CHIEF Stand

K3F220/K3G220 (2x2)

K3G320 (3x2)

EX241UN / -H Multi-Screen Installation Manual

NEC

Contents

General Information and Cautions

➢ Installation experience is necessary.

- The CHIEF stands have flexibility in connecting parts with monitor sets. Installation experience is necessary for achieving proper alignment and setup.
- At least 2 people are needed to properly install the monitors to the CHIEF stand. One person to hold the monitors after attaching them while adjustments are made to the arms and VESA plates.

➢ For information about the EX241UN and EX241UN-H refer to the monitor's user manual.

- Safety and cautions for handling the monitors are in their appropriate usage manuals.
- Mounting and usage is the customer's and installation specialist's responsibility, failure to comply with the safety and handling instructions in the user's manual could result in voiding the warranty.

1 Removing the Bezel

Purpose

Removing the monitor's bezel provides a more seamless wall image in multi-monitor installations.

Inactive Area: Single Unit

	With Bezel	Without Bezel	Difference
Top / L / R	5.38mm	3.93mm	1.45mm
Bottom	8.02mm	6.57mm	

Inactive Area: Adjacent 2 Units (2 x Single Unit)

	With Bezel	Without Bezel	Difference
Top / L / R	10.76mm	7.86mm	2.90mm
Bottom	16.04mm	13.14mm	

How to Remove the Bezel

Caution:

- Use extreme care when performing the steps to remove the bezel from the monitor.
- Use a desk or table with a flat even surface larger than the size of the monitor screen.
- Place a soft cloth on the surface to protect the glass from scratches and provide padding, and then place the monitor face down on the soft cloth.

1. Remove the 8 screws holding the bezel in place.

   Be careful not to apply pressure when removing the screws so as not to stress the LCD panel.

2. Insert a spatula (or similar flat object) between the back cover and the bezel.

   Separate the hooks starting from the top-left and proceed clockwise.

3. Remove the bezel and store it.

   The bezel needs to be reattached when repacking the monitor to store or move it. Do not discard the bezel in trash or recycling.

Note: Removing the bezel from the monitor leaves the edges of the glass unprotected; be careful when moving and installing the monitors. Do not let the edges of the monitors touch surrounding monitors. Pressure against the unprotected sides could chip or crack the glass.

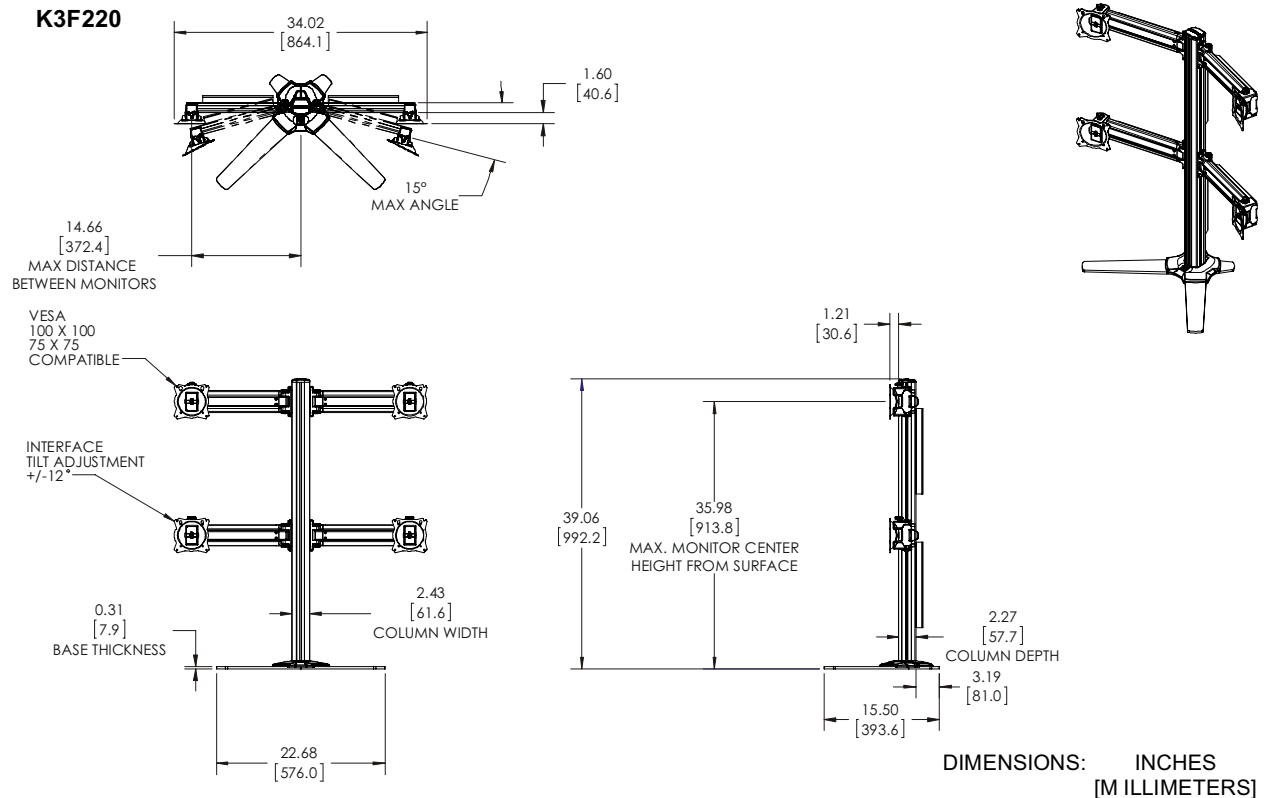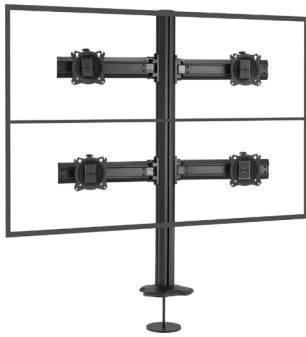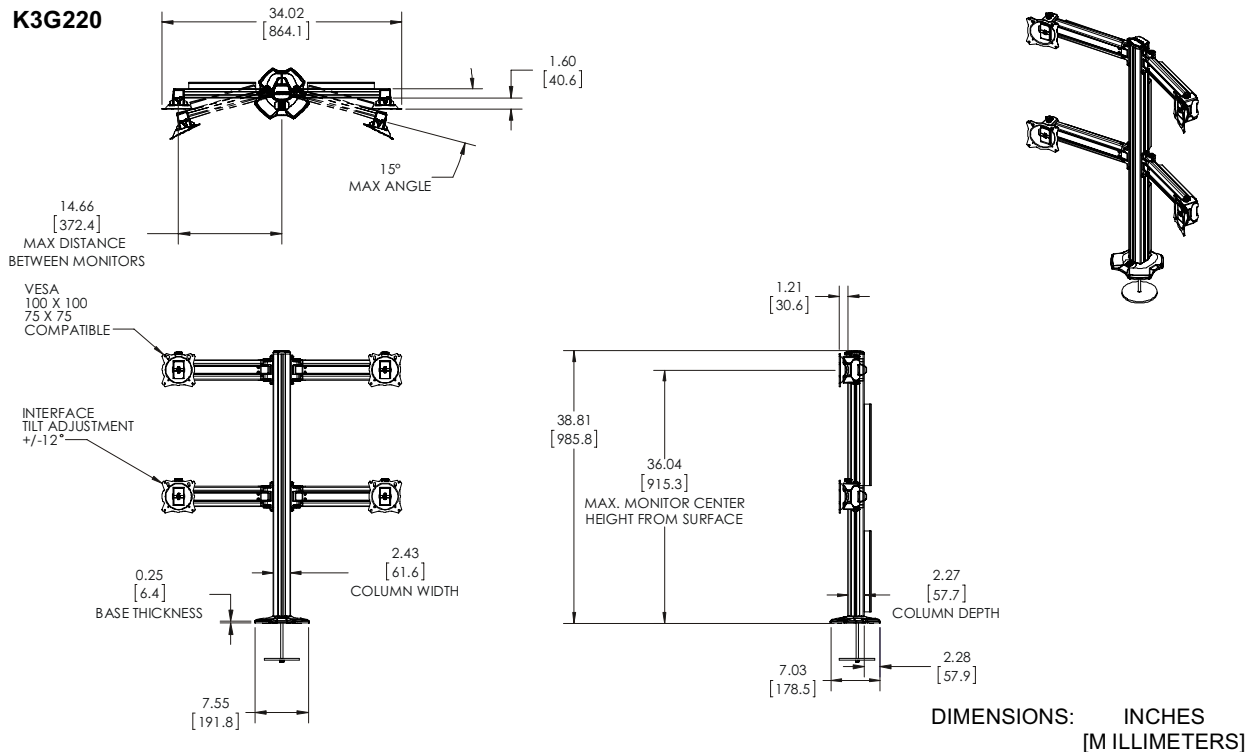# 2 x 2 Multi-Monitor Installation (K3F220/ K3G220)

Model K3F220 (Self-Standing)

Model:	K3F220
Supported Monitor Size:	Up to 27 inches
Maximum Weight:	6.8kg x 4 monitors
VESA Hole Pitches:	100x100mm & 75x75mm
Adjustment directions:	Up/Down/L/R & Front/Behind (See the illustration below or the CHIEF manual)

K3F220

34.02
[864.1]

1.60
[40.6]

15°
MAX ANGLE

14.66
[372.4]
MAX DISTANCE
BETWEEN MONITORS

VESA
100 X 100
75 X 75
COMPATIBLE

INTERFACE
TILT ADJUSTMENT
+/-12°

1.21
[30.6]

39.06
[992.2]

35.98
[913.8]
MAX. MONITOR CENTER
HEIGHT FROM SURFACE

0.31
[7.9]
BASE THICKNESS

2.43
[61.6]
COLUMN WIDTH

22.68
[576.0]

2.27
[57.7]
COLUMN DEPTH

3.19
[81.0]

15.50
[393.6]

DIMENSIONS: INCHES
                 [M ILLIMETERS]

Model K3G220 (Desk Mounted)

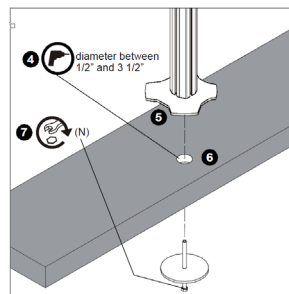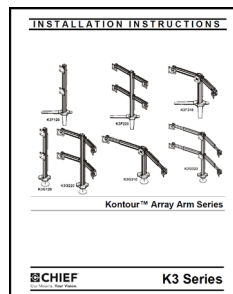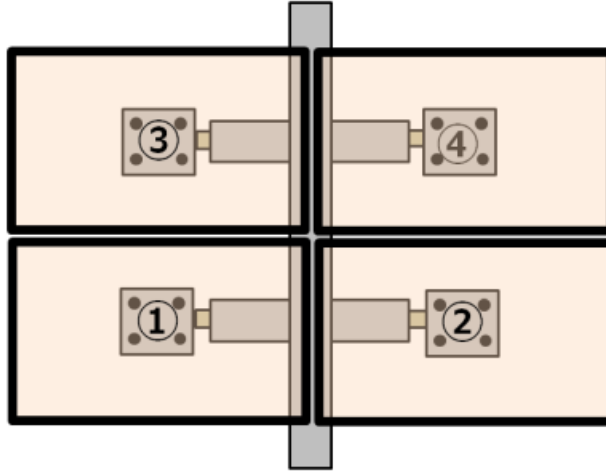|	
Model:	K3G220
Supported Monitor Size:	Up to 27 inches
Maximum Weight:	6.8kg x 4 monitors
VESA Hole Pitches:	100x100mm & 75x75mm
Adjustment directions:	Up/Down/L/R & Front/Behind (See the illustration below or the CHIEF manual)

K3G220

34.02
[864.1]

1.60
[40.6]

15°
MAX ANGLE

14.66
[372.4]
MAX DISTANCE
BETWEEN MONITORS

VESA
100 X 100
75 X 75
COMPATIBLE

INTERFACE
TILT ADJUSTMENT
+/-12°

0.25
[6.4]
BASE THICKNESS

2.43
[61.6]
COLUMN WIDTH

7.55
[191.8]

1.21
[30.6]

38.81
[985.8]

36.04
[915.3]
MAX. MONITOR CENTER
HEIGHT FROM SURFACE

2.27
[57.7]
COLUMN DEPTH

7.03
[178.5]

2.28
[57.9]

DIMENSIONS: INCHES
[M ILLIMETERS]

(Reference) For K3G220, please attach the stand to the desk following the CHIEF's "Installation Instructions".

INSTALLATION INSTRUCTIONS

Kontour™ Array Arm Series

CHIEF   K3 Series

diameter between
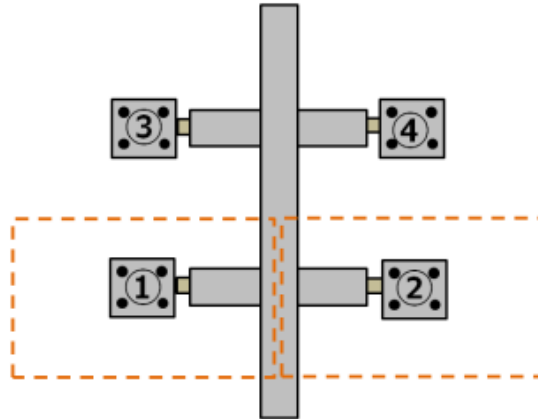1/2" and 3 1/2"

Overview

1. Attach the lower left ① and lower right ② monitors.
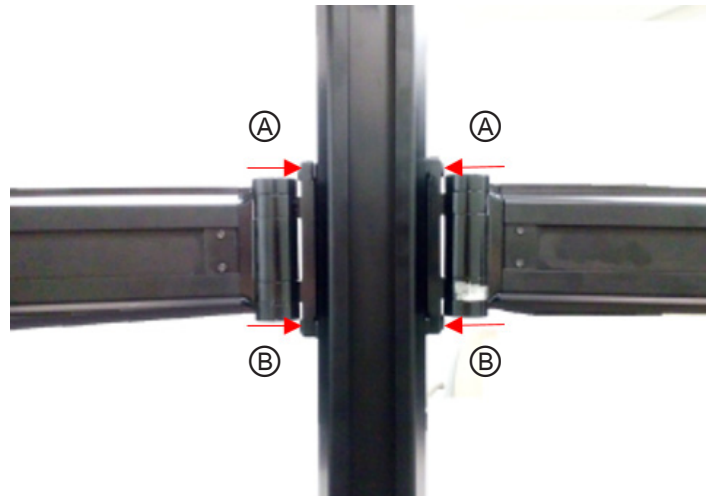2. Attach the upper left ③ and upper right ④ monitors.

Installing the Lower Left and Lower Right Monitors

Set the Vertical Arm Position

1. Loosen the 4 hex screws Ⓐ/Ⓑ for height adjustment.

2. Adjust the height of the arms until the left and right are at the desired height.

3. Tighten the hex screws to fix the arms in place.

   Make sure the arms are at the same height before tightening the hex screws.

4. Loosen the hex screw Ⓒ and knob Ⓓ of the lower left and right VESA plates so they can be adjusted by hand.

ⓘ Loosen the hex screw, do not remove it.

5. Adjust the tilt-angle of the VESA plate parallel to the arm surface. Do not rotate the plate.

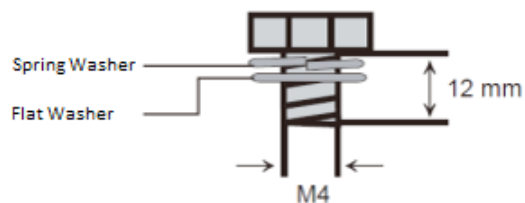6. Tighten the hex screw Ⓒ and knob Ⓓ when finished setting the position of the VESA plate.

Attach the Monitors

Two people will be needed to attach the monitors to the stand.

1. EX241UN-H (no stand) – Remove the lower 2 screws from the back of the monitor. Loosen the upper 2 screws to have some space between the screw-head and back casing.

   EX241UN (with stand) – Have 4 VESA M4 standard screws available, then set the lower 2 screws with some space between the screw-head and back casing.
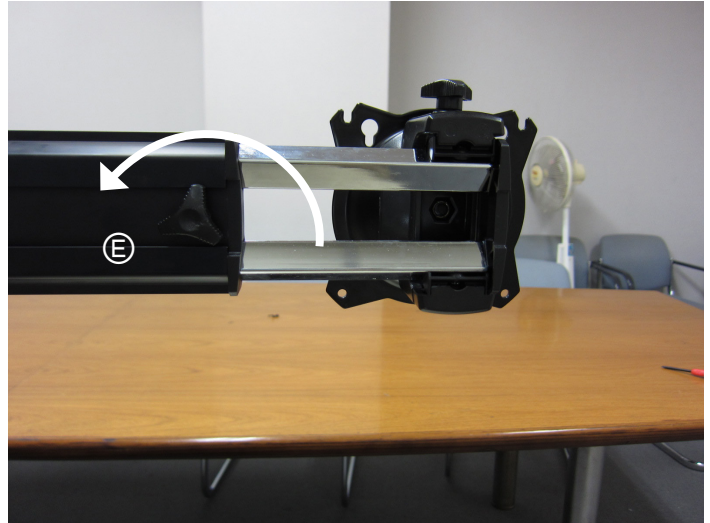
2. With one person holding the monitor from the front and one person holding the monitor from the back, carefully hang the monitor on the VESA plate of the arm.

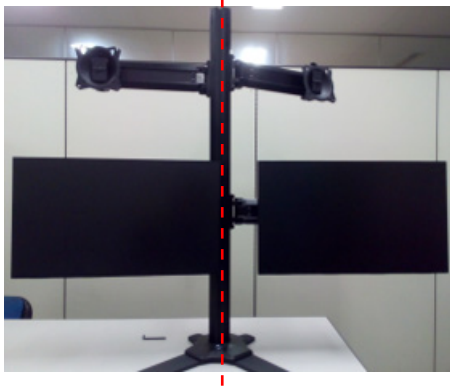   Repeat this for the second monitor.

Set the Horizontal Position

1. Loosen the knob Ⓔ on the back of the arm for the left monitor.

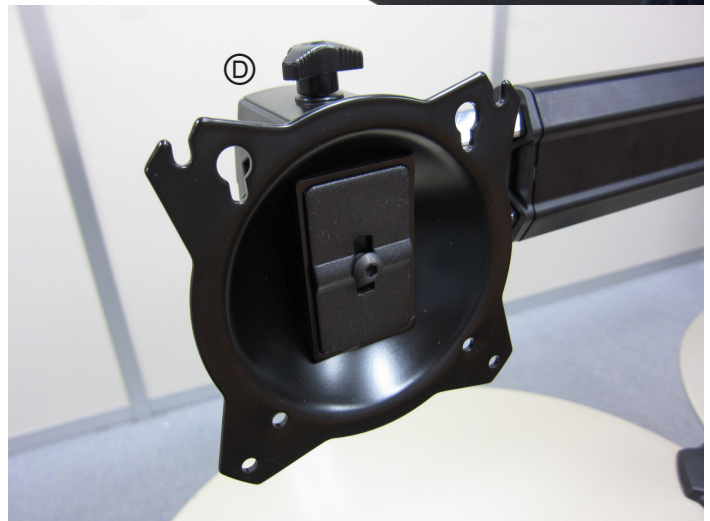2. Move the left monitor so that the edge of the monitor lines up with the center of the pole.

3. Tighten the knob Ⓔ on the back of the arm to fix the horizontal position.

4. Make sure the monitor does not tilt forward. It should be completely vertical when viewed from the side.

    If necessary, loosen knob Ⓓ and fine tune the adjustment.

✎ *Note:* The instructions in this section are for the monitors to be set up as a flat surface. Instructions for tilting the monitors are under "Adjust Tilt / Swivel / Pivot" on page 16.
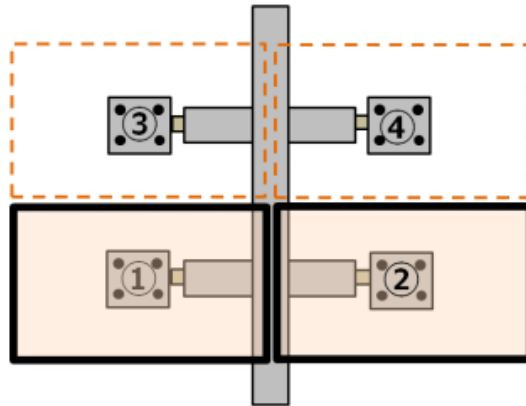
5. Set a spacer (included in the EX241UN box) against the edge of the lower left monitor.

6. Repeat steps **1-4** for the lower right monitor.

Important: One person should hold the spacer while the other person adjusts the right monitor into position. A small gap between the monitors is necessary to prevent damage to the screen, which can expand due to heat.

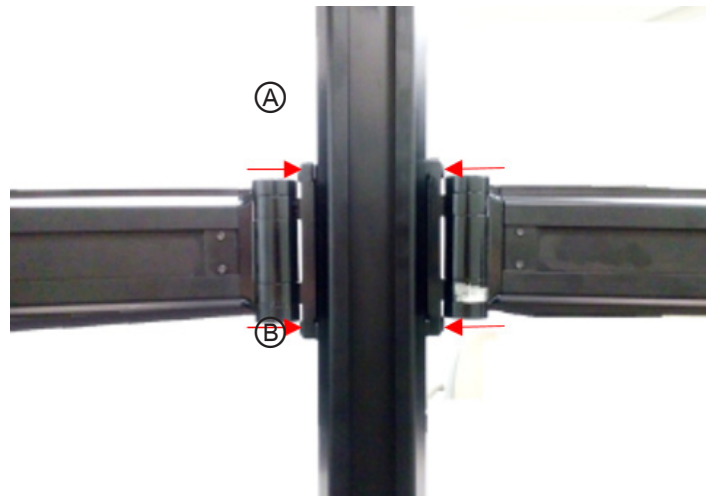# Installing the Upper Left and Upper Right Monitors

- Follow the instructions in "Set the Vertical Arm Position" on page 9 for the upper arms.

  Make sure to set the upper arms set to a preliminary height with enough room to attach the monitors.

Note: For narrower inactive borders between the upper and lower monitors, install the upper monitors rotated by 180 degrees.

- Follow the instructions for steps 1 and 2 in "Attach the Monitors" on page 10 for placing the upper left and right monitors.

After the monitors are attached, the upper monitors can be lowered into place following the instructions below.
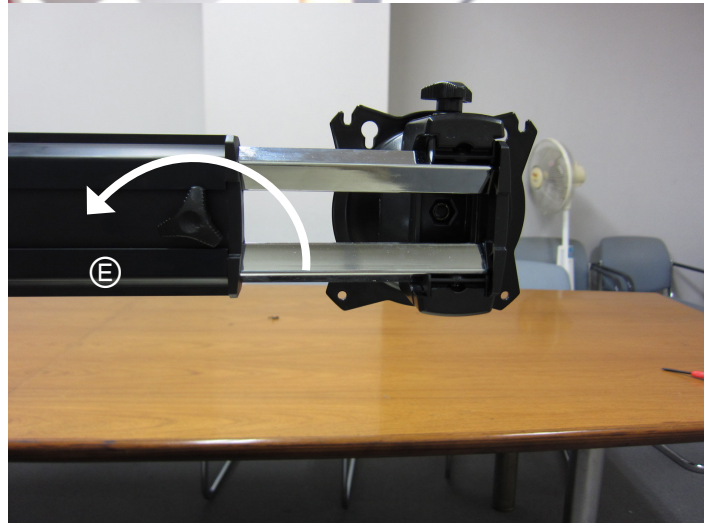
1. Loosen the 2 hex screws Ⓐ/Ⓑ, for the upper left arm height adjustment.

   One person should hold the monitor to prevent it from moving while loosening the hex screws.

2. Place a spacer on the top of the *lower* left monitor.

3. Carefully lower the upper left monitor.

4. After the upper monitor height is in the desired position, tighten the hex screws to fix the arm in place.

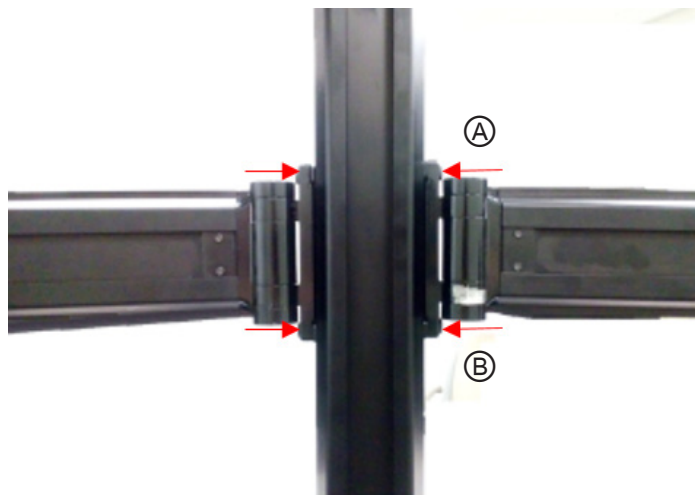5. Loosen the knob Ⓔ on the back of the arm for the left monitor.

6. Move the upper left monitor towards the center pole so that the edge lines up with the lower left monitor.

7. Tighten the knob Ⓔ on the back of the arm to fix the horizontal position.

8. Loosen the 2 hex screws Ⓐ/Ⓑ, for the upper right arm height adjustment.

   One person should hold the monitor to prevent it from moving while loosening the hex screws.

9. Place a spacer on the top of the *lower* right monitor and on the side of the *upper* left monitor.
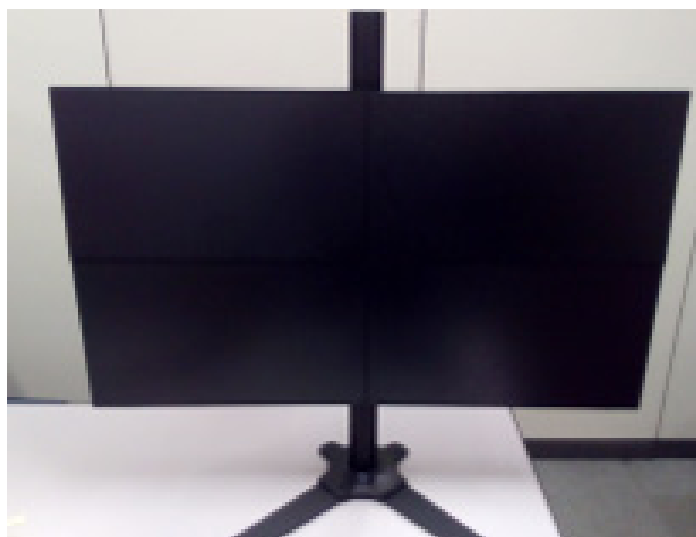
10. Carefully lower the upper right monitor.

11. After the upper monitor height is in the desired position, tighten the hex screws to fix the arm in place.

12. Follow steps **5** and **6** above to move the upper right monitor into position towards the center pole.

    Keep the spacers in place while positioning the upper right monitor.

13. Tighten the knob Ⓔ on the back of the arm to fix the horizontal position.

Adjust Tilt / Swivel / Pivot
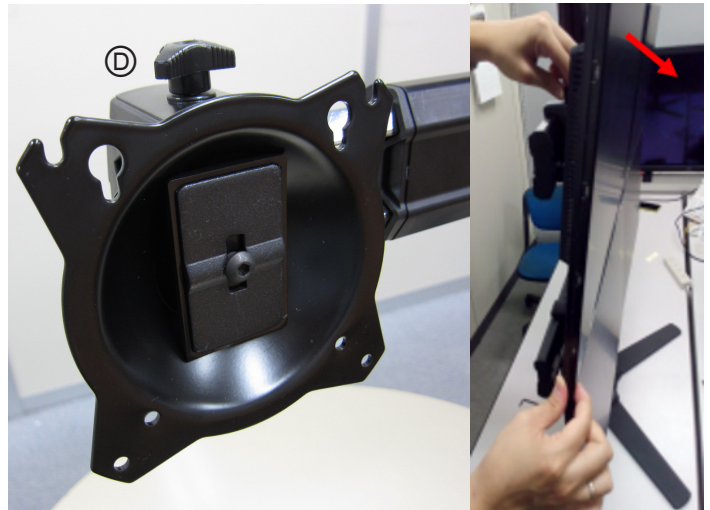
Tilt the Upper Monitors

Important: Always have spacers between all of the monitors before adjusting them to prevent the edges of the screens from touching.

1. Follow the instructions for "Set the Vertical Arm Position" on page 9 and "Attach the Monitors" on page 10.

2. After attaching the monitors to the VESA plates, loosen the knob Ⓓ and then tilt the monitor 5~7 degrees to the front.

   Do *not* let the edges of monitors touch. Keep a spacer between the monitors while adjusting the tilt.

3. Tighten the knob slightly to hold the tilt position while continuing with the setup.
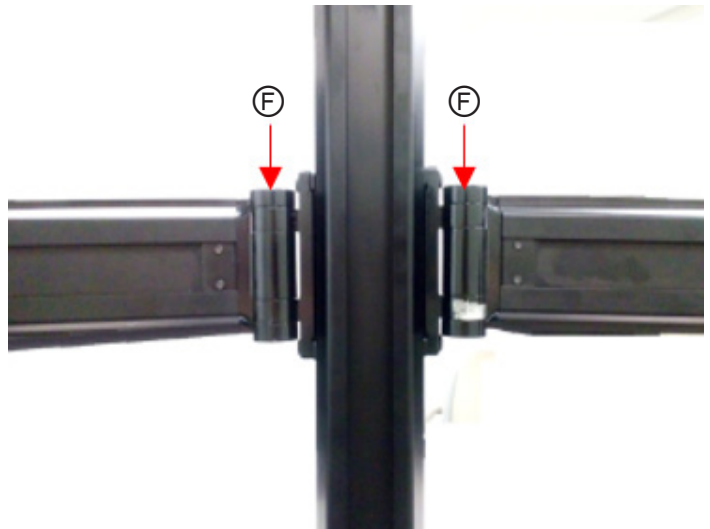
4. Adjust the horizontal position of the VESA plates and arm angles to align the bottom edge of the upper monitor with the top edge of the lower monitors.

5. Tighten knobs to fix the position of the monitors.
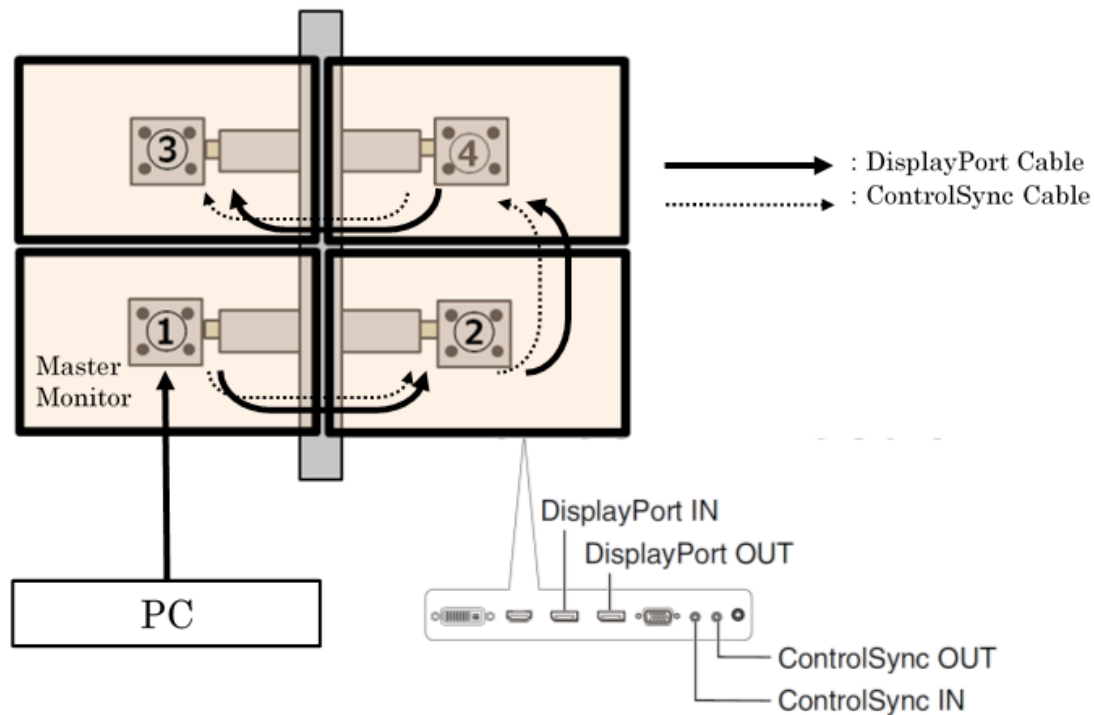
Face the Monitors Inside

Important: Always have spacers between all of the monitors before adjusting them to prevent the edges of the screens from touching.

1. Follow the instructions for "Set the Vertical Arm Position" on page 9 for the lower arms.

2. Loosen hex screws Ⓕ for adjusting the swivel of the lower arms.

3. Adjust the swivel angle between 0~15 degrees towards the center. Tighten the hex screws Ⓕ fully.

4. Follow the instructions for "Attach the Monitors" on page 10.

5. Follow the instructions for "Set the Vertical Arm Position" on page 9 to set a temporary position upper arms.

6. Repeat steps **2-4** of these instructions for the upper monitors.

7. Follow the instructions for "Installing the Upper Left and Upper Right Monitors" on page 13 to finalize the position of the upper monitors.
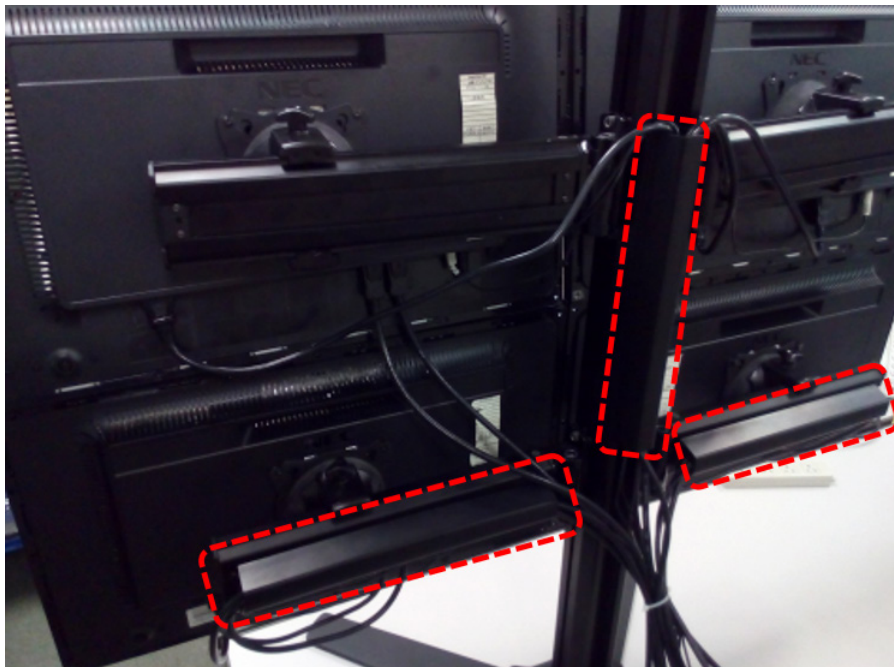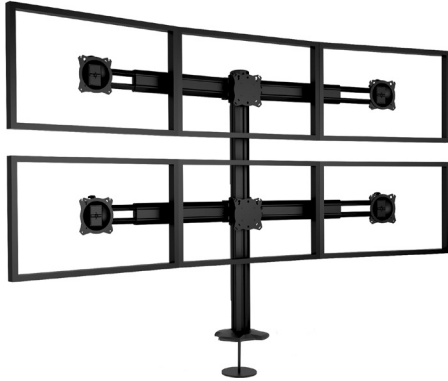
Cable Connection Example

2x2 Monitor

Cable Management

As shown in the picture below, cover the cables using the covers included with the CHIEF stand.
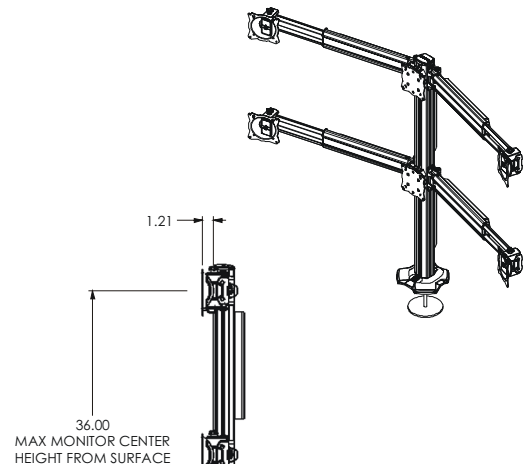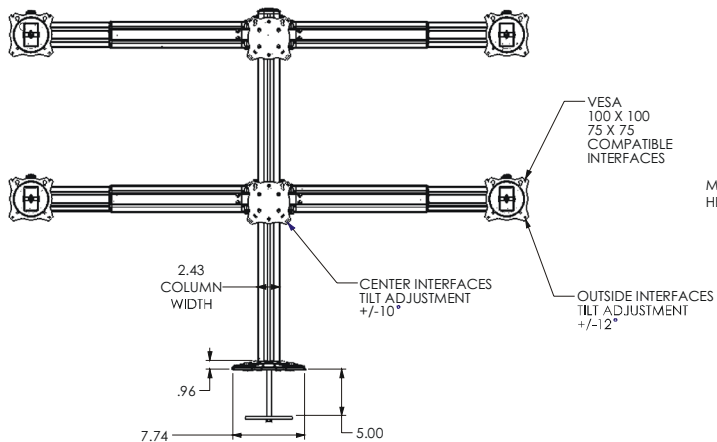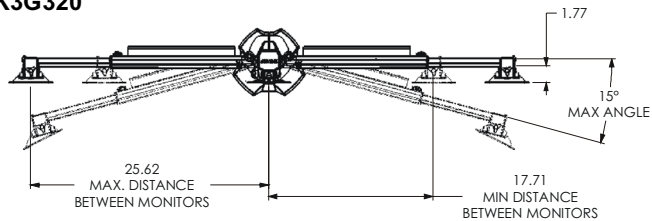
3 x 2 Multi-Monitor Installation (K3G320)
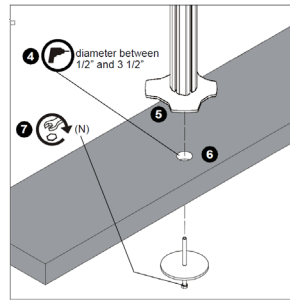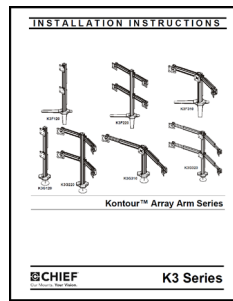
Model K3G320 (Desk Mounted)

Model:	K3G320
Supported Monitor Size:	Up to 27 inches
Maximum Weight:	6.8kg x 6 monitors
VESA Hole Pitches:	100x100mm & 75x75mm
Adjustment directions:	Up/Down/L/R & Front/Behind (See the illustration below or the CHIEF manual)

K3G320

1.77

15°
MAX ANGLE

25.62
MAX. DISTANCE
BETWEEN MONITORS

17.71
MIN DISTANCE
BETWEEN MONITORS

1.21

VESA
100 X 100
75 X 75
COMPATIBLE
INTERFACES

36.00
MAX MONITOR CENTER
HEIGHT FROM SURFACE

2.43
COLUMN
WIDTH

CENTER INTERFACES
TILT ADJUSTMENT
+/-10°

OUTSIDE INTERFACES
TILT ADJUSTMENT
+/-12°

2.27
COLUMN DEPTH

.96

7.74

5.00
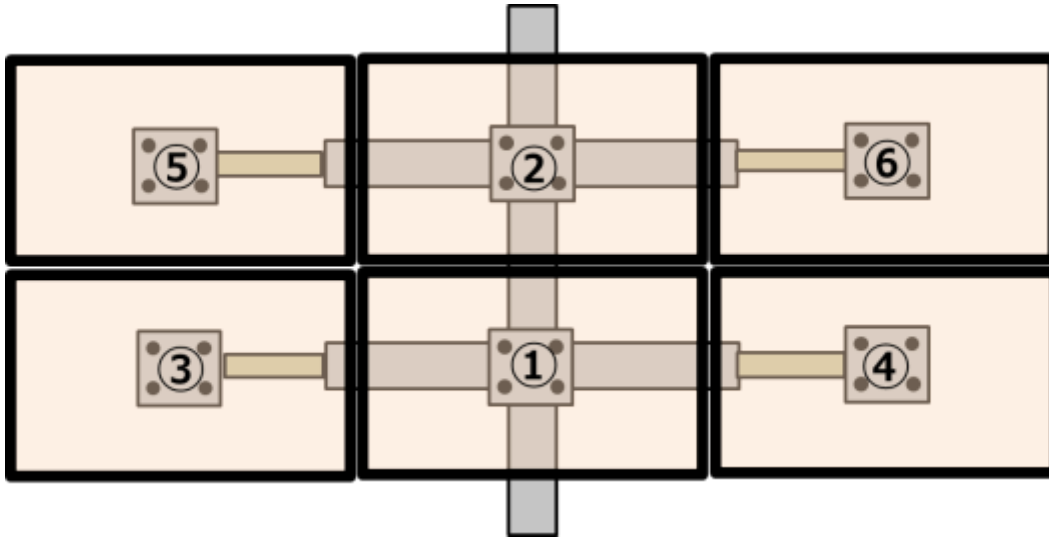
7.11

2.28

DIMENSIONS: INCHES
                [M ILLIMETERS]

(Reference) For K3G220, please attach the stand to the desk following the CHIEF's "Installation Instructions".
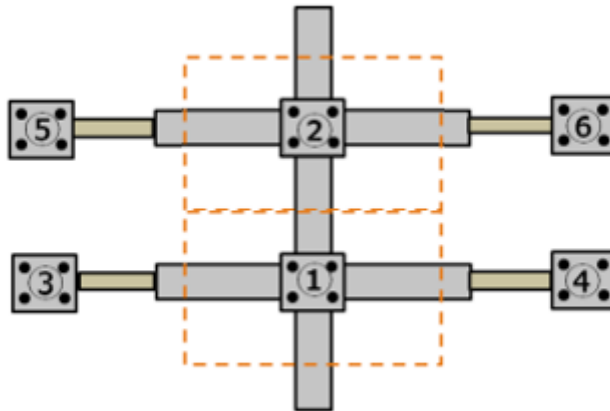
Overview

1. Set the height of the center VESA plate ①, then VESA plate ② at a measured distance from ①.
2. Attach monitors ① and ②.
3. Set the set the upper and lower arms at temporary heights.
4. Attach monitors in order of ③, ④, ⑤, then ⑥.
5. Fix the arm height, move the monitors to the center, fine tune adjust tilt/swivel/pivot simultaneously.

Installing the Center Monitors

Set the Center VESA Plates Position

1. Loosen hex screw Ⓐ of the lower-center VESA plate for height adjustment.

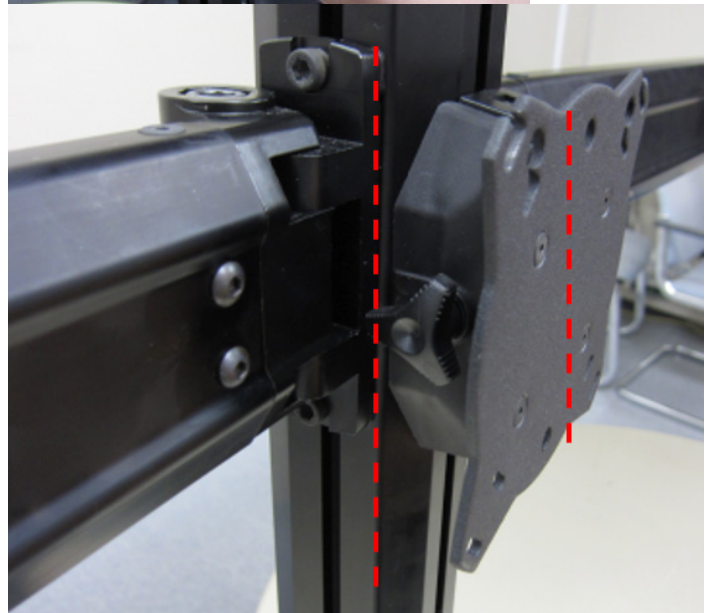ⓘ Loosen the hex screw, do not remove it.

2. Adjust the height of the lower-center VESA plate to the desired level.

   Make sure the plate is high enough that the monitor will not touch the table after it is attached.

3. Completely tighten hex screw Ⓐ.

4. Loosen the knob at the left side of the lower-center VESA plate.

5. Adjust the tilt angle of the VESA plate parallel with the stand pole.

6. Fix the knob tightly.

7. Loosen hex screw Ⓐ of the top-center VESA plate for height adjustment.

ⓘ Loosen the hex screw, do not remove it.

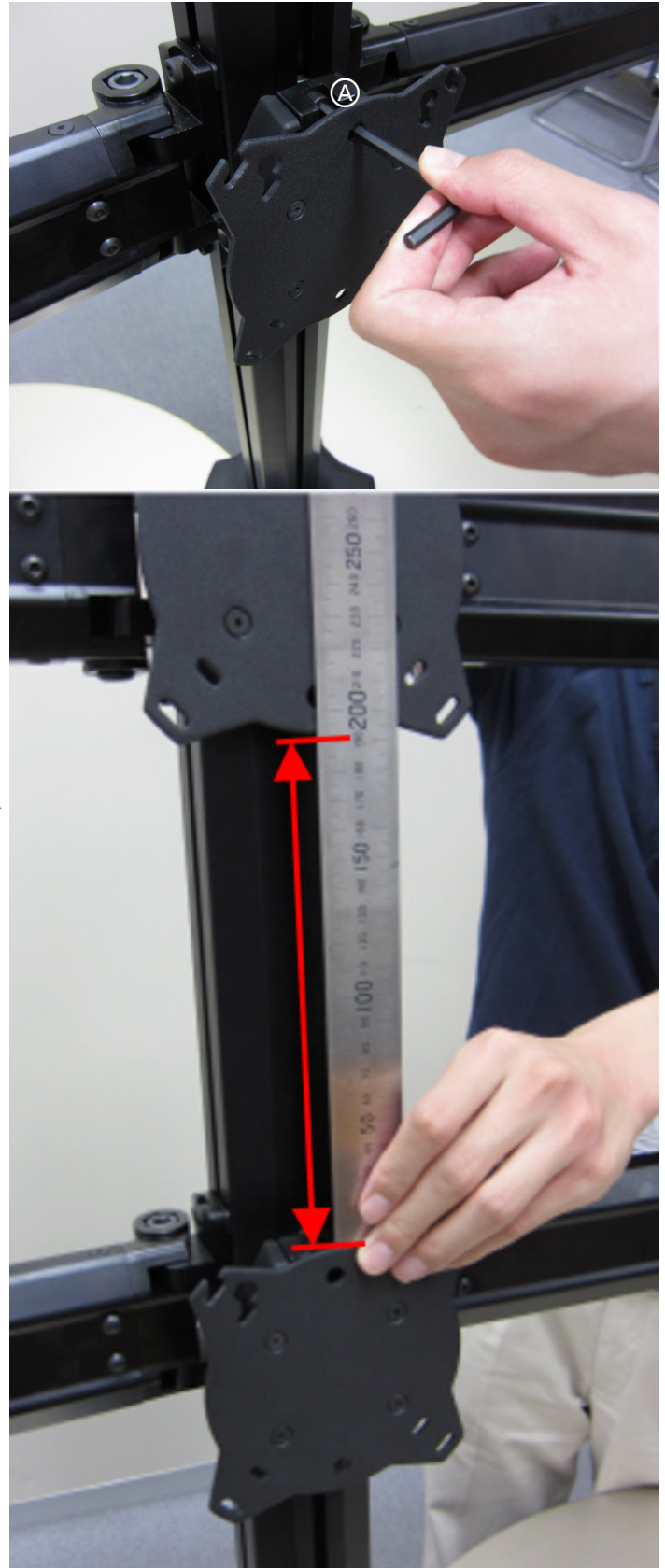8. Adjust the height of the upper-center VESA plate.

   Use a ruler to measure the distance from the lower VESA to set the correct distance based on the configuration:

   - Monitors with bezels: 196 mm
   - Monitors without bezels: 193 mm

   For narrower borders, the upper monitors will need to be installed rotated 180 degrees. In this configuration, the distance between the upper and lower VESA plates will need to be:

   - Monitors with bezels: 193 mm
   - Monitors without bezels: 190 mm

9. Completely tighten hex screw Ⓐ.

10. Loosen the knob at the left side of the lower-center VESA plate.

11. Adjust the tilt angle of the VESA plate parallel with the stand pole.
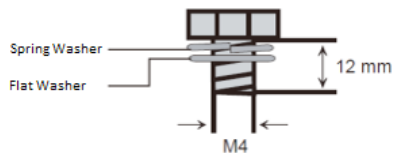
12. Completely tighten the knob.

Attach the Lower Center Monitor

Two people will be needed to attach the monitors to the stand.

1. EX241UN-H (no stand) – Remove the lower 2 screws from the back of the monitor. Loosen the upper 2 screws to have some space between the screw-head and back casing.

   EX241UN (with stand) – Have 4 VESA M4 standard screws available, then set the lower 2 screws with some space between the screw-head and back casing.

2. With one person holding the monitor from the front and one person holding the monitor from the back, carefully hang the monitor on the lower-center VESA plate.
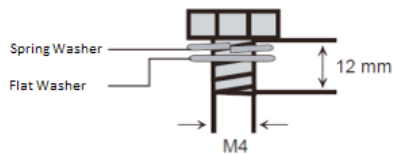
Attach the Upper Center Monitor

Three people will be needed to attach the monitors to the stand.

1. EX241UN-H (no stand) – Remove the lower 2 screws from the back of the monitor. Loosen the upper 2 screws to have some space between the screw-head and back casing.

   EX241UN (with stand) – Have 4 VESA M4 standard screws available, then set the lower 2 screws with some space between the screw-head and back casing.

2. Set a spacer (included in EX241UN-H) on the top of the lower-center monitor.

3. With one person holding the monitor from the front, one person holding the monitor from the back, and one person holding the spacer, carefully hang the monitor on the upper-center VESA plate.
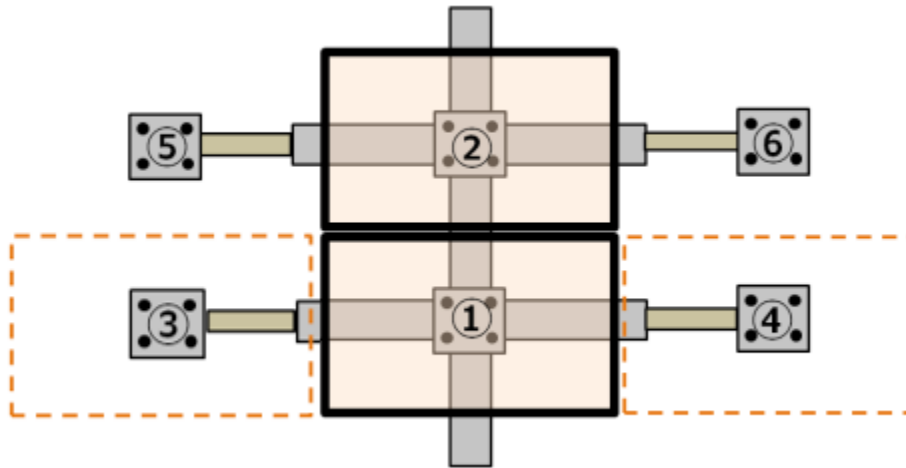
4. With the spacer still in place, match the upper and lower center monitor positions.

5. Tighten the VESA screws (total of 8 screws).

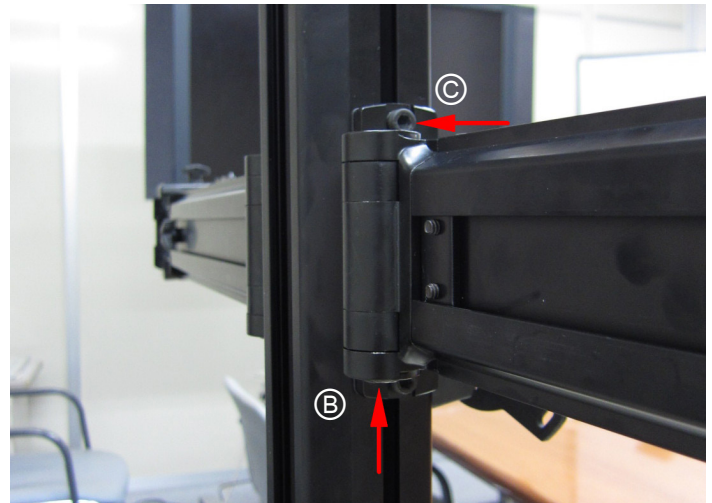6. Remove the spacer from the front.
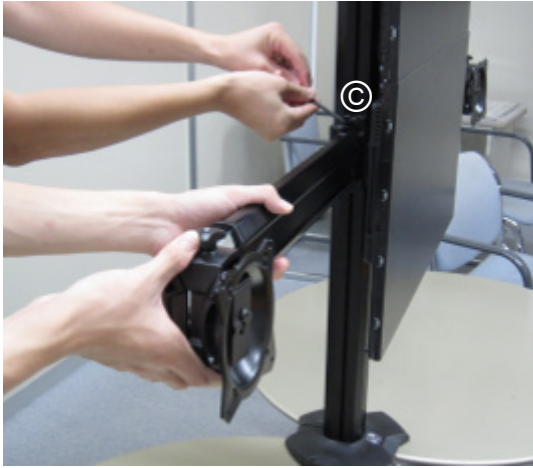
Installing the Lower Left and Lower Right Monitors

Set the Vertical Arm Position

1. Loosen the 2 hex screws Ⓑ/Ⓒ for height adjustment of the lower-left arm.

    One person should hold the arm to prevent it from dropping when loosing the hex screws.

2. Position the arm to the approximate height matching the lower-center monitor.

3. Tighten only the hex screw Ⓒ.

4. Repeat steps **1-3** for the lower-right monitor.

5. Loosen the hex screw Ⓓ and knob Ⓔ of the lower left and right VESA plates so they can be adjusted by hand.

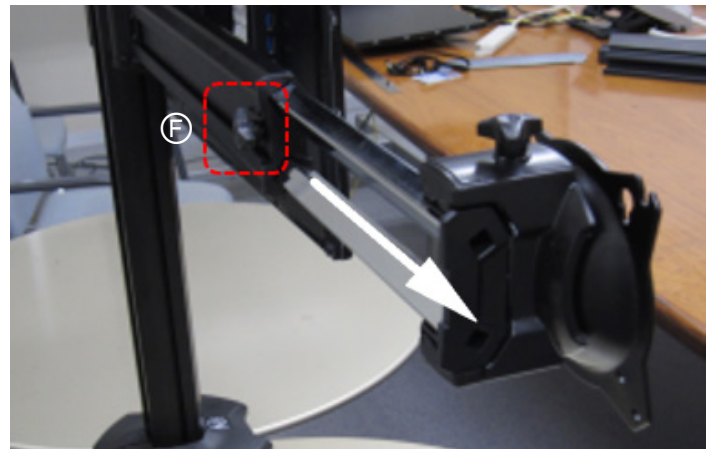ⓘ Loosen the hex screw, do not remove it.

6. Adjust the tilt-angle of the VESA plate parallel to the arm surface. Do not rotate the plate.

7. Completely tighten hex screw Ⓓ.

8. Loosely tighten knob Ⓔ when finished setting the position of the VESA plate.

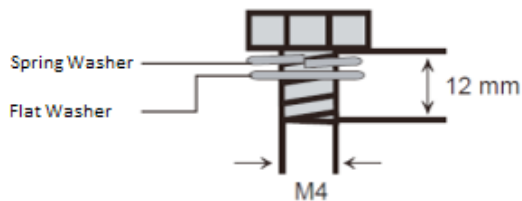# Attach the Lower Left and Lower Right Monitors

Two people will be needed to attach the monitors to the stand.

1. Temporarily extend the lower left and right monitors arms away from the center pole to allow room for attaching the monitors.

    - Loosen knob Ⓕ on the back of the arm.

    - Slide the arm away form the center pole.

    - Temporarily tighten knob Ⓕ to hold the arm position while mounting the monitors.

2. EX241UN-H (no stand) – Remove the lower 2 screws from the back of the monitor. Loosen the upper 2 screws to have some space between the screw-head and back casing.

    EX241UN (with stand) – Have 4 VESA standard screws available, then set the lower 2 screws with some space between the screw-head and back casing.

3. With one person holding the monitor from the front and one person holding the monitor from the back, carefully hang the monitor on the VESA plate of the arm.
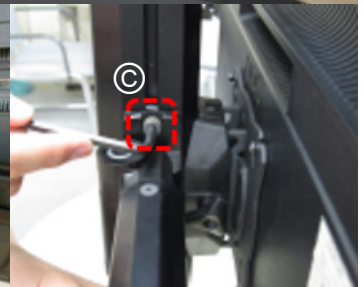
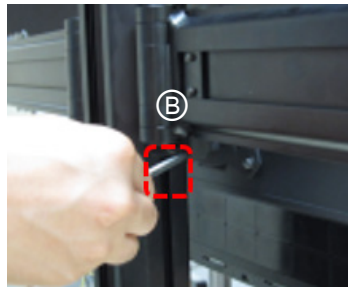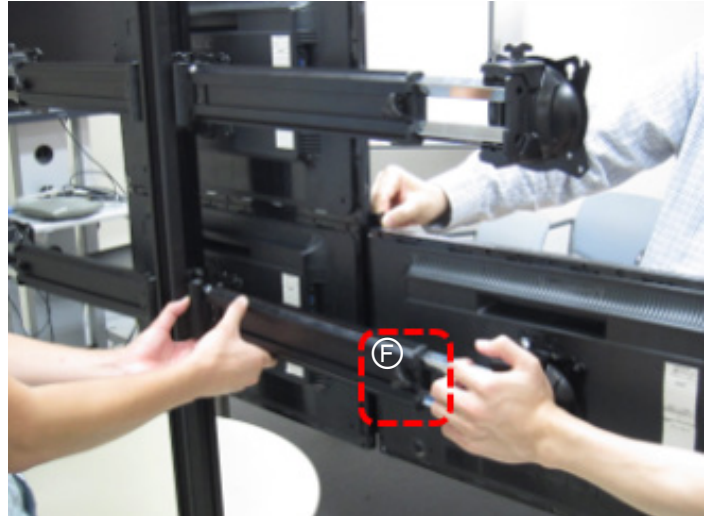   Repeat this for the second monitor.
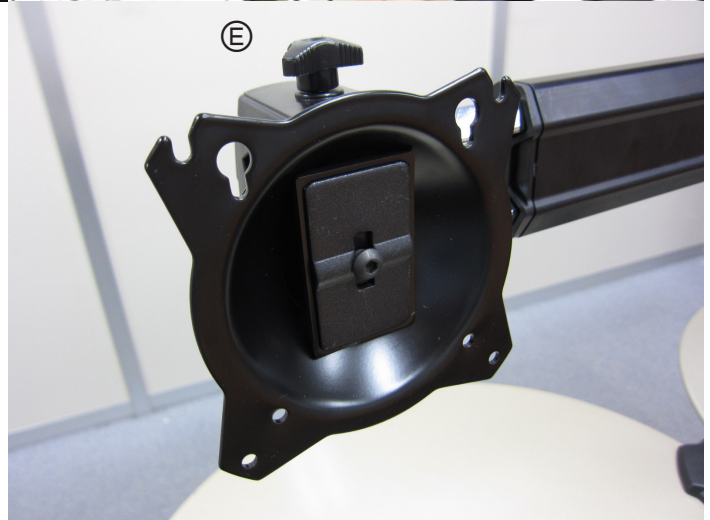
4. Tighten all VESA screws.

Set the Lower Left and Lower Right Horizontal Position

Three people are needed for adjusting the horizontal position of the monitors. One person to hold the spacer between monitors, one to hold the center-side of the arm to keep the arm steady, and one to make the adjustments.
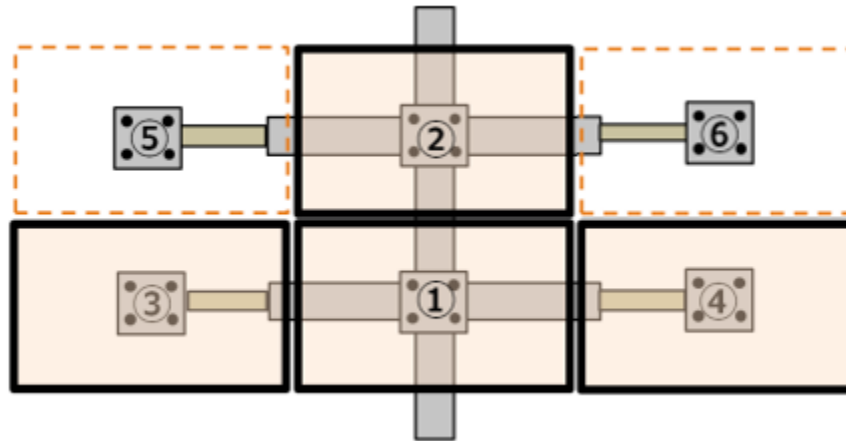
1. Loosen knob Ⓕ on the back to adjust the horizontal position.

2. Loosen hex screw Ⓑ for adjusting the arm height.

3. Loosen hex screws Ⓒ & Ⓖ for adjusting the arm angle.

4. Place a spacer on the side of the lower-center monitor.

5. Move the lower left monitor towards the center monitor.

6. Adjust the height and angle of the center monitor.

7. Tighten all hex screws and the knob Ⓔ on the VESA plate.

8. Remove the spacer.

9. Repeat steps **1-8** for the lower-right monitor.

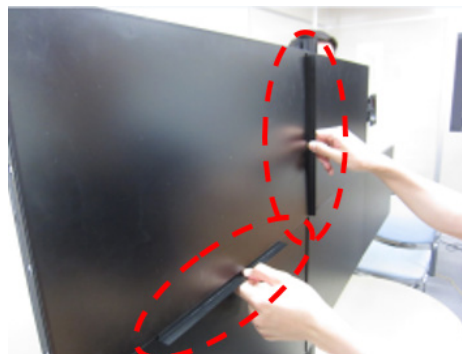# Installing the Upper Left and Upper Right Monitors

- Follow the instructions in "Set the Vertical Arm Position" on page 27 for the upper arms.

  Make sure to set the upper arms set to a preliminary height with enough room to attach the monitors.

✎ *Note:* For narrower borders between the upper and lower monitors, install the upper monitors rotated by 180 degrees.

- Follow the instructions in "Attach the Lower Left and Lower Right Monitors" on page 29 for placing the upper left and right monitors.

- Follow the instructions in "Set the Lower Left and Lower Right Horizontal Position" on page 30. Using two spacers at step 4, place one on the top of the lower monitor and on the edge of the center monitor.

Completed Setup

Adjust Tilt / Swivel / Pivot

Facing the Monitors Towards Center

Three people are needed for adjusting the horizontal position of the monitors. One person to hold the spacer between monitors, one to hold the center-side of the arm to keep the arm steady, and one to make the adjustments.

1. Place a spacer between the monitors before moving them.

2. Loosen the knob on the back of the arm for the monitor.

3. Slide the monitor away from the center.

4. Loosen the knob for the VESA plate.

5. Loosen the hex screw for adjusting the arm angle.

6. Adjust the arm swivel to the preferred angle and temporarily fix the monitor without leaning.

7. Repeat steps **1-6** for each of the left and right monitors that need to be faced towards the center.

8. Move the monitors back into position with spacers protecting the edges.

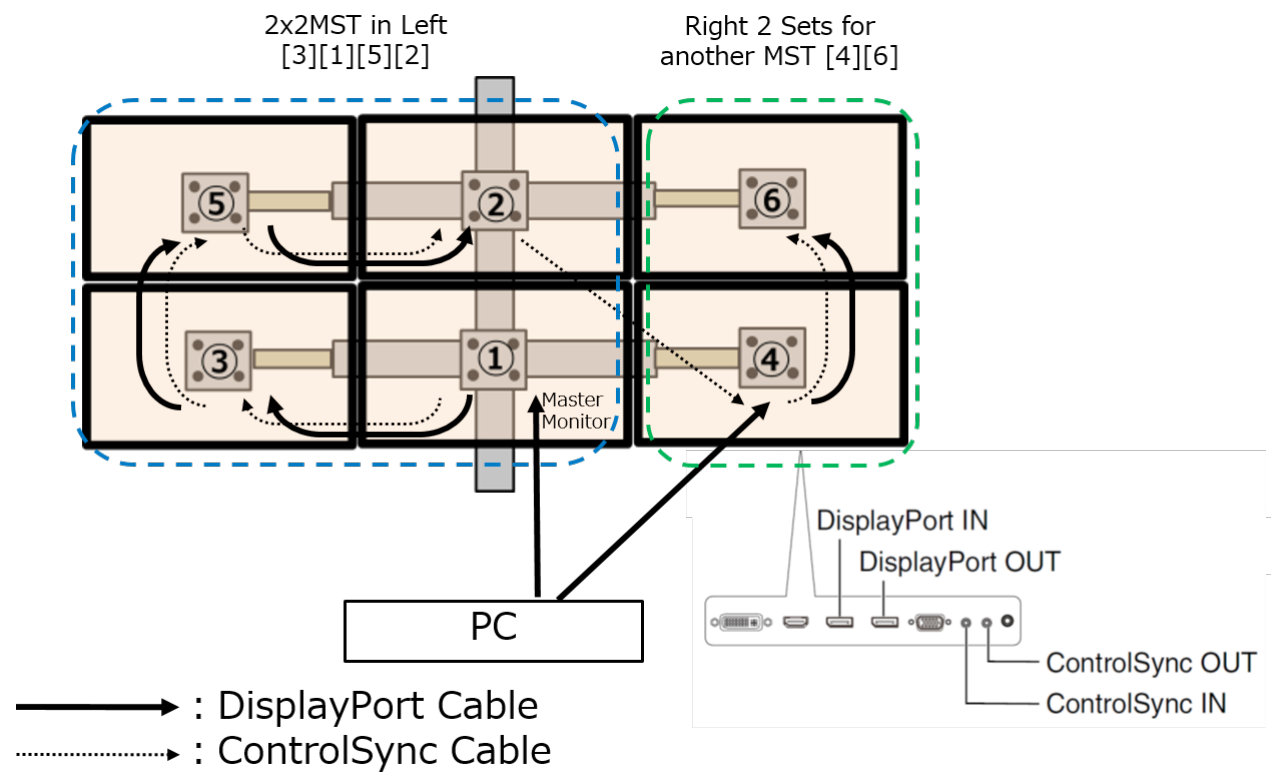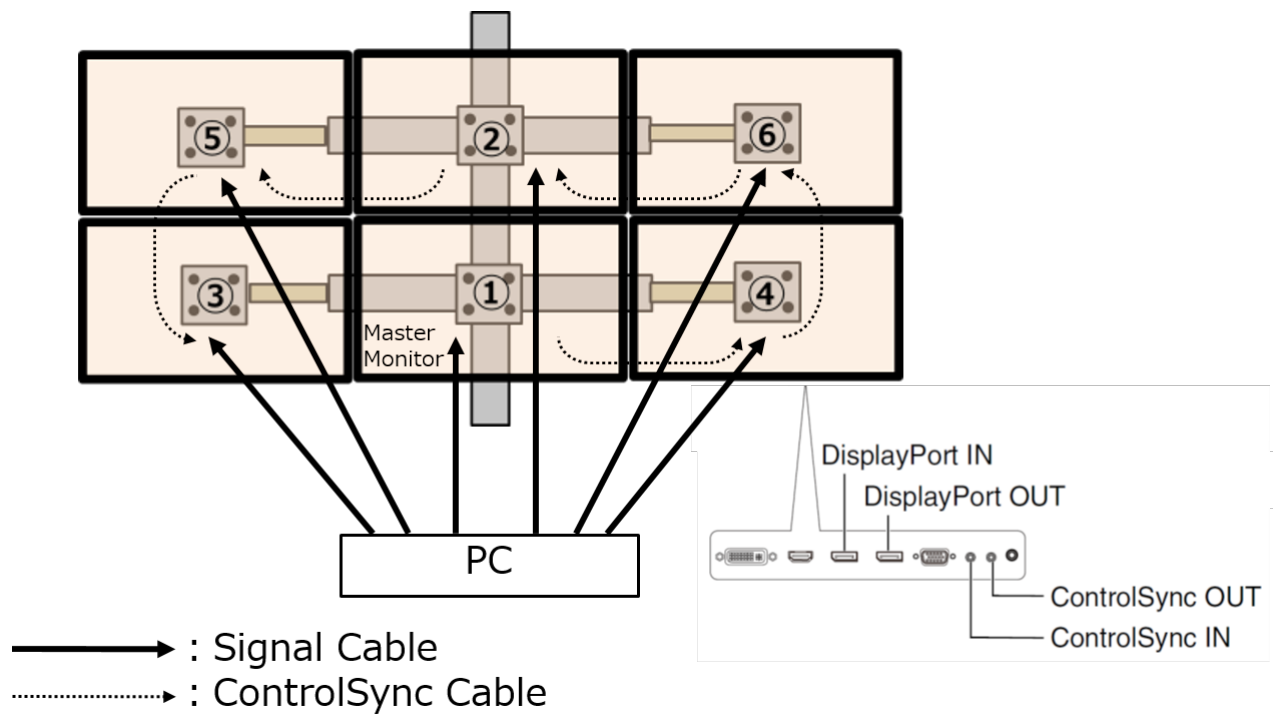9. Remove the spacers when complete.

Tilt Down the Upper-Center Monitor (Not Recommended)

If the upper-center monitor is tilted down, there is a gap in the front/back direction between the upper and lower monitor. This is due to the stand not having a front/back adjustment feature, only tilt is available. Therefore, it is not recommended to tilt down the upper-center monitor.
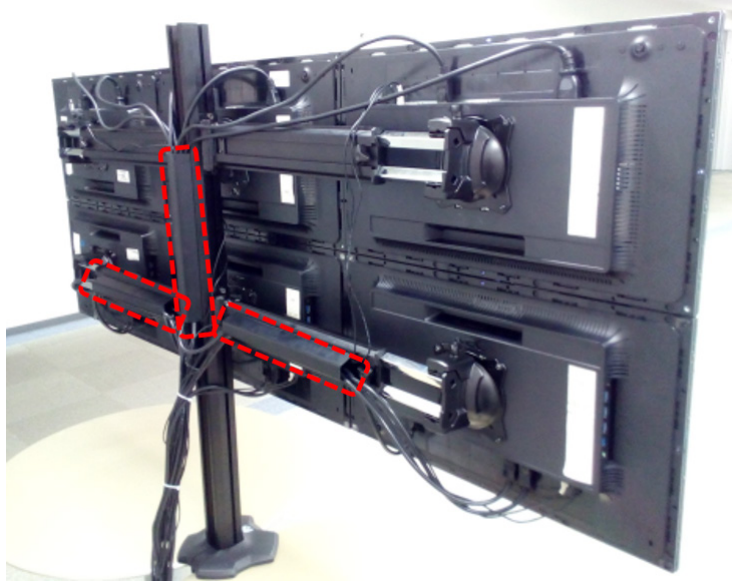
Cable Connection Example

: Signal Cable

: ControlSync Cable

DisplayPort IN
DisplayPort OUT
ControlSync OUT
ControlSync IN

2x2MST in Left
[3][1][5][2]

Right 2 Sets for
another MST [4][6]

Master Monitor

: DisplayPort Cable

: ControlSync Cable

DisplayPort IN
DisplayPort OUT
ControlSync OUT
ControlSync IN

Cable Management

As shown in the picture below, cover the cables using the covers included with the CHIEF stand.

Chapter

4 Unifying Multi-Picture Quality

If necessary, try these steps to improve uniformity and color matching across the monitors.

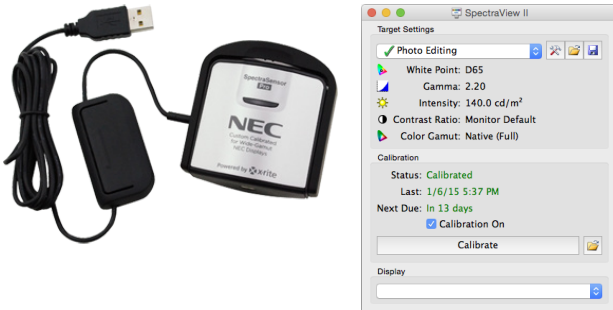➢ Uniformity — set **Uniformity** to "ON" in the OSD menu option.
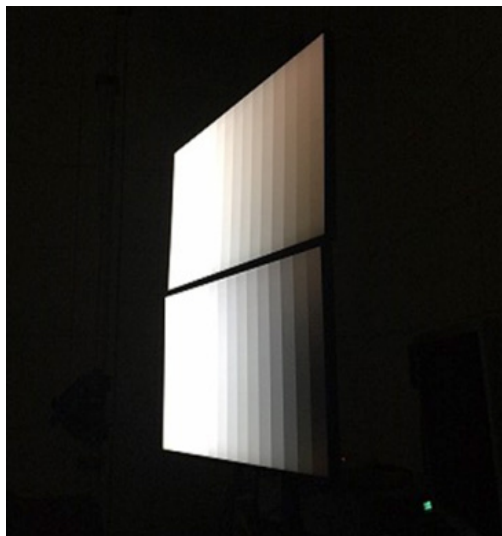

➢ Hardware Calibration — the monitors can be hardware color calibrated, using the optional SpectraView color calibration kit (SVII-PRO-KIT or SVII-EA-KIT), to match the screen color and brightness of each monitor.

➢ Color Shift — this is due to the viewing angle of the monitor from the user's perspective. Adjust the RGB gains for each monitor until the color shift is less noticeable.

NEC