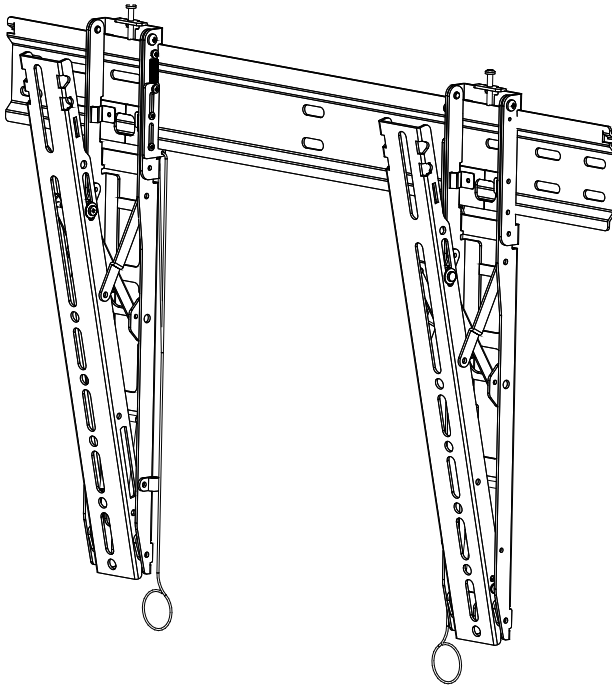# STRONG

SM-RAZOR-T-M/L/XL

Strong™ Low Profile Tilt Mount for Ultra-Thin Flat-Panel TVs

INSTALLATION MANUAL

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.
- The manufacturer does not accept responsibility for incorrect installation.

CAUTION:

This wall mount is intended for use only with the maximum weight of 80 lbs. (36.29 kg) for model SM-RAZOR-T-M, 100 lbs. (45.36 kg) for model SM-RAZOR-T-L, and 150 lbs. (68.04 kg) for model SM-RAZOR-T-XL. Use with heavier than the maximum weight indicated may result in instability causing possible injury.

Specifications:

Maximum Flat Panel Display Weight:

SM-RAZOR-T-M	80 lbs. (36.29 kg)
SM-RAZOR-T-L	100 lbs. (45.36 kg)
SM-RAZOR-T-XL	150 lbs. (68.04 kg)

Supported VESA Patterns:

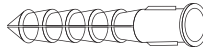|	
SM-RAZOR-T-M	Up to VESA 400x300
SM-RAZOR-T-L	Up to VESA 600x400
SM-RAZOR-T-XL	Up to VESA 800x600

Tools Required:

- Power Drill
- 5/6" and 3/16" Drill Bit
- Phillips Head Screwdriver
- Level
- 3/8" Socket Wrench
- Hammer
- Stud Finder

Package Contents

(A) Black Hex washer head
w/ Philips Drive
M Model (x4) *L &
XL Models* (x6)

(B) Concrete Wall Anchors
M Model (x4) *L &
XL Models* (x6)

(C) M4 x 12mm
Philips Head Screw (x4)

(D) M4 x 20mm
Philips Head Screw (x4)

(Q) 16 x 5.3 x 1.5mm
M5 Metal Washer (x4)

(F) M5 x 12mm
Philips Head Screw (x4)
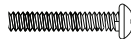
(H) M5 x 30mm
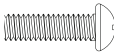Philips Head Screw (x4)

(R) 20.5 x 8.5 x 2mm
M8 Metal Washer (x8)

(I) M6 x 12mm
Philips Head Screw (x4)
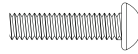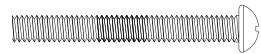
(J) M6 x 20mm
Philips Head Screw (x4)

(K) M6 x 30mm
Philips Head Screw (x4)

(L) M8 x 16mm
Philips Head Screw (x4)

(M) M8 x 20mm
Philips Head Screw (x4)

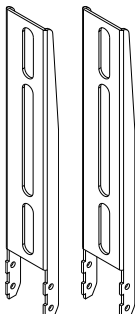(P) M8 x 40mm
Philips Head Screw (x4)
L & XL Models Only

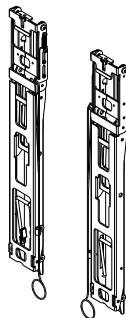(S) OD13 x ID6 x 12mm
Black Nylon Spacer (x4)

(T) OD17 x ID8.5 x 12mm
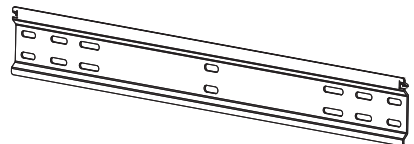Black Nylon Spacer (x4)
L & XL Models Only

(U) M5 x 12mm
Philips Head Screw (x8)
XL Model Only

Extension Brackets (x2)
XL Model Only

Display Brackets (x2)

Wall Plate (x1)

Installation

Step 1. Pre-Drill Wall for Mounting

A. **XL Model only:** If the vertical VESA pattern dimension on the display is greater than 400 mm (Figure 1, Dimension A), attach the extension brackets to the tops of the display brackets using the 8 included Screws (U) so the brackets will reach between the VESA mounting holes on the display.

Figure 1

XL Model Only

A

B. Determine the diameter of the Screw (parts C through P) your display requires by carefully trying to hand-thread one screw into the threaded insert on the rear of the display. If there is any resistance, stop immediately.

C. Spacers are commonly needed on displays with curved backs or recessed screw inserts. The screw will thread through the appropriate Washer (Q or R), the display brackets, any Spacer needed (S or T), and then into the display.

Figure 2

Lengthen

Shorten

Top of Arm

D. Mount the brackets so that they are as close to centered (vertically) on the back of the display as possible. The pull rings and catch hooks face inward when mounted (Figure 1). The brackets are labeled "L" and "R" for reference.

E. Ensure the brackets are installed with the flat side to the display and are square to each other after all screws have been installed (Figure 1).

F. Adjust the height of the bracket release string to be above the bottom of the display (Figure 2). Slide the clip up to lengthen and down to shorten the release string.
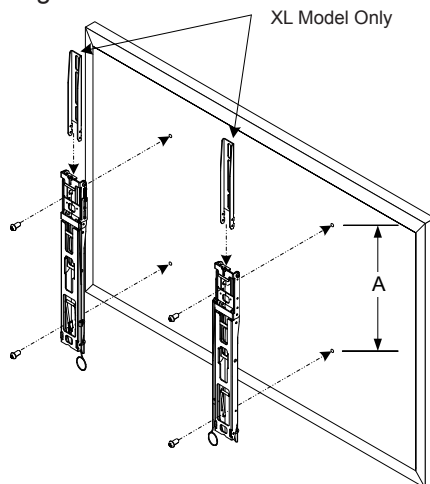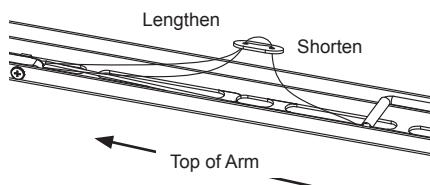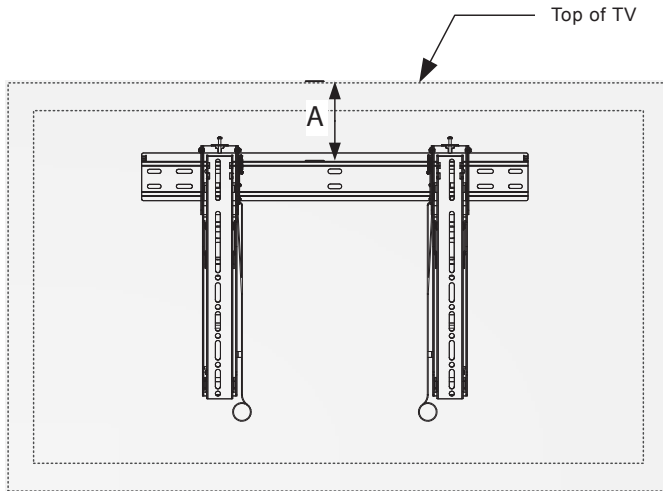
Step 2. Determine the Mounting Height of the Display

Depending on the layout of the VESA mounting holes on the display, the distance between the wall plate and the top of the display will vary. Figure 3 illustrates the distance that must be accounted for when deciding the final viewing height.

A.   Attach the wall plate to the brackets on the display. Measure and record the distance between the top of the display and the top edge of the wall plate (Figure 3, Dimension A).

B.   Mark the wall where you want the top of the display to sit when hung.

C.   Subtract Dimension A from the desired mounting height on the wall to find the correct mounting height for the top of the wall plate.

Figure 3

Top of TV

Step 3. Mount the Wall Bracket Assembly

Mounting on a Stud Wall

The wall plate is fastened to a stud wall using the included Lag Screws (A). Be sure to use the correct number of screws to fasten your mount as listed below:

Model:	Number of Lag Screws:
SM-RAZOR-T-M:	4 (Figure 4)
SM-RAZOR-T-L:	4 (Figure 4)
SM-RAZOR-T-XL:	6 (Figure 5)

A.   Pre-drill holes into two wood studs using a 3/16" drill bit. Be sure to drill into the center of the studs at least 2-1/2" deep. The use of a stud finder is highly recommended.

B.   Insert the Lag Screws (A) into holes through the wall plate and tighten bolts so that wall plate is firmly attached, but do not over tighten. (Figures 4 & 5)

> **WARNING:** Over tightening can damage the bolts, greatly reducing their holding strength.

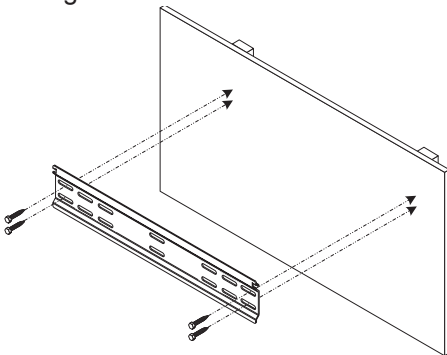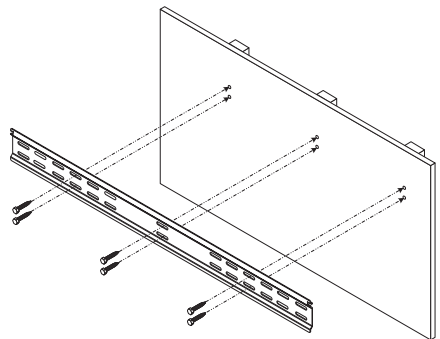Figure 4   Figure 5

Mounting on a Concrete Wall

The wall plate is fastened to a concrete wall using the included lag screws (A) and wall anchors (B). Be sure to use the correct number of screws and anchors to fasten your mount as listed below:

Model:	Number of Lag Screws:
SM-RAZOR-T-M:	4 (Figure 4)
SM-RAZOR-T-L:	6 (Figure 5)
SM-RAZOR-T-XL:	6 (Figure 5)

Figure 6

A. Pre-drill holes into concrete using 5/16" drill bits to a depth of 2 1/2". Insert Concrete Wall Anchors (B) and tap in with hammer if necessary (Figures 6 & 7).

Figure 7

Drill holes and insert anchors.

Place wall arm assembly plate over anchor and secure with lag screw.

Tighten all lag screws.

B. Insert the Lag Screws (A) into the Wall Anchors (B) through the wall plate and tighten all bolts so that wall plate is firmly attached, but do not over tighten.

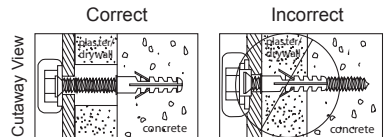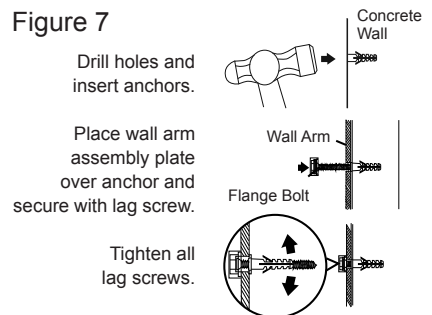> **WARNING:** Over tightening can damage the bolts, greatly reducing their holding strength.

WARNINGS:

When installing wall bracket on cinder block:

- Verify that you have a minimum of 1-3/8" of concrete thickness to be used for the concrete 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.
- Cinder block must meet ASTM C-90 specifications.
- To avoid breaking out the back of the hole when entering a void or cavity, it is suggested that a standard electric drill on slow setting is used to drill the hole instead of a hammer drill.
- Concrete must be 2000 psi density minimum. Lighter density concrete may not hold anchors.
- Make sure that the supporting surface will safely support the combined load of the equipment and all attached hardware and components.
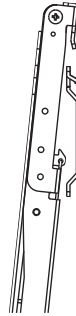

Step 4. Hang Display onto the Wall Plate

A. Carefully lift the display and place the bracket hooks over and onto the angled lip in the wall plate (Figure 8). Do not release the display until it is completely connected to the wall plate.

B. Pull the release strings down on both sides of the display, and gently press on the bottom of the display to lock the brackets onto the wall plate (Figure 9).

C. Let the release strings slide back up, and check to see that the catches engage by gently pulling the bottom of the display.

Figure 8

Figure 9

Installing   Locked

After the mount is installed, the display can be connected to the wiring. Then, final level and tilt adjustments can be made. See the the following sections for more details.
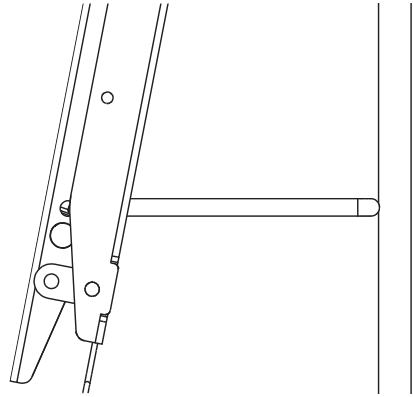
Wire Management Kickstands

The SM-RAZOR-T mounts are equipped with a kickstand that provides space between the display and the wall for connecting or disconnecting cabling

Note: These kickstands are provided for servicing only, it is recommended that they are collapsed and the brackets are locked during normal placement.

A. Pull down on the rings at the bottom of the brackets to release them from the wall bracket.

B. Pull the kickstands out on each bracket so that they rest on the wall (Figure 10).

C. When finished, collapse the kickstands to allow the brackets to lock onto the wall bracket.

D. Let the release strings slide back up, and check to see that the catches engage by gently pulling the bottom of the display.
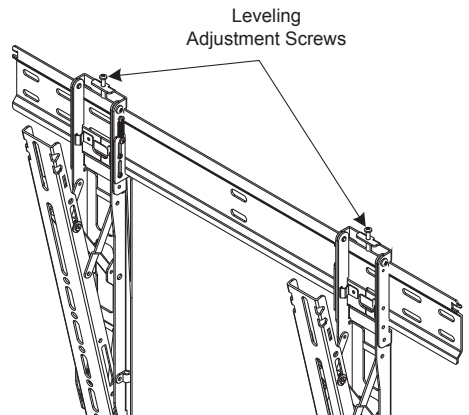
Figure 10

Display Leveling Adjustment

After mounting, the display may not be hanging perfectly level. The set screw at the top of each mounting hook allows either side to be adjusted using a Phillips screwdriver (Figure 11).

Place a level on one side of the display as the adjustment is made. Turn the screw clockwise to raise a side, or counterclockwise to lower a side, until the display is level.

WARNING: Turning the leveling adjustment screws too far clockwise to raise the display height could lock the display brackets to the wall plate. This could cause damage to the display or the mount when trying to disconnect the display brackets from the wall plate.

Figure 11

Leveling
Adjustment Screws

Display Tilt Adjustment

The SM-RAZOR-T mounts offer up to 15° of downward tilt. The mount is flat (0°) when pushed to the wall. Once the display is moved out, it tilts to 5° and then can be adjusted from 5-15°.
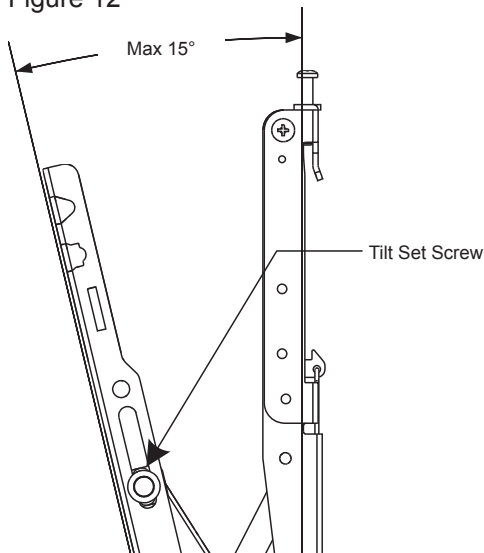
Figure 12

Max 15°

Tilt Set Screw

To adjust the viewing angle of the display, carefully push or pull the top of the display toward or away from the wall (Figure 13). The mount will snap into place when pushed flat to the wall.

If the display cannot be adjusted with ease, loosen the tilt set screws until the proper feel is achieved using a Phillips screwdriver (Figure 12).

If the display sags after being set, tighten the tilt set screws until no sagging occurs. The total adjustment needed should be minimal, no more than ¼ turn tighter or looser than the default setting.

WARNING: Do NOT over-loosen or remove the tilt adjustment friction screws. Doing so may cause permanent damage to the mount or display.

Lifetime Limited Warranty

Strong™ 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).

Contacting Technical Support

Phone: (866) 838-5052

Email: techsupport@snapav.com

STRONG