

NEC

NEC DISPLAY SOLUTIONS OF AMERICA, INC.

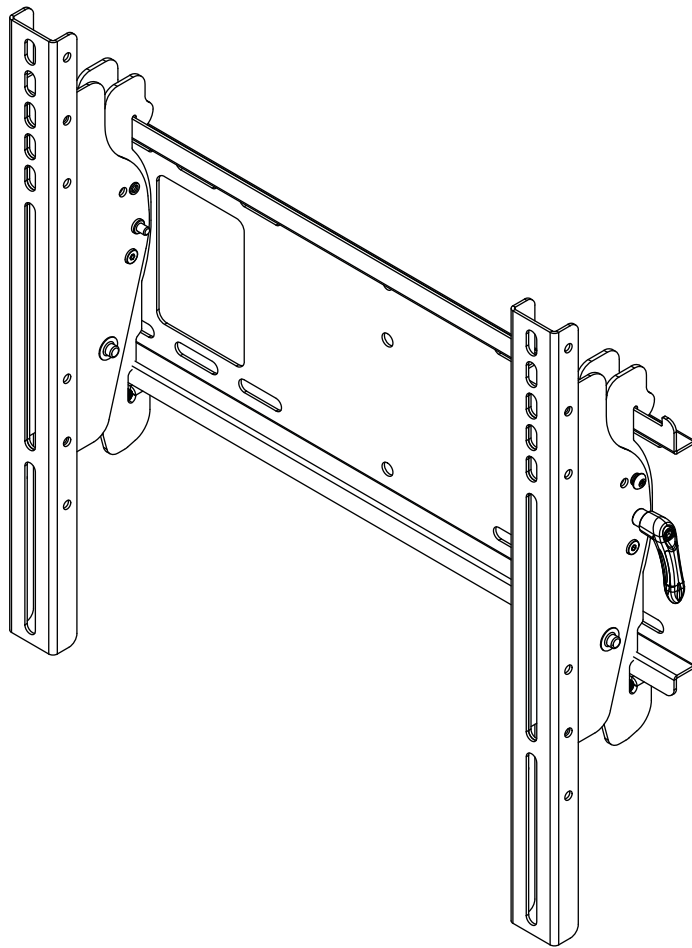
**Installation and Assembly - Flat Screen Wall
Mount for NEC models:**

**ASPV32, ASPV40, E321, E421, E461,
LCD3210, LCD3215, LCD4020, LCD4215,
LCD4615, LCD4620, LCD5220, LCD5710,
M40, M46, P401, P461, P521, P551, S401,
S461, S521, SC40, SC46, V321, V421, V461,
X431BT, X461HB, X461UN, E324**

Model: WMK-3257

oshpd c  **US LISTED**


This product is intended for use with UL
Listed products and must be installed by a
qualified professional installer.



Maximum UL Load Capacity: 150 lb (68 Kg)

ISSUED: 03-26-10 SHEET #: 125-9106-6 12-11-14

Note: Read entire instruction sheet before you start installation and assembly.

 **WARNING**

- Do not begin to install this product until you have read and understood the instructions and warnings contained in this Installation Sheet. If you have any questions regarding any of the instructions or warnings, please call customer care at 1-800-865-2112.
- This product should only be installed by someone of good mechanical aptitude, has experience with basic building construction, and fully understands these instructions.
- Make sure that the supporting surface will safely support the combined load of the equipment and all attached hardware and components.
- Never exceed the UL Listed Maximum Load Capacity of 150 lb (68 kg).
- If mounting to wood wall studs, make sure that mounting screws are anchored into the center of the studs. Use of an "edge to edge" stud finder is highly recommended.
- Always use an assistant or mechanical lifting equipment to safely lift and position equipment.
- Tighten screws firmly, but do not overtighten. Overtightening can damage the items, greatly reducing their holding power.
- This product is intended for indoor use only. Use of this product outdoors could lead to product failure and personal injury.
- This product was designed and intended to be mounted to the following supporting surfaces checked below with the hardware included in this product as specified in the installation sheet. To mount this product to an alternative supporting surface, contact customer care at 1 800 865-2112.
- This product was designed to be installed on the following wall construction only;

WALL CONSTRUCTION	ADDITIONAL HARDWARE REQUIRED
<input checked="" type="checkbox"/> Wood Stud	None
<input checked="" type="checkbox"/> Wood Beam	None
<input checked="" type="checkbox"/> Solid Concrete	None
<input checked="" type="checkbox"/> Cinder Block	None
<input type="checkbox"/> Metal Stud	Contact Customer Service
<input type="checkbox"/> Brick	Contact Customer Service
<input type="checkbox"/> Other or unsure?	Contact Customer Service

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For customer care call (800) 865-2112 or (708) 865-8870.

Tools Needed for Assembly

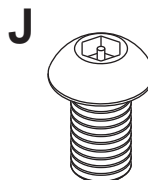
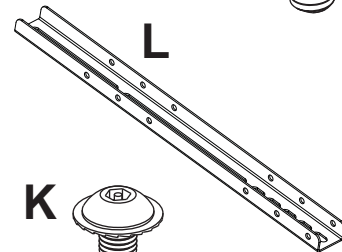
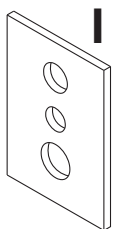
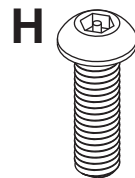
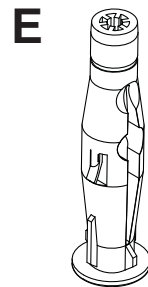
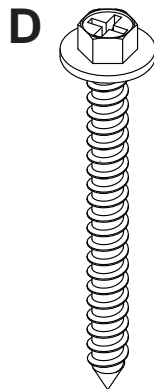
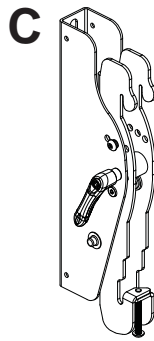
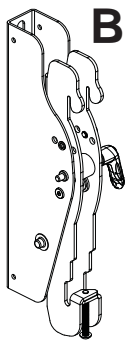
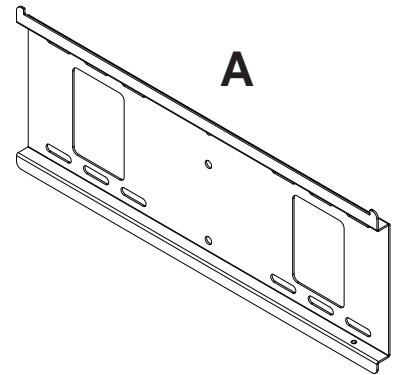
- stud finder ("edge to edge" stud finder is recommended)
- phillips screwdriver
- drill
- 1/4" bit for concrete and cinder block wall
- 5/32" bit for wood stud wall
- level

Before you begin, make sure all parts shown are included with your product.

Parts may appear slightly different than illustrated.

PARTS LIST

Description	Qty.	Part #
A wall plate	1	200-1797
B left tilt bracket	1	201-1704
C right tilt bracket	1	201-1703
D #14 x 2.5 wood screw	6	5S1-015-C03
E concrete anchor	6	590-0320
F 6" - 4 mm security allen wrench	1	560-9646
G M6 x 12 mm socket pin screw	4	520-1050
H M6 x 20 mm socket pin screw	4	520-9554
I multi washer	4	580-1036
J M8 x 15 mm socket pin screw	4	520-1068
K M5 x 6 mm socket pin serrated washer head screws	8	510-1114
L extension brackets	2	201-1711
M 14" - 4 mm security allen wrench	1	560-1145
N M4 x 16 mm socket pin serrated washer head screw	4	510-1087



Installation to Double Wood Stud Wall

⚠ WARNING

- Installer must verify that the supporting surface will safely support the combined load of the equipment and all attached hardware and components.
- Tighten wood screws so that wall plate is firmly attached, but do not overtighten. Overtightening can damage the screws, greatly reducing their holding power.
- Never tighten in excess of 80 in. • lb (9 N.M.).
- Make sure that mounting screws are anchored into the center of the stud. The use of an "edge to edge" stud finder is highly recommended.
- When installing Peerless wall mounts on a wood stud wall covered with gypsum board (drywall), verify that the wood studs are a minimum of 2" x 4" nominal size. Do not install over gypsum board thicker than 5/8".

- 1** Wall plate (**A**) can be mounted to two studs that are 16" apart. Use a stud finder to locate the edges of the studs. Use of an edge-to-edge stud finder is highly recommended. Based on their edges, draw a vertical line down each stud's center. Place wall plate on wall as a template. Level plate, and mark the center of the four mounting holes. Make sure that the mounting holes are on the stud centerlines. Drill four 5/32" (4 mm) dia. holes 2-1/2" (65 mm) deep. Make sure that the wall plate is level, secure it using four #14 x 2.5" wood screws (**D**) as shown in figure 1.2.

Skip to step 2 on page 6.

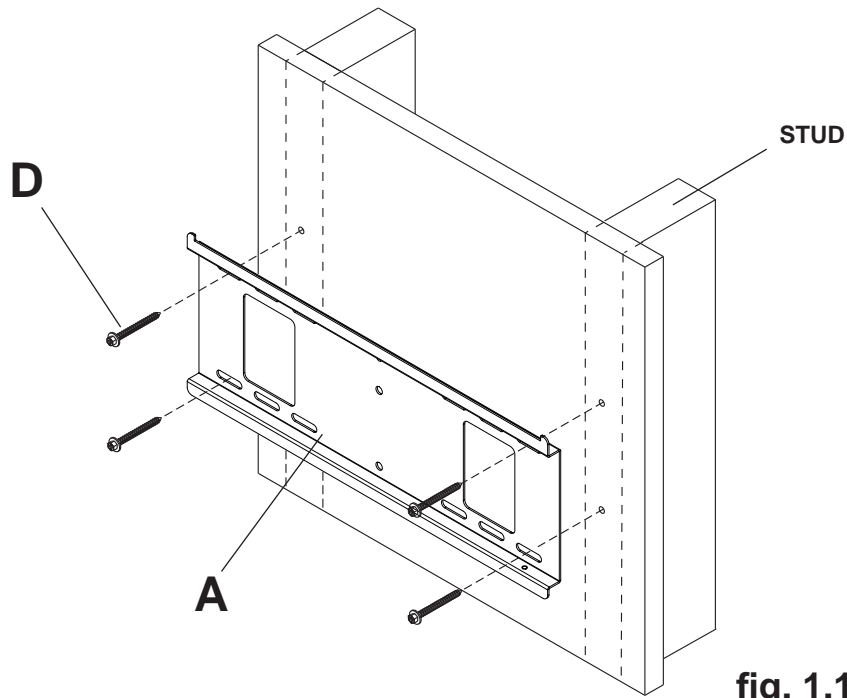


fig. 1.1

Installation to Solid Concrete or Cinder Block

⚠ WARNING

- When installing Peerless wall mounts on a concrete wall, the wall must be at least 8" thick with a minimum compressive strength of 2000 psi.
- When installing Peerless wall mounts on a cinder block wall, the cinder blocks must meet ASTM C-90 specifications and have a minimum nominal width of 8". Do not drill into mortar joints! Be sure to mount in a solid part of the block, generally 1" (25 mm) 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.

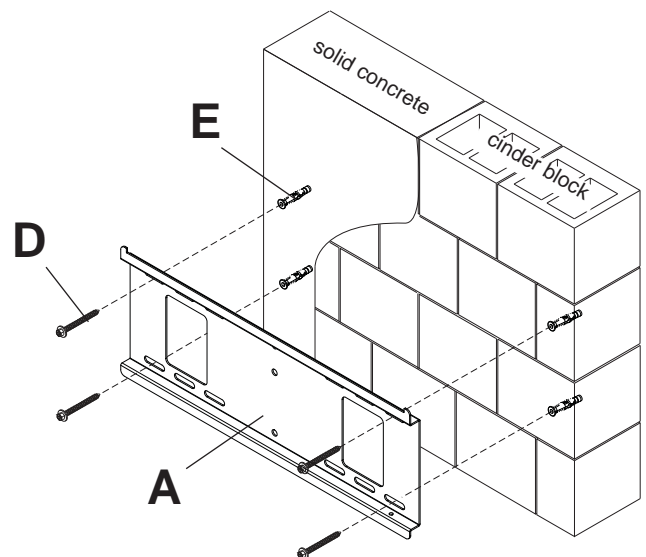
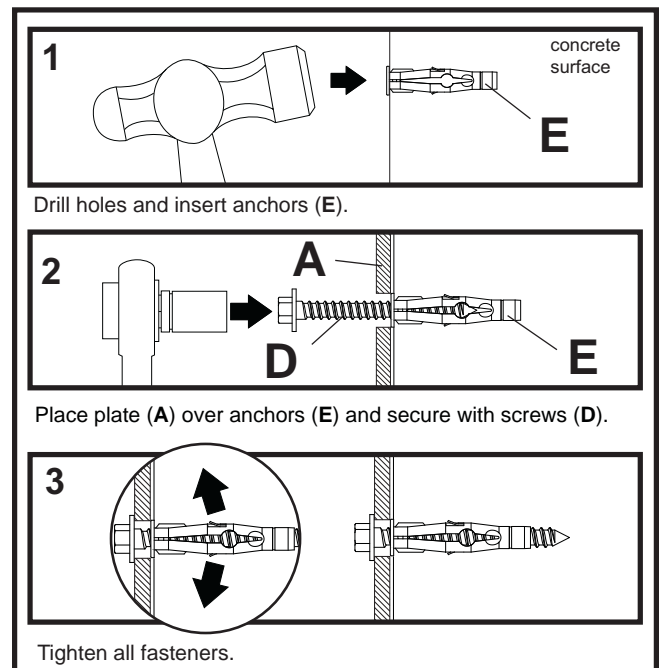
- 1 Make sure that wall plate (A) is level, use it as a template to mark four mounting holes. Drill four 5/16" (8 mm) dia. holes to a minimum depth of 2.5" (64 mm). Insert anchors (E) in holes flush with wall as shown (right). Place wall plate over anchors and secure with #14 x 2.5" screws (D). Level, then tighten all fasteners.

⚠ WARNING

- Tighten screws so that wall plate is firmly attached, but do not overtighten. Overtightening can damage screws, greatly reducing their holding power.
- Never tighten in excess of 80 in. • lb (9 N.M.).

⚠ WARNING

- Always attach concrete anchors directly to load-bearing concrete.
- Never attach concrete anchors to concrete covered with plaster, drywall, or other finishing material.



Use Chart to Determine Orientation and Screws

LANDSCAPE				PORTRAIT			
Recommended Hole Pattern				Recommended Hole Pattern			
A	100 mm x 100 mm	D	400 mm X 400 mm	A	100 mm x 100 mm	D	400 mm X 400 mm
B	200 mm X 200 mm	E	400 mm x 200 mm	B	200 mm X 200 mm	E	200 mm x 400 mm
C	300 mm X 300 mm			C	300 mm X 300 mm		
Screen	Screw Size	Screen	Screw Size	Screen	Screw Size	Screen	Screw Size
B ASPV32	M6 x 12	C P401	M6 x 12	B ASPV32	M6 x 12	C P401	M6 x 12
B ASPV40	M6 x 12	C P461	M6 x 12	B ASPV40	M6 x 12	C P461	M6 x 12
B E321	M6 x 12	D P521	M6 x 12	B E321	M6 x 12	D P521	M6 x 12
A E324	M4 x 16	D P551	M6 x 12	A E324	M4 x 16	D P551	M6 x 12
E E421	M6 x 12	C S401	M6 x 12	E E421	M6 x 12	C S401	M6 x 12
E E461	M6 x 20	C S461	M6 x 12	E E461	M6 x 12	C S461	M6 x 12
B LCD3210	M6 x 12	D S521	M6 x 12	B LCD3210	M6 x 12	D S521	M6 x 12
B LCD3215	M6 x 12	B SC40	M6 x 12	B LCD3215	M6 x 12	B SC40	M6 x 12
E LCD4020	M6 x 12	B SC46	M6 x 12	E LCD4020	M6 x 12	B SC46	M6 x 12
E LCD4215	M6 x 12	E V321	M6 x 12	E LCD4215	M6 x 12	E V321	M6 x 12
E LCD4615	M6 x 12	E V421	M6 x 12	E LCD4615	M6 x 12	E V421	M6 x 12
E LCD4620	M6 x 12	E V461	M6 x 12	E LCD4620	M6 x 12	E V461	M6 x 12
D LCD5220	M6 x 12	C X431BT	M6 x 12	D LCD5220	M6 x 12	C X431BT	M6 x 12
E LCD5710	M8 x 15	C X461HB	M6 x 12	E LCD5710	M8 x 15	C X461HB	M6 x 12
E M40	M6 x 12	C X461UN	M6 x 12	E M40	M6 x 12	C X461UN	M6 x 12
E M46	M6 x 12			E M46	M6 x 12		

Secure extension brackets (L) to left tilt bracket (B) with four M5 x 6 mm socket pin serrated washer head screws (K).

Height of tilt brackets may be adjusted using holes above and below center mounting location holes.

NOTE: Repeat using right tilt bracket (C).

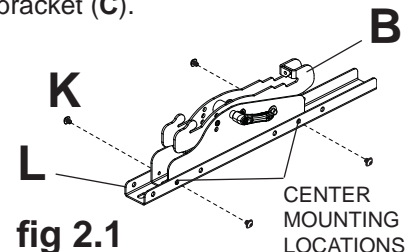


fig 2.1

Installing Tilt Brackets

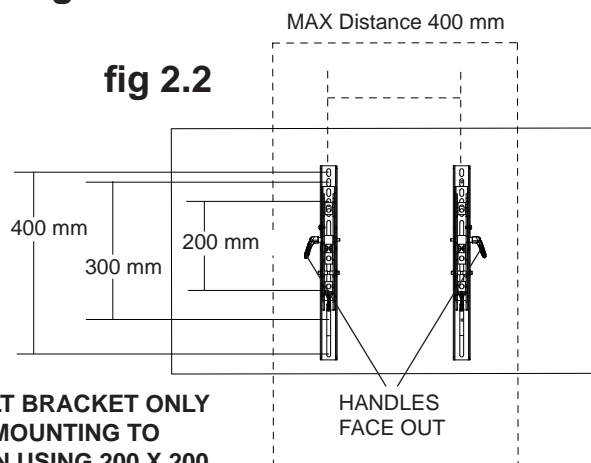


fig 2.2

USE TILT BRACKET ONLY WHEN MOUNTING TO SCREEN USING 200 X 200

WARNING

- Tighten screws so adapter brackets are firmly attached. Do not tighten with excessive force. Overtightening can cause stress damage to screws, greatly reducing their holding power and possibly causing screw heads to become detached. Tighten to 40 in. • lb (4.5 N.M.) maximum torque.
- If screws don't get three complete turns in the screen inserts or if screws bottom out and bracket is still not tightly secured, damage may occur to screen or product may fail.

2 To prevent scratching the screen, set a cloth on a flat, level surface that will support the weight of the screen. Place screen face side down. If screen has knobs on the back, remove them to allow the tilt brackets to be attached. Place tilt brackets (B and C) on back of screen as shown in fig. 2.2. **Note:** Be sure to attach tilt brackets with handles facing outward as in figure 2.2. Align tilt brackets to screen mounting holes as recommended by chart below. Attach the tilt brackets to the back of the screen using the appropriate combination of screws, either M4 x 16 socket pin screws (N), M6 x 12 mm socket pin screw (G), M6 x 20 socket pin screw (H), or M8 x 15 mm socket pin screw (J) with multi-washers (I) as shown in figures 2.3 and 2.4. Verify that all holes are properly aligned, and then tighten screws using security allen wrench (F).

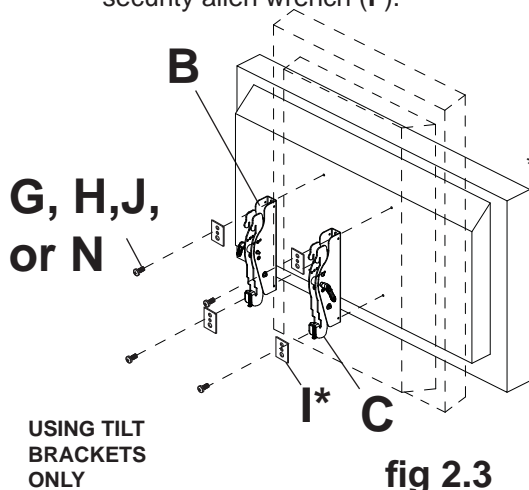


fig 2.3

Landscape ———
Portrait

* Use multi-washers (I) to attach tilt brackets (B and C) to your screen when using M4 x 16 socket pin screws (N), M6 x 12 mm socket pin screw (G), or M6 x 20 mm socket pin screws (H). M8 screws do not require multi-washers (I).

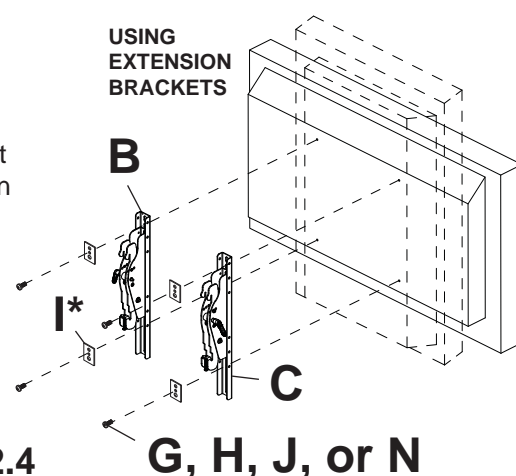


fig 2.4

Mounting and Removing Flat Panel Screen

⚠ WARNING

- Always use an assistant or mechanical lifting equipment to safely lift and position the flat panel screen.
- Do not tighten screws with excessive force. Overtightening can cause damage to mount. Tighten screws to 40 in. • lb (4.5 N.M.) maximum torque.
- Be careful not to pinch fingers when pushing screen from the bottom.

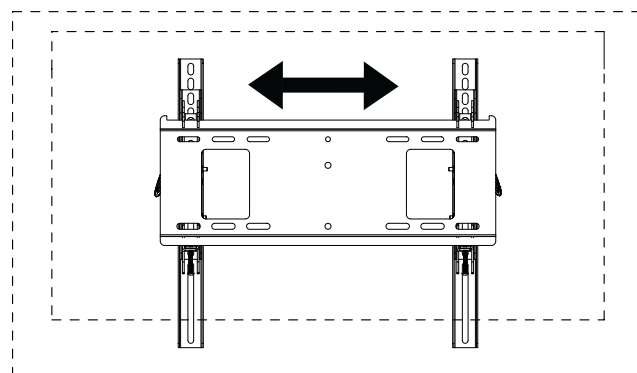
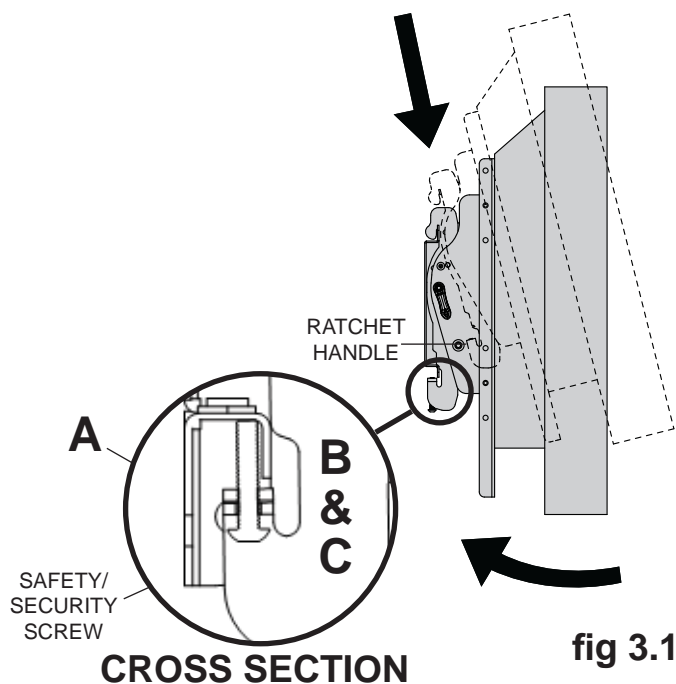
3

Tension Adjustment of Ratchet Handle: Adjust tension in tilt brackets (**B & C**) by rotating ratchet handle. **NOTE:** If obstruction prevents ratchet handle from rotating, pull handle out while turning will allow handle to reposition without tightening. Release and turn handle to tighten or loosen.

Mounting Screen: Ratchet handle must be in the up or down position or interference will occur while hooking tilt brackets to wall plate (**A**). Slowly hook tilt brackets (**B & C**) onto wall plate (**A**) and swing screen down as shown in fig. 3.1. Tilt bracket hooks must fully engage wall plate. Using phillips screw driver or security allen wrench (**F**), turn safety/security screws on tilt brackets (**B & C**) clockwise till screw tip securely contacts wall plate as shown in cross section.

Screen Adjustment: Screen can be adjusted horizontally by loosening safety/security screws on tilt brackets (**B & C**) three full turns. Adjust screen as shown in figure 3.2. Tighten safety/security screws on tilt brackets till screw tip securely contacts wall plate as shown in cross section.

Removing Screen: To remove screen from mount, loosen safety screws, swing screen away from mount, and lift screen off of mount.



Adjusting the Tilt Angle of the Flat Panel Screen

4

For preset tilt angles use Increlok™ and for custom tilt angle use ratchet handle.

INCRELOK™: The screen can be locked into a pre-set tilt position of -5°, 0°, 5°, 10° or 15°. Use locator hole to find tilt position hole and tilt screen to align holes. Tighten IncreLok™ tilt locking screws on both tilt brackets to lock tilt as shown in detail 2.

Ratchet Handle: Loosen ratchet handle (refer to step 3 for tension adjustment of handle). Push or pull from top or bottom of screen to adjust tilt as shown in figure 4.1. The tilt can be adjusted to a maximum of 15° forward or 5° backward.

