

# **Digital Menu Board – Installation Instructions Ver 10.0**

June 1, 2011

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## Overview

**\*\*\*IMPORTANT: Installer MUST contact EK3 Helpdesk (1800-473-9048) at the end of the install to confirm connectivity and activate. Failure to contact EK3 Helpdesk will be classed as a deficiency\*\*\***

Purpose of this project is to install 1 or 2 displays for the McCafé menu boards. Fig A and B for examples.

**IMPORTANT: The display(s) placement within the Restaurants may slightly vary based on locations:**

1. For the Restaurants with a Drive Thru, the McCafé menu boards will always be placed on the left side by the Drive Thru processing area.
2. For those Restaurants without a Drive Thru, the displays will be placed based on CBS placement, either on the right or left side of the main counter.

**PLEASE NOTE: If the displays are installed on the right side of the counter, the only variations for installation will be in terms of cable connections and mounting location of the Media Engine. The proper installation instruction for this type of placement is included in the applicable sections throughout this documentation.**

### **Prior to Installation**

- 1) Move any obstructions (i.e. CBS Machine). Work with restaurant manager to move any equipment that will get in the way of the installation.
- 2) Cover up equipment: Ask restaurant manager to cover any equipment to protect from dust (CBS, Registers etc).
- 3) If restaurant will remain open, ask manager to create a perimeter to prevent customers from entering work area.

### **Section 1:**

Provides project specific instructions

### **Section 2:**

Installation Manual for each mounting bracket

Fig A



Fig B





### Site Installation Report

Store Name		Store Number	
Address		City	
Site Contact		Phone#	

Date		Lead Tech Name	
Onsite Start Time		Onsite Stop time	
KM's to Site		Travel Time	

EK3 Media Engine ☐

Serial Number: \_\_\_\_\_

Display 1 ☐

Serial Number: \_\_\_\_\_

Display 2 ☐

Serial Number: \_\_\_\_\_

### General Site issues or status


Power was installed prior to my arrival: Yes ☐ No ☐

Network Cable was installed prior to my arrival: Yes ☐ No ☐

EK3 Contacted to confirm Connectivity: Yes ☐ No ☐

EK3 Contact: \_\_\_\_\_

Workplace left neat and tidy: Yes ☐ No ☐

### Customer Sign-off

Signature: \_\_\_\_\_

Lead tech: \_\_\_\_\_

Print Name: \_\_\_\_\_

Date: \_\_\_\_\_

Fax or email to EK3

Fax: 519-438-3071

Email: [helpdesk@ek3.com](mailto:helpdesk@ek3.com)

## Section 1: DMB Project Instructions

**IMPORTANT: For Dual Display Configuration. Display 1 is always on the Left and Display 2 is always on the right (Fig 2)**

**\*DO NOT position displays into their final aligned position until EK3 help desk has completed their testing\***

### **Display spacing**

The Display(s) should be as close to the food menu board as possible. The following measurements should be used. (Fig 1)

- 11 inches from food menu board. (10 inch for clearance plus 1 inch extra space.)
- 1 inch from bottom of wall (If possible). Try to align display with Menu Boards
- Display Height - 80" from floor to bottom of display
- Minimum display height is 78" from floor to bottom of display unless aligning with existing Menu Board or bottom of bulkhead
- Maximum display height is 84" from floor to bottom of display unless aligning with exiting Menu Boards
- If there are two displays, they should be aligned (Fig 2)
- Displays MUST be level.

**\*Wall Plate must allow display to have the proper spacing stated in the "Display Spacing" Section on page 2\* (Fig 3)**

Fig 1 Monitor spacing measurements

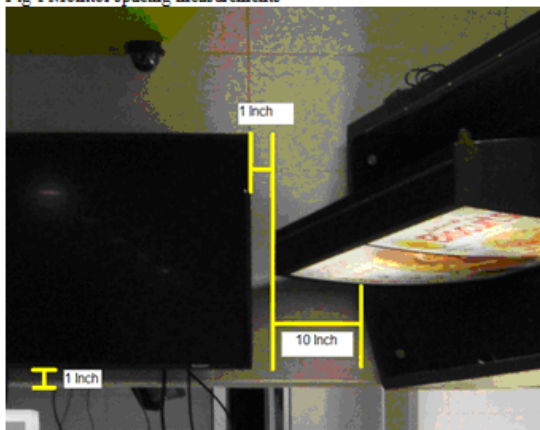


Fig 2: Completed Installation: Circled in red are obstructions that need to be avoided

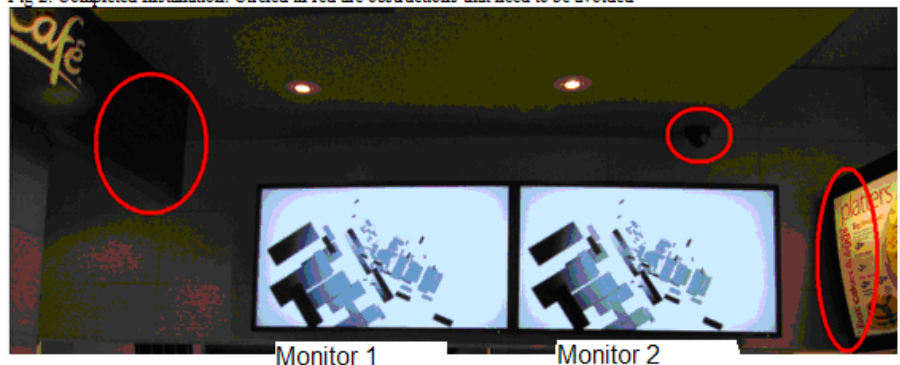
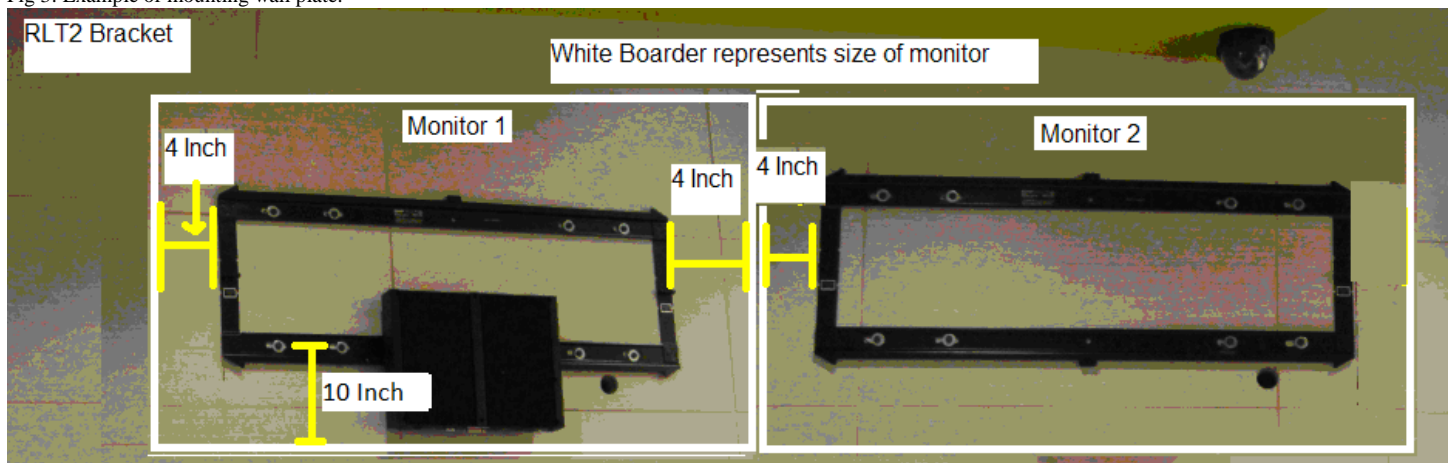


Fig 3: Example of mounting wall plate.



## Preparing Display for Mounting

### Interface Bracket for Wall Mount

\*Please refer to table of contents to find instructions on specific mounts.\*

- Mounting brackets must NOT be visible (Fig 3)

Fig 3: Mounting bracket must NOT be visible when the display is mounted.

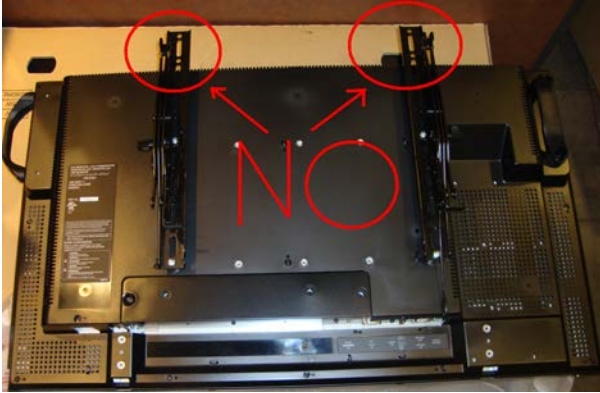
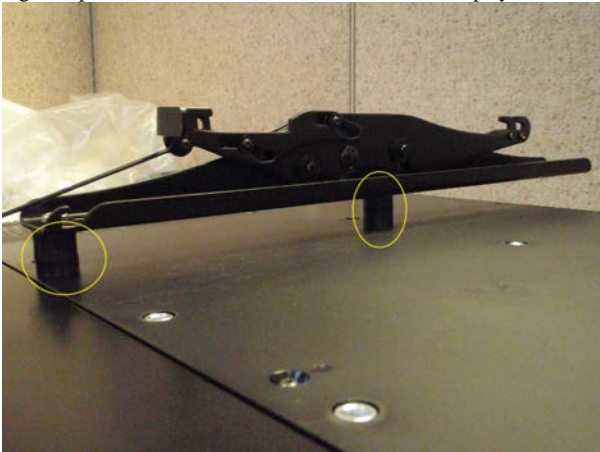


Fig 3a: Spacers must be installed between arms and display

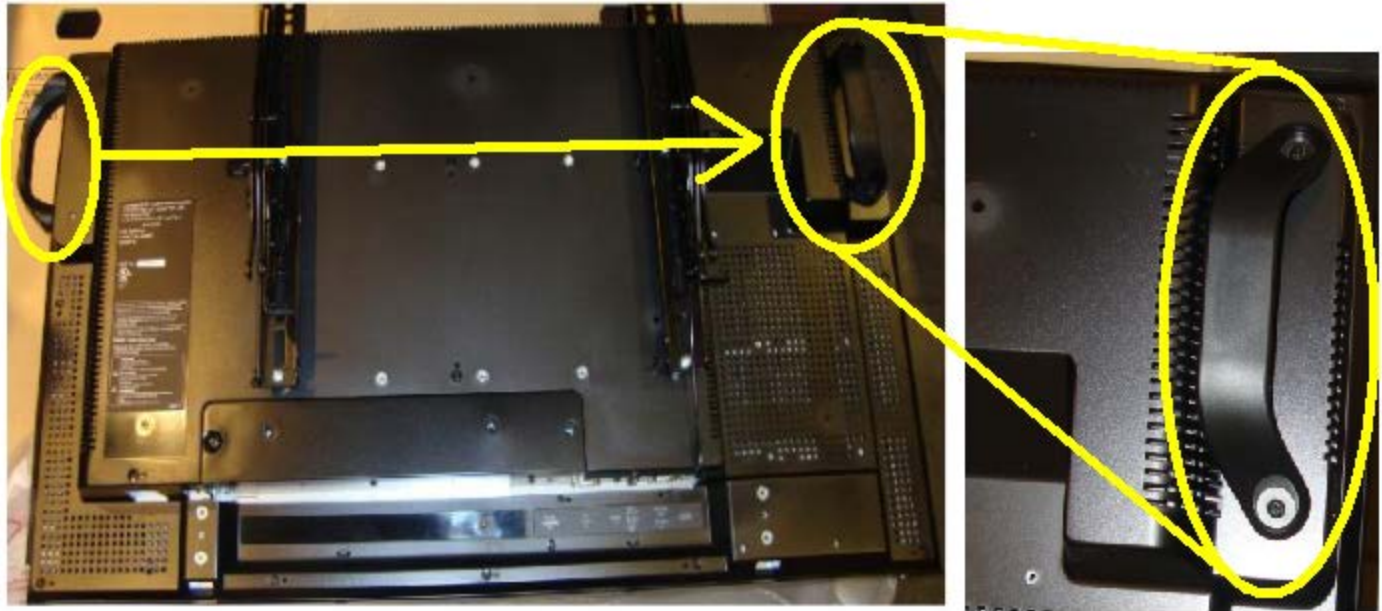




## Display Handles:

Remove Display Handles, and reattach handle to the back of the display with the curve facing inwards. (Fig 4)

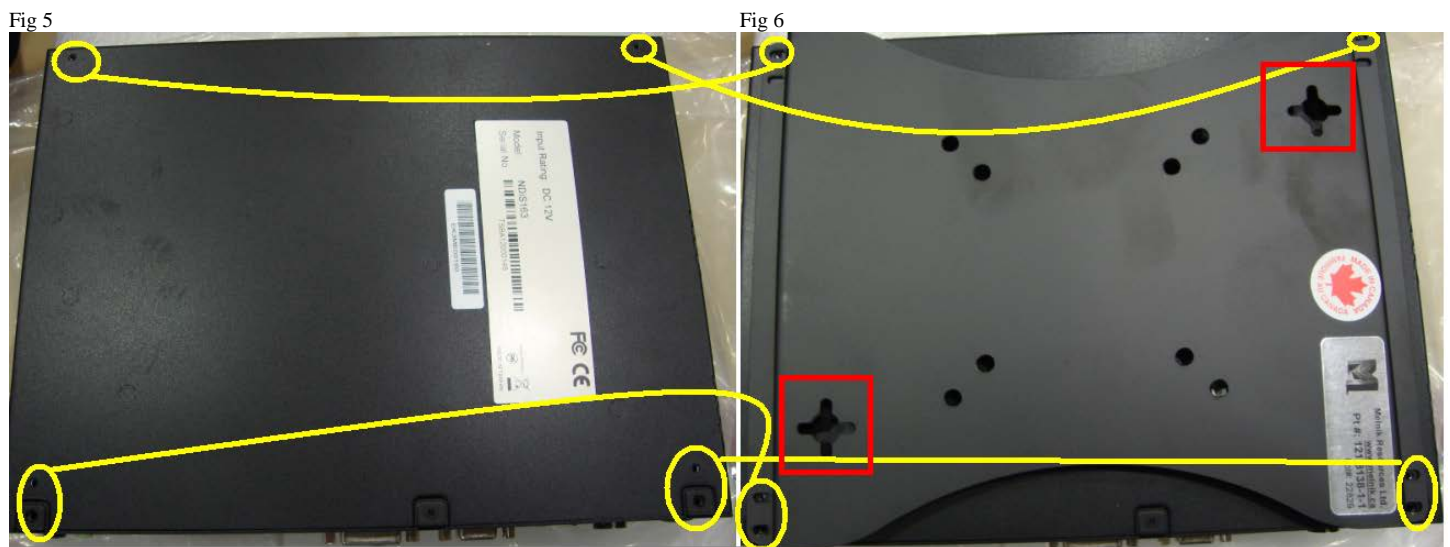
Fig 4: Left Handle = Default handle position. Right Handle = Repositioned.



## Mounting EK3 Media Engine

All EK3 Media Engines will use the same mounting bracket.

- Fig 5: shows the back of the EK3 Media Engine
- Fig 6: shows the mounting bracket
- Yellow circles are the attachment points for the EK3 Media Engine to the bracket
- Red Squares are where the bracket attaches to the wall





The EK3 Media Engine MUST be attached behind the Appropriate Display as shown in Fig 7 and Fig 8

Fig 7 For Articulating Wall Mount the Media Engine will be attached directly to the wall, for Standard Wall Mount the Media Engine will be mounted over the bottom rail of the bracket



Fig 8 For Ceiling Mount the Media Engine will be mounted to the Interface Bracket at the rear of the display



## Media Engine to Display(s) connections

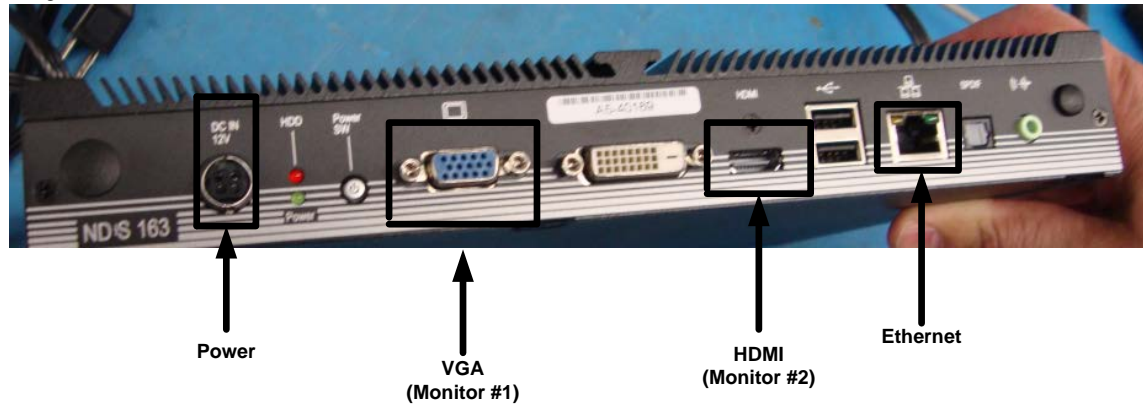
1) Remove packaging from display(s), and Media Engine.

2) Connect display(s) to Media Engine

a) Connecting VGA/HDMI Cables: If there are 2 displays (Dual Display Configuration):

- i For left side placement (i.e. to the left of the main Menu Board) installation: The Media Engine should be mounted behind Display 1. Display 1 connects to Media Engine via VGA cable and Display 2 will connect via HDMI. (Fig 5 & 7)
- ii For right side placement (i.e. to the right of the main Menu Board) installation: The Media Engine should be mounted behind Display 2. Display 1 connects to Media Engine via HDMI and Display 2 will connect via VGA cable

Fig 5: EK3 Media Engine (Front)



b) Connecting RS-232 (serial) cables:

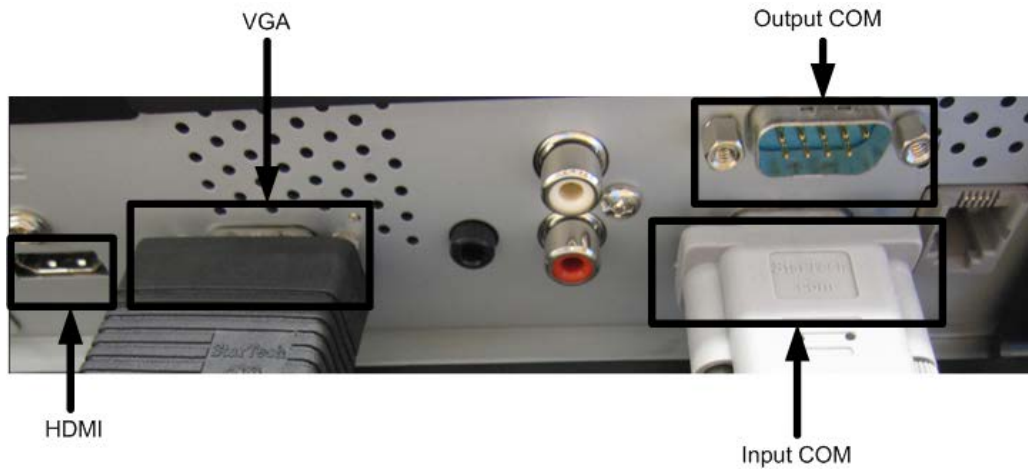
i) For Left side placement installation: Display1 Input COM port connects to Media Engine COM #1 (Fig 6) Display 1 Output COM port connects to Display 2 Input COM port (Fig 7)

ii) For Right side placement installation: Display2 Input COM port connects to Media Engine COM #1 (Fig 6) Display 2 Output COM port connects to Display 1 Input COM port (Fig 7)

Fig 6: EK3 Media Engine (Back)



Fig 7: Display Ports



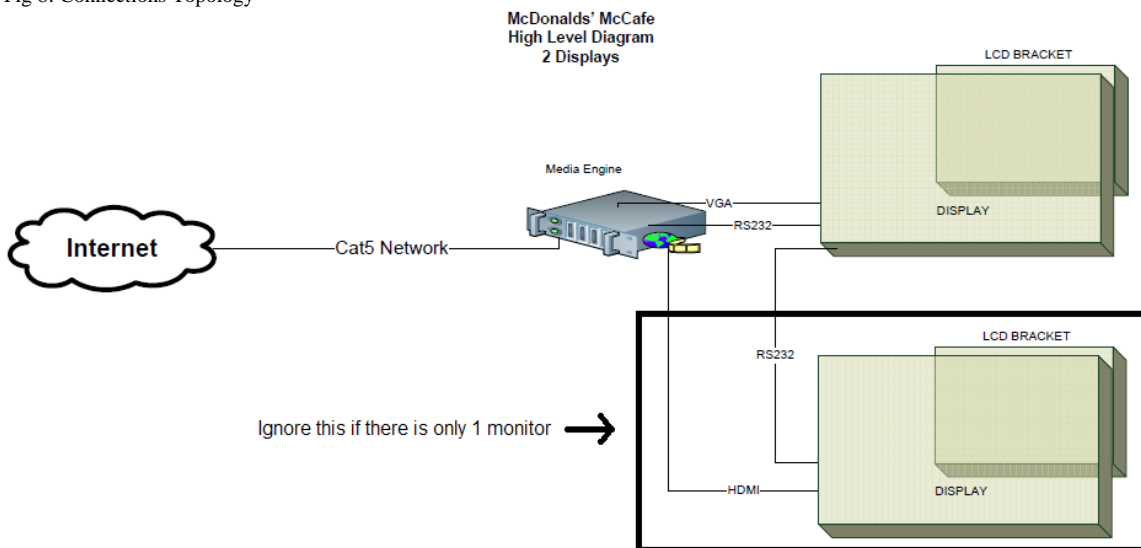
3) Connect Media Engine to EK3 network drop.

- On a 48 port switch, connect to port 44
- On 24 port switch, connect to port 15

4) Connect power to Media Engine: Once the Red flashing light turns Blue, the Media Engine is powered on

5) Connect power to Display(s)

Fig 8: Connections Topology





## Configuring Display(s)

Using the remote provided with the display. Perform the follow set up instructions.

MENU ► Used to Open/Close also serves as the Back button

VOL- ► Used as Arrow Down

VOL+ ► Used as Arrow Up

BRIGHT- ► Used as Arrow Left

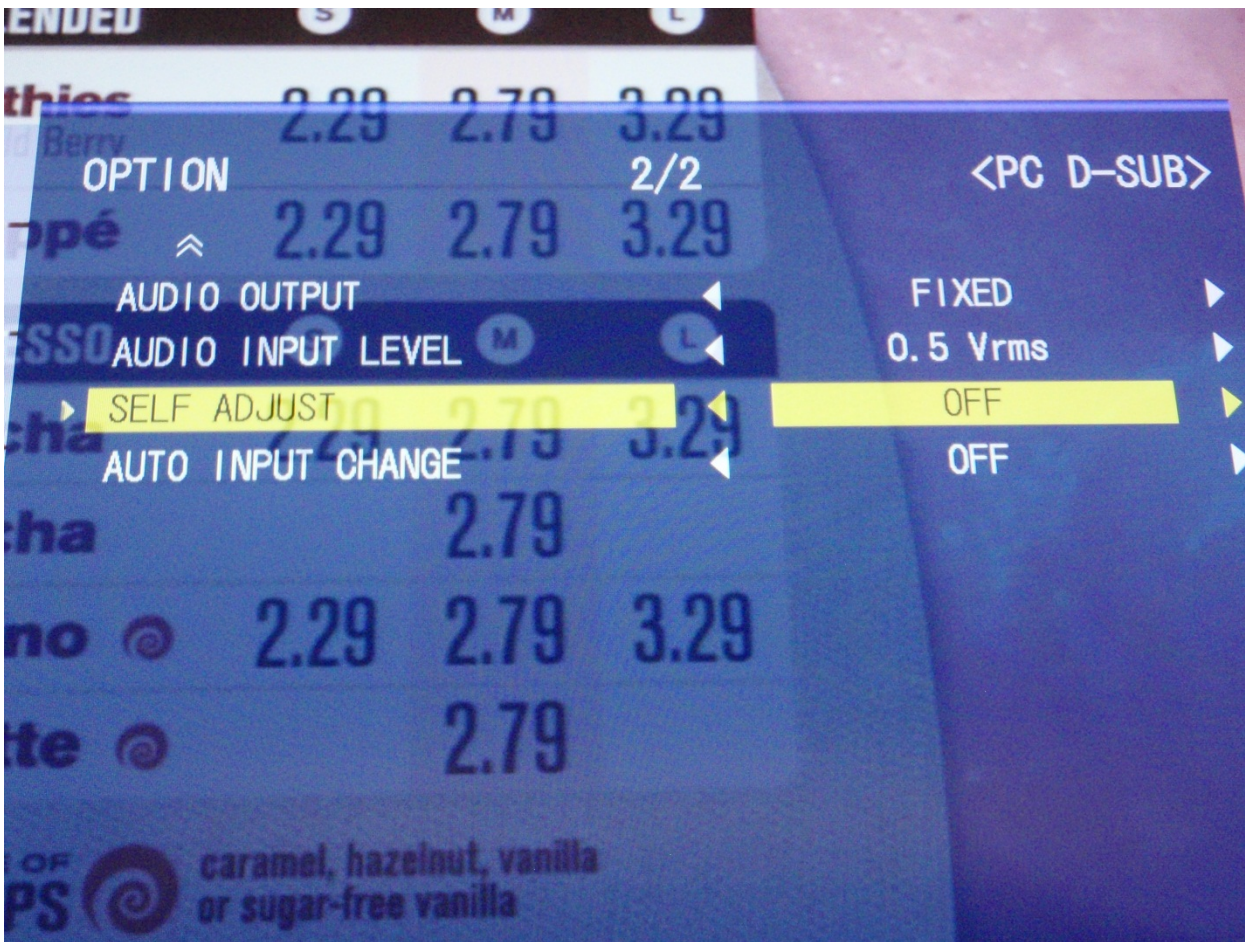
BRIGHT+ ► Used as Arrow Right

Here is simple outline of the steps using the remote.

### For a Single Display location:

Turn off Auto Adjust

Click 'MENU' ► VOL arrow keys to arrive at 'OPTION' ► set 'SELF ADJUST' to 'OFF'

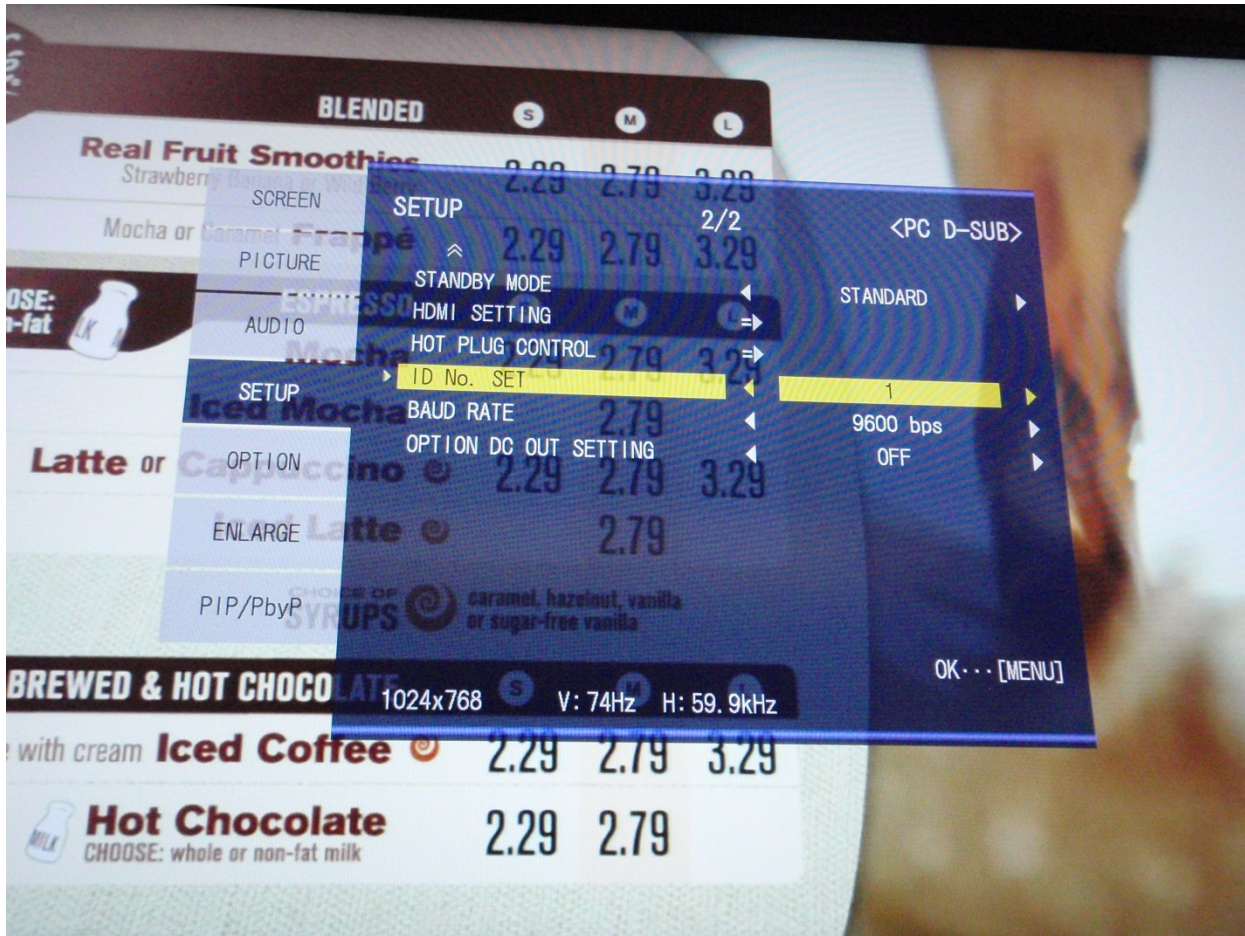


### For a Dual Display location:

- Steps 1 & 2 will have to be performed on both displays, step 3 is only for the display connected via HDMI

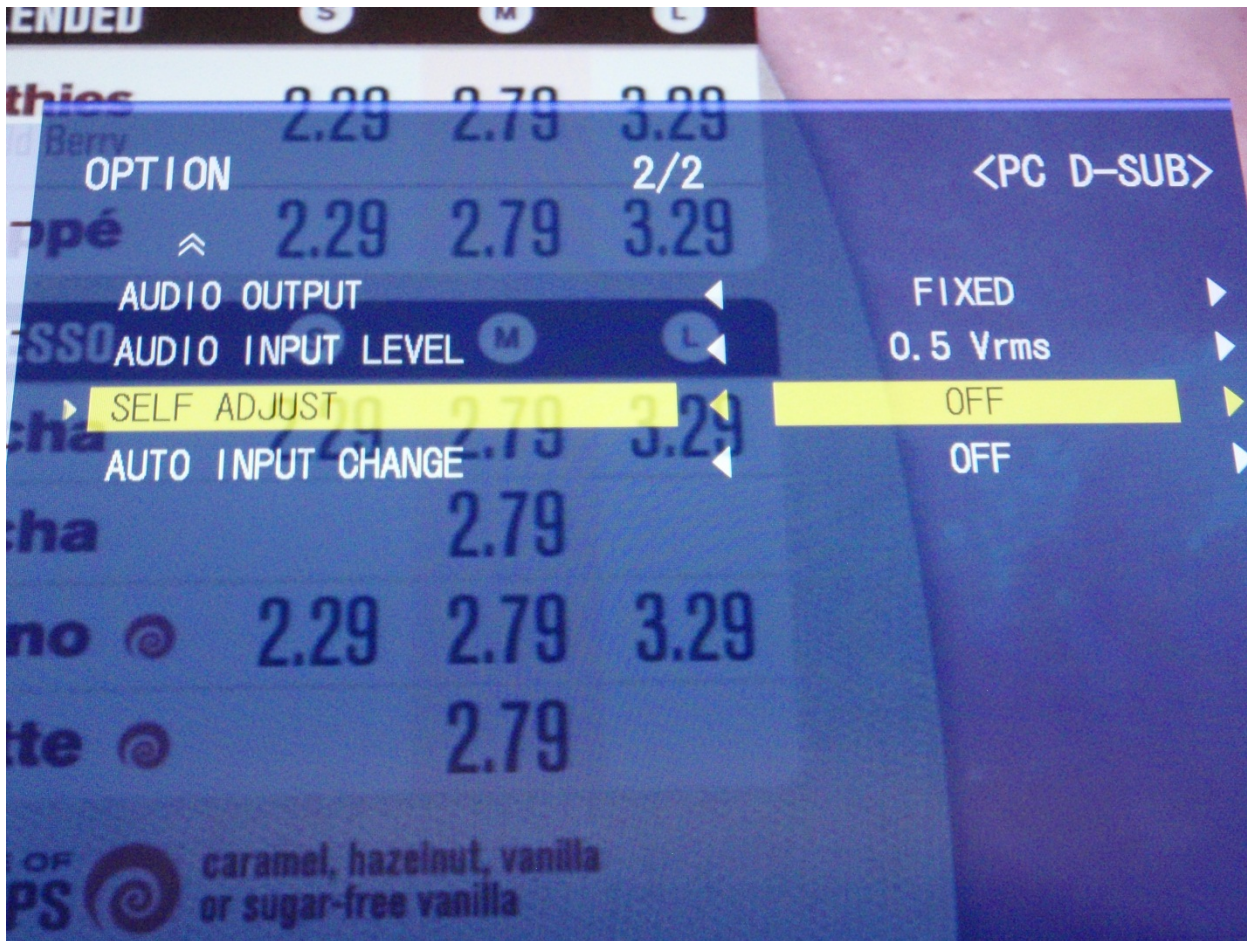
#### 1) Set Display ID Number

Click 'MENU' ► VOL arrow keys to arrive at 'SETUP' ► go to 'ID No. SET' and set display one (right) to 1 and display two (left) to 2





2) Turn off Auto Adjust on both displays  
Click 'MENU' ► VOL arrow keys to arrive at 'OPTION' ► set 'SELF ADJUST' to 'OFF'



### 3) Change HDMI Input

Click 'MENU' ► VOL arrow keys to arrive at 'OPTION' ► set 'INPUT SELECT' to 'PC HDMI'



## Configuration of Media Engine

Once everything has been mounted, powered on and connected to the network.

- Contact EK3 help desk at 1 800 473 9048.
- If after hours leave them your name, number and restaurant #. EK3 will call you back.
- Provide Media Engine Serial Number (A5-4####) to EK3 CSC
- EK3 will be checking for network connectivity and configuring their Media Engine
- Complete Sign Off sheet and return to EK3 via email or fax at bottom of sheet
- Take pictures of the install and email to [helpdesk@ek3.com](mailto:helpdesk@ek3.com) with store number included in the subject line of the email
- **\*\*\*IMPORTANT: Installer MUST contact EK3 Helpdesk at the end of the install to confirm connectivity and activate location. Failure to contact EK3 Helpdesk will be classed as a deficiency\*\*\***

## Adjust Display(s) into final viewing position

Once installation is complete, adjust display(s) so they are level.

\*Provide feedback/recommendations regarding these instructions to [kirk.frederiksen@ek3.com](mailto:kirk.frederiksen@ek3.com)\*



## **Section 2: Bracket Specific Information**

### **RLT2 Bracket**

#### **Wall Plate mounting**

Follow Manufacturers Installation Instructions

Wall plate must provide display with the following clearance (Fig A)

11 inches of horizontal clearance from menu board

1 inch of vertical clearance from bottom of wall

\*Fig B: shows Wall Plate, white boarder represents size of display\*

Fig A

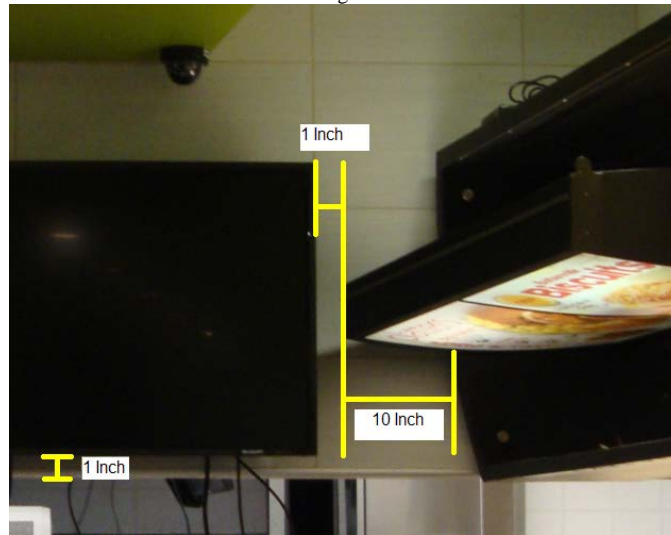


Fig B Left Location Mount

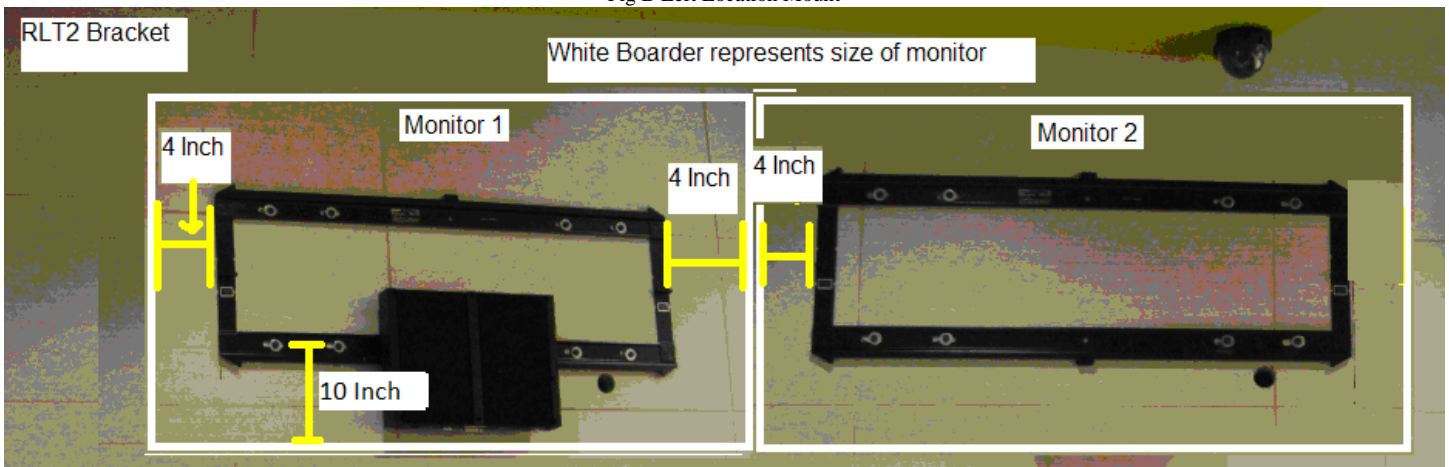
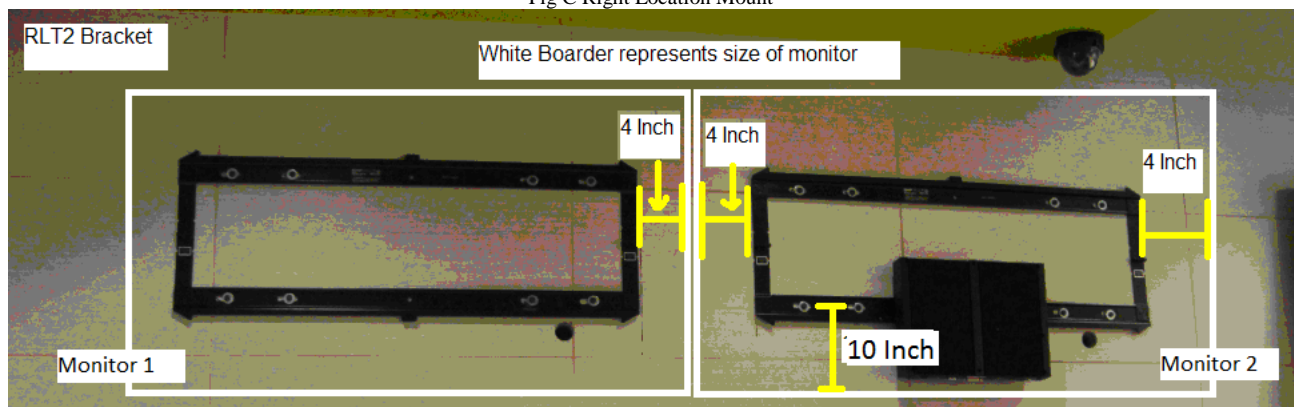


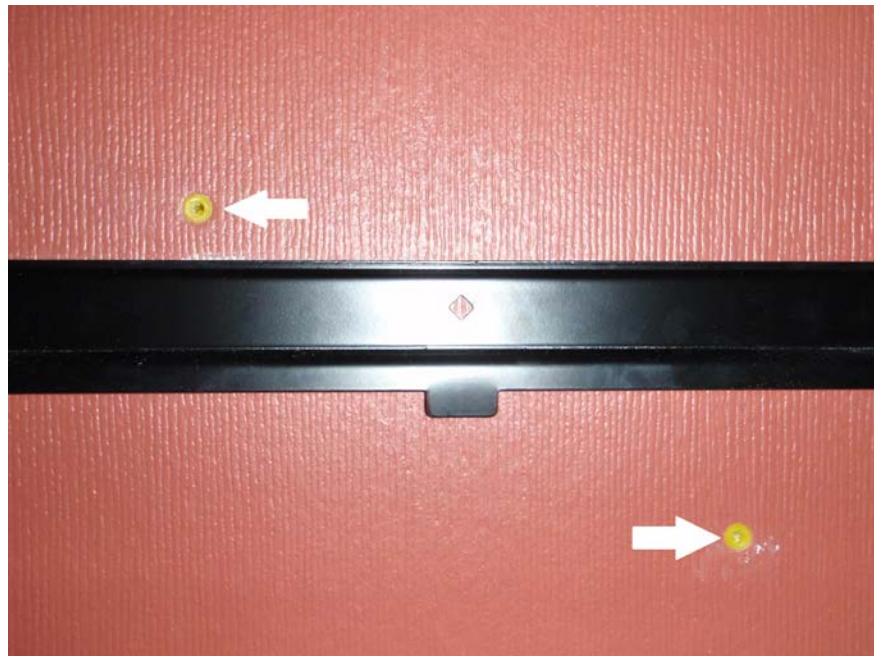
Fig C Right Location Mount



## Media Engine Mounting

Use Media Engine Interface to mark location for keyhole mounting screws

Line up top 2 holes with top of Wall Pate as shown in picture



Use 10 x 2 screws (to be provided by Installer) to mount Media Engine.  
Ensure that Media Engine is mounted snugly and is removable



### Mounting Interface Bracket Arms to Display

The following is required per connection points (4 points in total, circled in Yellow). Fig C

- 1 x SW-P Spacer
- 1 x SW-Q Spacer
- 1 x SW-K M6x35 Screw

Fig C

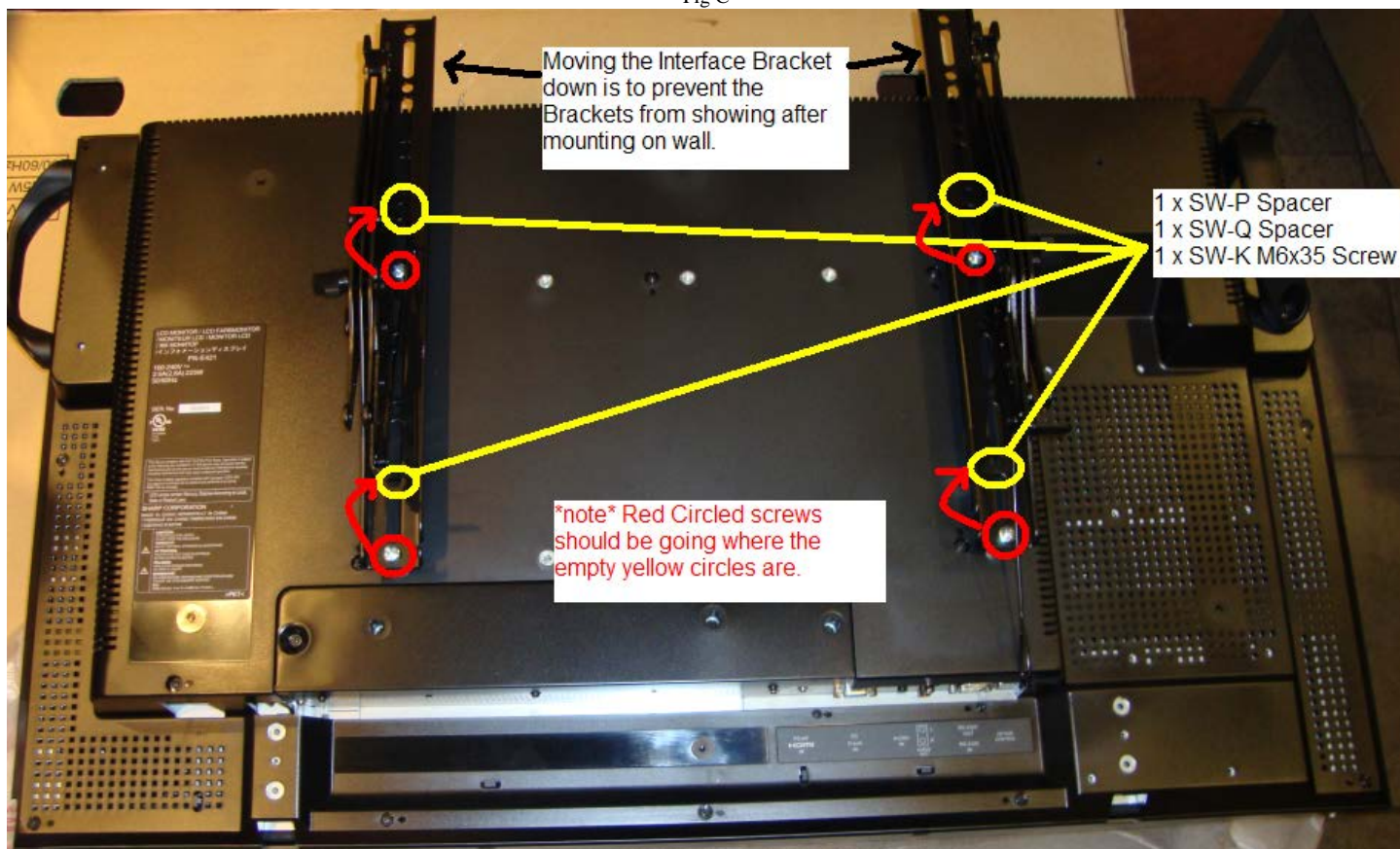




Fig D Proper Screw Location

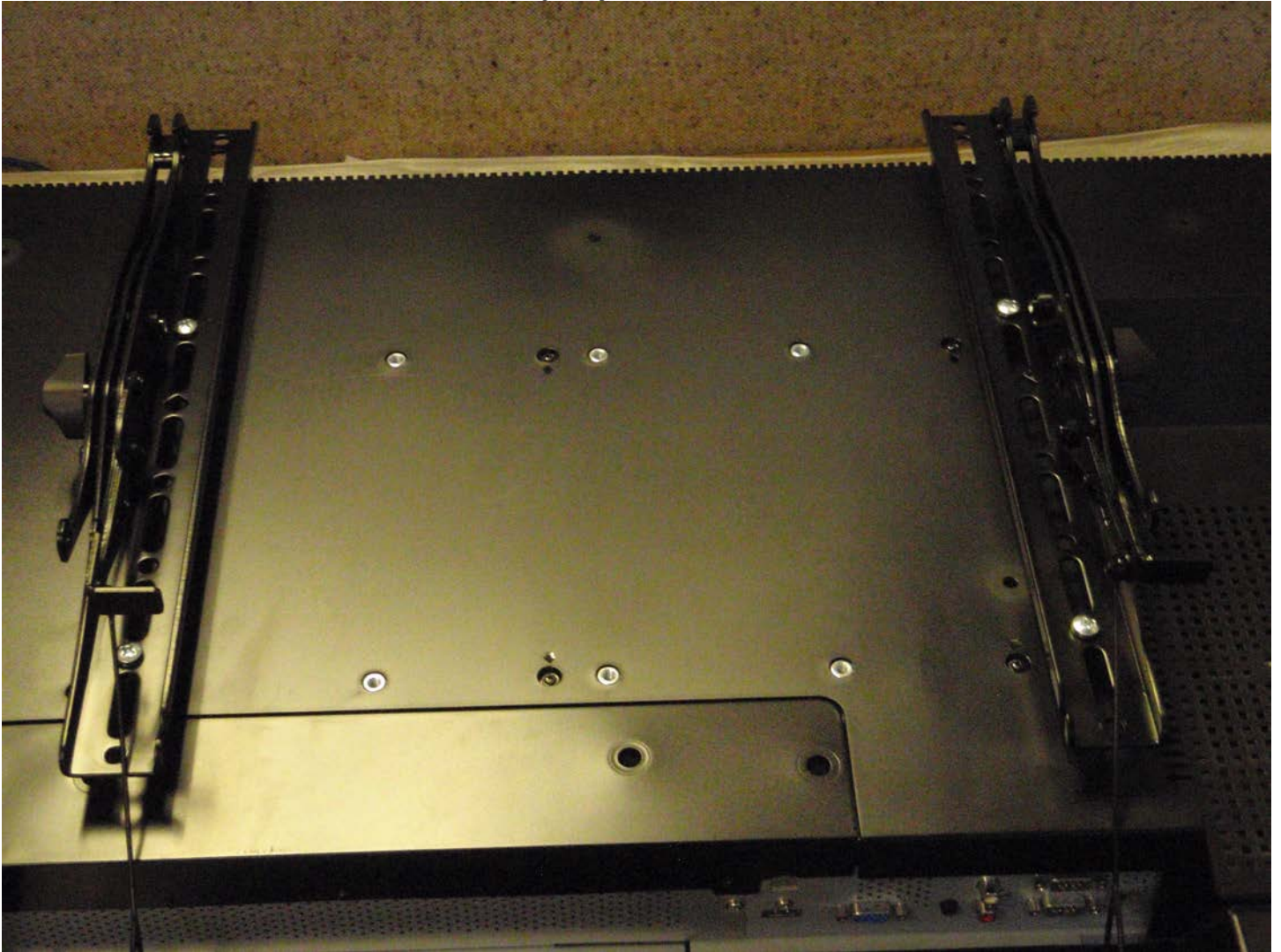
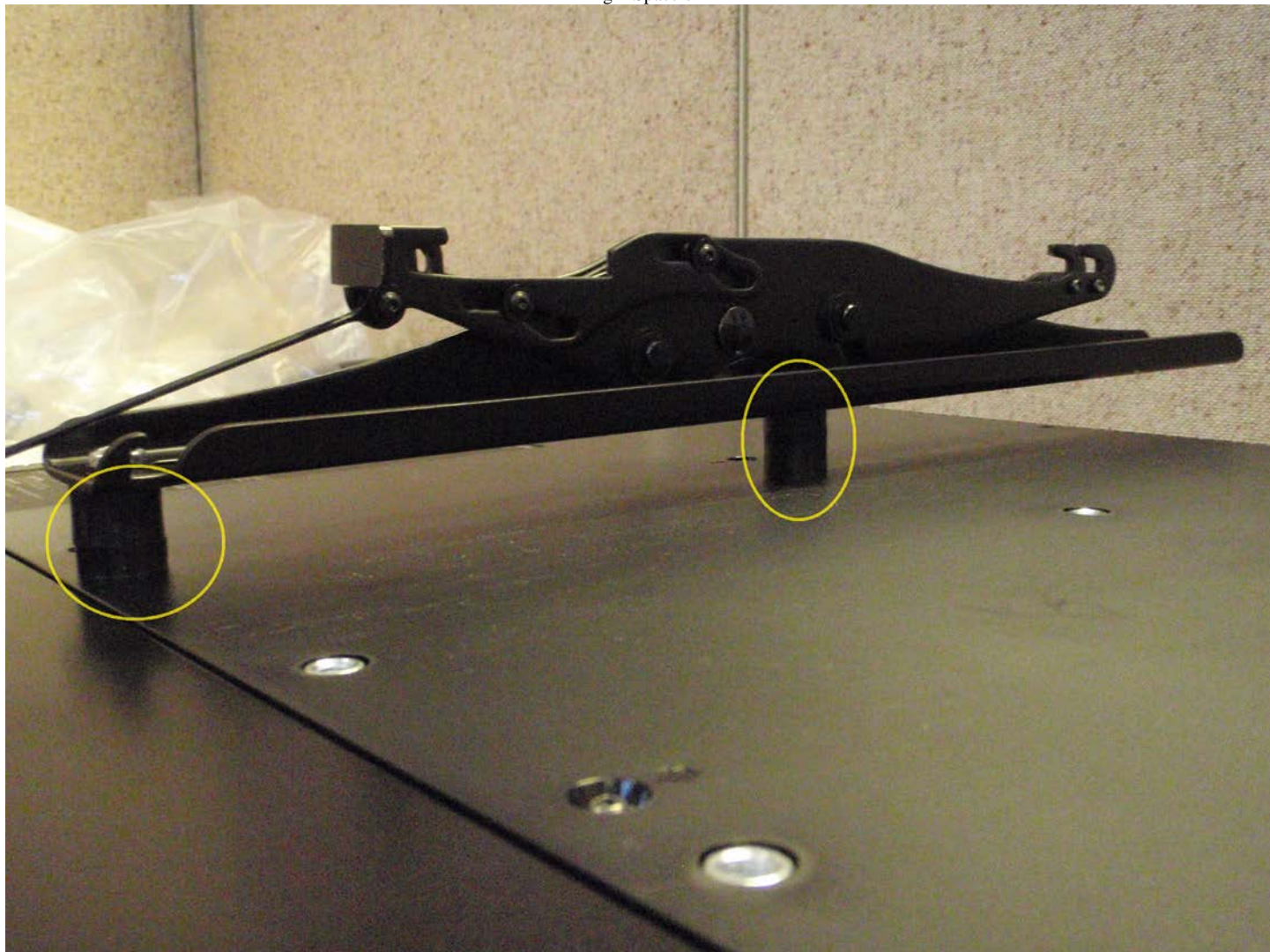


Fig E Spacers





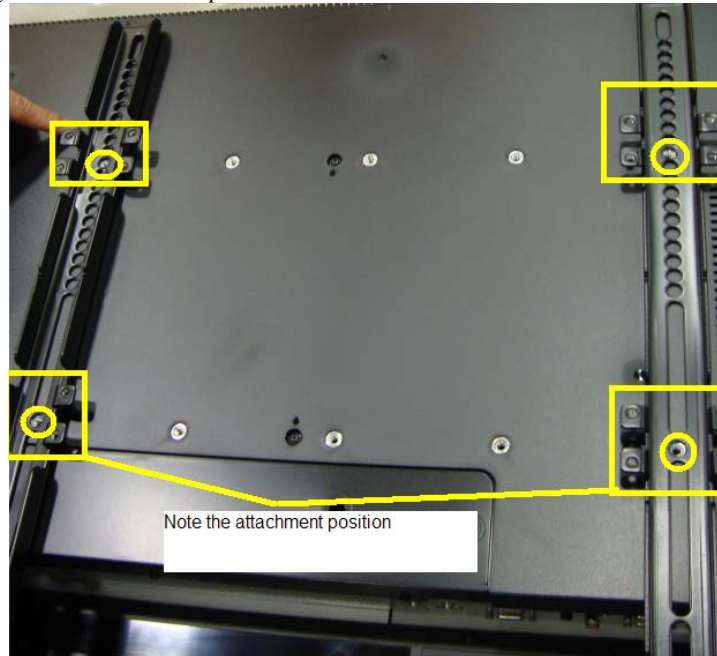
## **MWR (Articulating Arm Mount)**

Attach vertical portion interface bracket to display. Fig A

Follow Manufacturers Installation Instructions

Screws used: Package E - M6x16

Fig A: note the attachment positions. Brackets must have 3 screw holes between each other.



2) Attach Horizontal portion of interface bracket. Horizontal piece goes on top of the highlighted yellow squares in Fig A. Note the attachment points in Fig B.

Screws used: Package a – Bracket Screws

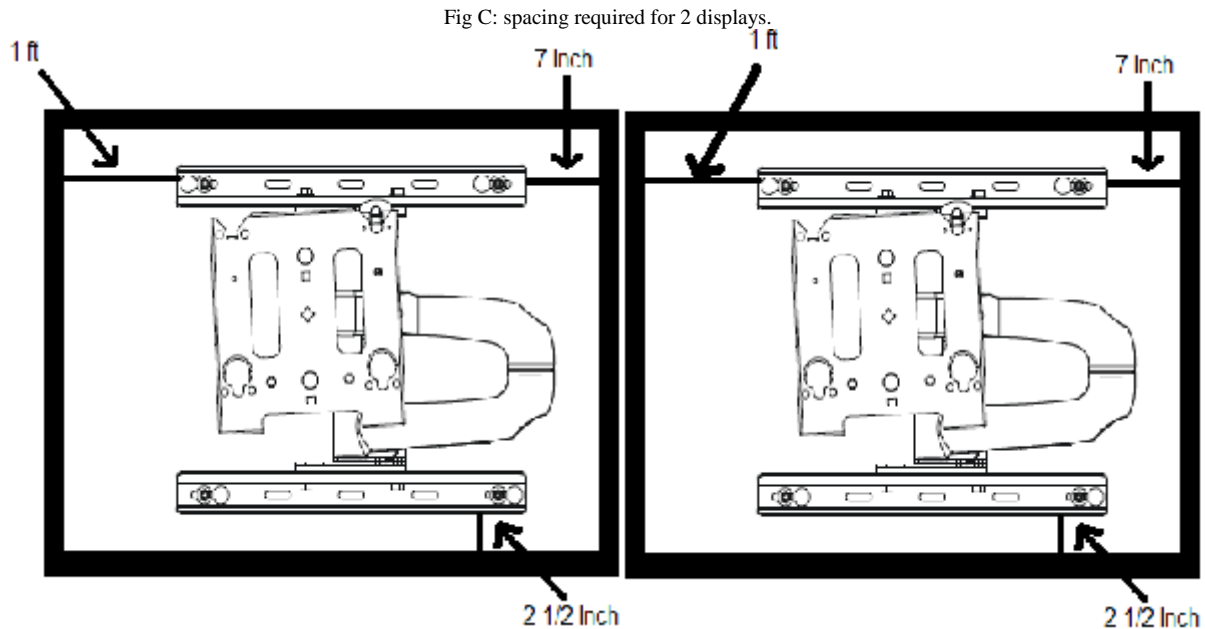
Fig B: shows both vertical and horizontal brackets mounted



### 3) Mount Arm onto wall.

Follow Manufacturers Installation Instructions

Fig C: Shows the display relative to the wall mounting points, when the display is fully retracted.  
When mounting 2 displays, make note of the spacing required to have 2 displays fully retracted.



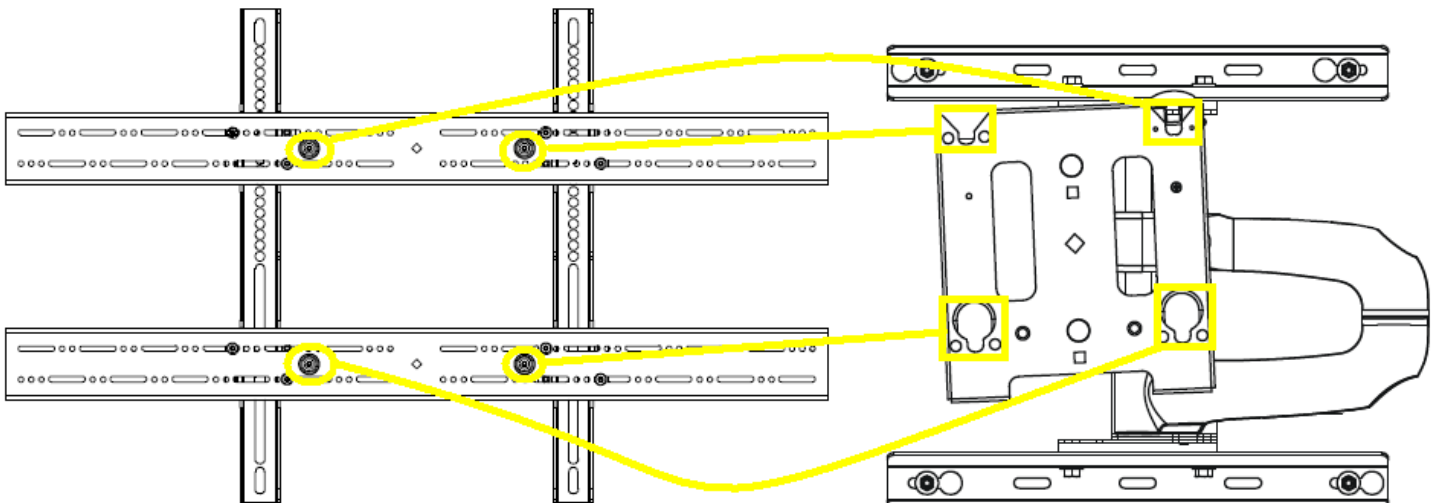
### 4) Attaching Display to Arm (Fig D)

Yellow Circles represent the silver coloured bolts on the horizontal interface bracket

Yellow Squares represent attachment points on the Arm

Lift and place bolts into the attachment points

Fig D: Lift and place bolts from interface bracket onto attachment points on arm.

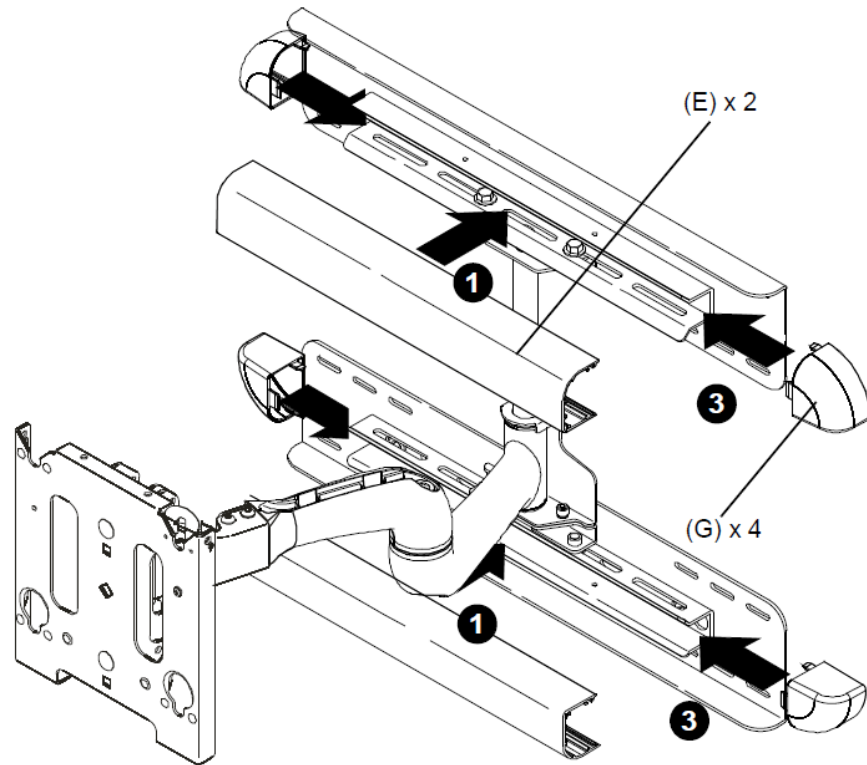




## 5) Mount Media Engine Use

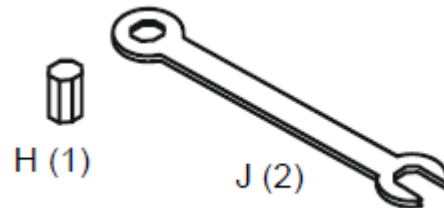
### 5) Installing Caps on Wall mount

Fig E: Installation of Caps



6) Positioning Display: After installation, move display into final viewing position and secure. Using Adjustment tools provided. Tighten and secure display into fixed viewing position Fig F  
Fig G shows adjustment points

Fig F: Tools provided in box

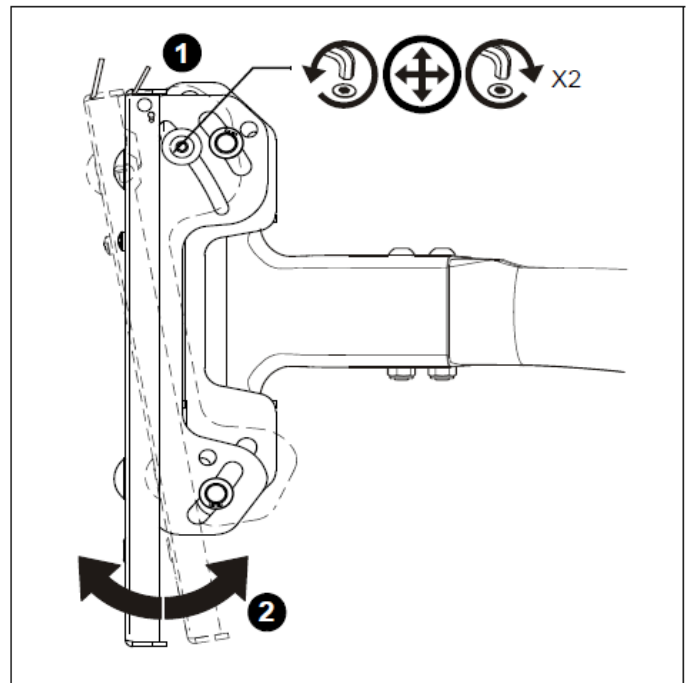


## ADJUSTMENTS

### Pitch Tension Adjustment

To adjust display pitch tension:

1. With display installed, tighten or loosen two screws, one on each side, using the 5/32" hex wrench. (See Figure 11)
2. Check for desired tension.
3. Repeat Steps 1 and 2 until desired tension is obtained.

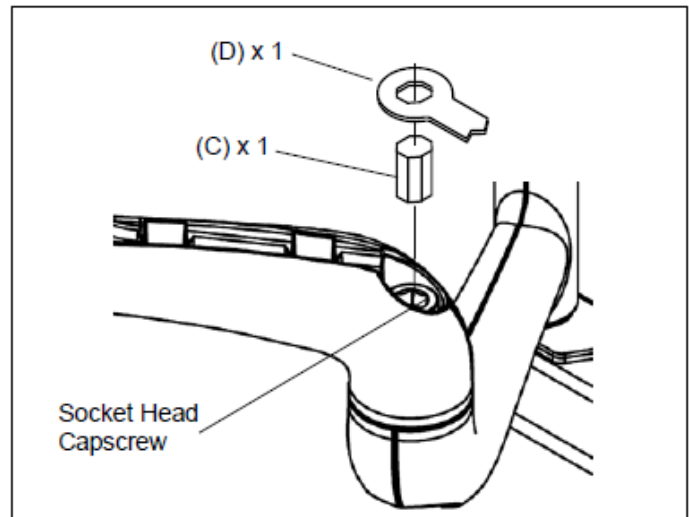
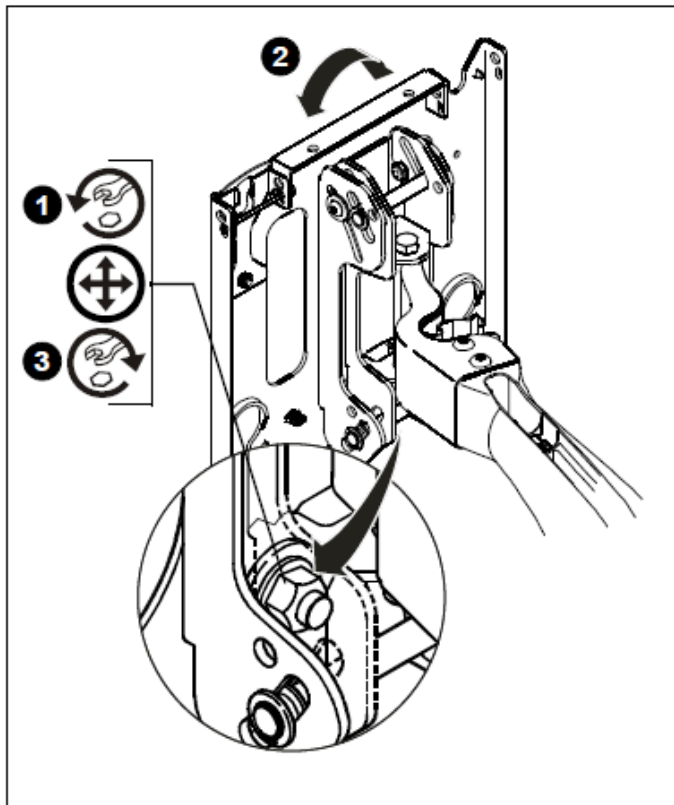


## Roll Adjustment

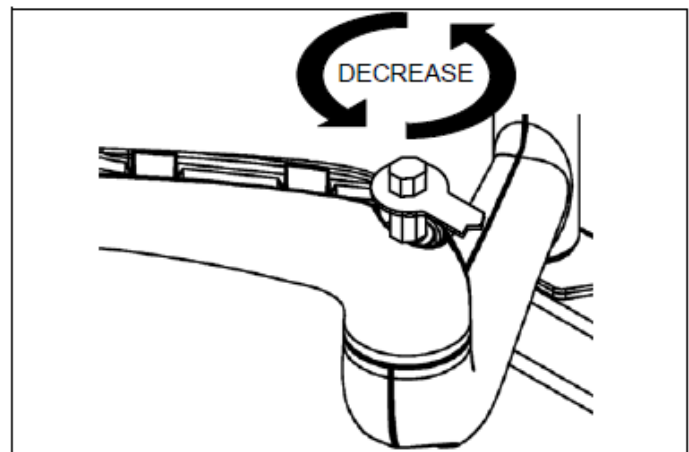
The MWR allows for the horizontal alignment (Roll) of the display to be adjusted up to 2 deg. right or left to level the display after installing.

To adjust Roll:

1. Loosen the roll tension adjustment nut located on the back side of the faceplate assembly. (See Figure 12)
2. Level display.
3. Tighten roll tension adjustment nut. (See Figure 12)



4. Using the adjustment wrench (D), turn adjustment bar (C) clockwise to increase swing arm tension or counterclockwise to reduce swing arm tension. (Small adjustments of 1/8 turn or less are typically all that is required to achieve desired tension.) (See Figure 14) and (See Figure 15)



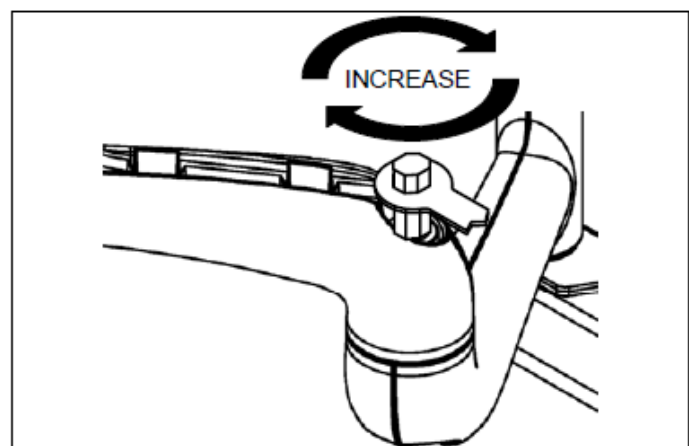
## Swing Arm Tension Adjustment

Swing arm tension is pre-set at the factory and is adjusted to accommodate displays with weights near the top of the mounts capacity.

If smaller displays are used it may be difficult to reposition the display after mounting. Swing arm tension can be adjusted to compensate for smaller display by:

The display must be mounted prior to adjusting swing arm tension.

1. Locate the adjustment bar (H) and adjustment wrench (J).
2. Place adjustment bar (H) into socket head cap screw located at swing arm pivot point. (See Figure 13)



### Media Engine Mounting

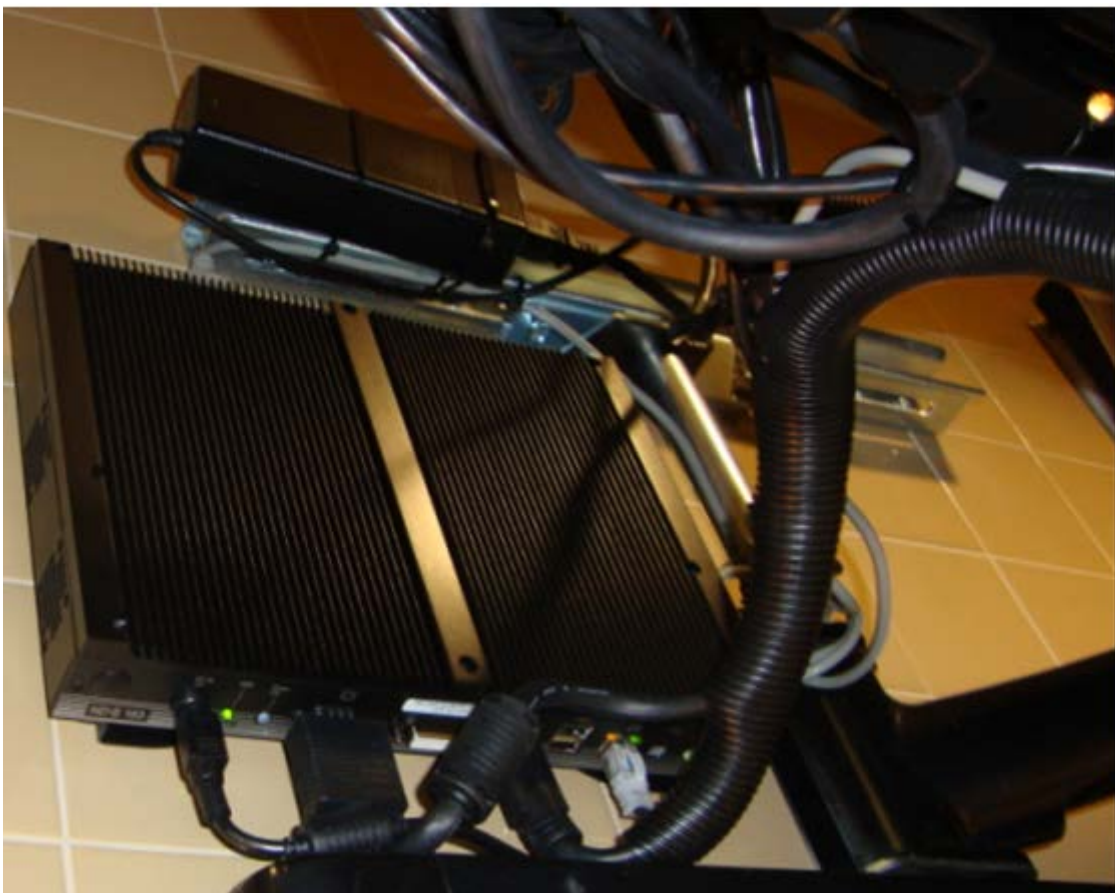
Use Media Engine Interface to mark location for keyhole mounting screws (2 screws to be provided by installer)

Use 10 x 2 screws (to be provided by Installer) to mount Media Engine

Ensure that Media Engine is mounted snugly and is removable



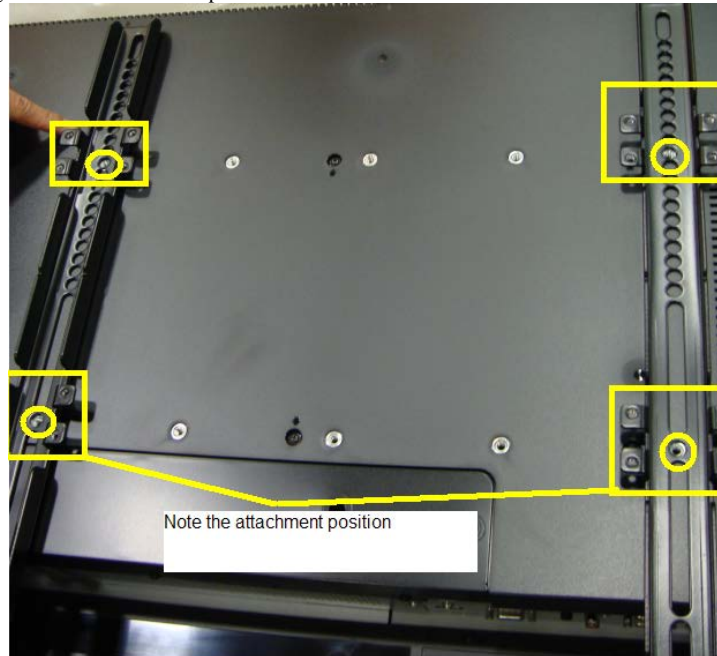
Attach Media Engine Interface to Media Engine  
Mount Media engine on Wall



## MCSU (Ceiling Mount)

- 1) Attach vertical portion interface bracket to display. Fig A  
Follow Manufacturers Installation Instructions  
Screws used: Package E - M6x16

Fig A: note the attachment positions. Brackets must have 3 screw holes between each other.



- 2) Attach Horizontal portion of interface bracket. Horizontal piece goes on top of the highlighted yellow squares in Fig A. Note the attachment points in Fig B.

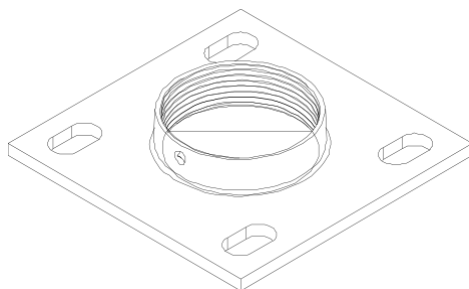
Screws used: Package A – Bracket Screws

Fig B: shows both vertical and horizontal brackets mounted

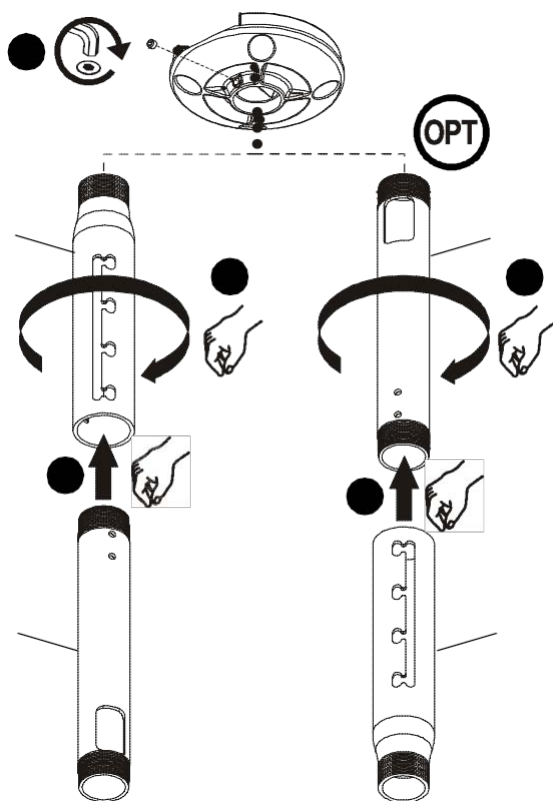




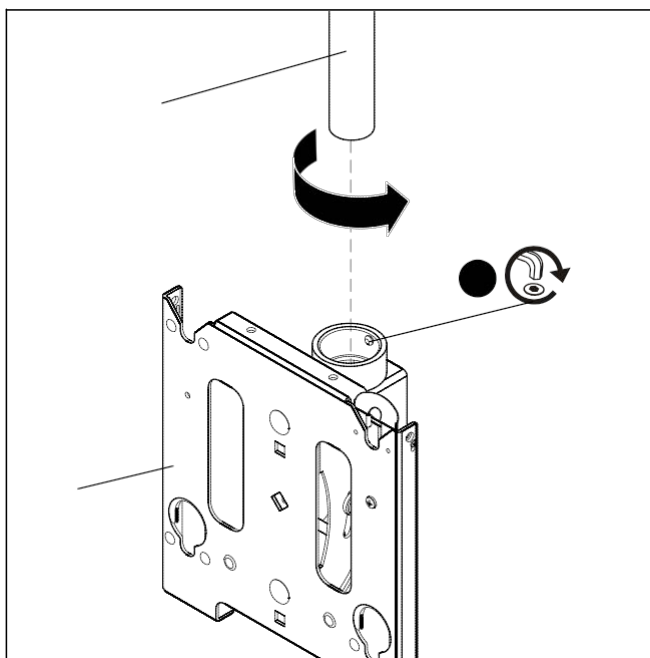
3) Attach Ceiling Mount Plate as per Manufacturer's Instructions.



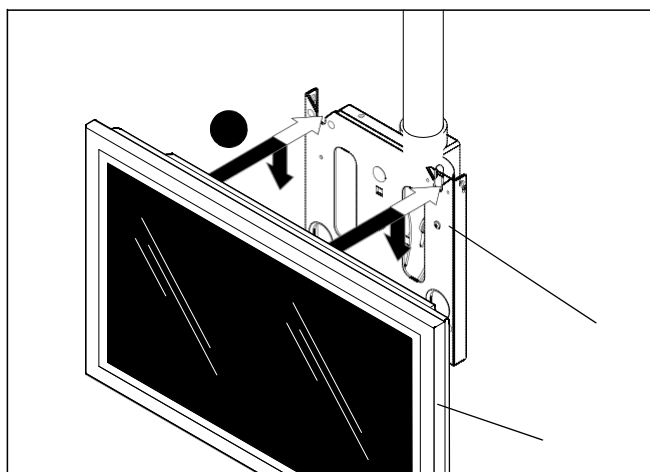
4) Attach Pipe to Ceiling Mount Plate as per Manufacturer's instructions (install smaller pipe to Mount Plate as shown on right to allow opening for cables, electrical at top of pipe). Pipe is adjustable from 3' to 5'. See page 4 for Height specifications.



5) Attach Bracket to Pipe as per Manufacturer's instructions.



6) Attach Display to MCSU Bracket as per Manufacturer's instructions.







7) Insert Bolts (Installer to provide 2 bolts and 4 nuts) into Media Engine Interface Bracket (use two inside holes as shown)



8) Attach Media Engine Interface to Media Engine (ensure that interface is attached so that VGA and Power connections will be facing down when mounted)





9) Attach Media Engine to top arm of MSCU Interface

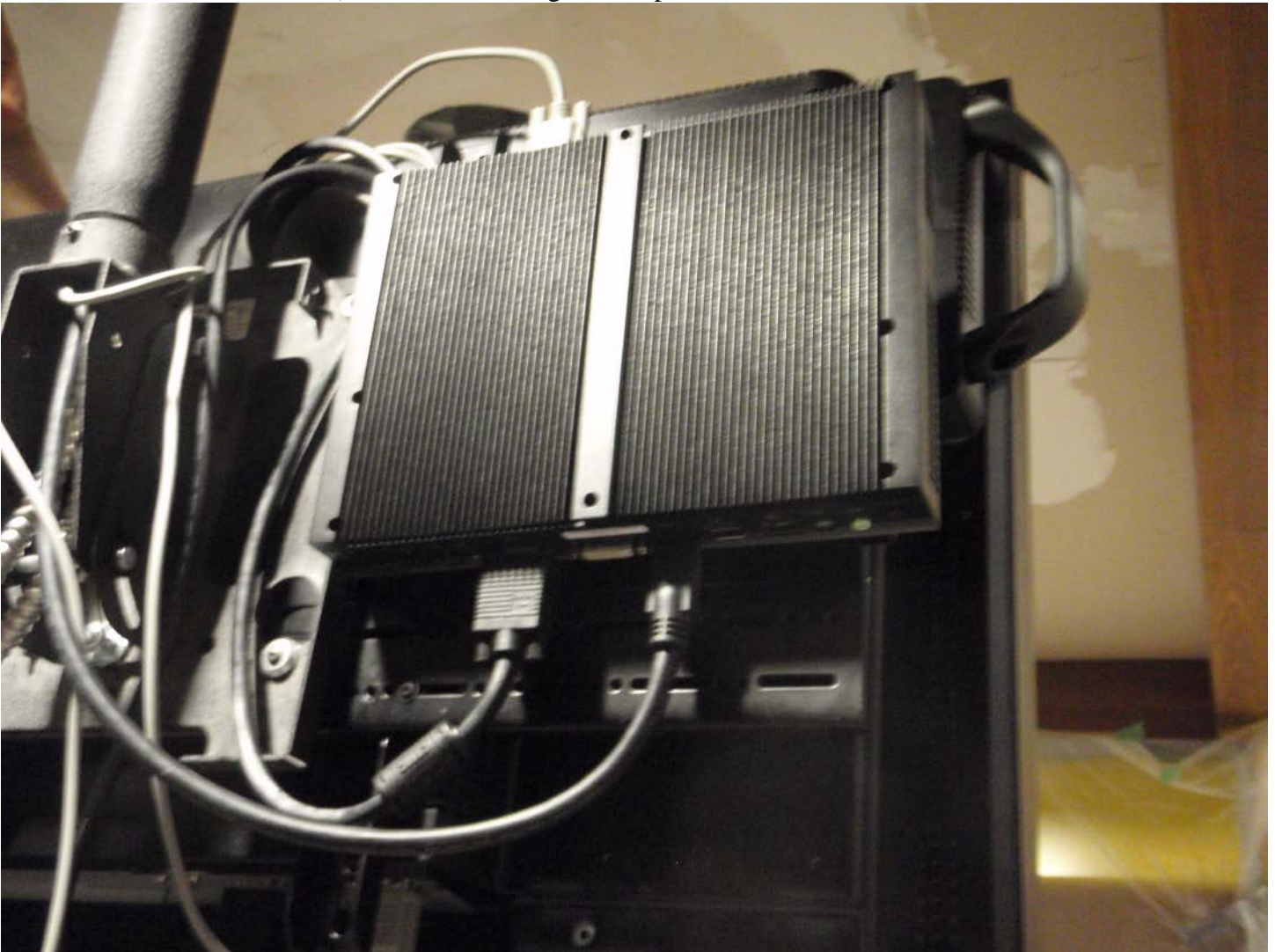


Fig D View from above Media Engine showing screws attached to MSCU Interface

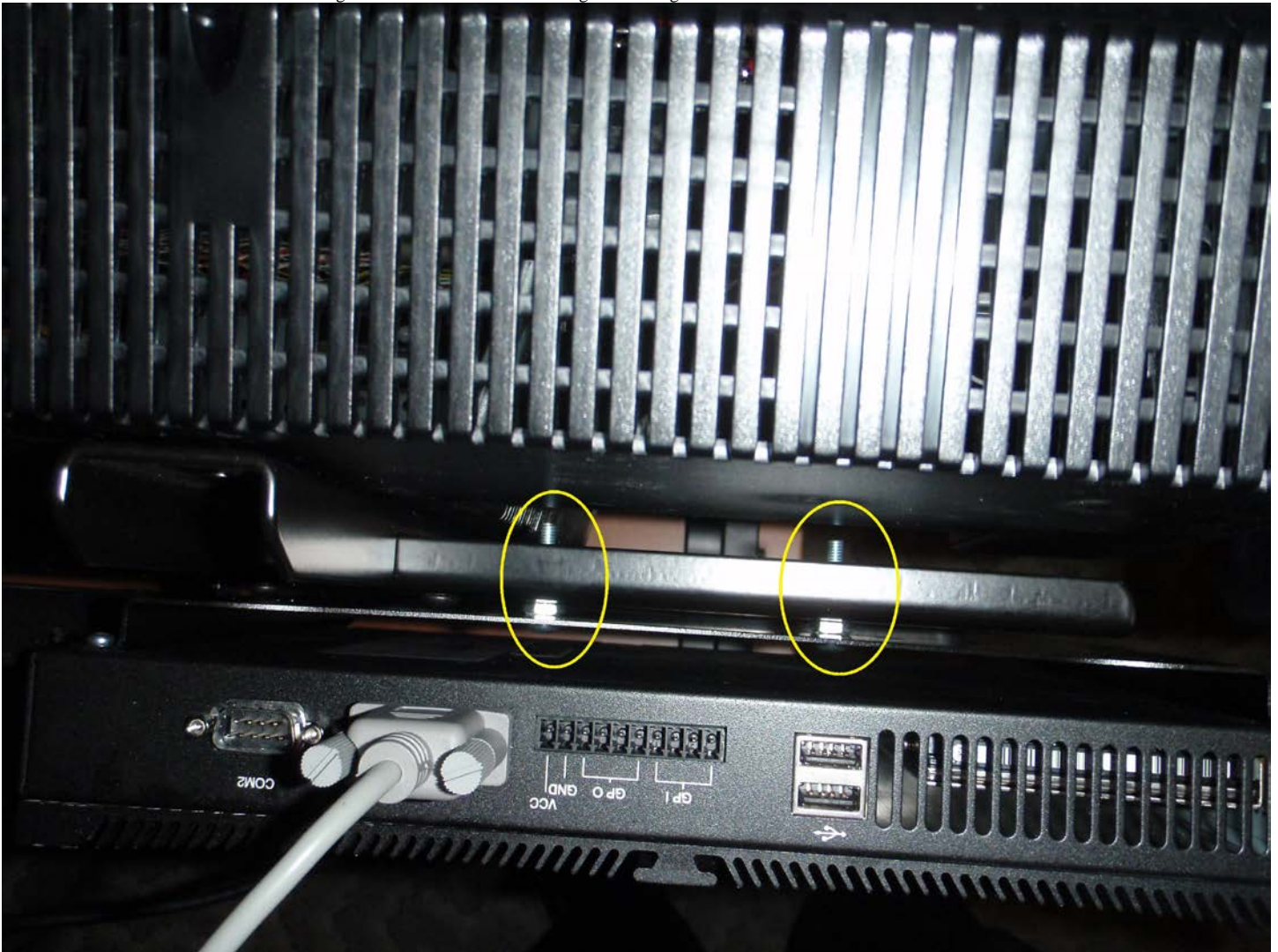




Fig E View from side of Media Engine showing screws attached to MSCU Interface



- 10) For Dual Display configuration run HDMI and Serial Cable from Media Engine and Display (respectively) up through pipe and down pipe at second display.