# INSTALLATION INSTRUCTIONS

# **Small Flat Panel Mounts**

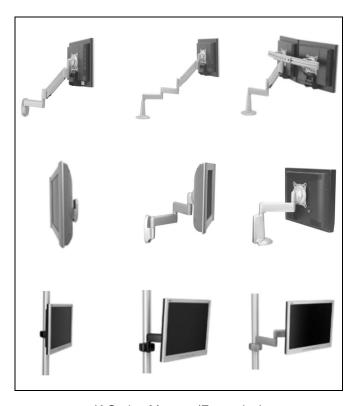
# **Model: K-Series**

This Instruction Manual covers most of the K-Series wall, desk, and pole mounts for single, dual, and triple displays. In addition, this Instruction Manual also covers selected K-Series accessories.

**NOTE:** Some K-Series mounts, such as Extreme Tilt, Grommet, and Table, as well as most K-Series accessories, have separate Instruction Manuals.

See Specifications for a complete list of models covered by this Instruction Manual.

**NOTE:** If an accessory such as an optional laptop tray is being installed, complete all required installation procedures within this document prior to installing the accessory.



K-Series Mounts (Examples)



### **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® is a registered trademark of Milestone AV Technologies. All rights reserved.



# 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. The wall to which the mount is being attached may have a maximum drywall thickness of 5/8" (1.6cm). Do not install drywall anchors into the seam between drywall pieces.



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 between the K-Series mount up to (and including) the display does not exceed the weight limit listed in Table 1.



**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.

# -- SAVE THESE INSTRUCTIONS--

# **CONTENTS**

| TOOLS REQUIRED FOR INSTALLATION                                 | 3  |
|---|----|
| SPECIFICATIONS  | 4  |
| MOUNT INSTALLATION  | 5  |
| DISPLAY INSTALLATION  | 8  |
| ARRAY ASSEMBLY (DUAL / TRIPLE DISPLAY; ALL EXCEPT KCY-210/-220) | 10 |
| MULTI-DUAL ARM ASSEMBLY (KCY-210/-220 ONLY)                     | 11 |
| CABLE MANAGEMENT  | 12 |
| ADJUSTMENT  | 13 |

# TOOLS REQUIRED FOR INSTALLATION

- Phillips Screwdriver, #1 and #2
- 9/16" Wrench (KSA-1015/-1016 Only)
- Drill (All Wall Mounts)
- 1/8" Drill Bit (All Wall Mounts except KSA-1015/-1016)
- 1/4" Drill Bit (KSA-1015/-1016 Only)
- 2.5mm Hex Key (approximately 3/32"; provided with Desk Mounts)
- 5/32" Hex Key (provided with applicable K-Series mounts)
- 3/16" Hex Key (provided with all K-Series mounts)

**NOTE:** Other tools may be required depending on your method of installation.

# **SPECIFICATIONS**

**Table 1: Mounts** 

| MODEL   | NO. OF<br>DISPLAYS | SUPPORTING<br>STRUCTURE | NO. OF<br>MOUNTING<br>ARMS | ADJUSTABLE<br>HEIGHT | MAX.<br>EXTENSION<br>(INCHES) | MIN.<br>CLOSED<br>DEPTH<br>(INCHES) | MAX.<br>SUPPORT<br>WEIGHT<br>(LBS.)<br>PER MONITOR |
|---------|--------------------|-------------------------|----------------------------|----------------------|-------------------------------|-------------------------------------|--|
| KWP-110 | Single             | Wall                    | None                       | No                   | None                          | 2.9                                 | 40   |
| KWV-110 | Single             | Wall                    | Single                     | Yes                  | 13                            | 2.2                                 | 25   |
| KWS-110 | Single             | Wall                    | Single                     | No                   | 9.5                           | 2.2                                 | 40   |
| KWG-110 | Single             | Wall                    | Dual                       | Yes                  | 19.5                          | 2.2                                 | 25   |
| KWD-110 | Single             | Wall                    | Dual                       | No                   | 16                            | 2.2                                 | 40   |
| KWB-110 | Single             | Wall                    | Triple                     | Yes                  | 26                            | 2.2                                 | 25   |
| KCV-110 | Single             | Desk                    | Single                     | Yes                  | 13.5                          | 2.2                                 | 25   |
| KCS-110 | Single             | Desk                    | Single                     | No                   | 10                            | 2.2                                 | 40   |
| KCG-110 | Single             | Desk                    | Dual                       | Yes                  | 20                            | 2.2                                 | 25   |
| KCD-110 | Single             | Desk                    | Dual                       | No                   | 16.5                          | 2.2                                 | 40   |
| KCB-110 | Single             | Desk                    | Triple                     | Yes                  | 26.5                          | 2.2                                 | 25   |
| KPP-110 | Single             | Pole                    | None                       | No                   | None                          | 2.2                                 | 40   |
| KPS-110 | Single             | Pole                    | Single                     | No                   | 9.5                           | 2.2                                 | 40   |
| KPD-110 | Single             | Pole                    | Dual                       | No                   | 16                            | 2.2                                 | 40   |
| KPG-110 | Single             | Pole                    | Single                     | Yes                  | 16.5                          | 2.2                                 | 25   |
| KPV-110 | Single             | Pole                    | Single                     | Yes                  | 13.3                          | 2.2                                 | 25   |
| KWD-130 | Single             | Wall                    | Single                     | Yes                  | 18.6                          | 5.1                                 | 25   |
| KWS-220 | Dual               | Wall                    | Single                     | No                   | 13.5                          | 6.4                                 | 17   |
| KWD-220 | Dual               | Wall                    | Dual                       | No                   | 20                            | 6.4                                 | 17   |
| KCS-220 | Dual               | Desk                    | Single                     | No                   | 14                            | 6.4                                 | 40   |
| KCD-220 | Dual               | Desk                    | Dual                       | No                   | 20.5                          | 6.4                                 | 17   |
| KCY-210 | Dual               | Desk                    | Multi-Dual                 | Yes (one arm)        | 20                            | 2.2                                 | 20   |
| KCY-220 | Dual               | Desk                    | Multi-Dual                 | Yes (two arms)       | 20                            | 2.2                                 | 20   |
| KWD-230 | Dual               | Wall                    | Single                     | No                   | 18.6                          | 5.9                                 | 40   |
| KWS-320 | Triple             | Wall                    | Single                     | No                   | 13.5                          | 6.4                                 | 10   |
| KWD-320 | Triple             | Wall                    | Dual                       | No                   | 20                            | 6.4                                 | 10   |
| KCS-320 | Triple             | Desk                    | Single                     | No                   | 14                            | 6.4                                 | 10   |
| KCD-320 | Triple             | Desk                    | Dual                       | No                   | 20.5                          | 6.4                                 | 10   |
| KGL-110 | Tray               | Desk                    | Single                     | Yes                  | 29.5                          | 14                                  | 18   |
| KGL-220 | Single/Tray        | Desk                    | Dual                       | Yes                  | 29.5                          | 14                                  | 40 total   |

**Table 2: Accessories** 

| MODEL    | NO. OF<br>MONITORS | SUPPORTING<br>STRUCTURE |        | ADJUSTABLE<br>HEIGHT | MAX.<br>EXTENSION<br>(INCHES) | MIN.<br>CLOSED<br>DEPTH<br>(INCHES) | WEIGHT<br>(LBS.) |
|----------|--------------------|-------------------------|--------|----------------------|-------------------------------|-------------------------------------|------------------|
| KMA-220  | Dual               | N/A                     | N/A    | N/A                  | N/A                           | N/A                                 | 17               |
| KMA-320  | Triple             | N/A                     | N/A    | N/A                  | N/A                           | N/A                                 | 10               |
| KMA-325  | Triple             | N/A                     | N/A    | N/A                  | N/A                           | N/A                                 | 10               |
| KSA-1015 | N/A                | Wall                    | Single | No                   | 16                            | 6.4                                 | 75               |
| KSA-1016 | N/A                | Wall                    | Dual   | No                   | 24.5                          | 6.4                                 | 75 total         |

# MOUNT INSTALLATION INSTALLATION TO WALL

1. Verify that you have the following parts:

| Item | Description  | Qty |
|------|--|-----|
| 10   | MOUNT, Wall, K-Series  | 1   |
| 20   | BRACKET, Wall  | 1   |
| 30   | SCREW, Hex Head Lag, 1/4" x 2-1/2" (ALL EXCEPT KSA-1015/-1016) | 2   |
| 40   | SCREW, Hex Head Lag, 3/8" x 3"<br>(KSA-1015/-1016 ONLY)        | 2   |
| 50   | WASHER, Flat Machine Screw, 1/4" (ALL EXCEPT KSA-1015/-1016)   | 2   |

- Determine location for mount keeping in mind display size, extension, height adjustment (if applicable), and pitch/roll requirements. Bracket (20) MUST be installed into wood stud.
- Using bracket (20) as a template, drill two pilot holes through top and bottom holes of bracket (20) into wall structure (See Figure 1):
  - All Except KSA-1015/-1016: Use 1/8" drill bit
  - KSA-1015/-1016 ONLY: Use 1/4" drill bit

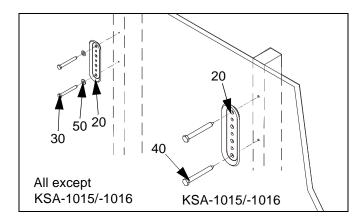


Figure 1: Install Wall Bracket

- 4. Install bracket (20) (See Figure 1):
  - All Except KSA-1015/-1016:
    Using 7/16" wrench, install screws (30) through
    washers (50), plate (20), and drywall into wood
    stud. Ensure bracket (20) is vertical, then tighten
    screws (30).
  - KSA-1015/-1016 ONLY: Using 9/16" wrench, install screws (40) through plate (20) and drywall into wood stud. Tighten screws (40).

**IMPORTANT!**: Overtightening screws (30 or 40, as applicable) may cause bracket (20) to compress into soft wall surface, resulting in difficult mount installation or improper engaging of set screw in step 6.

**IMPORTANT!:** IF you will be installing a SINGLE display with RECESSED mounting holes, then proceed to "DISPLAY INSTALLATION" *before continuing* with this mount installation procedure.

 Insert top of mount (10) over lip on top of bracket (20) (See Figure 2). Swing mount (10) down flush against wall.

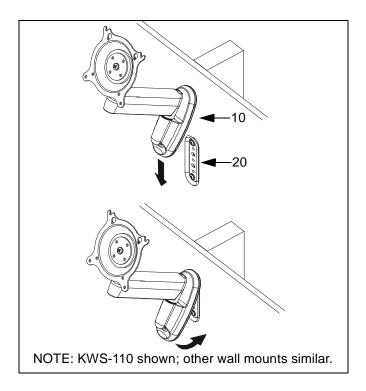


Figure 2: Install Wall Mount

6. Tighten set screw using 5/32" hex key (See Figure 3). Ensure set screw engages *back* side of bracket (20) to properly secure mount.

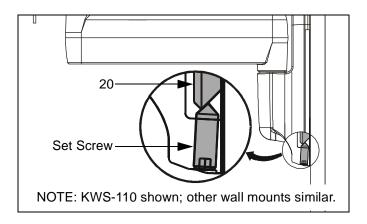


Figure 3: Tighten Set Screw

 Proceed to "CABLE MANAGEMENT" (for SINGLE display with RECESSED mounting holes), or to "DISPLAY INSTALLATION" (for all other display configurations).

#### **INSTALLATION TO DESK**

Two installation options exist:

- Edge Installation
- Hole (Grommet) Installation; requires 3/8" to 3" diameter hole and access to the bottom of the desk

#### **ASSEMBLY**

1. Verify that you have the following parts:

| Item | Description                           | Qty |
|------|---------------------------------------|-----|
| 10   | MOUNT, Desk, K-Series                 | 1   |
| 20   | BRACKET, Grommet                      | 1   |
| 30   | SCREW, Button Head Cap, 5/16"-18 x 4" | 1   |
| 40   | BUMPER, Adhesive                      | 6   |

- Determine approximate location for mount keeping in mind display size, extension, height adjustment (if applicable), and pitch/roll requirements.
- 3. Peel backing from adhesive bumpers (40) and attach to bottom of mount (10) (See Figure 4).

NOTE: One extra bumper (40) included for convenience.

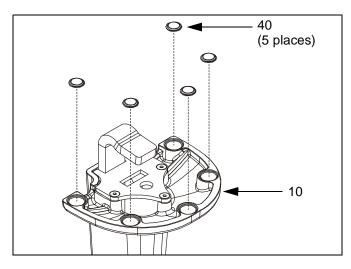


Figure 4: Install Bumpers

#### **EDGE INSTALLATION**

**IMPORTANT!:** IF you will be installing a SINGLE display (including KCY-210/-220) with RECESSED mounting holes, then proceed to "DISPLAY INSTALLATION" *before continuing* with this mount installation procedure.

**NOTE:** Bracket (20) and screw (30) are not used in this installation.

 Slip mount (10) over edge of desk so that clamp fully contacts desk edge. Using 3/16" hex key, securely tighten clamp adjustment screw (See Figure 5).

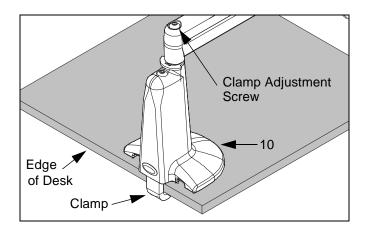


Figure 5: Desk Mount - Edge Installation

- 2. If you are installing:
  - SINGLE display with RECESSED mounting holes: Proceed to "CABLE MANAGEMENT."
  - KCY-210/-220: Proceed to "MULTI-DUAL ARM ASSEMBLY."
  - ALL other display configurations: Proceed to "DISPLAY INSTALLATION."

## **HOLE (GROMMET) INSTALLATION**

 Using 2.5mm hex key, remove and retain baseplate and three attach screws from bottom of mount (10) (See Figure 6).

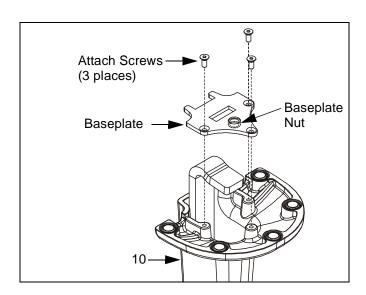


Figure 6: Baseplate

 Using 3/16" hex key, remove clamp adjustment screw, washer, and clamp (See Figure 7). Retain clamp adjustment screw and washer for later use.

NOTE: Clamp will not be used for Hole (Grommet) Installation.

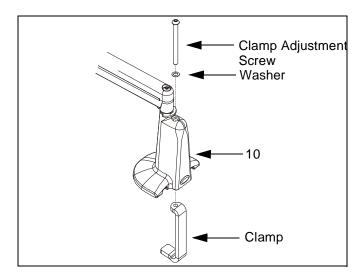


Figure 7: Remove Clamp Adjustment Screw

 Using 2.5mm hex key, re-install baseplate with three retained attach screws. Ensure baseplate nut faces interior of mount (See Figure 6). Tighten securely.

**IMPORTANT!:** IF you will be installing a SINGLE display (including KCY-210/-220) with RECESSED mounting holes, then proceed to "DISPLAY INSTALLATION" *before continuing* with this mount installation procedure.

4. From below desk, insert retained clamp adjustment screw and washer through bracket (20) and up through hole in desk (See Figure 8). Using 3/16" hex key, thread screw into baseplate nut but do not tighten completely at this time.

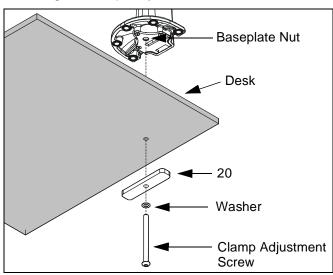


Figure 8: Desk Mount - Hole Installation

- 5. Center mount (10) over hole. Using 3/16" hex key, securely tighten screw.
- 6. Drop screw (30) into open (unused) clamp adjustment hole on top of mount (for appearance only).

- 7. If you are installing:
  - SINGLE display with RECESSED mounting holes: Proceed to "CABLE MANAGEMENT."
  - KCY-210/-220: Proceed to "MULTI-DUAL ARM ASSEMBLY."
  - ALL other display configurations: Proceed to "DISPLAY INSTALLATION."

#### INSTALLATION TO POLE

1. Verify that you have the following parts:

| Item | Description                              | Qty |
|------|--|-----|
| 10   | MOUNT, Pole, K-Series                    | 1   |
| 20   | CLAMP, Back                              | 1   |
| 30   | SCREW, Button Head Cap, 1/4"-20 x 1-1/8" | 3   |

**IMPORTANT!:** IF you will be installing a SINGLE display with RECESSED mounting holes, then proceed to "DISPLAY INSTALLATION" *before continuing* with this mount installation procedure.

- Determine approximate location for mount keeping in mind display size, extension, height adjustment (if applicable), and pitch/roll requirements.
- 3. Place mount (10) against pole, with clamp (20) on opposite side of pole (See Figure 9). Using 5/32" hex key, loosely assemble with screws (30).

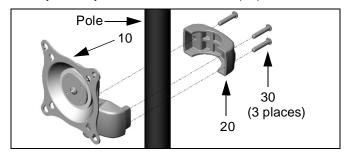


Figure 9: Pole Mount Installation

**NOTE:** Equally tighten screws (30) against mount and the pole clamp (20). (See Figure 10)

4. Position mount at desired height and orientation. Tighten screws (30) securely.

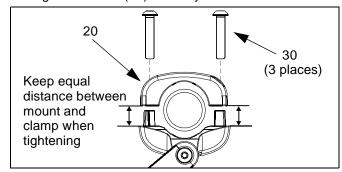


Figure 10: Securing Pole Mount and Clamp

 Proceed to "CABLE MANAGEMENT" (for SINGLE display with RECESSED mounting holes), or to "DISPLAY INSTALLATION" (for all other display configurations).

### **DISPLAY INSTALLATION**

#### SINGLE DISPLAY AND KCY-210/-220

**NOTE:** If you are installing DUAL / TRIPLE displays (Except KCY-210/-220), then proceed to page 9.

The mounting holes on the back of your display will either be *flush with* the back surface, or *recessed into* the back surface. Refer to the applicable installation procedure.

#### **FLUSH MOUNTING HOLES**

1. Verify that you have the following parts:

| Item | Description                            | Qty |
|------|--|-----|
| 10   | MOUNT, K-Series                        | 1   |
| 20   | SCREW, Phillips Pan Machine, M4 x 12mm | 4   |



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



**CAUTION:** Inadequate thread engagement in display may cause display to fall! Back out screws ONLY as necessary to allow installation of Centris bracket!

- Ensure Centris bracket is able to swivel and tilt easily, yet still be tight enough to hold display in desired position. Adjust as required before proceeding. See "ADJUSTMENT" for detail.
- 3. Using Phillips screwdriver, carefully install two screws (20) into the *upper* mounting holes on the display. Thread screws completely into display, then back out 3 complete turns.
- 4. Pick up and align display so that screws (20) (installed on the back of the display in the previous step) fit into the mounting holes on the Centris bracket; rotate the bracket as required (See Figure 11). Lower the display firmly into place.

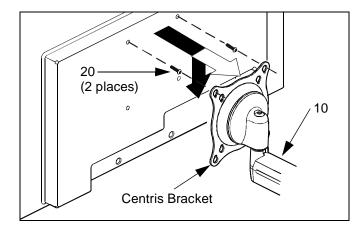


Figure 11: Single Display - Flush Mount

- 5. Using Phillips screwdriver, install two remaining screws (20) through the *lower* mounting holes in Centris bracket into the display.
- 6. Tighten all four screws (20). Do not overtighten!
- KCY-210/-220 Only: Repeat Steps 1-6 for second display.
- 8. Proceed to "CABLE MANAGEMENT."

#### RECESSED MOUNTING HOLES

1. Verify that you have the following parts:

| Item | Description                            | Qty |
|------|--|-----|
| 10   | MOUNT, K-Series                        | 1   |
| 20   | SCREW, Phillips Pan Machine, M4 x 20mm | 4   |
| 30   | SCREW, Phillips Pan Machine, M4 x 30mm | 4   |
| 40   | SPACER, Nylon, 3/8" long               | 4   |
| 50   | SPACER, Nylon, 3/4" long               | 4   |

- Ensure Centris bracket is able to swivel and tilt easily, yet still be tight enough to hold display in desired position. Adjust as required before proceeding. See "ADJUSTMENT" for detail.
- Carefully place display face down on protective surface.
- Determine depth of recessed mounting holes relative to back surface of display (against which Centris head will contact).
- Select proper length spacer and screw from table below:

**NOTE:** All spacers used should be the same length. If the recess depths result in multiple spacer lengths, then select the longer spacer.

| IF recess DEPTH is:                     | THEN use spacer: | AND screw:     |
|---|------------------|----------------|
| 3/8" or less                            | 40 (3/8" long)   | 20 (M4 x 20mm) |
| More than 3/8" up to and including 3/4" | 50 (3/4" long)   | 30 (M4 x 30mm) |

- Place the four selected spacers over each of the mount holes on the back of the display.
- 7. Pick up and orient the mount (10) so that the mounting holes in the Centris bracket are aligned with the holes in the spacers; rotate the bracket as required (See Figure 12).

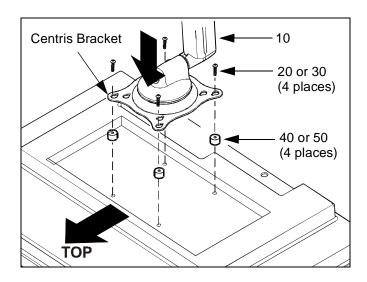


Figure 12: Single Display - Recessed Mount



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

- 8. Using Phillips screwdriver, install four selected screws through the mounting holes in Centris bracket, through the spacers, into the display (See Figure 12). Tighten all four screws. Do not overtighten!
- KCY-210/-220 Only: Repeat Steps 1-6 for second display.
- 10. Continue with "MOUNT INSTALLATION."

# DUAL / TRIPLE DISPLAY (ALL EXCEPT KCY-210/-220)

The mounting holes on the rear of your display will either be flush with the rear surface, or recessed into the rear surface. Refer to the applicable installation procedure.

#### **FLUSH MOUNTING HOLES**

1. Verify that you have the following parts:

| Item | Description                            | Qty        |
|------|--|------------|
| 10   | CENTRIS HEAD, Dual Knob Assembly       | 2-3        |
| 20   | SCREW, Phillips Pan Machine, M4 x 12mm | 4 per head |

- Carefully place display face down on protective surface.
- Place the Centris head (dual knob assembly) onto the back of the display, aligning the mounting holes on the Centris bracket with the mounting holes on the display.



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

4. Using Phillips screwdriver, install four screws (20) through the mounting holes in Centris bracket into the display (See Figure 13). Tighten all four screws (20). Do not overtighten!

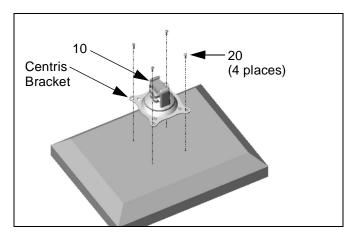


Figure 13: Dual / Triple Display - Flush Mount

5. Proceed to "ARRAY ASSEMBLY."

#### **RECESSED MOUNTING HOLES**

1. Verify that you have the following parts:

| Item | Description                            | Qty        |
|------|--|------------|
| 10   | CENTRIS HEAD, Dual Knob Assembly       | 2-3        |
| 20   | SCREW, Phillips Pan Machine, M4 x 20mm | 4 per head |
| 30   | SCREW, Phillips Pan Machine, M4 x 30mm | 4 per head |
| 40   | SPACER, Nylon, 3/8" long               | 4 per head |
| 50   | SPACER, Nylon, 3/4" long               | 4 per head |

- Carefully place display face down on protective surface.
- 3. Determine depth of recessed mounting holes relative to back surface of display (against which Centris head dual knob assembly will contact).
- Select proper length spacer and screw from table below:

**NOTE:** All spacers used should be the same length. If the recess depths result in multiple spacer lengths, then select the longer spacer.

| IF recess DEPTH is:                     | THEN use spacer: | AND screw:     |
|---|------------------|----------------|
| 3/8" or less                            | 40 (3/8" long)   | 20 (M4 x 20mm) |
| More than 3/8" up to and including 3/4" | 50 (3/4" long)   | 30 (M4 x 30mm) |

- 5. Place the four selected spacers over each of the mount holes on the back of the display.
- Place the Centris head (dual knob assembly) onto the spacers, aligning the mounting holes on the Centris bracket with the holes in the spacers (See Figure 14).

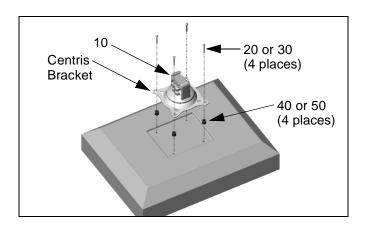


Figure 14: Dual / Triple Display - Recessed Mount



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

- Using Phillips screwdriver, install four selected screws through the mounting holes in Centris bracket, through the spacers, into the display (See Figure 14). Tighten all four screws. Do not overtighten!
- 8. Proceed to "ARRAY ASSEMBLY."

# ARRAY ASSEMBLY (DUAL / TRIPLE DISPLAY; ALL EXCEPT KCY-210/-220)

1. Verify that you have the following parts:

| Item | Description   | Qty |
|------|---|-----|
| 10   | ARRAY   | 1   |
| 20   | SCREW, Button Head Cap, 5/16"-18 x 4" (Used for Pivot / Swing Arm)      | 1   |
| 30   | SCREW, Button Head Cap, 5/16"-18 x 5" (Used with Height Adjustable Arm) | 1   |
| 40   | WASHER, 5/16", UHMW (plastic)   | 1   |
| 50   | WASHER, 5/16", Stainless Steel  | 2   |
| 60   | PIN<br>(ALL EXCEPT KSA-1015/-1016)                                      | 1   |
| 70   | PIN<br>(KSA-1015/-1016 ONLY)  | 1   |
| 80   | SPACER, UHMW (plastic)  | 1   |
| 90   | SPACER, UHMW (plastic)<br>(KSA-1015/-1016 ONLY)                         | 1   |
| 100  | NUT, Nylock, 5/16"-18   | 1   |
| 110  | SCREW, Button Head Cap,1/4"-20 x 1/2"                                   | 2   |
| 120  | NUT, Square, Machine Screw, 1/4"-20                                     | 2   |

- Install pin and spacer(s) into upper mount arm bore (See Figure 15):
  - All Except KSA-1015/-1016: Insert pin (60) and spacer (80).

 KSA-1015/-1016 ONLY: Insert large spacer (90), followed by large end of pin (70) and small spacer (80).

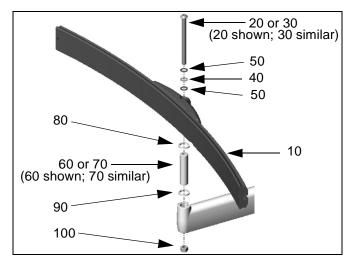


Figure 15: Assemble Array

- 3. Install array (10) onto pin (60 or 70, as applicable) (See Figure 15).
- Insert and hold nut (100) into lower mount arm bore (See Figure 15).
- Insert screw (20 or 30, as applicable) through washer (50), washer (40), washer (50), array (10), array/ mount arm assembly, and into nut (100) (See Figure 15). Tighten screw as required using 3/16" hex key.
- Slide the Centris head (dual knob assembly) onto the array (10) (See Figure 16). Ensure both the top and the bottoms of the Centris head are engaged into the corresponding slots in the array (10).

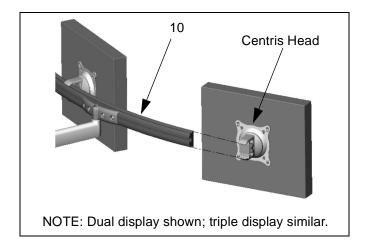


Figure 16: Install Display

7. Position the displays as desired and tighten the Centris head knob closest to the *array* (10). See "ADJUSTMENT" for additional information.

 Using 5/32" hex key, install screw (110) and nut (120) on each end of the array (10) to prevent displays from accidently sliding off (See Figure 17).

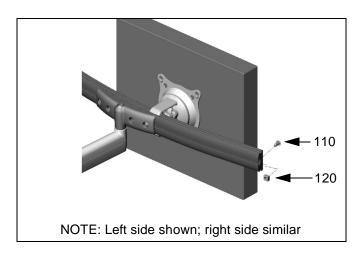


Figure 17: Install End Locks

9. Proceed to "CABLE MANAGEMENT."

# MULTI-DUAL ARM ASSEMBLY (KCY-210/-220 and FGL-220 ONLY)

#### **BASIC ASSEMBLY**

1. Verify that you have the following parts:

| ltem | Description                           | Qty |
|------|---------------------------------------|-----|
| 10   | ARM ASSEMBLY, K-Series                | 2   |
| 20   | MOUNT, Desk, K-Series                 | 1   |
| 30   | SCREW, Button Head Cap, 5/16"-18 x 4" | 2   |
| 40   | WASHER, 5/16", UHMW (plastic)         | 2   |
| 50   | WASHER, 5/16", Stainless Steel        | 4   |
| 60   | PIN                                   | 2   |
| 70   | SPACER, UHMW (plastic)                | 2   |
| 80   | WASHER, Lock, External Tooth, 5/8"    | 4   |
| 90   | NUT, Nylock, 5/16"-18                 | 2   |

2. Insert pin (60) into Y-connector upper bore in mount (20) (See Figure 18).

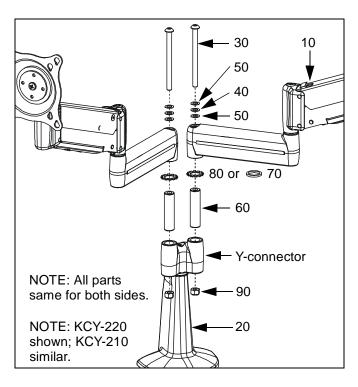


Figure 18: Multi-Dual Arm Assembly

3. Install spacer (70) or washer (80), as desired, on pin (60) (See Figure 18).

NOTE: Spacer (70) will allow limited movement of arm assembly (10) relative to Y-connector, dependent upon tension of screw (30). Washer (80) will lock arm assembly (10) to Y-connector. See "ADJUSTMENT" for detail.

- 4. Insert arm assembly (10) on pin (60) (See Figure 18).
- While holding nut (90) in lower bore of Y-connector, insert screw (30) through washer (50), washer (40), washer (50), arm assembly (10), and Y-connector, into nut (90) (See Figure 18). Loosely install screw (30) using 3/16" hex key.



**CAUTION:** Improper positioning of arm assembly (10) may result in failure of mount and subsequent damage to displays. Do NOT position either arm assembly (10) in gray shaded area.

 Position arm assembly (10) within UNSHADED area as shown (See Figure 19). Using 3/16" hex key, tighten screw (30) as required to maintain position.

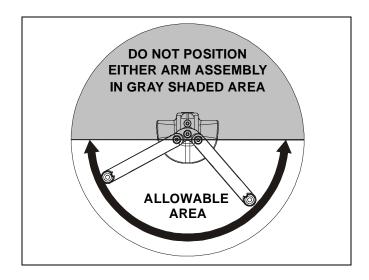


Figure 19: Allowable Arm Area

- 7. Repeat Steps 2. through 6. for second mount arm assembly (10).
- If desired, proceed to "MODIFICATION." Otherwise, proceed to:
  - "CABLE MANAGEMENT" (for display with RECESSED mounting holes), or to
  - "DISPLAY INSTALLATION" (for all other display configurations).

# **MODIFICATION**

If desired, each arm assembly (10) may be modified to prevent movement of the outer arm relative to the inner arm (without loosening the adjustment screw).

NOTE: Spacer (shipped configuration) will allow limited movement of outer arm relative to inner arm, dependent upon tension of screw. Washer (80) will lock arms together. See "ADJUSTMENT" for detail.

 Using 3/16" hex key, loosen screw until nut can be removed (See Figure 20). Retain nut. Screw and washers may remain in outer arm.

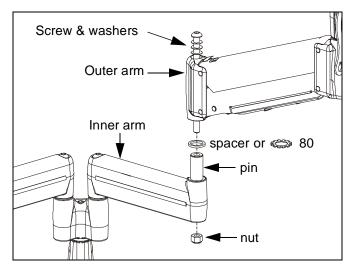


Figure 20: Multi-Dual Arm Modification

- 2. Lift outer arm from pin (with screw and washers) and place on protective surface.
- Remove spacer from pin (See Figure 20).
- 4. Install washer (80) on pin (See Figure 20).
- 5. Re-install outer arm (with screw and washers) on pin (See Figure 20).
- 6. Insert and hold nut in lower bore of inner arm (See Figure 20).
- Tighten screw as required using 3/16" hex key (See Figure 20).
- 8. Proceed to "CABLE MANAGEMENT" (for display with RECESSED mounting holes), or to "DISPLAY INSTALLATION" (for all other display configurations).

### CABLE MANAGEMENT

|   | Item | Description   | Qty              |
|---|------|---|------------------|
|   | 10   | COVER, Arm  | 1 per static arm |
|   | 20   | SCREW, Phillips Flat Machine, 8-32 x 3/8"             | 2 per static arm |
|   | 30   | WRENCH, Hex, 3/32" (provided)                         | 1                |
| - | 40   | CABLE TIE, (only provided with certain models)        | 2 or 4           |
|   | 50   | STRAIN RELIEF TIE (only provided with certain models) | 2 or 4           |

- 1. Attach all cables to display.
- Open the cable management bracket (on heightadjustable arm only) by sliding it towards the edge of the arm (See Figure 21).

**NOTE:** If necessary, cable management bracket attach screws may be loosened using hex key (30).

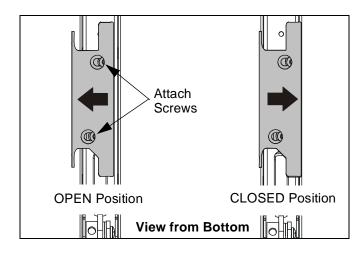


Figure 21: Height Adjustable Arm - Cable Management Bracket



**CAUTION:** Ensure that adequate cable slack exists for movement of display, and that cables will not be pinched when bracket is closed.

3. Carefully insert cables into bracket (See Figure 22).

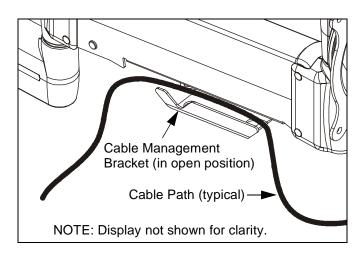


Figure 22: Height Adjustable Arm - Cable Path

4. Close cable management bracket by sliding it back towards the centerline of the arm (See Figure 21).

**NOTE:** If necessary, cable management bracket attach screws may be tightened using hex key (30).



**CAUTION:** Ensure that adequate cable slack exists for movement of display, and that cables will not be pinched by installation of cover (10) or screws (20).

- Carefully insert cables in cavity located in lower portion of static mount arm (See Figure 23).
- 6. Using Phillips screwdriver, install cover (10) with two screws (20).

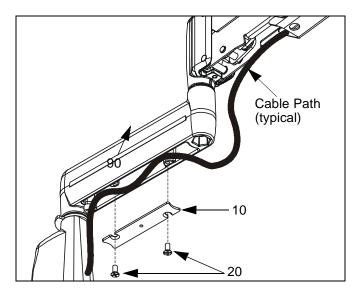


Figure 23: Static Arm - Cable Path

NOTE: Installation is complete.

**NOTE:** Cable ties (provided with certain models) may be used for additional cable management capability.

#### ADJUSTMENT

#### ARM

#### **PIVOT / SWING**



**CAUTION:** If washer (80) has been used to assemble KCY-210/-220 arms, then forced movement of arms without loosening screw (30) will damage arm and/or Y-connector (See Figure 18)(See Figure 20).

1. Using 3/16" hex key, slightly loosen or tighten the adjustment screw(s) as necessary (See Figure 24).

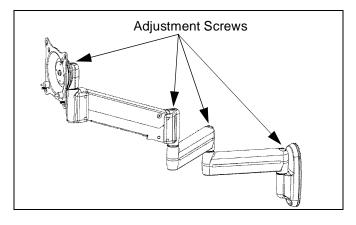


Figure 24: Pivot / Swing Arm Adjustment

### **HEIGHT ADJUSTABLE (IF APPLICABLE)**

**IMPORTANT!:** It is important that the mount be attached to the mounting surface AND display be attached to the mount BEFORE attempting to adjust the height adjustable arm.

- Using 5/32" hex key, slightly loosen or tighten the adjustment screw as necessary (See Figure 25).
  - If display settles on its own, then rotate adjustment screw counterclockwise (towards the "+" symbol).
  - If display rises on its own, then rotate adjustment screw clockwise (towards the "-" symbol).

**NOTE:** It may be necessary to raise or lower the height adjustable arm to expose the adjustment screw.

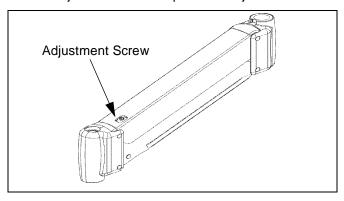


Figure 25: Height Adjustable Arm Adjustment

#### **CENTRIS HEAD**

#### SINGLE DISPLAY AND KCY-210/-220

- If previously attached, disconnect cables from display, then remove display.
- 2. Using Phillips screwdriver, slightly loosen or tighten the adjustment screw as necessary (See Figure 26).

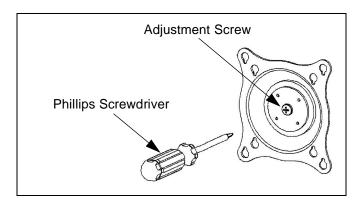


Figure 26: Single Display Adjustment

Install mount and then display cables. See "DISPLAY INSTALLATION."

#### **DUAL / TRIPLE DISPLAY**

- 1. LATERAL POSITION ON ARRAY:
  - Using your fingers, slightly loosen adjustment knob "A" (See Figure 27).
  - Slide display to desired position.
  - Using your fingers, tighten adjustment knob "A".

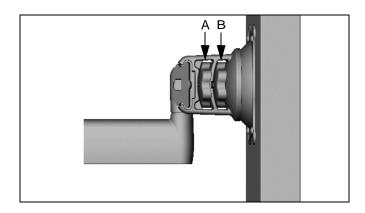


Figure 27: Dual / Triple Display Adjustment

- PITCH / YAW / ROLL:
  - Using your fingers, slightly loosen adjustment knob "B" (See Figure 27).
  - Adjust display as desired.
  - Using your fingers, tighten adjustment knob "B".

