ASSEMBLY

Use only the screws in accordance with the enclosed assembly diagram for assembling your desk frame.

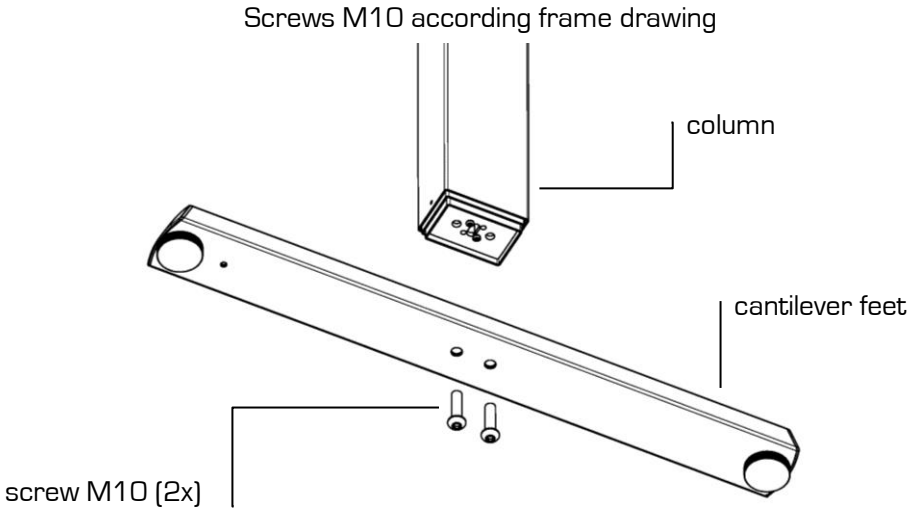
Caution: Incorrect screws can cause damage to the table.

Danger: When assembling the table frame, the power cable of the motor control unit must be disconnected from the mains!

Caution: Before assembling the sit-stand table and putting it into operation, make sure that the product is acclimatized to the temperature and humidity values specified in the technical data for operation!

1) Assembly the cantilever feet

- For side bases with fixed welded cantilever feet, continue with point 2 (assembly the beam and support plate).
- For side bases with bolted cantilever feet, they must first be assembly on the columns, using the screws according to the assembly diagram.
- The max. tightening torque is 10 Nm!
- The max. screw-in depth of the M10 screws in the drive column is 9 mm!
- For asymmetrical cantilever feet (C-leg), keep in mind that a left and a right side base is required.

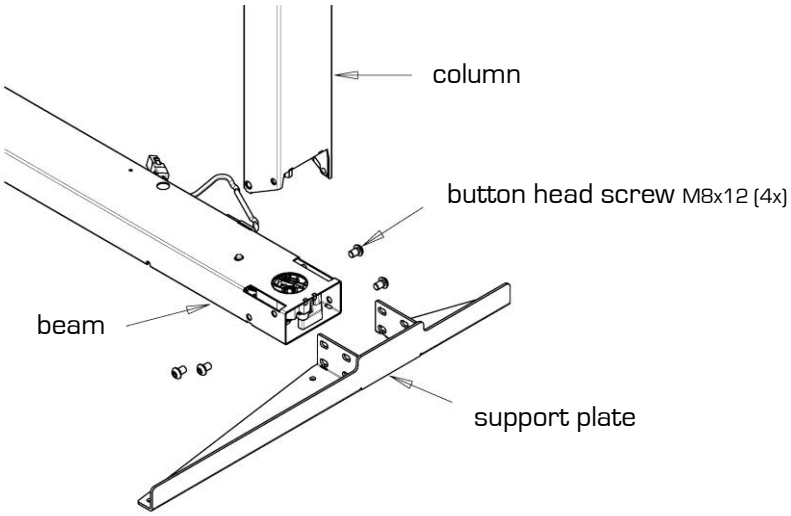


2) Assembly the beam and support plate

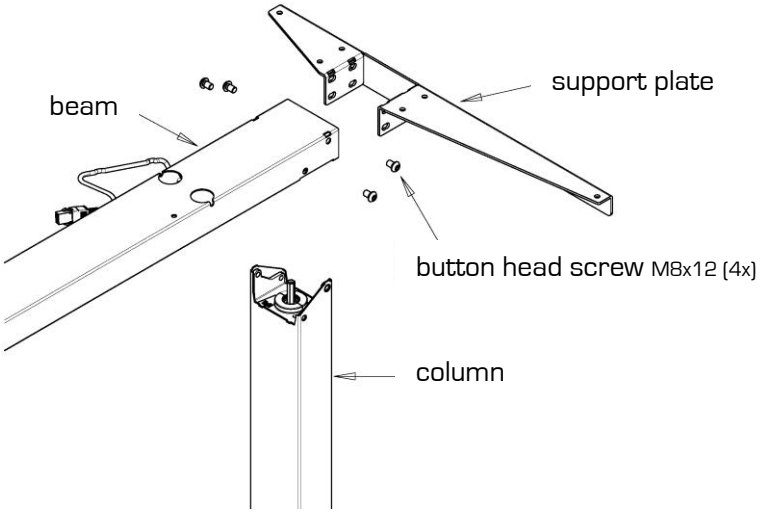
First assemble the mounting column in the appropriate sections of the beam. The M8 screws are only used when mounting the support plate.

Note: Make sure that the hexagonal SW8.8 at the top of the mounting column is inserted smoothly into the hexagon of the drive motor premounted in the beam. For positioning, the hexagon of the mounting column can be rotated **clockwise** using an SW9 open-end spanner. The mounting column is rotationally symmetrical.

Assembling overhead



Assembling in the operating position



Then assemble the support plate with the M8 screws according to the frame diagram through the thread in the mounting column on the beam. The maximum tightening torque for these screws is 10 Nm.

3) Assembly the table top

Now fasten your table top to the table frame according to the frame diagram. There are Ø 6.5mm holes for this on the table frame, suitable for Ø 5mm to Ø 6mm screws. All provided screw points must be used.[*1)]

4) Assembly the control unit and control panel

Now assemble the control unit and the control panel on the table top. There are Ø 5.4mm holes for this on the control unit and Ø 4.5mm holes on the control panel. You should use screws with a lens or cylinder head on the control unit. The tightening torque depends on the material of the table top, but should not exceed 2 Nm.[*1)]

[*1)] The screws are not supplied with the table frame, because they must be selected based on the material and thickness of the table top.

PUTTING INTO OPERATION

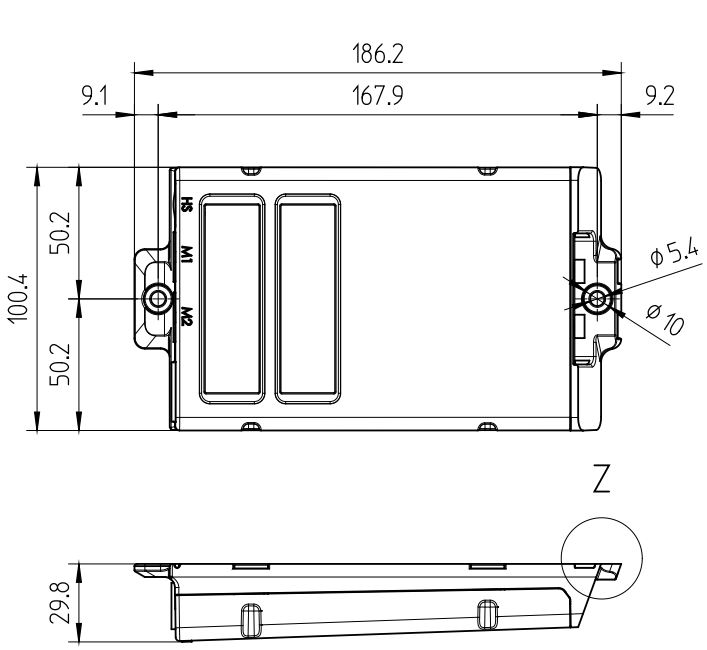
Putting the device into operation involves those activities that are required so that an electrically adjustable sit-stand table can be height-adjusted by means of the SMART motor control unit. Requirements for putting the device into operation are:

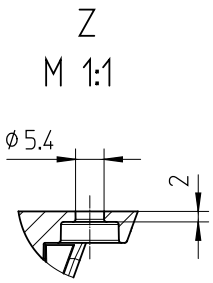
- the table frame is fully assembled (Installation section 1-3)
- the SMART motor control unit and the control panel are mounted (Installation section 4)

Danger: The motor control unit must be put into operation by expert personnel! Expert personnel have the necessary electro-technical training and are familiar with these operating instructions.

Caution: Before assembling the sit-stand table and putting it into operation, make sure that the product is acclimatized to the temperature and humidity values specified in the technical data for operation!

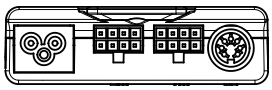
1) Connectors on the SMART motor control unit





pin assignment

HS	**Clip-on control panel**
M1	**Motor socket 1 (M1)**
M2	**Motor socket 2 (M2)**
AC	**Mains socket**



2) Procedure for putting into operation

Caution: Only plug in the power cable after all other electrical connections have been made! (All motors, the control panel and any other accessories are connected to the control unit.)

Proceed as follows to put the sit-stand table into operation:

3) Connecting drives

Make sure that the connection cables of the drives on both sides up reach the respective connectors on the control unit. It may be necessary to mount the control unit off-centre in the case of angle combinations or extremely long tables. An extension cable for the connecting cable of the drives may be necessary for very large table frames.

Connect the drives on the side bases to the control unit using the motor cable. The plug connections must lock firmly into the 8-pole motor sockets! In the case of control units with more connections for drives than there are drives, start with the (M1) connection. (Needles connections remain unused if necessary.)

Note: When plugging in the motor cable, the sequence M1, M2 must be followed!

4) Connecting the control panel

Connect the control panel to the 7-pole control panel socket (HS) on the control unit.

5) Connect power cable

Caution: Before connecting the power cable, check again

- whether the mains voltage corresponds to the type plate of your control unit
- that all components are plugged into the appropriate jacks

The SMART motor control unit is ready for operation when the power supply cable is plugged in!

Note: The first time you connect the power cord / power cable, initialisation of the table frame (RESET) is required; this is described in the Initialisation / Reset section.

Caution: Use only the supplied power cord! The SMART motor control unit necessarily requires a 3-pin power cable with earth wire.

Caution: Attach all cables to the table frame or the table top so that there can be no damage during operation.

Initialisation / Reset

After assembly, or when the table has been disconnected from the power supply for a long time, or if there has been a malfunction with the table, or when the connection between the drives and the control unit has been separated - the table's control unit must be initialised.

When the control unit is awaiting a new initialisation, only downward movement of the table with a reduced speed is possible.

To initialise, move the table to the lowest position - hold the down button on the control panel down until all drives have reached the lowest position. Then press the down button again and keep it pressed (about 5 seconds) until the table has made a slight movement downward and up again; only release the button when the table no longer moves. Releasing the button too early leads to a malfunction of your table; if this happens accidentally, you need to repeat the process.

Caution: The upper end position is preset in the control unit. For this reason, only control units that have been supplied to fit each table frame may be used!

Danger: During all resets, the optional collision protection is **not active**. Pay attention to a possible danger of crushing.

TROUBLESHOOTING

Error	Cause	Remedy
Table does not move	No power supply	Plug in the power cable, if necessary check connection on the control unit
	No or loose connection to the drives / side bases	Check or reconnect the plug connections of the motor cables on the control unit and on the drives
	No connection to the control panel	Check or reconnect the plug connection on the control unit
	max. lifting capacity exceeded	Reduce weight
	max. operating time exceeded	Control unit reactivates automatically after about 3 minutes **CAUTION!** The max. movement time of 2 minutes is only available again after a rest period of min. 18 minutes.
	Defective drive	Contact customer services
	Defective control unit	Contact customer services
	Defective control panel	Replace control panel
Table only moves downwards slowly	Control unit is awaiting re-initialisation	see Initialisation
Table only moves slowly	max. lifting capacity exceeded	Reduce weight
Table only moves briefly on one side and then stops	No or loose connection to the drives / side bases	Check or reconnect the plug connections of the motor cables on the control unit and on the drives
	Defective drive	Contact customer services

TECHNICAL DATA

General

Supply voltage	207-253 V / 50-60 Hz
Nominal voltage	220-230 V / 50-60 Hz
Standby power at nominal voltage, primary (typical)	≤0.3 W
Ambient temperature during operation	0-30°C
Permissible relative humidity (for operation)	5-85% (non-condensing)
Storage and transport temperature	-40°C to +85°C
Permissible relative humidity (for storage)	5-90% (non-condensing)
Protection class	I
IP class	IP 20
Max. operating time	10% (2 min. on / 18 min. off)
Nominal lifting speed of drive columns (decreases under max. load)	38 mm/s

Single drive (mounting column or side base, support foot) with SMART-e-2

Lifting force max.	600 N (≈ 60 kg)
Stroke length depending on version	see diagram
Power consumption max., primary	216 W

Table frame with 2 drives (mounting columns or side panels) with SMART-e-2

Lifting force max. (incl. weight of table top)	1000 N (≈ 100 kg)
Stroke length depending on version	see diagram
Power consumption max., primary	216 W

TESTS AND CERTIFICATES

The drive system is tested in accordance with:

Electromagnetic compatibility (EMC Directive 2004/108/EC)

- EN 61000-6-2:2005 Electromagnetic compatibility (EMC)
- EN 61000-6-3:2007 + A1 Electromagnetic compatibility (EMC)
- EN 61000-3-2:2006 + A1 +A2 Electromagnetic compatibility (EMC)
- EN 61000-3-3:2008 Electromagnetic compatibility (EMC)

Electrical Safety (Low Voltage Directive 2006/95/EC)

- EN 60335-1:2012 Safety of electrical appliances for household and similar purposes

Safety-related parts of control systems

- EN ISO 13849-1:2008 Safety of machinery Safety-related parts of control systems Performance level "b"