## INSTALLATION INSTRUCTIONS



Small Thinstall<sup>™</sup> Swing Arm

**TS110SU/TS118SU** 



### DISCLAIMER

Milestone AV Technologies and its affiliated corporations and subsidiaries (collectively "Milestone"), intend to make this manual accurate and complete. However, Milestone makes no claim that the information contained herein covers all details, conditions or variations, nor does it provide for every possible contingency in connection with the installation or use of this product. The information contained in this document is subject to change without notice or obligation of any kind. Milestone makes no representation of warranty, expressed or implied, regarding the information contained herein. Milestone assumes no responsibility for accuracy, completeness or sufficiency of the information contained in this document.

Chief® and Thinstall<sup>™</sup> are registered trademarks of Milestone AV Technologies. All rights reserved.

# IMPORTANT WARNINGS AND CAUTIONS!



**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: 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.

**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. The wall to which the mount is being attached may have a maximum drywall thickness of 5/8" (1.6cm) if it is being installed to wood studs. Do NOT install to a concrete wall of any kind that has a drywall covering!

**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 attached does not exceed 35 lbs (15.9 kg). Use with products heavier than the maximum weight indicated may result in collapse of the mount and its accessories causing possible injury.

**IMPORTANT ! :** The TS110SU/TS118SU mounts are designed to be mounted to an 8" concrete, 8"x8"x16" concrete block, clay brick or 2" x 4" wood studs (16" on center).

#### **DIMENSIONS - TS110SU**



#### **DIMENSIONS - TS118SU**



#### LEGEND

	Tighten Fastener	Pencil Mark
	Apretar elemento de fijación	Marcar con lápiz
C	Befestigungsteil festziehen	Stiftmarkierung
	Apertar fixador	Marcar com lápis
	Serrare il fissaggio	Segno a matita
	Bevestiging vastdraaien	Potloodmerkteken
	Serrez les fixations	Marquage au crayon
C	Loosen Fastener	Drill Hole
	Aflojar elemento de fijación	Perforar
	Befestigungsteil lösen	Bohrloch
	Desapertar fixador	Fazer furo
	Allentare il fissaggio	Praticare un foro
	Bevestiging losdraaien	Gat boren
	Desserrez les fixations	Percez un trou
	Phillips Screwdriver	Adjust
	Destornillador Phillips	Ajustar
	Kreuzschlitzschraubendreher	Einstellen
	Chave de fendas Phillips	Ajustar
	Cacciavite a stella	Regolare
	Kruiskopschroevendraaier	Afstellen
	Tournevis à pointe cruciforme	Ajuster
60	Open-Ended Wrench	Remove
	Llave de boca	Quitar
	Gabelschlüssel	Entfernen
	Chave de bocas	Remover
	Chiave a punte aperte	Rimuovere
	Steeksleutel	Verwijderen
	Clé à fourche	Retirez
E Contraction of the second se	By Hand	Optional
	A mano	Opcional
	Von Hand	Optional
	Com a mão	Opcional
	A mano	Opzionale
	Met de hand	Optie
	À la main	En option
)	Hex-Head Wrench	Security Wrench
	Llave de cabeza hexagonal	Llave de seguridad
	Sechskantschlüssel	Sicherheitsschlüssel
	Chave de cabeça sextavada	Chave de segurança
	Chiave esagonale	Chiave de segurança Chiave di sicurezza
	Zeskantsleutel	Veiligheidssleutel
	Clé à tête hexagonale	Clé de sécurité
		I LIE DE SECUTIE

#### TOOLS REQUIRED FOR INSTALLATION



#### PARTS



#### **Assembly And Installation**

#### Install to Wall

#### Install Main Assembly to Wall - Wood Studs

**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. The wall to which the mount is being attached may have a maximum drywall thickness of 5/8" (1.6cm).

- 1. Determine mounting location using a stud finder to locate a wood stud.
- Measure 2 5/8" above desired center line if mounting TS110SU or 1" below desired center line if mounting TS118SU and mark a hole at this location. (See Figure 1)

**IMPORTANT ! :** Use a level to make sure main assembly (H) is level when mounted to the wall!

**IMPORTANT ! :** The TS110SU/TS118SU mounts are designed to be mounted to a 2" x 4" wood studs (16" on center) wall.

Drill one 1/8" hole at location marked in Step 2. (See Figure 1)



Figure 1

- 4. Install one 1/4 x 2 1/2" lag bolt (E) into hole, leaving screw hanging out 1/2" from the wall. (See Figure 2)
- 5. Hang main assembly (H) onto lag bolt (E) by latching keyshaped hole over top of bolt. (See Figure 2)



#### Figure 2

- 6. Mark holes at lower mounting hole location. (See Figure 3)
- 7. Remove main assembly (H) from wall.
- 8. Drill 1/8" hole at location marked in Step 6. (See Figure 3)
- 9. Hang main assembly (H) back onto wall.
- Install remaining 1/4 x 2 1/2" lag bolt (E) into hole drilled in Step 8 to secure mount to wall. (See Figure 3)
- 11. Tighten both lag bolts (E) to fully secure mount to wall.



Figure 3

#### Install Main Assembly to Wall - Hollow Concrete Block, Poured Concrete or Clay Brick

**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. Do NOT install to a concrete wall of any kind that has a drywall covering!

WARNING: INSTALLING THE TS110SU/TS118SU INTO UNDERRATED OR DAMAGED CONCRETE CAN LEAD TO SERIOUS INJURY OR DAMAGE TO PRODUCT! Never install the TS110SU/TS118SU into cracked, chipped or flaking concrete.

- 1. Determine mounting location.
- Measure 2 5/8" above desired center line if mounting TS110SU or 1" below desired center line if mounting TS118SU and mark a hole at desired mounting location. (See Figure 4)

**IMPORTANT ! :** Use a level to make sure main assembly (H) is level when mounted to the wall!

**IMPORTANT ! :** The TS110SU/TS118SU mounts are designed to be mounted to an 8" concrete, 8"x8"x16" concrete block or clay brick wall.

Drill one 8mm hole at location marked in Step 2. (See Figure 4)



#### Figure 4

- Install one concrete anchor (F) into drilled hole. (See Figure 5)
- Install one 1/4 x 2 1/2" lag bolt (E) into concrete anchor (F), leaving bolt hanging out 1/2" from the wall. (See Figure 5)
- Hang main assembly (H) onto lag bolt (E) by latching keyshaped hole over top of bolt. (See Figure 5)



#### Figure 5

- 7. Mark hole at lower mounting hole location. (See Figure 6)
- 8. Remove main assembly (H) from wall.
- 9. Drill 8mm hole at marked location. (See Figure 6)
- 10. Install remaining concrete anchor (F) into drilled hole. (See Figure 6)
- 11. Hang main assembly (H) back onto wall.
- Install remaining 1/4 x 2 1/2" lag bolt (E) into concrete anchor (F) to secure mount to wall. (See Figure 6)
- 13. Tighten both lag bolts (E) to fully secure mount to wall.



Figure 6

#### **Display Installation**

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 attached does not exceed 35 lbs (15.9 kg). Use with products heavier than the maximum weight indicated may result in collapse of the mount and its accessories causing possible injury.

#### 

**CAUTION:** Using screws of improper diameter may damage your display! Proper screws will easily thread into display mounting holes.

- **NOTE:** Compatible mounting patterns for the TS110SU and TS118SU include 75mm x 75mm, 100mm x 100mm, 200mm x 100mm and 200mm x 200mm.
- Select screw *diameter* by examining hardware (A-C) (4mm, 5mm or 6mm) and comparing with mounting holes on display.

## 

**CAUTION:** Using screws of improper length may damage your display! Proper screws will have adequate thread engagement without contacting bottom of display mounting holes.

- 2. Select screw length:
  - Using your hand, insert SHORTEST length screw of selected diameter (A1, B1 or C1) into display mounting hole. Do NOT fully thread screw into hole at this time.
- 3. Install two selected screws (A-C) into upper two holes on back of display. (See Figure 7)

**IMPORTANT ! :** If using M4 or M5 screws (A or B), washer hardware (D1 or D2) should be used to ensure tight fit into the faceplate holes!

**IMPORTANT ! :** For recessed mounting holes or to gain extra space, 1/4" spacers (D3) may be used in between the back of the display and the faceplate. Multiple spacers may be used on each screw if more space is needed.

- Hang display by two screws onto faceplate through either inner or outer teardrop mounting holes. (200x200 mounting pattern shown) (See Figure 8)
- Install two selected screws (A-C) through selected washer hardware (D1 or D2 if necessary), lower holes on faceplate and into lower two holes on display. (See Figure 8)

**IMPORTANT ! :** For recessed mounting holes or to gain extra space, 1/4" spacers (D3) may be used in between the back of the display and the faceplate. Multiple spacers may be used on each screw if additional space is required.

6. Tighten all hardware to ensure display is securely mounted.



Figure 7



Figure 8

#### Wall Cover Installation

**CAUTION:** Wall covers are fragile and may be damaged or broken if installed with excessive force! Use caution when installing and removing wall covers.

- Pull apart top or bottom section of wall cover (J) so that it fits over the main assembly arm. For the TS110SU pull apart the top and for the TS118SU pull apart the bottom. (See Figure 9) or (See Figure 10)
- Install wall cover (J) onto main assembly making sure holes on cover latch over tabs on main assembly. (See Figure 9) or (See Figure 10)



Figure 9



Figure 10

#### **Cable Management**

- 1. Make all cable connections to display.
- Open cable management covers on upper and lower swing arms by unhinging center tabs and lifting covers to the open position. (See Figure 11)



#### Figure 11

- 3. Route cables on top of upper arm. (See Figure 12)
- **NOTE:** Cable ties (not included) may be used to secure cables to back of faceplate using cable tie holes on either side of faceplate.
- (Optional) Use cable ties (not included) to secure cables to upper arms by threading ties around cable and through cable tie holes inside the covers. (See Figure 12)
- 5. Close upper cable management cover. (See Figure 12)
- 6. (TS118SU only) Route cables under lower portion of swing arm. (See Figure 12)
- (Optional for TS118SU only) Use cable ties (not included) to secure cables to lower arms by threading ties around cable and through cable tie holes inside the covers. (See Figure 12)
- 8. (TS118SU only) Close lower cable management cover. (See Figure 12)



Figure 12

#### **Tilt Friction Adjustment**

- 1. Adjust tilt friction adjustment screws to increase or decrease tilt friction. (See Figure 13)
- **NOTE:** There is a tilt friction adjustment screw on each side of the pitch mechanism that must be adjusted evenly in order to properly adjust tension.





#### Arm Tension Adjustment

 Use 3/16" hex key (T) to adjust arm tension at any of the tension adjustment points. (See Figure 14) or (See Figure 15)



Figure 14



Figure 15



Chief Manufacturing, a products division of Milestone AV Technologies

8832-002076 REV 03 ©2012 Milestone AV Technologies, a Duchossois Group Company www.chiefmfg.com 05/12

#### USA/International

Europe

Asia Pacific

- A 6436 City West Parkway, Eden Prairie, MN 55344
- **P** 800.582.6480 / 952.225.6000
- **F** 877.894.6918 / 952.894.6918
- A Franklinstraat 14, 6003 DK Weert, Netherlands
- **P** +31 (0) 495 580 852
- **F** +31 (0) 495 580 845
- A Office No. 1 on 12/F, Shatin Galleria 18-24 Shan Mei Street Fotan, Shatin, Hong Kong
- **P** 852 2145 4099
- **F** 852 2145 4477

