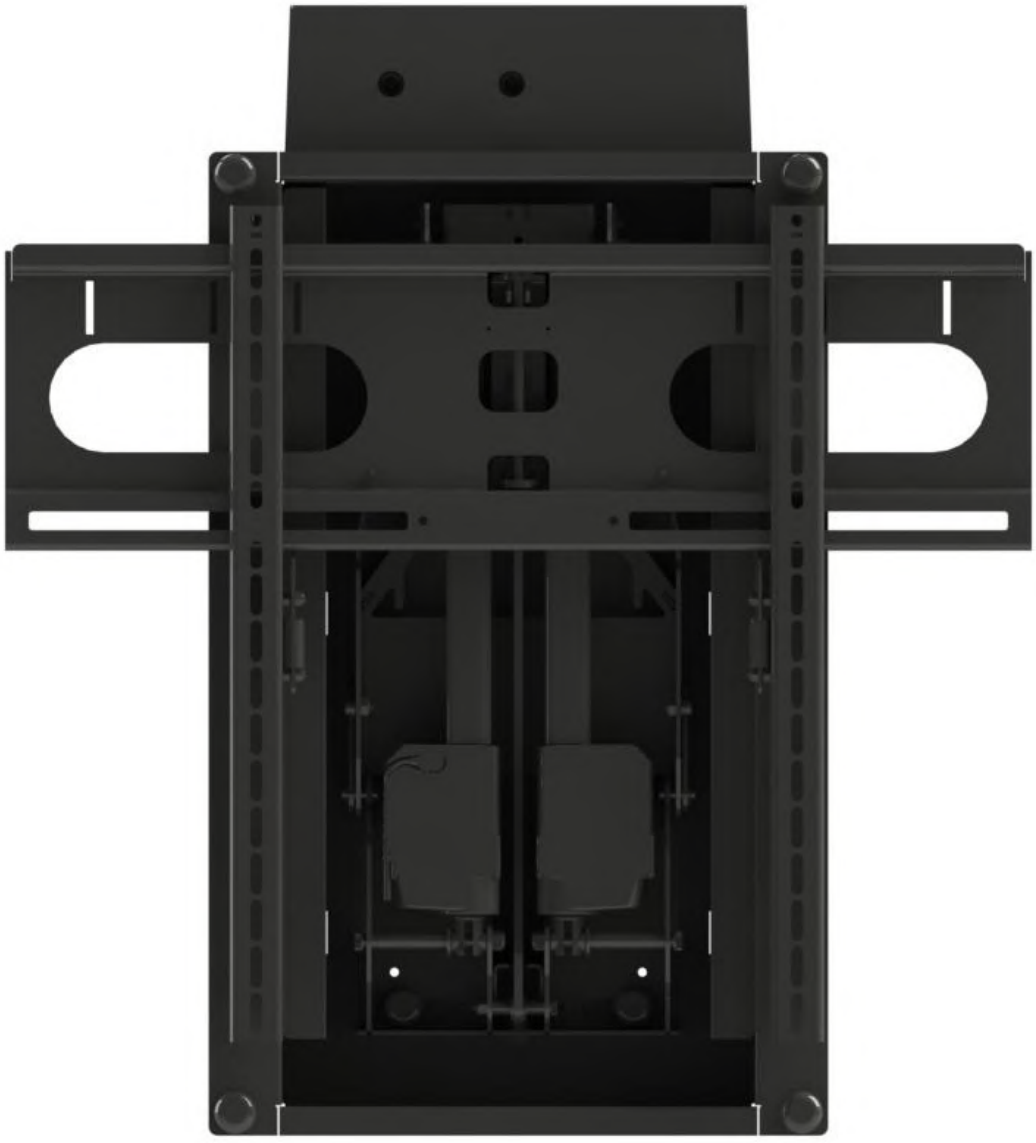
NEXUS 21

TECHNOLOGY IN MOTION

Transcend Pro
Installation Instructions



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TECHNOLOGY IN MOTION

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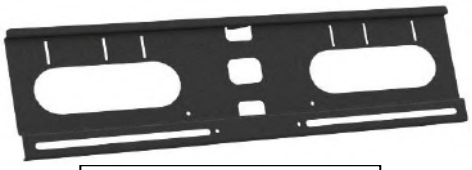
Revised: 09/14/18

Below is a parts list describing all of the items included with the Transcend Pro. 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

Control Box Enclosure

Parts List, continued

Cables

- **Motor Cable 1m (2)** – 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) – #10 x 0.25" Phillips Screws
3. Four (4) – Zip Ties
4. Two (2) – Adhesive Rubber Bumpers
5. Four (4) – Lag Screw Covers
6. Four (4) – Lag Screw Cover Washers
7. 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 19.

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 19.

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 22".**

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2. Assembling the Mount
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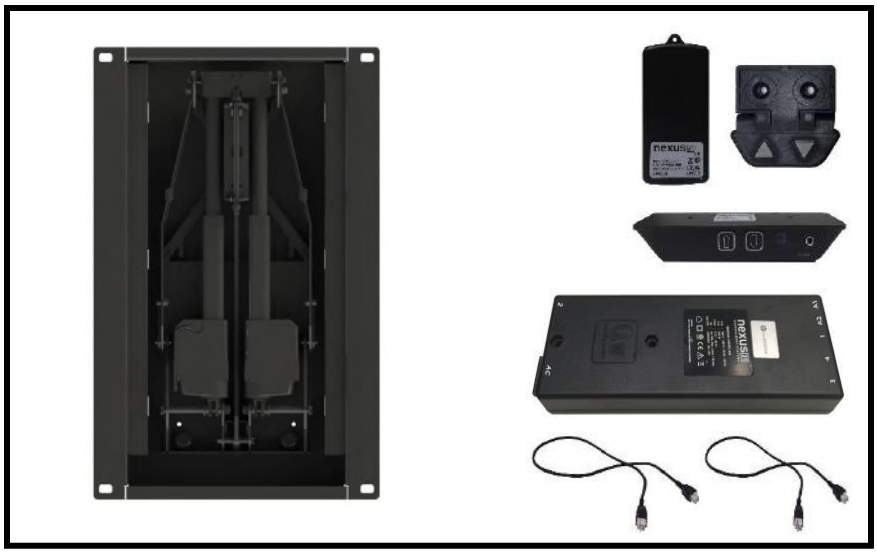
4. Attaching the TV to the Mount
5. TV Level Adjustment
6. How to Set the Tilt
7. How to Set a Lower Limit
8. Cable Management Information
9. Maintenance & Contact Closure Information

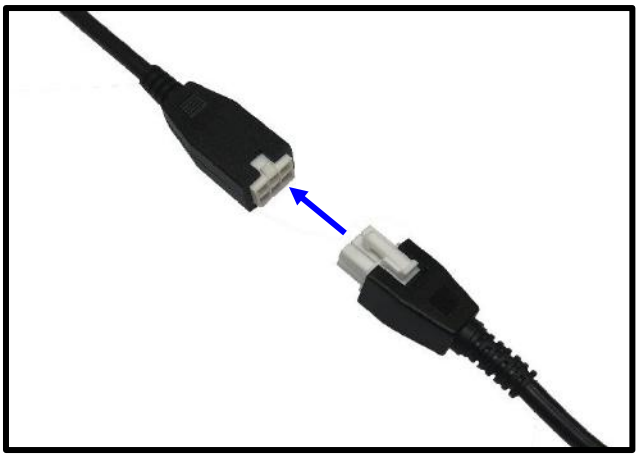
Connecting the Mount

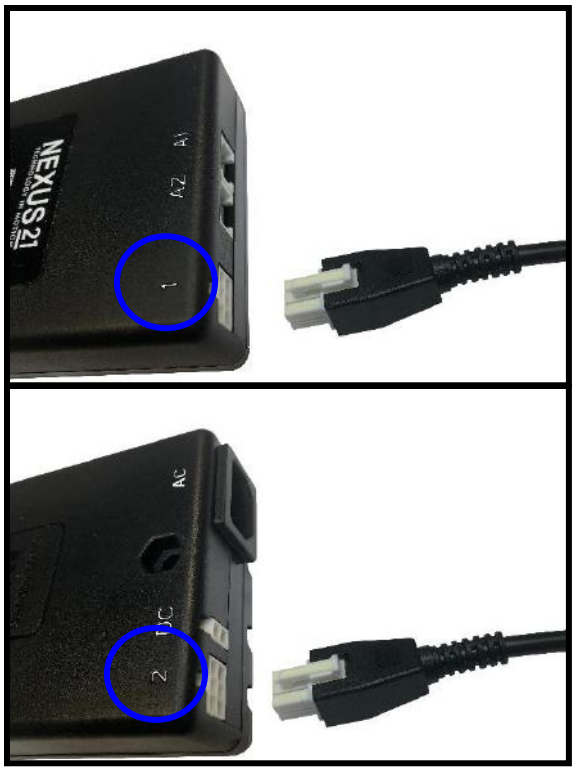


For these steps you will need the following parts:

- Transcend Pro Mount
- Control Box
- (2) Motor Cables
- Power Cord
- Wired Backup Switch
- CSI Control Kit or RF Control Kit

Step 1: Connect the *Motor Cables* to the Pigtail on each Actuator for the Transcend Pro.



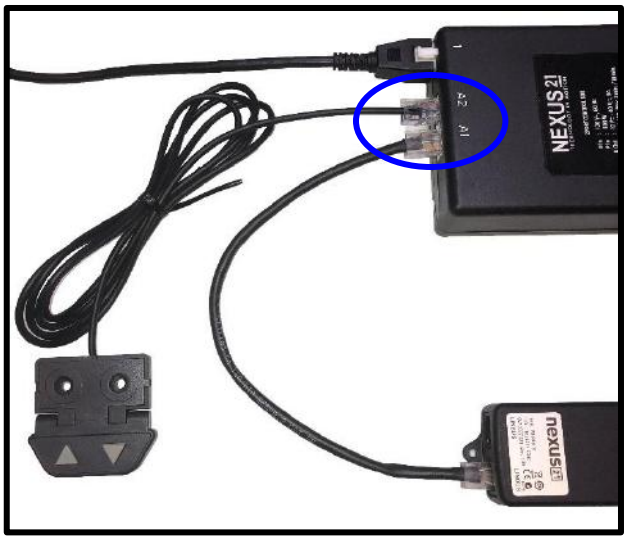


Step 2: Connect the *Motor Cables* to Ports 1 & 2 which are located on the front and back face of the *Control Box*.

Step 3: If the system came with RF Controls, connect the *Wired Backup Switch* and *RF Receiver* to Ports A1 & A2 on the *Control Box*.

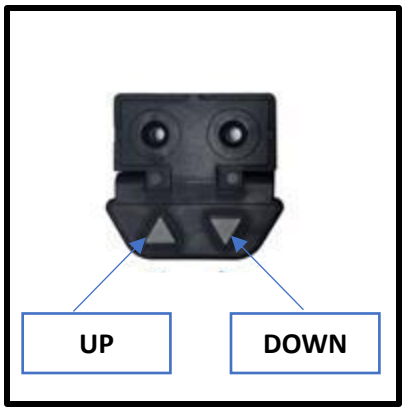
If your system came with the CSI Kit, connect just the *IR Receiver* to Port A1 on the *Control Box*.

CSI Kit



RF Kit

Step 4: Connect the *Power Cable* to Port AC on the *Control Box* and connect the other end to a Wall Outlet.



Step 5: Press and hold the Down button on the *Wired Backup Switch* and run the Actuators to their lowest position.

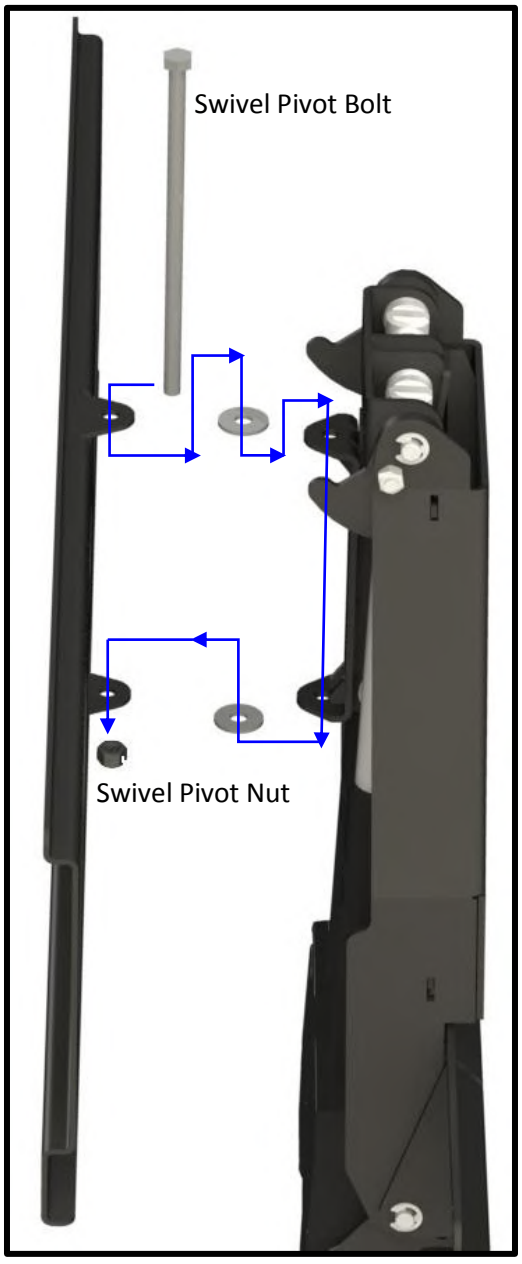
Step 6: Once the Actuators stop, release the Down button then press and hold it again until you hear a click from both Actuators. This will initialize them so they start and stop at the same point.

Assembling the Mount

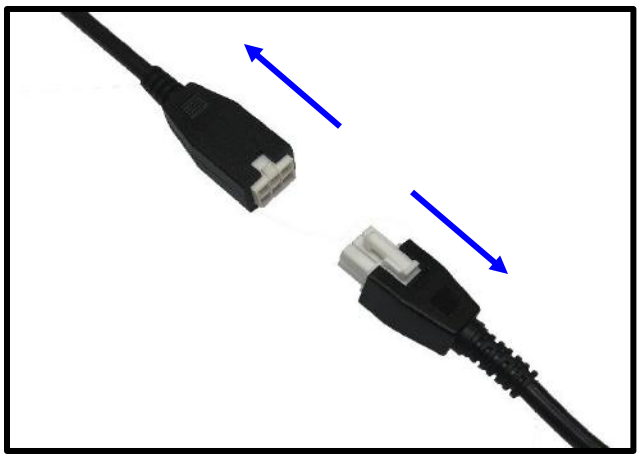
For these steps you will need the following parts:

- Swivel Pivot Bolt
- Swivel Pivot Nut
- (2) Swivel Pivot Washers
- (2) 5 x 35mm BHMS Screws
- (4) #10 x 0.25” Phillips Screws

Step 7: 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.

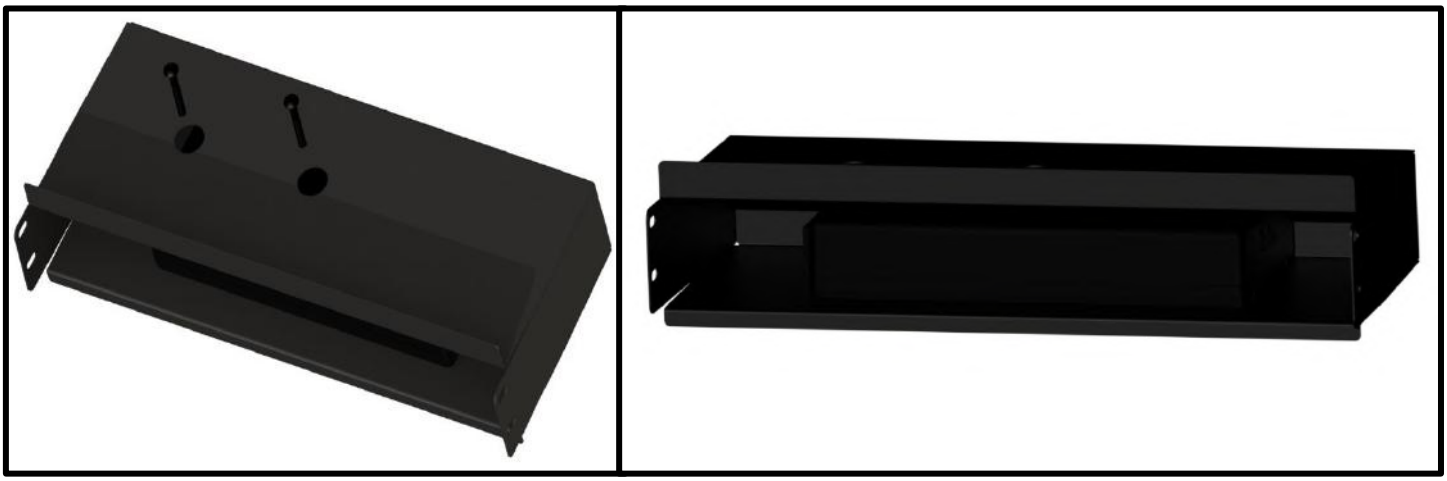


Step 8: Adjust the Swivel Tension, by loosening or tightening the Swivel Pivot Nut while holding the head of the Swivel Pivot Bolt with a Wrench.

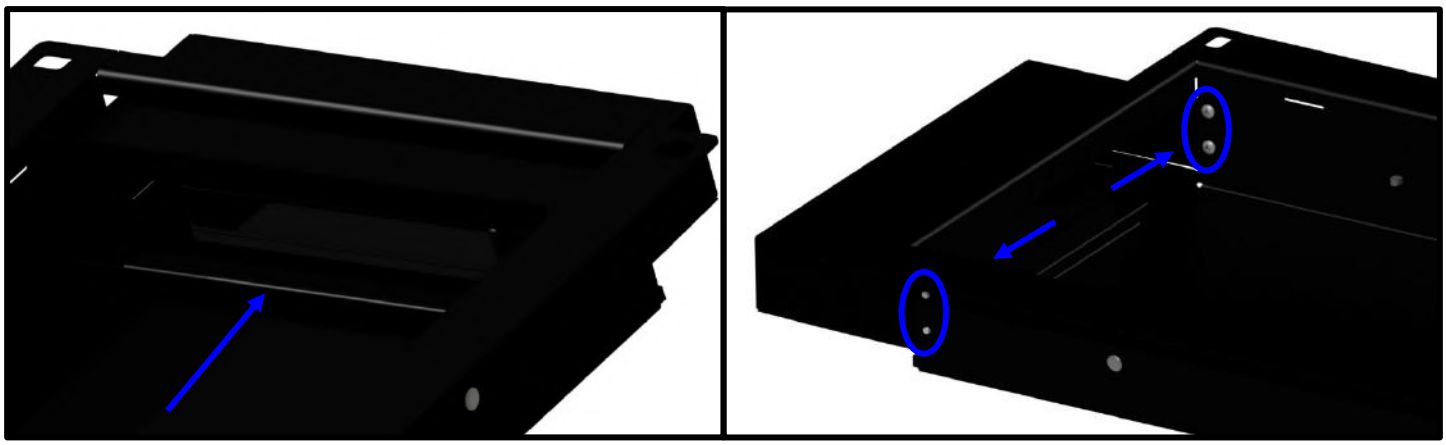


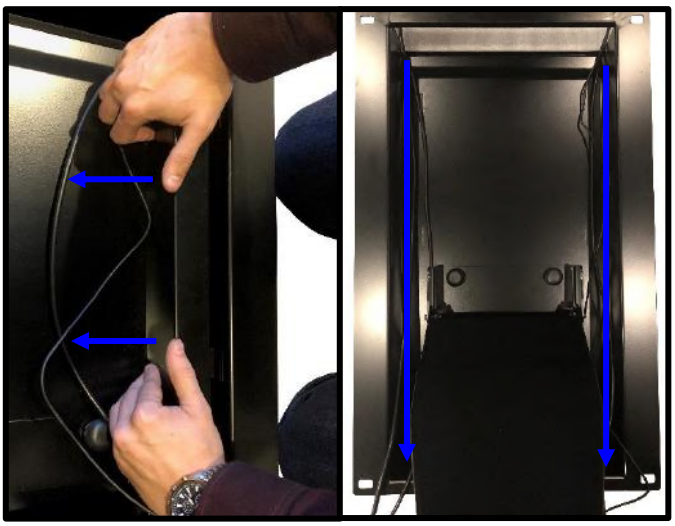
Step 9: Disconnect the Motor Cables from the Actuators.

Step 10: Place the Control Box with all of its connections into the Control Box enclosure and fasten it to the enclosure using (2) BHMS Screws.



Step 11: Place the Enclosure into the top slot of the Transcend Pro and Fasten it to the recess box using (4) Phillips Screws.

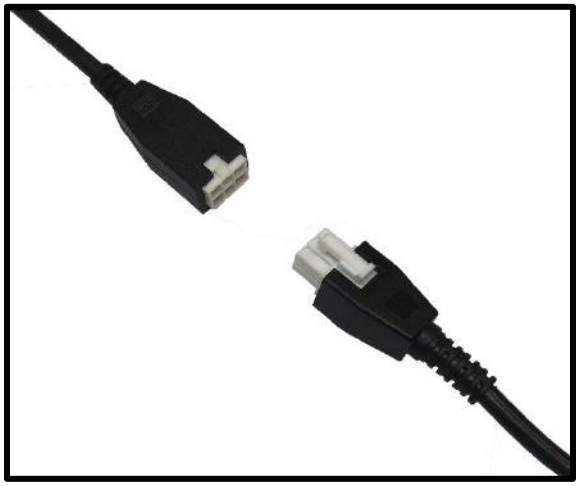


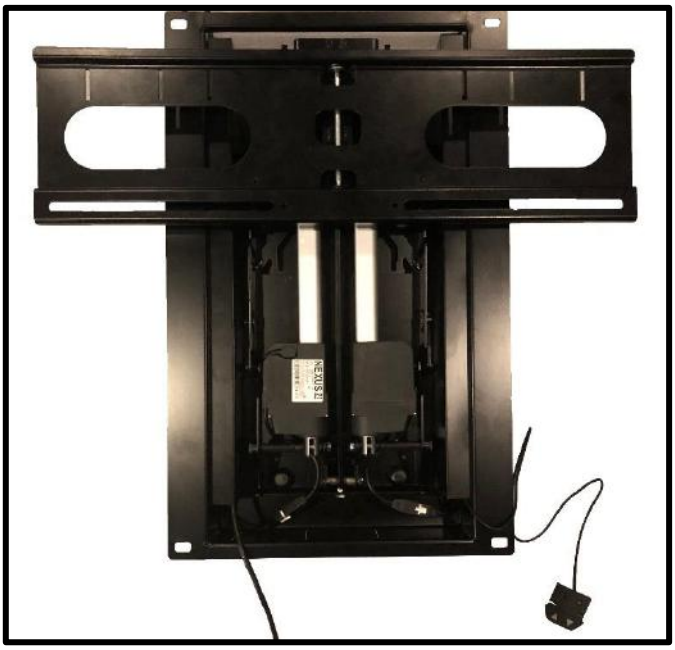


Step 12: Remove the Cable Management Covers on the interior sides of the Recess Box.

Step 13: Place all the cables into their respective areas and replace the Cable Management Covers.

Step 14: Reconnect the Motor Cables to each Actuator.





Step 15: Press the Up button to run the mount to the top most position then disconnect it from power.

Installing the Mount

For these steps you will need the following parts:

- Transcend Pro
- (4) Lag Bolts
- (4) Lag Bolt Cover Washers
- (4) Washers
- (4) Lag Bolt Covers

Step 16: Remove the Knock Out for your power on the bottom of the Recess Box.

Note: At this point make sure the necessary power supply is ran to the cutout in the wall for the mount, TV, and any other components.

Step 17: Measure Your Shelf Depth [D], if you do not have a Shelf or Mantel proceed to the next step.

Step 17a: Using shelf depth [D], locate the cell in (Table 1) to determine the [H] (Minimum Clearance)

Step 17b: Using the shelf depth [D] locate the cell in (Table 2) to determine the [H] (Minimum Clearance)

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

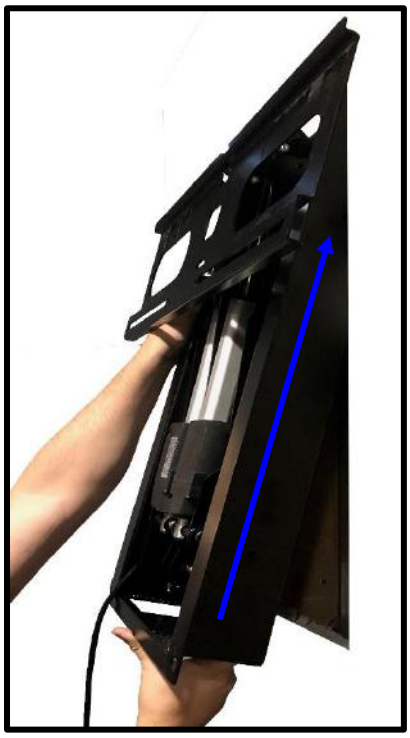
Note: Mocking the TV up on the mount prior to installation will allow you to determine where the TV will rest relative to the bottom of the mount. This will ensure the requirements for Table 2 are met and the TV does not collide with the top of the shelf during downward travel.

Transcend Pro Clearance Table

Shelf Depth **[D]** in Inches	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**
Mount Clearance Height **[H]** in Inches	0	0	1.25	2.25	3	4	5	6	7	10	12	-	-	-
Shelf Depth **[D]** in Centimeters	**0**	**2.6**	**5.1**	**7.7**	**10.2**	**12.7**	**15.3**	**17.8**	**20.4**	**22.9**	**25.4**	**28**	**30.5**	**33**
Mount Clearance Height **[H]** in Centimeters	0	0	3.2	5.8	7.7	10.2	12.7	15.3	17.8	25.4	30.5	-	-	-
[H] = MINIMUM CLEARANCE BETWEEN TOP OF SHELF AND BOTTOM MOUNT														

TV Clearance Table (or Soundbar Clearance Table, whichever is lower)

Shelf Depth **[D]** in Inches	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**
TV/Soundbar Clearance Height **[H]** in Inches	0	0.25	0.5	0.75	1	1.5	1.75	2.5	3	3.75	4.5	5.5	6.75	8.25
Shelf Depth **[D]** in Centimeters	**0**	**2.6**	**5.1**	**7.7**	**10.2**	**12.7**	**15.3**	**17.8**	**20.4**	**22.9**	**25.4**	**28**	**30.5**	**33**
TV/Soundbar Clearance Height **[H]** in Centimeters	0	0.7	1.3	2	2.6	3.9	4.5	6.4	7.7	9.6	11.5	14	17.2	21
[H] = MINIMUM CLEARANCE BETWEEN TOP OF SHELF AND BOTTOM OF TV/SOUNDBAR														



Step 18: Place the top end of the Transcend Pro into the cutout in the wall, push it up, then push the bottom half of the mount into place.

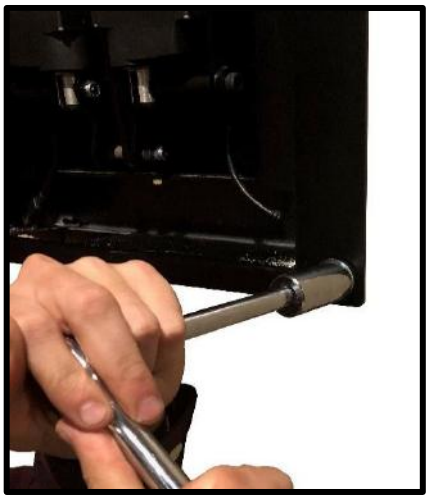
Note: Be sure to pull the necessary power supply up to the knockout in the bottom of the Recess Box.

Step 19: Connect power cord for the Control Box to your power supply or outlet.

Step 20: Mark the Screw locations on the wall and Drill Pilot Holes for each Screw Location.

Note: Ensure the Pilot Hole is centered within the slot. This will allow minor adjustment for the position of the mount if needed.

Step 21: Partially fasten the Mount to the Wall using (4) Lag Bolts, (4) Washers, and (4) Lag Bolt Cover Washers.



Step 22: Level the Mount off of the Screen Back Plate, ensure it is level relative to the mantel or floor, then completely fasten Lag Bolts.

Important Note: If the mount is unlevel, use the Slotted Holes for the Lag Bolts to adjust its position. If the mount is still unlevel, the cutout may need to be expanded. Finer adjustments for the level of the TV can be made separately and are covered later in Adjustments section of this Instruction Manual.

Step 23: Place the (4) Lag Bolt Covers over each Lag Bolt Cover Washer when finished.

Attaching the TV to the Mount

For these steps you will need the following parts:

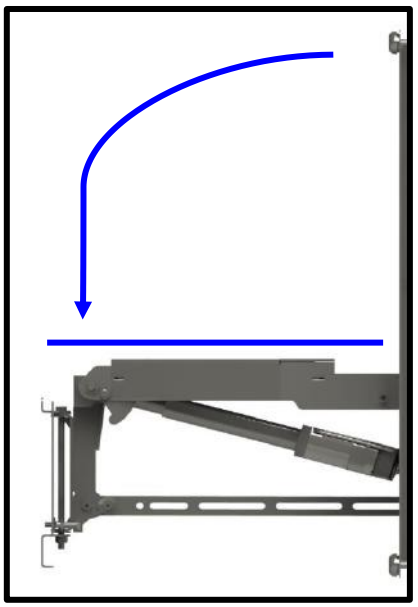
- Vertical Mounting Bars
- Large Assorted Hardware Pack

Step 24: Attach the Vertical Mounting Bars as high as possible on the Back of the TV

Note: This will ensure the mount has the most possible downward travel and is fully concealed when in the Top Position.

Step 25: Retract the spring-loaded Screen Locks on the Vertical Mounting Bars to their down and locked positions.

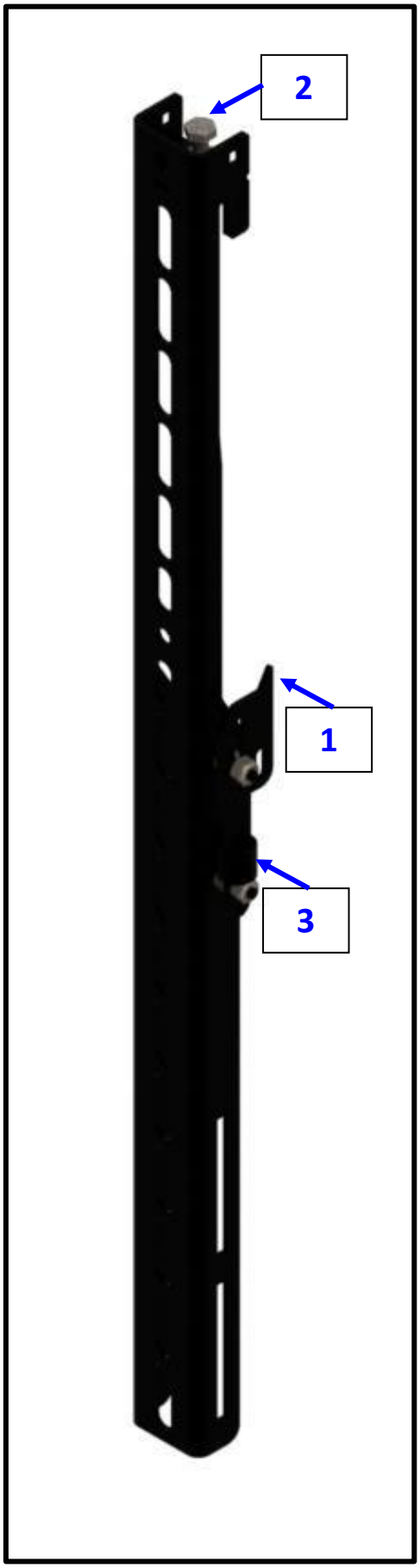
Step 26: Press the Down button on the Wired Backup Switch to lower the Mount, press the Up button to stop it once it reaches the out most position.



Step 27: Hang and center the TV on the Screen Back Plate, then release the spring-loaded Screen Locks to secure the TV in place.

Step 28: Test run the Mount to ensure the lowest position does not interfere with the shelf or mantel below it.

TV Level Adjustment



Step 1: Disengage the Spring-Loaded Screen Lock.

Step 2: Loosen or Tighten the Bolt on the Top of either Vertical Mounting Bar, to raise of lower that side of the TV.

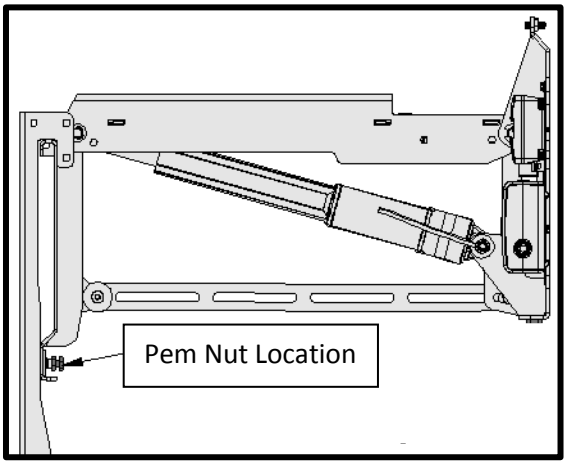
Note: Maximum adjustment of +/- 0.5 Degrees.

Step 3: Re-engage the Spring-Loaded Screen Lock.

Step 4: Test run the Mount to ensure the position is set correctly.

How to Set the Tilt

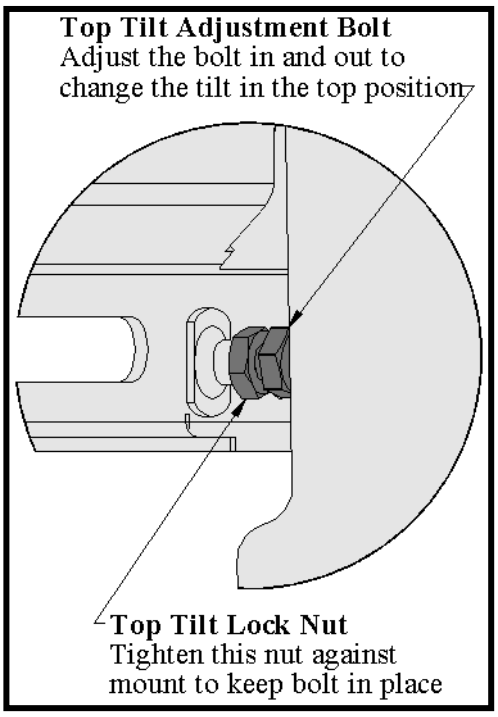
The has +/- 1 degree of Tilt in the Top Position, and +1/-2 Degrees in the Bottom and Out Positions. Below are the steps on how to set the Tilt for each position of the mount.



Top Tilt Adjustment

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

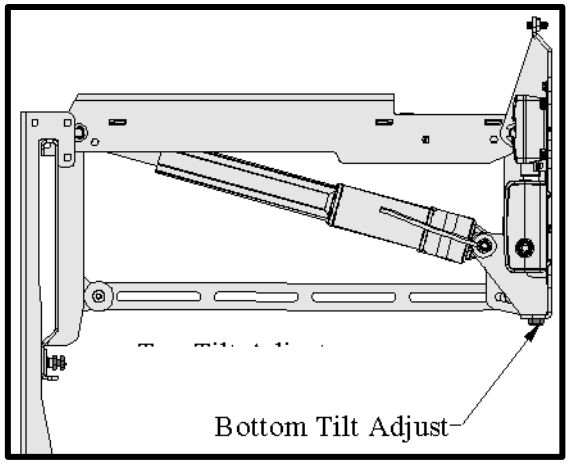
Step 2: Fasten each Screw into the Pem Nuts located on the left and right side of the Screen Back Plate.

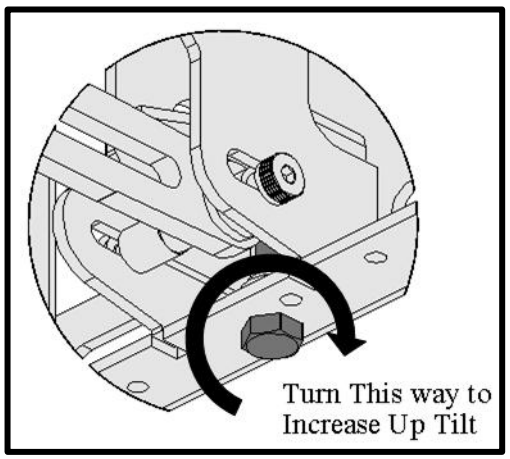


Step 3: To increase the Tilt, loosen the Lock Nut on the Screw and loosen the Screw from the Screen Back Plate.

Bottom Tilt Adjustment

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





How to Set a Lower Limit

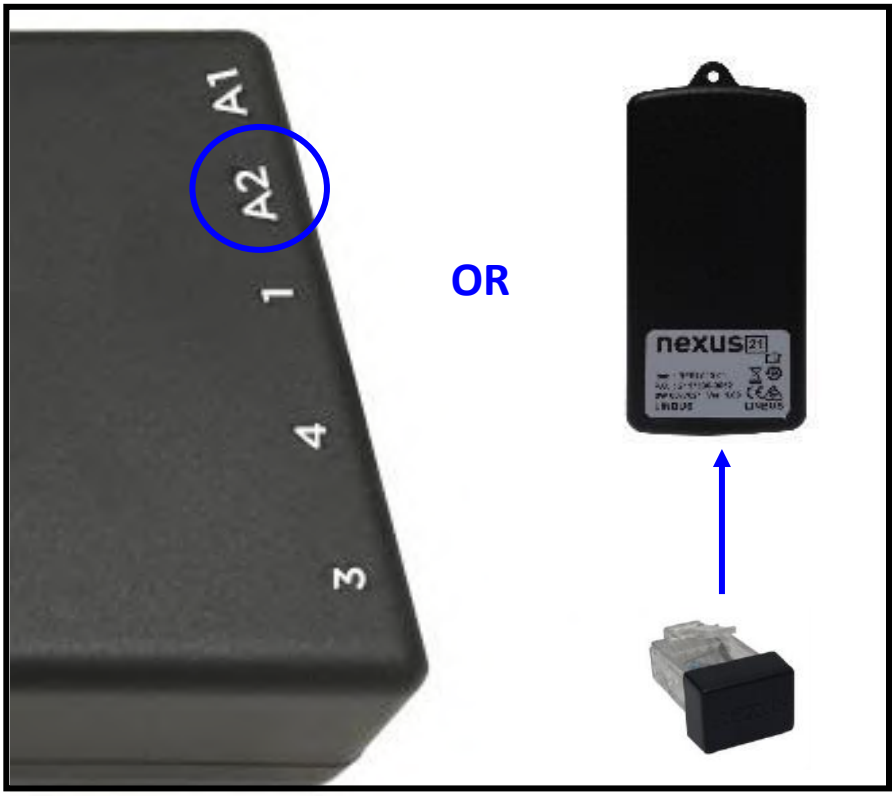
Only the Lower Limit can be set on the Transcend Pro, however it must be able to fully travel with no obstructions below it. This is because the Mount resets in the lowest position and will be unable to reset if it is obstructed.

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.



Cable Management

- Wires from the TV can be routed down along the Center Linkage Arm then zip tied to it. Ensure enough slack remains so that the wires can freely move when the mount is operated.

- Once all Cable Management is finished, check the full range of motion again to ensure no pinching or rubbing occurs on cables, zip ties, components, etc.

Maintenance

To ensure the mount functions for the duration of its life. Please follow these steps once every 3 months:

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.

Contact Closure Information

Our systems are able to be integrated via Contact Closure through the use of a 3-Wire RJ45 Cable. Use the following information for wiring the to your Control System.

Green is UP (Pin 3)
Red is DOWN (Pin 5)
Blue is GROUND (Pin 8)

You will need (2) Normally Open Relays, one for UP and one for DOWN. Each relay should receive a momentary pulse of 750ms to 1000ms. Do not latch a contact closure command as this will cause intermittent function on the system and potentially damage the Control Box.

Note: You cannot use both IR and Contact Closure or RF and Contact Closure at the same time as this may cause intermittent function on the system.

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