

# VERCO

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Oblique Adapt  
Assembly and Operating Instructions  
June 2013

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## Foreword






Dear Customer,

We are pleased that you chose our product. This manual explains how this sit-stand desk is assembled, used and maintained. All sit-stand tables are subjected to functional and quality tests before leaving our factory. If you still have problems with your table base, you can always contact our service department.

The assembly of the table frame must be made in accordance with this manual. Changes to the table frame or improper use may affect the safety, function and life!

This manual is for all OBLIQUE Adapt sit-stand tables with HDU provided. Due to different models or types pictures can be different.

## Safety Information

-  Safe use of the sit-stand table is only possible if the instructions are read and are strictly observed.
-  Failure to observe instructions could result in significant damage or injuries.
-  Anyone who has assembled this sit-stand desk or is a user of the desk must have access to these instructions.
-  If the product is obviously damaged, it must not be installed or continue to be used.
-  This table frame is not intended for use by persons (including children) with reduced physical, sensory or mental abilities or lack of experience and / or knowledge. Children should be supervised to ensure that they do not play with the table.

## **Before installing, uninstalling, or troubleshooting**

- Stop the sit-stand table.
- Turn the power off and unplug the power cord.
- Unload the sit-stand table of any weight.
- The opening and exchange of electrical equipment may only be performed by qualified electricians.
- The table must not to be used in wet areas, e.g. Pools.
- The table must not to be used in hazardous environments.

## **Before the operation**

- Make sure that the table has been installed in accordance with this manual.
- Check the operating voltage of the table of the local power supply. (see label on the control, EU-Standard = 230V)
- Set the plug connections from the Handset and the Columns to the control unit.
- Connect the power cable to the controller.

## **During the operation**

- If the drives or the control unit during operation may cause unusual noises or smells, disconnect the power supply.
- Make sure that the cables are not damaged.
- During operation of the sit-stand table, make sure that no objects or body parts can be pinched.

All moving parts of the table frame to have a distance of min. 25 mm to adjacent components.

## Repairs

To avoid malfunction, all repairs done by authorized service personnel.



**WARNING!** Should the user attempt to repair or open any part of the desk system then warranty is null and void. In such a case VERCO are not liable for any failures sustained.

## Warranty

These table bases are warranted for a period of 5 years. The warranty covers all defects in material and manufacturing faults calculated from the production date (see label). The warranty is valid only on condition that the table frames within the described parameters are properly and professionally assembled and used. In addition all maintenance and repair must be performed only by authorized service personnel.

The sit-stand table must not be handled or used improperly and no changes made to the table frame are allowed or this will invalidate the warranty. For more information, please refer to our Terms and Conditions.

## Maintenance / Cleaning

Remove dust and dirt on a regular basis from the table frame, especially from the guide tubes and make sure that no damage or cracks are present.

Check that all mounting screws and all connections, cables and connectors are tight.

The control unit, the handset and the table frame may be cleaned with a dry or slightly damp cloth.

Aggressive cleaning agents may cause damage or discoloration to the product. It is therefore recommended that only an agent with a pH of 6-8 is used.

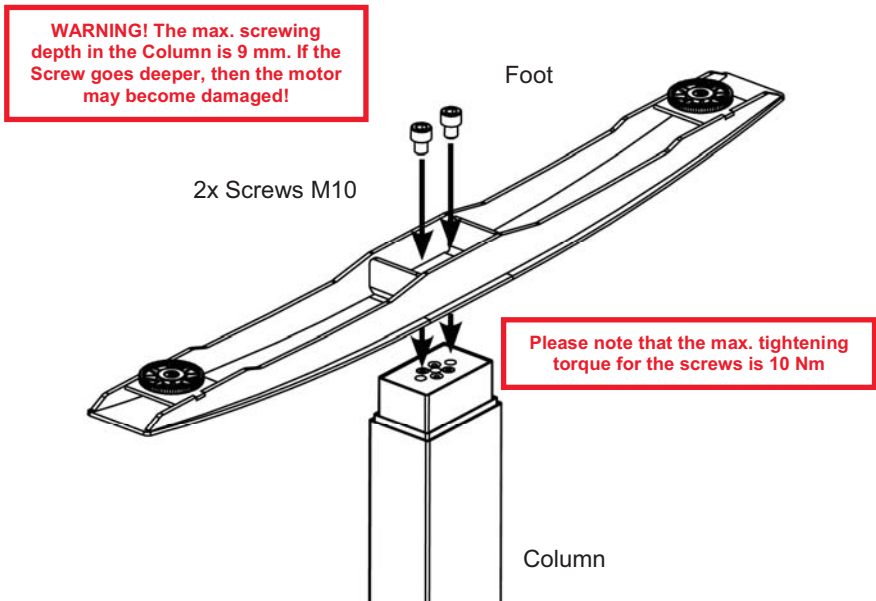
Make sure that no liquid enters the system (control unit, handset, cables and table frame).

## Assembly

In the assembly of the table frame, use only the bolts to the prescribed specifications.

👉 **WARNING!** Incorrect screws can cause damage to the table.

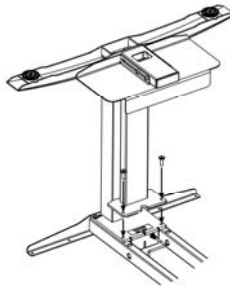
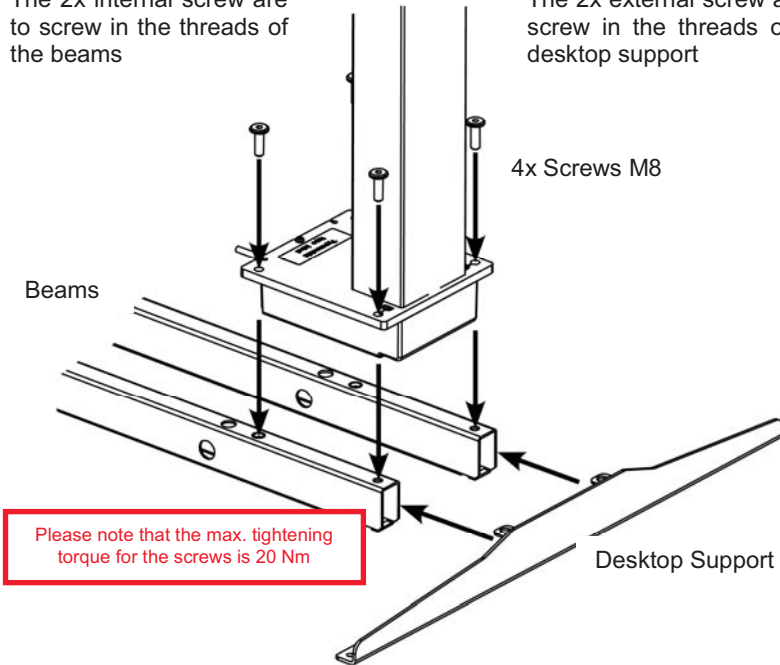
1. For columns with fixed welded feet continue with step 2. For columns with bolted feet, they must be assembled first on the columns (please use the bolts to the table frame-drawing). The max. tightening torque is 10 Nm! The max. screwing depth of the M10 in the Driving column is 9 mm! With asymmetrical frames (C-form) please note that a left and a right side panel is required.



- Now install the two beams and the desktop support on the two Columns. Use only the M8 screws, according to the frame-drawing! The max. tightening torque for these screws is 20 Nm The max.

The 2x internal screw are to screw in the threads of the beams

The 2x external screw are to screw in the threads of the desktop support



If a CPU holder are integrated into the system, please connect these over the two inner screws, over the top plate of the column, to the beams.



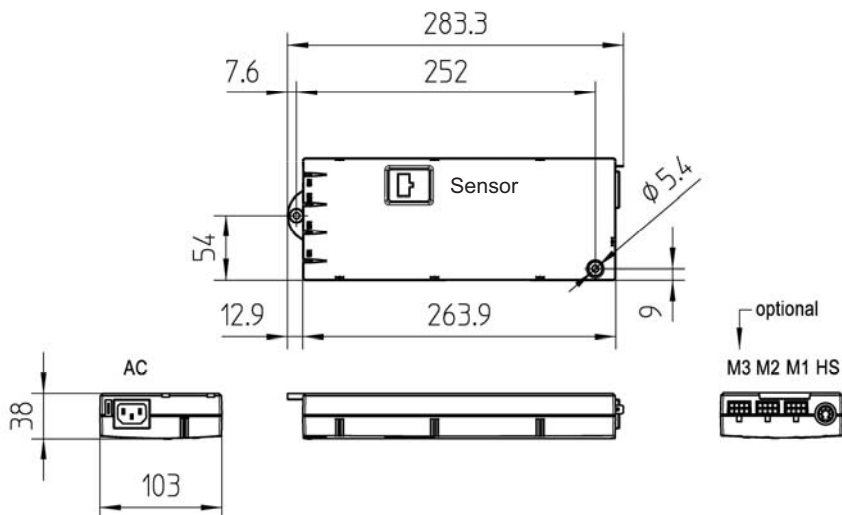
3. Fasten your desktop on the table frame. On the beams holes with an  $\varnothing 6.5$  mm are provided for fixing the desk top (recommended screws  $\varnothing 5.5$  to  $\varnothing 6.0$  mm).
4. Install the control unit and the handset on the desktop. On the control unit you have  $\varnothing 5.5$  mm holes and at the handset you have  $\varnothing 4.5$  mm holes. For the control unit, you should use screws with a lens or cylinder head.
5. The screws for assembly of the desk top are not included.

Make sure, that the motocables are long enough to connect to the controlbox. If necessary you can place the controlbox excentric under the tabletop. For very long tables you can use a motorextension cable.

6. Connect the motorcables form the column to the controlbox. The plug-connection has to click into place. If a controlbox is used, which has mire plug-terminals than needed you always have to start to connect to M1 (The redundand terminals can be left open)
7. Make the connection between the handset and the control unit (HS) and then plug the power cord into the controller (AC).

Use only the supplied power cable! The control unit "COMPACT" needs necessarily a 3-pin power cable with ground wire.

Attach all cables to the table frame or on the underside of the table top so as to avoid any damage during operation.



## Connections to the control unit

- M1-M3 = Connectors for the drives
- HS = Connectors for the handset
- AC = Connector for the power cord (3-pin)

## Reset

The desk may need to be reprogrammed / reset after any of the following:  
After assembly; after disconnection from the power supply or after any impact on the table top.

In the case of a reset becoming necessary downward movement of the table at a reduced speed is possible. On handset models with display "Reset-LED" will be indicated. This display clears once the initialization has been completed successfully.

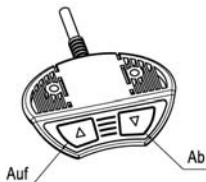
To reset you have to drive the table to the lowest position by holding the down button of the hand switch pressed until all drives reach the lowest position. Then press the down button again and hold it pressed (about 5 seconds) until a slight movement of the table drops down to the machine zero point and back up to the operation zero point and the table stops moving, after that release the button. If the button is released too early, this leads to a malfunction at the table. If this occurs you must repeat the process.

The upper end position is preset in the control unit. For this reason, only control units that have been provided for each specific desk frame should be used. Under no circumstance should a control box from one desk be moved to another.

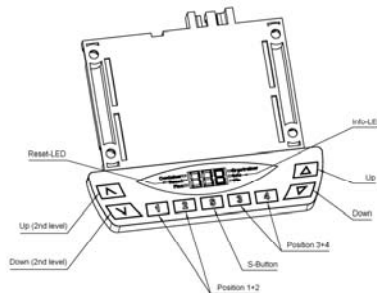
## Operation

### Normal mode (with all handset types)

With the Up and Down keys, move the table in the direction up or down, the table stops when it reaches the end position. Depress the up or down button as required until the desired position is reached.



Standard Handset



HDU Handset (optional)

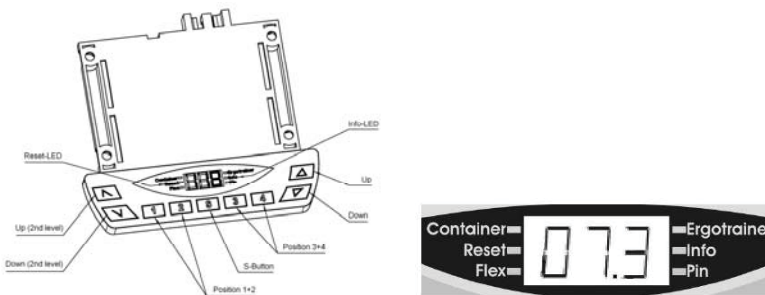
## Adjustment of the altitude display

If the indicated value does not match the actual height of the tabletop, the display can be corrected as follows:

1. Press the S key and release the button again.
2. Press the DOWN key until the display start to flash (about 5 sec.)
3. Measure the table height and enter the measured value (depending on the setting in centimeters or inches) with the UP or DOWN button. Confirm the entry by pressing the S button.

To exit the menu without making a selection, you can wait about 10 seconds and the height display will appear again.

## Operation with HDU handset with display & memory (optional)



This handset is equipped with a display for displaying the current table height in centimeters or inches, in addition, the storage of 4 "memory" positions (desk height) is possible.

The Reset-LED indicates that a reset is required (see section - Reset). It lights until the reset is completed.

The Info-LED indicates that the control unit has detected an error. At the same time on the display instead of the current table height, an error code "EXX" will be displayed. To resolve the error, see Section - Troubleshooting.

The LED's "Container, Flex, Ergotrainer and pin" are reserved for optional features and are not used in standard systems. The key UP (2) and DOWN (2) operate in the standard model as the buttons UP and DOWN

## **To save a position:**

Drive the table with "Up" or "down" to the desired height. Then press the "S" key (in the display "S -" is displayed) and then a position of the 1-4 buttons (the display will show as "S1"). The save procedure is confirmed by the control unit with a double click sound and after about 2 seconds, the LCD shows the current table height. In this way it is possible to save max. 4 different positions.

## **Recall a saved position:**

Press and hold the desired memory location (1, 2, 3 or 4) key and the table moves independently from the current position in the saved position. The button must be pressed until the position is reached, if the button is released, the table will stop short of the desired height.

## **Change the height noted in display from cm or inches (S5 Menu)**

The height display of the handset can be set both in centimeters, or inches. With the help of the S5-menus, the unit can be changed. If the display has been set to centimeters, the height will be displayed in inches after the menu selection of if inches have previously been displayed you can change to displaying centimeters.

To change the unit, follow these steps:

1. Press the Menu key (3-5 seconds) until the "S x" is displayed (where x is a number, unless it is already "S 5" display continue with 3)
2. Press the UP or DOWN button until the display shows "S 5".
3. Confirm by pressing the S button. Now the display depending on the. Previous setting will change to either inches or centimeters.

To exit the menu without making a selection, you can wait about 10 seconds and the altitude display appear again.

## Adjustment of the height display

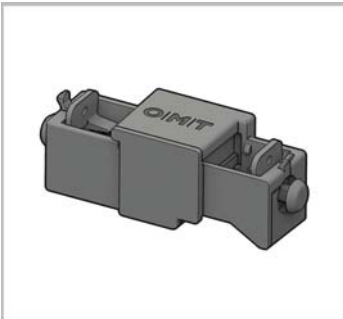
If the indicated amount does not match the actual height of the tabletop, the display can be corrected as follows:

1. Press the S key and release the button.
2. Press the DOWN key until the display start to flash (about 5 sec.).
3. Measure the table height and enter the measured value (depending on the setting in centimeters or inches) with the UP or DOWN button. Confirm the entry by pressing the S button.

To exit the menu without making a selection, you can wait about 10 seconds and the altitude display appear again.

## Optional equipment

### External sensor for collision detection



The sensor bridge (9903 2200) is responsible for an early detection of a possible collision of the table frame with other components or objects provided.

When using the sensor bridge it's absolutely necessary to observe strictly the separate assembly and operating instructions for the sensor.

## Troubleshooting

<b>Error</b>	<b>Source</b>	<b>Solution</b>
Table does not move	No power supply	Plug in the power cord if necessary check the connections on the control unit
	None or a loose connection to the drives	Verify the plug connections of the motor cable to the control unit and the drives, respectively establish it.
	No or a loose connection to the handset	Verify the plug connections of the handset to the control unit and the drives, respectively establish it.
	max. lifting capacity is exceeded	Reduce the weight or load on the desktop
	max. Time limit exceeded	Control is activated automatically after about 9 minutes later
	Defective drive	Contact customer service
	Defective control unit	Contact customer service
	Handset is defective	Replace the Handset
Table moves slowly down	Control unit expects new reset	see page 11
Table moves only slowly	max. Lifting capacity is exceeded	Reduce weight
Table moves on one side only briefly and then stops	None or a loose connection to the drives	Verify the plug connections of the motor cable to the control unit and the drives, respectively establish it.
	Defective drive	Contact customer service

## Error Code in the display of the handset (optional)

Display	Source	Remedying
HOT	The control unit monitors the duty cycle (time-controlled) and its max. temperature. A value has been exceeded.	Wait until the "HOT" goes out, then the table is working properly again.
E00	M1 – Internal fault	Unplug! and contact the customer service
E01	M2 – Internal fault	
E02	M3 – Internal fault	
E12	M1 – Defect	Unplug! Correct the external short circuit and / or verify the cable to the drives Take the control unit back in operation.
E13	M2 – Defect	
E14	M3 – Defect	
E24	M1 – Overcurrent	Collision? -> resolve if necessary
E25	M2 – Overcurrent	max. Load exceeded -> remove the load from the table.  If the problem still exists after that, please contact customer service.
E26	M3 – Overcurrent	
E36	M1 – Not connected	Motor not connected Check cable / connector to the drive Reset the table.
E37	M2 – Not connected	
E38	M3 – Not connected	
E48	Overcurrent drive 1	Collision? -> resolve if necessary
E49	Overcurrent drive 2	max. Load exceeded -> remove the load from the table.
E55	Drive 1 – Synchronization is lost	Motor position to different, if necessary reduce the load on the table.  Reset the table.
E56	Drive 2 – Synchronization is lost	
E60	Collision identified	Optional ISP function. Remove source.
E61	Drive replaced	The Connection to the drive is interrupted or a new drive is connected. Reset the table.



Display	Source	Remedying
E62	Overcurrent	Control unit - Overall current overload
E63	External sensor or the cable is not connected	External sensor or other add-on module is not connected. Check the plug connection if necessary
E64	Authentication error	Reset the table.
E65	Overcurrent or short circuit	If errors occur during the drive.  Collision? -> resolve if necessary  max. Load exceeded -> remove the load from the table.
E67	Overvoltage	Power or power supply fluctuations? Verify that the correct power voltage/frequency is applied.
E70	Change of the drive configuration	Unplug the system and wait 5 Min. seconds, then reset table.
E81	Internal fault	Memory or reset fault? Reset the table (for service: If necessary import set of parameters new) .

If it is not possible to resolve an error as described, disconnect the power cord, wait a few minutes and reset the table again!

If the error still occurs, remove the table from power and contact Customer Support.

(Error Code list is valid from firmware 1.7.5 and higher!)

## Technical Data

### General

Power supply	230 V $\pm$ 10% / 50 Hz
Standby power consumption, primarily no condensation	<0.6 W 0-35°C
Allowed relative humidity (for operation)	5-85% (no condensation)
Allowed relative humidity (for storage)	5-90% (no condensation)
Protection class	I
Maximum duty cycle	10% (2 min. on / 18 min. off)

### 1 Drive with COMPACT-2

Maximum lift capacity	600 N (≈ 60 kg)
Adj. Range, depending on version	View drawing
Maximum Power consumption, Primarily	338 W

### 2 Gear Drive with COMPACT-2

Maximum lift capacity	750 N (≈ 75 kg)
Adj. Range, depending on version	View drawing
Maximum Power consumption, Primarily	338 W

### 3 Gear Drive with COMPACT-2

Maximum lift capacity	750 N (≈ 75 kg)
Adj. Range, depending on version	View drawing
Maximum Power consumption, Primarily	422 W

## Tests and Certifications

The drive system is tested according to the following standards:

Electromagnetic compatibility (EMC Directive 2004/108/EC)

EN 61000-6-2:2005                      Electromagnetic compatibility (EMC)

EN 61000-6-3:2007                      Electromagnetic compatibility (EMC)

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

EN 50366:2003 + A1:2006              Electrical apparatus for household and similar purposes  
Electromagnetic Fields

EN 60335-1:2002 + A1:2004           Safety of electrical equipment for  
+ A11:2004 + A12:2006 + A2:2006 Household and similar purposes