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Critical Environment Solutions

Quick-Start Operating Guide *Document No. 1800-28*

ErgoHeight™ Work Stations

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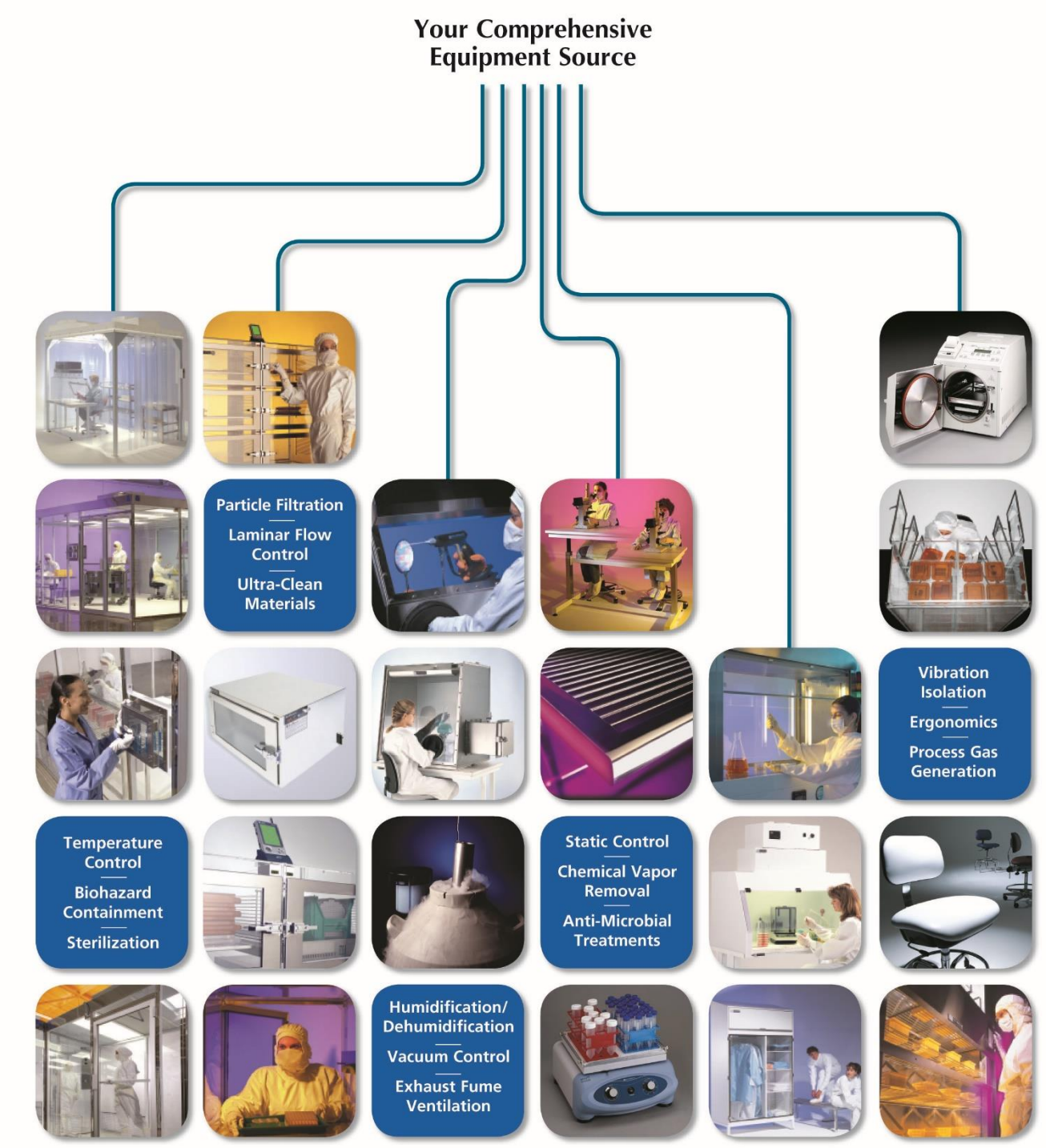

Quick-Start Operating Guide

ErgoHeight™ Work Stations

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Safety Notice

A thorough familiarity with all operating guidelines is essential to safe operation of the product. Failure to observe safety precautions could result in poor performance, damage to the system or other property, or serious bodily injury or death.

The following symbols are intended to call your attention to two levels of hazard involved in operation:

CAUTION — **Cautions are used when failure to observe instructions could result in significant damage to equipment.**

WARNING — **Warnings are used when failure to observe instructions or precautions could result in injury or death.**

The information presented here is subject to change without notice.

1. Introduction

This manual provides information on installing and operating your Terra ErgoHeight™ Work Station. By studying this document carefully, you can be assured of a long, efficient service life from the unit.

For operation of the Vibration-Free ErgoHeight™ Work Station, refer also to QuickStart Document No. 1800-62.

2. Description

Terra's ErgoHeight™ Auto-Adjusting Cleanroom Work Station can be easily raised and lowered while loaded, to comfortably accommodate people of differing heights.

The ErgoHeight table features two lifting columns, each with a high-torque, low-RPM motor. Each lifter is rated for 440 pounds of load, for a total net load of 880 pounds (including the weight of the tabletop). The workstation load capacity assumes a uniform weight distribution across the tabletop.

WARNING: Loads over 440 pounds that are not uniformly distributed risk performance issues and/or damage to the lifting device.

A control panel mounted on the front of the bench top frame contains all necessary switches for up/down table motion and for leveling the work surface. This capability makes the bench ideal for use with process equipment that requires height adjustment to suit individual operators, as well as for leveling the system or interfacing it with adjacent operations. Standard height range is 28" to 48" floor-to-top.

All parts are designed for cleanroom compatibility. The thermally protected lifters are completely sealed inside the legs to ensure particle retention.

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3. Installation

Carefully unpack all system components and check for missing or damaged parts. Any damage should be reported immediately to the shipping company.

The ErgoHeight™ Auto-Adjusting Work Station is shipped fully assembled, ready for operation. The front control panel is divided into operation and memory drive functions:

A. Store Memory Button
B. Memory 1 Setting
C. Memory 2 Setting
D. Memory 3 Setting
E. Memory 4 Setting
F. Activate Up motion
G. Activate Down motion

To Initialize and Level the System

Warning: When initializing and leveling the table, please pay special attention to whether there are people or objects under the table that may cause damage or injury!

1. Connect the bench to a grounded, 115VAC, 50/60Hz power source (international models connect to 230VAC, 50Hz power)
2. Lower the table to the bottom position by pressing and holding the “Down” arrow button. Once the table reaches the bottom position, continue to hold the down arrow for about 10 seconds until the system resets. While the down arrow is still held, the lifting columns will rise by a very small amount. Once the display “rSt” disappears, the reset is over.
3. Then, raise the bench top to the desired working height by pressing the “Up” arrow button.

To Store Memory Positions,

The ErgoHeight™ can store four memory positions.

1. Raise or lower the ErgoHeight™ work surface to the desired position.
2. Press the “S” (Store Memory) button.
3. Press the desired number (1-4) to assign the height to memory.
4. Repeat this sequence for the remaining memory positions.

Note: To overwrite the memory positions, repeat steps listed above.

To Retrieve Memory Positions,

1. Press one of the numbers (1-4) for the desired memory position.
2. The ErgoHeight™ will bring the work surface to the position specified for the memory setting.

Note: If the ErgoHeight™ displays ERR or ABS instead of the height, hold the down arrow button until the ErgoHeight™ is at the lowest position. This should take about 10 seconds, and the screen will display 0.00.

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4. Maintenance and Cleaning

Wipe surfaces clean of dust and dirt regularly to ensure cleanroom compatibility. Use a clean, non-woven wipe for best results. Cleaners and disinfectants must not be highly alkaline or acidic (pH value between 6 – 8).

Additional resources:

Stainless steel cleaning guidelines
Powder-coated steel data sheet
Chemical compatibility chart

5. Specifications

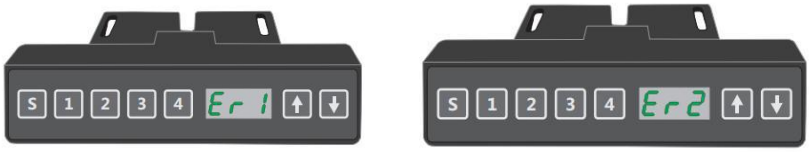
Dimensions: 30" or 34"D x 36", 48", 60" or 72"W
Height Range: 28" to 48", floor-to-top (20" of travel)

Lifters

Weight Capacity:	440lb per lifter
Protection:	Class IP 20
Duty Cycle:	10% ~ 6 min. per hour, or 2 minutes at continuous use at full load
Max. Speed:	43 mm/sec.
Current:	3.5 amp. at max. thrust per lifter (typical)
Power:	115VAC, 50/60 Hz (230VAC, 50Hz available)
Temperature:	+5°C to +40°C ambient

6. Troubleshooting

a. Fault code ERR, Er1, Er2:



When the hand controller displays “ERR” or “Er1”, it represents error 1. When this code appears, it indicates that there is a problem with the M1 interface channel (see the picture below). The possible problems include not correctly connecting the matching motor, not correctly connecting the compatible hall signal board, connecting wire disconnection etc.

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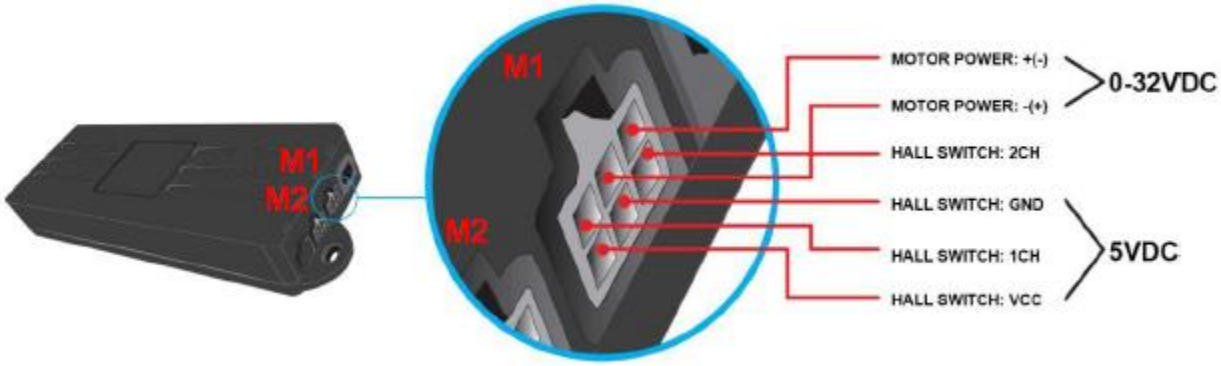

After the problem is eliminated, press and hold the "↓" for more than three seconds to eliminate the fault display and the whole machine returns to the reset state. “Er2” would be the same, as “Er1” except it would be applied to M2.

b. System prompt to reset:

When it displays “rSt,” or “RSF” manual operation is required to reset the entire system. See d. for further direction.

c. System forced reset:

When the height displayed on the hand controller is at the minimum value, press and hold the down arrow for more than 4 seconds. After the hand controller displays “rSt” or “RSF”, let go and then the system can be reset. See d. for further direction.

d. Reset method:

Warning: When resetting, please pay special attention to whether there are people or objects under the table that may cause damage or injury!

When the hand controller displays “rSt”, press and hold the down arrow and do not let go. Both of the lifts will begin to go down at the same speed until it reaches its limits.

If they are offset, one will reach first and wait until the other one reaches its limit.

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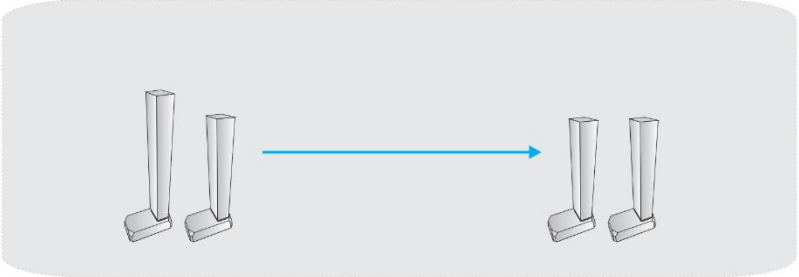


Once both lifts are at its low, it will go up a bit at the same time. Once the display "rSt" disappears, the reset is over.

e. When the motors continue to operate after releasing:

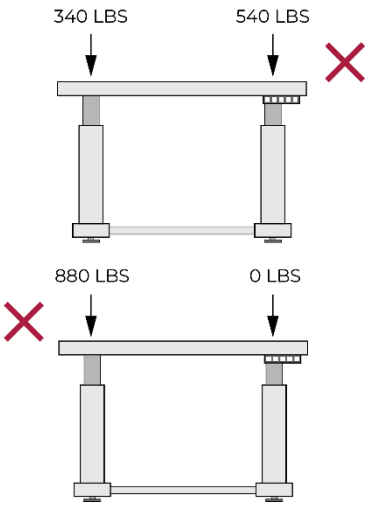
That means the system is in testing mode and it needs to convert to working mode. In testing mode, the motors will stay in motion, even if it reaches desired height. In working mode, it will stop when the table reaches the desired height. To change from the testing mode to working mode, long press on "4" would cause the screen to show "R02," representing the testing mode. Press "down" until the screen goes to "R00," the working mode. Reset the screen by long pressing "4."

f. Slow rising and slow falling:

The start and stop of the lifters in all modes adopts the method of gradual speed change, that is, slow rise and slow fall. In order to avoid a relatively large impact on the desktop when starting and stopping.

g. Slowing of lifters, or lifters not operating:

The lifts are designed in such way that at the beginning and the end of the motion, it will slow down. For a newer product, there will be resistance between the case and the moving part. This will cause the product to move at a slower rate for the time being, and the "down" will move slower than "up" in this case. After a time of use, both lifters should move at a normal rate.



In cases where the lifting columns stop operating, or work slower than usual, check the weight load and weight distribution. The table assembly is rated for 880lb distributed load (440lb for each lifting column). If the load is not evenly distributed and one leg is carrying over 440lbs, the performance of the table may drastically decrease.

Resistance may also occur if too much weight focuses on the center of the table, between the two lifting columns. This may cause the lifting columns to work in a non-parallel way, thus causing resistance, and both ups and downs will become a little hard.

7. Warranty

For more information about our warranty system, please visit our company's warranty website.

Thank you for choosing
Terra Universal!