MXWall-LT

User Manual

4-Input and Up to 12-Output Video Wall Processor and Matrix Switch

All-in-one video wall and matrix solution with 1080p Full HD resolution output, integrated converter & scaler, flexible creative configuration modes, and user friendly control software!

Smart-AVI
SMART AUDIO VIDEO INNOVATION

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# WHAT'S IN THE BOX

PART NO.	QTY	DESCRIPTION
MXWALL-LT-S	1	4-Input 12-Output Video Wall Processor and Matrix Switch
CCPWR06	1	Power supply cord
Manual	1	Quick Start Guide

INTRODUCTION

The MXWall-LT is an enhanced and fully scalable video wall controller. The MXWall-LT combines switching with the high definition capabilities of a converter. Specifically designed and optimized for the most demanding environments and applications, the MXWall-LT lets users manage and route up to 12 HDMI or DVI video sources to as many as 12 HD displays. There are a total of 4 card slots for input and output cards. Each card has 4 ports. You can add input and output cards in any combination, but there must be at least 1 input card and 1 output card in the final configuration. Capable of expanding any one HD signal from as many as 4 to 12 large-scale screens at 1080p (1920x1080 @ 60Hz). Completely compatible with HDCP and HDMI 1.4, the MXWall-LT reliably transmits HD content across scalable display configurations in real-time for 24/7 uninterrupted use via HDMI or DVI outputs.

FEATURES

- Android companion application for quick switching of layouts from your mobile device.
- Complete hardware solution
- Plug-and-play ready
- Output resolution up to 1080p
- Reliable 24/7 uninterrupted heavy duty use
- HDCP and HDMI 1.4 compliant
- User-Friendly MXWall Manager Software
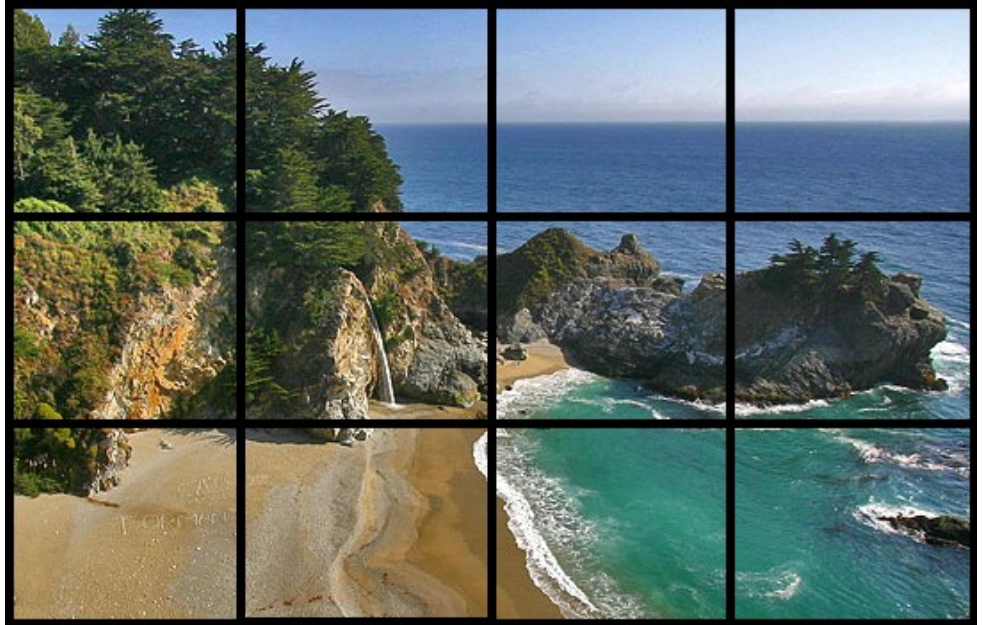
APPLICATIONS

- Corporate or Educational Presentations
- Airport Installations
- Wall Displays
- Digital Signage
- Dealer Rooms
- Control Rooms
- Shopping Centers
- Security
- Corporate Lobbies

TECHNICAL SPECIFICATIONS

VIDEO	
Video Amplifier Bandwidth	3.2G
Input Video Signal	Video (TMDS) 0.5~1.0Vpp
Input DDC Signal	5 volts
Compliances	HDMI 1.4 and HDCP
Pixel Rates	Clock frequency beyond 165Mpix/second
Format	4:4:4 and 4:2:2 data input formats
Input Resolution	480p, 720p, 1080i, 1080p
Output Resolution	Up to 1080p (1920X1080@60Hz)
Input Card Format	4-port HDMI or DVI
Output Card Format	4-port HDMI or DVI
Video Input	Up to 3 cards *
Video Output	Up to 3 cards *
Video Type	RGB/YCBCR : 24/30/36-bits,YCBCR: 8/10/12/16/20/24-bits
CONTROLS	
Front	2x8 keyboard with 4x40 LCD
RS-232	DB9 Female, 115200 BPS, N, 8, 1, No flow control
Network	RJ45, UDP
OTHER	
Working Temp.	32 to 122°F (0 to 50 °C)
Working Humidity	Up to 85% RH (no condensation)
Storage Temp.	-4 to 149 °F (-20 to 65 °C)
Storage Humidity	Up to 90% RH (no condensation)
Weight	20 lbs. Unit Only
Dimensions	17 in (W) x 3.5 in (H) x 15 in (D)
Power Supply	50/60Hz, 100~230 VAC

* There are a total of 4 card slots for input and output cards. You can add input and output cards in any combination, but there must be at least 1 input card and 1 output card in the final configuration.

HARDWARE INSTALLATION

1. Position MXWall-LT conveniently and keep it unplugged.
2. Connect displays to the MXWall-LT and power on the displays.
3. Connect any video source to the MXWall-LT.
4. Optionally connect an RS-232 cable from a PC to the RS-232 port on the unit for additional control.
5. Optionally connect an Ethernet cable to the MXWall-LT for additional control.
6. Turn on the MXWall-LT and wait a few seconds for the unit to initialize.
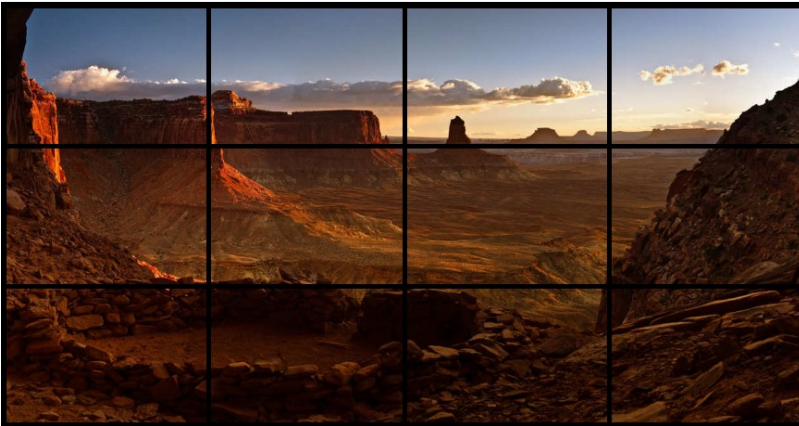
AVAILABLE CONFIGURATIONS

It is easy to create different configurations or modes that are easy to navigate through with the MXWall-LT. There are endless possibilities. Creating and switching between display modes is simple. Front panel buttons, on-screen-display, RS-232, and TCP/IP can be used to switch between modes at will.

VIDEO WALL MODE: Users can stretch an input image across 4 to 12 HD screens with screen resolution of 1920x1080.

INDIVIDUAL MODE: Users can route individual input images to each display individually.

QUAD MODE: Create 4 four proportional sections, each displaying one of any 4 input images.

User defined custom displays can be created with supplied software: Users can populate individual screens with multiple inputs. Add any of the input signals to play along side others within a single display.

FRONT PANEL CONTROLS

The front panel of the MXWall-LT allows you to quickly set up IP address, Baud Rate, and control input and outputs.

Press the "Menu" button, and a Menu of items will appear in the green screen. You can use the buttons on the far right to go up or down or simply press the number next to the option you want.

Baud: Option 1 will allow you to set the BAUD rate. You will have four options.
Simply press the button with of the BUAD rate located to the left or navigate using the two far right buttons. Press "Enter" once the Baud Rate has been selected.

Mch ID: Option 2 lets you control multiple video walls through 1 computer.

IP Addr: Option 3 will allow you to set your IP address. Once inside IP you will see two options:

Press 2, Then the "Mode" button to enter your IP address manually using the number buttons on the front panel. Once you have input your IP address press the "Enter" button and the "Save" button.

Buzz: Option 4 allows you to turn the Buzzer ON or OFF.

MPort: Option 5 allows you to set your port. Simply use the buttons located on the panel. Then hit "enter" and "Save"

IMPORTANT: These settings must match what you use in the MXWall-LT software. If you use the default settings or custom settings make a note of them so you can enter them into the MXWall-LT software settings during software install.

SOFTWARE INSTALLATION

1. Run setup.exe (Provided with the MXWallProInstaller software)
2. A Setup window will pop open. Click 'Next >' to continue (Figure 8-1). Subsequently select where you would like to save MxWallPro and who the users will be and click 'Next >'. (Figure 8-2)
3. You will be asked to confirm the installation. Click 'Next>' to continue. (Figure 8-3)
4. Your System may ask if its ok for the installer to make changes to your computer. Click the Yes button to continue. (Figure 8-4)
5. When the installation is complete a window will appear stating whether the installation was successful or not. Click the Close button to exit. (Figure 8-5)
6. Execute the MXWallPro.exe shortcut to start the MXWall Pro software. (Figure 8-6)
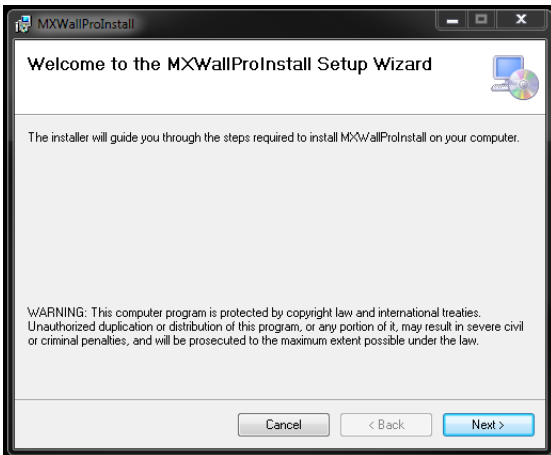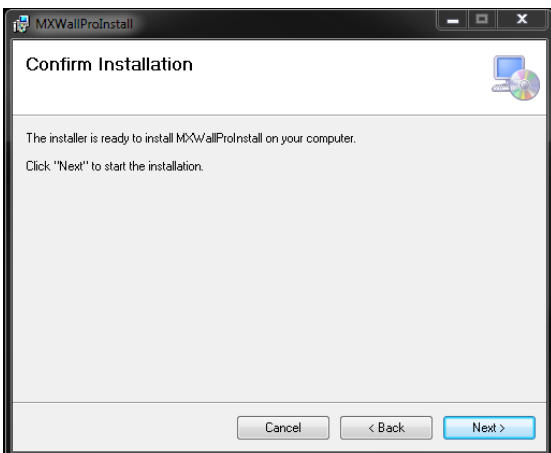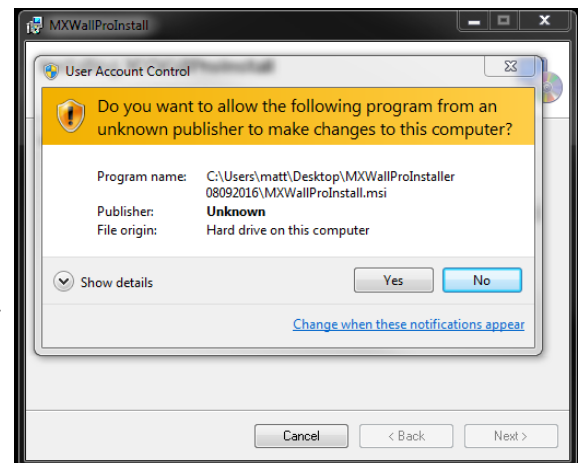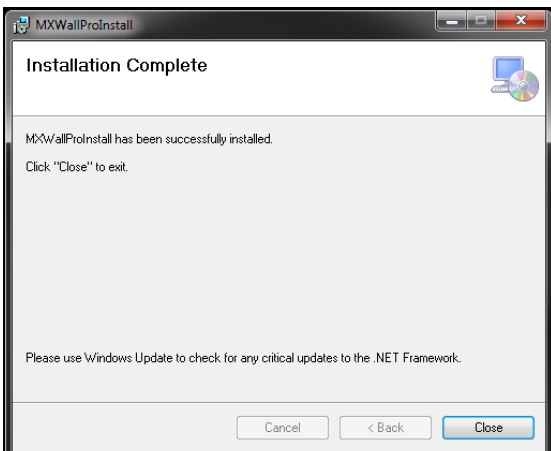
Figure 8-1
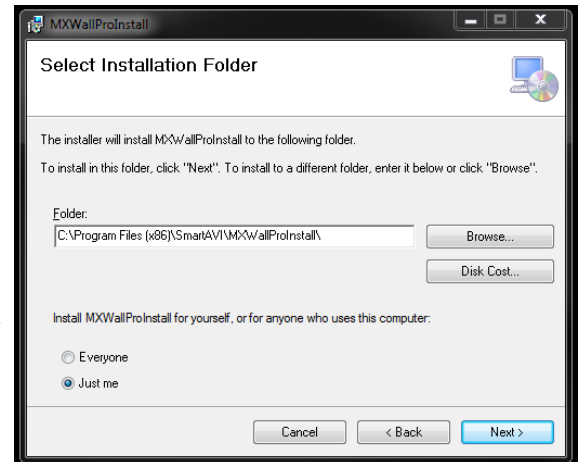
Figure 8-2

Figure 8-3

Figure 8-4

Figure 8-5

Figure 8-6

USING THE SOFTWARE

First Time Logging In
1. Run MxWallPro
2. Log in using the default Account Settings. **Username 'Administrator' Password 'admin',** then click the 'ENTER' button. (Figure 9-1)

Figure 9-1

Configuring Settings
1. Click on 'SETTINGS' Located in the top blue bar. (Figure 9-2)
2. A pop up window of Settings will appear. Here you can set the Serial port, Baud Rate, IP Address and Port number. (Figure 9-3)
3. Once everything is set, Click on 'Set up' on Com Port Side and IP Address side and click on the 'x' on the top right corner to close the box
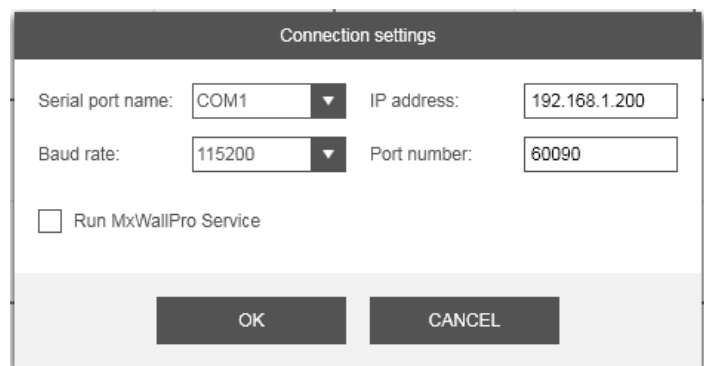

Figure 9-2

Figure 9-3

Connecting/Disconnecting LAN
1. Click on 'LAN', Once connected the red circle with an X in it will disappear as shown in figure 9-4.
2. To disconnect LAN click LAN again. The red circle with an X indicates that you are not connected as shown in figure 9-5. Connecting to the RS-232 COM port functions in the same way. See Figure 9-6.
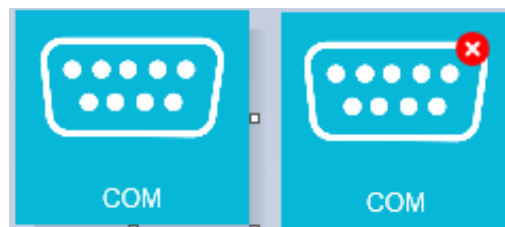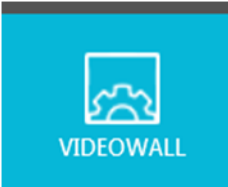

Figure 9-4

Figure 9-5

Figure 9-6

USING THE SOFTWARE (Continued)

Configuring VideoWall

After Logging in, Navigate with your mouse to the top, and click on 'VideoWall'

On the right side of the VideoWall settings window under 'Resolution' you can use the pull down menu to select the resolution. Click on the + or — buttons to set the number of Rows and Columns in your Video Wall array. (Figure 10-1)
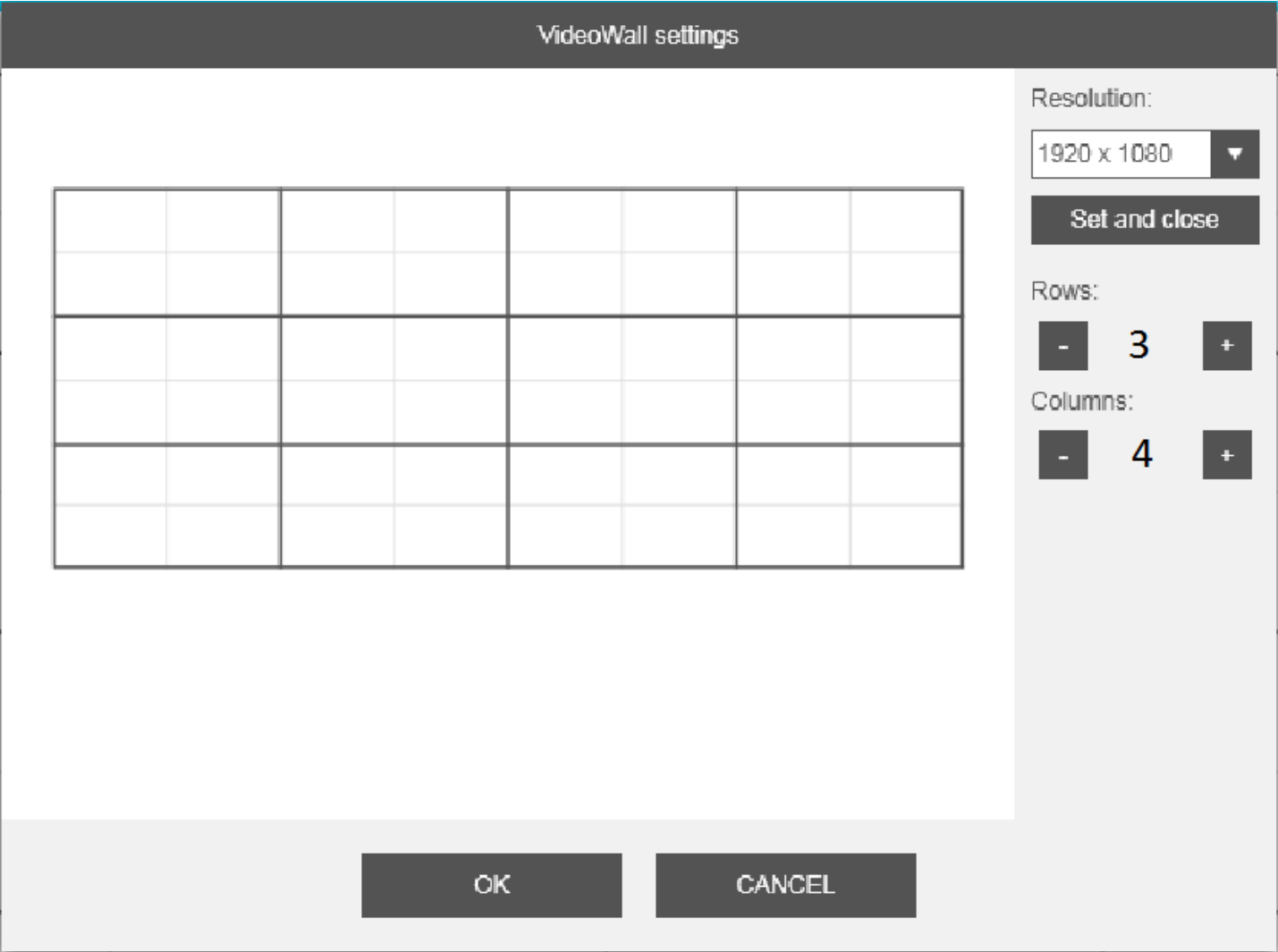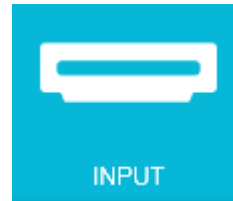

Figure 10-1

USING THE SOFTWARE (Continued)
Creating Inputs and Views
While in the MXWall Main Window click on 'INPUT'.

An 'Input Settings' pop up will appear. See Figure 11-1. Click on the + and — buttons to set the number of input ports and click the OK button. The number of ports on the left side of the screen should change to reflect the new number. See Figure 11-2
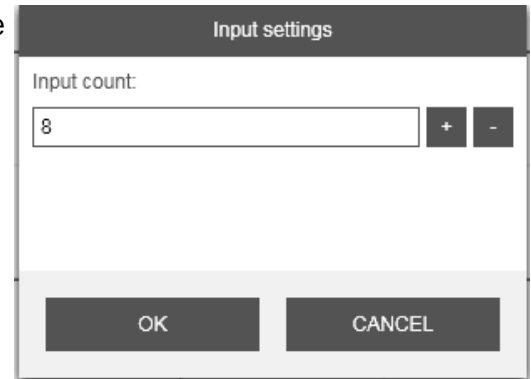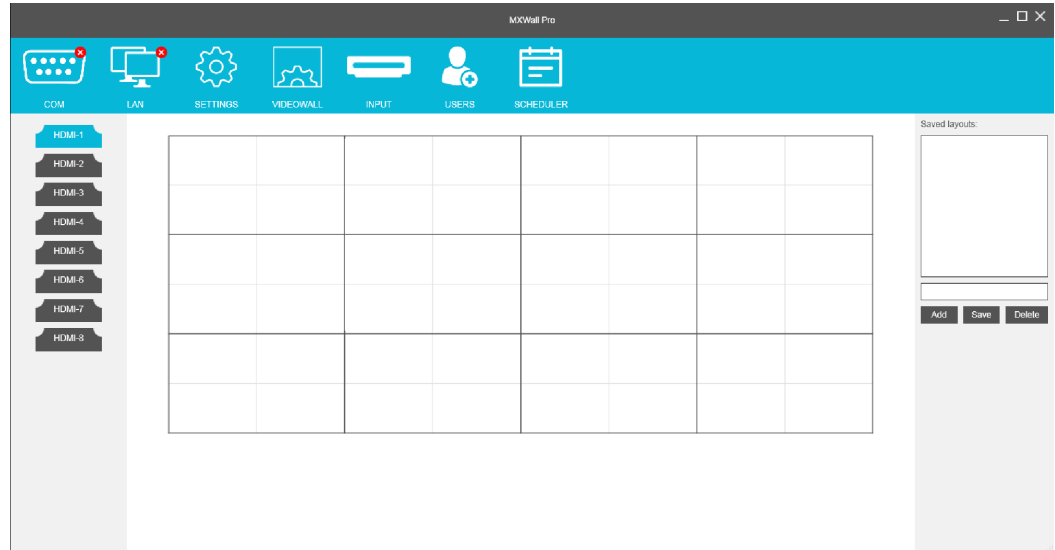
Figure 11-1

Figure 11-2

Figure 11-3

Click on the HDMI input of your choice. The HDMI port should then be highlighted blue. on the layout you created, left click and drag to create a view across as many rows and columns as you want. Once you let go of the mouse the view is created for the HDMI input that you chose. See Figure 11-3.

On the top left of the view you will see the View number. Click in the darker blue bar at the top of the view you just created and drag the view to where you want it positioned on your video wall. In the 4 corners of the view are boxes that you can click on and drag to re-size the view in any direction.

Each View will also let you know the Location and size of the box. This information is located under the box number. Each box also keeps track of which HDMI out put it is using. Continue to adjust your layout until your layout is full and you are satisfied.

In the upper right corner of the view there are 4 symbols. See Figure 12-1.
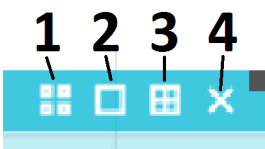
1. Clicking on this symbol will toggle CBD Mode (overlay mode) on and off.
2. Clicking on this symbol will expand the view to fill the entire array.
3. Clicking on this symbol will expand the view to fill all of the screens it is touching.
4. Clicking on this symbol will delete the view.

Figure 12-1

USING THE SOFTWARE (Continued)

Adding USERS

You can Add and delete Users by clicking on the USERS symbol shown in figure 12-1.

Figure 12-1

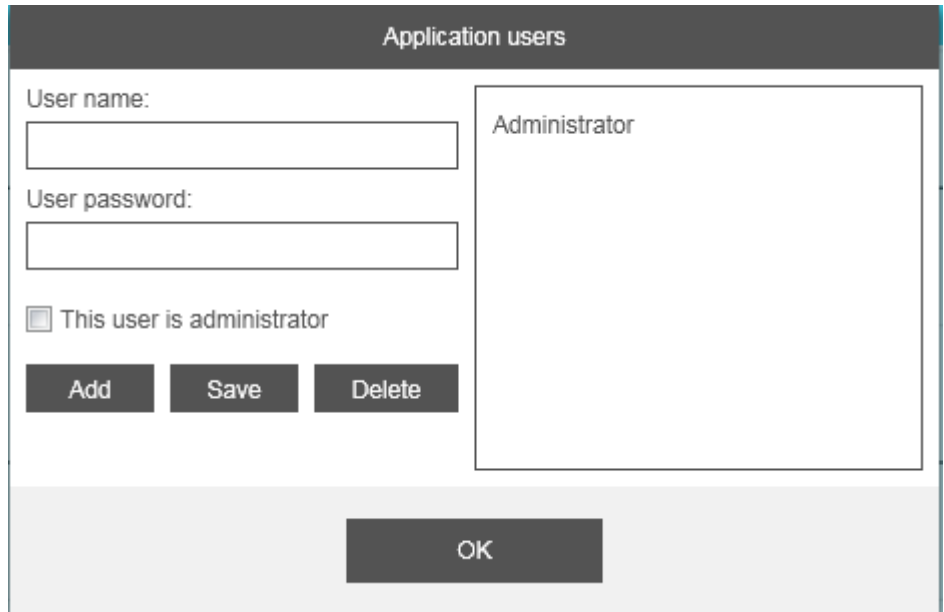In the window that pops up you set the name, password and whether or not the user is administrator. See Figure 12-2
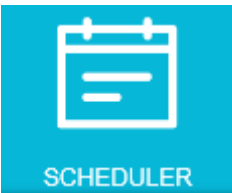
Figure 12-2

Creating Schedules

You can set up displays to start and stop automatically by clicking the Scheduler symbol shown in Figure 12-3. The Scheduler configuration window will appear. See Figure 12-4.

Figure 12-3

Start Date: Enter a start date by typing the date in or clicking on the calendar and selecting a start date.
End Date: Enter an end date by typing the date in or clicking on the calendar and selecting an end date.
Start time: Enter the Hour and Minutes.
Layout Name: Use the drop down box to select the layouts you have already   created to be put into the Scheduled.
Task Name: Enter the name of the task by typing it in. This will help you remember what this task is for.
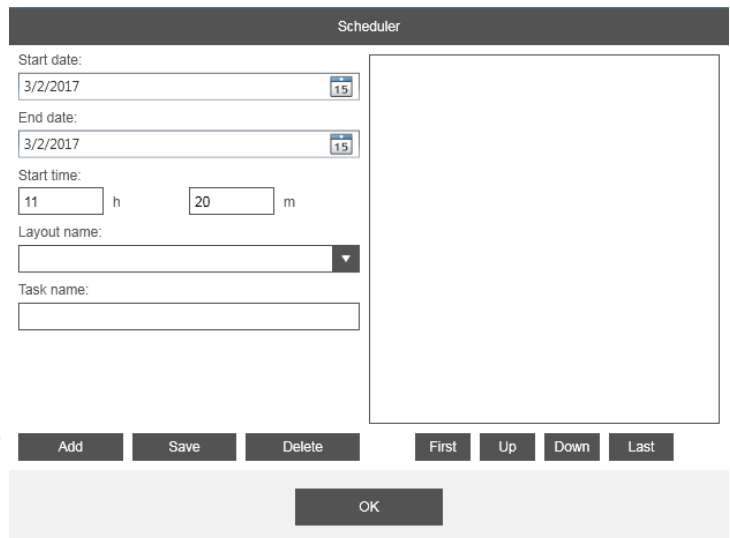
Figure 12-4

Click on Add and your task will appear in the list on the right. To delete a task, simply select the task and click on the Delete button. Once done click on Save to save the tasks that have been scheduled and click on OK to close the Scheduler.

LIMITED WARRANTY STATEMENT

A.   Extent of limited warranty

Smart-AVI Technologies, Inc. warrants to the end-user customers that the Smart-AVI product specified above will be free from defects in materials and workmanship for the duration of 1 year, which duration begins on the date of purchase by the customer. Customer is responsible for maintaining proof of date of purchase.

Smart-AVI limited warranty covers only those defects which arise as a result of normal use of the product, and do not apply to any:
a. Improper or inadequate maintenance or modifications
b. Operations outside product specifications
c. Mechanical abuse and exposure to severe conditions

If Smart-AVI receives, during applicable warranty period, a notice of defect, Smart-AVI will at its discretion replace or repair defective product. If Smart-AVI is unable to replace or repair defective product covered by the Smart-AVI warranty within reasonable period of time, Smart-AVI shall refund the cost of the product.

Smart-AVI shall have no obligation to repair, replace or refund unit until customer returns defective product to Smart-AVI.

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

Smart-AVI limited warranty is valid in any country where the covered product is distributed by Smart-AVI.

B.   Limitations of warranty
To the extant allowed by local law, neither Smart-AVI nor its third party suppliers make any other warranty or condition of any kind whether expressed or implied with respect to the Smart-AVI product, and specifically disclaim implied warranties or conditions of merchantability, satisfactory quality, and fitness for a particular purpose.

C.   Limitations of liability
To the extent allowed by local law the remedies provided in this warranty statement are the customers sole and exclusive remedies.

To the extant allowed by local law, except for the obligations specifically set forth in this warranty statement, in no event will Smart-AVI or its third party suppliers be liable for direct, indirect, special, incidental, or con-sequential damages whether based on contract, tort or any other legal theory and whether advised of the possibility of such damages.

D.   Local law
To the extent that this warranty statement is inconsistent with local law, this warranty statement shall be considered modified to be consistent with such law.

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