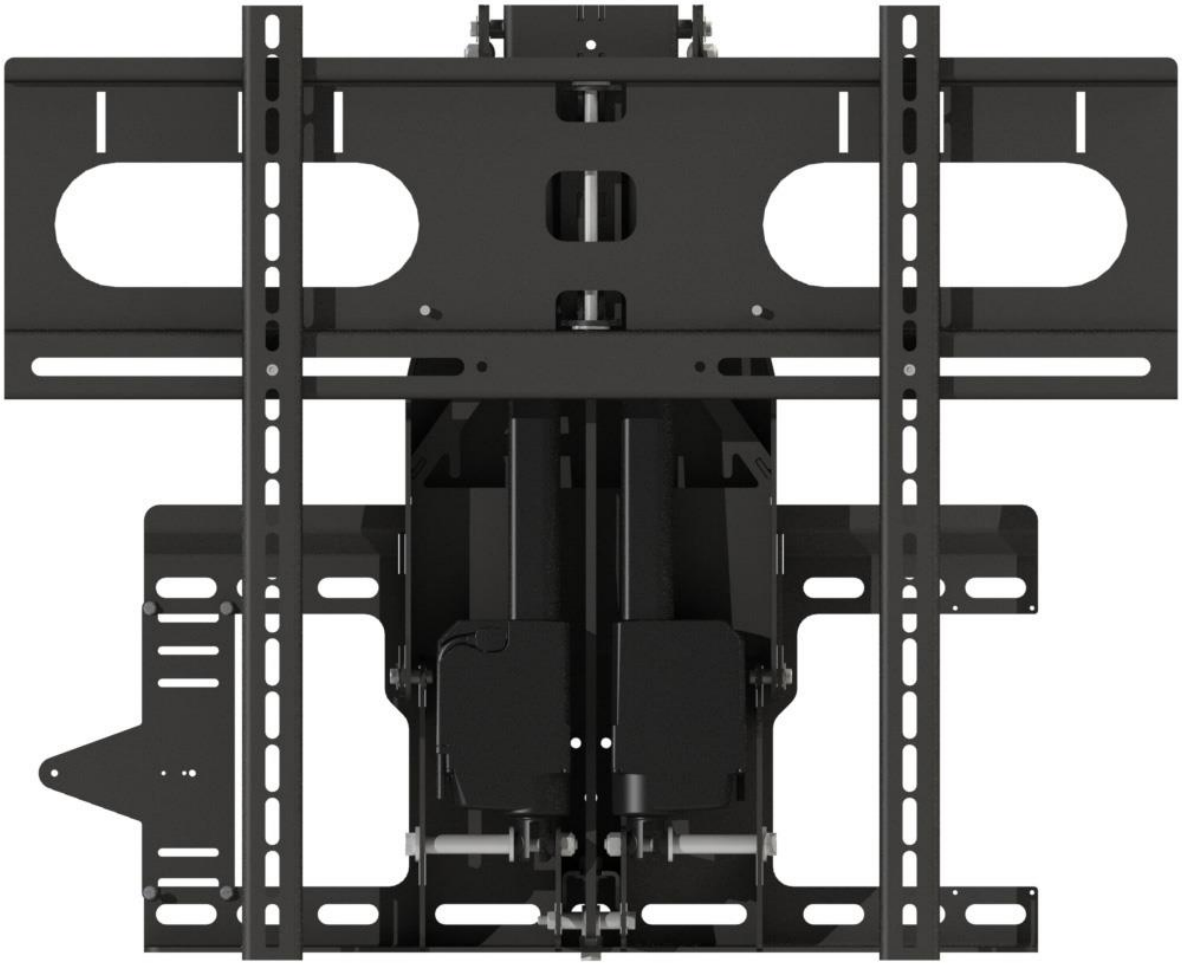
NEXUS 21

TECHNOLOGY IN MOTION

Transcend Pro Surface Installation Instructions



NEXUS 21

TECHNOLOGY IN MOTION

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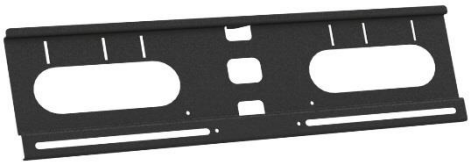
Revised: 12/4/17

Below is a parts list describing all of the items included with the Transcend Pro Surface. You may also wish to refer to the dimensional diagram shown on "Supplemental Page A" (at the end of this document).

Before beginning assembly and installation, please make sure that you have all items included on the list. If any parts are missing or damaged, please contact Nexus 21. Our contact information is shown at the top of this page.

Parts List

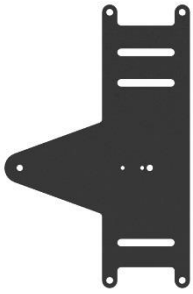
Vertical Mounting Bars



Screen Back Plate

Control Box

Transcend Pro Surface



Control Box Mounting Plate

Parts List, continued

Cables

- **Motor Cable 18inch (1)** – Black cable with white, six-pin plugs. Use this cable to connect the Actuator to the Control Box.
- **Motor Cable 1m (1)** – Black cable with white, six-pin plugs. Use this cable to connect the Actuator to the Control Box.
- **Power Cable** – Connects Control Box to power outlet. Three feet long.
- **RF Cable (only present if you ordered the RF version of the Lift System)** – Use to connect the RF Receiver to the Control Box. Ends have RJ-45 connectors. One-foot long.

Hardware

1. Four (4) – 3/8" x 3" Lag Screws w/Washers
2. Four (4) – Zip Ties
3. Two (2) – Adhesive Rubber Bumpers
4. Four (4) – Lag Screw Covers
5. Four (4) – Lag Screw Cover Washers
6. Assorted TV Hardware
    a. Four (4) – 6 x 20mm PHMS
    b. Four (4) – 6 x 35mm PHMS
    c. Four (4) – 8 x 20mm PHMS
    d. Four (4) – 6 x 35mm PHMS
    e. Four (4) – ¼" Plastic Spacers
    f. Eight (8) – 1/8" Plastic Spacers
    g. Four (4) – Steel M6 Washers

SAFETY INFORMATION

SEVERE PERSONAL INJURY AND PROPERTY DAMAGE CAN RESULT FROM IMPROPER INSTALLATION OR ASSEMBLY. READ THE FOLLOWING WARNINGS BEFORE BEGINNING:

WARNINGS:

1. Do not use this product for any application other than those specified by Nexus 21.
2. Do not exceed the weight capacity. This can result in serious personal injury or damage to the equipment. It is the installer's responsibility to ensure that the total combined weight of all attached components does not exceed that of the maximum figure stated.
3. Follow all technical specifications and instructions during the installation.
4. Only use attachments/accessories specified by the manufacturer.
5. Close supervision is necessary when this system is being used by, or near, children, or disabled persons.
6. It is the responsibility of the installer to warn all potential users of the dangers of interfering with the mechanism during operation.
7. Read all technical instructions fully before installation and use. It is the installer's responsibility to ensure that all documentation is passed on the users and read fully before operation.
8. Failure to provide adequate structural strengthening, prior to installation can result in serious personal injury or damage to the equipment. It is the installer's responsibility to ensure the structure to which the Mount System is affixed can support four times the weight of the system.
9. Risk of electric shock. Do not attempt to open the Control Box.
10. To reduce risk of fire or electric shock, do not expose parts to rain or other liquids.
11. Protect the power cord from being walked on or pinched.
12. Keep all documentation.
13. Heed all warnings.
14. Clean only with a dry cloth.
15. Refer all service questions to Nexus 21 if the system does not operate normally.

Nexus 21 disclaims any liability for modifications, improper installations, or installations over the specified weight range. Nexus 21 will not be liable for any damages arising out of the use of, or inability to use, Nexus 21 products. Nexus 21 bears no responsibility for incidental or consequential damages. This includes, but is not limited to, any labor charges for the servicing of Nexus 21 products performed by anyone other than Nexus 21.

Nexus 21 intends to make this and all documentation as accurate as possible. However, Nexus 21 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 prior notice or obligation of any kind. Nexus 21 makes no representation of warranty, expressed or implied, regarding the information contained herein. Nexus 21 assumes no responsibility for accuracy, completeness or sufficiency of the information contained in this document.

Types of Controls for Nexus 21 Systems

All Nexus 21 Systems come standard with a **wireless remote control** and receiver. We offer a choice of two different types of remotes: IR and RF (both of which are explained in detail below). Our standard control type is RF, so unless you specifically requested the IR version when you made your purchase, you probably received the RF controls with this Mount System. The method of installation for each type of remote control is slightly different, so you should now identify which type of remote you have by reading below, and then follow the instructions for that type of remote.

NOTE: If you will be using the Mount with a home control system (like the ones made by companies such as Crestron or Control 4) the most common form of control is to WIRE IT DIRECTLY to the relays of your home control system. This direct-wire method is called **Integration by Contact Closure**, and is accomplished by using the Contact Closure Hardware that is supplied with the IR Control Kit to connect the Mount to your home control system.

Before You Begin the Installation: Identify Your Control Type

IR (Infrared) – This control option allows you to utilize a 3rd party universal style remote control to raise and lower the Mount. Your universal remote will "learn" the IR codes from the provided IR Handset, which will enable you to control the mount. The universal remote will then communicate with the "eye" located on the IR Receiver via your 3rd party emitter (or flasher). Instructions for setting the Mount's travel limit are on Page 30.

NOTE: If you are NOT planning on using a 3rd party Universal Remote, switch to the RF setup. (There is no charge for swapping)

These are the parts included with IR controls:

Contact Closure Hardware

IR Receiver

IR Handset

Height Limit Insert

RF (Radio Frequency) - This system utilizes a wireless remote control handset that sends a radio signal to the RF Receiver. The radio signal can go through cabinet walls and does not require line-of-sight. Instructions for setting the Mount System travel limit are on Page 30.

TIP: Planning to integrate the Mount with your UNIVERSAL REMOTE CONTROL? The RF version of the Nexus 21 controls won't do it. Switch to IR.

These are the parts included with RF controls:

Backup Switch

RF Receiver

RF Handset

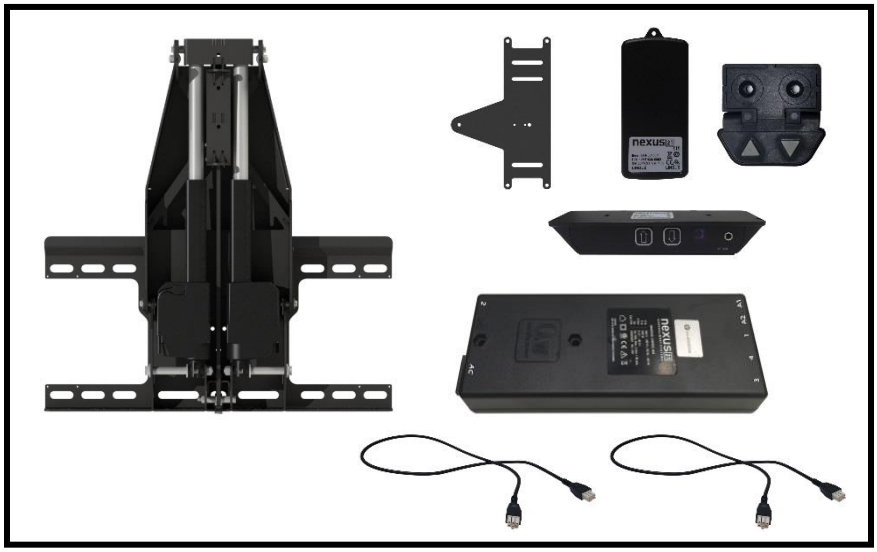
Height Limit Insert

Integration by Contact Closure – To direct-wire the Mount controls to a home control system (Crestron, Control 4, AMX, etc.) you will use the Contact Closure Hardware. You won't use any Nexus 21 receiver or handset for this type of control because you will use the handset or control pad that comes with your home control system. **Instructions for setting up the System using Contact Closure are on "Page 31".**

Table of Contents

1. Connecting the Mount
2. Assembling the Mount
3. Locating and Installing the Mount
4. Attaching the TV to the Mount
5. How to Set a Lower Limit
6. How to Set the Tilt
7. Vanity Plate Information
8. Cable Management Information
9. Maintenance

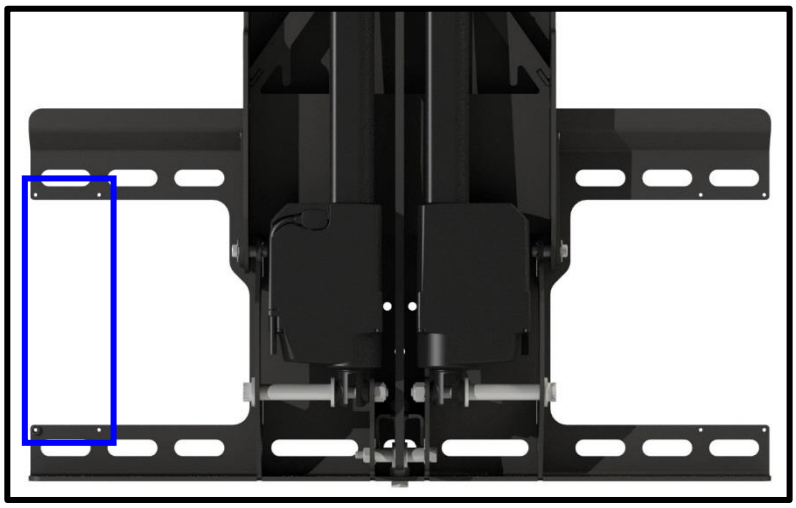
Connecting the Mount

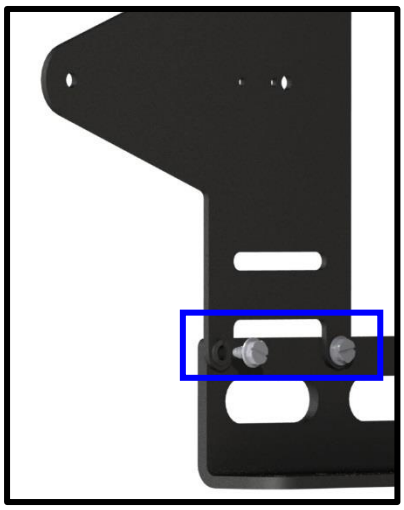


For these steps you will need the following parts:

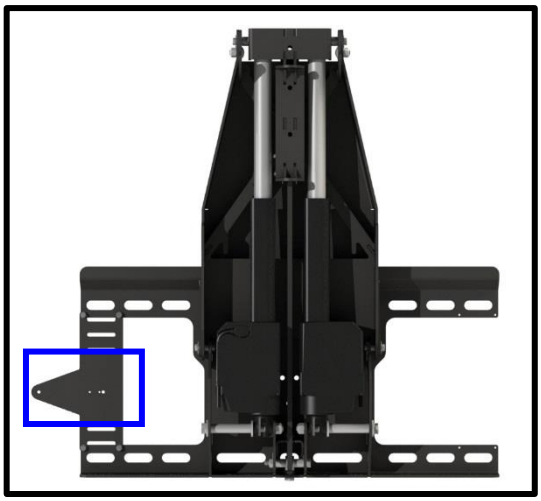
- Transcend Pro Mount
- Control Box Mounting Plate
- Control Box
- (2) Motor Cables
- Power Cord
- Wired Backup Switch
- CSI Control Kit or RF Control Kit
- (4) #6 x ¼" TS

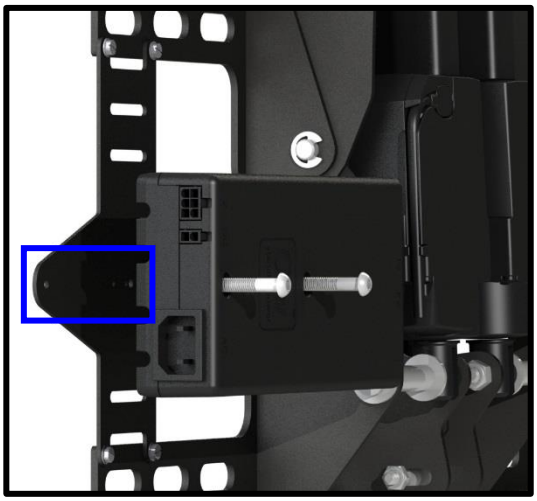
Step 1: Fasten the Control Box Mounting Plate to the Left side of the Transcend Pro Mount using (4) Tap Screws taped to the Control Box Mounting Plate.

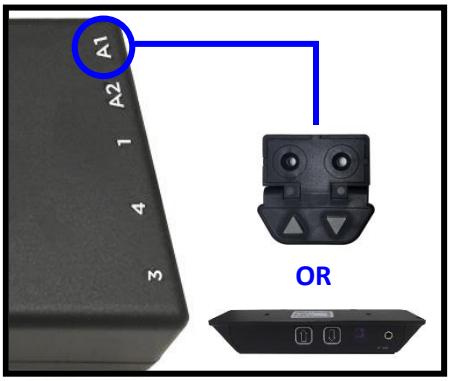




Step 2: Fasten the Control Box to the Control Box Mounting Plate using (2) 6 x 35mm BHMS.

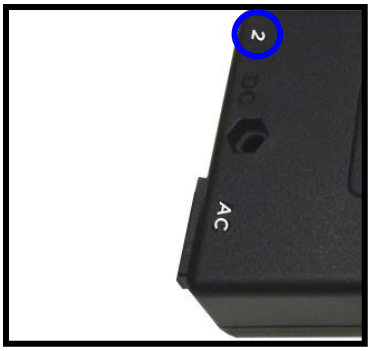






Step 3: Connect the Wired Backup Switch to Port A1 on the Control Box. If you ordered the CSI Kit, connect the IR Receiver to Port A1 instead.

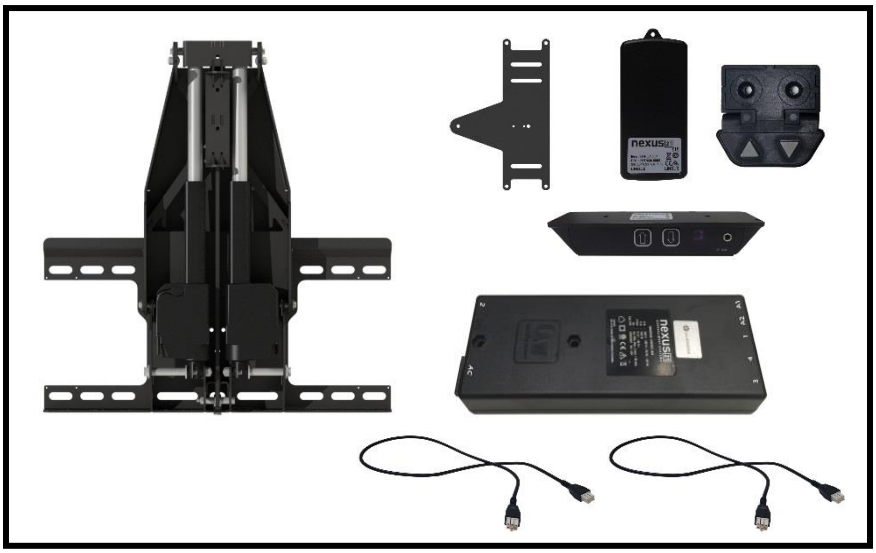
Step 4: If you ordered the RF Kit, connect the RF Receiver to Port A2. If you ordered the CSI Kit, leave Port A2 empty.



Step 5: Connect the Actuators to Ports 1 & 2 on the Control Box using the two provided Motor Cables.

Step 6: Connect the Power Cord to Port AC on the Control Box then connect the Power Cord to a power receptacle.

Assembling the Mount

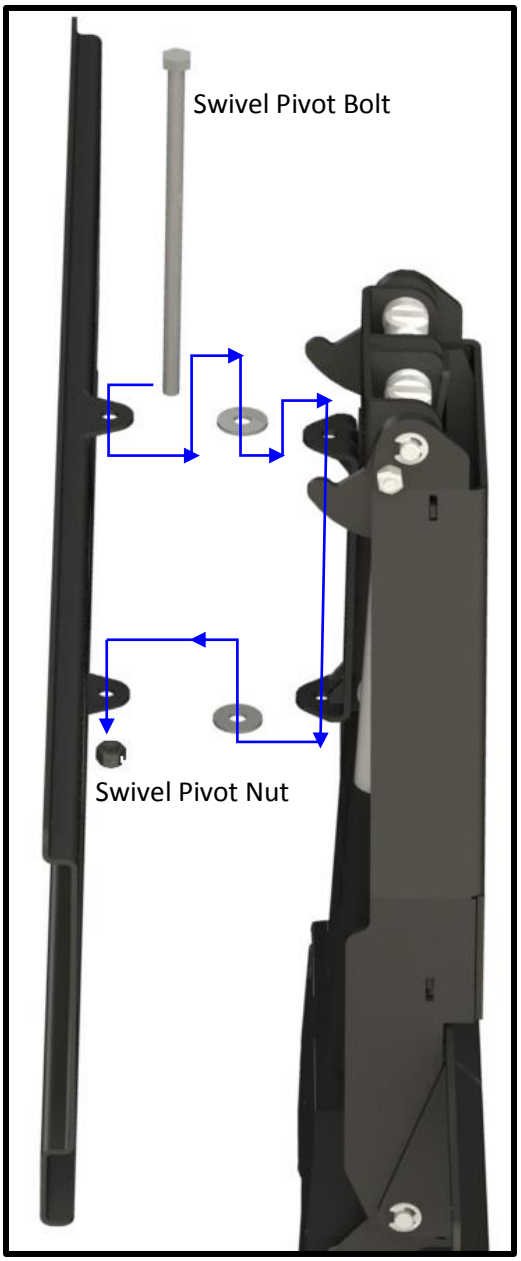


For these steps you will need the following parts:

- Screen Back Plate
- Swivel Pivot Bolt
- Swivel Pivot Nut
- (2) Swivel Pivot Washers
- Power Cord
- Wired Backup Switch
- CSI Control Kit or RF Control Kit

Step 6: Attach the Screen Back Plate to the Mount using the Swivel Pivot Bolt, Swivel Pivot Nut, and (2) Washers using the diagram shown to the right. Ensure the thinner washer remains on top.

Step 7: Adjust the Swivel Tension, by loosening or tightening the Swivel Pivot Nut while holding the head of the Swivel Pivot Bolt with a Wrench.



Locating and Installing the Mount

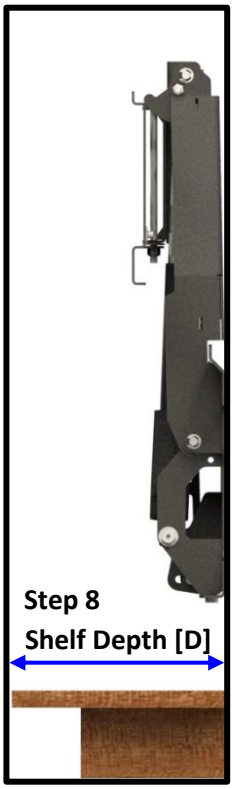
For these steps you will need the following parts:

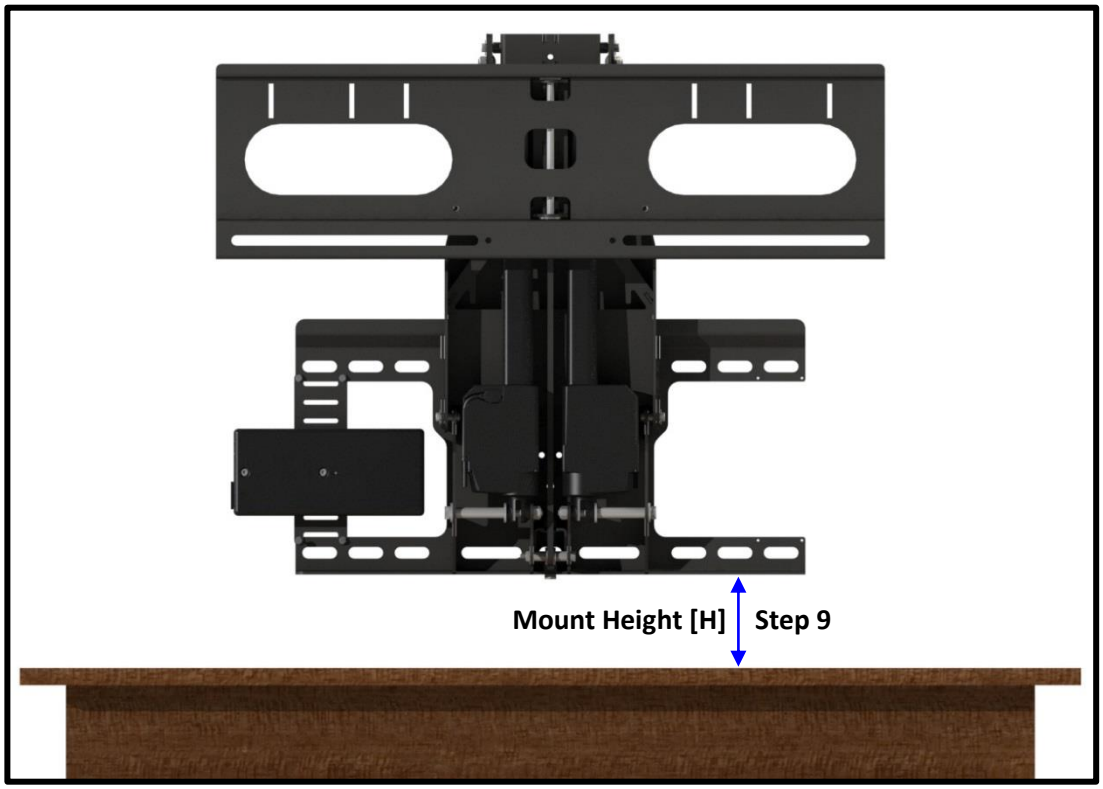
- Mounting Template
- (4) Lag Bolts

Step 8: Measure depth [D] of your Shelf or Mantel, if you do not have a Shelf or Mantel proceed to the next step.

Step 9: Using the Mounting Template and tape, determine how high your mount needs to be located according to the [D] Shelf Depth measured in Step 8 and the below table.

Note: The Transcend Pro Surface must always be able to lower its full travel with no obstructions.



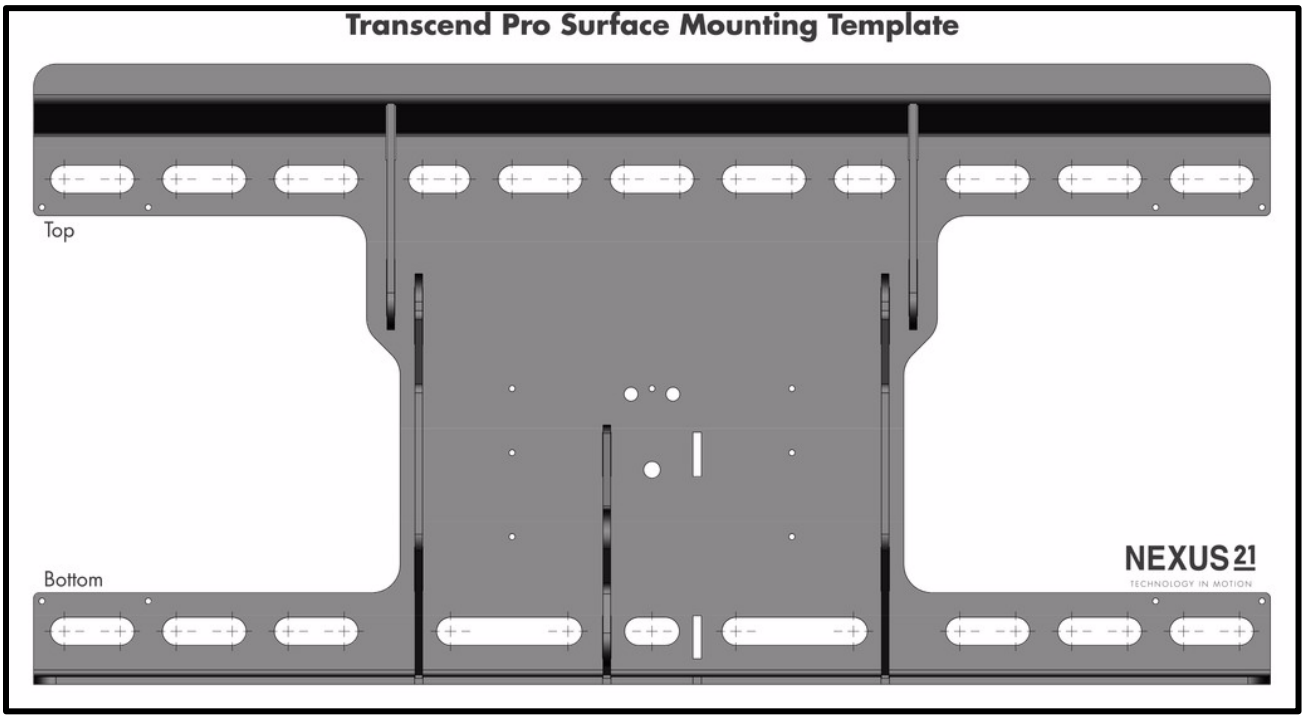


TRANSCEND PRO SURFACE CLEARANCE TABLE (CLEARANCE BETWEEN MOUNT AND SHELF)													
	[D] SHELF DEPTH (IN)												
DOWNWARD TRAVEL [T]		**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**
	27	0	0	1	2	3	3.75	4.75	5.75	6.5	7.5	8.5	10	11
[H] CLEARANCE BETWEEN MOUNT AND SHELF (UNBOLDED)													

TV CLEARANCE TABLE (OR SOUNDBAR CLEARANCE TABLE, WHICHEVER IS LOWER)													
	[D] SHELF DEPTH (IN)												
		0	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**
		0	1	1.25	1.5	1.75	1.75	2	2.25	2.5	2.75	3	3.25	3.75
MINIMUM CLEARANCE NEEDED BETWEEN TOP OF SHELF AND BOTTOM OF TV													

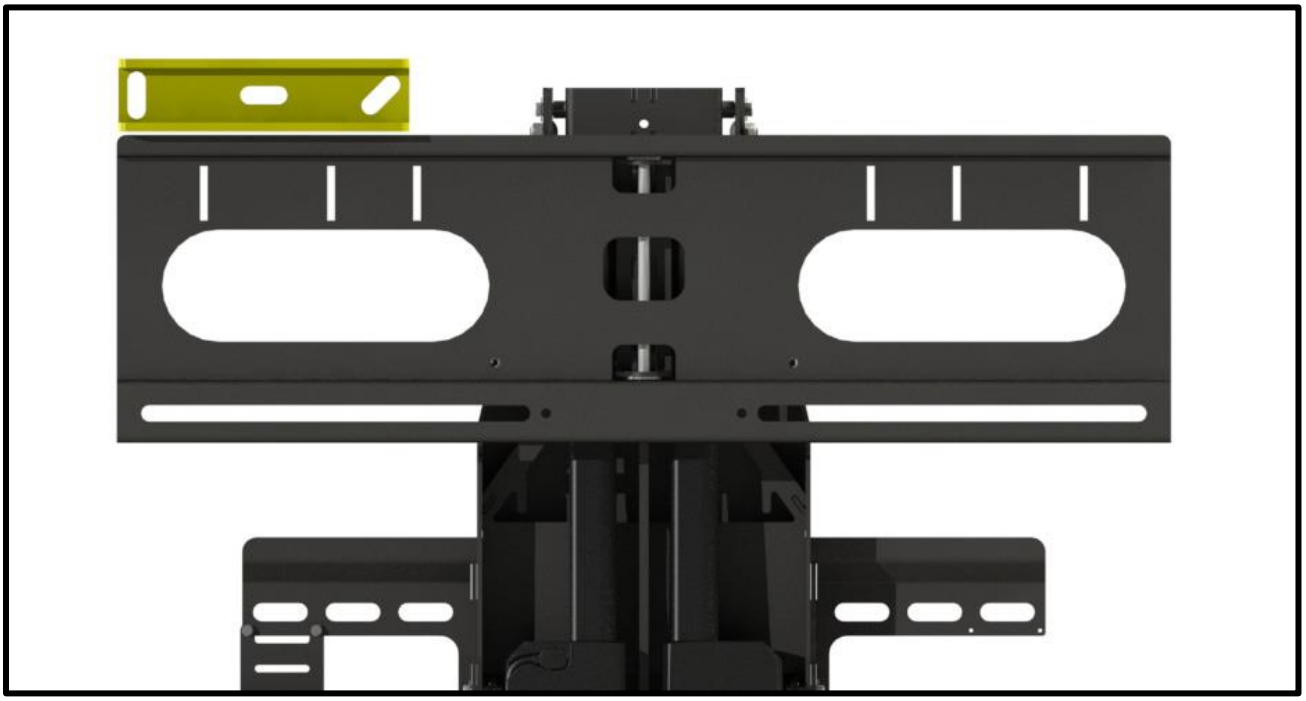
Step 10: Once the position is located, mark the Screw locations on the wall and Drill Pilot Holes for each Screw Location.

Note: The Transcend Pro Surface can accommodate up to 16” Center Stud Spacing. For wider Stud Spacing, you can purchase the Extra Wall Support Accessory to accommodate up to 32” Stud Spacing.



Step 11: Align the Mount with the Screw Locations on the Wall and Partially Fasten it to the Wall using (4) Lag Bolts.

Step 12: Level the mount off of Screen Back Plate, and fully fasten the Mount to the Wall.

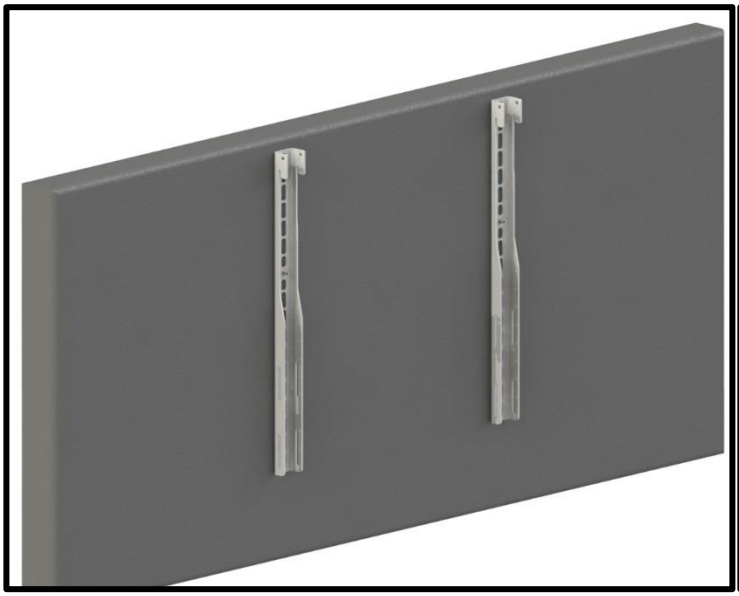


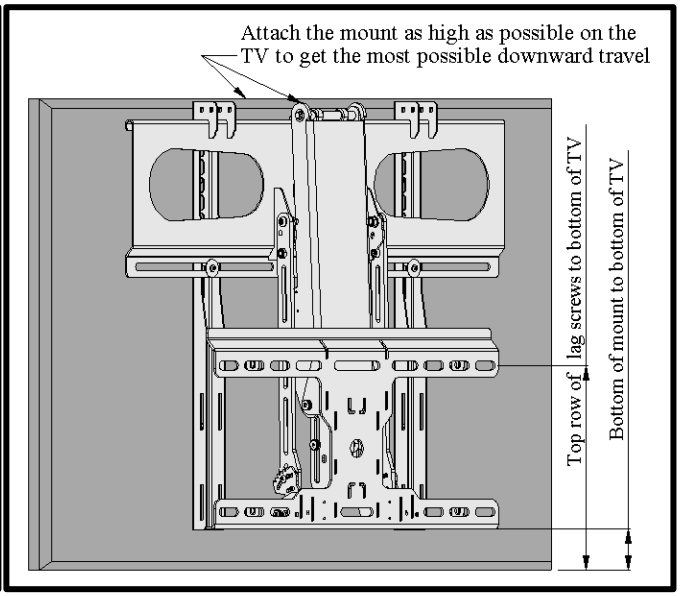
Attaching the TV to the Mount

For these steps you will need the following parts:

- Vertical Mounting Bars w/Washers & Screws
- Assorted TV Hardware Pack

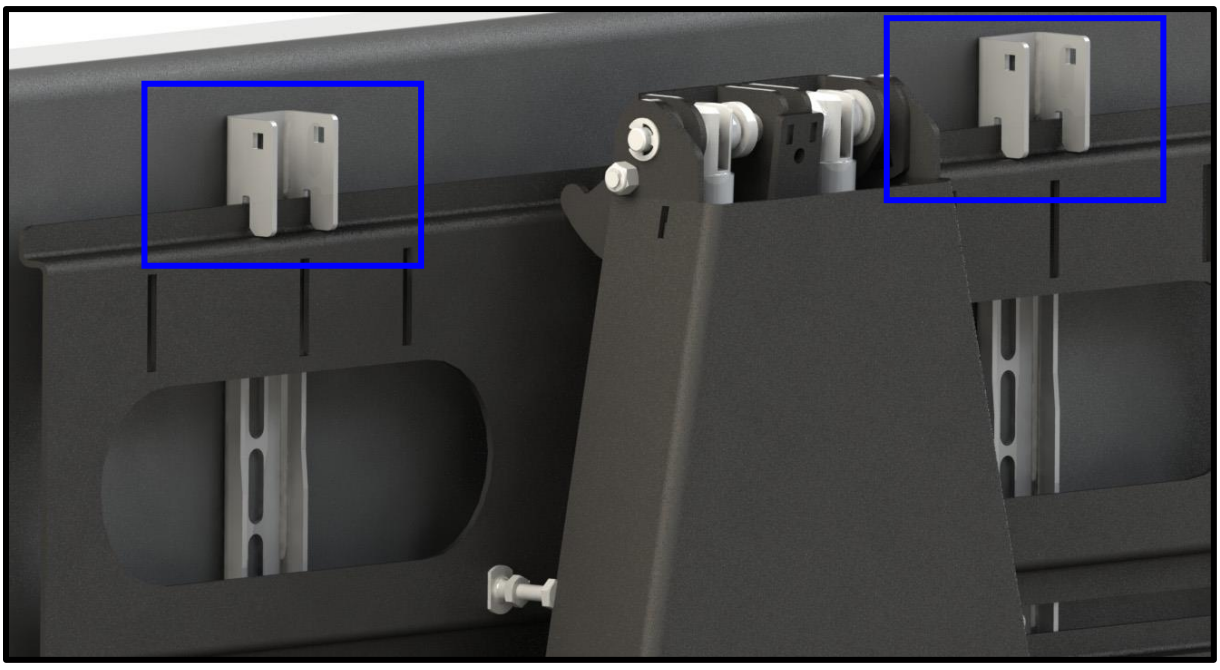
Step 13: Attach Vertical Mounting Bars as high as possible to Back of the TV. This will ensure the most possible downward travel is obtained and that the mount is fully concealed when in the Top Position.

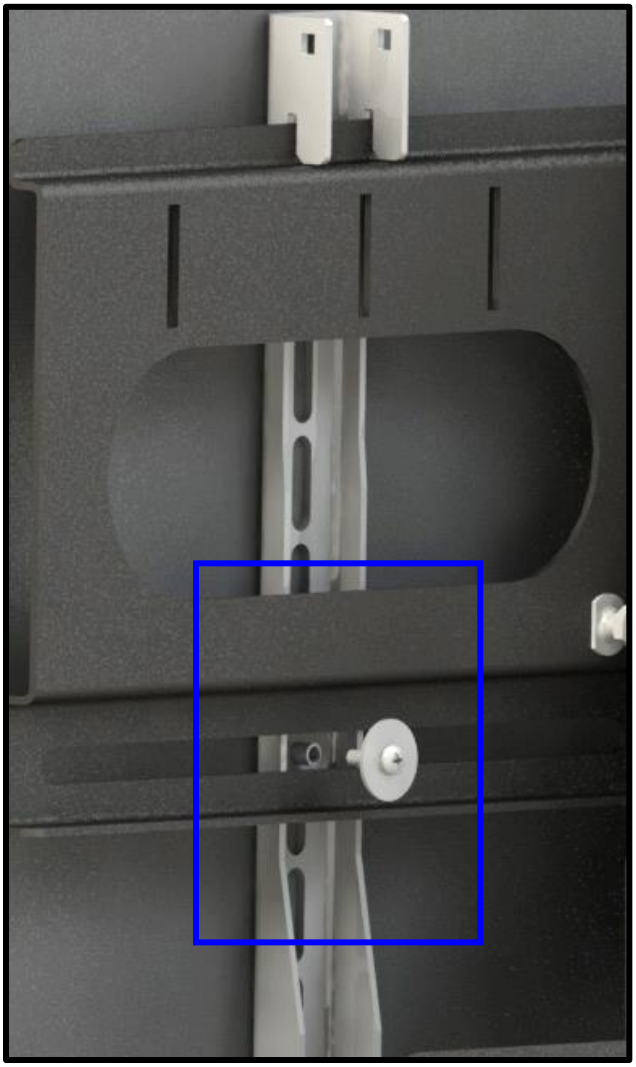




Step 14: Hang TV with the Vertical Mounting Bars on the Screen Back Plate and center the TV on the Mount.

Note: You can Extend the Mount out by pressing the DOWN button and stop it at your desired position by pressing the UP button if needed.

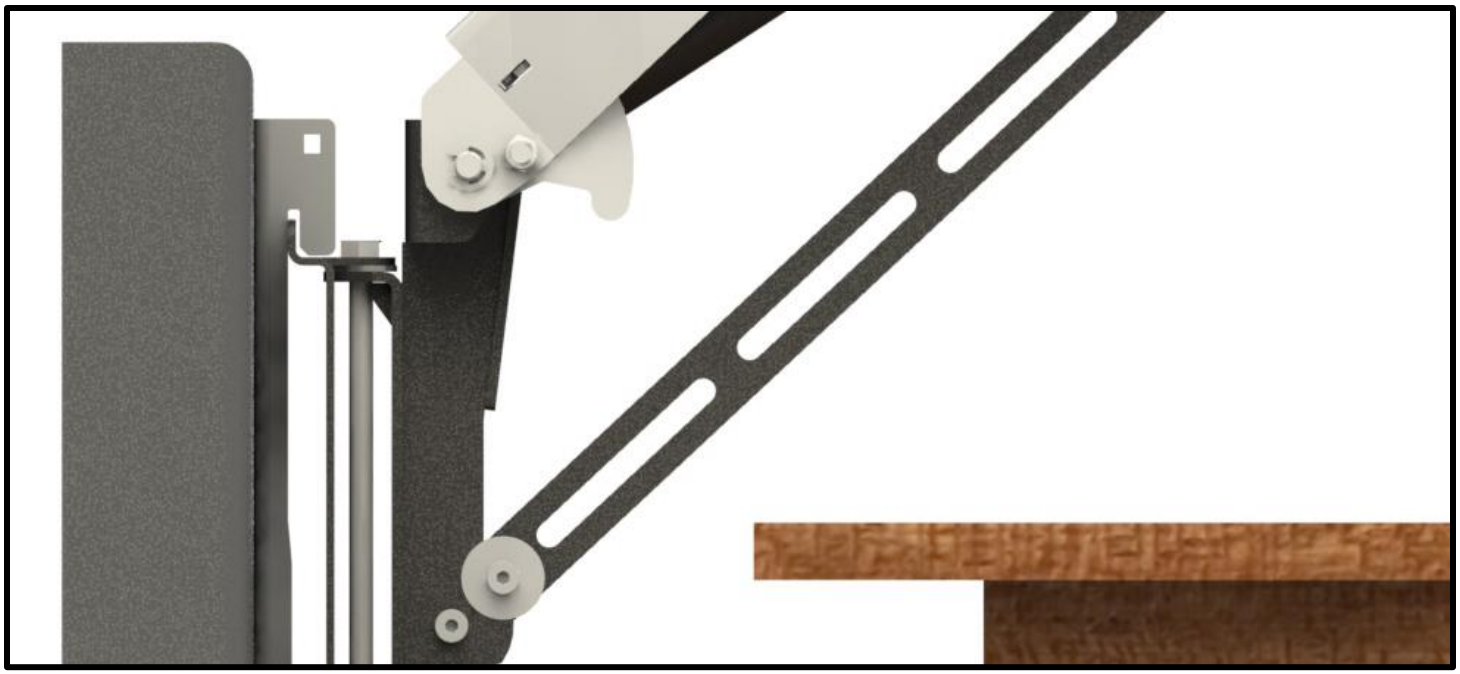




Step 15: Fasten Vertical Mounting Bars to Screen Back Plate using the (2) Screws and (2) Washers that were fastened to each Vertical Mount Bar.

Step 16: Test Run the Mount to ensure the Lower position does not interfere with the Shelf or Mantel below.

Note: If needed a Lower Limit can be set. Refer to page (2) for information on setting the Lower Limit.



How to Set a Lower Limit

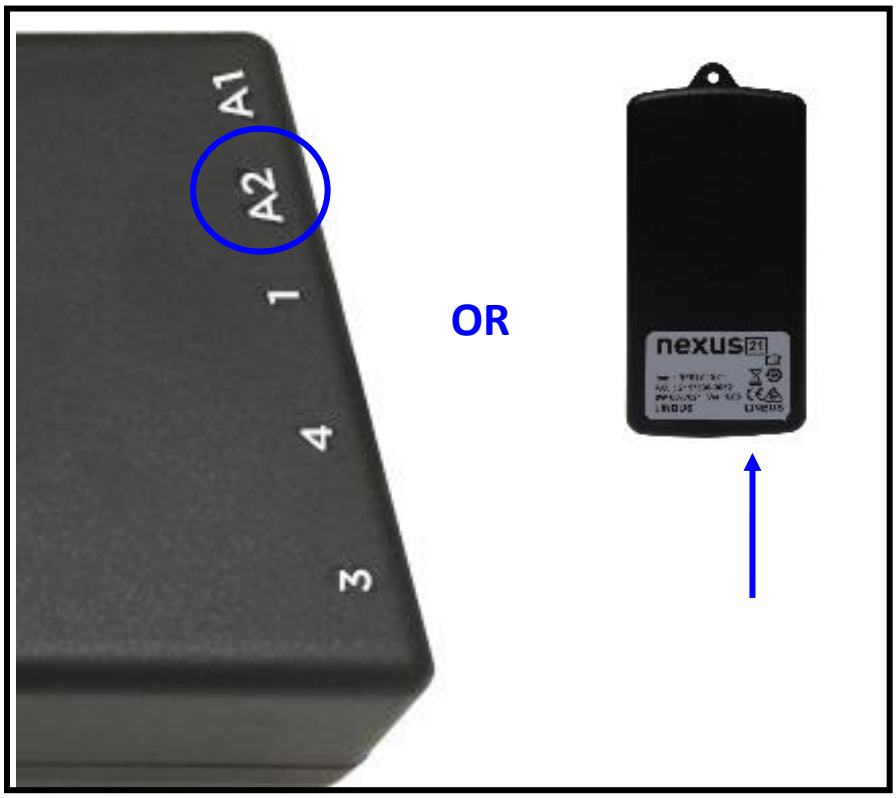
Only the Lower Limit can be set on the Transcend Pro Surface, however it must be able to fully travel with no obstructions below it. This is because the Mount resets in the lowest position and will be unable to reset if it is obstructed.

To set a Lower Limit follow the steps listed below:

1. Press the DOWN button on the Wired Backup Switch or Remote Control.

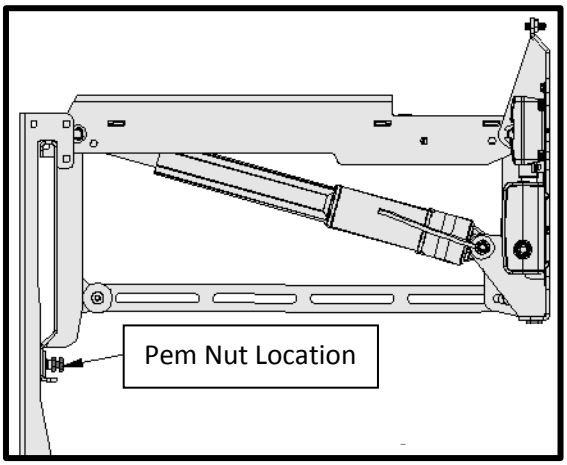
2. Once the Mount reaches your desired position, press the UP button to STOP the Mount.

3. Plug the Height Limit Insert into Port A2 on the Control Box if you are using IR Controls. If you are using RF Controls, plug the Height Limit Insert into the available RJ45 Port on the RF Receiver.



How to Set the Tilt

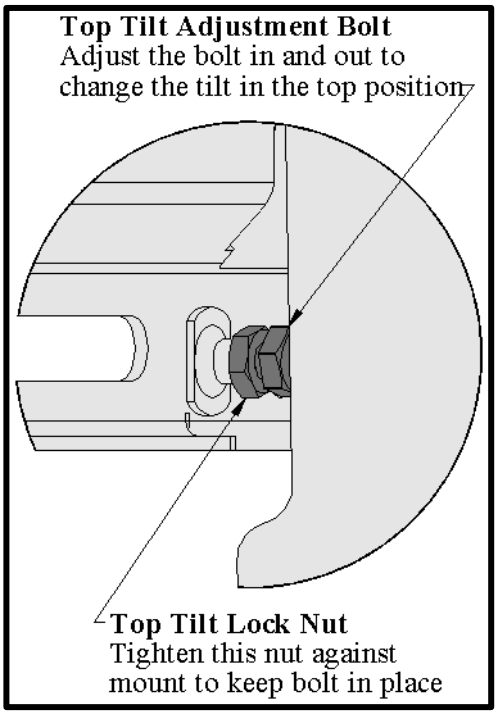
The Transcend Pro Surface has +/- 1 degree of Tilt in the Top Position, and +1/-2 Degrees in the Bottom and Out Positions. Below lists the steps on how to set the Tilt for each position.



Top Tilt Adjustment

Step 1: Fasten the Lock Nuts to each of the Screws

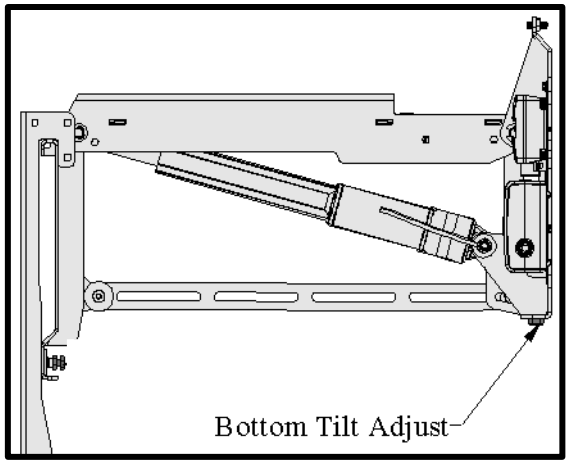
Step 2: Fasten each Screw into the Pem Nuts located on the left and right side of the Screen Back Plate.

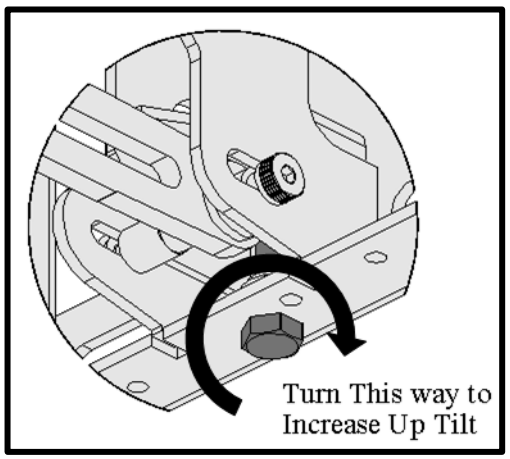


Step 3: To increase the Tilt, loosen the Lock Nut on the Screw and loosen the Screw from the Screen Back Plate.

Bottom Tilt Adjustment

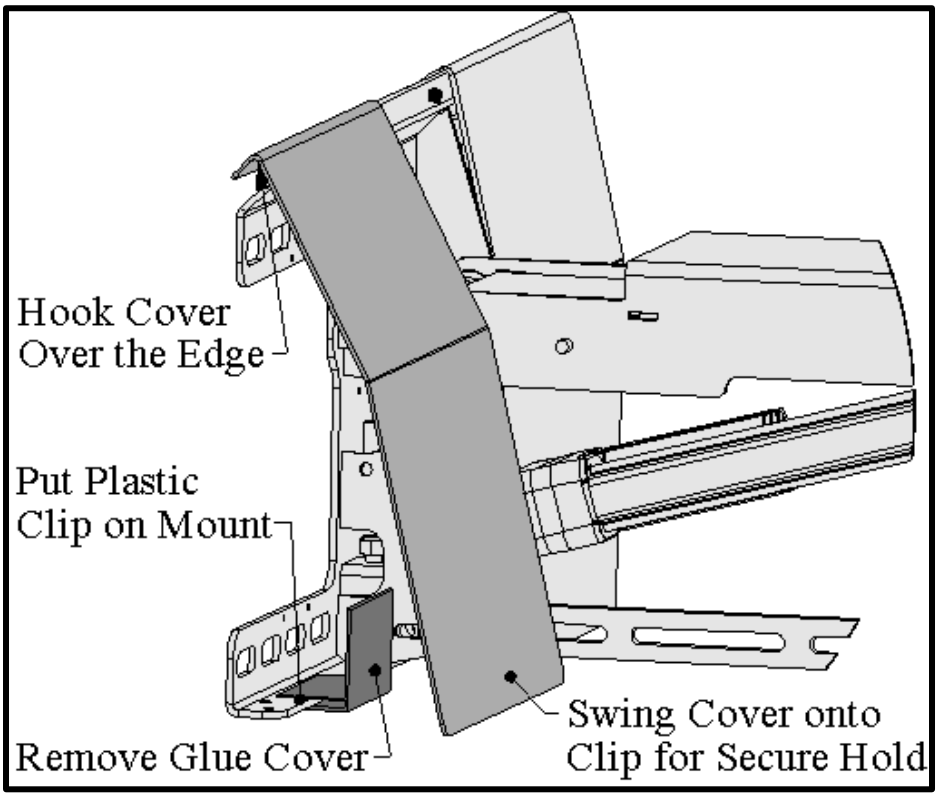
Step 1: Tighten the Bolt shown in the figure below to adjust the bottom tilt +1/-2 degrees.





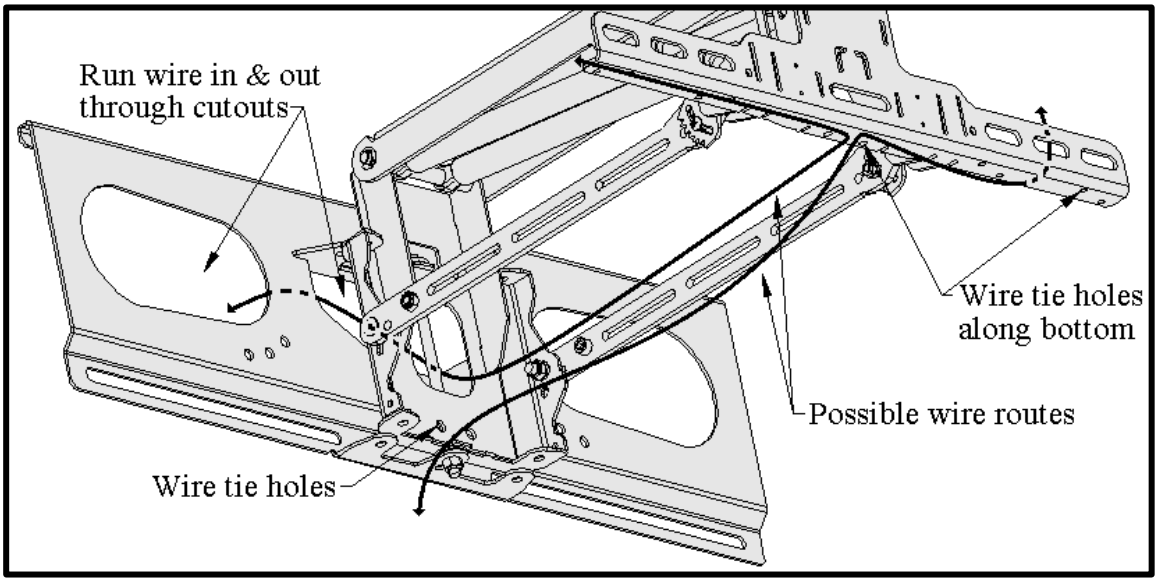
Vanity Plate Information

- The Vanity Plates and Plastic Clips are provided to cover the Controls and Outlets as well as any cables that are managed on the left and right of the system.
- Each Vanity Plate is paintable and simply hooks over the Mount Lip as shown in the image below.
- Outlets can be installed under each Vanity Plate and wires can be ran underneath them. Low Profile Wires may be needed to ensure the Vanity Plates do not protrude away from the Plastic Clips.
- Once the desired location of the Vanity Plate is found, remove the Glue Cover from the Plastic Clip and press the Vanity Plate against it to fix the position and prevent any movement.



Cable Management Information

- Wires can be routed through the wire routing holes and/or zip tied with the included zip ties as shown in the image below. Ensure enough slack remains so that the wires can freely move when the TV is swiveled left and right.
- The Right Actuator Motor Cable can be routed above the mount and between the wall and Upper Mount Lip using the provided 1m Motor Cable.
- Once all Cable Management is finished, check the full range of motion of the Mount to ensure no pinching or rubbing occurs.



Maintenance

To ensure the mount functions for the duration of its life. Please follow these simple procedures:

1. Lubricate all joints every 3 months. More lubrication may be required for outdoor installations.

2. Visually check all bolts every 3 months to ensure no unordinary noise or function occurs.

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