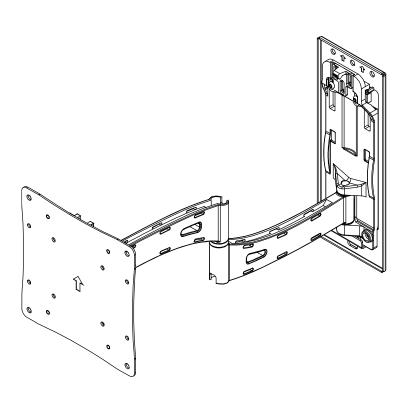


engineered by Snap

# **SM-RAZOR-ART1-M**

# Strong<sup>™</sup> Razor Series Articulating Mount for Medium Displays



**INSTRUCTION MANUAL** 

## 1. Warnings

- Installation of this product should be done by a qualified professional.
- Do not begin installation before reviewing and understanding these instructions.
- Ensure the mounting wall used can safely support 4 times the combined weight of the mount and chosen display.
- Under no circumstances should this product be mounted to metal studs.
- The manufacturer does not accept responsibility for incorrect installation.



This wall mount is intended for use only with the maximum weight of 50 lbs./22.67 kg. Use with heavier than the maximum weight indicated may result in instability causing possible injury.



## 2. Tools Required

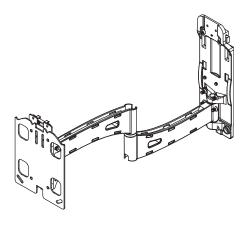
- Power Drill
- 1/4" Drill Bit
- Phillips Head Screw Driver
- Level
- 1/2" (13mm) Socket Wrench
- Stud Finder (optional, recommended for wood stud mounting)
- Zip Ties (for wire management)
- 5/16" Masonry Drill Bit (concrete mounting only)
- Hammer (concrete mounting only)

## 3. Optional Accessories

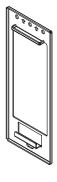
• **Dual Stud Mounting Bracket (SM-RAZOR-ART1-BKT-20)** - For use when mounting location must be between two studs 16" to 20" apart.

## 4. Package Contents

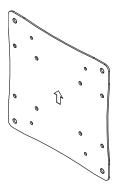
#### 4.1. Mount & Accessories



Wall Arm Assembly (1)

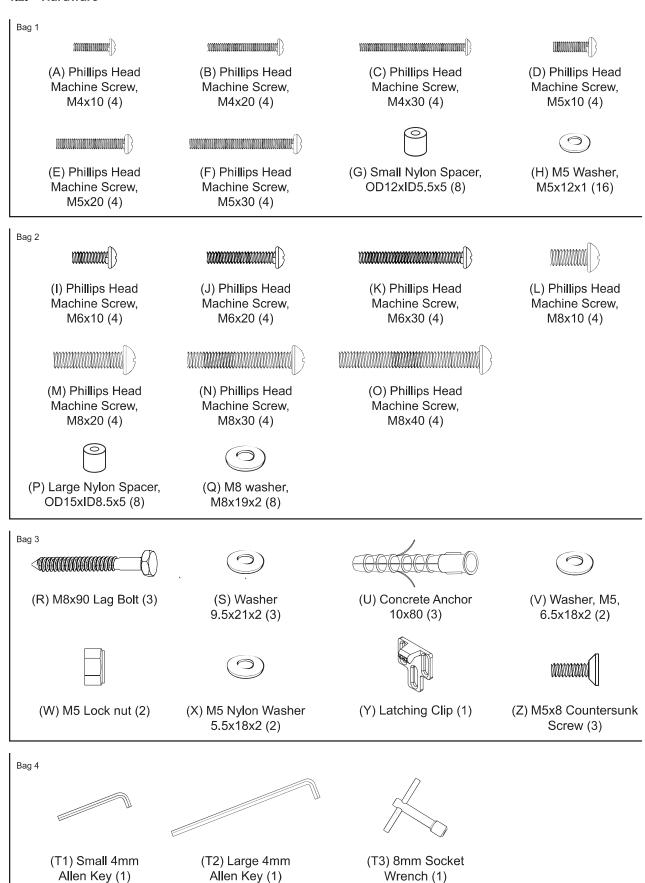


Single Stud Wall Bracket (1)



TV Plate (1)

#### 4.2. Hardware



#### 5. Installation

#### Step 1. Install the Display Adapter Plate

- A. Carefully lay the display face-down on a soft surface.
- B. Locate the four mounting holes in the back of the display housing. Try to thread screws (A through N) in until the correct thread is found for the holes.
- C. Lay the adapter plate over the holes in the display (directional arrow facing up), and check the clearance between the TV and the plate. Make sure the mounting holes match up properly to four of the holes in the adapter plate. The adapter plate should be centered on the back of the display. See the available VESA patterns in Figure 1.
- D. If the plate won't sit flat against the back of the television, spacers (G and P) and washers (H and Q) may be placed between the display and the plate as needed.
- E. Fasten the plate to the display using a #2 Phillips screwdriver. Use screws long enough to thread securely into the display without bottoming out.

Note: The adapter plate (Figure 1) is designed for use with these VESA patterns: 100x100, 100x200, 200x100, and 200x200.

Warning: Over-tightening can damage the bolts or the display and is not covered under warranty. Make sure the fasteners are tight enough not to rattle loose while the mount is in use.

Figure 1.

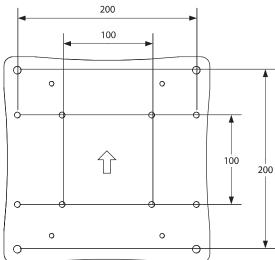


Figure 2.

Step 2. Determine the Correct Mounting Height

Important! If the optional Dual Stud Mounting Bracket (SM-RAZOR-ART1-BKT-20) is being used to hang the mount on the wall, refer to the SM-RAZOR-ART1-BKT-20 manual (included with the bracket) to complete Step 2.

- A. Decide the height where the top edge of the display should be once installed. (Height)
- B. Measure and record the distance between the top of the display and the top of the display adapter plate (Figure 3). Make sure to measure from the flat area on top of the plate, not the curved area. (Dimension A)
- C. Insert Dimension A into the formula:

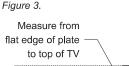
$$(Height) - 1/4" - (A) = Wall Plate Screw Height$$

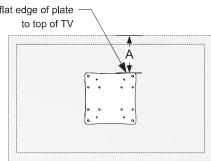
$$(Used in Step 3, next page)$$

#### Example:

Desired Display Height = 60" Dimension A (measured) = 6 1/2" 60" - 1/4" - 6 1/2" = 53 1/4" (Wall Plate Screw Height)

D. Mark the Wall Plate Screw height at the center line of the mount location. (Figure 4)





#### Step 3. Install the Mounting Bracket on the Wall

### A. For Mounting on a Stud Wall

*Important!* If the optional Dual Stud Mounting Bracket (SM-RAZOR-ART1-BKT-20) is being used to hang the mount on the wall, refer to the SM-RAZOR-ART1-BKT-20 manual (included with the bracket) to complete Step 3.

Single Stud Bracket

- Locate a stud to mount the bracket on. Mark the center line of the stud on the wall. The use of a stud finder is highly recommended.
- 2. Using a level for guidance, hold the bracket on the wall and mark the mounting holes that will be used. The holes will be centered on the height mark from Step 2. Be sure that the arrows on the bracket face up toward the ceiling.
- 3. Pre-drill the holes to a depth of 3 1/2" using a 1/4" drill bit. Be sure to drill into the center of the stud.
- 4. Insert the lag screws (R) through the washers (S) and the wall plate, and thread them into the holes in the wall. Tighten the bolts so the bracket is firmly attached to the wall.

**Warning:** Over-tightening can damage the bolts, greatly reducing their holding strength. Do not over-tighten!

Wall Plate
Screw Height
Mark (From
Step 2)
Screw Holes:
-Ø1/4"
-Depth 3 1/2"

#### B. For Mounting on a Concrete Wall

Important! If the optional Dual Stud Mounting Bracket SM-RAZOR-ART1-BKT-20 is being used to hang the mount on the wall, refer to the SM-RAZOR-ART1-BKT-20 manual (included with the bracket) to complete Step 3.



Warning! For Concrete or Cinder Block Mounting: Cinder block must meet ASTM C-90 specifications.

Concrete must be 2000 psi density minimum. Lighter density concrete may not hold concrete anchor. Verify that there is a minimum of 1-3/8" of concrete thickness to be used for the included concrete wall anchors.

Do not drill into mortar joints! Be sure to mount in a solid part of the block, generally 1" minimum from the side of the block.

It is suggested that a standard electric drill on slow setting is used to drill the hole instead of a hammer drill, to avoid breaking out the back of the hole when entering a void or cavity.

Make sure that the supporting surface will safely support the combined load of the equipment and all attached hardware and components.

- Using a level for guidance, hold the bracket on the wall and mark the mounting holes that will be used. The holes will be centered on the height mark from Step 2. Be sure that the arrows on the bracket face up toward the ceiling.
- 2. Pre-drill the holes using a 5/16" masonry drill bit to a depth of 3 1/2". Insert the concrete wall anchors (U) and tap them in with a hammer if necessary.
- 3. Insert the lag screws (R) through the washers (S) and the wall plate, and thread them into the wall anchors (U). Tighten the bolts so the bracket is firmly attached to the wall.

**Warning:** Over tightening can damage the bolts, greatly reducing their holding strength. Do not over-tighten!

Figure 5.

Drill holes and insert anchors.

Place wall arm assembly plate over anchor and secure with flange bolt.

Tighten all flange bolts.

Figure 6.

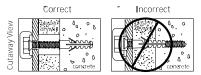
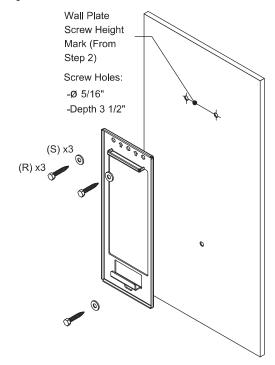


Figure 7.



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#### Step 4. Attach the Arm Assembly to the Wall Plate

- A. Loosen the two upper clamping screws on the arm assembly.
- B. Align the arm assembly with the top and bottom rail of the wall plate.
- C. Slide the arm assembly into position while lowering and pushing it toward the wall. Loosen the upper clamping bolts more if the assembly will not clip onto the rail.
- D. Tighten the upper and lower clamping bolts using the small 4mm Allen wrench (T1).
- E. If the SM-RAZOR-ART1-BKT-20 is being used, the wall bracket end covers can now be installed.

Figure 8.

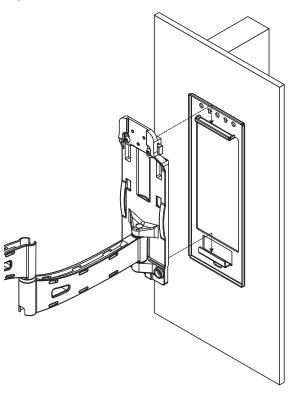
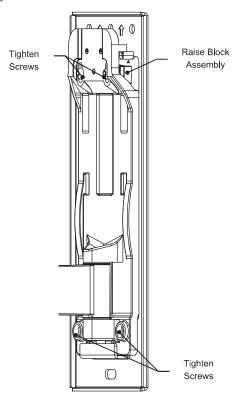
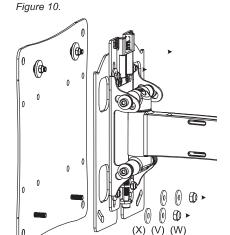


Figure 9.



## Step 5. Attaching the Display to the Arm Assembly

- 1. Lift the display and place it on the end of the arm assembly as shown in Figure 10.
- 2. Secure the display using the two Nylon washers (X), two metal washers (V), and lock nuts (W). Be sure to place the Nylon washer between the mount and the metal washer. This will allow for easier tilt adjustments later.
- 3. Tighten the nuts with the 8mm socket wrench (T3).



## 6. Adjusting Display Position

#### 6.1. Horizontal Level Adjustments

- 1. Loosen the two locking nuts (W) at the bottom of the arm assembly end plate using the 8mm socket wrench (T3). (Figure 11)
- 2. Place a level on top of the display, and rotate the display until it is horizontally level. (Figure 12)
- 3. Tighten the locking nuts at the bottom of the arm assembly end plate and then loosen them ¼ turn. This will allow for the display to be positioned with minimal effort.
- 4. After adjustment is complete, tighten the nuts.

Figure 11.

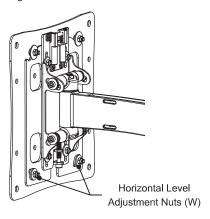
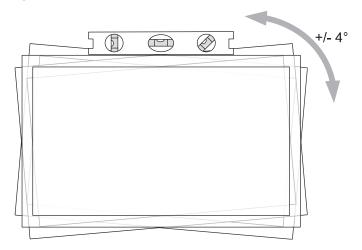


Figure 12.



#### 6.2. Vertical Position Adjustments

The vertical position of the display can be adjusted +/- 3/8" from the pre-adjusted centered position. This is achieved by tightening (up) or loosening (down) the vertical adjustment screw located on the arm plate.

- 1. Extend the arm to access the vertical position adjustment.
- 2. Loosen the four lock-nuts on the rear of the arm plate using the 8mm socket wrench (T3). (Figure 13)
- 3. Using the Large 4mm Allen wrench (T2), tighten the adjustment screw to raise the display, or loosen the screw to lower the display. (Figure 14)
- 4. Tighten the four lock nuts on the rear of the arm plate using the 8mm socket wrench (T3).

Figure 13.

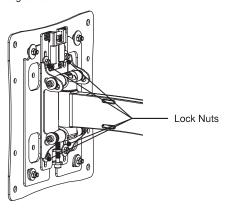
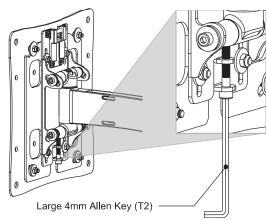


Figure 14.



#### 6.3. Adjusting Home Position (Fully Retracted)

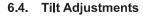
The mount includes a home position latch that secures the arm to the wall mount. This prevents the display from being pushed away from the wall due to cabling.

**Note:** Only the TV Plate side of the latch is preinstalled. The home position latch clip requires installation and adjustment.

- 1. Extend the arm out away from the wall.
- Attach the home position latch (Y) to the wall arm assembly using the three screws (Z) as shown in Figure 15. Use a #2 Phillips screwdriver to adjust the screws.
- 3. Leave the screws loose enough to be able to adjust the latch and set it at the top of its travel.
- 4. Push the display back to the wall.
- 5. If no "click" is heard as the arm is pushed flat, adjust the latch downward and test again.
- 6. Repeat these steps until a "click" is heard and the display latches completely to the wall mount.

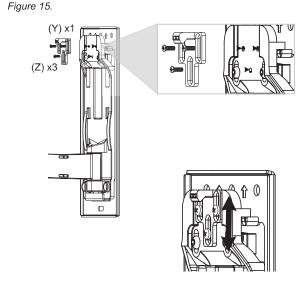
Figure 16.

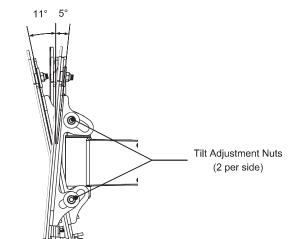
7. After the latch is set correctly, tighten the screws completely.



Tilt adjustments usually do not require loosening any bolts or screws. The tilt plate fasteners have been pre-adjusted for easy adjustment with most TVs. However, heavier TVs may sag due to the extra weight.

If this occurs, evenly tighten the lock nuts on each side of the end plate using the small 4mm Allen Wrench (T1) until the display no longer sags. (Figure 16)

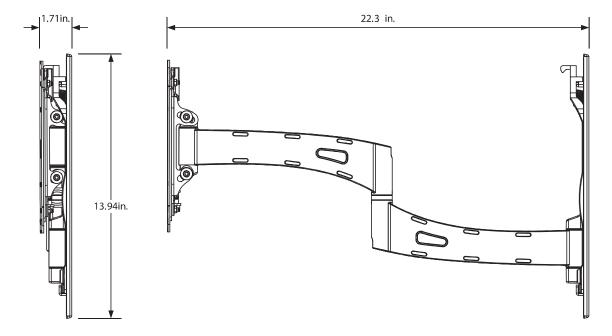




# 7. Specifications

| Finish Type                          | Powder Coated, Matte Finish |
|--------------------------------------|-----------------------------|
| Product Weight                       | 13.30 lbs.                  |
| Maximum Display Load                 | 50 lbs. (22.67 kg)          |
| Minimum Mounting Pattern             | 100 x 100 VESA              |
| Maximum Mounting Pattern             | 200 x 200 VESA              |
| Retracted On-Wall Thickness (inches) | 1.65"                       |
| Maximum Extension (inches)           | 22.3"                       |
| Pan/Swivel Range                     | 180°                        |
| Tilt Angle Range                     | -11°, +5°                   |
| Certifications                       | UL                          |

## 8. Dimensions



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## 9. Warranty



#### **Lifetime Limited Warranty**

Strong<sup>™</sup> Mounts have a Lifetime Limited Warranty. This warranty includes parts and labor repairs on all components found to be defective in material or workmanship under normal conditions of use. This warranty shall not apply to products which have been abused, modified or disassembled. Products to be repaired under this warranty must be returned to Snap AV or a designated service center with prior notification and an assigned return authorization number (RA).

## 10. Contacting Technical Support

Phone: (866) 838-5052

Email: Techsupport@snapav.com

