rated voltage	100-240 V / 50-60Hz
Rated current consumption	
Rated power	
Standby power at nominal voltage, primary (typical)	
Dimensions (L x B x H)	294 x 89 x 38 mm 11.57" x 3.50" x 1.496"
Ambient conditions during operation	
Ambient conditions during transport and storage	
weight	approx. 500g
Protection class	II
IP Class	IP 20
Max. operating time	2 Min. ON / 18 Min. OFF

Individual drive (installation column or side panel, support foot) with STAND.CONTROL C1

Lifting capacity max.	700 N	(≈ 70 kg)
Lift length depending on version	see drawing	
Current consumption max., primary	250 W	

Desk base with 2 drives (installation column or side panels) with STAND.CONTROL C1

Lifting capacity max.	850 N	(≈ 85 kg)
Lift length depending on version	see drawing	
Current consumption max., primary	250 W	

12 Tests and certificates

The drive system is tested according to the following standards:

Electromagnetic compatibility (EMV)

EN 61000-6-2:2005
 EN 61000-6-3:2007 + A1
 EN 61000-3-2:2014
 EN 61000-3-3:2013

Electrical safety (low voltage directive 2006/95/EC)

EN 62233:2008	Measurement methods for electromagnetic fields of household appliances and similar apparatus with regard to human exposure
EN 60335-1:2012	Household and similar electrical appliances Internal and similar uses

Safety-related parts of controllers

EN ISO 13849-1:2015 Safety of machinery
 Safety-related parts of control systems
 Performance Level “b”

After suitable enhancement and assembly by the office furniture manufacturer:

DIN EN 527-1:2011	Office furniture - Work tables and desks Part 1: Dimensions
DIN EN 527-2:2017	Office furniture - Work tables and desks Part 2: Safety, strength and durability requirements
DIN Technical Report 147:2006	Requirements and tests of office furniture Guideline for the security requirements on work tables and storage furniture in Germany



13 Address

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