*Sign**Wall*

HD Video Wall System

Hardware Installation and Configuration

Smart-AVI

SMART AUDIO VIDEO INNOVATION

www.smartavi.com

Thank You & Congratulations

Congratulations on your purchase of the SignWall information display netwrok. Please read the instructions carefully before using.

When you need to make a presentation that will really grab their attention, SignWall is your best choice. SignWall reduces unnecessary costs and eliminated the need for multiple PCs to run applications concurrently. Each screen is capable of running unique applications, as though they were on separate computers.

SignWall is the ultimate solution for the display and management of your digital content. It is highly cost effective and easy to use. It is perfect for both small-scale and large-scale projects.

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b.   Operations outside product specifications.

c.   Mechanical abuse and exposure to severe conditions.

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4.   SmartAVI shall have no obligation to repair, replace, or refund unit until customer returns defective product to SmartAVI.

5.   Any replacement product could be new or like new, provided that it has functionality at least equal to that of the product being replaced.

6.   SmartAVI limited warranty is valid in any contry where the covered product is distributed by SmartAVI.

What's in the Box?

PART NO.	QTY	DESCRIPTION
AP-SVW-120G5	1	SignWall Video Wall Player with 120GB Disk, 4GB RAM, i5 - *Figure A*
CCPWR06	1	6ft Power Cable - *Figure B*
CCVHDCI4DVI	1	VHDCI to 4-Port DVI Breakout Adapter for Radeon HD 5570 - *Figure C*
CCDVIMM1M	4	1 meter male-to-male DVI cable - *Figure D*
AP-SNSV-SW	1	SignWallManager Software - *Figure E*
ASUSBKEY	2	USB Key for SignWall Software - *Figure F*
SEDM-4P	1	EDID-Mirror-4P 4-Port DVI-D Emulator - *Figure G*
PS5VDC2A	1	Power Supply 5-Volt 2-Amp - *Figure H*

Figure A

Figure B

Figure C

x4

Figure D

Figure E

x2

Figure F

Figure G

Figure H

Introduction

SignWall is powered by Windows 7 on a blazing fast Intel Core i5 or Core i7 processor with 4GB of RAM and a Solid State Drive (SSD). This combined with a VisionTek AMD Radeon™ HD 5570 1GB SFF 4-Port DVI-D video processor gives SignWall the power to display seamless full HD 1920x1200 video on 4 displays. At the core of the SignWall system is the AMD Eyefinity and and advanced AMD video synchronization technology. This gives you the power to create a video wall up to 4X4 that supports output locking of videoplayback. That means you can play a single video that is powered by 4 separate processors, making it the most stable, precise and smooth output possible.

SignWall is capable of capturing 1080p HD video in real-time and displaying it in any configuration you choose. This feature makes it easy for someone to play a video on the SignWall without having to capture the video ahead of time, eliminating the need to convert video into bulky files. If you need to quickly play a video, just connect your HDMI compatible player to the SignWall's HDMI capture port and play your video.

Features

- Use with up to four high-definition displays per player
- Synchronizes players to form video walls up to 4X4
- Supports a broad range of media types including video, images, PowerPoint, Flash, PDF, Excel and more
- Capture live 1080p HDMI input and play it back in real-time
- Includes the SignWatchPro surveillance system to monitor your installation

SignWall Technical Specifications

SYSTEM SPECIFICATIONS	
Motherboard	Intel BOXDP67DEB3 LGA 1155 Intel P67 SATA 6Gb/s USB 3.0 Micro ATX Intel Mother-board
Processor	Intel Core i5-2400 Sandy Bridge 3.1GHz (3.4GHz Turbo Boost) LGA 1155 95W Quad-Core Desktop Processor **OR** Intel Core i7-2600 Sandy Bridge 3.4GHz (3.8GHz Turbo Boost) LGA 1155 95W Quad-Core Desktop Processor
RAM	G.SKILL Ripjaws X Series 4GB (2 x 2GB) 240-Pin DDR3 SDRAM DDR3 1333 (PC3 10666) Desktop Memory
Storage	SanDisk Ultra SDSSDH-120G-G25 2.5" 120GB SATA II Internal Solid State Drive (SSD)
Onboard Video	Intel HD Graphics 2000 PCI-E
Operating System	Windows 7
SUPPORTED FORMATS	
Image	JPG, GIF, Animated GIF
Video	AVI, WMV9, MPEG-2 PS, MPEG-1, MPEG-2 MP@ML, MPEG-4.2 ASP, MPEG-4.10/H.264, MP@L3.0,
Audio	MPEG-1 Layer I, II, MPEG-4 AAC
Other	Excel, Powerpoint, PDF, HTML, Flash, Quicktime, RSS
VIDEO INTERFACE	
Adapter	AMD RADEON 5570 GPU @ 650MHz 900345
Memory	High speed DDR3 Memory, 1GB on board memory
Resolution	Up to 1920 x 1200 @60Hz Standard Digital 7680 x 1080 (2x2) Eyefinity mode. 1920 x 4320 (1x4) Eyefinity mode. 5760 x 1080 (1x3) Eyefinity mode. 1920 x 3240 (3x1) Eyefininity mode
Connector	(4) ***DVI-D via VHDCI Breakout Cable***
AUDIO INTERFACE	
Connector	Stereo 3.5mm Female, SPDIF
OTHER INTERFACES	
USB	(2) USB 2.0, (2) USB 3.0
Firewire	IEEE 1394a
Power	Internal 100-240 VAC, 50-60 HZ, 500 Watts
Network	RJ-45 Gigabit
ENVIRONMENTAL	
* Operating temperature: 35º F to 96º F	
* Storage temperature: -20º F to 140º F	
Dimensions	17"W x 3.5"(2U)H x 15"D
WARRANTY	
1 Year	

Included EDID-Mirror-4P EDID Emulator

The EDID-Mirror is a DVI-D EDID (Extended Display Identification Data) emulator that supports up to 4 DVI-D displays. EDID-Mirror will learn and emulate the EDID configuration of the displays, so that the displays can be disconnected without losing their configuration. The EDID information stores the resolution and timing information for each connected display. The EDID mirror provides the computer with a constant EDID signal, regardless of whether the displays are connected or not. This is particularly useful when using operating systems, including Windows 7, that reset display configurations when the displays are disconnected. The EDID-Mirror is a time saver that offers the freedom to switch displays while eliminating the headache of EDID configuration.

- Learn up to 4 EDID configurations at once
- Stores EDID configuration in non-volatile memory so that the unit may be powered off and the configuration will not be lost
- Displays can be disconnected as needed without losing EDID configuration
- Uses standard EDID configuration standards
- Compatible with most DVI-D displays and all Windows versions

ABOUT EDID

EDID provides plug-and-play capability to your displays. When you plug a display into your computer, the EDID table in the display tells the computer the optimal resolution to use.

Technical Specifications

DVI-D VIDEO	
Format	DVI-D Single Line
Maximum Pixel Clock	165 MHz
Input Interface	(4) DVI-D 29-pin female
Output Interface	(4) DVI-D 29-pin female
Resolution	Up to 1920 x 1200 @60Hz
DDC	5 volts p-p(TTL)
Input Equalization	Automatic
Input Cable Length	Up to 10 ft.
Output Cable Length	Up to 10 ft.
OTHER	
DDC Signal	5 Volts [peak-to-peak], TTL
TDMS Signal	1.2 Volts[peak-to-peak], TTL
Power	External 5VDC2A @ 10W
Dimensions	8.625"W x 1.75"H x 2.175"D
Weight	0.5 lbs.
Approvals	Device: CE, ROHS Power Supply: C-UL US, CE

Quick Installation

IMPORTANT: The SignWall is already pre-configured for use. All that is necessary is to connect the hardware as outlined below:
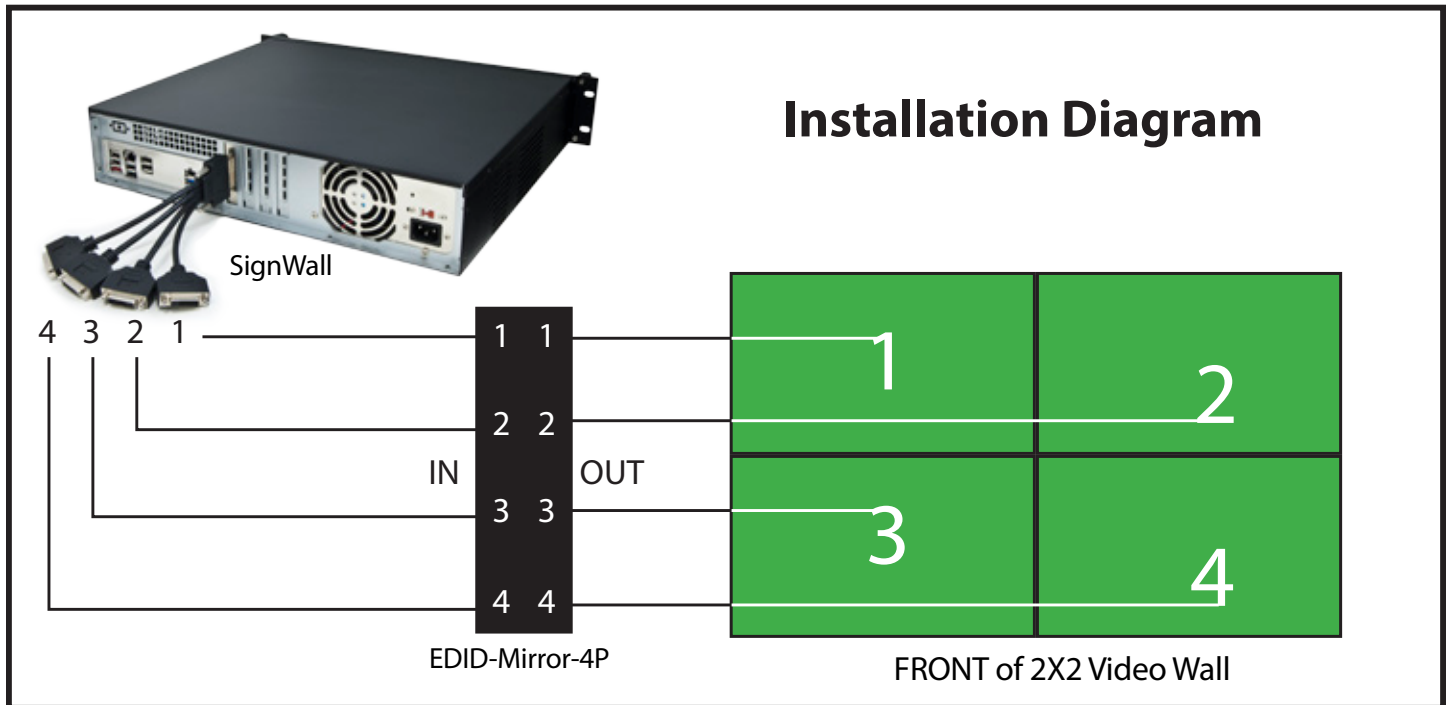
Installation Diagram

SignWall

4 3 2 1

1 1
2 2
IN   OUT
3 3
4 4

EDID-Mirror-4P

1
2
3
4

FRONT of 2X2 Video Wall

1. Connect all the DVI-D cables from the SignWall processor to the EDID-Mirror-4P and to the Video Wall as shown in the above diagram.
2. Plug in the green ASUSBKEY to any available USB port.
3. Power on the EDID-Mirror-4P by plugging it in.
4. Power on the Displays.
5. Power on the SignWall processor.
6. Run the SignWall Manager software.

NOTE: If for some reason you need to change or reset your configuration, follow the instructions on the following pages titled **Custom Installation.**

Custom Installation

> **IMPORTANT:** The SignWall is already pre-configured for use. Please refer to the *Quick Installation* on the previous page.
> If you are sure you want to completely re-configure the SignWall settings, follow the instructions below:

Installation Diagram

SignWall

EDID-Mirror-4P

FRONT of 2X2 Video Wall
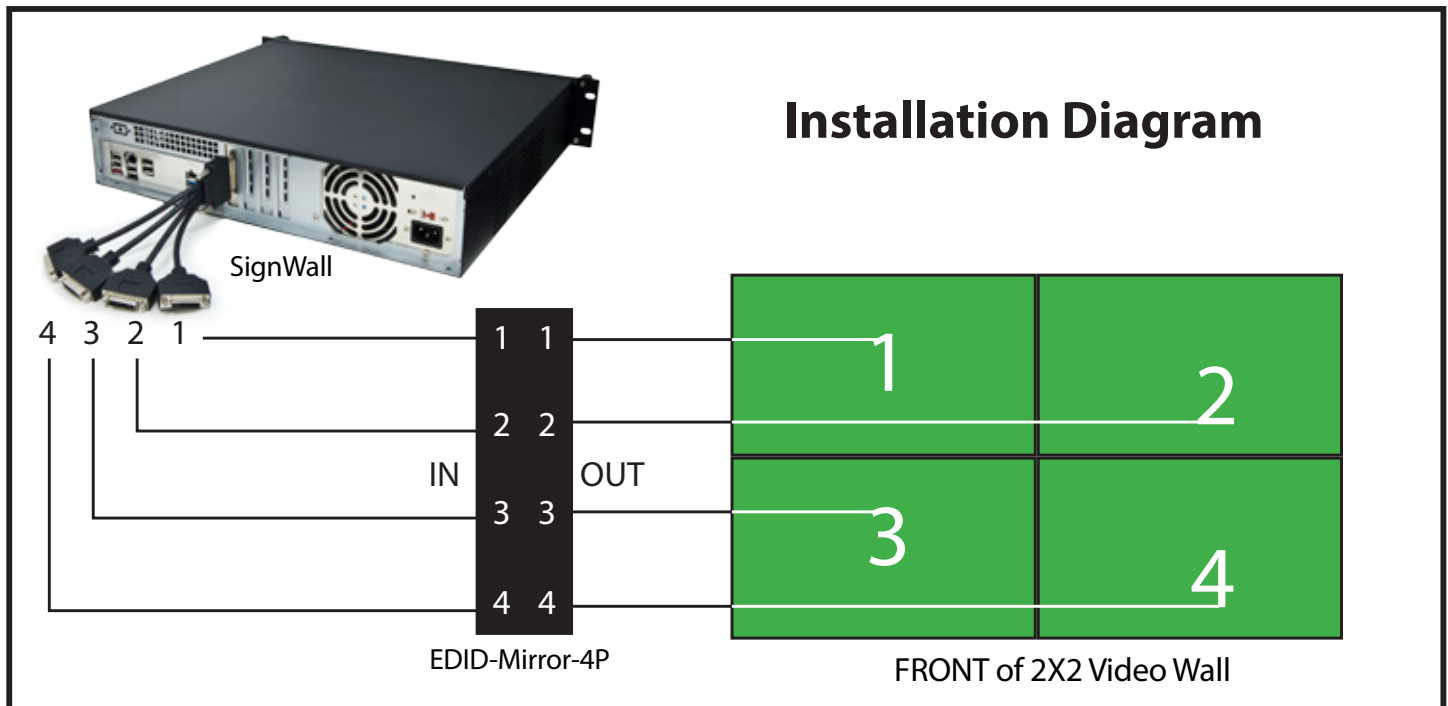
Connecting the Hardware

1. Connect all the DVI-D cables from the SignWall processor to the EDID-Mirror-4P and to the Video Wall as shown in the above diagram.
2. Plug in the green ASUSBKEY to any available USB port.
3. Power on the EDID-Mirror-4P by plugging it in.
4. Power on the Displays.
5. Power on the SignWall processor.

Learning the EDID with the EDID-Mirror-4P

1. The activity lights on the EDID-Mirror-4P will be steadily illuminated.
2. Press and hold the LEARN button until both the activity lights turn off. (approximately 2 seconds)
3. Release the LEARN button.
4. The activity lights will blink slowly while the EDID is learned.
5. When the learning is completed, both activity lights will quickly blink alternately indicating that the EDID has been learned. (If the learning fails, the activity lights will turn off for approximately 2 seconds)
6. It is now safe to disconnect the DVI-D cables from the displays without losing your configuration.
7. The EDID information is stored even if the EDID-Master-4P is powered off.

Configuring the Displays using the Catalyst Control Center
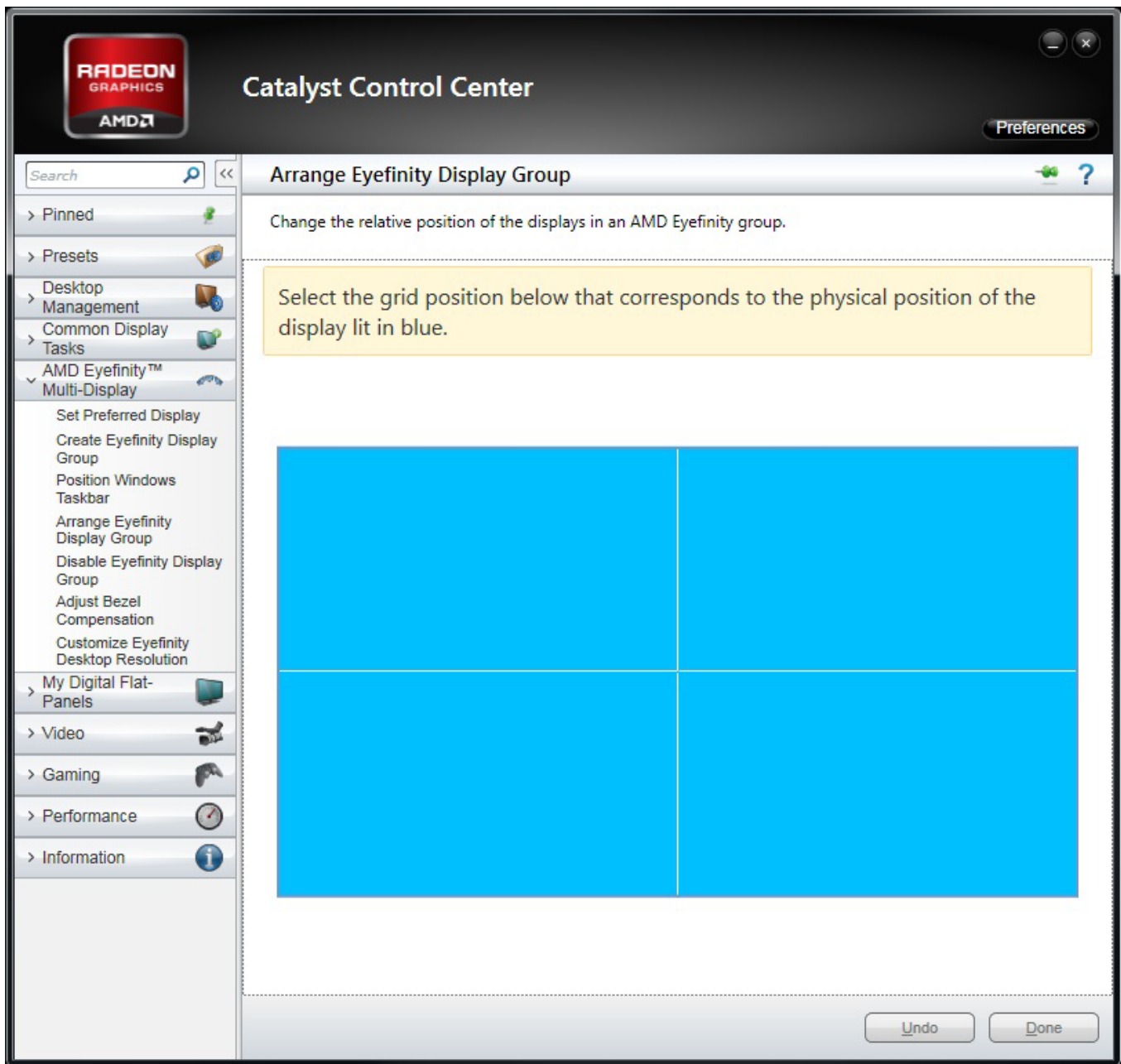
1. Right-click on the Desktop
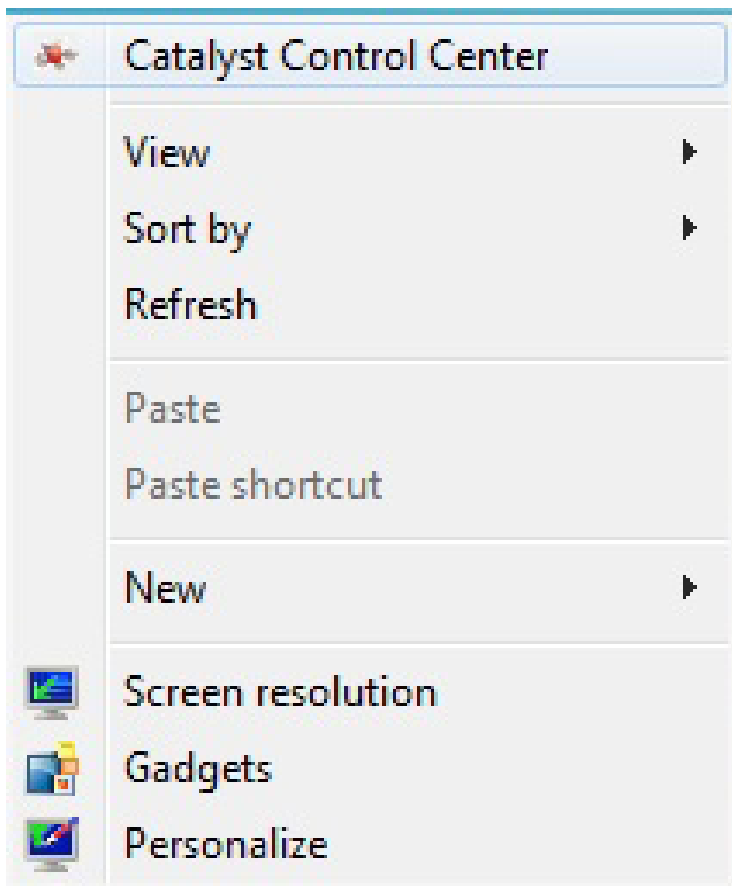
2. Click on **Catalyst Control Center**
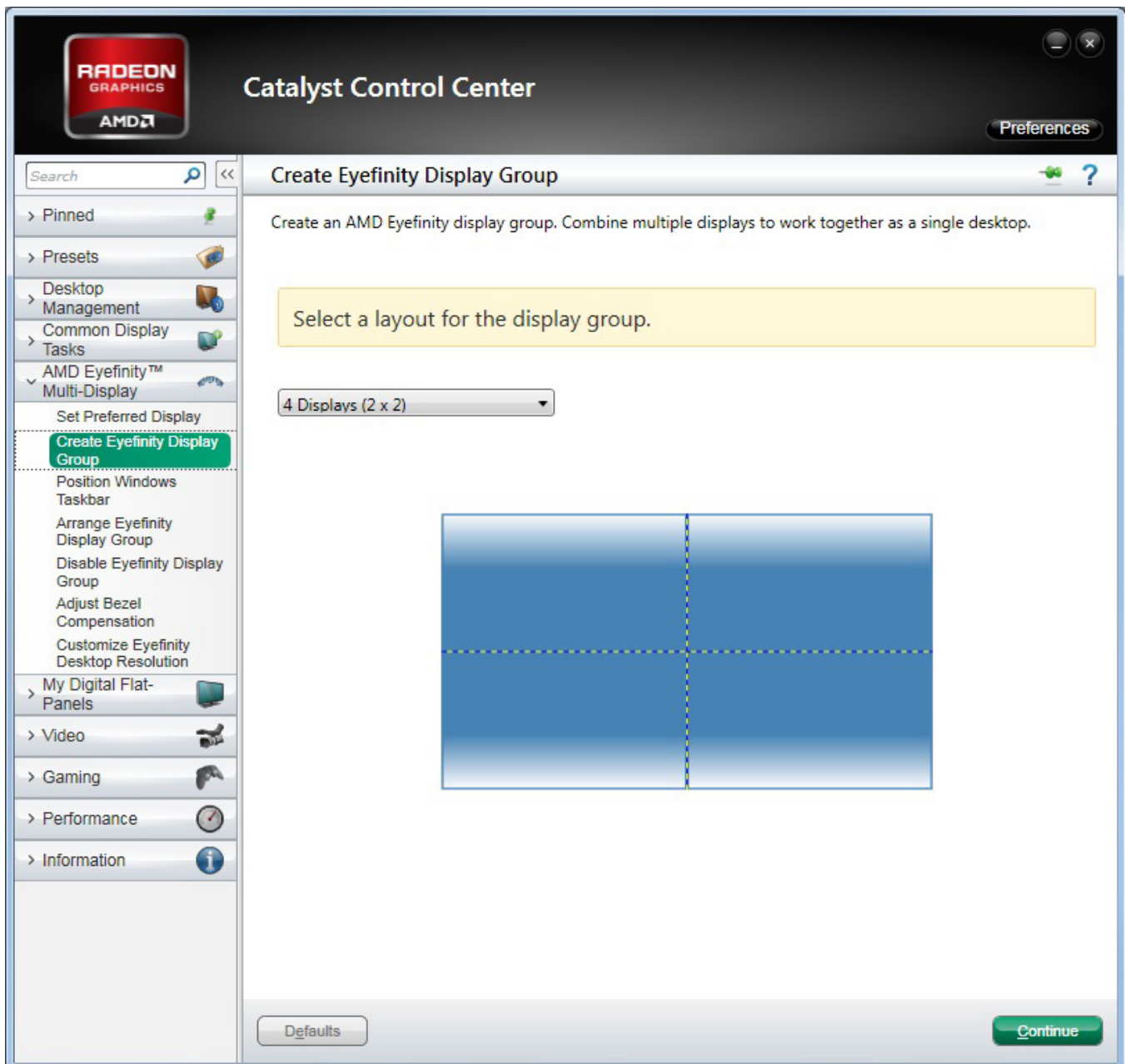
3. Go to **AMD Eyefinity Multi-Display** -> **Create Eyefinity Display Group**
4. Select **4 Displays (2x2)**
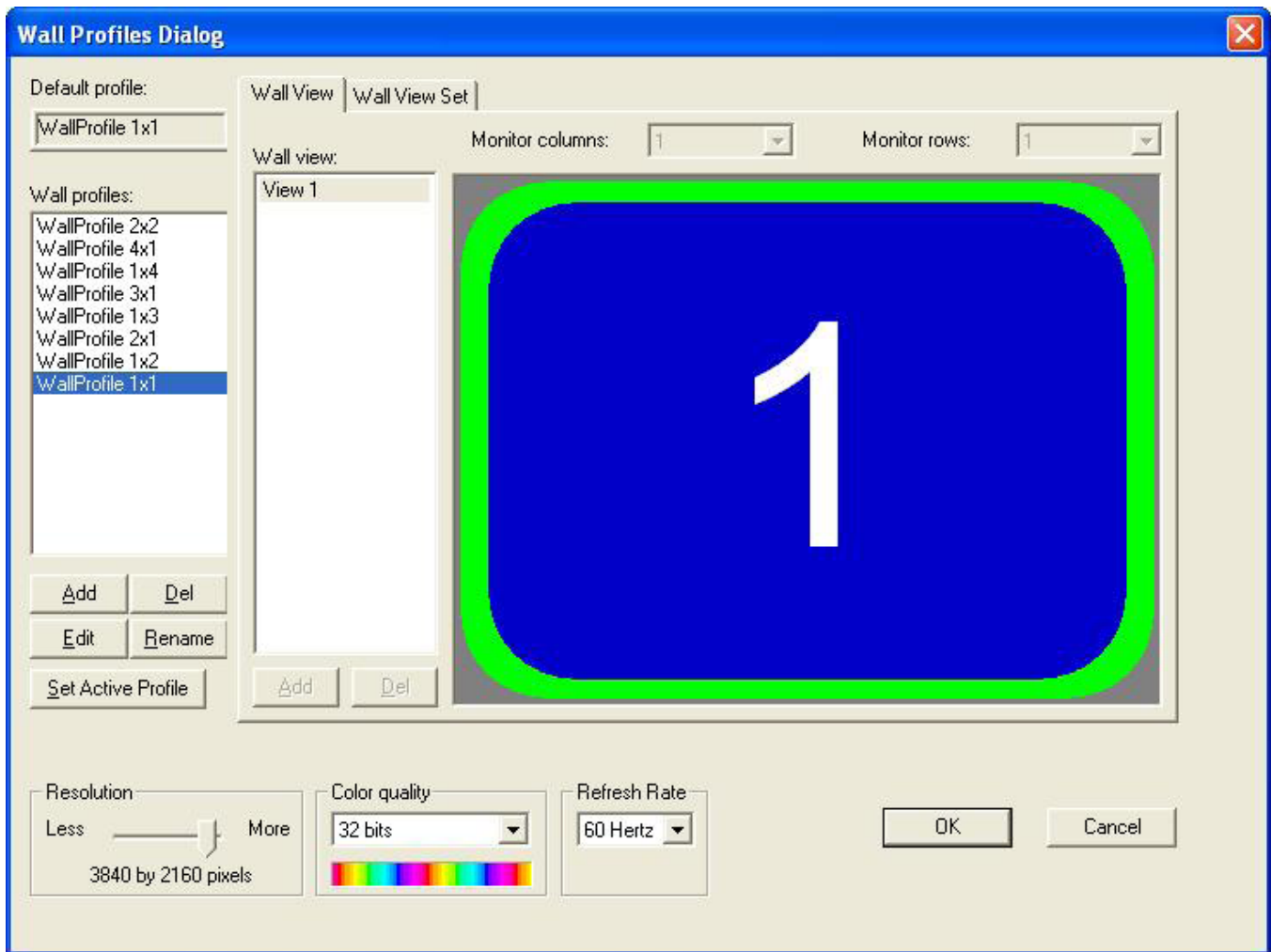5. Click **Continue**

6. Click **Arrange**

7. Select the grid position that corresponds to the physical position of the display lit in blue.
8. Click **Done**

Completing the Configuration in the SignWall Task Manager

1. Open the **Wall** menu in the SignWall Task Manager

2. Click on **Select Wall profile** or press **Ctrl+Shift+V**

3. Set **WallProfile 1x1**
4. Change the Resolution **3840 by 2160 pixels**.
5. Click **Set Active Profile**
6. Click **OK**

SignWall is now configured and ready for use.

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