# VZ-PRO SERIES VIDEO WALL CONTROLLER GUIDE

Cable & Graphic Card SET UP MANUAL



Please read this manual thoroughly before use, and keep it handy for future reference.



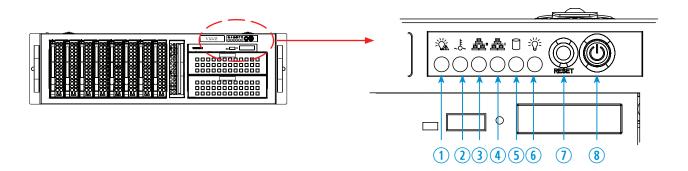
# **VZ-PRO4 License Key**



Note: One USB license key required to run MaxWall is installed on the motherboard's USB socket (inside chassis).

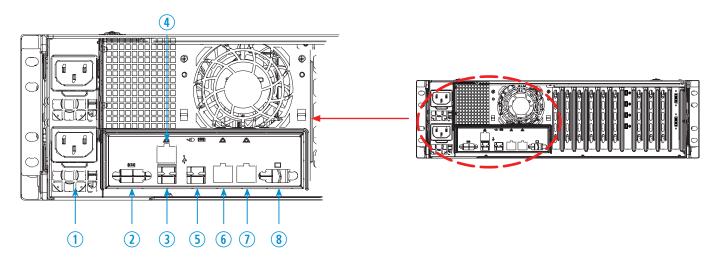
VZ-PRO4 Specification					
СРИ	1 x Intel® Xeon® E5 Series Processor				
Storage	2 x 512GB SSD (Raid 1)				
I/O Interface	4 x HDMI Display (via uD to HDMI cables)				
	4 x Capture In ports				
	4 x USB ports				
	1 x COM port				
	1 x VGA (Disabled)				
	2 x RJ45 for Gigabit Ethernet				
	1 x IPMI Lan port				
Power Supply	980W high-efficiency (94%+) AC-DC Redundant power supplies				

#### **VZ-PRO4 Front Panel Interface**



- 1. Power Failure LED
- 2. Alert LED
- 3. LAN 1 LED
- 4. LAN 2 LED
- 5. HDD LED
- 6. POWER LED
- 7. Reset Button
- 8. Power Button

#### **VZ-PRO4** Rear Panel Interface

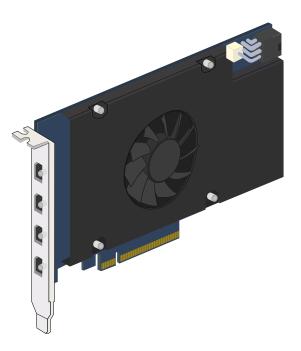


- 1. Power AC 110V In
- 2. Com 1 Port
- 3. USB 3.0 x 2
- 4. LAN (IPMI)Port
- 5. USB 2.0 x 2
- 6. LAN 1
- 7. LAN 2
- 8. VGA In

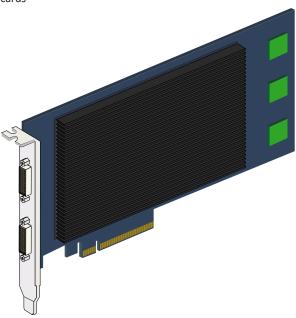
## VZ-PRO4 - Display (Output) & Capture (Input) Card



One uD8-42 display(output) cards & one cP4 capture(input) display cards are installed in VZ-PRO4. 4 uD-HDMI cables & 2 cP4 cables are included in utility box for HDMI display output & input.



1 x uD8-42 display (output) cards



1 x cP4 capture (input) cards

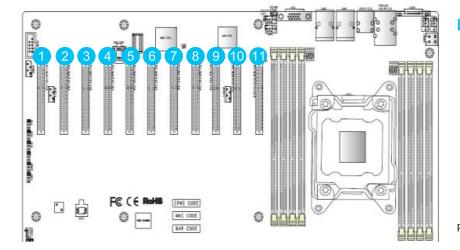


## VZ-PRO4 - Display (Output) & Capture (Input) Card - Motherboard installation

D: Display card uD8

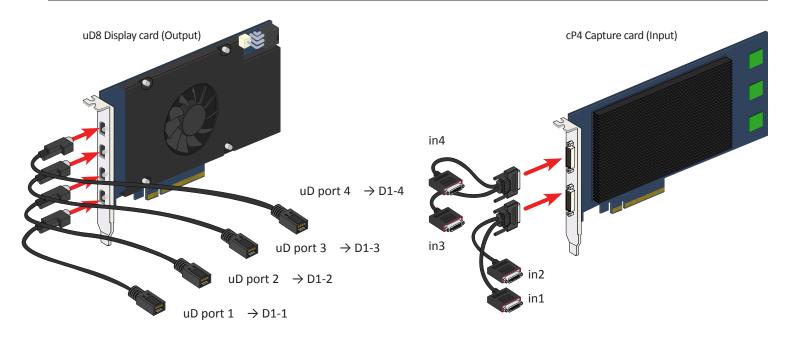
C: Capture (Input) card cP4

1 Display card and 1 Capture card installed in VZ-PRO4											
PCIe slot Number	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11
Installed Card	C 1			D 1							

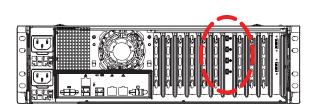


PCIe slots on VZ-PRO motherboard

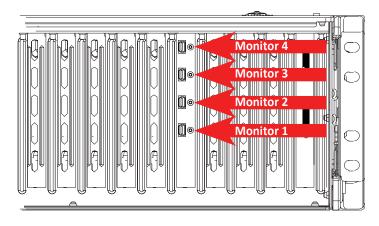
# Display(Output) & Capture(Input) Card - Cable Connection



#### VZ-PRO4 - Display (Output) Card | Configuration



One uD8-42 Display(Output) Card



Monitors' connection: Monitor  $\rightarrow$  HDMI cable  $\rightarrow$  uD-HDMI cable  $\rightarrow$  Graphics card's output port.



Basically, VZ-PRO4 default setup is the 2x2 video wall configuration. Please see the below instruction to setup your monitor connection



uD-HDMI cables. (8 cables are included)

#### VZ-PRO4 - Windows desktops configuration.

When Windows 7 completes booting on VZ-PRO4, the CMS/MaxWall launches immediately but no contents are running – blank screens. Please press ESC/escape key to exit running MaxWall and return to Windows desktops.



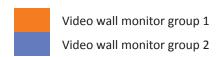
# VZ-PRO4 - Display (Output) - Video Wall Monitor Grouping

#### 2x2 Video wall monitor layout / Monitor Cabling

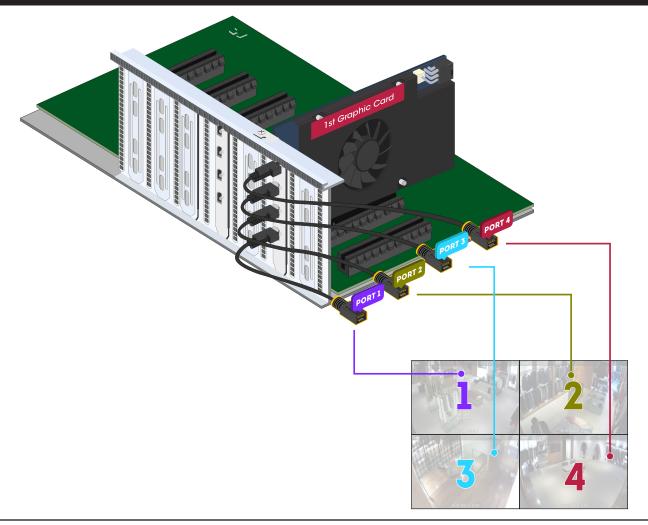
Monitor	Monitor
(D1-1)	(D1-2)
Monitor	Monitor
(D1-3)	(D1-4)

2 x 2 Video wall

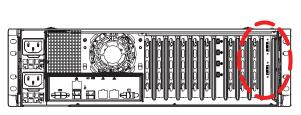
#### Video wall monitor group



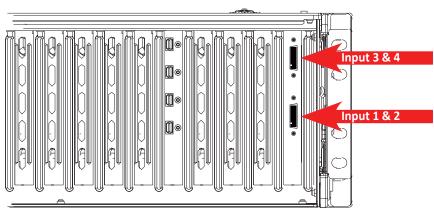
## VZ-PRO4 - uD8 Cable (Output) Connection



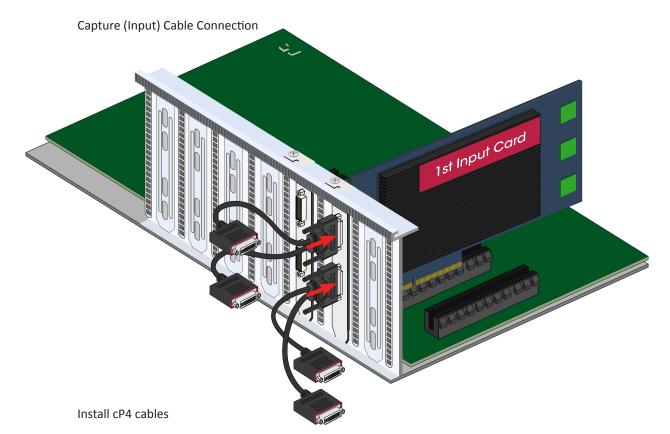
# VZ-PRO4 - Capture (Input) Card



One cP4 Capture(Input) Card









#### Capture (Input) Card Configuration | Capture Board ID

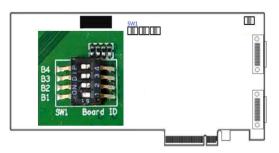


When more than one capture board is installed in VZ-PRO system, each capture board is recommended to have a unique Hardware ID.

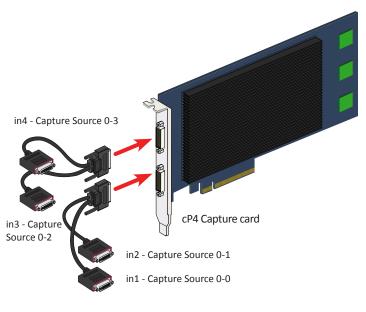
The DIP Switch #1 located at back of capture board is for setting board ID.

Switch to ON, bit define as 0, Switch to OFF, bit define as 1. The board/card ID can be set from 0 to 15.

<b>Card Number</b>	SW1 [4]	SW1 [3]	SW1 [2]	SW1 [1]	Description
0	ON	ON	ON	ON	Num.0 Card
1	ON	ON	ON	OFF	Num.1 Card
2	ON	ON	OFF	ON	Num.2 Card
3	ON	ON	OFF	OFF	Num.3 Card
4	ON	OFF	ON	ON	Num.4 Card
5	ON	OFF	ON	OFF	Num.5 Card
6	ON	OFF	OFF	ON	Num.6 Card
7	ON	OFF	OFF	OFF	Num.7 Card
8	OFF	ON	ON	ON	Num.8 Card
9	OFF	ON	ON	OFF	Num.9 Card
10	OFF	ON	OFF	ON	Num.10 Card
11	OFF	ON	OFF	OFF	Num.11 Card
12	OFF	OFF	ON	ON	Num.12 Card
13	OFF	OFF	ON	OFF	Num.13 Card
14	OFF	OFF	OFF	ON	Num.14 Card
15	OFF	OFF	OFF	OFF	Num.15 Card



cP4 Capture card - Board ID 1



The port numbers are defined by MaxWall as shown below.

Port Number = Board ID + Channel Number

For example, if the Board ID is set to 0, then its input port numbers are

$$No.0 = 0-0 \mid No.1 = 0-1 \mid No.2 = 0-2 \mid No.3 = 0-3$$

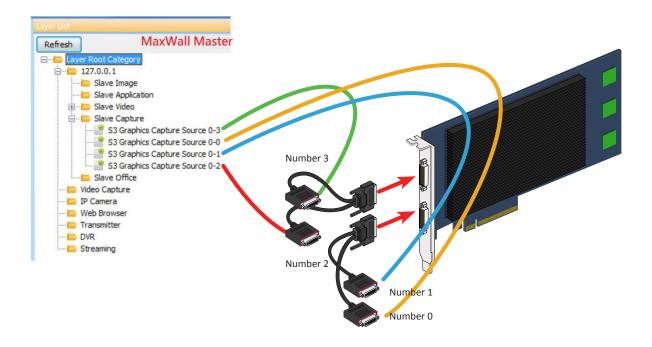
For example, if the Board ID is set to 4, then its input port numbers are

For example, if the Board ID is set to 12, then its input port numbers are

# Capture (Input) Card Configuration | Capture Board ID

An example: One Capture board configuration. (Support 4 inputs)

<b>Card Number</b>	SW1 [4]	SW1 [3]	SW1 [2]	SW1 [1]	Description
0	ON	ON	ON	ON	Num.0 Card



Ex: Capture Source 0-3 --> Board ID 0, Port No. 3

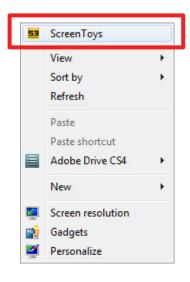
## **Configure Multi-Display Driver - Screen Toy Setup**



After a successful driver installation or when you get the new VZ-PRO4, you are ready to configure your Multi-Display Driver to assign proper display mode - 4x2 or 2x2 or 4x4, accessible through the *S3 ScreenToys* configuration pages.

To access the **S3 ScreenToys** Multi-Display configuration settings:

1. Right click on an unpopulated area of the desktop. Select *S3 ScreenToys* to open the *S3 ScreenToys* utility pages or Right click on the S3 task-bar icon to bring up the *S3 ScreenToys* menu list.





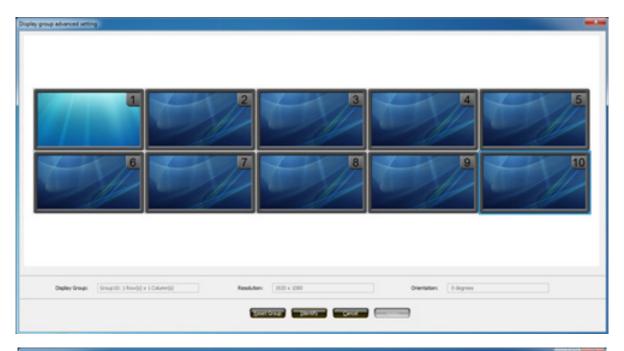


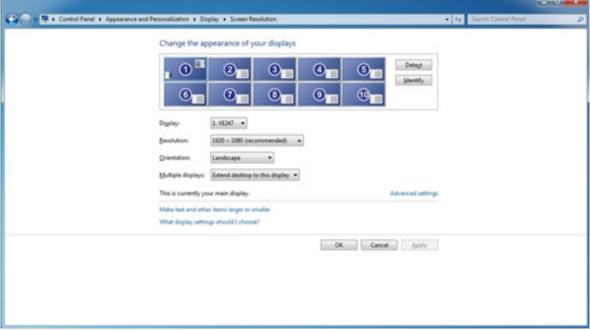
#### **Multi-Display Setup**

After you install the driver or booting, the initial layout of the display groups is set based on the number of monitors connected.

The number of display groups equals the number of monitors connected. Each display group contains one monitor, 1 column x 1 row.

The display group layout consists of 10 display group, each display group has one monitor (1 column x 1 row). If you have 4, 8, 12 and 16 monitors, you can easily set it up based on below instruction.





When you done with setup, you can see the above configuration window if setup correctly.

#### To configure the display groups

- **Step 1.** Launch the *S3 ScreenToys* utility by right clicking the desktop menu.
- **Step 2.** Select the Multi-Display Setup page.
- **Step 3.** Select 1 in the Group drop-list to configure settings for Display Group 1.
- **Step 4.** Set the number of columns using the Columns drop-list. Set the number of rows using the Rows drop-list.

For 10-Display configuration, we will set up 4 groups. (One GPU supports one display group)

## S3 Graphics ScreenToys for Multi-Display Multi-Display Setup S3 Graphics 5400EW + S3 Graphics 5400EW + S3 Graphics 5400EW + S3 Graphics 5400EW Basic Multi-Display Setup Bezel Adjustment Information 0 Advanced Desktop Management Display Adjustment Troubleshooting Display Group Setup ▼ Columns 3 ▼ Rows 1 Display Group 1 Orientation 0 degrees • Resolution 1920 x 1080 x 60hz

#### Display group 1 set up

#### Display group 2 set up

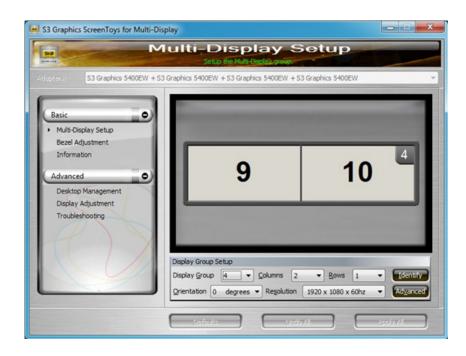




#### Display group 3 set up



#### Display group 4 set up



**Step 5.** A Reboot Confirmation dialog will appear after you apply the new group settings. Click Yes to reboot your system. If you click No, the system will not reboot and the new settings will not be applied.



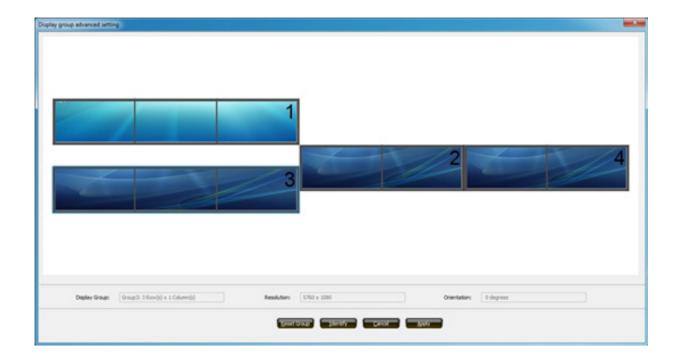
**Step 6.** After system reboots, in Win7, launch the *S3ScreenToy* again to finalize the group setup. You probably will see the group layout as shown below. Please use mouse to drag and drop each group to its final location as shown in screen shots below



## **Before adjustment**



## Moving groups by mouse



## After adjustment

