MXWall-Pro

User Manual

Route Up to 32 sources to as many as 32 HD displays



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

Smart-AVI
SMART AUDIO VIDEO INNOVATION

TABLE OF CONTENTS

WHAT'S IN THE BOX?	2
INTRODUCTION	3
FEATURES	3
APPLICATIONS	3
TECHNICAL SPECIFICATIONS	4
HARDWARE INSTALLATION	5
AVAILABLE CONFIGURATIONS	6
FRONT PANEL CONTROLS	7
SOFTWARE INSTALLATION AND USE	8-11
LIMITED WARRANTY STATEMENT	

WHAT'S IN THE BOX?

PART NO.	QTY	DESCRIPTION
MXWALLPRO-32x32-S	1	32 Port HDMI, Real-Time Switch with Integrated Video wall
CCPWR06	1	Power supply cord
	1	Quick Start Guide



Figure 2-1

INTRODUCTION

The MXWall-Pro is an enhanced and fully scalable video wall controller combining switching capabilities with the versatile 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 32 HDMI video sources to as many as 32 HD displays. Capable of expanding any one HD signal to as many as 4 to 32 large-scale screens at 1080p (1920x1080 @ 60Hz). Completely compatible with HDCP and HDMI 1.4 connectors, the MXWall-Pro reliably transmits HD content across scalable display configurations in real-time for 24/7 uninterrupted use via DVI outputs.

FEATURES

- Complete hardware solution
- Plug-and-play ready
- Expandable 32 HDMI inputs and 32 DVI outputs
- Output Resolution up to 1080p @ 30Hz
- Supports Video Wall and Digital Signage Layouts
- Reliable 24/7 Uninterrupted Use
- Easy control and access
- 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
Resolution	Up to 1080P
Input Card Format	HDMI
Output Card Format	DVI
Input Slots	Up to 8 cards of 4 HDMI input each
Output Slots	Up to 8 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
TCP/IP	RJ45 (HDBaseT)
OTHER	
Working Temperature	0°C~+55°C
Storage Humidity	10%~90%
Weight	30 lbs.
Dimensions	17.125 in (W) x 12 in (H) x 12 in (D)
Power Supply	50/60Hz, 100~230 VAC
Consumption	300W

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 HDMI inputs (Blu-Ray player, computer, etc).
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.

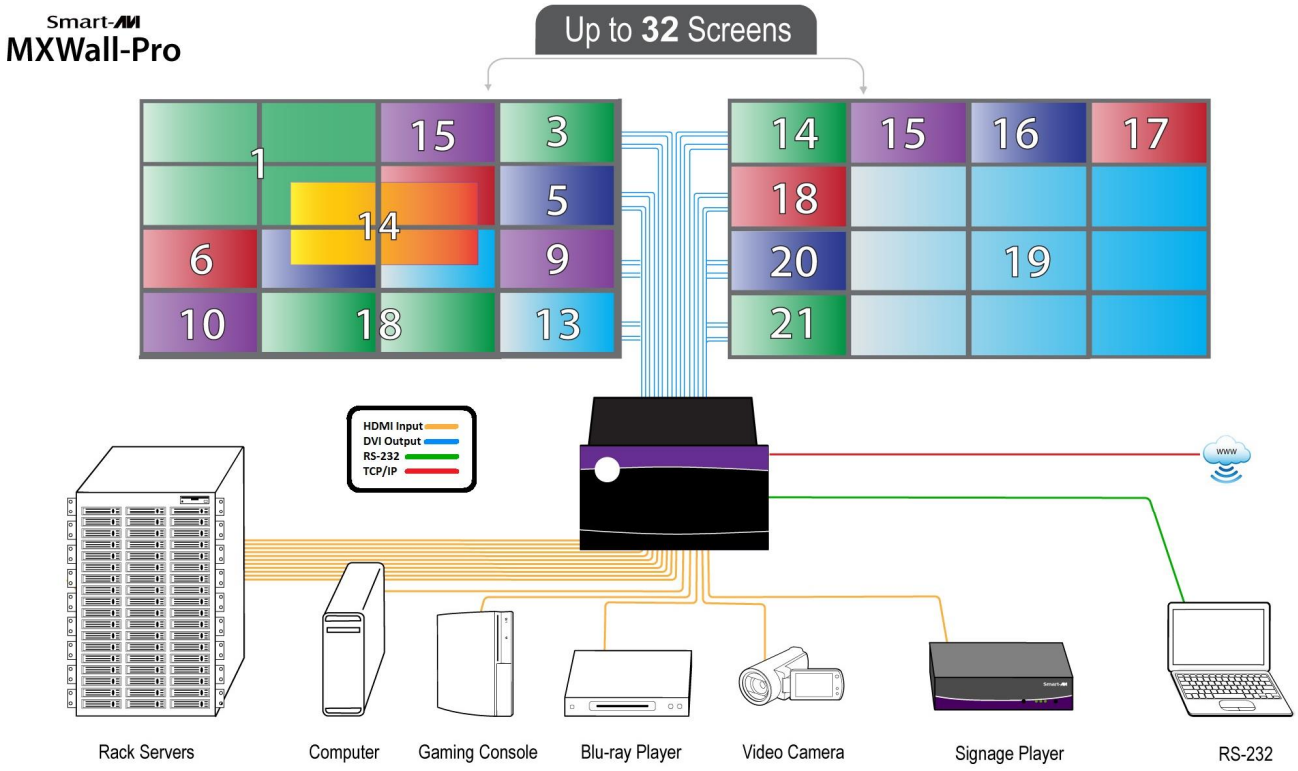


Figure 5-1

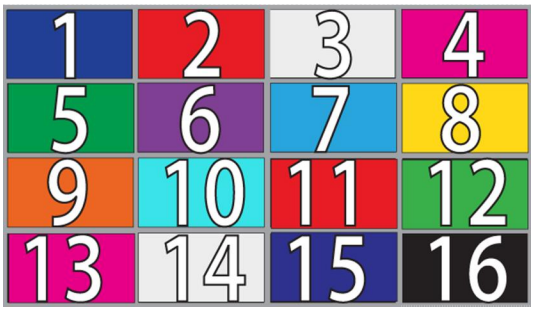


AVAILABLE CONFIGURATIONS

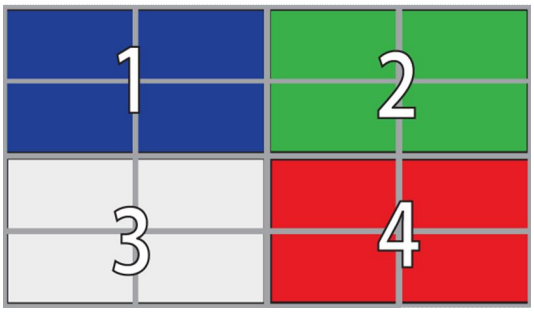
There are four different configurations or modes that are easy to navigate through with the MXWall-Pro. Switching between the display modes is simple. Front panel buttons, on-screen-display, RS-232, and TCP/IP can be used to switch between modes at will.



VIDEO WALL MODE: Users can stretch the input image across 4 to 32 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 32 input images.

User defined custom displays can be created with supplied software: Users can populate individual screens with multiple inputs. Add any of the 32 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.

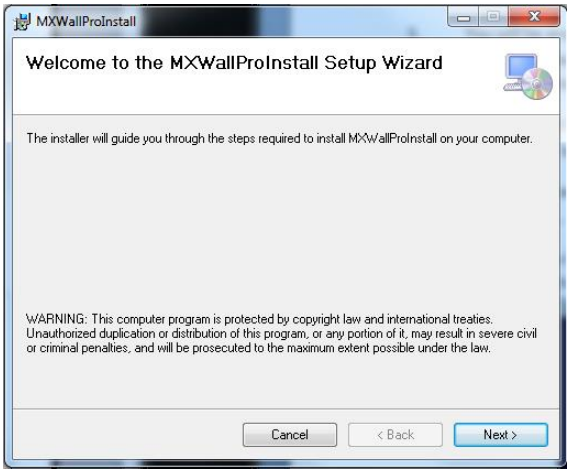
Buzz: Option 4 allows you to turn Buzz ON or OFF.

MPort: Option 4 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 MXWallPro software. If you use the default settings or custom settings make a note of them so you can enter them into the MXWallPro software settings during software install.

SOFTWARE INSTALLATION AND USE

Run the MXWallProInstall setup Wizard provided on CD or Downloaded from www.smartavi.com



A Welcome window will pop open. Click “Next” to continue. (Figure 8-1)

Select where you want MxWallPro2 installed and who the users will be and click “Next” again.

A window will open stating that the installation is ready. Click “Next” to start the installation.

A progress bar will appear showing how the installation is progressing.

Figure 8-1

A window will open stating Installation Complete. Click “Close”.

USING THE SOFTWARE

Click on MXWallPro and execute the software. A Log in screen will appear. The default login is:
User Name: Administrator
Password: admin

The Main screen will appear. See Figure 8-2

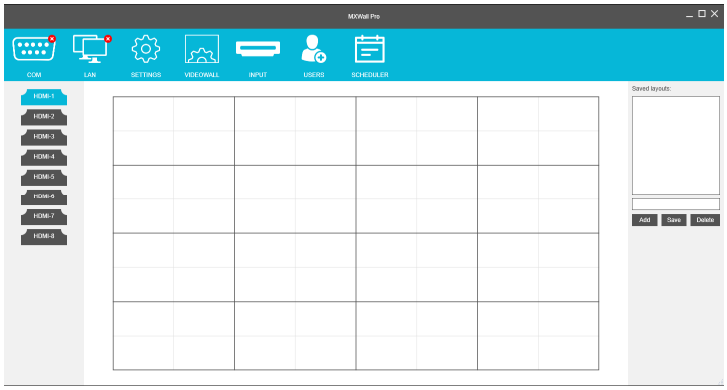


Figure 8-2

Click the settings icon.
Enter the connection settings in the boxes provided. See Figure 8-3
They should match the settings used in the MXWall-Pro.

If you need to identify the COM port used by your computer do the following:

1. Click on the start button.
2. Click on Control Panel.
3. Click on Device Manager.
4. Click on the arrow next to Ports (COM & LPT). You should see the name of your adapter and or the COM port number in use.

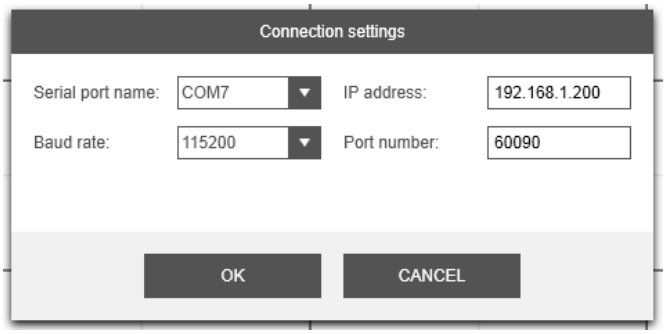


Figure 8-3

SOFTWARE INSTALLATION AND USE (Continued)

Click on the COM icon to connect to the MXWall-Pro via RS-232 or Click on the LAN Icon to connect via network. See Figure 9-1.

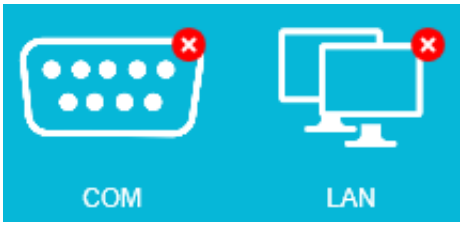
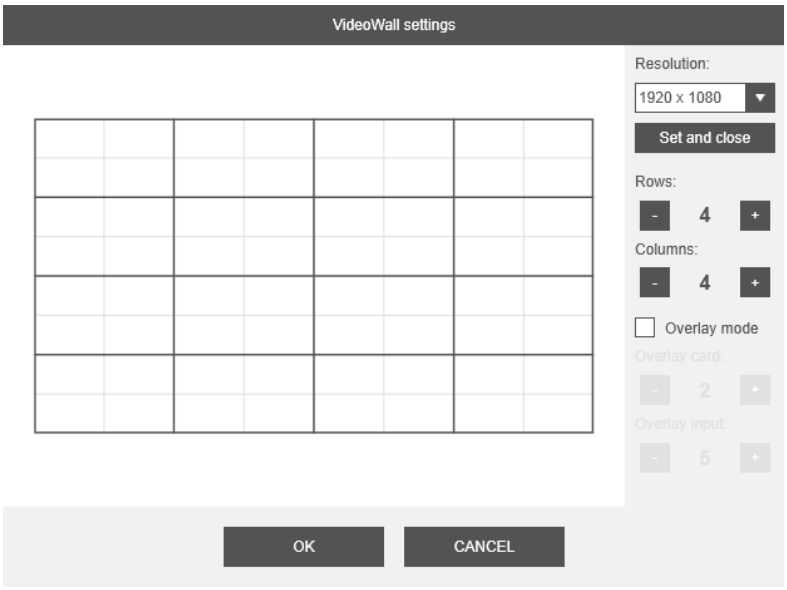


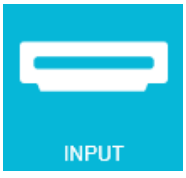
Figure 9-1



Click the VIDEOWALL Icon and enter the settings for your video wall. Select the displays resolution from the options in the dropdown menu and use the + and - buttons to set the number of displays in the rows and columns of your video wall array. See Figure 9-2.

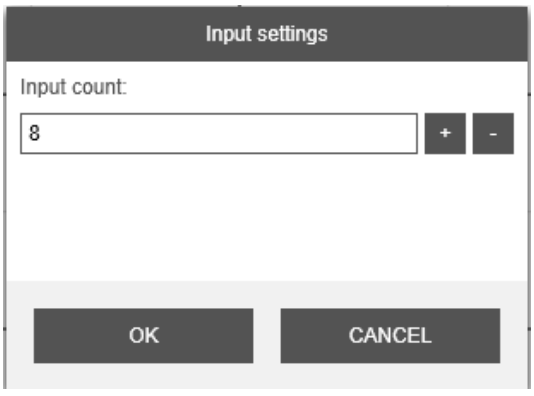
Figure 9-2





Click the INPUT Icon and set the number of inputs connected to the MXWall-Pro.

Figure 9-3



SOFTWARE INSTALLATION AND USE (Continued)

To assign an input to the display, click on the HDMI input icon then click on the display position. Click on one of the corners and drag the corner out until the four corners are covering the area you want the image to appear in.

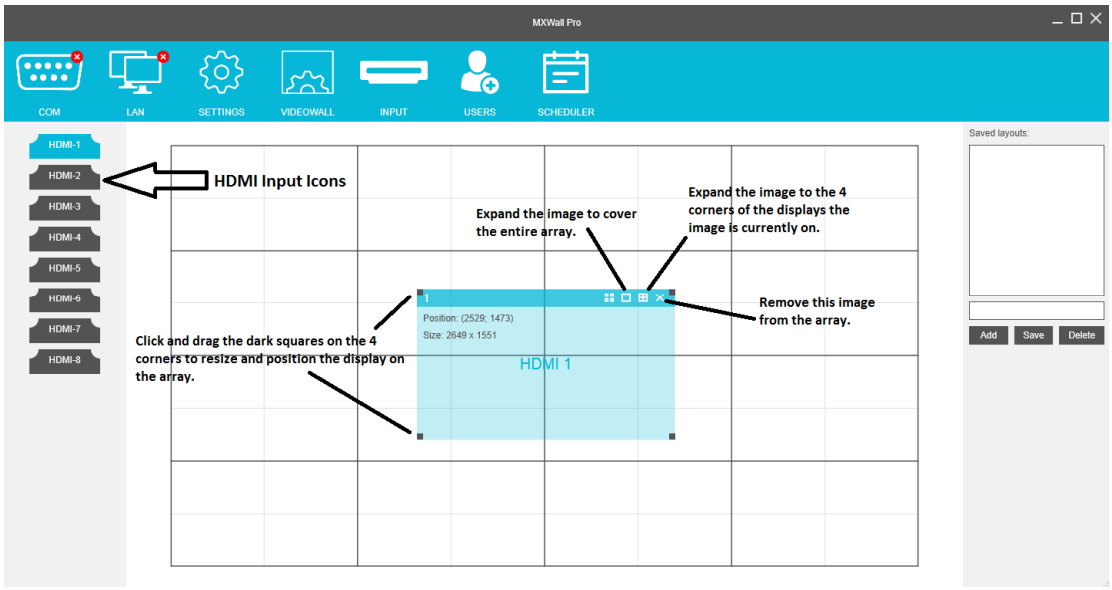


Figure 10-1

You can expand the image by clicking and dragging any of the 4 corners for a custom size and position on the array as shown in Figure 10-1 or you can expand the image to the corners of the displays it is located on as shown in Figure 10-2.

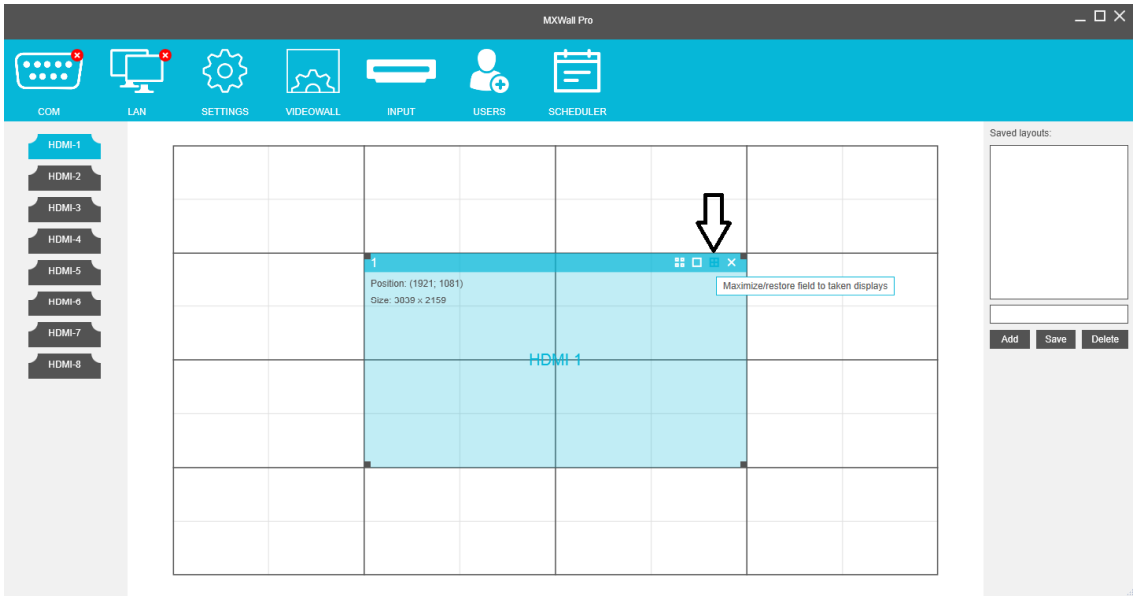


Figure 10-2

There is a window on the right side of the screen where you can name and save the custom layouts you have created.

SOFTWARE INSTALLATION AND USE (Continued)



You can create multiple User accounts with or without administrator privileges. See Figure 11-1.

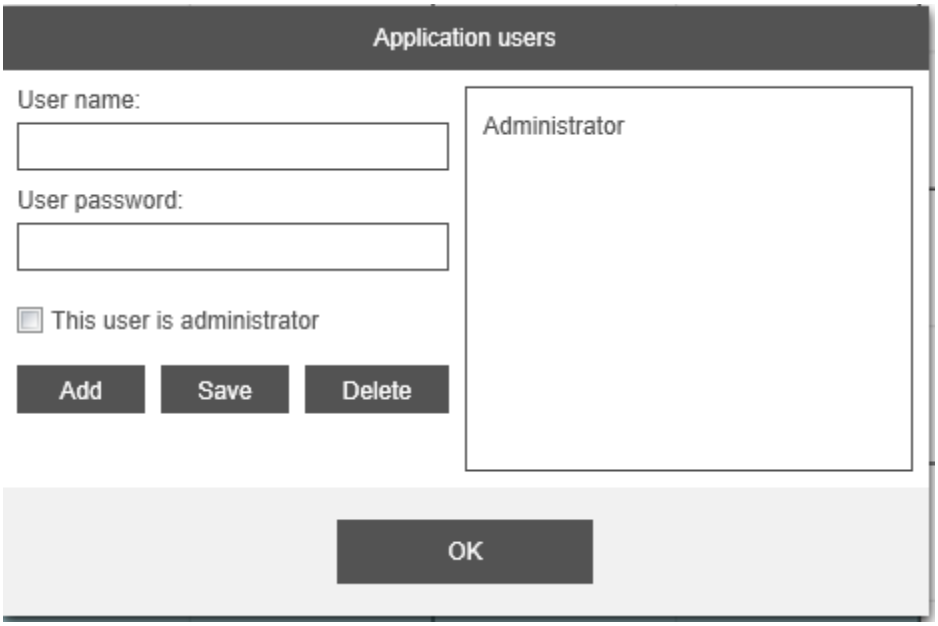


Figure 11-1

You can schedule start and stop times for the custom displays you have saved. See Figure 11-2.



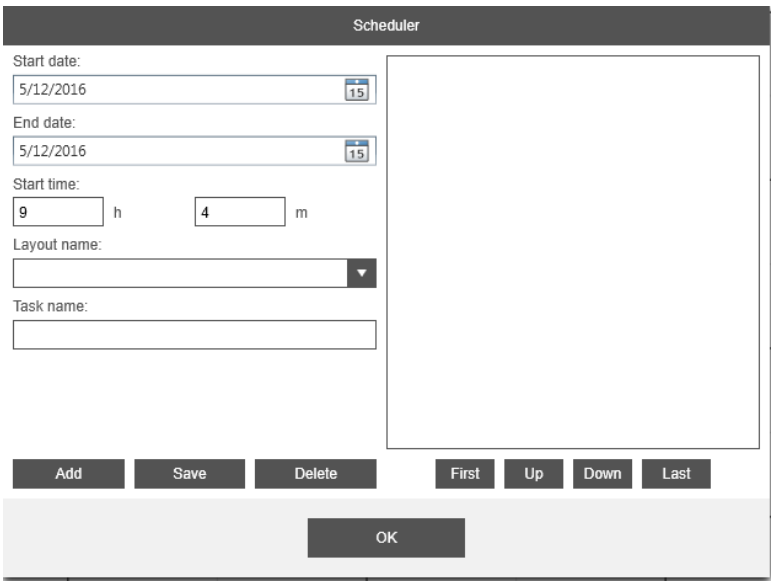


Figure 11-2

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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