VERSION 2 USER MANUAL

ERGO KIT TEK01 SERIES





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Preface

We are delighted that you have chosen products from TIMOTION. Our ergonomic height adjustable workstation systems are high-tech products based on many years of experience in the manufacture and development of electric linear actuators, electronic control boxes, hand controls, and power supplies. We are constantly improving our products to meet and exceed customer expectations.

This User Guide will tell you how to install, use and maintain your Ergo Motion products. We are sure these products will provide you with many years of reliable operation. All TiMOTION products undergo rigorous functionality and quality testing prior to shipping. You are always welcome to contact our local corporate offices or sales agents for any questions you may have. It is our goal and pleasure to assist you.

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1. Important Information

- (1) Always make sure all screws are tightened before use of the frame kit, also after a period of use.
- (2) Duty cycle of the TEK ergo desk kit is 10%, max. 2 minutes operating / min. 18 minutes stop.
- (3) Maximum load of the TEK ergo desk kit is 120kg, equally divided. Ensure the loading on each column is less than 80kg. Otherwise it might cause permanent damage to the column(s) during operation.
- (4) When the motor cable is connected to the control box, the columns can maintain an adequate locking force up to 120kg load including the tabletop. However, when the cable is damaged or is disconnected from the control box, it will cause the desk to gradually slide to the bottom, if the load on either column is greater than 60kg.
- (5) Make sure that no persons or items will collide with the TEK ergo desk kit, when adjusting upwards and downwards.
- (6) Damaged cords must be replaced before connecting the power cable.
- (7) Keep at least 20mm of free space around the entire desk assembly (combined frame and tabletop).
- (8) Do not operate the system if the ambient temperature is outside of the specified limits.
- (9) The ergonomic frame kit is not intended to lift persons.
- (10) Do not lift the columns before the assembly is completed.

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2. Safety Instructions

2.1 Before Installation / Reinstallation

- (1) Make sure that the appliance is being installed as described under the Connection section, page 7, within this user guide. When installing and using electrical equipment, basic safety precautions should always be followed to avoid a risk of fire, electric shock, or injury to persons.
- (2) If the power cord is damaged, it must be replaced by the manufacturer, its service agent or a similar qualified person in order to avoid hazard.
- (3) Not to be opened by unauthorized personnel (control box, motor housing, hand control)
- (4) RISK OF ELECTRIC SHOCK. Insert the plug only into proper socket only. If it does not fit, contact a qualified electrician to install the proper outlet. Do not change the plug in any way.
- (5) The control box is only used for the specified linear actuators, do not use appliances not recommended by the manufacturer.
- (6) Never drop or insert any object into any opening.
- (7) Make sure the correct tools and assembly parts are used when mounting the system.
- (8) Be aware that the control box can only be connected to the voltage printed on the label.
- (9) Before moving the frame, remove the plug from main power supply.

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2.2 During Operation

- (1) Not intended for use by children.
- (2) For indoor use only.
- (3) Do not use table when the load exceeds the rating.
- (4) Always unplug the table from the electrical outlet before cleaning.
- (5) Unplug from outlet before installing or removing parts.
- (6) Keep the cord away from heated surfaces.
- (7) Do not operate where aerosol (spray) products are being used or where oxygen is being administered.
- (8) To properly disconnect the system, lower table to minimum height, then remove plug from outlet.
- (9) If table is heavily loaded, keeps the load away from edges to prevent the possibility of the table tipping over.
- (10) Any servicing is to be performed by an authorized service representative.
- (11) Make sure that no persons or items will collide with the table, when adjusting upwards and downwards.
- (12) If the control box or the columns make any unusual noises or smells, immediately unplug table from power supply.

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2.3 Connection

Before the control box is connected to the main power supply, the individual parts of this table must be connected as described below:

Step 1.

Motors (legs) must be connected with control box using enclosed cables.

Step 2.

Hand control must be connected with control box.

Step 3.

Control box must be connected to power supply.

Make sure to place the table on an equal leveled floor, or use adjusting screws to level the frame. Make sure that all cords are long enough when the frame is in both highest and lowest positions. Control Box is normally pre-assembled between the outer pipes, underneath the tabletop. The hand control is normally mounted underneath or within the tabletop in a reachable distance for the user.

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3. Technical Specifications

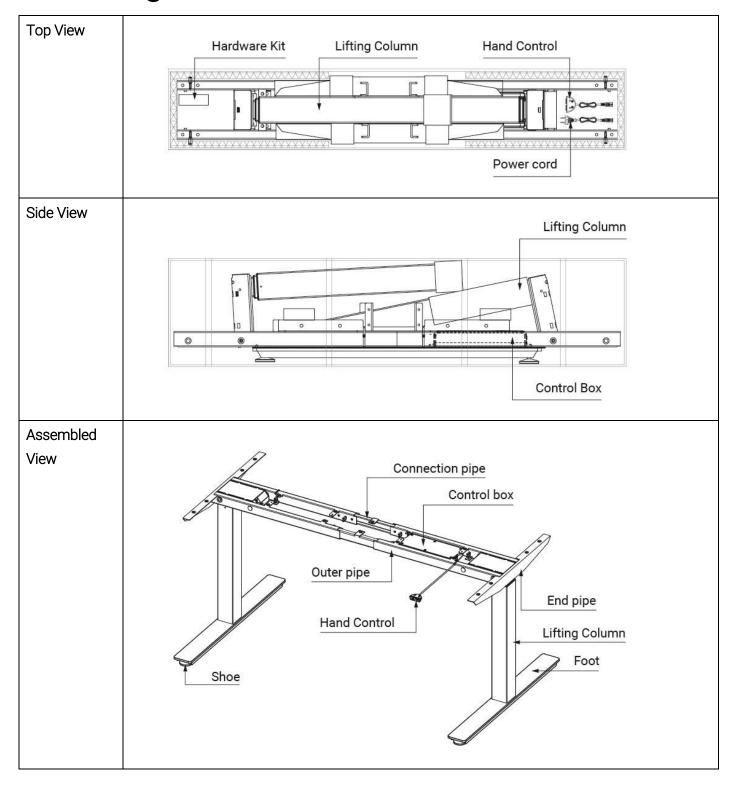
Item		TEK01 Series	
Leg		2	
Frame orientation		Rectangular	
Max. lifting capacity (Including tabletop)	Max. lifting capacity (Including tabletop)		
Height adjustable range*	2 part column	680-1180mm	
(Min. to max.; excluding tabletop)	3 part column	630-1280mm	
	3 part column (BIFMA)	600-1260mm	
Speed (Depending on the load and colum	30-40mm/s		
Desk width	1165-1965mm		
	1050-1850mm		
Noise level		39 dB	
Duty cycle		10; max. 2 min. run / 18 min. stop	
Ambient temperature		0°∼ 45° C	

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4.TEK01 Introduction

4.1 Ergo Kit Contents



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• Chart A: List of package contents

No.	Description	Drawing	Q'ty
1	Pre-assembled desk frame (including 2 lifting columns and 1 control box)		1 set
2	End pipe		2 pcs
3	Foot		2 pcs
4	Ergo motion control (multiple options)		1 pc
5	Power cord		1 pc
6	Hardware kit	Refer to chart B for more details	1 set

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• Chart B: Hardware kit

No.	Description	Drawing	Q'ty (pcs)
A	Foot bolt		8
В	Cap		4
С	Tabletop screw	XIIIIII	14
D	Control screw (*Note 1)	A STATE OF THE PARTY OF THE PAR	2
Е	Allen key (Hex key)		1

Note 1: The number D refers to the screws only for hand controls like TH37, TFH8, or TDH5. The screw dimension may be slightly different if you use the other hand control models.

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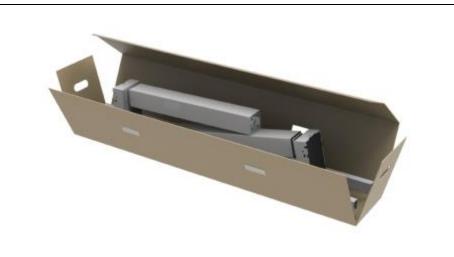
4.2 Installation Instructions

This manual is based on the columns-TL4 and hand control-TH37.

Step 1:

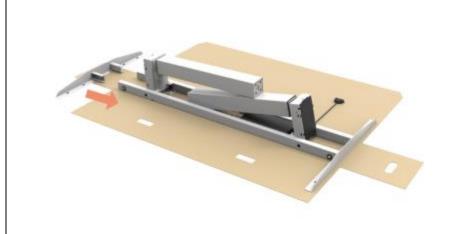
Before assembling, open the carton on a flat floor or work area.

Place desk frame on the flat carton.



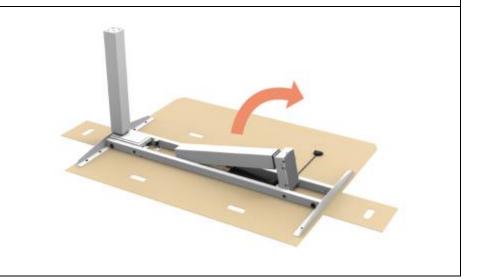
Step 2:

Insert end pipes into ends of the desk frame.



Step 2.1:

Align legs into a vertically upright position.



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Step 3:

Fasten the end pipe brackets and lifting columns into place using bolts (8pcs) that were previously embedded into the desk frame.



Step 4:

Attach feet to the lifting columns using bolts.



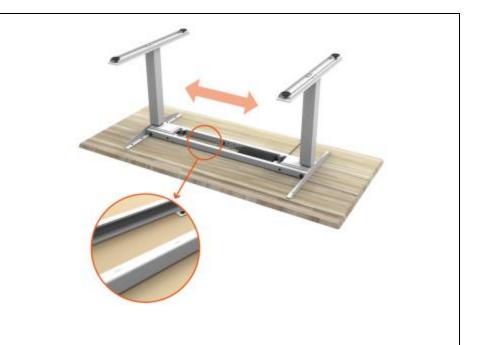
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Step 5:

Move the assembled desk frame to the tabletop. Adjust the table frame to achieve appropriate span between lifting columns. Options are clearly marked on the frame (as shown in circled part of diagram).

Note: Recommended frame span is 50mm less than width of tabletop. For example, a 1400mm tabletop should have a frame width of 1350mm.



Step 5.1:

Once the desired frame width has been set, use the supplied Allen key to tighten the set screws (8pcs total).

Note: Set screws are preinstalled into the frame instead of being included within the provided hardware kit.

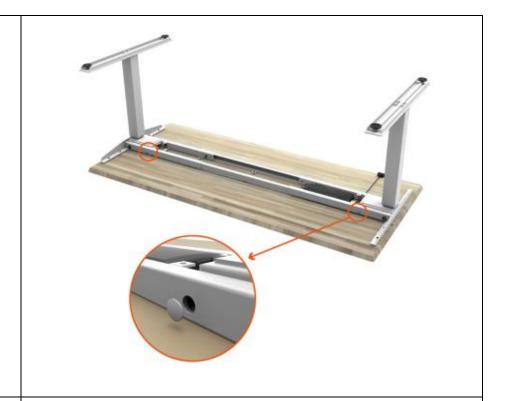


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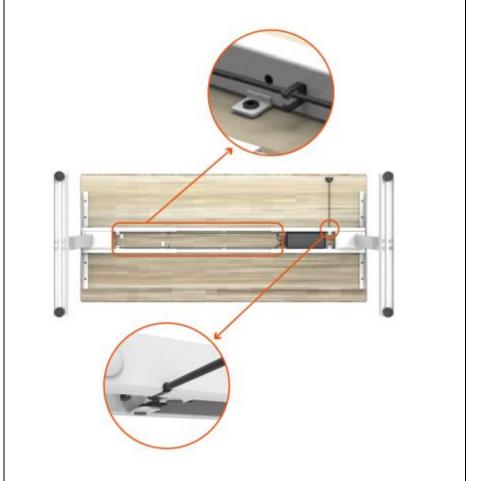
Step 5.2:

Put caps into the holes.



Step 6:

Plug the power cord and hand control to the control box. Run the wire through the cable management clips. Then, run the hand control wire through the inlet hole.



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Step 7:

Fasten the control and assembled desk frame to the tabletop with screws. Then, tighten the control screws as shown in circled.

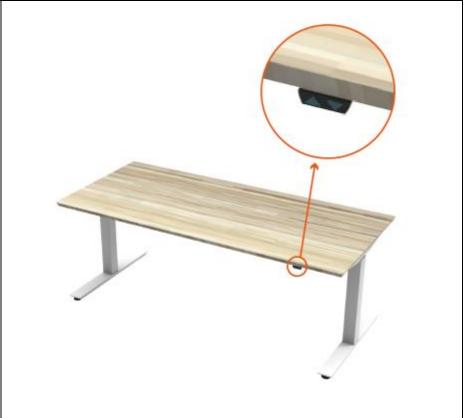


Step 8:

Flip over the desk and reset control box before adjusting.

Simultaneously press and hold the

▲ and ▼ buttons together for 3 to 5 seconds until you hear a beep.



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4.3 Getting Started

4.3.1 Resetting

- (1) Press and hold the ▲ and ▼ buttons on the hand control at the same time for 3 seconds.
- (2) Continue holding the buttons until both legs reach the lowest position.
- (3) When finished resetting, the hand control will beep once and the buttons can released.

4.3.2 Operation

- (13) Press and hold the **\(\Lambda \)** button to raise the desk.
- (14) Press and hold the ▼ button to lower the desk.

Note: For controls with memory functionality, please contact TiMOTION for the respective user guides.

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4.4 Anti-Collision

The control boxes for TiMOTION's Ergo Motion products are programmed with an anti-collision function which may reduce damage to the desk in the event of collision with a firm object. When the desk is raised / lowered, the power consumption of each column is monitored and compared to a software algorithm.

If the power consumption for the columns is increased relative to a predetermined value, the system assumes there is an obstruction (collision). Once an obstruction is detected, the desk will stop and then move in the opposite direction. This opposite movement is automatic and continues for 40 mm without activating the hand control.

The sensitivity of this anti-collision is different during upward or downward motion. The anti-collision activates with a force of approximately + 25 kg upwards and downwards the anti-collision activates with a force of approximately + 35 kg + weight of the desktop and what is placed on the desktop.

Situations where the anti-collision is not activated:

- If the collision occurs during the reset operation.
- If the collision occurs within the first 2 seconds or after de-activating the handset.
- If the collision occurs downwards and the load on the desk frame is less than 40kg.
- If the collision is not with a solid object.

4.5 Energy Preserving Feature

(Optional)

When the table is left in position for more than 30 seconds, it will go into standby mode in order to reduce unneeded energy consumption. When adjusting your table after a dormant period, hold the up or down button to take table out of standby mode.

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5. Disposal Guidance

TiMOTION's TEK series may be disposed by dividing components into different waste groups for recycling or combustion. We recommend the TEK series is disassembled as much as possible before disposal. The main groups to sort for waste are: Metal, plastic, cable scrap, combustible material and collection for recoverable resources.

Some of these main groups can be sub-divided into groups e.g. metal can be divided into steel and aluminum or plastic can be divided into ABS and PP. All plastic parts > 50g are provided with an internal code for plastic types.

The example below shows the recycling groups in which the different components of the TEK series should be placed into:

Products	Components	Recycling group
Columns	Spindle and motor	Scrap
	Plastic housing	Plastic recycling or combustion
	Cable	Cable scrap or combustion
	PCB boards	Electronics scrap
Control box	Spindle and motor	Electronics scrap
	Plastic housing	Plastic recycling or combustion
	Cable	Cable scrap or combustion
	Transformer	Metal scrap
Controls	Plastic housing	Plastic recycling or combustion
	Cable	Cable scrap or combustion
	PCB boards	Electronics scrap

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6. Troubleshooting

Problem	Observe	Solutions	
The frame will not move.	• Is the power cable connected to the main power supply with correct voltage?	Connect plug to main power supply to make sure the voltage is ok.	
	 Make sure that all plugs are mounted correctly in the control box and to the legs. 	Check all connections.	
	One or more legs/cables are defective.	 Perform reset and move table upwards. If the table will not move upwards after reset is performed, it is defective. 	
	 Look for visible damages on cables, control box and legs. 	 Damaged parts must be exchanged – contact TiMOTION. 	
The frame operates irregularly or is tilted.	Visual observation.	Perform reset.	
The frame stops and can only move downwards.	• Is the frame in the highest position?	When the frame has reached the maximum height, it will only move downwards.	
	The frame could be overloaded.	Remove some of the load and perform again.	
The frame will only move downwards even though frame is not overloaded.	Visual observation.	Perform reset.	
The frame always stops at the same position, before reaching maximum height.	 Has the system been programmed to this specific height? 	Perform reset.	
Not all legs move when adjusting the frame downwards.	The leg that does not move could be defective or the cable connection for the leg	Check all connections, and then perform reset. If the leg will not move after reset it is	

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could be defective.		defective.
	•	Damaged parts must be
		exchanged - contact
		TIMOTION.

If the above solutions are not effective, please contact TiMOTION for further assistance.

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