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IMPORTANT SAFETY INSTRUCTIONS

WARNING: A WARNING alerts you to the possibility of serious injury or death if you do not follow the instructions.

CAUTION: A CAUTION alerts you to the possibility of damage or destruction of equipment if you do not follow the corresponding instructions.

WARNING: Failure to read, thoroughly understand, and follow all instructions can result in serious personal injury, damage to equipment, or voiding of factory warranty! It is the installer’s responsibility to make sure all components are properly assembled and installed using the instructions provided.

WARNING: Failure to provide adequate structural strength for this component can result in serious personal injury or damage to equipment! It is the installer’s responsibility to make sure the structure to which this component is attached can support five times the combined weight of all equipment. Reinforce the structure as required before installing the component.

WARNING: Exceeding the weight capacity can result in serious personal injury or damage to equipment! It is the installer’s responsibility to make sure the combined weight of all components located on the MSA1U/MTA1U does not exceed 125 lbs (56.7 kg), OR 200 lbs (90.7 kg) for the LSA1U/LTA1U.

WARNING: Use this mounting system only for its intended use as described in these instructions. Do not use attachments not recommended by the manufacturer.

WARNING: Never operate this mounting system if it is damaged. Return the mounting system to a service center for examination and repair.

WARNING: Do not use this product outdoors.

IMPORTANT!: The MSA1U/MTA1U/LSA1U/LTA1U mounts are designed to be mounted to:

- a bare 8” concrete or 8”x8”x16” concrete block wall, or
- a 2” x 4” wood stud wall covered by drywall with maximum thickness of 5/8”:
  - MSA1U/MTA1U: Wood studs must be 16” on center;
  - LSA1U/LTA1U: Wood studs may be 16” or 24” on center.

--SAVE THESE INSTRUCTIONS--
Installation Instructions

MSA1U/MTA1U/LSA1U/LTA1U

DIMENSIONS

1. MAXIMUM MOUNTING PATTERN IS 22.7" (576 mm) WITHOUT REVERSING UPRIGHTS
2. MAXIMUM MOUNTING PATTERN IS 25.3" (642 mm) WITH REVERSING UPRIGHTS
3. FOR RECESSED APPLICATIONS, MINIMUM VERTICAL LIFT FOR HOOK ENGAGEMENT IS .75" (19 mm)

RAILS CAN BE SLID LEFT OR RIGHT FOR OFFSET

MSA1U

DIMENSIONS: INCHES [MILLIMETERS]

MTA1U

DIMENSIONS: INCHES [MILLIMETERS]
DIMENSIONS--continued

LSA1U

RAILS CAN BE SLID LEFT OR RIGHT FOR OFFSET

1. MAXIMUM MOUNTING PATTERN IS 34.3" (873 mm) WITHOUT REVERSING UPRIGHTS
2. MAXIMUM MOUNTING PATTERN IS 31.7" (805 mm) WITH REVERSING UPRIGHTS
3. FOR RECESSED APPLICATIONS, MINIMUM VERTICAL LIFT FOR HOOK ENGAGEMENT IS .75" (19 mm)

DIMENSIONS:  INCHES
[MILLIMETERS]

LTA1U

RAILS CAN BE SLID LEFT OR RIGHT FOR OFFSET

1. MAXIMUM MOUNTING PATTERN IS 31.3" (794 mm) WITHOUT REVERSING UPRIGHTS
2. MAXIMUM MOUNTING PATTERN IS 34.6" (879 mm) WITH REVERSING UPRIGHTS
3. FOR RECESSED APPLICATIONS, MINIMUM VERTICAL LIFT FOR HOOK ENGAGEMENT IS .75" (19 mm)

DIMENSIONS:  INCHES
[MILLIMETERS]
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TOOLS REQUIRED FOR INSTALLATION

- 7/32" (5.5mm) Wood Stud
- #2 3/8" (9.5mm) Concrete

PARTS

Universal Hardware Kit
- A (4) M4x12mm
- B (4) M4x20mm
- C (4) M4x25mm
- D (4) M5x12mm
- E (4) M5x20mm
- F (4) M5x25mm
- I (4) M6x25mm
- J (4) M8x12mm
- K (4) M8x20mm
- L (4) M8x30mm
- MA (8) [Nesting spacer]
- MB (4) [Universal washer]

Wall Mounting Hardware Kit
- N (4) 5/16 x 2-1/2"
- P (4) UX10x60mm
- Q (4) [Slotted washer]

MSA1/LSA1 Mount Hardware Kit
- R (1) 3/16"
- S (2) 3/8-16 x 3/4"

MTA1/LTA1 Mount Hardware Kit
- R (1) 3/16"
- S (2) 3/8-16 x 3/4"
- U (2) 1/4-20

MSA1U/MTA1U/LSA1U/LTA1U Mount Hardware Kit
- T (2) 1/4-20 x 1"

OR

Interface brackets
- V (1) [left]
- W (1) [right]
- X (1) [left]
- Y (1) [right]

[Included in hardware box]
[Included in hardware box]
INSTALLATION

The MSA1U/MTA1U/LSA1U/LTA1U mounts are designed to be mounted to a bare 8" concrete, 8"x8"x16" concrete block; or 2" x 4" wood studs (16" on center for MSA1U/MTA1U, and 16" or 24" on center for LSA1U/LTA1U) wall covered by drywall with 5/8" maximum thickness.

The MTA1U and LTA1U have brackets which allow the TV to be tilted. The MSA1U and LSA1U have static brackets which keep the TV in an upright position.

Locate Mounting Site

WARNING: IMPROPER INSTALLATION CAN LEAD TO MOUNT FALLING CAUSING SEVERE PERSONAL INJURY OR DAMAGE TO EQUIPMENT! It is the installer's responsibility to make certain the structure to which the mount is being attached is capable of supporting five times the combined weight of all components located on the mount, not to exceed 125 lbs (56.7 kg) for the MSA1U/MTA1U, OR 200 lbs (90.7 kg) for the LSA1U/LTA1U.

NOTE: Proceed to either the Installing to a Wood Stud Wall section or the Installing to a Concrete Wall section.

Installing to a Wood Stud Wall

1. Determine the center of the TV screen, and where it should be located on the wall.
2. Locate the closest stud to the left and right of the selected location.

NOTE: If the screen area lies over a stud, use that stud and the stud to either the left or right of it.
3. Line up the diamond shapes on mount (Z) with center of screen marking to determine vertical center. (See Figure 1)
4. Measure up 7" (177.8mm) from the center point to mark location of the upper mounting slots. (See Figure 1)

5. Using a level, mark the wall on each stud to attach the mount through the upper mounting slots. (See Figure 2)
6. Drill one 7/32" (5.5mm) pilot hole in each stud.
7. Partially install two 5/16 x 2-1/2" flanged lag bolts (N) into pilot holes but do not tighten to wall.
8. Hang mount (Z), aligning upper mounting slots over lag bolts and adjust side-to-side for proper location.
9. Place one slotted washer (Q) over each flanged lag bolt. (See Figure 2)
10. Tighten lag bolts to secure mount (Z) to wall at upper mounting slots.

Figure 1

Figure 2
Installing to a Concrete Wall

1. Determine the center of the TV screen, and where it should be located on the wall.
2. Line up the diamond shapes on mount (Z) with center of screen marking to determine vertical center. (See Figure 1)
3. Measure up 7” (177.8mm) from the center point to mark location of the upper mounting slots.
4. Using a level, mark the wall through both upper mounting slots. (See Figure 3)

**CAUTION:** MINIMUM HORIZONTAL DISTANCE BETWEEN WALL BRACKETS IS 16” (406.4mm). Do not place mounting brackets closer together than 16” (406.4mm).

5. Drill one 3/8” x 3-1/2” (9.5mm x 88.9mm) pilot hole at each marking.
6. Install an anchor (P) into each pilot hole using a hammer, making sure that the anchor is flush with the wall.
7. Partially install two 5/16 x 2-1/2” flanged lag bolts (N) into pilot holes but do not tighten to wall.
8. Hang mount (Z), aligning upper mounting slots over lag bolts and adjust side-to-side for proper location.
9. Place one slotted washer (Q) over each flanged lag bolt. (See Figure 3)
10. Tighten lag bolts to secure mount (Z) to wall at upper mounting slots.
11. Mark the attachment points for the lower mounting slots, making sure the attachment points are located on the studs. (See Figure 3)
12. Drill 3/8” x 3-1/2” (9.5mm x 88.9mm) pilot holes at markings for lower mounting holes. (See Figure 3)
13. Use two 5/16 x 2-1/2” flanged lag bolts (N) and two 5/16” slotted washers (Q) to attach the mount to the wall through the lower mounting holes. (See Figure 3)
14. Slide rails to approximate center of screen location.

**Attaching Interface Brackets to Screen**

1. Align the center of the bracket (V and W or X and Y) with center of screen. (See Figure 4)

**NOTE:** The diamond-shape holes in the bracket correspond to the center of the mount.

**WARNING:** IMPROPER INSTALLATION CAN LEAD TO DISPLAY FALLING CAUSING SERIOUS PERSONAL INJURY OR DAMAGE TO EQUIPMENT! Using screws of improper size may damage your display. Properly sized screws will easily and completely thread into display mounting holes. If spacers are required, be sure to use longer screws of the same diameter.

2. Select correct screws, nesting spacers (if necessary) and universal washers from the hardware bag (A-M) and attach brackets to back of screen. (See Figure 4)

**IMPORTANT !:** (LSA1U/LTA1U Only) If M4 fasteners are used to attach brackets to back of screen, the weight of the screen may NOT exceed 150 lbs (68.0 kg).
NOTE: The nesting spacers (MA) may be used separately, or put two together in different configurations to create different size spacers. (See Figure 5)

3. If necessary, the tilt interface bracket knobs may be switched to allow the interface brackets (X and Y) to be reversed. (See Figure 7)
   a. Remove display from mount.
   b. Remove interface brackets from display.
   c. Hold the right interface bracket horizontally, tightly gripping it so that spacers do not move.
   d. Remove the knob and screw.
   e. Replace the knob and screw in the opposite order, with the knob on the inside of the bracket.
   f. Switch the right interface bracket to the left side of the wall mount.
   g. Repeat Steps 3c through 3f with the left interface bracket.

Switching Interface Brackets (Optional)
If an installation situation makes adjusting the location of interface brackets necessary, there are several options.

1. The wall brackets may be adjusted side to side at the point of attachment. (See Figure 6)

2. The location of the left and right interface brackets (V and W or X and Y) may be switched, with the knobs on the MTA1U/LTA1U interface brackets (X and Y) facing the inside of the mount. (See Figure 6)
Attaching Screen to Wall Mount

NOTE: NEVER place both interface brackets (V and W or X and Y) to one side of the wall mount center line! (See Figure 8)

NOTE: Do NOT allow both interface brackets (V and W or X and Y) to be located on same side of wall bracket. (See Figure 8)

[Figure 8]

NEVER place both interface brackets to one side of the wall mount center line (CL)!

Both interface brackets must NEVER be located to one side of the wall brackets!

[Brackets V and W shown]
1. Hang screen onto the top rail of the mount (CC). (See Figure 9)
   - **MSA1U / LSA1U:** Hang top hook of interface brackets (V and W) onto the top rail of the mount (Z). (See Figure 9)
   - **MTA1U / LTA1U:** Move latch on top of interface bracket to OPEN position and hang top hook of interface brackets (X and Y) onto the top rail of the mount (Z). (See Figure 9)

**NOTE:** The screen initially installs into the "service mode" to allow easy cable access.

2. Adjust screen and rails to desired viewing position.
3. Route cables between wall and rails.

⚠️ **CAUTION:** PINCH POINTS! Keep fingers, hands and cables out of pinch point areas.

4. Pull downward on the pull cords and swing inward toward wall, latching interface brackets to lower rail and fastening bottom of screen to the mount. (See Figure 9)
5. Attach end of pull cord (a magnet) to mount so it does not extend beyond bottom of screen. (See Figure 9)
Adjustments

Horizontal Adjustment

1. The mount wall brackets may be adjusted side to side at the point of attachment. (See Figure 10)

2. The screen may also be adjusted along rails side to side.

**NOTE:** NEVER place both interface brackets (V and W or X and Y) to one side of the wall mount center line! (See Figure 8)

**NOTE:** Do NOT allow both interface brackets (V and W or X and Y) to be located on same side of wall bracket. (See Figure 8)

3. **(MTA1U / LTA1U only)** Move latch on top of interface brackets to CLOSED position. (See Figure 11)

Tilt **(MTA1U / LTA1U Only)**

The interface brackets (X and Y) allow from -2° to 12° tilt, and can be locked at 0°, 6° and 12°.

1. Loosen the interface bracket knob.
2. Adjust tilt as required. (See Figure 11)
3. The tilt may be locked at 0°, 6° or 12° using one 1/4-20 x 1” round head carriage bolt (T) and one 1/4-20 hex nut (U) per interface bracket. (See Figure 11)
4. Tighten interface bracket knob.
**Locking Screen Interface Brackets (Optional)**

1. Lock screen interface brackets onto mount rails using one 3/8-16 x 3/4" set screw (S) on each interface bracket. (See Figure 12)

**Locking Mount (Optional)**

1. Add padlock (not included) to interface bracket to complete security. (See Figure 13)

**NOTE:** The padlock maximum shackle diameter is 5/16” (7.9 mm).