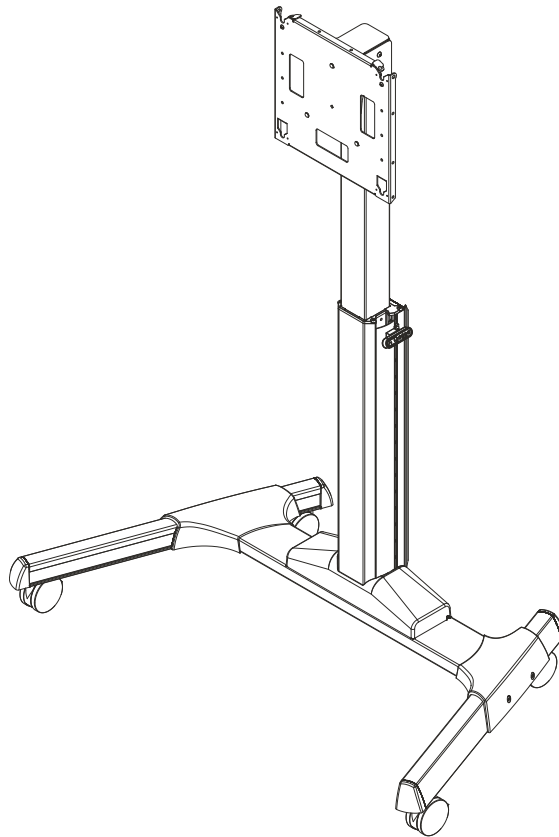


---

# INSTALLATION INSTRUCTIONS

---



---

## Electrical Height Adjustable Video Cart

---



A brand of  legrand®

# LPE1U

## DISCLAIMER

Legrand | AV and its affiliated corporations and subsidiaries (collectively "Legrand | AV"), intend to make this manual accurate and complete. However, Legrand | AV makes no claim that the information contained herein covers all details, conditions or variations, nor does it provide for every possible contingency in connection with the installation or use of this product. The information contained in this document is subject to change without notice or obligation of any kind. Legrand | AV makes no representation of warranty, expressed or implied, regarding the information contained herein. Legrand | AV assumes no responsibility for accuracy, completeness or sufficiency of the information contained in this document.

Chief® is a registered trademark of Legrand AV Inc.

## DEFINITIONS

 **WARNING** alerts you to the possibility of serious injury or death if you do not follow the instructions.

 **CAUTION** alerts you to the possibility of damage or destruction of equipment if you do not follow the corresponding instructions.

 **DANGER** alerts you to an imminently hazardous situation which, if not avoided, will result in death or serious injury.

**MOUNTING SYSTEM:** A MOUNTING SYSTEM is the primary Chief product to which an accessory and/or component is attached.

**ACCESSORY:** AN ACCESSORY is the secondary Chief product which is attached to a primary Chief product, and may have a component attached or setting on it.

**COMPONENT:** A COMPONENT is an audiovisual item designed to be attached or resting on an accessory or mounting system such as a video camera, CPU, screen, display, projector, etc.

## IMPORTANT SAFETY INSTRUCTIONS

**WARNING:** FAILURE TO READ AND FOLLOW THE FOLLOWING INSTRUCTIONS CAN RESULT IN SERIOUS PERSONAL INJURY, DAMAGE TO EQUIPMENT OR VOIDING OF FACTORY WARRANTY. It is the installer's responsibility to make sure all components are properly assembled and installed using the instructions provided.

When using an electrical mounting system, basic precautions should always be followed, including the following:

**READ ALL INSTRUCTIONS BEFORE USING THIS PRODUCT!!!!**

 **DANGER:** TO REDUCE THE RISK OF ELECTRIC SHOCK:

1. Always turn off power at source before cleaning.

 **WARNING:** TO REDUCE THE RISK OF BURNS, FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS:

1. Unplug from outlet before putting on or taking off parts.
2. Close supervision is necessary when this furnishing is used by, or near children, invalids, or disabled persons.
3. Use this furnishing only for its intended use as described in these instructions. Do not use attachments not recommended by the manufacturer.
4. Never operate this mounting system if it has a damaged cord or plug, if it is not working properly, if it has been dropped or damaged, or dropped into water. Return the mounting system to a service center for examination and repair.
5. Keep the cord away from heated surfaces.
6. Never operate the furnishing with the air openings blocked. Keep the air openings free of lint, hair, and the like.
7. Never drop or insert any object into any opening.
8. Do not use outdoors.
9. Do not operate where aerosol (spray) products are being used or where oxygen is being administered.
10. To disconnect, turn all controls to the off position, then remove plug from outlet.
11. For loading always put heavier items at the bottom and not near the top in order to help prevent the possibility of the furnishing tipping over.

 **WARNING:** Exceeding the weight capacity can result in serious personal injury or damage to equipment! It is the installer's responsibility to make sure the weight of all components attached to the LPE1U does not exceed 200 lbs (90.7 kg).

 **WARNING:** Use this mounting system only for its intended use as described in these instructions. Do not use attachments not recommended by the manufacturer.

 **WARNING:** Never operate this mounting system if it is damaged. Return the mounting system to a service center for examination and repair.

 **WARNING:** RISK OF SERIOUS INJURY OR DEATH! Risk of death or serious injury may occur when children climb on audio and/or video equipment furniture. A remote control or toys placed on the furnishing may encourage a child to climb on the furnishing and as a result the furnishing may tip over on to the child.

**⚠ WARNING:** RISK OF SERIOUS INJURY OR DEATH! Relocating audio and/or video equipment to furniture not specifically designed to support audio and/or video equipment may result in death or serious injury due to the furnishing collapsing or overturning onto a child.

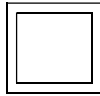
**NOTE:** The LPE1U cart has no user serviceable parts.

**NOTE:** The LPE1U cart can support screen sizes up to a maximum of 86".

**NOTE:** The LPE1U cart is intended for Institutional Use.

**NOTE:** To reduce the risk of electric shock, this furnishing has a polarized plug (one blade is wider than the other). This plug will fit in a polarized outlet only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install the proper outlet. Do not change the plug in any way.

**NOTE:** This product is a double-insulated, cord-connected product and must be serviced accordingly. In a double-insulated product, two systems of insulation are provided instead of grounding. No grounding means for grounding to be added to the product. Servicing a double-insulated product requires extreme care and knowledge of the system, and is to be done only by qualified service personnel. Replacement parts for a double-insulated product must be identical to the parts they replace. A double-insulated product is marked with the symbol (square within a square)



different from that to which the receiver is connected.

- Consult the dealer or an experienced radio/TV technician for help.

**⚠ CAUTION:** Changes or modifications to this unit not expressly approved by the manufacturer can void the units FCC compliance rating and make the unit illegal to operate.

Responsible Party:

Legrand | AV  
6436 City West Parkway  
Eden Prairie, MN 55344  
866-977-3901  
av.support@legrand.com

CAN ICES-3 (B)/NMB-3(B)

**--SAVE THESE INSTRUCTIONS--**

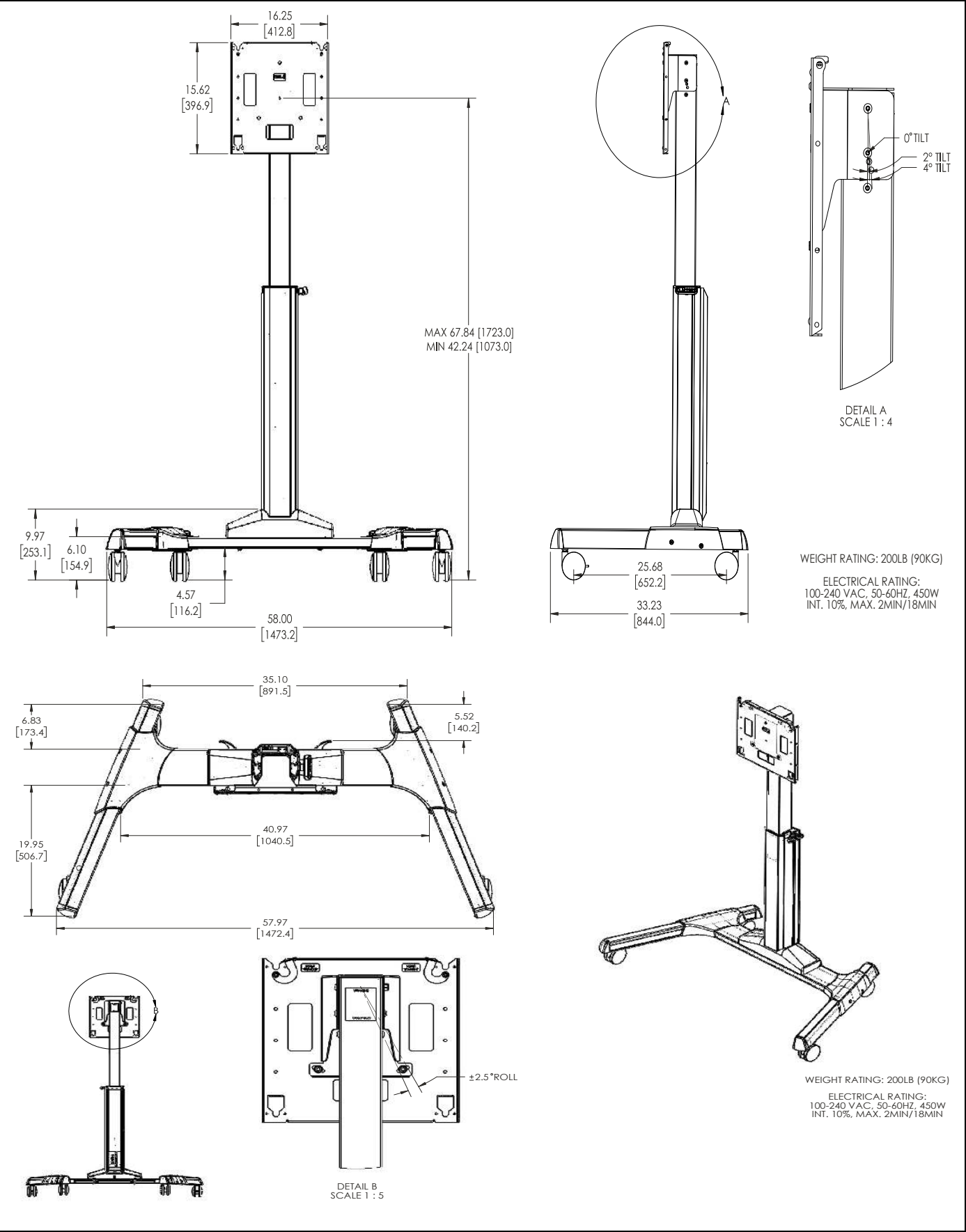
### Electrical Specifications

|                          |                                                    |
|--------------------------|----------------------------------------------------|
| Input voltage, frequency | 100-240 V~, 50-60 Hz, 450W                         |
| Duty Cycle               | Intermittent: 10%; max 2 minutes on/18 minutes off |

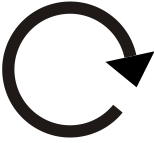
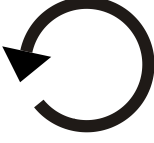
**NOTE:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit

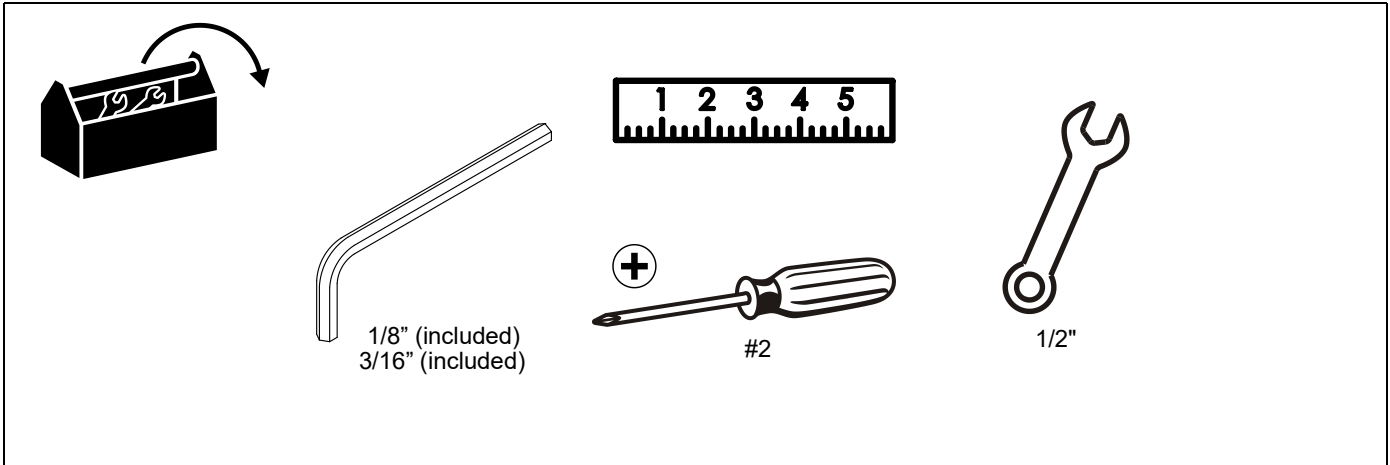
DIMENSIONS



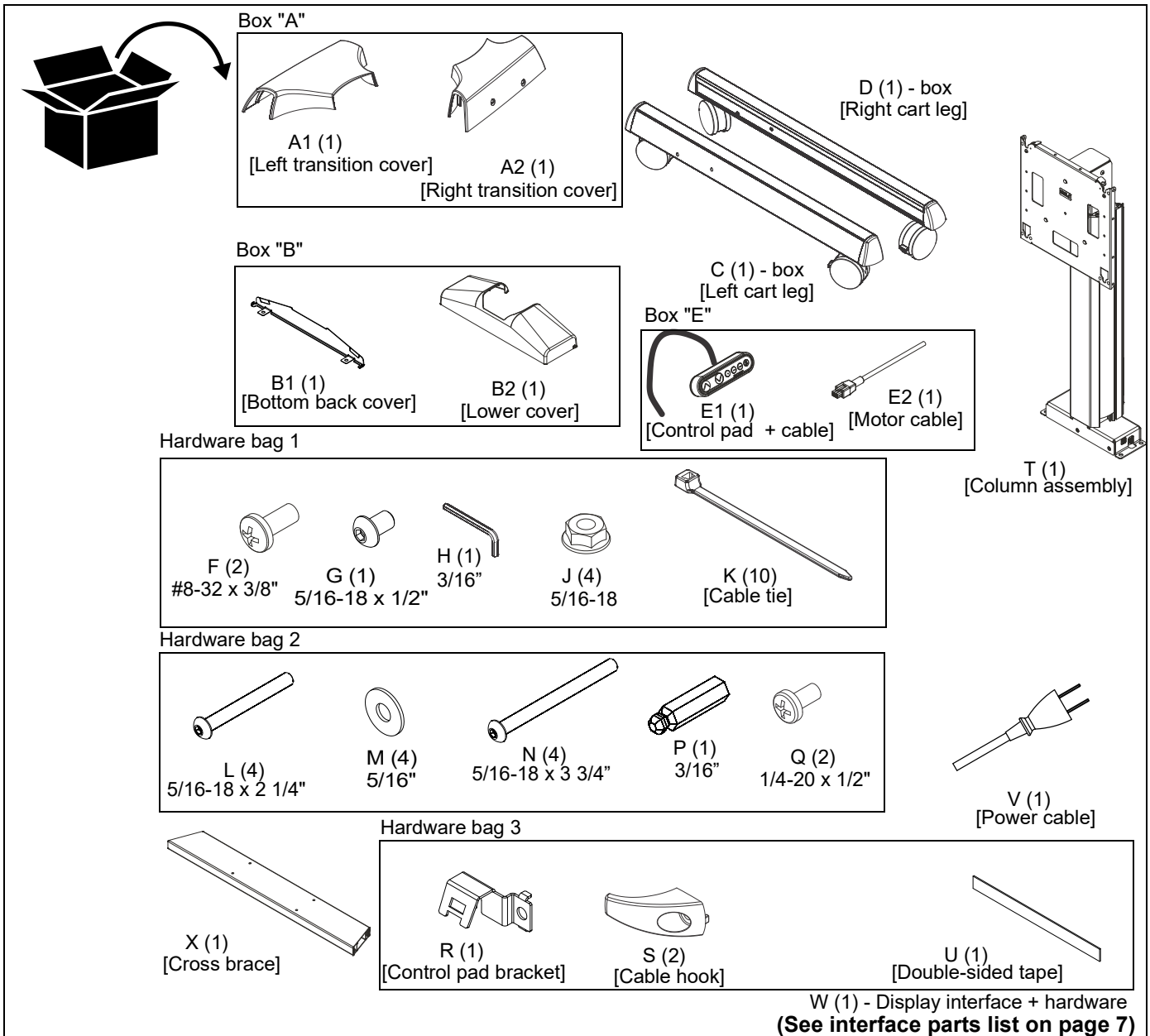
**LEGEND**

|                                                                                     |                                                                                                                                                                                                       |                                                                                      |                                                                                                                                                            |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    | <b>Tighten Fastener</b><br>Apretar elemento de fijación<br>Befestigungsteil festziehen<br>Apertar fixador<br>Serrare il fissaggio<br>Bevestiging vastdraaien<br>Serrez les fixations                  |    | <b>Pencil Mark</b><br>Marcar con lápiz<br>Stiftmarkierung<br>Marcar com lápis<br>Segno a matita<br>Potloodmerkten<br>Marquage au crayon                    |
|    | <b>Loosen Fastener</b><br>Aflojar elemento de fijación<br>Befestigungsteil lösen<br>Desapertar fixador<br>Allentare il fissaggio<br>Bevestiging losdraaien<br>Desserrez les fixations                 |    | <b>Drill Hole</b><br>Perforar<br>Bohrloch<br>Fazer furo<br>Praticare un foro<br>Gat boren<br>Percez un trou                                                |
|   | <b>Phillips Screwdriver</b><br>Destornillador Phillips<br>Kreuzschlitzschraubendreher<br>Chave de fendas Phillips<br>Cacciavite a stella<br>Kruiskopschroevendraaier<br>Tournevis à pointe cruciforme |   | <b>Adjust</b><br>Ajustar<br>Einstellen<br>Ajustar<br>Regolare<br>Afstellen<br>Ajuster                                                                      |
|  | <b>Open-Ended Wrench</b><br>Llave de boca<br>Gabelschlüssel<br>Chave de bocas<br>Chiave a punte aperte<br>Steeksleutel<br>Clé à fourche                                                               |  | <b>Remove</b><br>Quitar<br>Entfernen<br>Remover<br>Rimuovere<br>Verwijderen<br>Retirez                                                                     |
|  | <b>By Hand</b><br>A mano<br>Von Hand<br>Com a mão<br>A mano<br>Met de hand<br>À la main                                                                                                               |  | <b>Optional</b><br>Opcional<br>Optional<br>Opcional<br>Opzionale<br>Optie<br>En option                                                                     |
|  | <b>Hex-Head Wrench</b><br>Llave de cabeza hexagonal<br>Sechskantschlüssel<br>Chave de cabeça sextavada<br>Chiave esagonale<br>Zeskantsleutel<br>Clé à tête hexagonale                                 |  | <b>Security Wrench</b><br>Llave de seguridad<br>Sicherheitsschlüssel<br>Chave de segurança<br>Chiave di sicurezza<br>Veiligheidssleutel<br>Clé de sécurité |

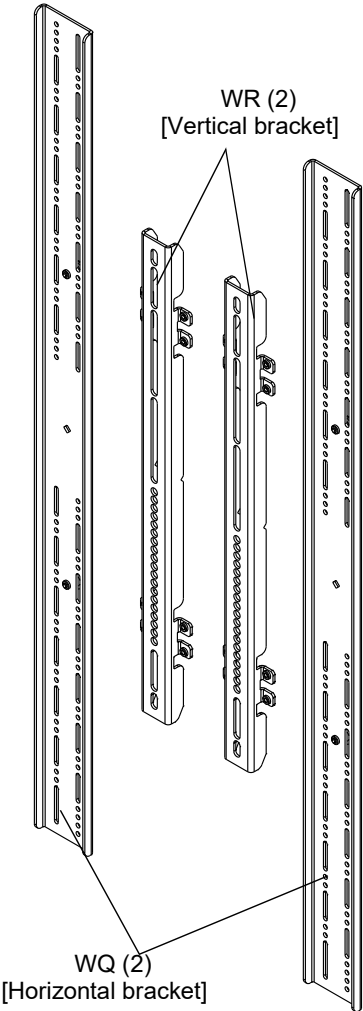
## TOOLS REQUIRED FOR INSTALLATION



## PARTS



PARTS - DISPLAY INTERFACE



WR (2)  
[Vertical bracket]

WQ (2)  
[Horizontal bracket]

Hardware Kit

|                                                                                                                                                                                                                                                           |                                                                                                                            |                                                                                                                            |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|
| <b>Bag A</b><br><br>WA (4)<br>M4 x 12mm                                                                                                                                  | <b>Bag B</b><br><br>WB (4)<br>M4 x 20mm | <b>Bag C</b><br><br>WC (4)<br>M4 x 25mm |
| <b>Bag D</b><br><br>WD (4)<br>M5 x 12mm                                                                                                                                  | <b>Bag E</b><br><br>WE (4)<br>M5 x 20mm | <b>Bag F</b><br><br>WF (4)<br>M5 x 25mm |
| <b>Bag G</b><br><br>WG (4)<br>M6 x 12mm                                                                                                                                  | <b>Bag H</b><br><br>WH (4)<br>M6 x 20mm | <b>Bag I</b><br><br>WI (4)<br>M6 x 25mm |
| <b>Bag J</b><br><br>WJ (4)<br>M8 x 12mm                                                                                                                                  | <b>Bag K</b><br><br>WK (4)<br>M8 x 20mm | <b>Bag L</b><br><br>WL (4)<br>M8 x 30mm |
| <b>Bag M</b><br><br>WMA (8)<br>[Nesting spacer]<br><br>WMB (4)<br>[Universal spacer] |                                                                                                                            |                                                                                                                            |

  
WN (8)  
#10-24 x 1/2"

  
WP (1)  
1/8"

## Assembly And Installation

**IMPORTANT !** : The LPE1U packaging was designed to help make the installation and setup easier. Do NOT remove assembly prior to reading installation instructions!

### Cart Assembly

1. Remove all boxes and smaller parts. Leave foam packaging and other cardboard pieces inside to provide stability while performing Steps 2-4. (See Figure 1)
2. Lift column assembly (T) up by lifting at the bottom of the assembly. (See Figure 1)
3. Carefully set column assembly (T) base on the edge of box. (See Figure 1)

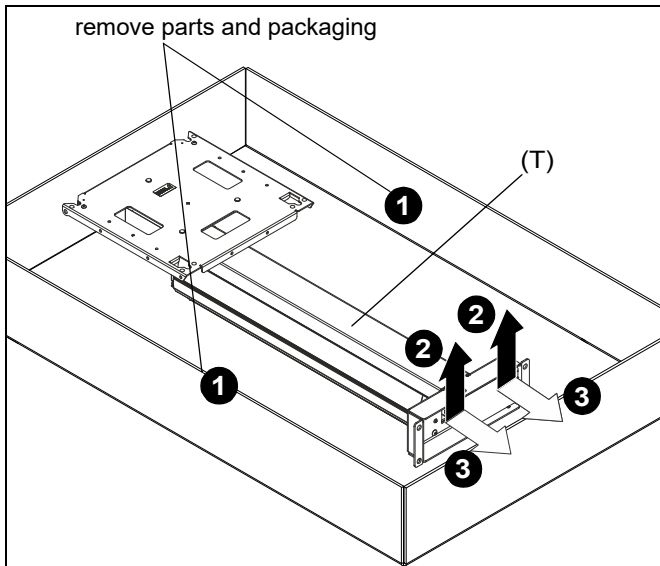


Figure 1

4. Use four 5/16-18 x 2 1/4" button head cap screws (L), 5/16" washers (M) and four 5/16-18" hex nuts (J) to secure cross brace (X) to column assembly (T) and bottom back cover (B1). (See Figure 2)

**NOTE:** Make sure cross brace is positioned in the proper orientation before attaching. There is a "this side up" label on the top. (See Figure 2)

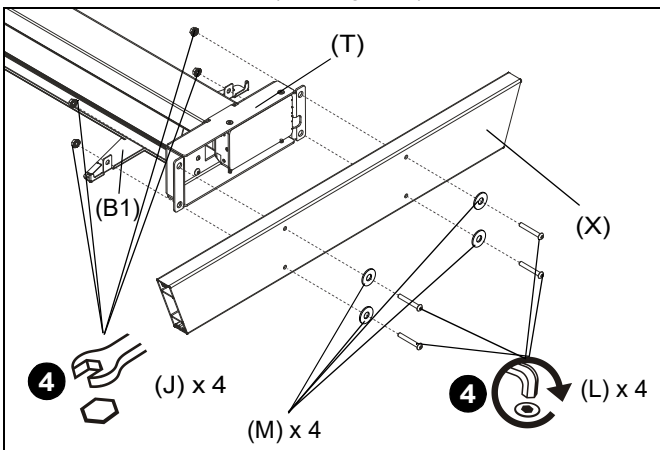


Figure 2

5. Place right transition cover (A2) on right cart leg (D), lining up the holes on the cover with the holes on the leg and cross brace (X). (See Figure 3)
6. Place left transition cover (A1) on left cart leg (C), lining up the holes on the cover with the holes on the leg and cross brace (X). (See Figure 3)



**CAUTION:** Attachment holes may be damaged if a power drill is used to insert button head cap screws. Screws should first be inserted and turned BY HAND with the hex key or with a hand-held screwdriver BEFORE using the hex head drill bit and power drill to complete the attachment.

7. Use four 5/16-18 x 3 3/4" button head cap screws (N) to secure legs (C and D) and covers (A1 and A2) to cross brace (X). (See Figure 3)

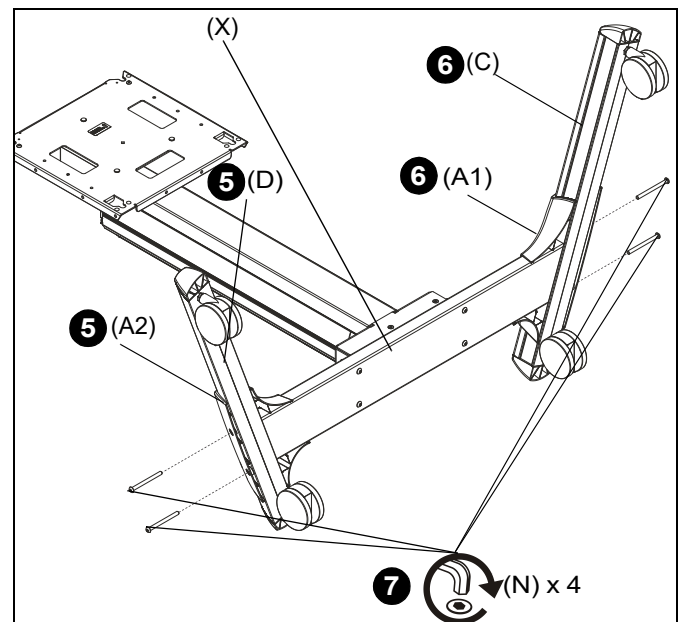


Figure 3

8. Remove cart from box by tipping it from the top onto its wheels. (See Figure 4)
9. Lock wheels to hold cart in position during installation.

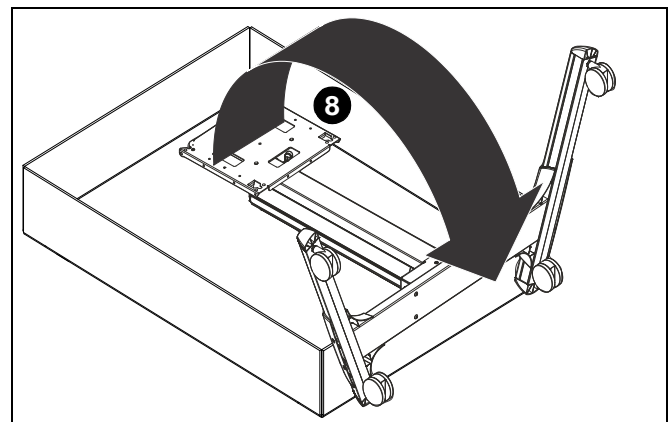


Figure 4

10. Attach control pad bracket (R) to column assembly (T) using 5/16-18 x 1/2" button head cap screw (G). (See Figure 5)

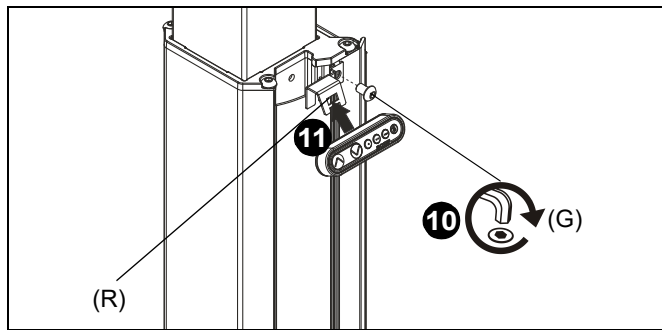


Figure 5

11. Secure control pad (E1) into control pad bracket (R). (See Figure 5)

**NOTE:** Control pad may also be attached to bottom of display using double-sided tape (U) after display has been installed.

12. Route control pad cable (E1) through side channel. (See Figure 6) and (See Figure 7)

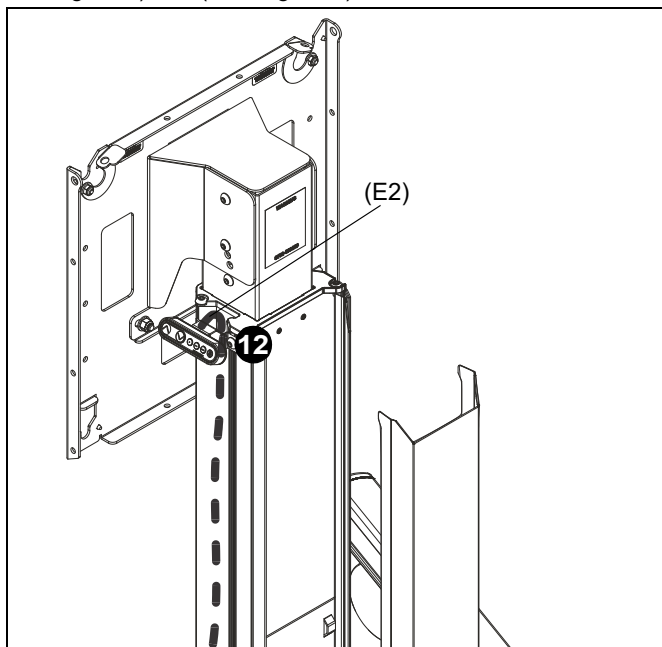


Figure 6

13. Remove back cover to expose control box. (See Figure 7)

14. Route control pad cable (E1) and motor cable (E2) behind back cover plate (B1) and into corresponding ports on control box. (See Figure 7) and (See Figure 8)

- Control pad cable (E1) plugs into port A1.
- Motor cable (E2) plugs into port 1.

**NOTE:** Back cover plate (B1) may need to be pulled back or loosened in order to fit cables behind it.

**NOTE:** Use cable ties (K) and pre-installed cable clips to provide tension relief.

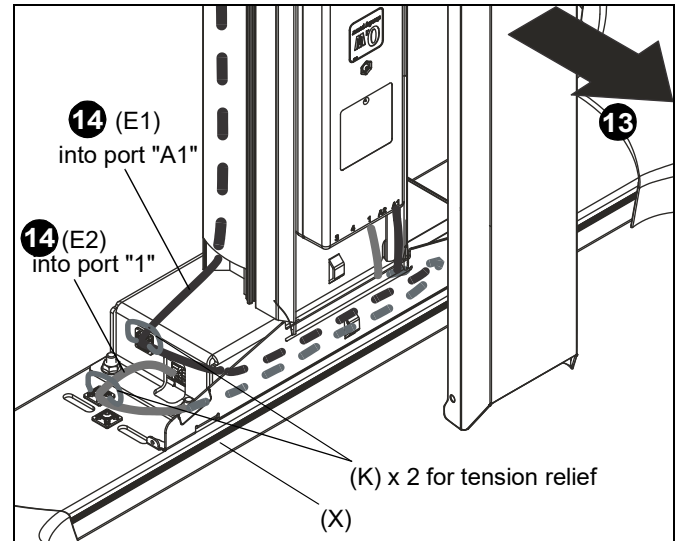


Figure 7

**IMPORTANT !** : Lower cover (B2) should only be installed after all cables have been routed with no load.

15. Slide lower cover (B2) onto column assembly (T) and use two 8-32 x 3/8" Phillips pan machine screws (F) to secure bottom back cover (B1) to lower cover (B2). (See Figure 8)

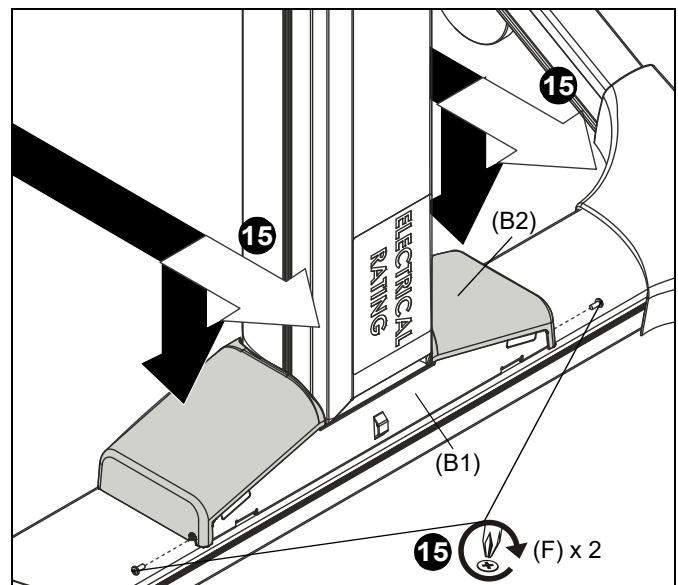
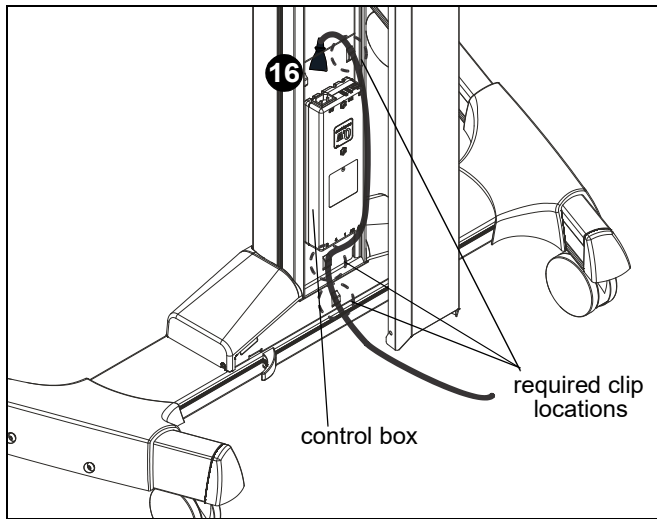


Figure 8

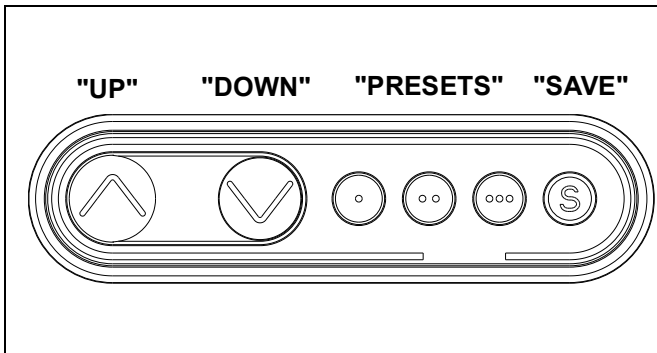
16. Plug in power cable (V) to control box and route along side of control box. Provide strain relief using the cable ties (K) and cable clips. All three cable clips **MUST** be used to prevent cable from rubbing against lower edge of cover! (See Figure 9)



**Figure 9**

17. Plug in power cable (V) to outlet.  
 18. Press and hold "DOWN" button for three seconds to initialize lift mechanism. (See Figure 10)  
 19. Press and hold "UP" button until mount reaches its maximum height. (See Figure 10)

**NOTE:** If lifting mechanism does not function properly refer to "Troubleshooting" Section.

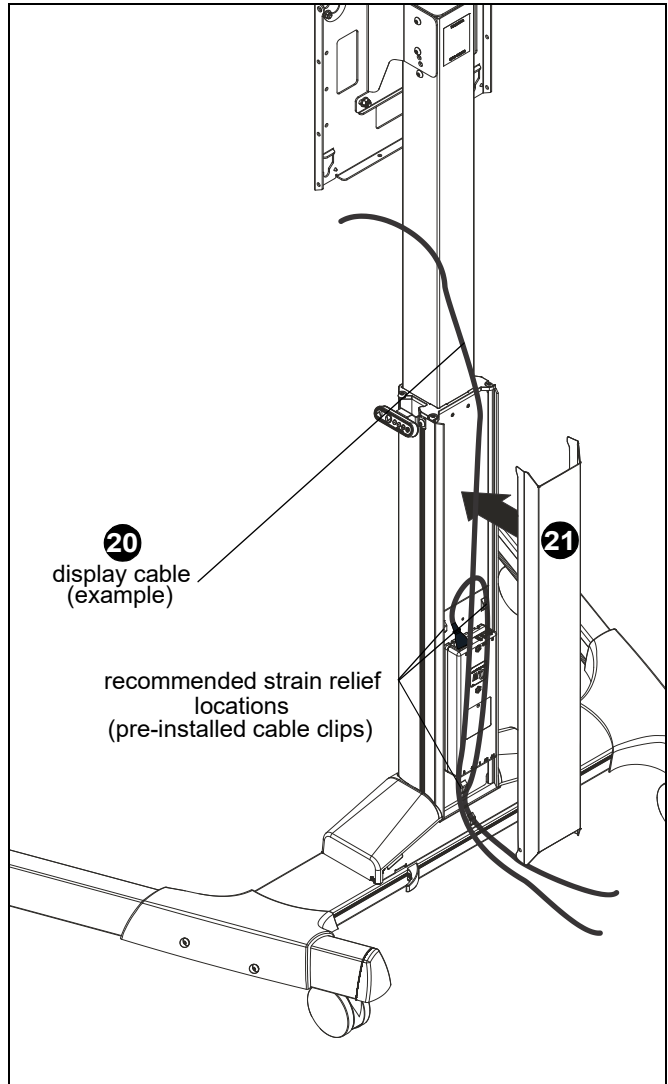


**Figure 10**

20. Attach display and signal cables to power source. Use cable ties (K) to route as necessary. (See Figure 11)

**IMPORTANT ! :** Make sure to install cables when lift is at the highest position and so that there is enough length to reach input locations for display and signal.

21. Reinstall back cover to column assembly (T). (See Figure 11)



**Figure 11**

22. (Optional) Relocate control pad to the front center of display if desired following these steps. (See Figure 12) and (See Figure 13)

**IMPORTANT ! :** Make sure to perform these steps when lift is at the highest position and so that there is enough length for cable to reach control box.

- A. Unplug control pad cable from the RJ45 port in the control box.
- B. Remove cable through side cable cover.
- C. Pull cable out through opening at bottom of cable cover.
- D. Feed removed cable down through back channel.
- E. Plug cable back into control box into A1 port.
- F. Use double-sided foam tape (U) to attach control pad to bottom of display in the center.

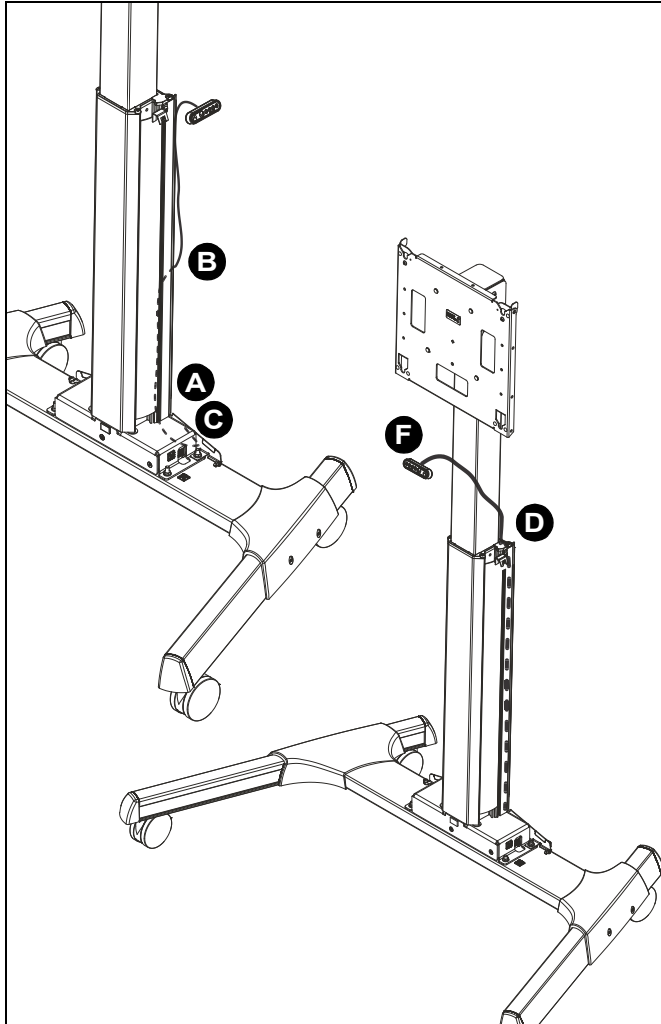


Figure 12

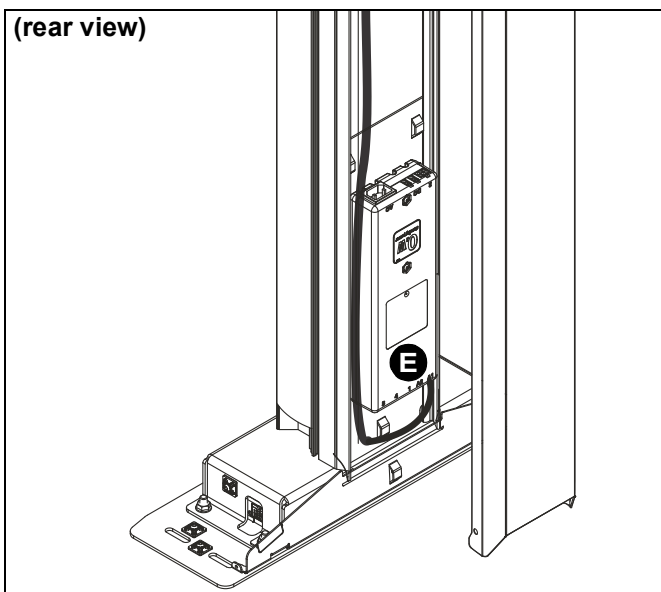


Figure 13

23. Use two 1/4-20 x 1/2" Phillips pan machine screws (Q) to attach two cable hooks (S) to cross brace (X). (See Figure 14)

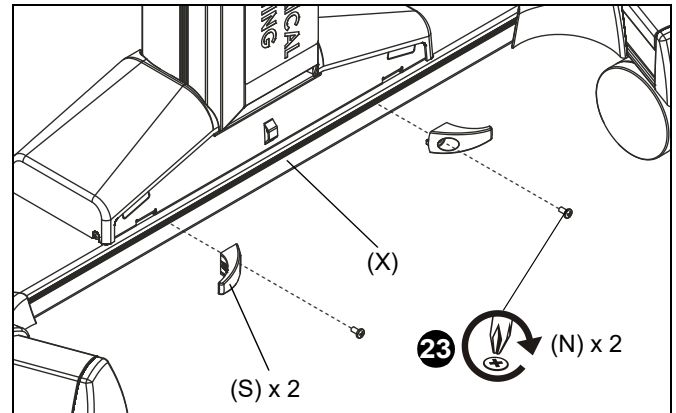


Figure 14

## Display Installation



**WARNING:** Exceeding the weight capacity can result in serious personal injury or damage to equipment! It is the installer's responsibility to make sure the weight of all components attached to the LPE1U does not exceed 200 lbs (90.7 kg).

1. Make sure height is at the lowest possible position.
2. Make sure latching flags are in "open" position.



**WARNING:** IMPROPER INSTALLATION CAN LEAD TO MOUNT FALLING CAUSING SERIOUS PERSONAL INJURY OR DAMAGE TO EQUIPMENT! DO NOT substitute hardware. Only use hardware provided or specified by manufacturer.

3. Determine and mark the vertical center position between the Left side Upper and Lower mounting holes in display. (See Figure 15)
4. Determine and mark the vertical center position between the Right side Upper and Lower mounting holes in display. (See Figure 15)
5. Orient vertical mounting bracket (WR) so that mounting holes are on top and mounting slots are on bottom. (See Figure 15)

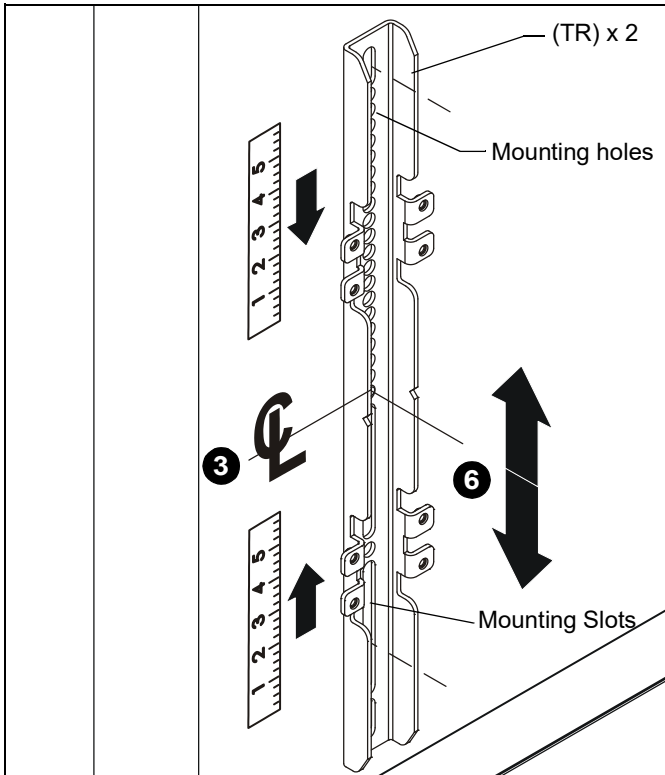


Figure 15

6. Align mounting holes in vertical mounting bracket (WR) with upper and lower mounting holes in display.

7. Adjust vertical mounting bracket (WR) position until mark made in Step 1 aligns with center mark in vertical mounting bracket (WR).
8. Select correct screws, nesting spacers (if necessary) and universal washers (if required) from the hardware bag (WA-WM) and attach brackets to back of screen. (See Figure 17)

**IMPORTANT !** : The M8 screws do **NOT** require a washer. Use the universal washer (WMB) only with M4, M5 and M6 screws.

**NOTE:** The nesting spacers (WMA) may be used separately, or put two together in different configurations to create different size spacers. (See Figure 16)

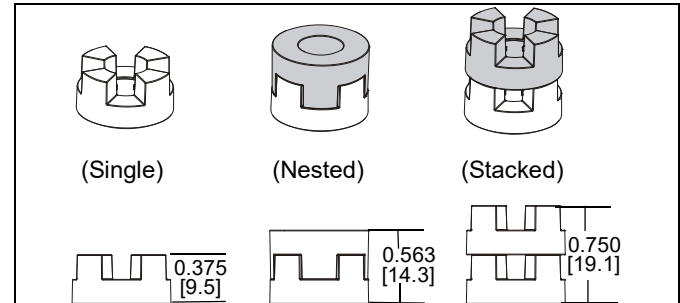


Figure 16

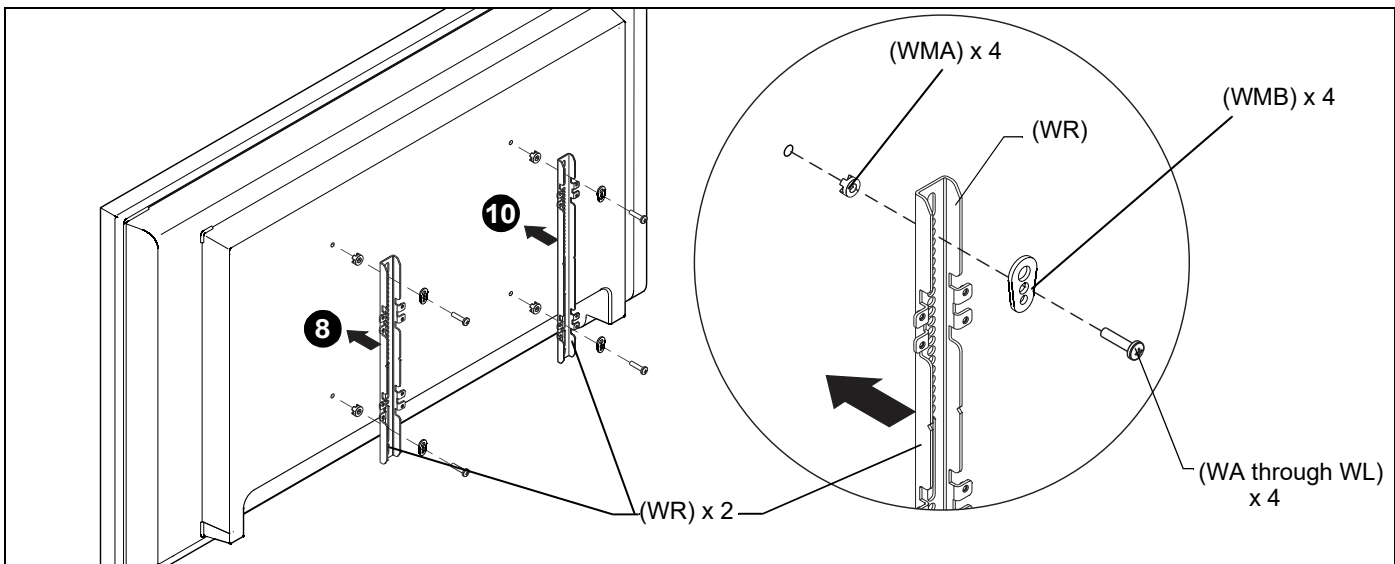


Figure 17

9. If the display has a recessed mounting surface, protrusions or a power box, a spacer and longer mounting hardware must be placed between the display and vertical mounting bracket (WR). (See Figure 17)
10. Repeat Steps 5 through 8 for Right side vertical mounting bracket using the same hole locations to align brackets horizontally.
11. Determine and mark the horizontal center position between the Left and Right *TOP* mounting holes in display. (See Figure 18)
12. Determine and mark the horizontal center position between the Left and Right *BOTTOM* mounting holes in display. (See Figure 18)
13. Orient upper horizontal mounting bracket (WQ) so that flanges are facing towards display and resting in recessed area of left and right vertical mounting brackets (WR). (See Figure 18)
14. Adjust Upper horizontal mounting bracket (WQ) position until center diamond in horizontal mounting bracket (WQ) aligns with mark made in Step 11, and mounting holes and slots in horizontal mounting bracket (WQ) are aligned with threaded holes in mounting tabs of left and right vertical mounting brackets (WR). (See Figure 18) and (See Figure 19)
15. Use 1/8" hex key (WP) to secure upper horizontal mounting bracket (WQ) to left and right vertical mounting brackets (WR) using four button head flanged screws (WN). (See Figure 19)
16. Repeat Steps 12 through 15 for lower horizontal mounting bracket (WQ).

**IMPORTANT !** : The orientation of, and mounting holes used, when installing the lower horizontal mounting bracket must be the same as the upper horizontal mounting bracket. Vertically

align upper and lower brackets by aligning holes or end of slots. (See Figure 19)

**IMPORTANT !** : Whenever possible install mounting screws diagonally as shown in detail in Figure 19.

17. Install display by inserting mounting buttons on horizontal mounting brackets (WQ) into teardrop mounting holes on faceplate making sure latching flags are in "open" position.

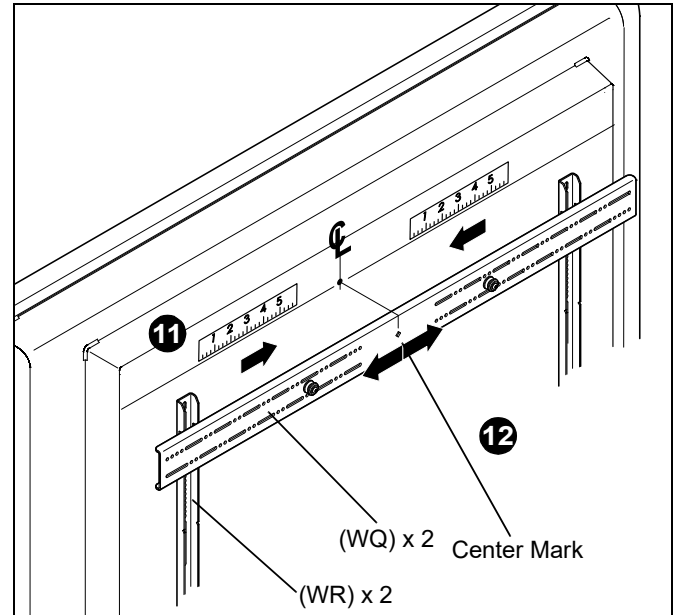


Figure 18

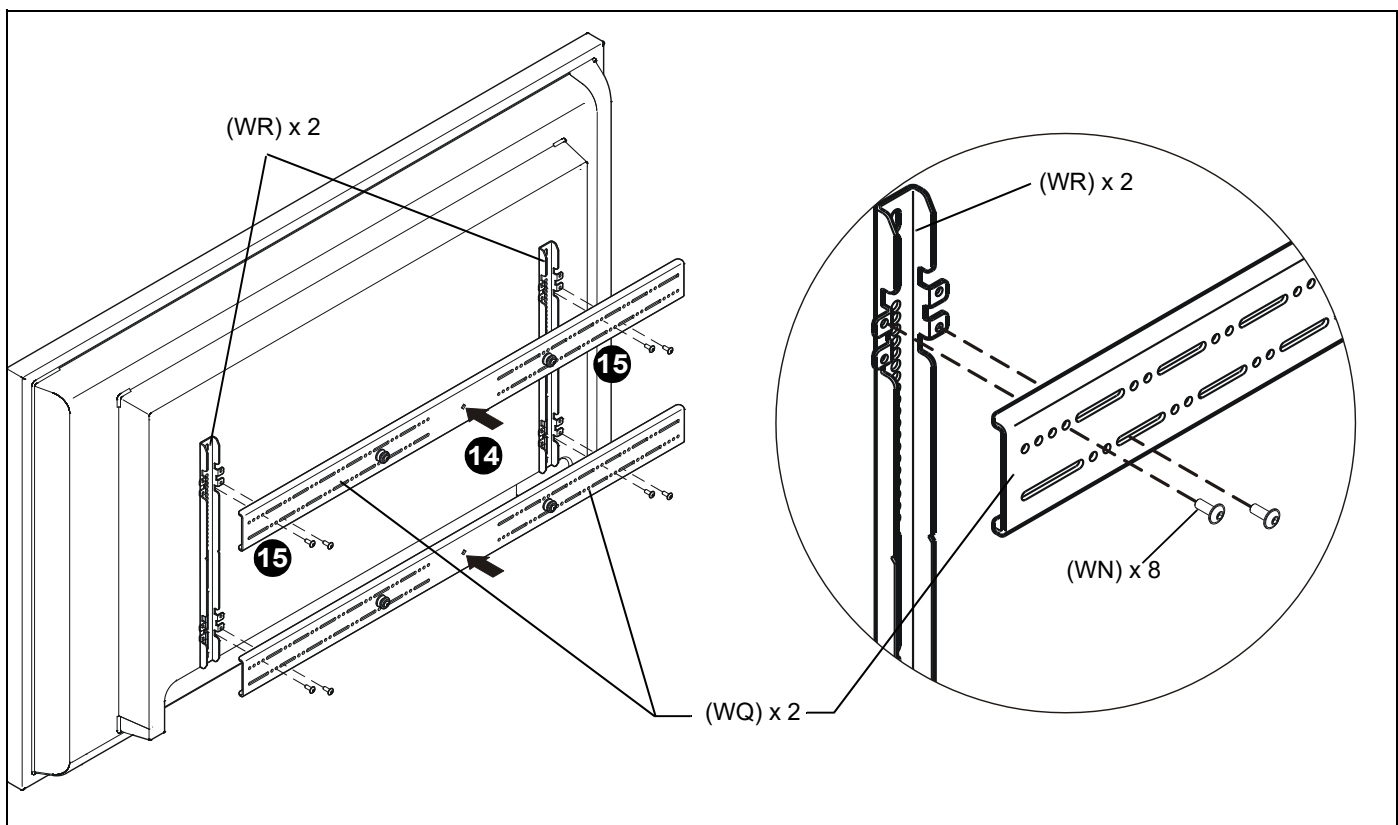


Figure 19

18. Make sure latching flags are in "closed" position prior to using cart! (See Figure 20)

**IMPORTANT !** : Manufacturer recommends using cable ties (K) to secure the latching flags in closed position on both sides if padlock is not being used. (See Figure 20)

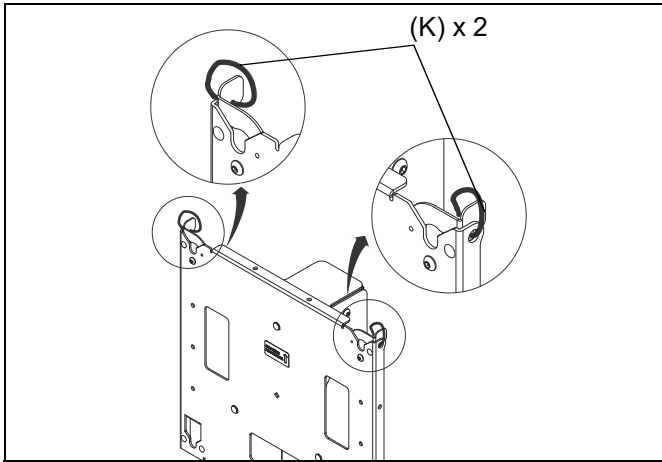


Figure 20

## Adjustments

### Height Adjustment

1. Press "UP" or "DOWN" buttons to raise or lower height as desired. (See Figure 21)

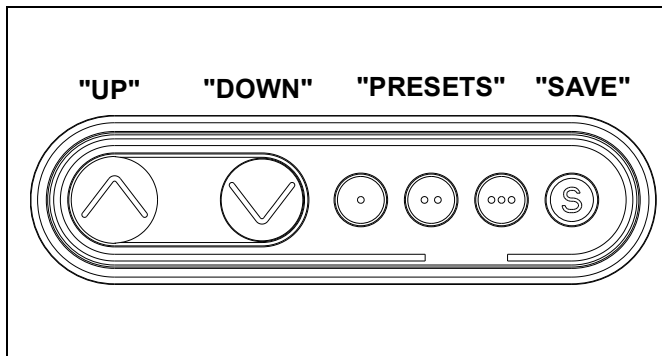


Figure 21

### Save Height Levels

1. Adjust height until desired preset level is reached using "UP" and "DOWN" buttons. (See Figure 21)
2. Press "SAVE" button. (See Figure 21)
3. Press one of three preset buttons (., .. or ...) to save preset position. (See Figure 21)
4. Repeat Steps 1-3 as desired.

## Tilt Adjustment

**IMPORTANT !** : Remove display from mount prior to adjusting tilt!

5. Use 3/16" hex key (H) to remove tilt adjustment screw. (See Figure 22)
6. Adjust faceplate tilt and re-install removed screw in either the middle hole for 2° tilt or the lowest hole for 4° tilt. (See Figure 22)

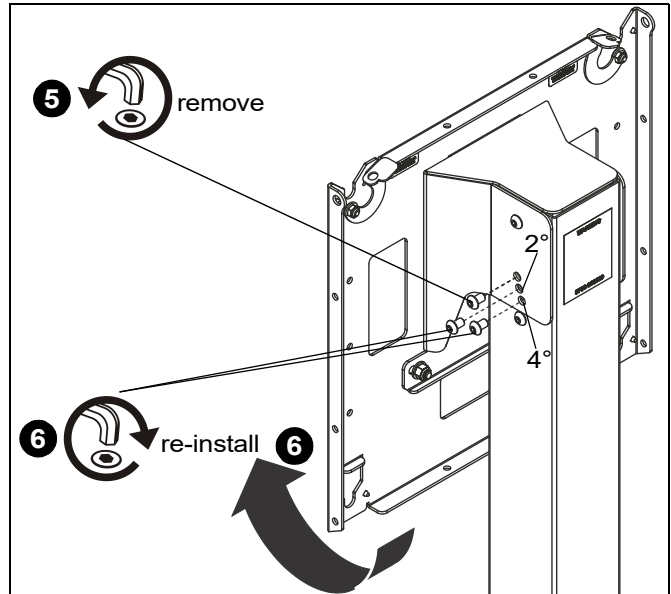


Figure 22

## Roll Adjustment

7. Loosen nuts on back of faceplate. (See Figure 23)
8. Adjust roll as desired. (See Figure 23)
9. Tighten nuts on back of faceplate. (See Figure 23)

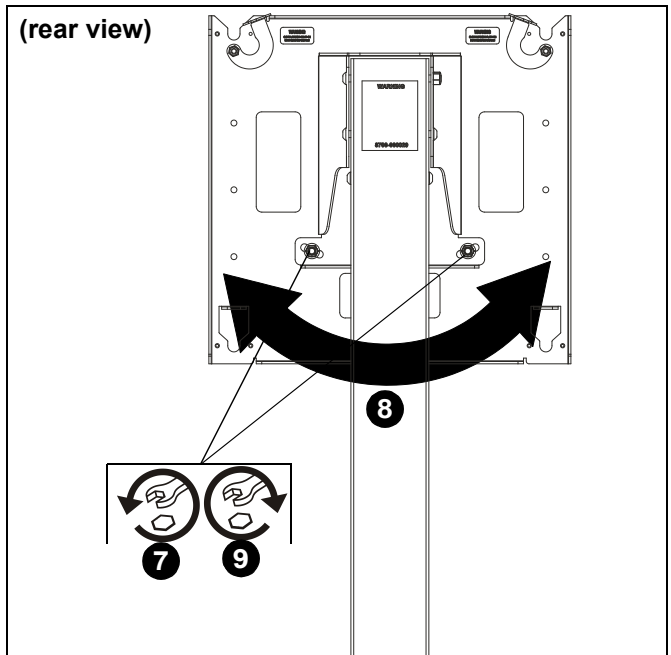


Figure 23

## Cart Use and Maintenance



**WARNING:** Exceeding the weight capacity can result in serious personal injury or damage to equipment! It is the installer's responsibility to make sure the weight of all components attached to the LPE1U does not exceed 200 lbs (90.7 kg). Use with heavier televisions may result in instability causing tip over resulting in death or serious injury. See Figure below for reference.



**WARNING: RISK OF SERIOUS INJURY OR DEATH!**  
Placing a remote control or toy on the cart may encourage a child to climb onto the cart causing the cart to tip over onto the child. DO NOT place remote controls or toys on the cart!



**WARNING: RISK OF SERIOUS INJURY OR DEATH!**  
Relocating audio and/or video equipment to the cart may result in the cart collapsing or overturning onto a child. DO NOT relocate audio and/or video equipment to the cart!



**WARNING: CART CAN TIP OVER RESULTING IN INJURY!** Do not allow children under 16 to move cart. Only adults should move this cart.



**WARNING: CART CAN TIP OVER RESULTING IN INJURY!** Move cart slowly and with the cart set at its lowest position. Use handles for additional stability. Push, don't pull cart. (See Figure 24)

**NOTE:** The LPE1U cart has no user serviceable parts.

**NOTE:** The LPE1U cart can support screen sizes up to a maximum of 86" wide.

**NOTE:** The LPE1U cart is intended for institutional use.

1. Always place cart on a level surface.

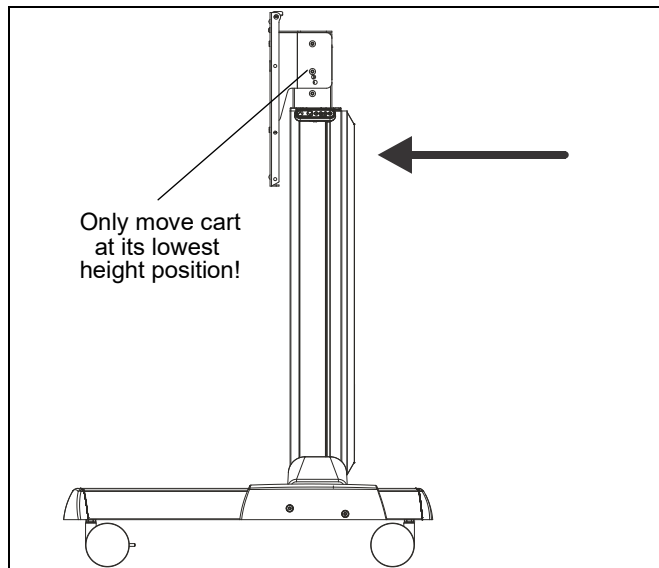


Figure 24

2. Always lock the wheels when the cart is not moving by pressing down the locks on wheels. (See Figure 25)

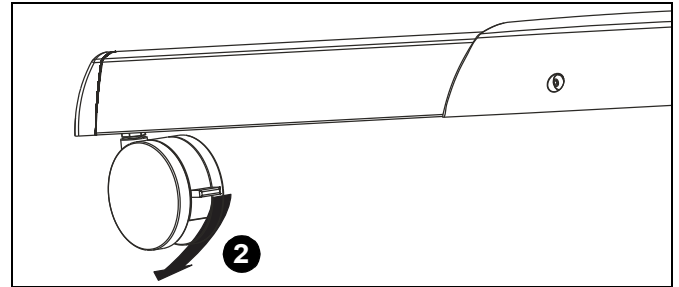


Figure 25

3. Check and tighten the hex nuts on the casters occasionally. (See Figure 26) These should be checked especially after use on uneven ground.

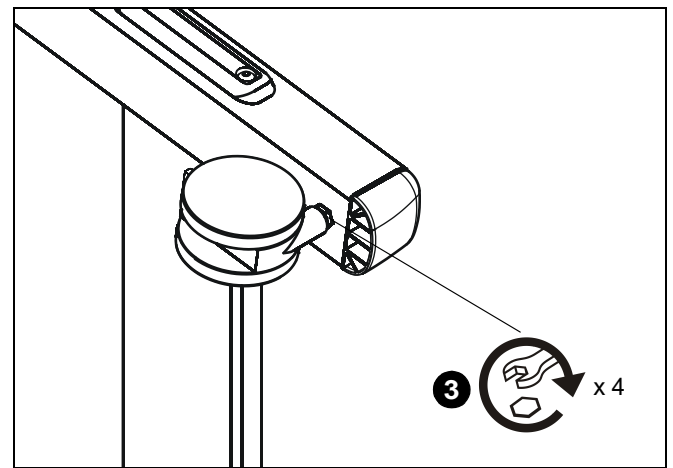


Figure 26

## Troubleshooting

If lifting function does not work properly, try to following troubleshooting steps. If none of these work, contact customer service.

1. If there is uneven movement, initialize the control box (reset)
  - Hold "Down" button until lift has reached it's lower limit.
  - Briefly release "Down" button
  - Press and hold "Down" for five seconds, wait until all movement has stopped, then release
2. If there is no movement, check the following
  - Check all cable connectors between controllers and actuators.
  - Check power cable connection to control box.
3. If there is slight movement and then reverse travel, check for any obstructions that may be interfering such as cables or peripheral devices.
4. Contact customer service if none of the above steps fix the problem.



A brand of  **legrand**

8800-003129 Rev01  
©2020 Legrand | AV  
[www.legrandav.com](http://www.legrandav.com)  
01/20

|                          |                                                                                                                                                          |
|--------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>USA/International</b> | <b>A</b> 6436 City West Parkway, Eden Prairie, MN 55344<br><b>P</b> 800.582.6480 / 952.225.6000<br><b>F</b> 877.894.6918 / 952.894.6918                  |
| <b>Europe</b>            | <b>A</b> Franklinstraat 14, 6003 DK Weert, Netherlands<br><b>P</b> +31 (0) 495 580 852<br><b>F</b> +31 (0) 495 580 845                                   |
| <b>Asia Pacific</b>      | <b>A</b> Office No. 918 on 9/F, Shatin Galleria<br>18-24 Shan Mei Street<br>Fotan, Shatin, Hong Kong<br><b>P</b> 852 2145 4099<br><b>F</b> 852 2145 4477 |

