

Down and Out Motor Mount Installation Directions

Mounting the Down and Out Motor Mount correctly takes a lot of thought and a lot of planning. Please read the directions thoroughly and plan out how the mount would be installed best for your use. Each Setup will be different and these directions cannot account for every situation. Failure to do so may result in Damage, Injury, or Death. Dynamic Mounting is not responsible for any damage, injury, or death resulting from improper mounting or use of the Down and Out Motor Mount.

These instructions are only a guide and the consumer is responsible for correct and secure mounting. The person installing the mount should be a competent person with experience mounting load bearing assemblies. For any questions or concerns, please contact Dynamic Mounting at Info@DynamicMounting.com.



CAUTION: This wall mount is intended for use only with the maximum weight of 125 lbs. Use with heavier than the maximum weights indicated may result in instability causing possible injury.

Pinching and Crushing Hazard: The wall mount actuation is very strong; do NOT run the mount when anyone is near the mount. Do NOT have any part of the body in the mount or between the TV and Wall. The Mount will keep driving until someone pushes another button on the remote to stop it.

Note: These instructions are for the non-swivel and swivel version of the Down and Out Motor Mount.

Specifications

- Fits most Flat and Curved Televisions 40 inches and larger to 125 lbs with Frame, 70 lbs as Single Stud (No Frame). Check television weight and mounting hole pattern for compatibility with your television
- **Note for smaller televisions;** the mount may be wider or taller than the television. If this is the case then the mount may be visible in the top position. See Figure 1
- Handles televisions 20 to 125 lbs with Frame, 20 to 70 lbs as Single Stud (No Frame)
- Allowable television mounting pattern: 7.9in (200mm) to 27.1in (688mm) wide, up to 22.8in (579mm) high. Works with all VESA patterns in that range, See Figure 1 with Frame, Figure 5 without Frame
- Product Dimensions Non-Swivel: 29.0 x 23.6 x 3.9 inches. Swivel: 29.0 x 23.6 x 4.6 inches. See Figure 1
- Frame Weight: 5 lbs, Fixed Mount weight: 26 pounds, Swivel Mount Weight: 28 lbs
- Tilts 10 degrees to Vertical in top position
- Tilt can be fine-tuned Vertical +/-1 degree in out through bottom position
- Swivel Version can be swiveled +/-33 degrees, 66 degrees total

FAQ

- **Where do I mount over a shelf?** See the Above Shelf Mounting section on page 11.
- **The TV tilts down in the top position.** See the Setting the Tilt in the Top Position section on page 12.
- **The TV isn't level in the out and bottom positions.** The TV's Center of Gravity needs to be centered on the mount, if the stud spacing isn't allowing this to happen the [Ultra Wall Support](#) (sold separately) extends the mounts reach and would probably help.

CAUTION: These wall mounting instructions and hardware are for mounting to wood studs only. It is up to you to verify that the material supplied will work for your setup; other materials may need to be purchased by you. For concrete, brick or other mounting materials consult an expert.

Consult your TV's owner manual before mounting your television, it contains relevant information.

Tools Needed

- 7/16" open ended wrench
- 1/2" open ended wrench
- 9/16" box or ratchet wrench
- 1/4" Drill Bit
- Drill
- Tape Measure
- Stud Finder
- Level
- Phillips Screwdrivers
- A friend or 2, depending on how heavy your television is



Various Items (All in One Bag)

- 4 3/8" by 3" long lag screw with washer
- 4 Lag Screw Cover
- 4 Washer for Lag Screw Cover
- 4 Zip Ties
- 2 Sticky L-grips for covers

Fasteners for Mounting the Television to the TV Hangers (All in One Bag)

- 4 M6 x 20 mm (.78") long Phillips head machine screw
- 4 M6 x 35 mm (1.38") long Phillips head machine screw
- 4 M8 x 20 mm (.78") long Phillips head machine screw
- 4 M8 x 35 mm (1.38") long Phillips head machine screw
- 4 1/4" tall plastic spacers
- 8 .1" tall plastic spacers
- 4 Steel M6 washers

Parts Included

- 1 Down and Out Motor Mount (Fixed or Swivel)
- 1 Wall Frame (unless ordered Single Stud Only)
- 2 Auto-Locking TV Hangers
- 2 Paintable Plastic Covers
- 1 RF Remote Control
- 1 Remote Control Holder with screws and anchors
- 2 AAA Batteries
- 1 IR Remote Control with Battery

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These Directions are for the Down and Out Motor, Fixed and Swivel Mount, on the Frame or Single Stud (No Frame) Version.

- Figure 1 is the overview with the Frame
- Figure 5 is the overview of the Single Stud
- Page 5 is for the Swivel Mount only
- Page 7 shows how to mount the Frame to the wall
- Page 8 shows how to mount the Single Stud, without Frame, to the wall.

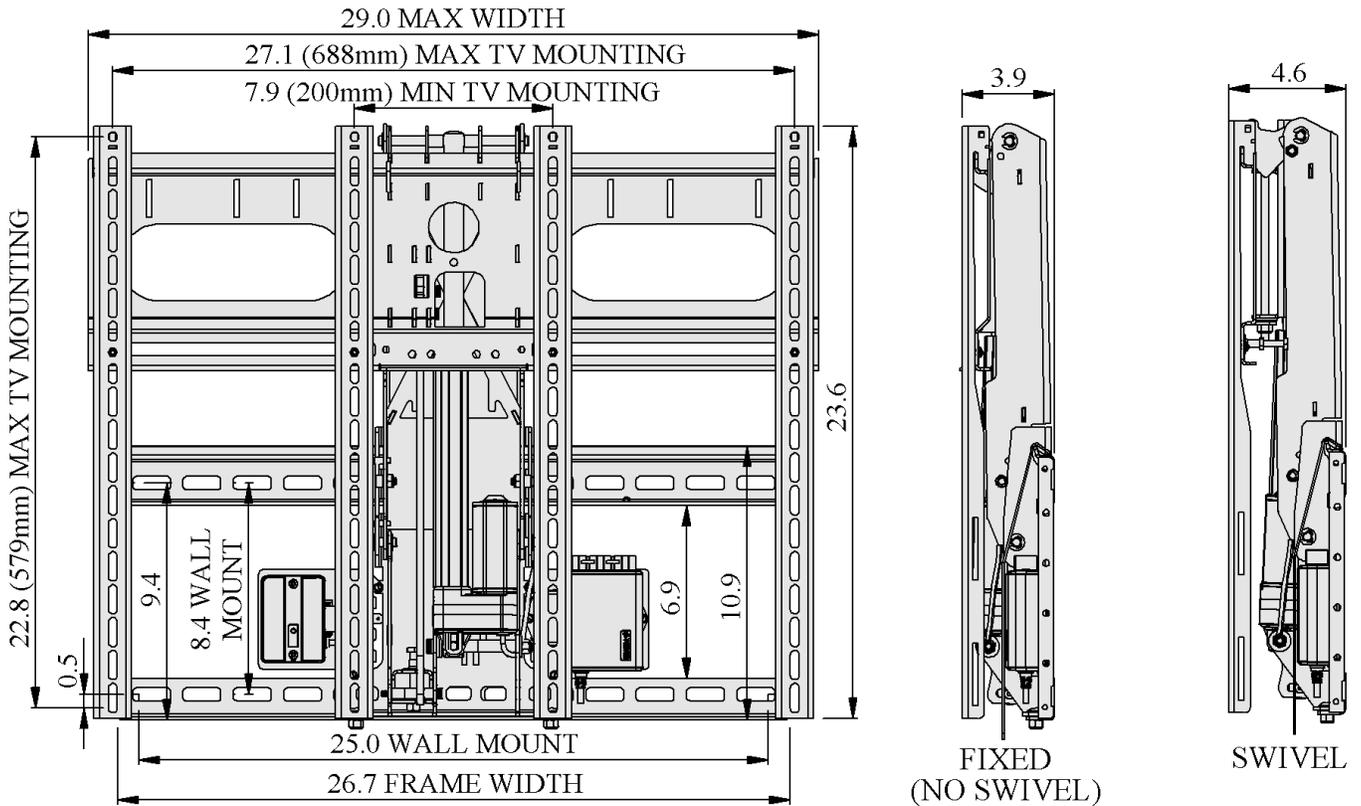


Figure 1, Mount Overall Size, Television Mounting Hole Pattern Range, Wall Mounting Hole Pattern Range

Note: Mount Only Comes with 2 television Mounting Arms, Not the 4 Shown

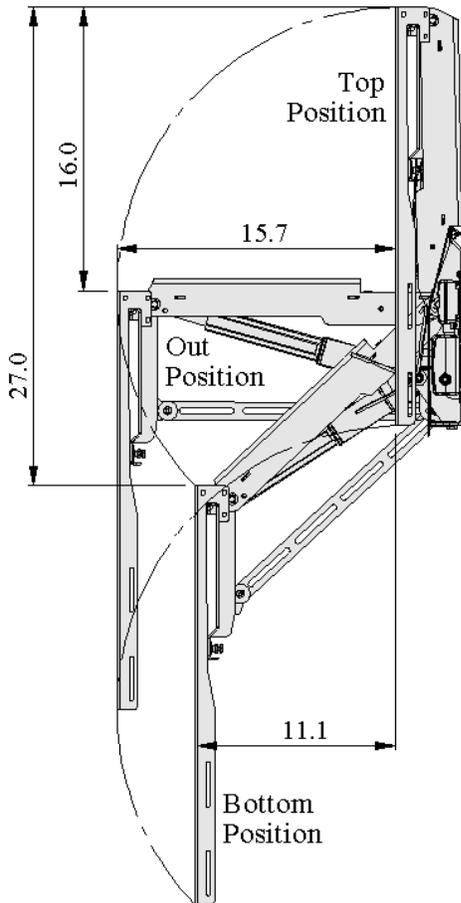
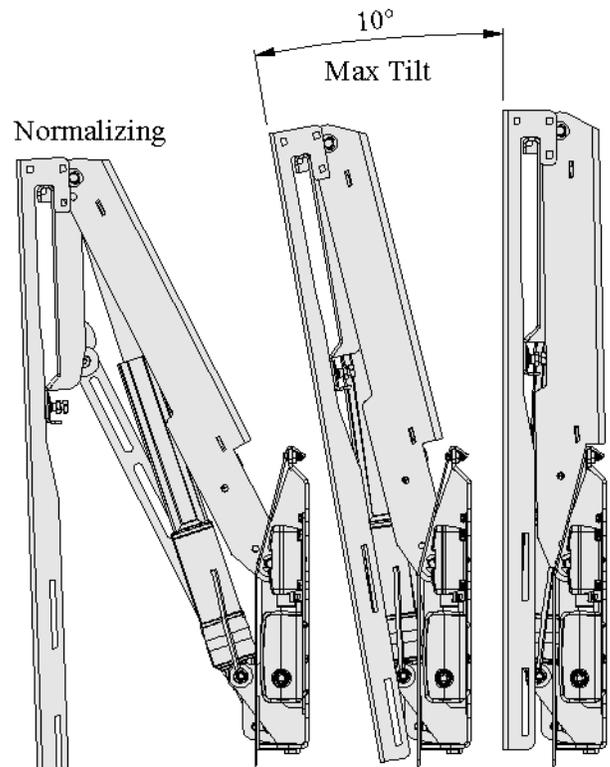


Figure 2, Vertical in Top Position

Vertical tolerance in Out and Bottom Positions is +/-1 degree.

Install Video at www.DynamicMounting.com/Install



As the mount lowers, first it tilts down. As it keeps lowering, it normalizes, becoming vertical about 6 inches down.

Figure 3, Max Tilt and Motion at the Top

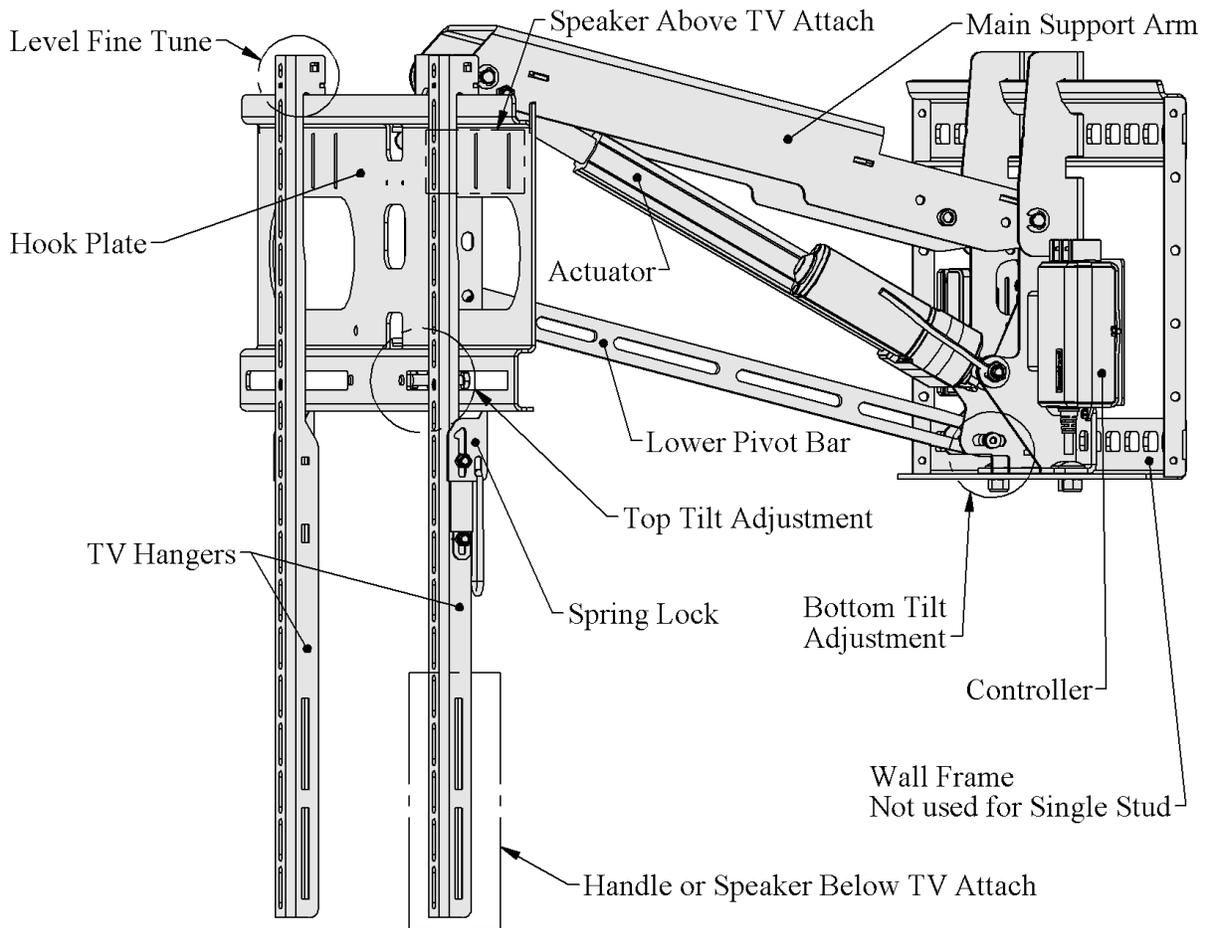


Figure 4, Overview of Mount Parts

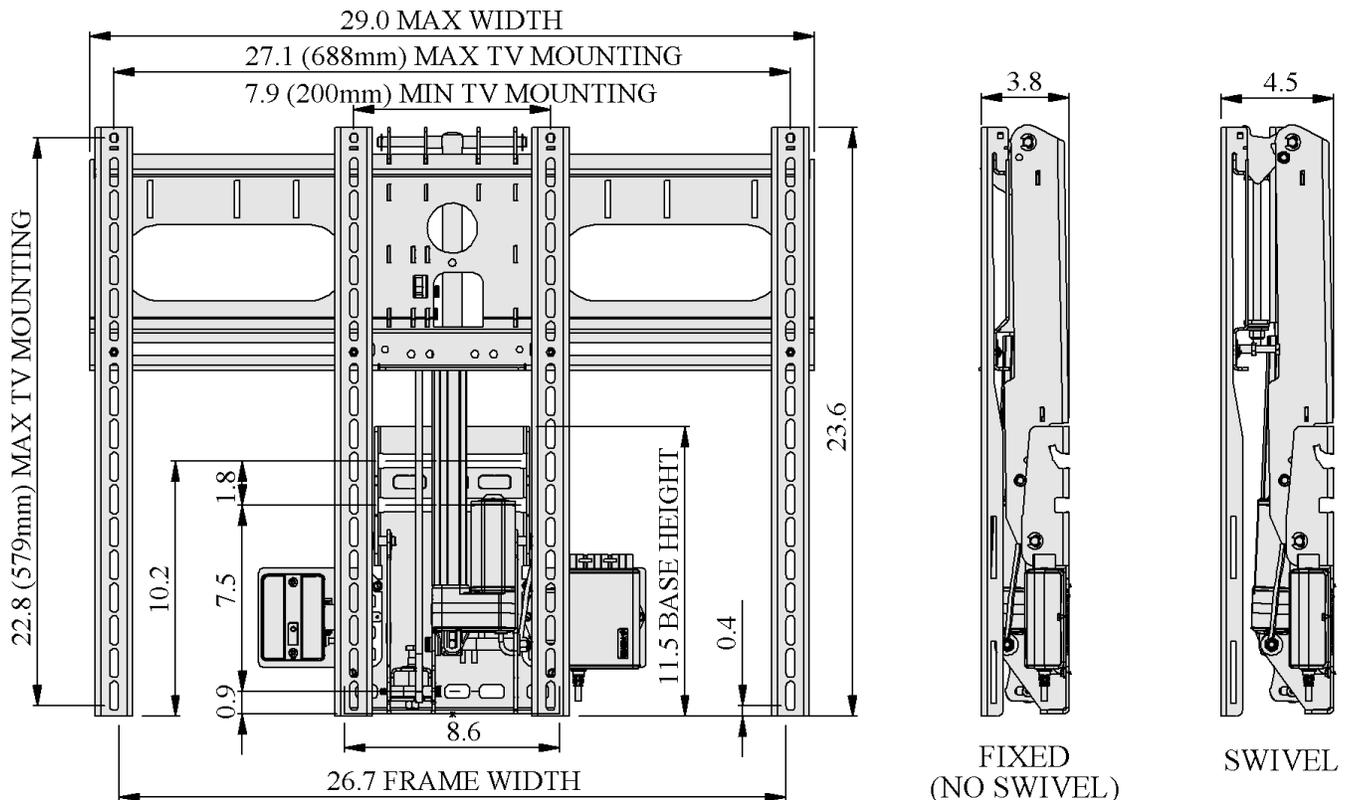


Figure 5, Mount Overall Size without Frame, Television Mounting Hole Pattern Range, Wall Mounting Hole Pattern Range
 Note: Mount Only Comes with 2 television Mounting Arms, Not the 4 Shown

Swivel Version

The swivel version of the mount can be manually swiveled in the out and bottom positions as shown in Figure 6. When raising the mount to the top position there is an adjustable came that can be set so that the TV will not hit the wall or shelf, while still allowing the maximum amount of swivel.

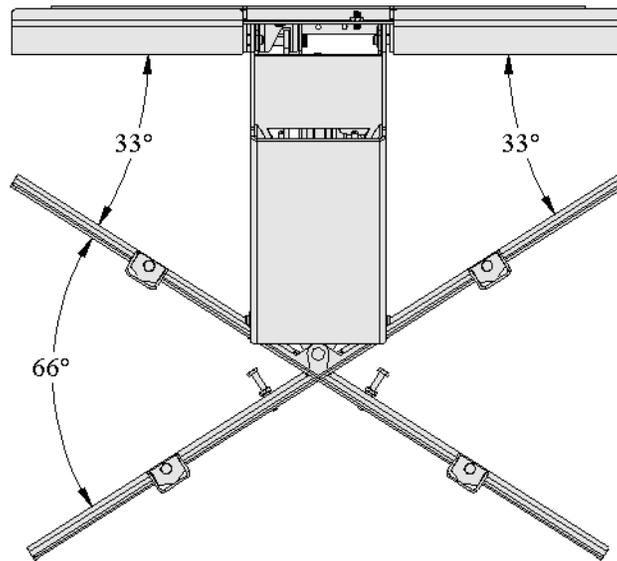


Figure 6 Swivel

Swivel Cam Adjust

To avoid the TV hitting the wall or shelf, adjust the Swivel Cam and tighten the Cam Nut shown in Figure 7. Run the TV up to ensure it is set so that the TV can swivel as much as possible without it hitting the Wall when it goes past the out position. There are 2 cams, 1 per side that can be adjusted.

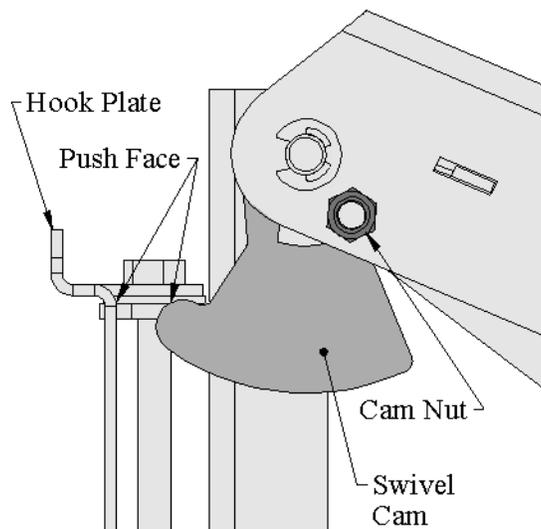


Figure 7 Swivel Cam Adjust

Determining Where to Put Mount

1. Extra thought and planning is needed when mounting over a shelf; see the Above Shelf Mounting section on page 11 for more details and relevant dimensions. Find the needed distances [H] and [C] for your shelf depth [D].
2. To find out how the mount relates to the television you should do a test fitting on the ground.
3. If attaching a soundbar lay that out also with the soundbar bracket.
4. Figure 8 shows the important things to look for and measure.
5. Figure 1 and Figure 5 show important dimensions of the mount.
6. The bottoms of the TV Hanger, Mount, and Frame, are the same height. We recommend attaching the TV Hangers (Figure 9) to the TV and measuring from the bottom of the TV Hanger.
7. If mounting over a shelf, make sure the [H] and [C] minimum distances are satisfied.

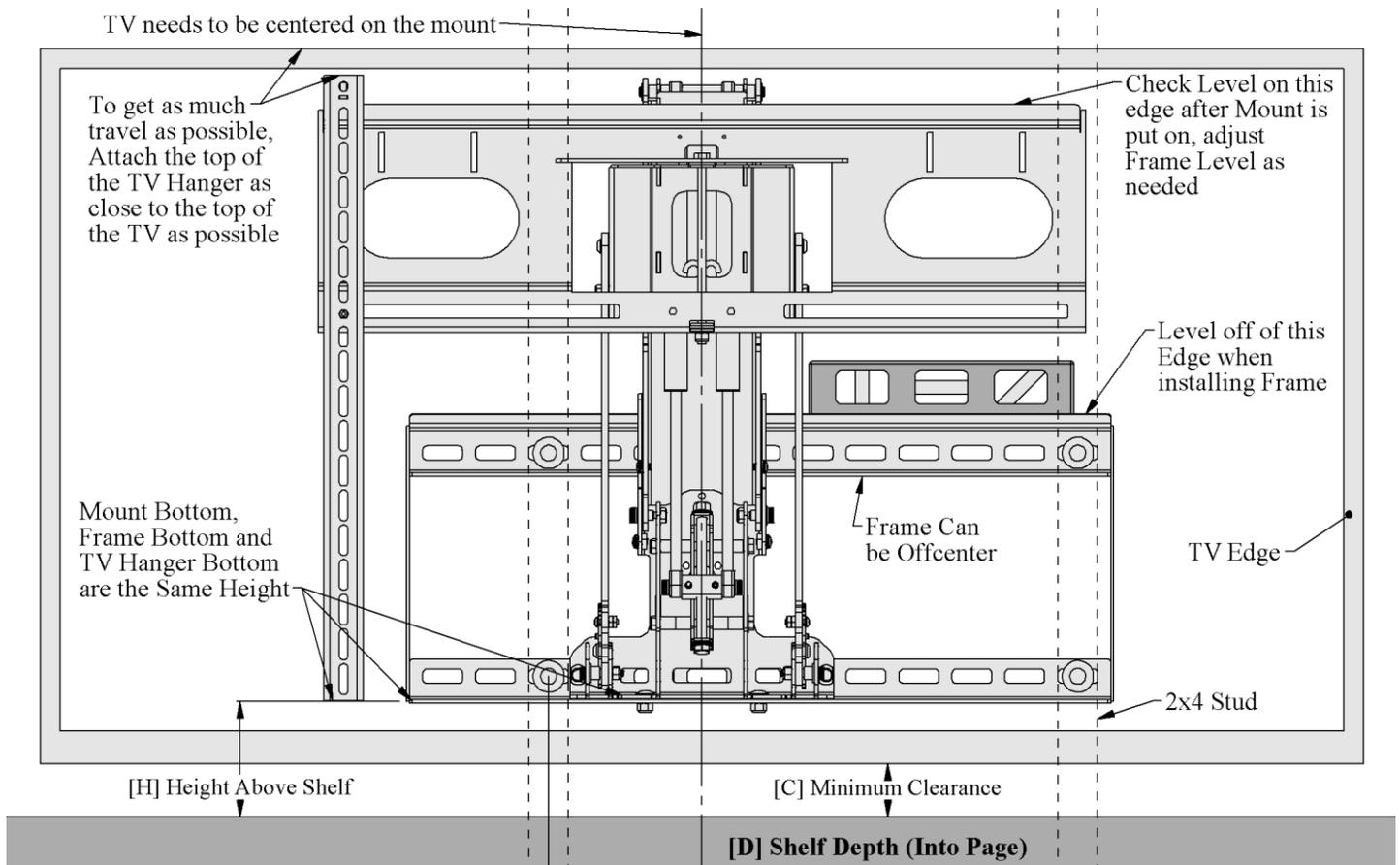


Figure 8, Positioning Mount on the Wall

Attaching TV Hangers to Television

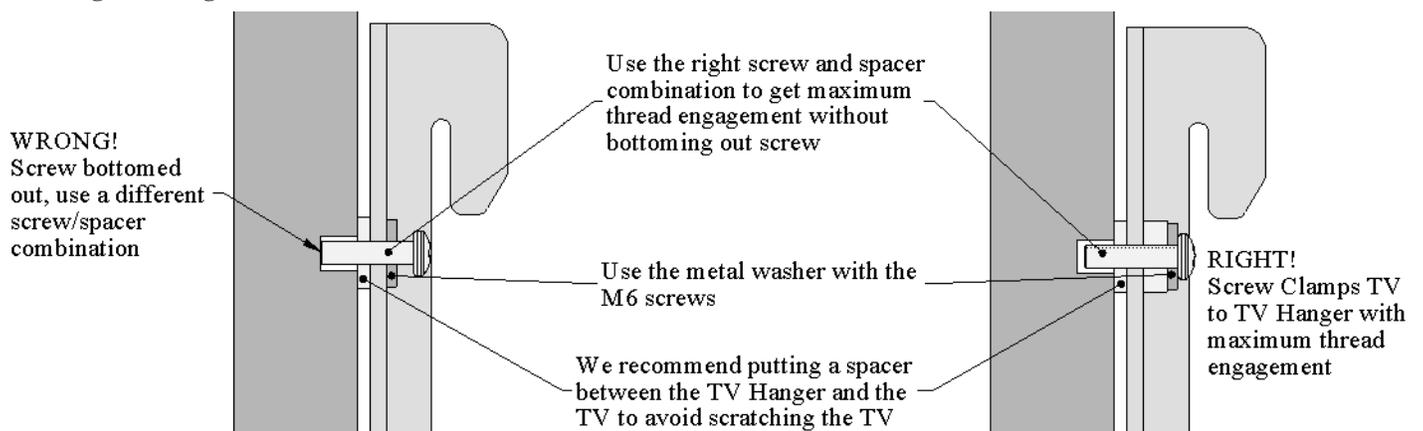


Figure 9, Attaching TV Hangers to TV

This Page is for attaching the Frame Mount to the wall, see next page for Single Stud Mounting.

Conditions for Mounting the Frame to the Wall

1. The TV must be centered on the mount to avoid leaning.
2. The mount is designed to attach to standard 2 x 4 or larger wall studs. If the wall isn't sturdy enough then more support will need to be added, consult an expert.
3. The mount is designed to attach to a structure that can support 4 times the total weight of the television and mount. Dynamic Mounting assumes no responsibility for damage from an improperly installed mount.
4. The mounting holes need to be in the center of the studs, use a stud finder as needed.
5. 2 lag screws are needed in the top slots of the mount and 2 in the bottom slots.
6. 2 lag screws need to be on each side of the center of the mount and the center of gravity of the television.

Important: The TV needs to be centered on the mount to avoid leaning

Mounting Frame to Wall

1. The television should be centered on the mount, if not the television will sag to one side. The heavier the TV and the more off center, the more unlevel the TV will be through its range of motion.
2. Mark the locations of the mounting holes by Using the Frame as a template
3. Once you know your location, pre-drill 1 of the top row of mounting holes 2.5in deep using the 1/4in drill bit.
4. Figure 10 shows the correct order to put on the lag screw.
5. Use a 9/16in wrench to install the lag screw; do not tighten all of the way down yet.
6. Level the mount as shown in Figure 8.
7. Mark and drill the other 3 holes 2.5in deep.
8. Install the lag screws and tighten until the mount is firmly pressed against the wall. Do NOT over tighten.
9. In some situations the mount will interfere with a lag screw,
 - o Remove the lag screw.
 - o Follow the directions in the Attaching Mount to Frame Section Below.
 - o Put the Lag Screw through the Mount and Frame.

Attaching Mount to Frame

1. Figure 10 shows how to attach the Mount to the Frame.
2. Hook Mount over the top of the Frame.
3. Swing Bottom in.
4. Ensure Mount is on the Centerline of the TV.
5. Use the 5/16" Carriage Bolts and Locknuts to lock in the bottoms of the frame and mount together.

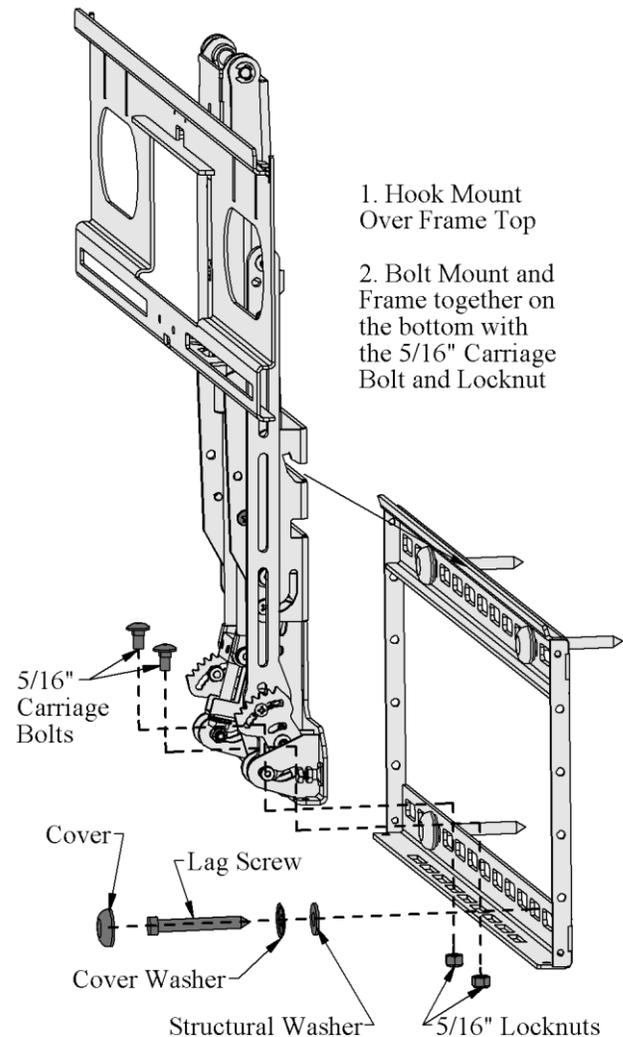


Figure 10, Frame Attach

This Page is for attaching the Single Stud to the wall (No Frame).

Note: The Single Stud Mount has a reduced Max Load of 70 lbs; this is because a single stud isn't strong enough to hold more, the mount is strong enough so if you are attaching to something stronger than a single stud, the mount can handle more weight.

Conditions for Mounting Single Stud to the Wall

1. The TV must be centered on the mount to avoid leaning.
2. The mount must be centered on the stud.
3. The mount is designed to attach to standard 2 x 4 or larger wall studs. If the wall isn't sturdy enough then more support will need to be added, consult an expert.
4. The mount must be securely fastened to a structure that can support 4 times the total weight of the television and mount. Dynamic Mounting assumes no responsibility for damage from an improperly installed mount.
5. The mounting holes need to be in the center of the studs, use a stud finder as needed.
6. 2 lag screws are needed in the top slots of the mount and 1 in the bottom slot.

Important: The TV needs to be centered on the mount to avoid leaning

Mounting Single Stud to the Wall

- The top two lag screw slots are covered by the mount and needs to be actuated to be able to access them.
 - The actuator does not pull down, it only lifts up, so when moving down without any weight on it, the mount may not move. The actuator is moving still though which means the actuator is not holding the Hook Plate up.
 - The Hook Plate can be moved up by hand when the actuator is retracted. Be careful not to pinch a finger when moving the mount for single stud install.
- Figure 11 show the steps to successfully attach to the wall.

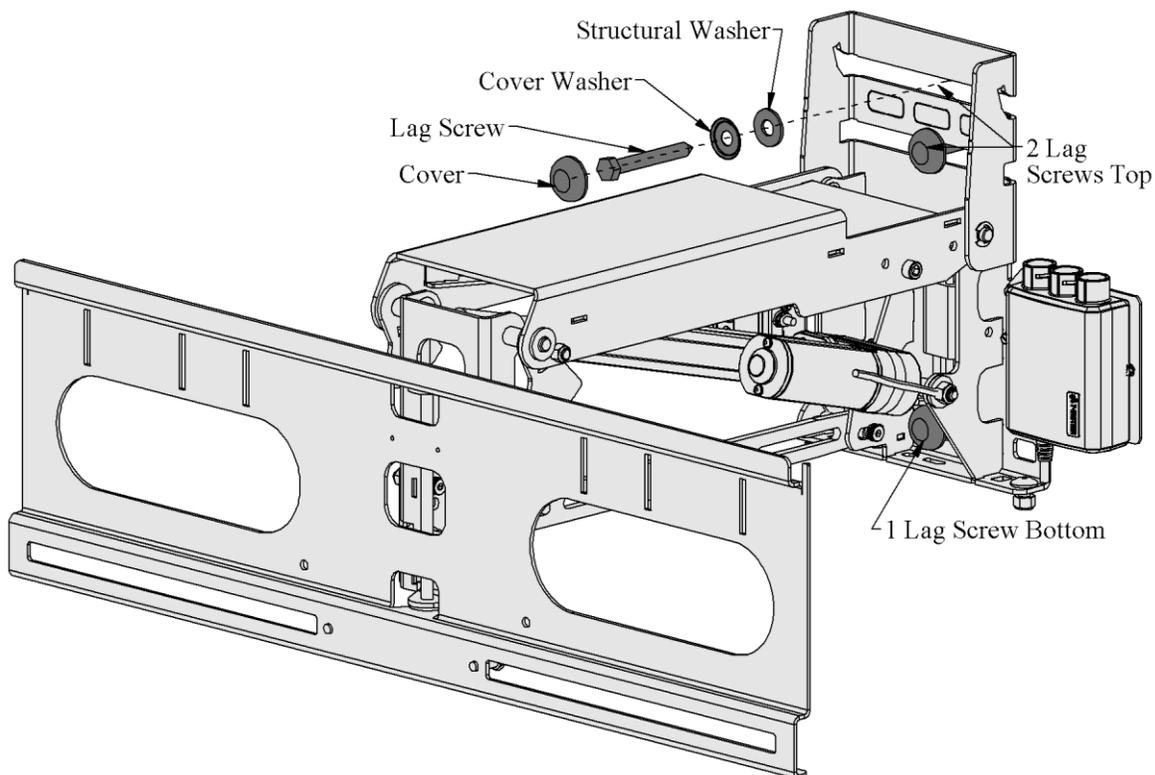


Figure 11, Mounting Single Stud to the Wall

Attaching the Television to the Mount

After the above steps are finished you are ready to put the television on the mount.

1. Drive Mount up and down, ensuring everything is working as expected.
2. Drive mount to the lowest position, if the mount would hit the shelf, set lower position so that it won't.
3. Unplug the power to avoid any accidental movement.
4. We recommend having someone help putting the TV on the mount.
5. Hook the TV Hangers (with the TV attached to them) over the Hook Plate as shown in Figure 12.
6. Adjust the television so that it is centered on the mount.
7. Hit the Hanger Locks as shown in Figure 13 to lock the TV to the mount.
8. Plug the power in and move around.

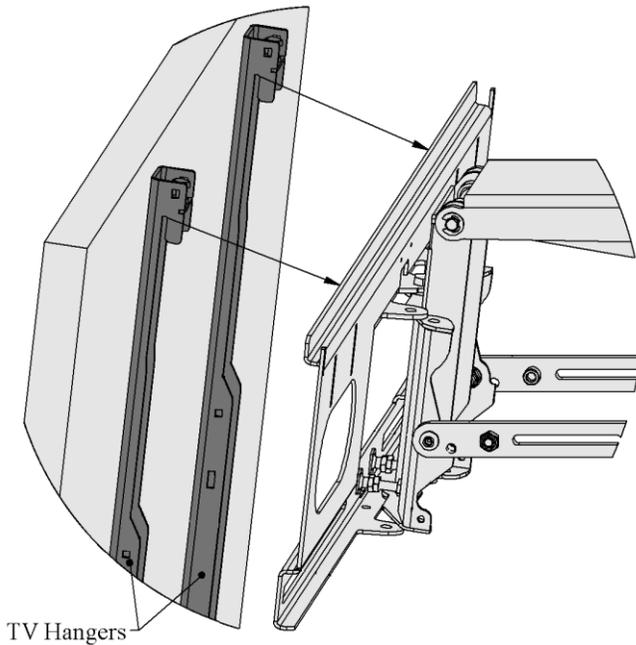


Figure 12, Attaching the Television

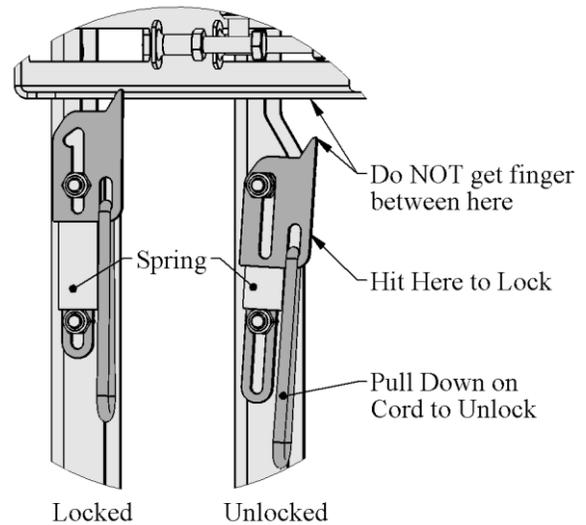


Figure 13 TV Hanger Locks

TV Level

The Level of the TV can be fine-tuned +/- .5 degrees after it is put on the mount.

1. Figure Out which TV Hanger is on the low side of the TV
2. Figure 14 shows the parts for Leveling
3. Unlock Hanger Lock as shown in Figure 13
4. Move the Level Bolt Down Until Level
5. Lock Position with the Level Locknut
6. Lock the TV Hanger as shown in Figure 13

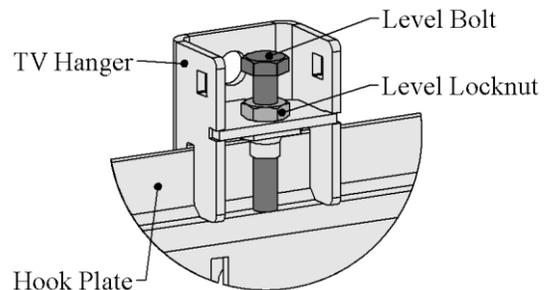


Figure 14, TV Level Fine Tuning (Detail from Figure 4)



Pinching and Crushing Hazard: The wall mount actuation is very strong, do NOT run the mount when anyone is near the mount. Do NOT have any part of the body in the mount or between the TV and Wall. The Mount will keep driving until someone pushes another button on the remote to stop it. When working on the mount unplug the power.

RF Remote Control

The RF remote requires 2 AAA batteries, to replace use a small screwdriver to slide the cover tab over and then pull out.

The RF remote comes with a holder that can be mounted, screws are supplied.

IR Remote Control

The IR remote comes with a battery and needs to be pointed at the IR receiver to work.

Remote Control Buttons

These Instructions are for the IR and RF remotes

- **↑** – Move the mount up to the topmost set position
 - Mount cannot be driven higher then set limit
 - Comes set for max top position
 - Hold to drive to position
- **↓** – Move the mount down to the bottom most set position
 - Mount cannot be driven lower then set limit
 - Comes set for lowest bottom position
 - Hold to drive to position
- **1** – Move the mount to the set 1 position
 - Mount will drive to this position from either direction
 - Does not come set out of the box
 - Hold to drive to position
- **2** – Move the mount to the set 2 position
 - Mount will drive to this position from either direction
 - Does not come set out of the box
 - Hold to drive to position
- **Run** – Automatically move to the position selected
 - Press **Run** then any position button within 3 seconds and the mount will move there automatically
 - Press any button to stop movement
- **Set** - Set and Clear Positions
 - Press **Set**, then any position button, then Hold **Set** for 3 seconds to set the current position for that button, remote will flash twice to indicate the position is set
 - Press **Set**, then any position button, then Hold **Set** for 6 seconds to delete the current position for the button, remote will flash three times to indicate the position is cleared
- **Stop** – Press any button to stop movement

Note: Press each button firmly; a quick tap probably will not work.



AutoMove is Dangerous: The Mount will keep driving until someone pushes another button on the remote to stop it or it reaches the position. Keep an eye on the mount until it stops moving. The wall mount actuation is very strong. Do NOT run the mount when anyone is near the mount. Do NOT have any part of the body in the mount or between the TV and Wall.

Automatically Move to Position

The mount can be automatically moved to any set position without having to hold the button. To do this, press **Run** and then the Position Button (**↑**, **↓**, **1**, **2**). To stop movement, simply push any button on the remote.

Preventing Mount from Hitting Shelf

If the mount would hit the shelf or some other object in the top or bottom position. You can easily reduce the top (**↑**) and bottom most (**↓**) position so that the mount cannot move past that point. Follow the directions in the

Remote Control Buttons section above.

Above Shelf Mounting

To get the lowest possible bottom position when mounting above a shelf, it is very important that you put extra thought into the mounting process. The Mount can clear shelves up to 16" deep.

The TV Clearance Table shows the minimum clearance [C] needed between the shelf top and the bottom of the TV (or the bottom of an attached soundbar, whichever is lower) for the mount to swing around the shelf. To find the clearance needed, find the shelf depth [D], in this example 8", and go down the column and find the corresponding minimum clearance height [C], which is 2.5". Figure 8 shows where to measure [C] and [H].

Figure 15 and the Mount Travel Table shows you how much downward travel you will get with different shelf depths and heights above the shelf. For example, to find the downward travel [T] when you have an 8" shelf depth [D] and you attach the bottom of the mount 6" above the shelf [H]. First find the corresponding [D] and look down the column and find the closest [H], which in this case is 5.75". Now go left along the row and find the corresponding Travel [T]. In this case you will get a downward travel of approximately 26".

Tips to get the Lowest Possible Bottom Position

- Get the top of the mount and the top of the TV to be as close as possible.
- Typically you'll get the lowest bottom position by being near the minimum clearance shown in the TV Clearance Table.
- Getting the most travel possible out of the mount, doesn't mean you'll get the lowest possible bottom position.
 - For example, for a 12" shelf, to go from 26" of travel, to 27" of travel (1" more), you have to raise the mount up 2". So your new bottom position is actually 1" higher.
 - If the mount would hit the shelf, simply change the bottom most (↓) position so it won't. See the
 - Remote Control Buttons section on page 10

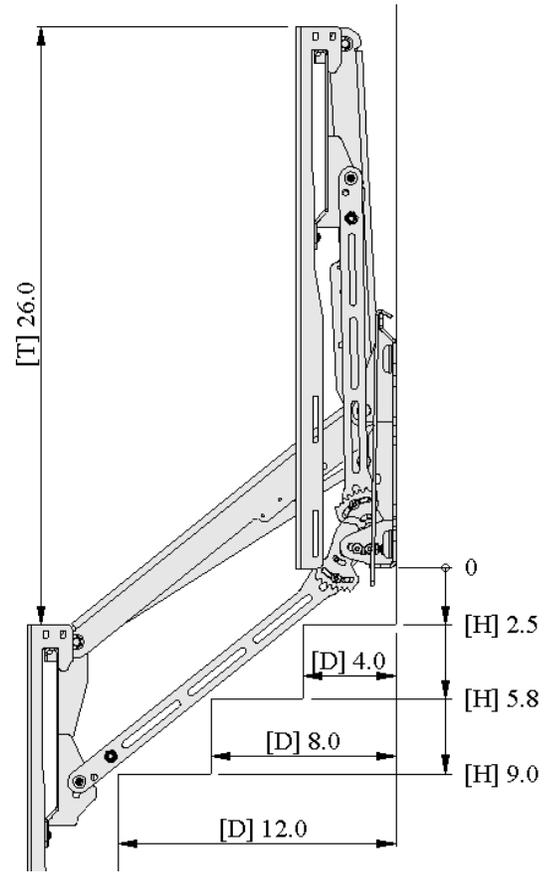


Figure 15, Shelf Clearance Drawing

TV CLEARANCE TABLE (OR SPEAKER/SOUNBAR CLEARANCE, WHICHEVER IS LOWER)

<u>[D] SHELF DEPTHS (IN) (BOLD NUMBERS)</u>																	
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
0	1	1.25	1.5	1.75	1.75	2	2.25	2.5	2.75	3	3.25	3.75	4.25	5	5.75	6.75	-
<u>[C] MINIMUM CLEARANCE NEEDED BETWEEN SHELF TOP AND TV BOTTOM IN TOP POSITION (IN)</u>																	

27 (IN) IS THE MAXIMUM POSSIBLE DOWNWARD TRAVEL

ALL MEASUREMENTS ARE APPROXIMATE, 16 INCHES IS THE MAXIMUM SHELF DEPTH THE MOUNT WILL WORK WITH
 - MEANS IT IS POSSIBLE, BUT YOU WILL NOT GET ANYMORE DOWNWARD TRAVEL

MOUNT TRAVEL TABLE (DOWNWARD TRAVEL OF MOUNT VS. HEIGHT AND SHELF DEPTH)

		<u>[D] SHELF DEPTHS (IN)</u>																
		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
[T] DOWNWARD TRAVEL OF MOUNT (IN)	27	0	0	1	2	3	3.75	4.75	5.75	6.5	7.5	8.5	10	11	-	-	-	-
	26	0	0	0.75	1.5	2.25	3.25	4	4.75	5.75	6.5	7.25	8	9	11	11.75	-	-
	24	0	0	0.5	1	1.75	2.25	2.75	3.5	4	4.75	5.25	5.75	6.5	7	7.5	9.5	10
	22	0	0	0.25	0.75	1.25	1.5	2	2.5	2.75	3.25	3.75	4	4.5	5	5.25	5.75	7.5
		<u>[H] HEIGHT MOUNT IS ABOVE SHELF (IN) (UNBOLDED NUMBERS)</u>																



Unplug Power Before Adjusting: The wall mount actuation is very strong, do NOT run the mount when anyone is near the mount. Do NOT have any part of the body in the mount or between the TV and Wall. The Mount will keep driving until someone pushes another button on the remote to stop it. When working on the mount unplug the power.

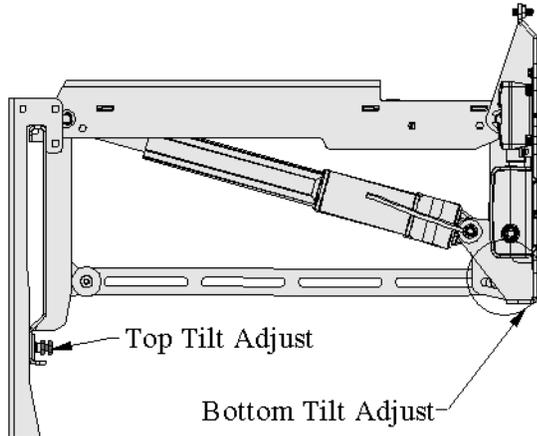


Figure 16, Tilt Adjust

Setting the Tilt in the Bottom and Out Positions

In the bottom and out positions the mounts tilt can be set Vertical +1/-2 degree. To adjust;

1. Have TV on the mount
2. Drive mount to Out Position for easiest access
3. Unplug the power to avoid mount movement
4. Adjust the bolt shown in Figure 17 with a 1/2" open ended wrench

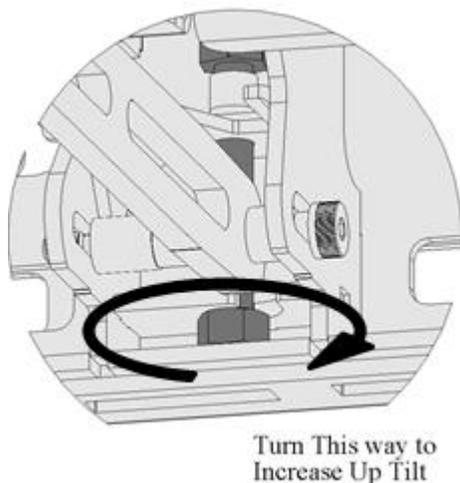


Figure 17, Bottom Tilt Adjust

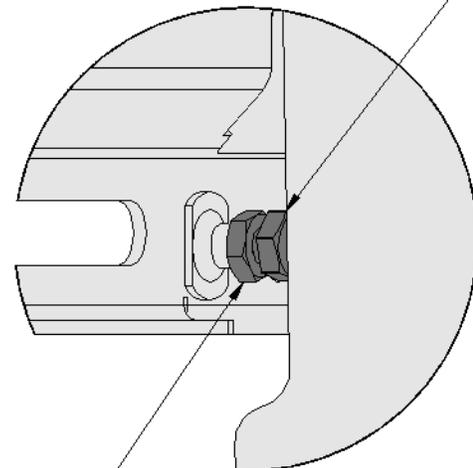
Setting the Tilt in the Top Position

In the top position the tilt will probably have to be adjusted to be vertical;

1. Have TV on the mount
2. Drive mount all of the way to the Top Position (hold **↑** until mount stops)
3. Take note of the tilt
4. Drive mount to Out Position for easiest access
5. Unplug the power to avoid mount movement
6. Adjust the screws shown in Figure 18, one on each side
7. Plug power back in
8. Drive mount to the Top Position
9. Repeat As needed
10. Tighten Lock Nut when Tilt is good

Top Tilt Adjustment Bolt

Adjust the bolt in and out to change the tilt in the top position



Top Tilt Lock Nut
Tighten this nut against mount to keep bolt in place

Figure 18, Top Tilt Adjust

Wire Management

Figure 19 shows the suggested wire route to keep the wires hidden with maximum flexibility and free from pinching.

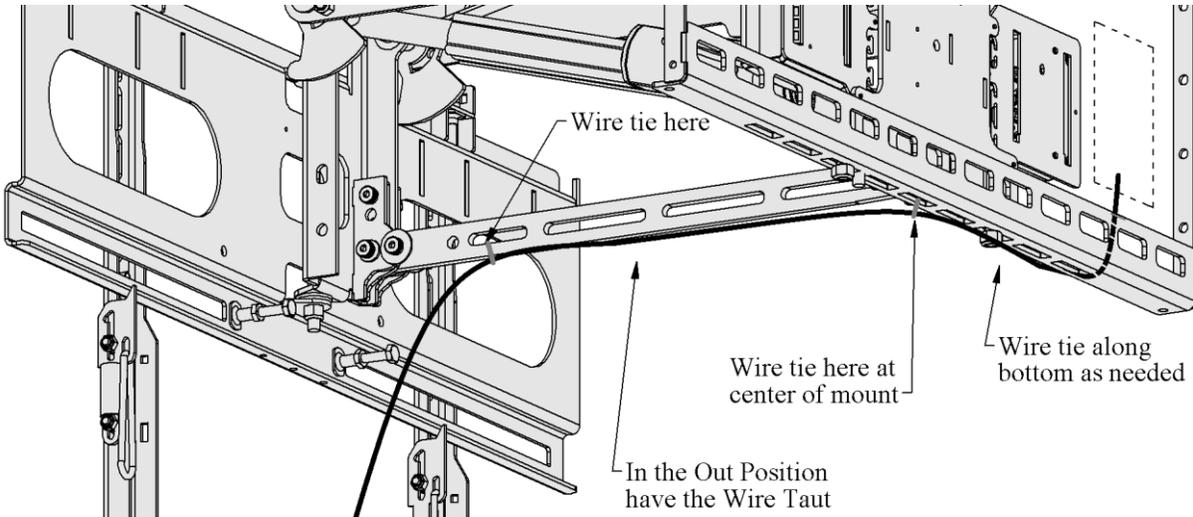


Figure 19, Wire Routing

Paintable Plastic Covers

The Paintable Plastic Covers can be painted to match your wall or left as is to help the mount blend in. They simply hook over the Frame as shown in Figure 20. Sticky L-grips are included to stick the covers to the bottom of the Frame. Outlets can be installed under the covers and then the wires ran under them. You may need low profile wires or an indented outlet to get it to fit though.

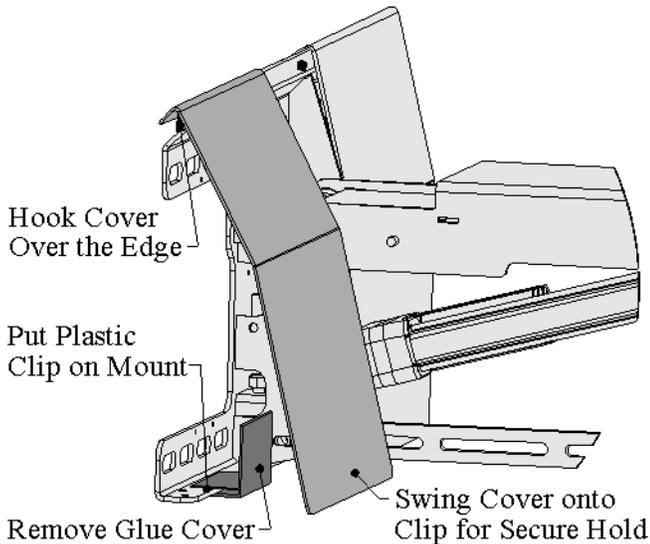


Figure 20, Put Plastic Cover On

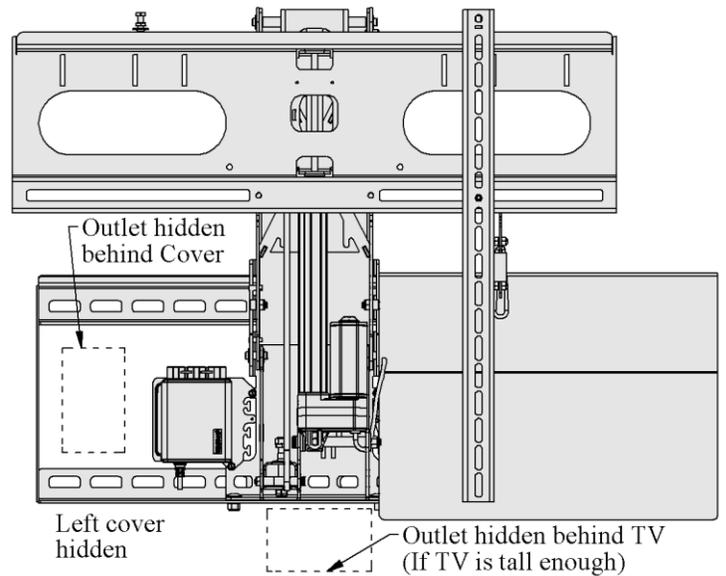


Figure 21, Ideal Outlet Placement and Plastic Cover

Maintenance

To ensure the mount will work great for as long as possible follow these simple procedures;

1. Lubricate all joints every 3 months. May need more, especially if outside.
2. Visually check all bolts every 3 months to ensure nothing looks like it is coming loose.

Warranty

Dynamic Mounting guarantees the Down and Out Motor Mount to be free of defects for the product's warranty period of 5 years.

The warranty period begins on the original date of shipping. The limited warranty is intended only for the original purchaser. The warranty will be void if the mount is modified in anyway or not installed correctly, Including overloading, abuse, or use for any purpose other than specified in these directions. This mount is for indoor use only and the warranty will be voided if the mount is used outdoors.

Dynamic Mounting is not liable for any damage or injury caused from the use of or the inability to use our mount. To the maximum extent permitted by applicable law, Dynamic Mounting disclaims any responsibility for incidental or consequential damages.

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