

FLIP AROUND MODELS: M3-40-7, M3-43-7, M3-48-7, M3-50-7

Any questions? Please contact us! We'd love to help. Call the office 208-287-8882 during business hours or call Mark's mobile anytime including evenings and weekends. 208-919-5969.

Table of contents

• Helpful resources including Installation Overview VIDEO	1
• Layout	2-4
○ Width, Height, and Vertical Clearance	2
○ Vertical placement	2, 3
○ Wall studs layout	3
○ Cable access opening dimensions	3
○ Cable box options and power requirements	4
• Assembly	5-6
• Wall Mounting	7
• Motor Setup (for motorized models)	8-9
• Cable Installation	4, 10-11
○ Cable box options and power requirements	4
○ "Cable Routing Mode"	10
○ Cable installation requirements and routing path	11
• Install Cover Plate	12
• TV Installation	13-14
○ Maximum TV size chart and diagram	13
○ TV installation and TV strap	14
• Picture Frame & Artwork	15-16
○ Artwork & Mirror guidelines and recommendations	15
○ Artwork & Mirror Size	15
○ Picture Frame installation	16
• Adjustments	17
○ Performance adjustments using balancing springs	20

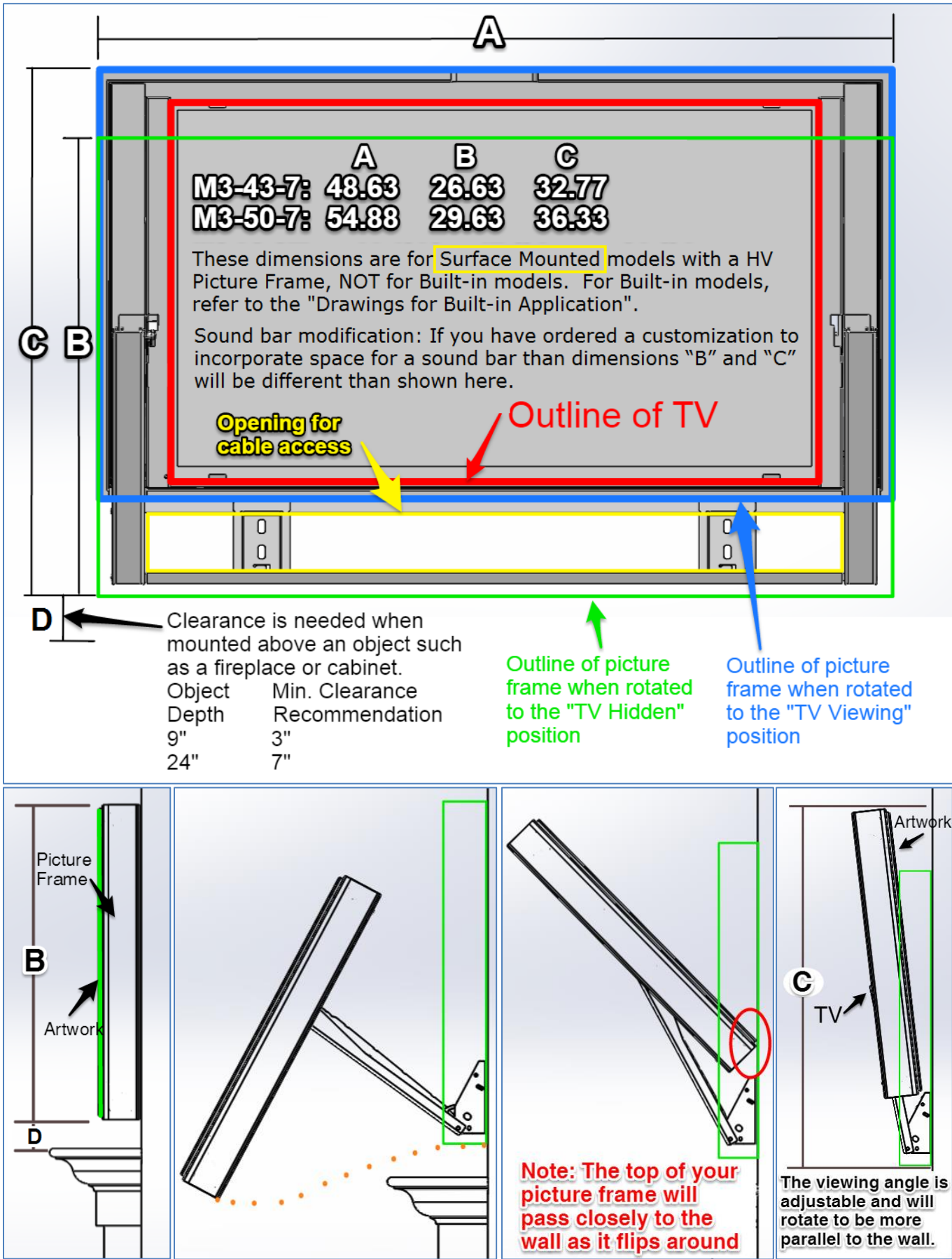
Before you start you may want to check out these helpful references.

- **INSTALLATION OVERVIEW VIDEO:** The model shown in this video is a **similar model but NOT IDENTICAL**. Please refer the instructions below for specific details relating to your model. <https://youtu.be/GM1LVz5AKGg>
- **List of helpful 3rd party products:** Check out "[Accessories](#)" on our website for helpful products you may need. Also, for additional products that we do not sell, see the following document (<http://bit.ly/m3helpfulproducts> (Note: you do NOT need to download DROPBOX. Look for the "direct download" option, normally found in the upper right corner of you screen)

STEP 1: Layout (for surface mounted installations)

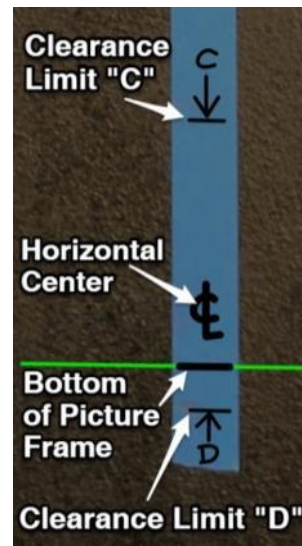
(for "Built-in" installations, where the mount is recessed into the wall, refer to the construction drawings for dimensions and details relating to layout)

FIG 1

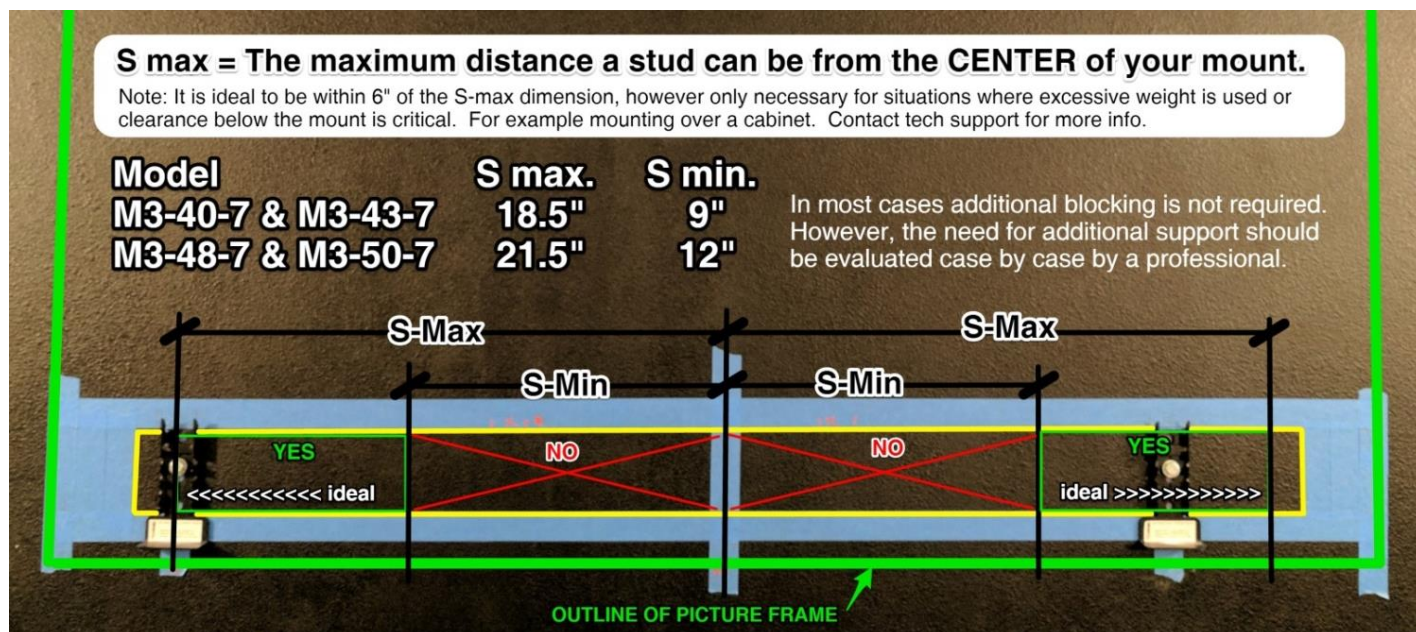


Note: We recommend using painters tape to layout the mount for 2 reasons. 1) It's helpful to write notes on the tape. 2) The tape reduces creaking caused by friction between the mount and the painted surface of your wall.

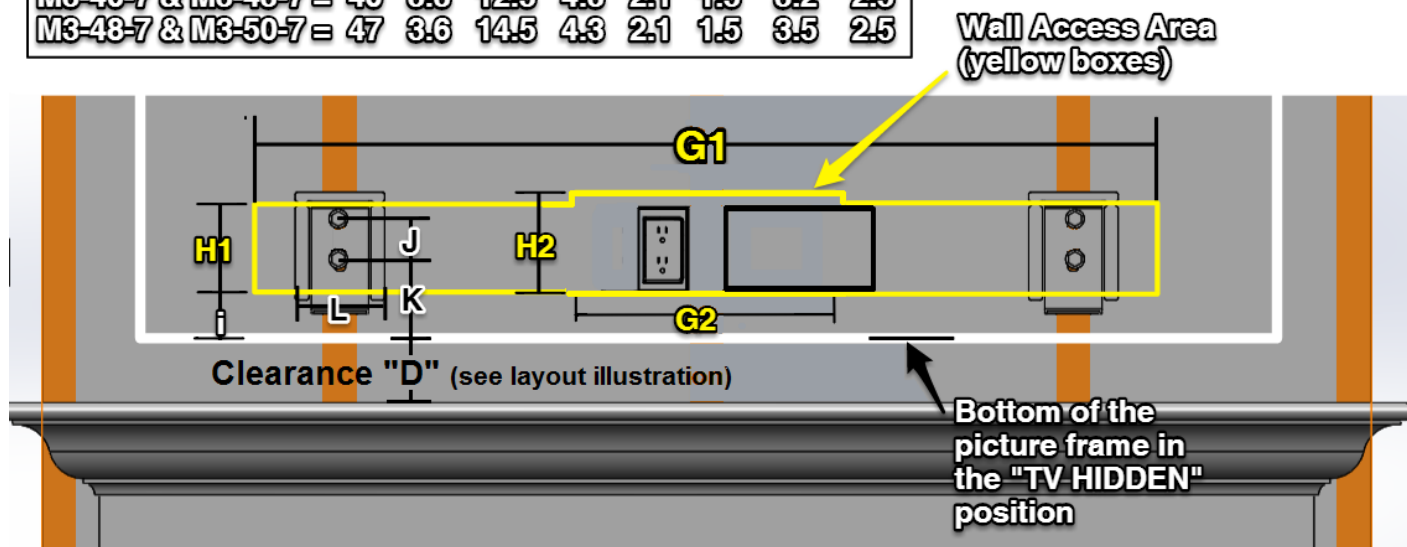
1. Define where you want the picture frame to be centered horizontally.
2. Mark vertical clearance limits "C" & "D" (see FIG 1)
 - a. Measure from the Ceiling and mark dimension "C"
 - b. If there is an object such as a fireplace mantel or cabinet under the mount, mark clearance "D".
3. Mark where you want the bottom of your picture frame to be when it's in the closed position (ie: position where the TV is hidden) It must be between C & D. (Note: Clearance "D" is negotiable. Contact Mark for more info. 208-919-5969)
4. (Recommended) Outline the cable access area with 1.5" painters tape
5. Mark studs. If two studs fall between S-Max and S-Min choose the stud closer to S-Max.



The wall mount brackets should be fastened to two structural members (such as a 2x4 wood stud). For standard walls with 2 x 4 wood studs spaced 16" on center additional blocking is not typically required. However, in some cases additional blocking may be required depending on various factors. (The need for additional blocking should be evaluated case by case by a professional.) If you are mounting this product to a structural material other than wood you must use appropriate fasteners. Do not use the supplied lag screw fasteners. Each installation should be evaluated/overseen by a professional.



	G1	H1	G2	H2	i	J	K	L
M3-40-7 & M3-43-7 =	40	3.3	12.5	4.3	2.1	1.5	3.2	2.5
M3-48-7 & M3-50-7 =	47	3.6	14.5	4.3	2.1	1.5	3.5	2.5

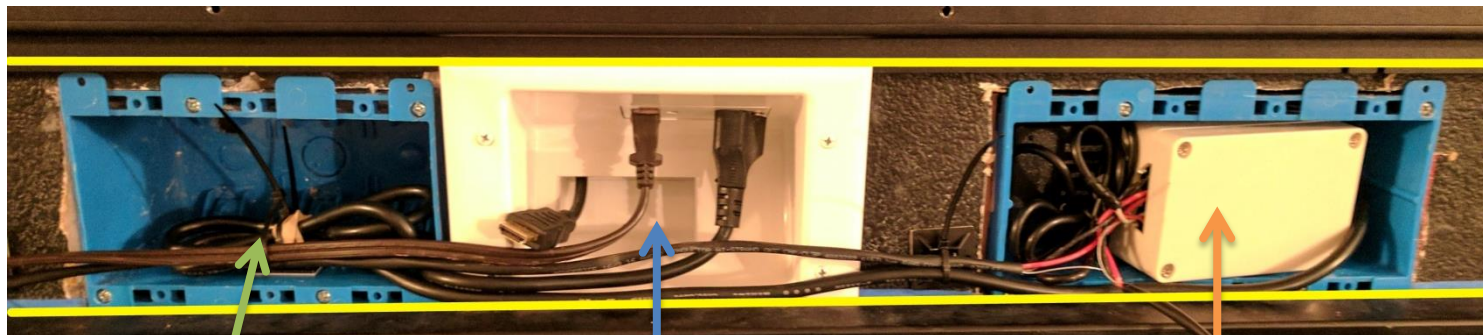


Cable Access / Power Requirements

Numerous products and combinations can be used, however, there are specific details that must be observed.

- 1) Within the Yellow outlined area nothing can protrude more than 1/2" from the wall/mounting surface.
- 2) Within the area BELOW the yellow outlined area no objects should protrude more than 3/16".
- 3) Within the area ABOVE the yellow outline no objects should protrude from the wall if avoidable. If not avoidable you can (in some cases) get away with up to 1/8". May require shimming out the wall mounting brackets. Please contact us with questions.

Here are a couple options we've found to work well. Electrical should be performed by a licensed electrician. It is your responsibility to verify all electrical components and installation methods meet your local building, safety and fire codes.



Recommended for ALL models

You'll likely need somewhere to stuff extra cable. Installing a **3-GANG "OLD WORK" box** (shown here) is an easy way to accommodate this.

MOTORIZED models:

Motorized models have a power supply and controller box that must be housed in the wall or close by*. These boxes fit nicely in a **4-GANG "OLD WORK"** electrical box as shown here.

*You can relocate the power supply & controller box to a nearby cabinet or closet if you want. HOWEVER, you must use the appropriate gauge wire to avoid 'Voltage Drop' (reduced power to the motors.)

(2 wires per motor = 4 wires total) Up to 20' extension = 14AWG X 4
Up to 35' extension = 12AWG x 4 Up to 50' extension = 10 AWG x 4

ALL MODELS require a RECESSED Outlet of some kind because the cover plate sits 1/2" from the wall.

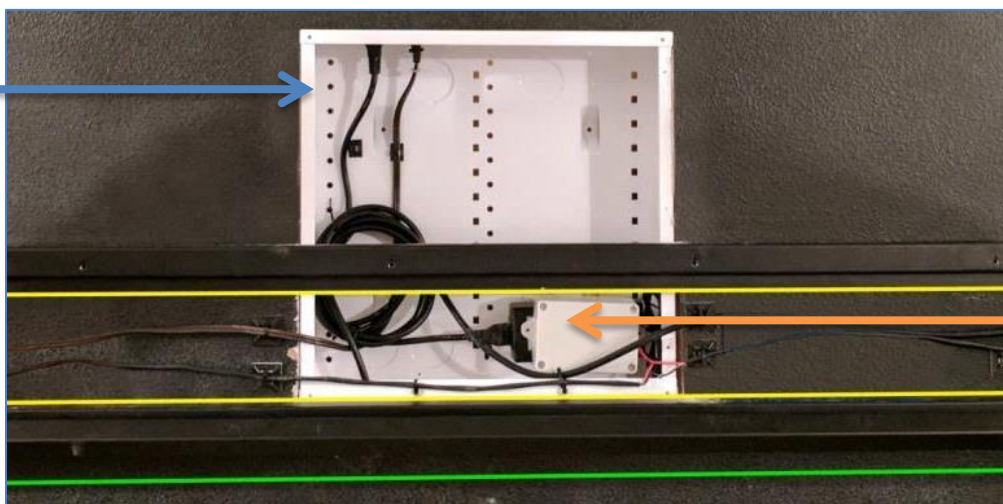
Option 1: Power Bridge Two-Pro-12 (found on the **Accessories** page of our website. www.HVTVmounts.com)

Option 2: (shown above) DataComm 45-0071-WH or 45-0024-WH. You can order this item from Amazon by searching the part numbers above. Caution: You can find items that look similar to this at your local hardware store. However, they are likely larger than the example shown above (5" x 7") and may not fit well.

Option 3: Need to pick something up today? You can find the following at your local hardware store. "Duplex RECESSED Outlet," "1-Gang Old Work box," and "Recessed Wall Plate for low voltage cables."

Option 4: (shown below) You can use an in-wall, flush mount, junction box similar to the one shown below.

Caution: Potential interference with picture frame! As the mount flips around and approaches the TV viewing position, the picture frame will pass closely to the wall/mounting plane. Any Make sure nothing protrudes from the wall ABOVE the YELLOW outlined area. Contact us for more info.



ASSEMBLY

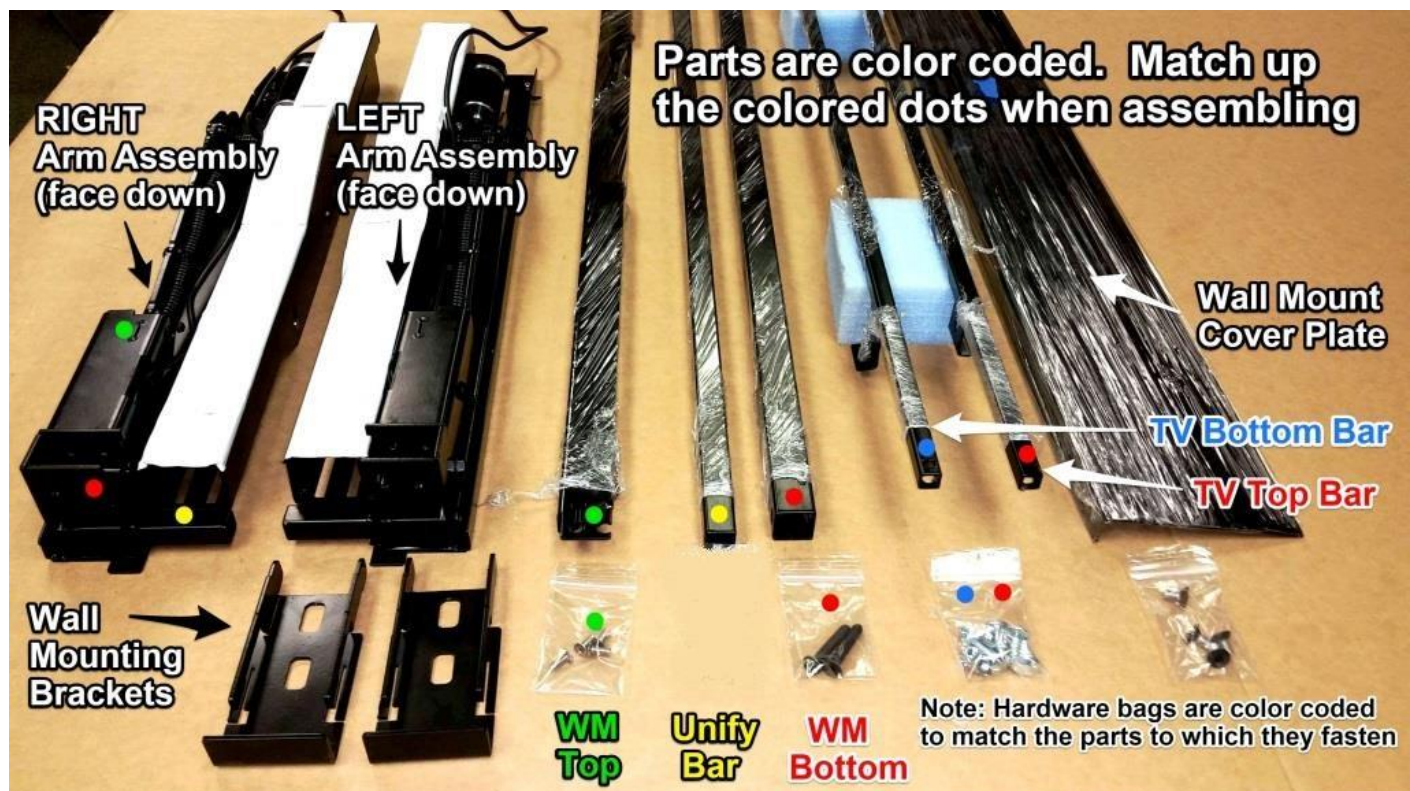
Any questions? Please contact us! We'd love to help. Call the office 208-287-8882 or Mark's mobile 208-919-5969

WARNING (all models):

- NEVER operate the mount if it is not fastened to the wall.
- **SPRING LOADED:** This mount is designed to operate with the weight of a TV and Picture Frame. If operated without the TV installed the mount will open and close very quickly and with great force.
- **PINCH DANGER:** There are multiple pinch points that can cause injury. Keep hands away from moving parts when the mount is being operated. Use caution and familiarize yourself with the movement and pinch dangers.

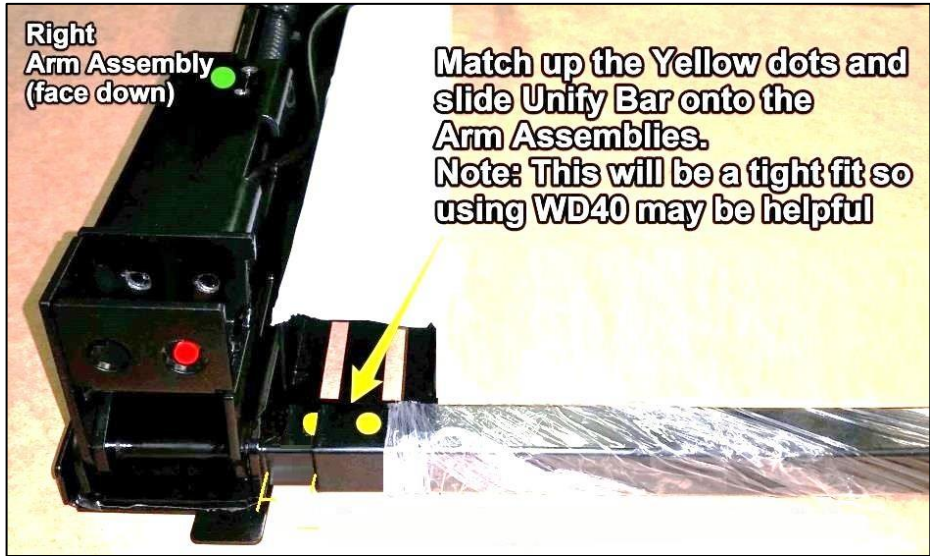
WARNING (MOTORIZED MODELS):

- DO NOT operate the mount WITHOUT the TV installed. Without the TV installed the springs designed to counter the weight of the TV will apply excessive resistance to the motors. Motors will fight against the powerful springs and will cause the fuses to blow.

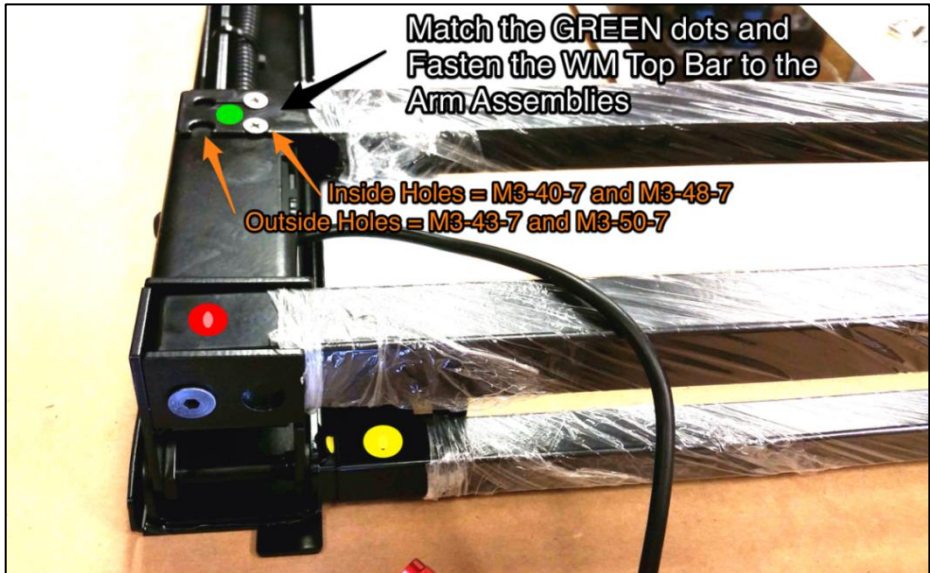


Lay the arm assemblies face down on the floor in the orientation shown above. Caution! **Protect your carpet/floor**. The moving parts of the arm assemblies are **greased**!

Install the UNIFY BAR (Yellow). Slide the Unify Bar on to the Right and Left Arm Assemblies.

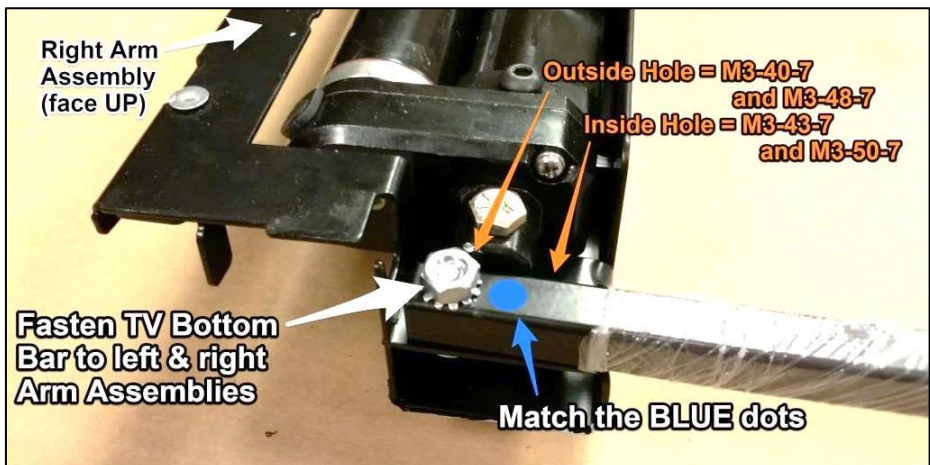


Install the WM Top Bar (Green) and fasten with the #10-24 x 1/4" Philips drive screws. Carefully align the holes so the screws pull to center when tightened.

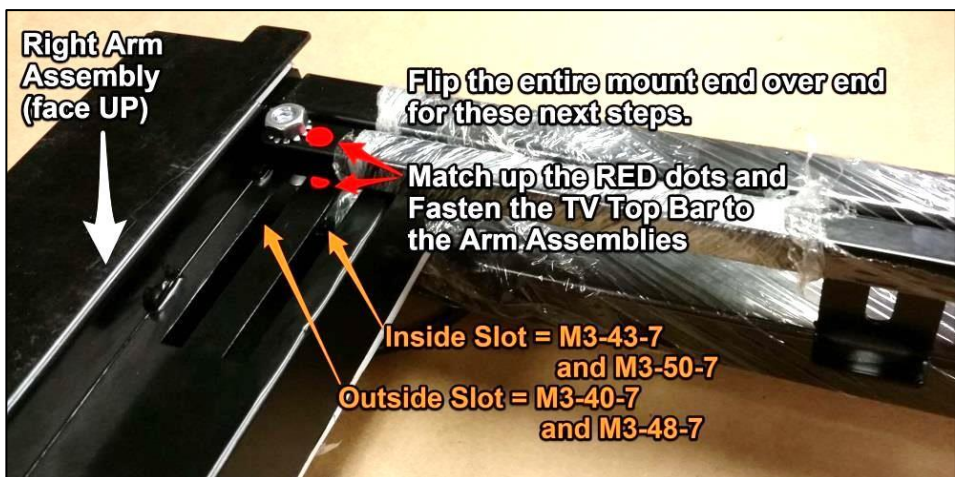


Install the WM Bottom Bar (Red). Install screws but DO NOT TIGHTEN yet. These will be tightened last.

Flip the mount over and install the TV Bottom Bar (Blue). Make sure to choose the correct hole for the model size you ordered.



Install the TV Top Bar (Red)



Install Wall Mounting Brackets

Any questions? Please contact us! We'd love to help. Call the office 208-287-8882 or Mark's mobile 208-919-5969

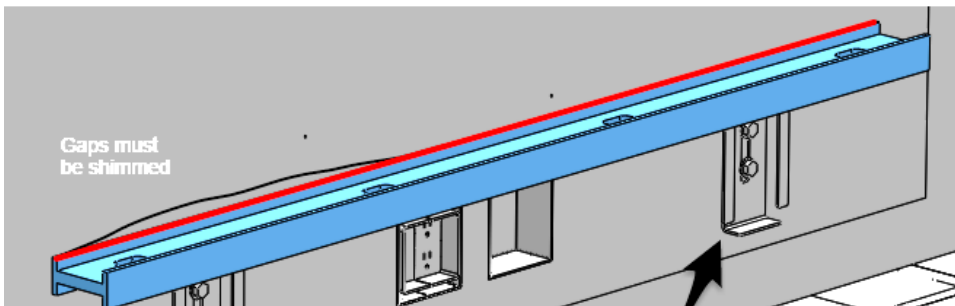
NOTE: This mount is meant for installation on wood framed walls with 2" x 4" minimum wood studs and 7/16" minimum drywall thickness. Installation to metal stud walls or concrete walls require special fasteners and or additional support (not supplied). In some cases additional studs may be required for adequate support. The integrity and adequacy of the structure to which this product is attached and the means by which this product is fastened to the supporting structure is the installer's responsibility. Consult a professional. Mark Joseph Design / Hidden Vision is not liable for failure, damage, or injury caused due to inadequate support or improper installation.

1. Find **EXACT CENTER** of your wall stud (NOTE: It is very important that your lag bolts are installed **CENTERED** on the wood stud. Use the supplied trim nail or drill bit to poke through your drywall to find the left and right edges of your stud. This way you can be sure to find the exact center of your stud. Don't rely on a stud finder alone.)
2. Mark the wall 1-1/4" above the 'Bottom of picture frame line'. Place a Wall Mounting Bracket on the wall with the bottom aligned with the mark you just made. Now, outline the lag bolt slots on the wall.
3. Predrill a 1/4" hole for each lag bolt. Make sure the holes are drilled in the exact center of the stud.
4. Install the wall mount brackets. Leave the bolts slightly loose so the wall mount brackets can be shifted up/down.
5. Hang the mount on the wall mount brackets.
6. Slide the mount left/right to center and up/down to level. With the mount centered and leveled tighten down the lag bolts.
7. Be sure to shim between the wall mount and the wall at the bottom of the wall mount bracket there is any gap.

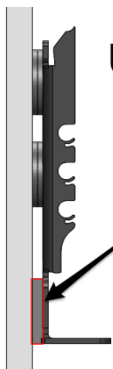
IMPORTANT:

IF YOUR WALL MOUNT BRACKETS TILT FORWARD
YOUR PICTURE FRAME/TV MOUNT WILL TILT FORWARD.

Special care should be taken to account for imperfections in your wall.
Use something with a straight edge such as a level to determine where
shims will be required to create a flat mounting surface.



USE SHIMS IF WALL IS BOWED INWARD



IMPORTANT: A shim **MUST** be
used at the **BOTTOM** of the wall
bracket if it is gapped from the wall.

Motor Setup (skip to next step for manual models)

Any questions? Please contact us! We'd love to help. Call the office 208-287-8882 or Mark's mobile 208-919-5969.

IMPORTANT OPERATION NOTES FOR MOTORIZED MODELS

- **THE FUSES WILL BLOW** if you operate the mount without the TV installed unless you assist the motors. **THIS IS SUPPOSED TO HAPPEN.** DO NOT INSTALL HIGHER AMP FUSES. This happens because the springs, which are meant to counter the TVs weight, will apply increasing resistance against the motors as the mount moves further from the wall.)
 - **See the cable routing section for instruction on assisting the motors when operating the mount without the TV installed.**
 - **DO NOT ATTEMPT TO OPERATE A MOTORIZED MOUNT MANUALLY.** The motors cannot be overpowered manually.
 - **BLOWN FUSES?** See the next page.
1. Wondering where to locate the electronics? Want to extend the motor wires? What power is required? Refer to the Cable & Power requirements within the Layout section of these instructions for answers to these questions.
 2. If you're using our RF wireless remote controller, proceed on this page. If you are using our Smart Controller with Contact Closure and adhesive backed keypad you must refer to the instructions that were included in the motorized parts box (also found here: <http://bit.ly/m3-smart-control>)
 3. There are 2 motors (one in each arm). Each motor has a pair of wires exiting the base of the arm. Connect the motor wires to the two pairs of wires coming from the controller. Match **RED** with **BROWN** and **BLACK** with **BLUE**. It does not matter which pair goes to which motor.



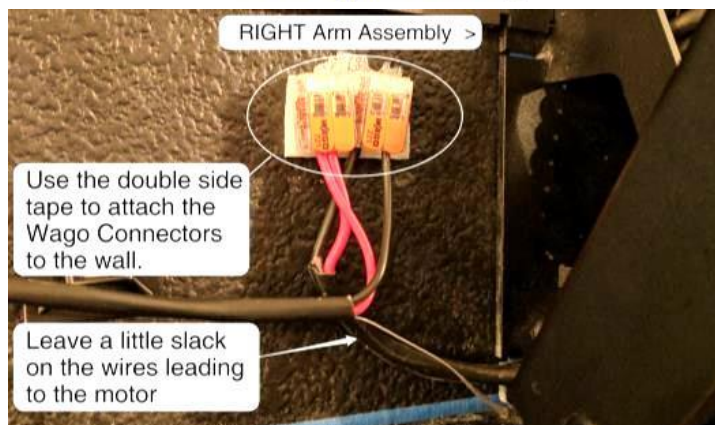
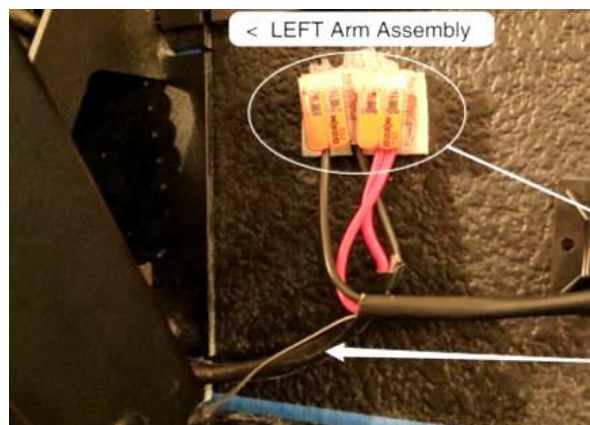
Strip the wire to **7/16" (11mm)**
(refer to strip length guide printed
on the side of the connector)



Lift lever to open clamping unit;
insert stripped wire.



Lower the lever to close the clamping
unit. Flip the housing over to visually
verify that the exposed wire is
contacting the metal clamp.



Controller type: **WiFi Smart Controller w/ Contact Closure**

4. If you're using our RF wireless remote controller, proceed on this page. If you are using our Smart Controller with Contact Closure and adhesive backed keypad you must refer to the instructions that were included in the motorized parts box (also found here: <http://bit.ly/m3-smart-control>)

Controller type: **RF Wireless Remote and Receiver**

5. Plug the power supply into 110 VAC - 220 VAC outlet.
6. The motors are now ready. Once your TV is installed you can operate the motors and flip the mount.
7. Wireless remote buttons: UP = TV Viewing position, DOWN = TV Hidden.

(Instructions for programing additional RF remotes: <https://goo.gl/F7rsdp> (the web address is case sensitive))

BLOWN FUSES? Read this.

- There are two motors (one in each arm assembly). Each motor has a dedicated fuse located near the motor to which it's attached. The specific location varies depending on your model.
- NEVER install fuses with an amp rating higher than the ones supplied. We've included extra fuses for your convenience.

Troubleshooting Blown Fuses:

The motor **FUSES are meant to blow** if the motors encounter unexpected resistance which may be caused by one of the following conditions.

- **If operated without sufficient weight (most common)**
 - **WHY:** The arms are spring loaded to counter balance the weight of the TV and Picture Frame. Without this weight the motors will fight against the springs causing increased resistance which results in blown fuses.
 - **IDENTIFY:** 1) Both the LEFT & RIGHT fuses have blown **AND** 2) The left & right arms have progressed equally.
 - **SOLUTION:** Install the TV **OR** install 1" to 1-1/2" thick plywood substitute for the TV. This is often preferable for cabinet makers and contractors working on built-in projects. Replace the fuses following the steps below.
- **If one of the two motors is not receiving power or is wired incorrectly**
 - **WHY:** If one of the two motors is not receiving power or wired incorrectly, the running motor will experience increased resistance and the fuse connected to the running motor will blow.
 - **IDENTIFY:** 1) One arm will have traveled further than the other **AND** 2) the fuse on the leading arm will be blown, but the fuse on the trailing arm will NOT be blown. Tip: Hold the fuse up to a light source and look closely for any break along the thin wire within the fuse.
 - **SOLUTION:** Inspect your wire connections to verify good connectivity and wire colors are correctly matched. Look for cut, damaged, or pinched wire. Replace the fuses following the steps below.
- **If interference is encountered**
 - **WHY:** Interference will result in increased resistance on the motors and this will blow the fuses.
 - **IDENTIFY:** 1) If scenario 1 is NOT true **AND** 2) Both motor fuses are blown.
 - **SOLUTION:** Identify and resolve the interference. If the interference is not obvious, here's a list of possible culprits. Tip: A call to our tech support can make quick work of this task.
 - Identify the side that encountered interference. It will be the side that has traveled a lesser distance.
 - Are your cables exactly as described in the cable routing instructions? Any deviance can cause interference.
 - Did anything fall into the base of the arm? Objects like discarded cable ties can cause interference with moving parts at the base of the arm. Tip: Compressed air can be helpful to remove debris that can't be reached.

Important Steps for replacing blown fuses:

- 1) **Remove BOTH motor fuses.** Identify and trash any blown fuses. (do not reinstall fuses yet)
- 2) **Set the controller to reverse the direction** of travel so that when you insert the fuses in the following steps the mount will move opposite the direction it was traveling when the fuses blew.
- 3) **Align arms** by briefly contacting the fuse of the leading arm until the leading arm is aligned with the trailing arm.
- 4) **Test each arm individually by briefly contacting the fuse to verify both motors are traveling in the same direction.** If a motor is running the wrong direction, then check that you have not connected the motor wires in reverse polarity. If there is no movement verify the fuse is good, look for cut or damaged wire, and inspect wire connections.
- 5) **Turn OFF power to the controller & install the new fuses in BOTH motors.** (Tip: It's sometimes easiest to just switch off the breaker to the outlet that powers your TV and controller.)
- 6) **Turn ON power.** Both arms should travel together in the direction you set before powering off the controller. If the motors move in the opposite direction than expected, you may not have changed your "Power on state" setting to "Resume previous state." Refer to the WiFi controller instructions for details on changing this setting.
- 7) **Cycle the mount a couple times to verify smooth operation.** If the fuses blow again please take advantage of our exceptional Tech Support! I'm sure we can help. Call 208-287-8882 x2

CABLE INSTALLATION

Any questions? Please contact us! We'd love to help. Call the office 208-287-8882 or Mark's mobile 208-919-5969.

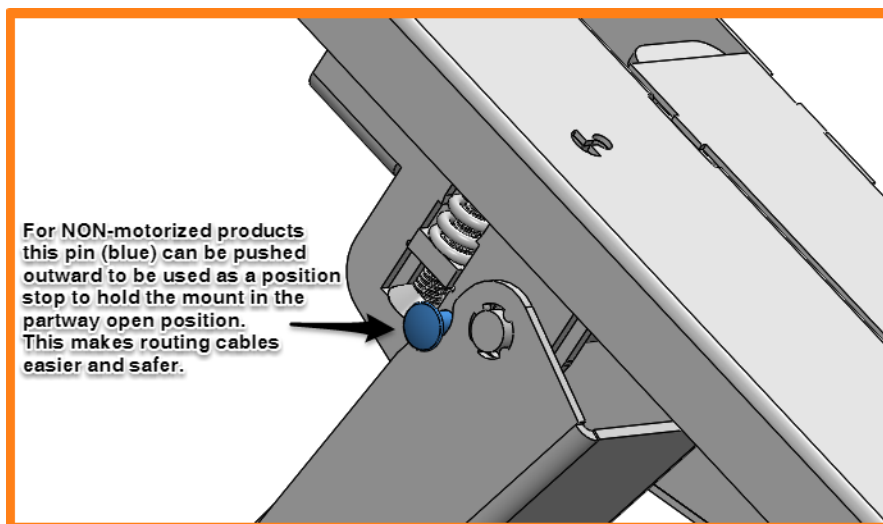
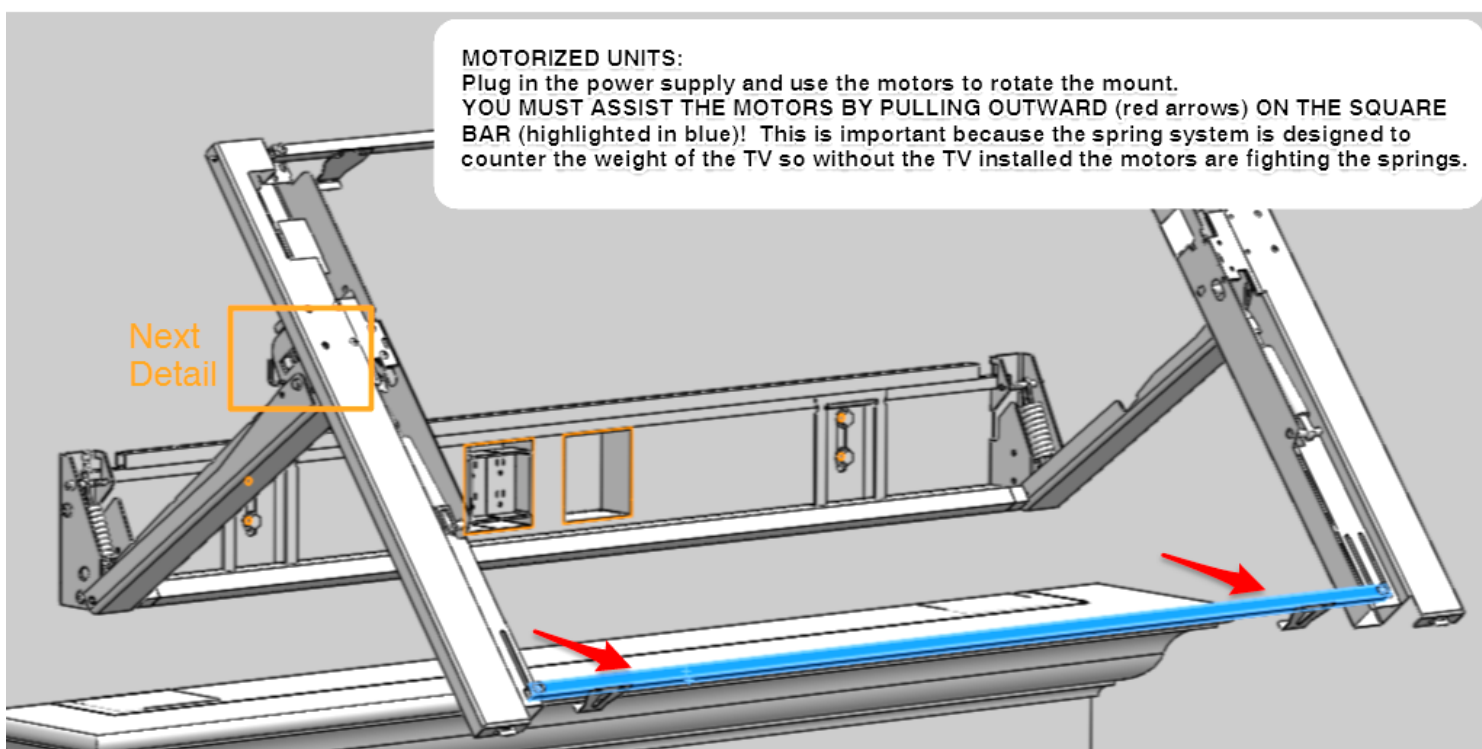
IMPORTANT: Cable routing is the most commonly underestimated and overlooked step. There is ONE CORRECT WAY TO ROUTE CABLES! DO NOT GUESS. Routing cables incorrectly will result in interference which will prevent full opening and/or closing which can result in damage to the cables and/or the TV mount (especially if motorized). Look carefully at the following instructions and READ EVERY WORD. Call us with any questions.

Rotate the mount to the position shown here

MOTORIZED:

- DO NOT operate manually
- When the TV is not installed you must assist the motors or the motors can be damaged and/or the fuses will blow. (described below)

NON-MOTORIZED: Pull outward on the square tube (highlighted in blue). Use the position stop pin (described in the following detail) to hold the mount in the position shown here. BE CAREFUL! Spring loaded! Without the TV to counter the springs the mount will move very quickly and with force if it is not controlled. You can be seriously injured if not careful.



Cable path

Cables can be installed in both left and right arms

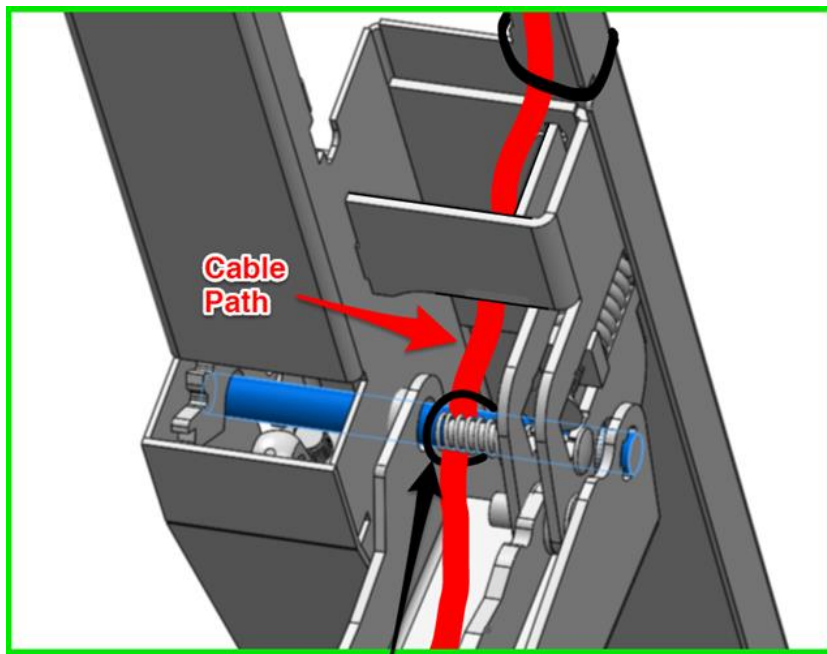
Install 2 cable ties Here

See following detail

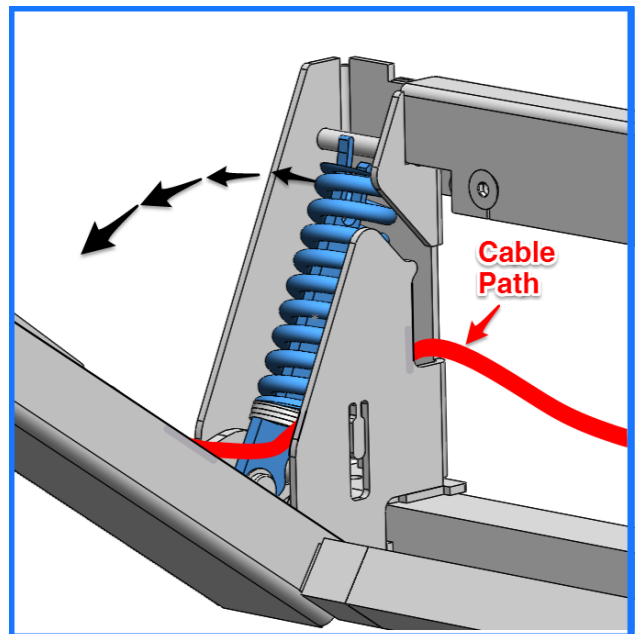
Tuck your cables inside the supplied wire loom tube. It is slit down the middle

There are 4 notches along this arm. Install a cable tie at each of these notches. DO NOT install cable ties anywhere else along this arm.

See following detail



All cables should be LOOSELY zip tied to the the 1/2" pivot pin (shown in BLUE here)

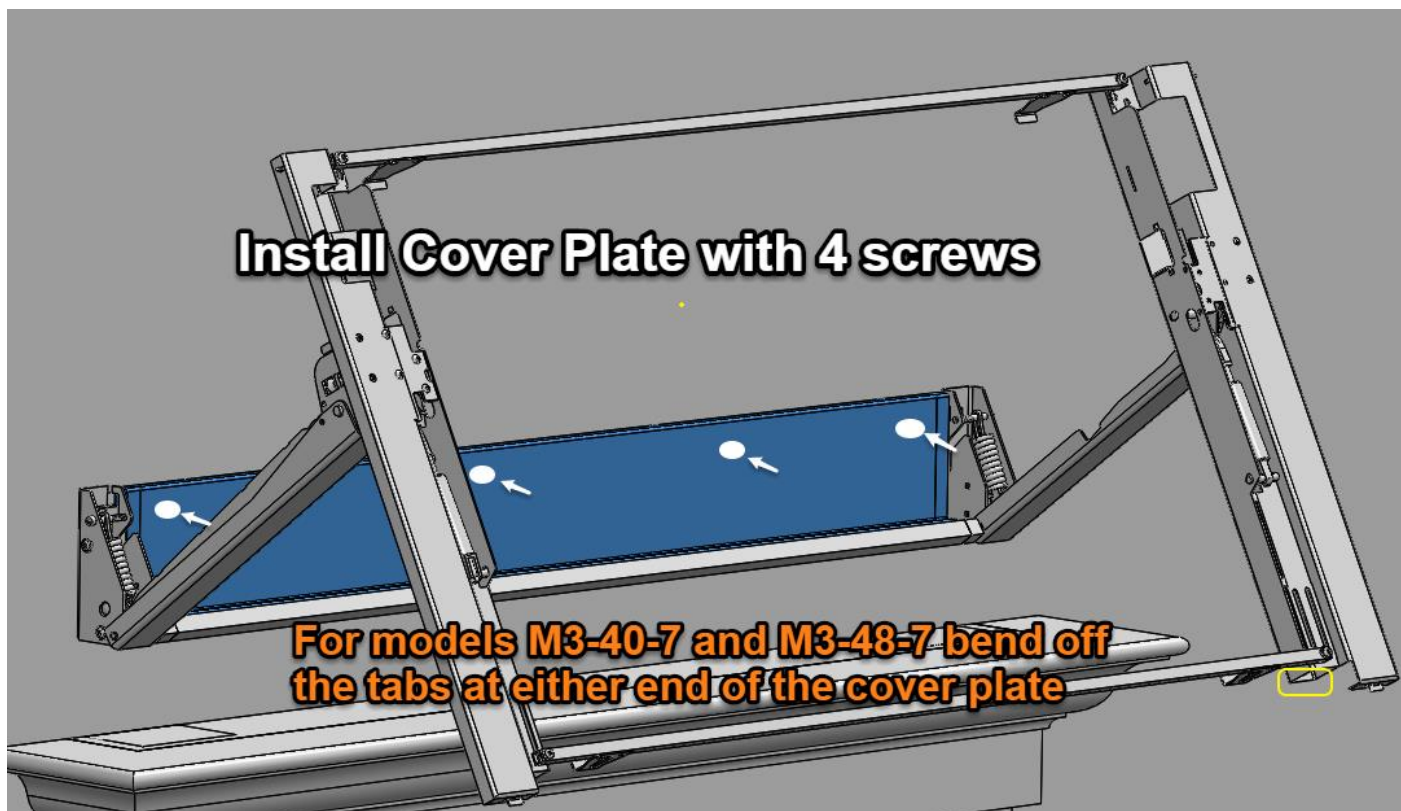


If needed this spring can be pulled forward to install cables more easily. MAKE SURE the spring is BACK IN POSITION before operating the mount.

INSTALL STRUCTURAL COVER PLATE

Any questions? Please contact us! We'd love to help. Call the office 208-287-8882 or Mark's mobile 208-919-5969.

1. Note: If your model is M3-40-7 or M3-48-7 you'll need to remove the tabs at both ends of your cover plate. They can be removed by bending the tabs back and forth until they break off. Do not do this for models M3-43-7 or M3-50-7.
2. Install the cover plate using the four 1/4-20 x 3/4" flat head socket cap screws.
3. Operate the mount back to the CLOSED position (the factory position) for the next step. (Note: for non-motorized models: The position stop pin should automatically disengage when rotating the mount to the closed position. However, attempting to rotate the mount to the Open position will bend the pin and damage it.)



INSTALL TV

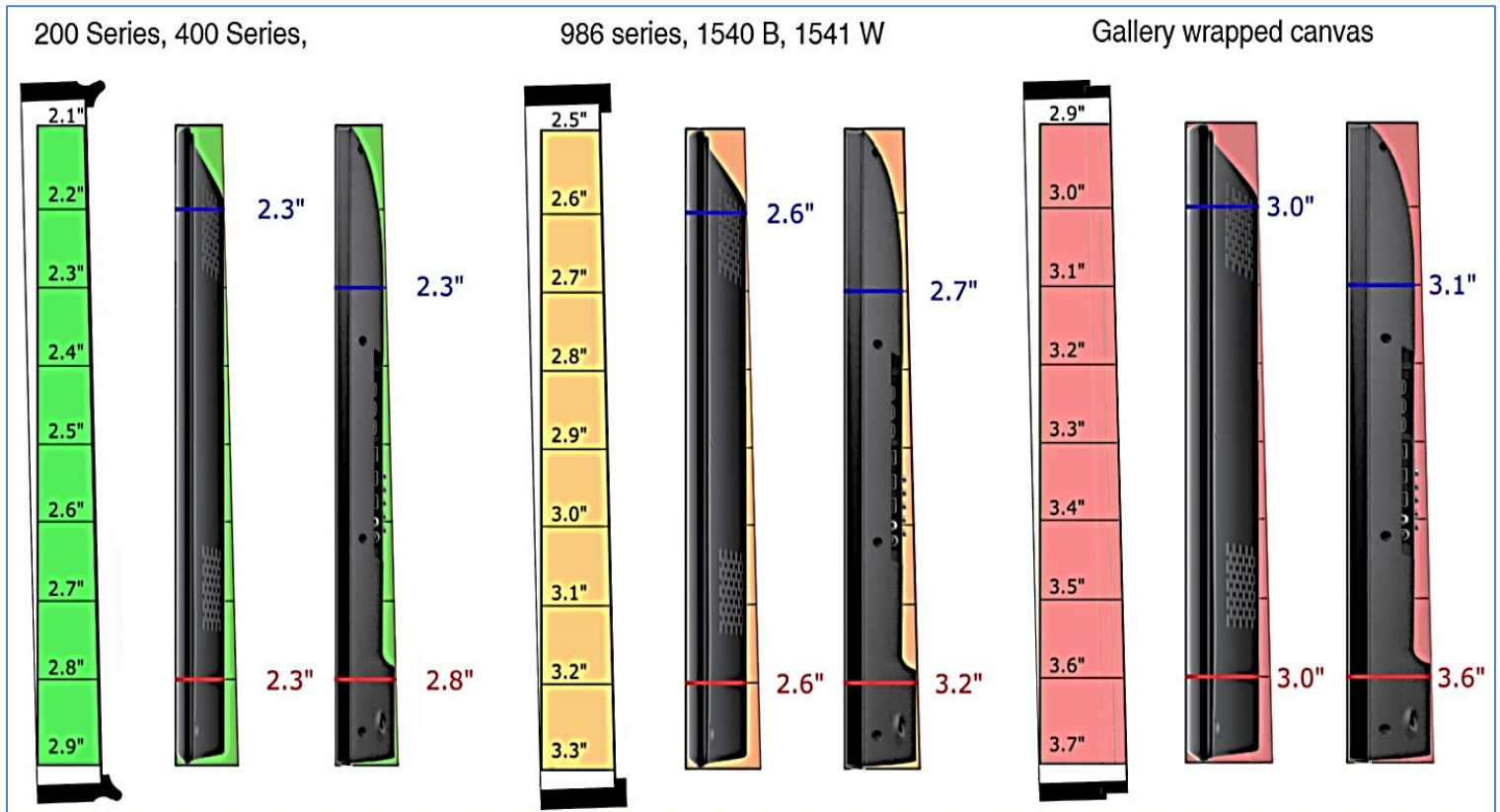
Any questions? Please contact us! We'd love to help. Call the office 208-287-8882 or Mark's mobile 208-919-5969.

Maximum TELEVISION Dimensions & Weight

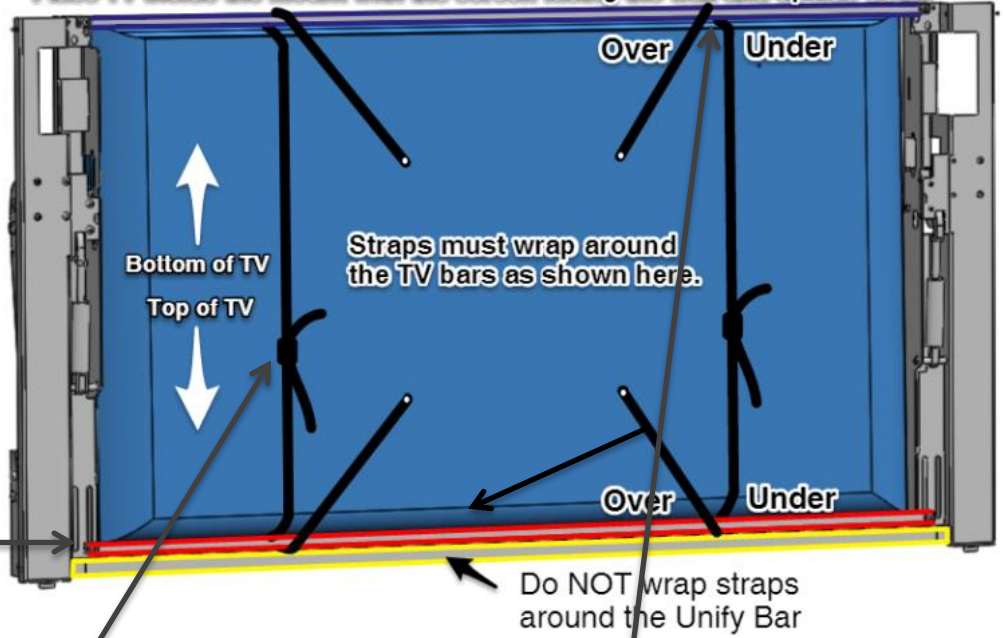
TV Mount Model #	Screen Size	Width ** (Max.)	Height (Max.)	Depth * (Max.)	Weight (Max.)
M3-40-7	up to 40	36.8**	23.0	*	30
M3-43-7	up to 43	38.3**	23.0	*	30
M3-48-7	up to 48	43.0**	26.0	*	35
M3-50-7	up to 50	44.5**	26.0	*	35

* Note Regarding TV Depth: In general 2.5" is the Maximum TV Depth. However, it varies depending on 1) the inside depth of the picture frame you choose and 2) the shape of your TV. If your TV is thick at the bottom but thin at the top you can fit a thicker TV. Contact us for more info.

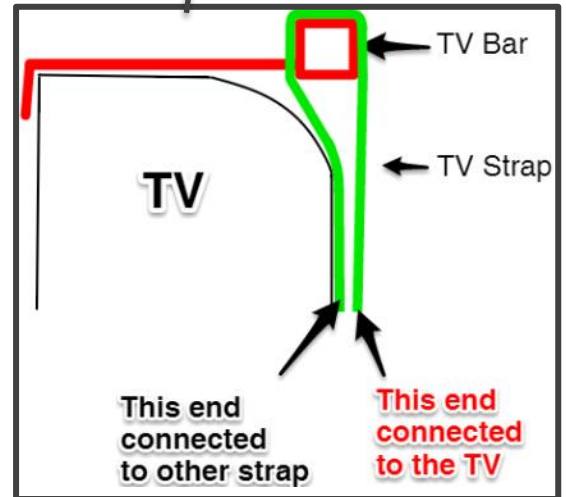
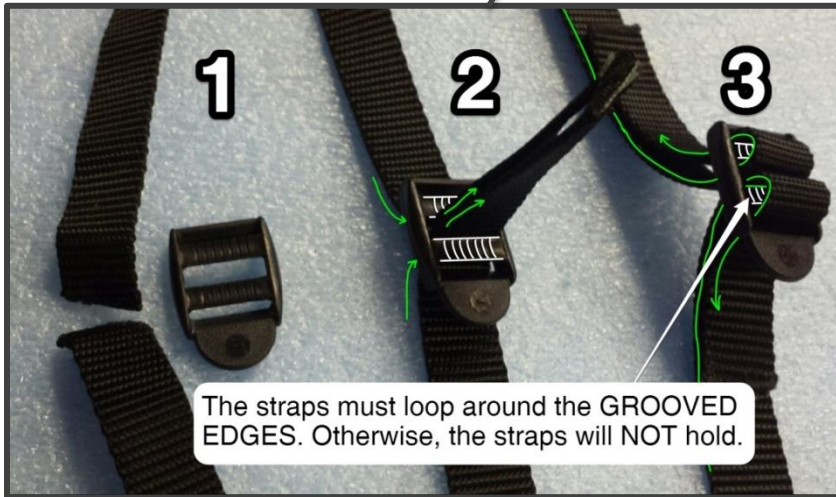
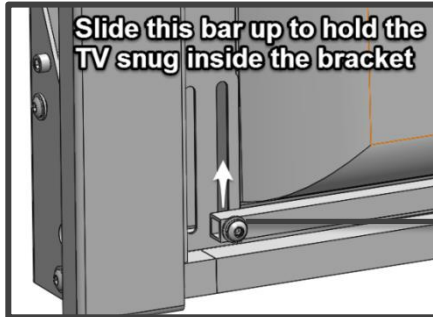
** TV WIDTH NOTE: If your TV is close to the maximum width listed above you may need to install the TV when the mount is in the Open Position (TV viewing position). Contact us for more info.



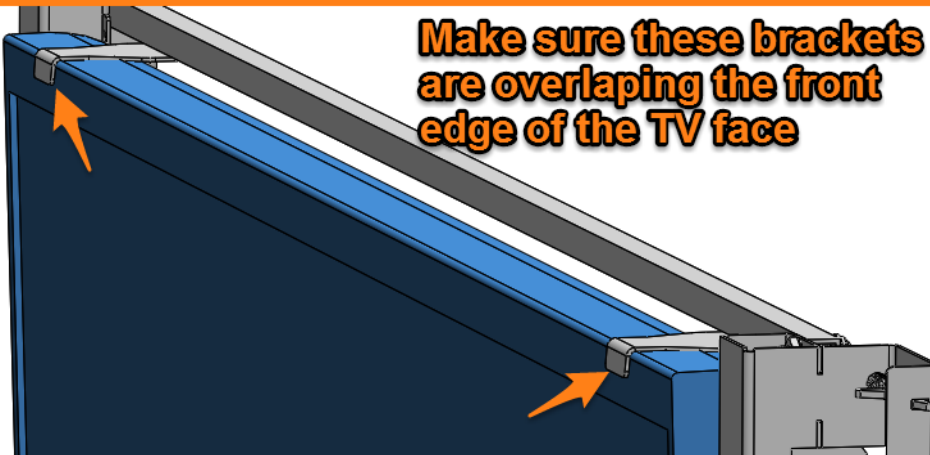
Place TV inside the mount with the screen facing the wall and upside-down



The "RED" TV Bar slides up or down so it can be adjusted to fit your TVs height.



Make sure these brackets are overlapping the front edge of the TV face



PICTURE FRAME & ARTWORK

Any questions? Please contact us! We'd love to help. Call the office 208-287-8882 or Mark's mobile 208-919-5969.

Picture Frame ASSEMBLY Videos

We recently designed new brackets for picture frame assembly. You can watch these videos for general reference but your hardware style and placement may be different then what is shown in the video.

Frame Options - "LOW PROFILE" Picture Frame - Assembly Video

Frame Options - "MAX" Moulding Picture Frame - Assembly Video

Frame Options - "SHADOWBOX EXTENDER" Frame - Assembly Video

Artwork & Mirror Notes

Helpful tip: If the backside of your artwork or mirror is not black you can cover it easily with black adhesive backed shelf liner found at most Lowes or Home Depot hardware stores.

Mirror Notes:

- **Mirror Thickness:** Mirror can be no thicker than 1/8". The more commonly used 1/4" mirror is too heavy in most cases. Contact us for more info.
- **Mirror must be backed with certified SAFETY BACKING.**
- You can order mirror from Hidden Vision. Contact us for details.
- *Helpful tip: If you choose to install a mirror not supplied by Hidden Vision you should use double side tape along the perimeter of the mirror to keep the mirror from shifting and reduce vibration.*

Artwork Notes:

- We recommend using canvas mounted on 3/16" or 1/4" foam core board. Black foam core is recommended so it blends into the background when viewing the TV.
- You can order artwork from Hidden Vision. Contact us for details.

Glass Notes:

- Use of glass is not recommended with our products. Plexiglas can be used if desired.

The following dimensions are for standard frames. If we have customized a frame for you (including any sound bar customizations) these dimensions will not apply. Please take artwork measurements after assembling your frame.

Artwork Dimensions for 200, 400, 986, 1540 & 1541 Series Frames

TV Mount Model #	Width (inches)	Height (inches)
M3-40-7	45.25	24.94
M3-43-7	46.75	24.94
M3-48-7	51.5	27.94
M3-50-7	53	27.94

Artwork Dimensions for LOW PROFILE Series Frames

TV Mount Model #	Width (inches)	Height (inches)
M3-40-7	43.9	23.56
M3-43-7	45.43	23.56
M3-48-7	50.1	26.56
M3-50-7	51.68	26.56

Picture Frame INSTALLATION

If you have a picture frame supplied by Hidden Vision you will find four slots cut along the inside edges of your frame (excluding Shadowbox Extender frames*)

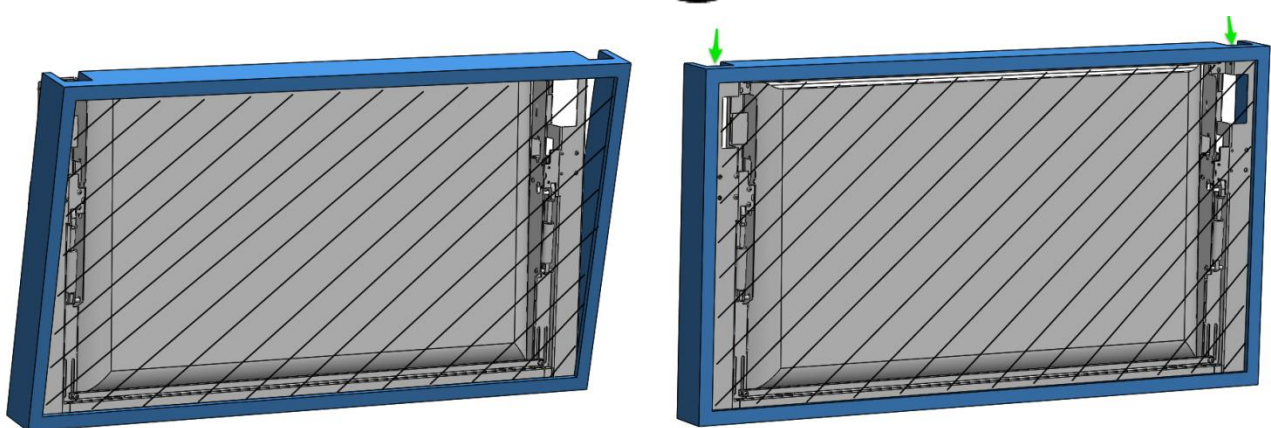
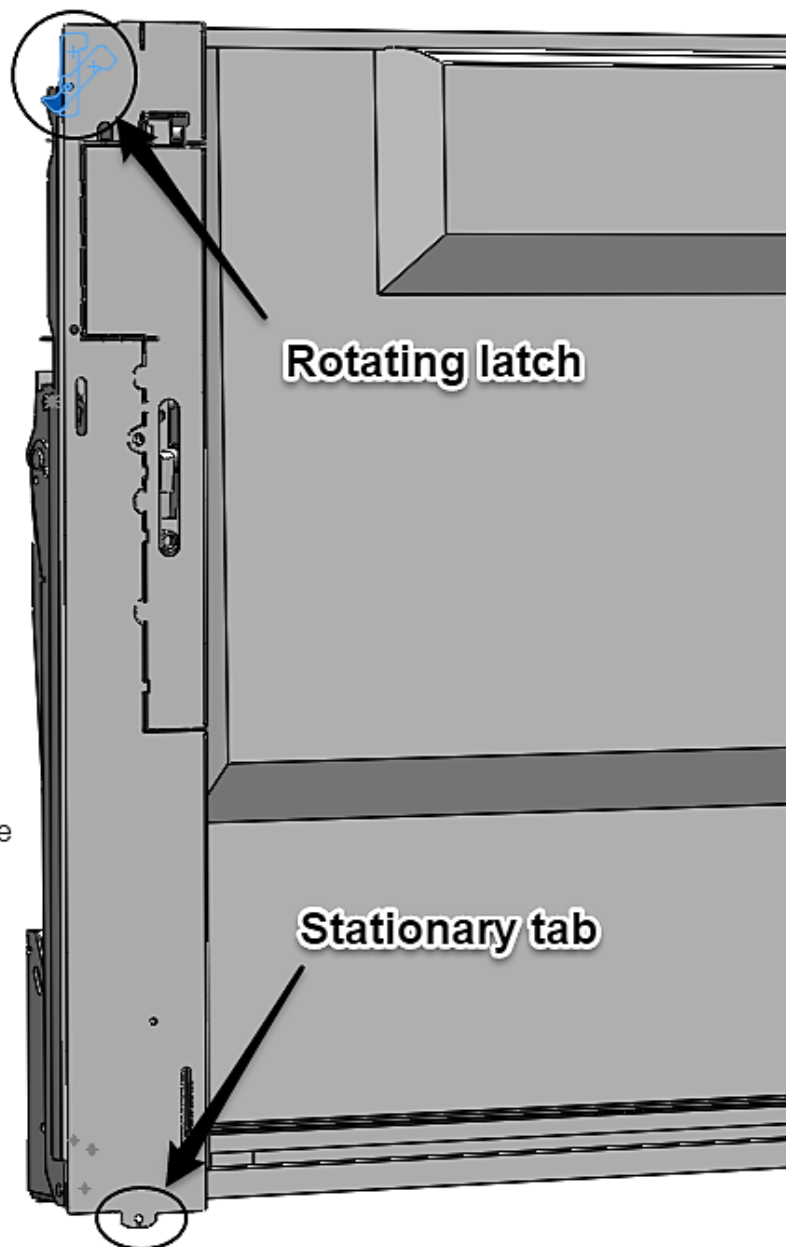
Install the picture frame by inserting stationary tabs into the slots along the bottom inside edge of your picture frame.

Then tilt the picture frame so the top overlaps the top of the mount.

The top of the picture frame will have cutouts at either end. Reach through these cutouts to rotate the latch so it locks the picture frame in place.

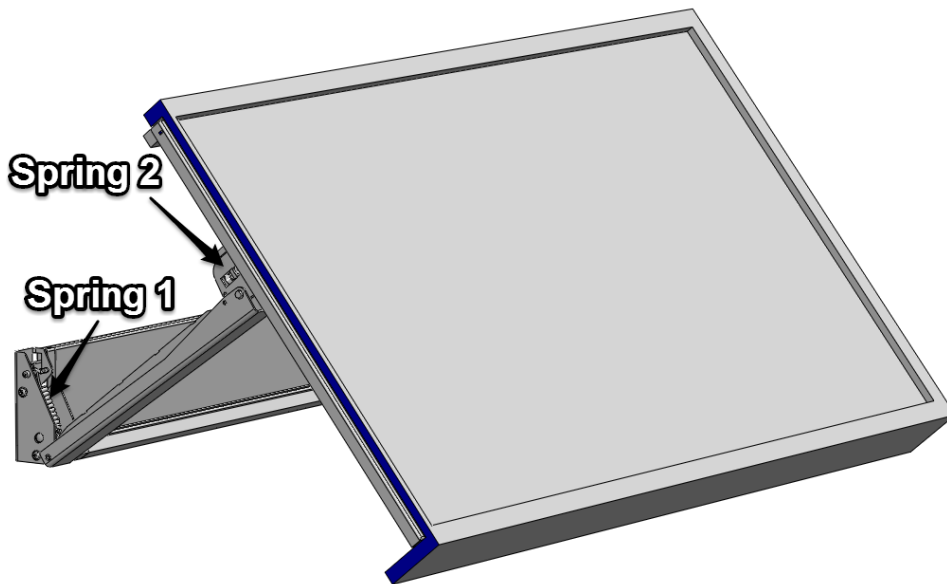
Test by pulling outward on each corner individually to verify all tabs have properly inserted into the slots and the frame cannot move.

* 3" Shadowbox Extender frames do not have slots because there is a gap/slot created between the rabbit cutout in the Extender Frame and the 3rd party frame.



PERFORMANCE ADJUSTMENTS

Any questions? Please contact us! We'd love to help. Call the office 208-287-8882 or Mark's mobile 208-919-5969.

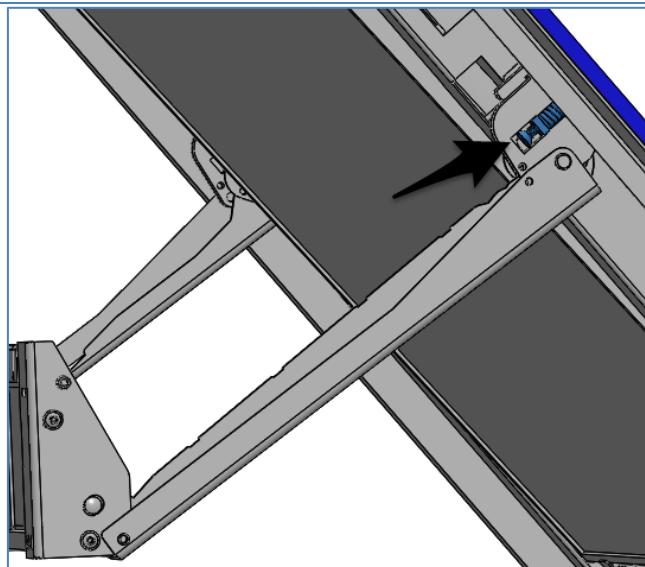
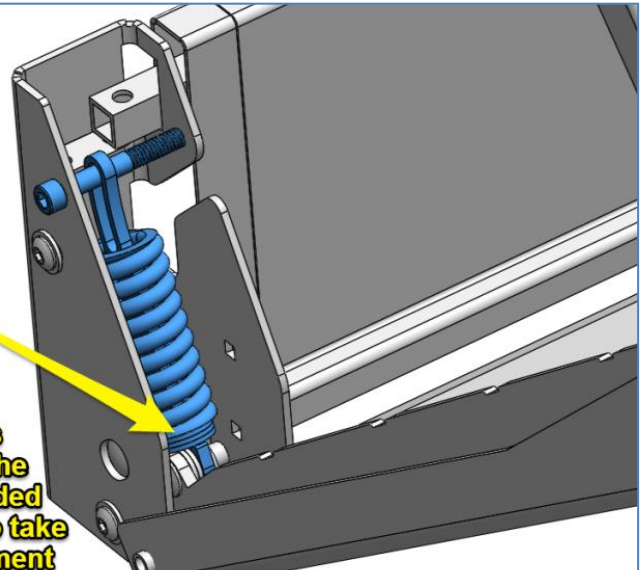


SPRING 1, at the base of each arm, controls the speed at which the Picture Frame approaches the wall when closing to the hidden position

SPACER WASHERS

- + Add washers to make the Picture Frame close slower to the wall
- Remove washers if the Picture Frame doesn't close all the way to the wall by itself

Note: You are supplied with two spacer washers in your parts bag that are half the thickness of the washers preinstalled. Believe it or not 1/32" added or removed will make a noticeable difference so take this into consideration as you make this adjustment



SPRING 2, located in **ONE ARM ONLY**, slows the mount as it approaches the TV Viewing Position. It can also be used to adjust the viewing angle of the TV.

Rotating the screw counter clockwise increases the damper and can also increase the downward tilt of the TV.