MXWall-Pro

User Manual

Route Up to 64 sources to as many as 64 HD displays

All-in-one HD Switch / Converter / Scaler for
Video Walls and Signage Displays

Smart-AVI
SMART AUDIO VIDEO INNOVATION

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WHAT'S IN THE BOX

PART NO.	QTY	DESCRIPTION
MXWALLPRO-1	1	MXWall: HDMI Video Wall Controller.
CCPWR06	1	Power supply cord
Manual	1	Quick Start Guide

MODELS	
MXWALLPRO-1	4X4
	8X8
	12X12
	16X16

OR

PART NO.	QTY	DESCRIPTION
MXWALLPRO-2	1	MXWall: HDMI, HDMI Video Wall Controller.
CCPWR06	1	Power supply cord
Manual	1	Quick Start Guide

MODELS	
MXWALLPRO-2	4X4
	8X8
	12X12
	16X16
	32X32
	64x64

INTRODUCTION

The MXWall-Pro is an enhanced and fully scalable video wall controller. The MXWall-Pro combines switching with the high definition capabilities of a converter. Specifically designed and optimized for the most demanding environments and applications, the MXWall-Pro lets users manage and route up to 64 HDMI video sources to as many as 64 HD displays. Capable of expanding any one HD signal to as many as 4 to 64 large-scale screens at 1080p (1920x1080 @ 60Hz). Completely compatible with HDCP and HDMI 1.4, the MXWall-Pro reliably transmits HD content across scalable display configurations in real-time for 24/7 uninterrupted use via HDMI outputs.

FEATURES

- Android companion application for quick switching of layouts from your mobile device.
- Complete hardware solution
- Plug-and-play ready
- Expandable up to 64 HDMI inputs
- Up to 64 HDMI outputs
- 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
- Point-of-Sale
- Entertainment Venues
- Corporate Lobbies
- Restaurants

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	HDMI
Output Card Format	HDMI
Input Slots	Up to 16 cards of 4 HDMI input each
Output Slots	Up to 16 cards of 4 DVI output each
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
LAN	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	54 lbs. (32X32 configuration)
Dimensions	17.5"W X 12.75"H X 16.5"D
Power Supply	50/60Hz, 100~230 VAC

HARDWARE INSTALLATION

1. Position MXWall-Pro conveniently and keep it unplugged.
2. Connect DVI output cables between the MXWall-Pro and your video wall screens.
3. Connect any inputs to the MXWall-Pro.
4. Optionally connect an RS-232 cable from PC to the RS-232 port of the unit for additional control.
5. Optionally connect an Ethernet cable to the MXWall-Pro for additional control.
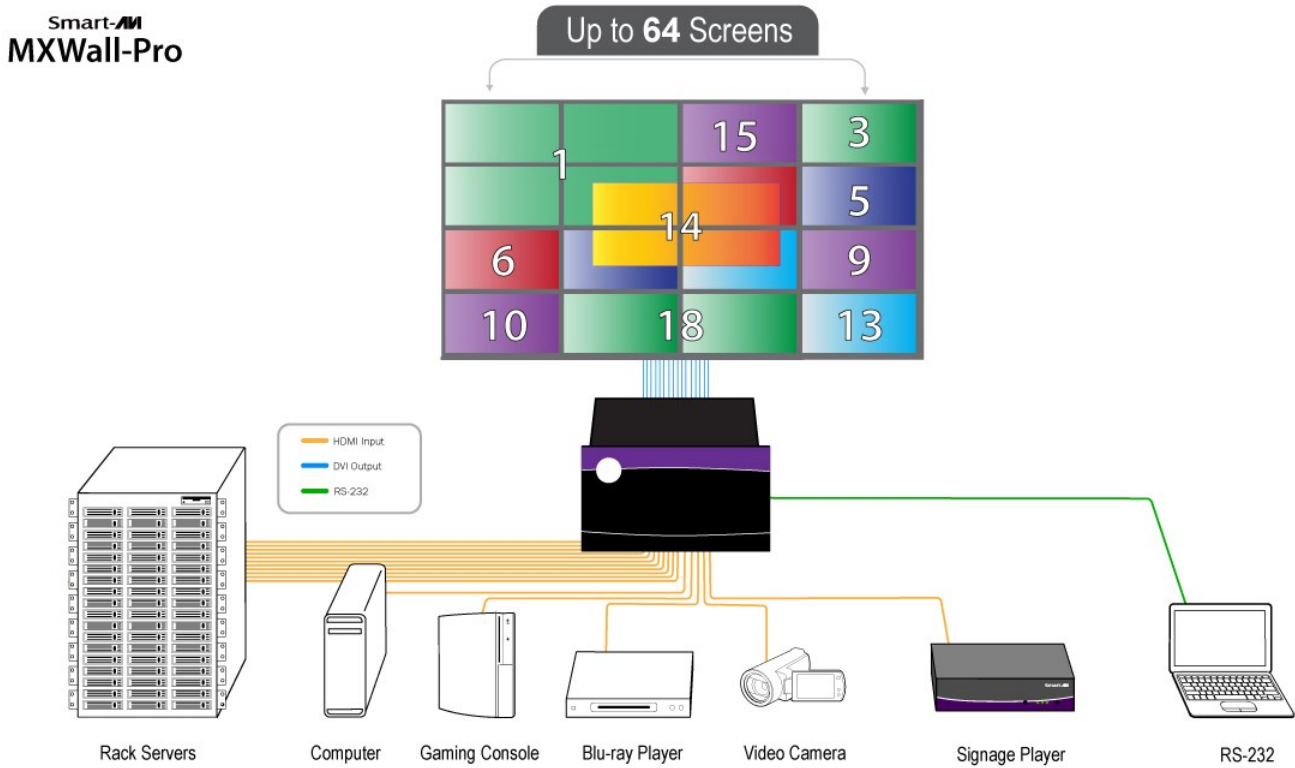6. Turn on the MXWall-Pro and wait a few seconds for the unit to initialize.

Figure 5-1

MULTIPLE CONFIGURATIONS

There are multiple configurations or modes that are easy to navigate through with the MXWall-Pro. Switching between the 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 the input image across 4 to 64 HD screens with screen resolution of 1920x1080.
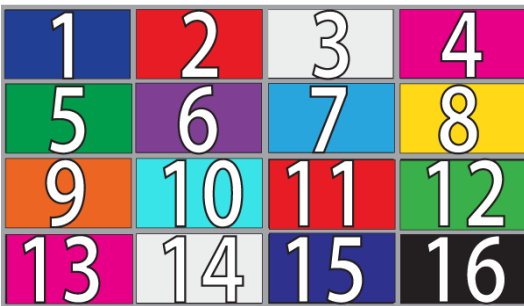
INDIVIDUAL MODE: Users can route individual input images to each display individually.
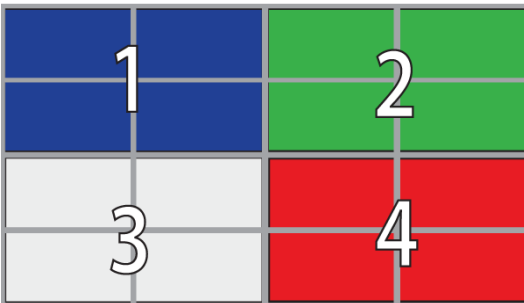
QUAD MODE: Split each individual screen into four proportional sections, each displaying one of any 64 input images.

User defined custom displays can be created with supplied software: Users can populate individual screens with multiple inputs. Add any of the 64 input signals to play along side others within a single display.

FRONT PANEL CONTROLS

The front panel of the MXWall-Pro 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 Pro software. If you use the default settings or custom settings make a note of them so you can enter them into the MXWall Pro 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)
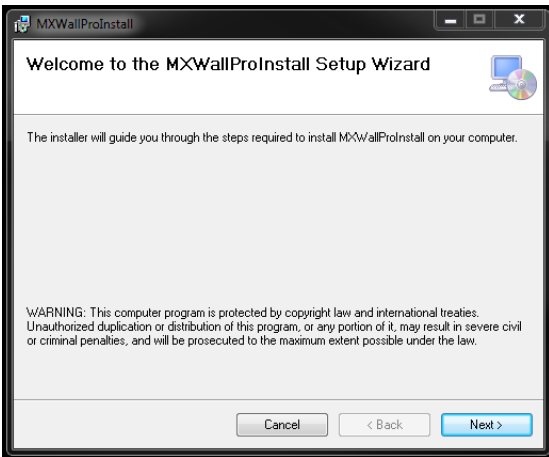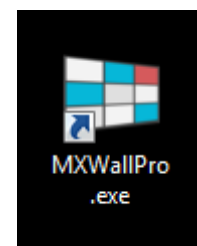
Figure 8-1
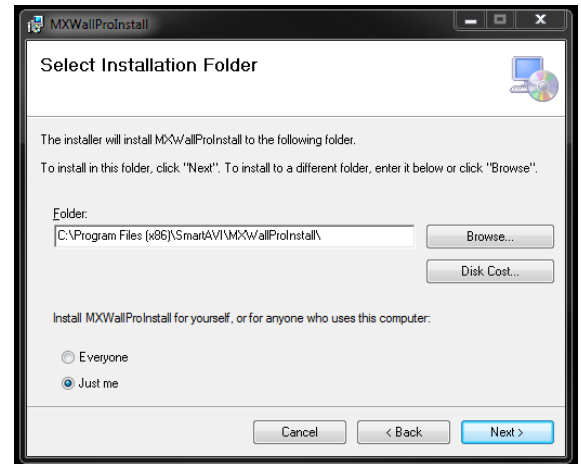
Figure 8-2
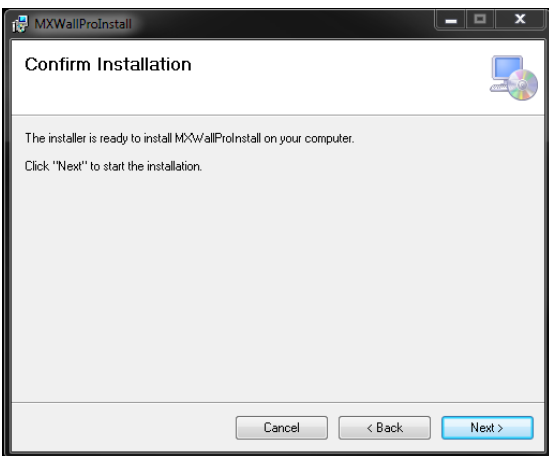
Figure 8-3
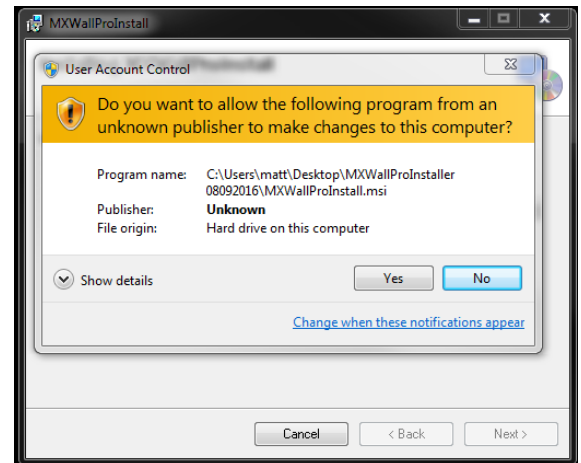
Figure 8-4
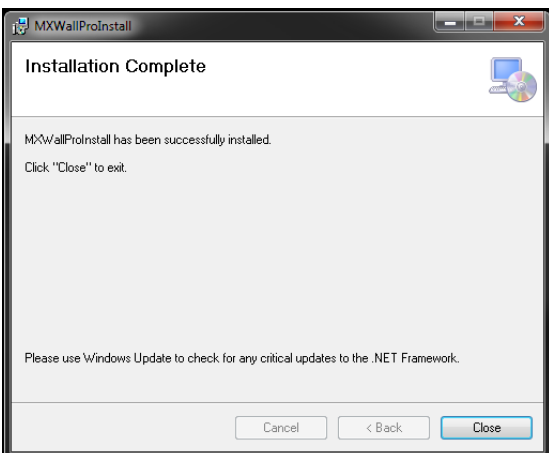
Figure 8-5

Figure 8-6

Using the MXWall-Pro

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 'Connect' 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 andPort number. (Figure 9-3)
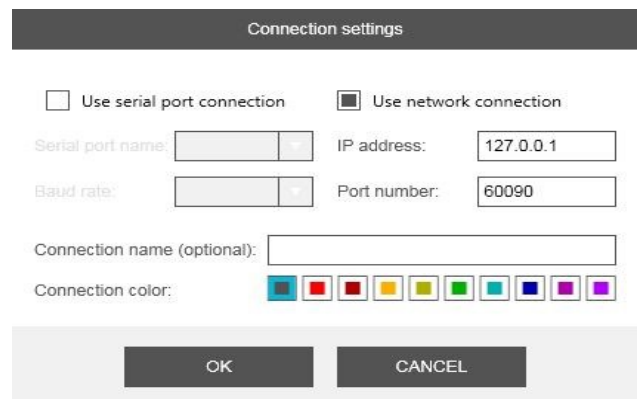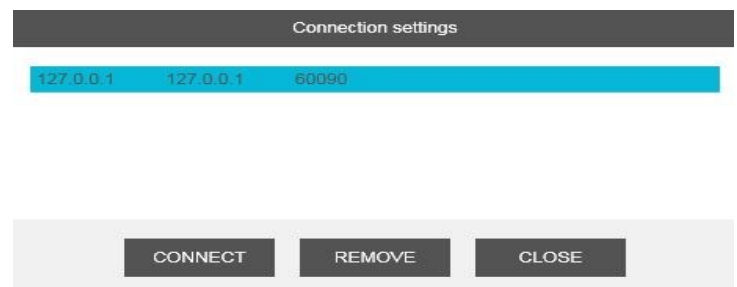3. Once everything is set, Click on 'ok" .

Figure 9-2

Figure 9-3

Connecting to the MXWall-Pro

1. Click on 'Connections', Your video wall will be shown. Choose Connect. Figure 9-4.

Figure 9-4

USING THE SOFTWARE (Continued)

Configuring VideoWall

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

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)

If you want to use PIP you must plug 1 output port into an input card on the MXWall-Pro. To set this up, you select the Overlay mode box and click on the + or — buttons to set the number of the Overlay card and Overlay input port. (Figure 10-1)
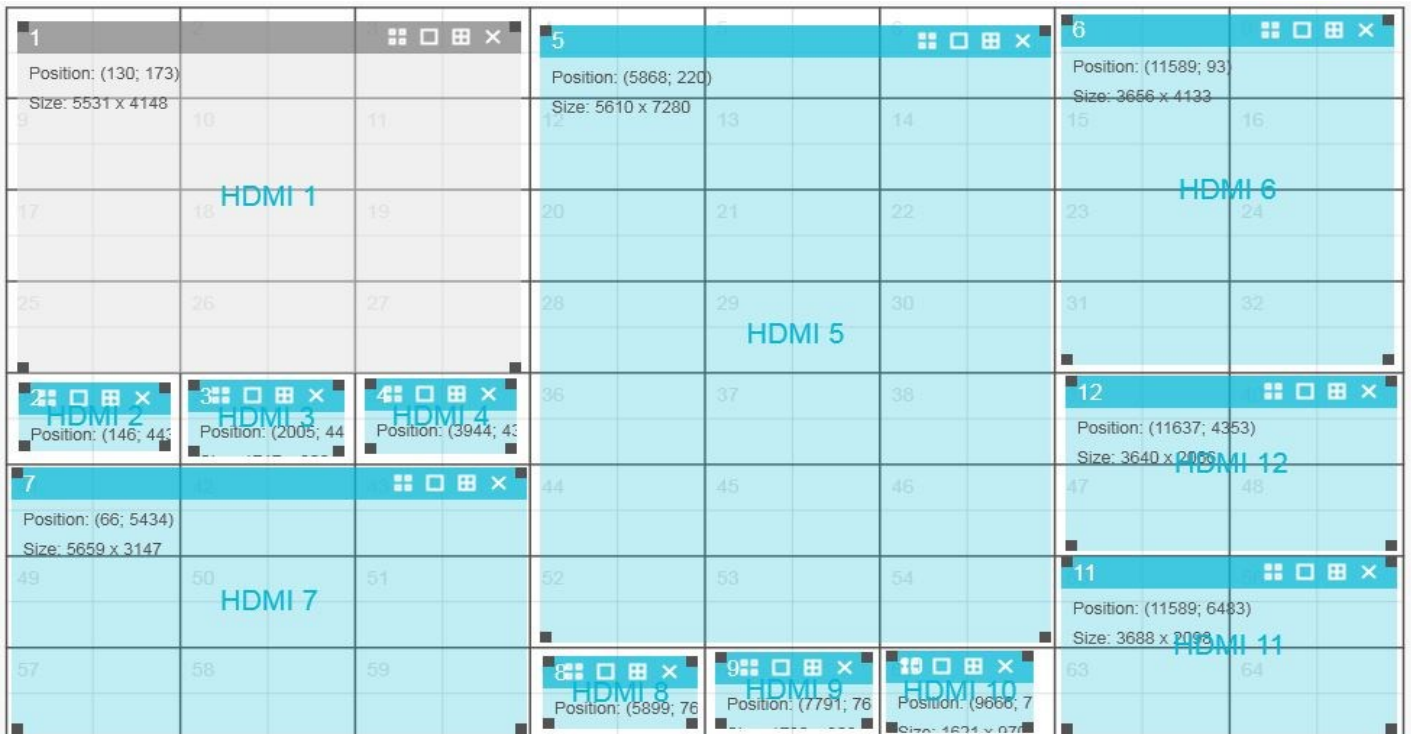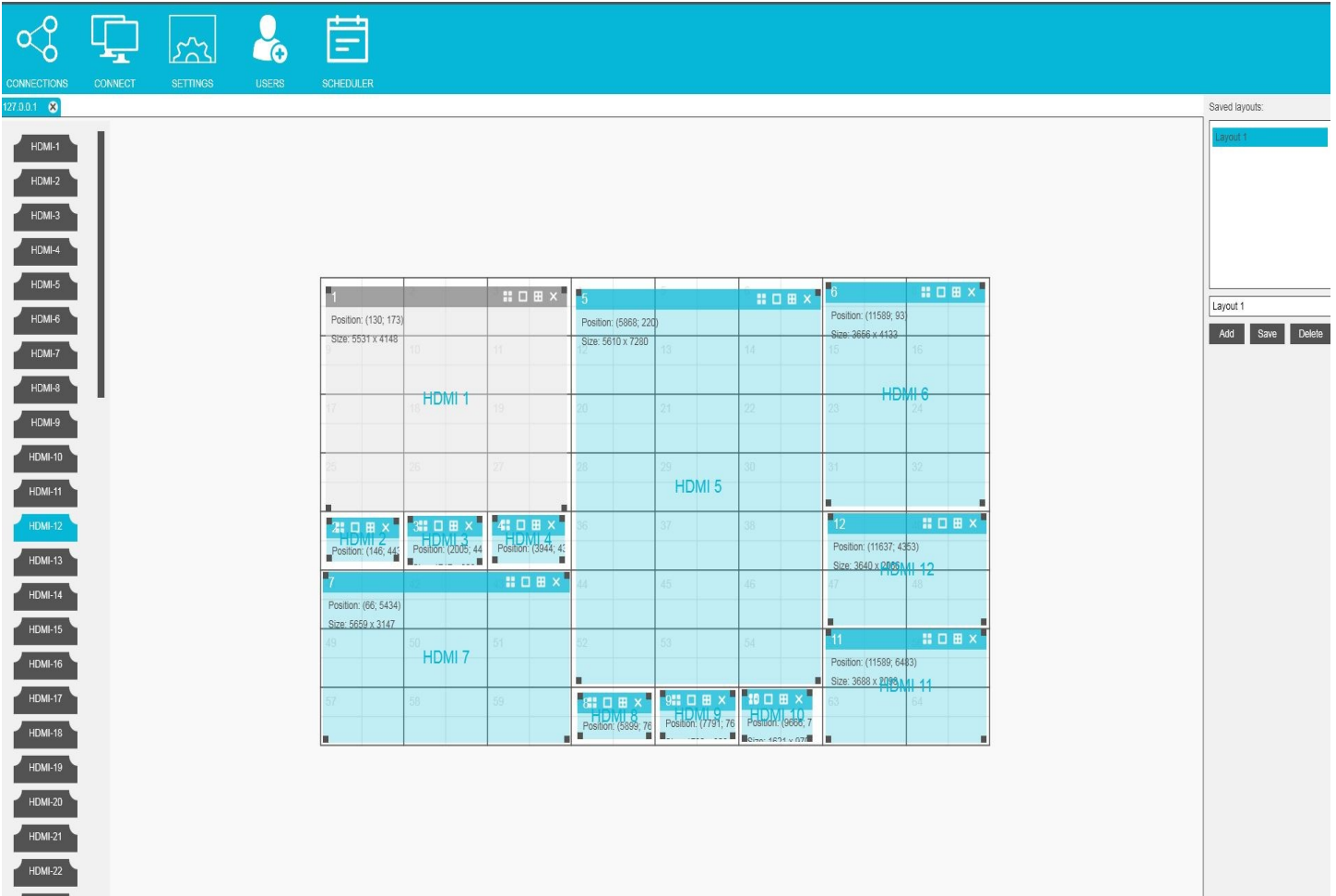

Figure 10-1

USING THE SOFTWARE (Continued)

Creating Inputs and Views

After your MxWAll-Pro has been configured. Time to set up your screen configurations.
Click an "HDMI" tap on the left, for your input source. And Drag, drop, expand on the wall to select your screens. It's that easy. Create and save as many layouts as you like.
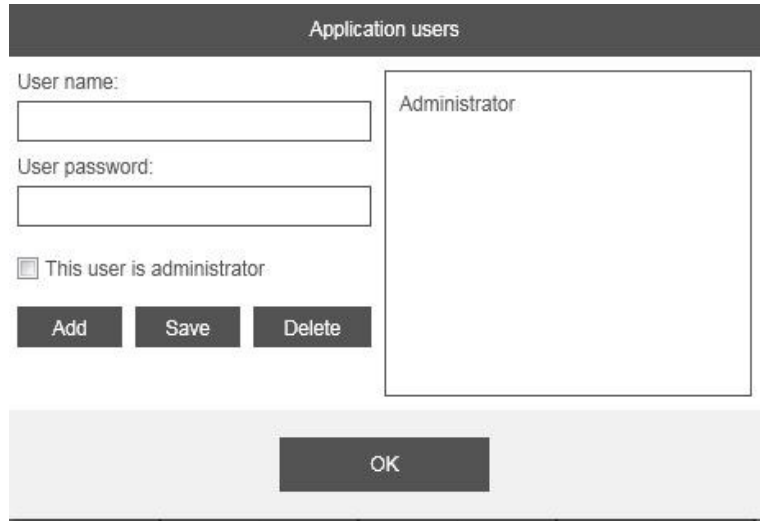
USING THE SOFTWARE (Continued)

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.
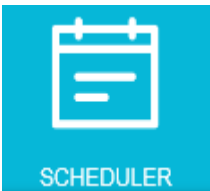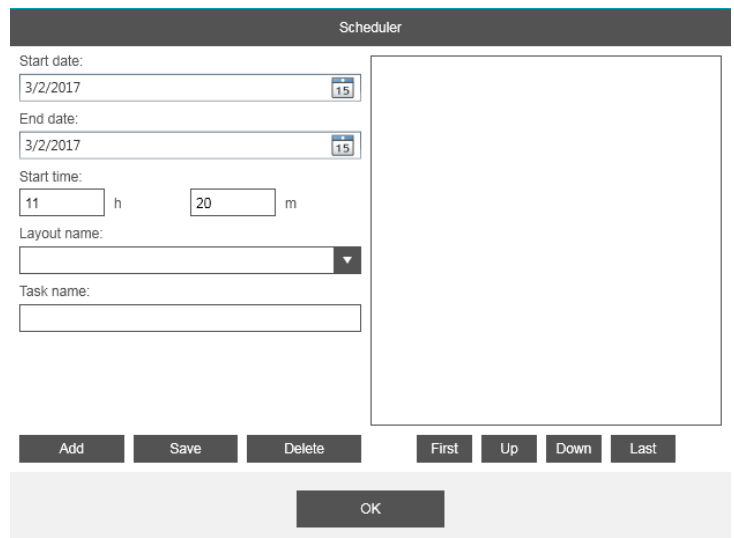

Figure 12-3

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.

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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 consequential 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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