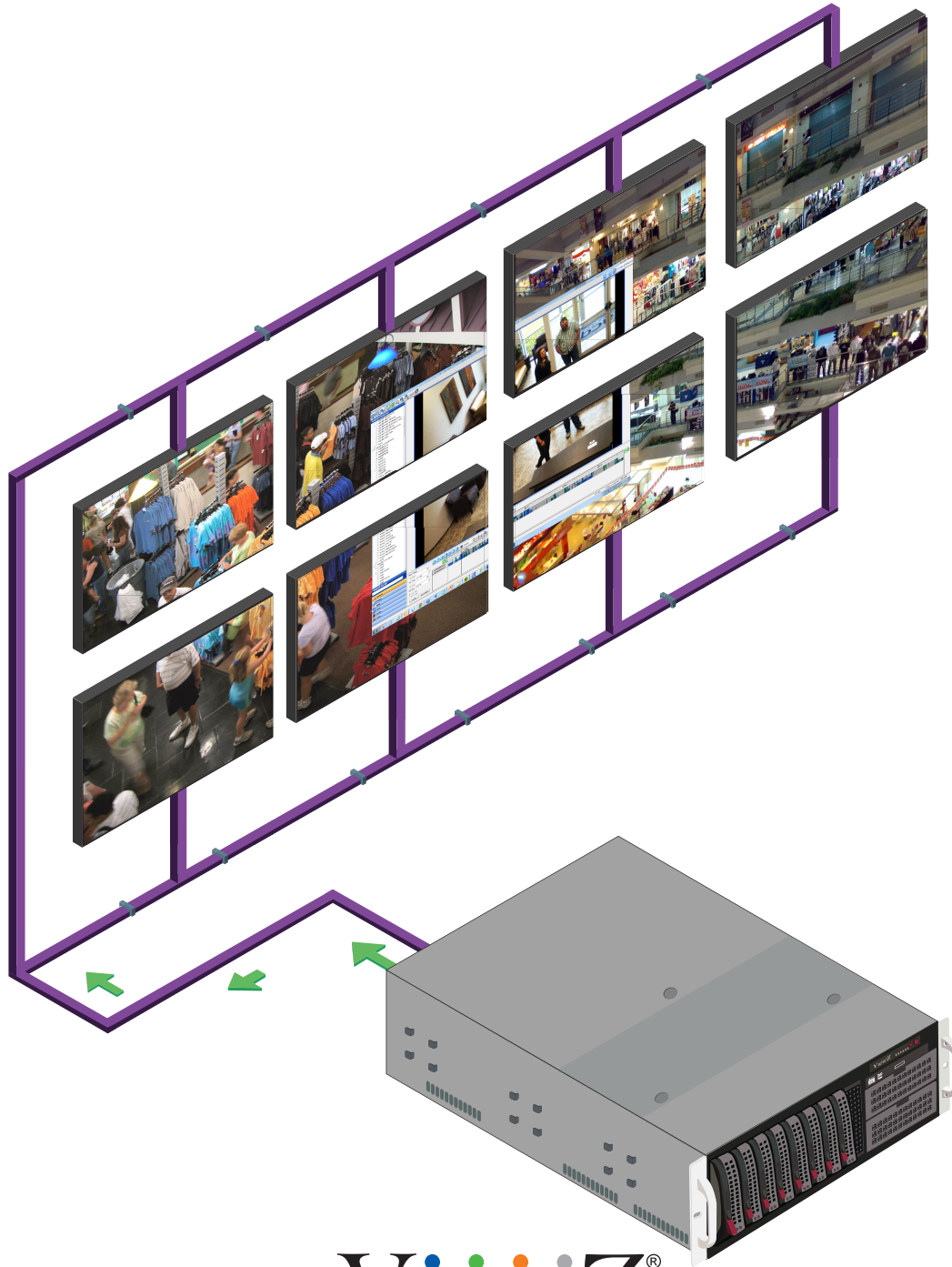# VZ-PRO SERIES

VIDEO WALL CONTROLLER GUIDE

Cable & Graphic Card SET UP MANUAL

ViewZ®
www.viewzusa.com

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

VZ-PRO12 License Key

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

VZ-PRO12 Specification

CPU	1 x Intel® Xeon® E5 Series Processor
Storage	2 x 512GB SSD (Raid 1)
I/O Interface	8 x HDMI Display (via uD to HDMI cables)
	8 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-PRO12 Front Panel Interface

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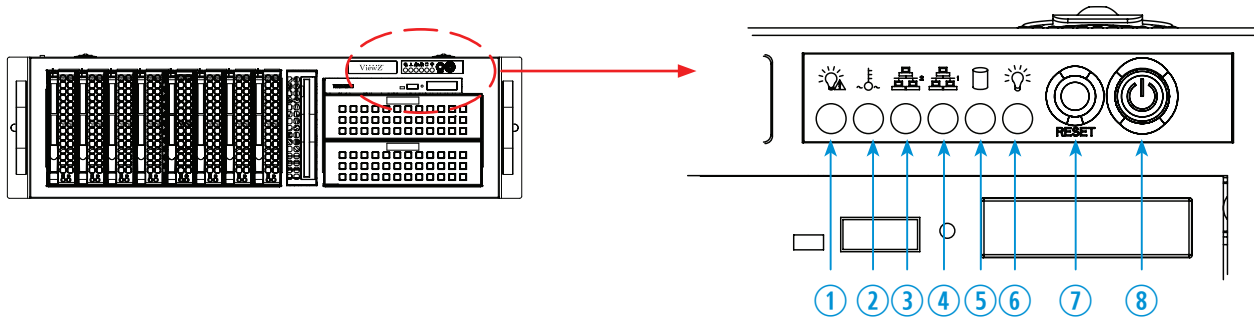
1. Power Failure LED
2. Alert LED
3. LAN 1 LED
4. LAN 2 LED
5. HDD LED
6. POWER LED
7. Reset Button
8. Power Button

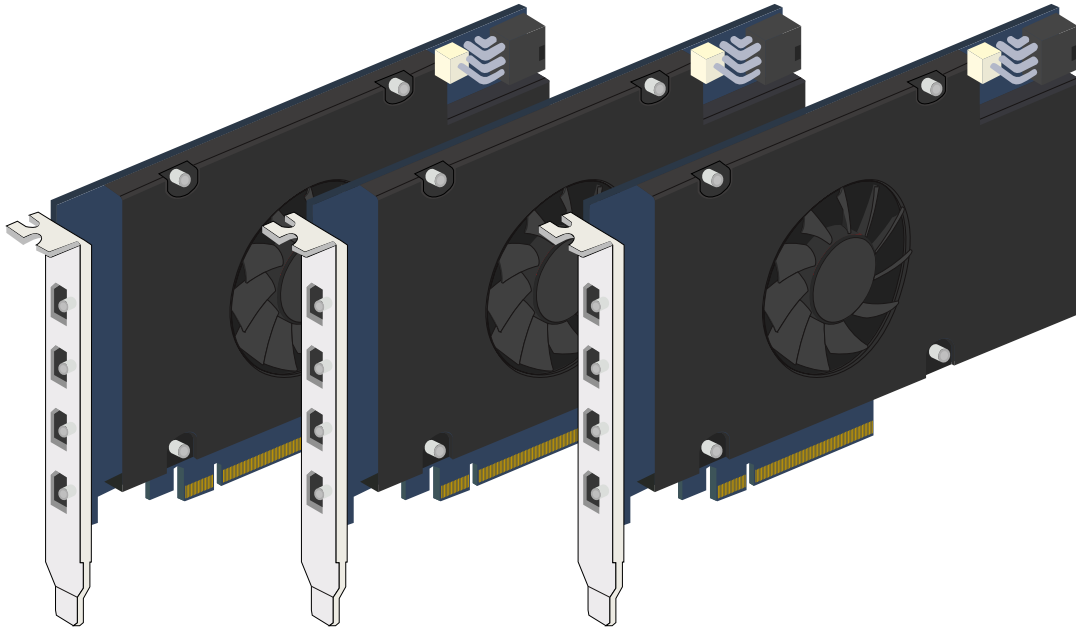## VZ-PRO12 Rear Panel Interface

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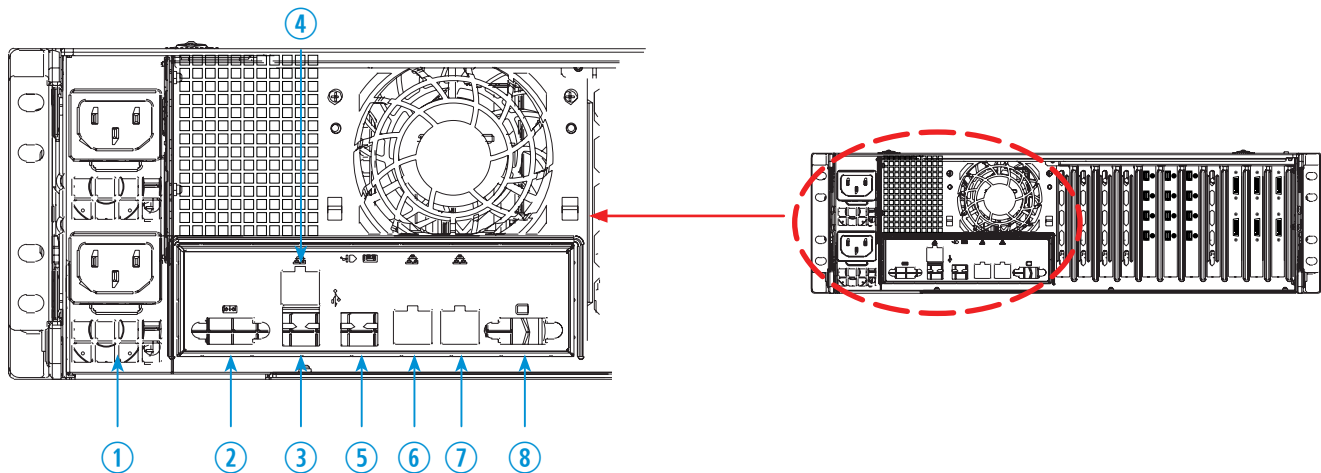
1. Power AC 110V In
2. Com 1 Port
3. USB 3.0 x 2
4. LAN (IPMI)Port
5. USB 2.0 x 2
6. LAN 1
7. LAN 2
8. VGA In

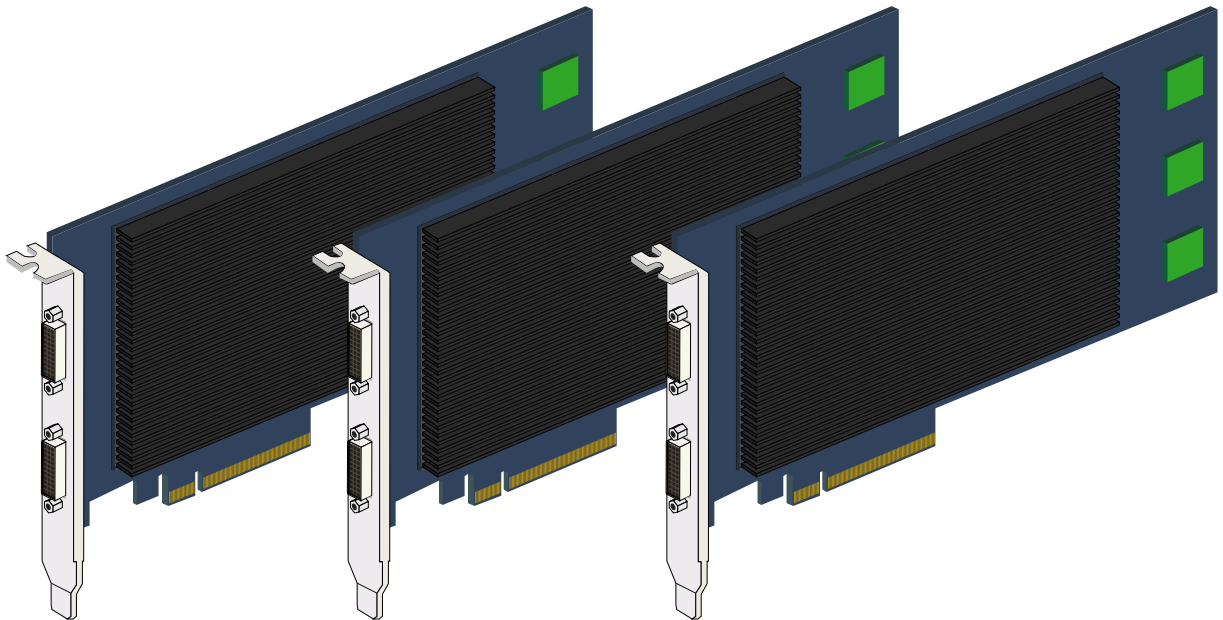## VZ-PRO12 - Display (Output) & Capture (Input) Card

Three **uD8-42** display(output) cards & three **cP4** capture(input) display cards are installed in VZ-PRO12.

12 uD-HDMI cables & 6 cP4 cables are included in utility box for HDMI display output & input.

3 x **uD8-42** display (output) cards
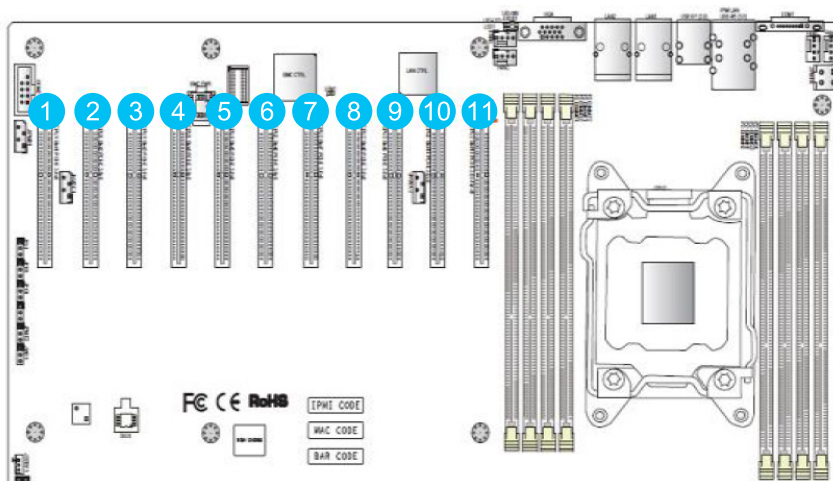

3 x **cP4** capture (input) cards

VZ-PRO12 - Display (Output) & Capture (Input) Card - Motherboard installation

D : Display card **uD8**

C : Capture (Input) card **cP4**

3 Display card and 3 Capture card installed in VZ-PRO12											
PCIe slot Number	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11
Installed Card	C 1	C 2	C 3	D 1	D 2	D 3					

D1 : 1st **uD8**　　**C1** : 1st **cP4**
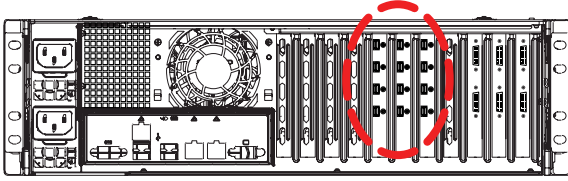
D2 : 2nd **uD8**　　**C2** : 2nd **cP4**

D3 : 3rd **uD8**　　**C3** : 3rd **cP4**

PCIe slots on VZ-PRO motherboard

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

uD8 Display card (Output)

cP4 Capture card (Input)

uD port 4　→ D1-4

uD port 3　→ D1-3

uD port 2　→ D1-2

uD port 1　→ D1-1

in4

in3

in2

in1
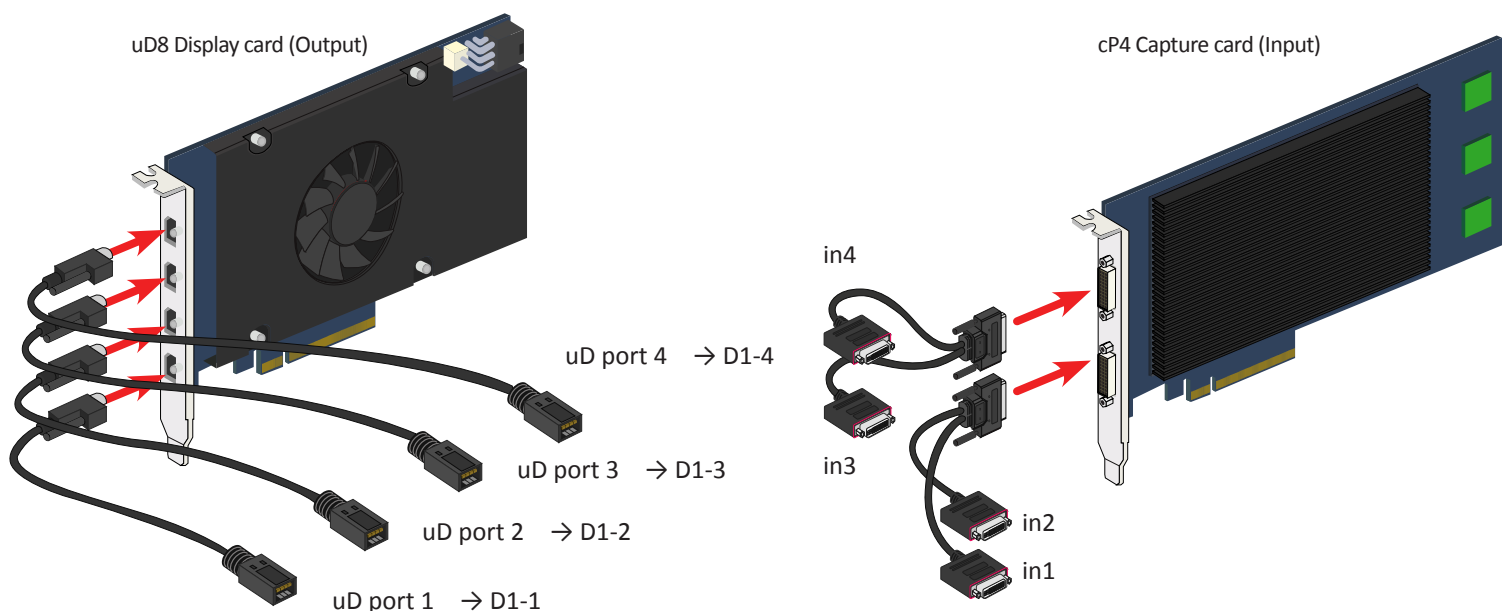
VZ-PRO12 - Display (Output) Card | Configuration

Three uD8-42 Display(Output) Cards
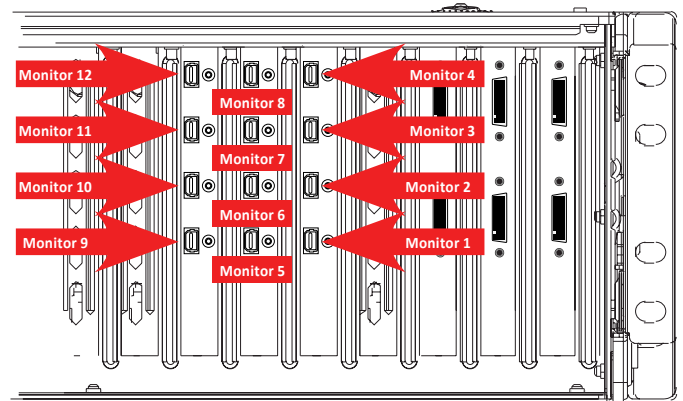
Monitors' connection: Monitor → HDMI cable → uD-HDMI cable → Graphics card's output port.

Basically, VZ-PRO12 default setup is the 4x3 video wall configuration. Please see the below instruction to setup your monitor connection

uD-HDMI cables. (12 cables are included)

VZ-PRO12 - Windows desktops configuration.

When Windows 7 completes booting on VZ-PRO12, 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-PRO12 - Display (Output) - Video Wall Monitor Grouping
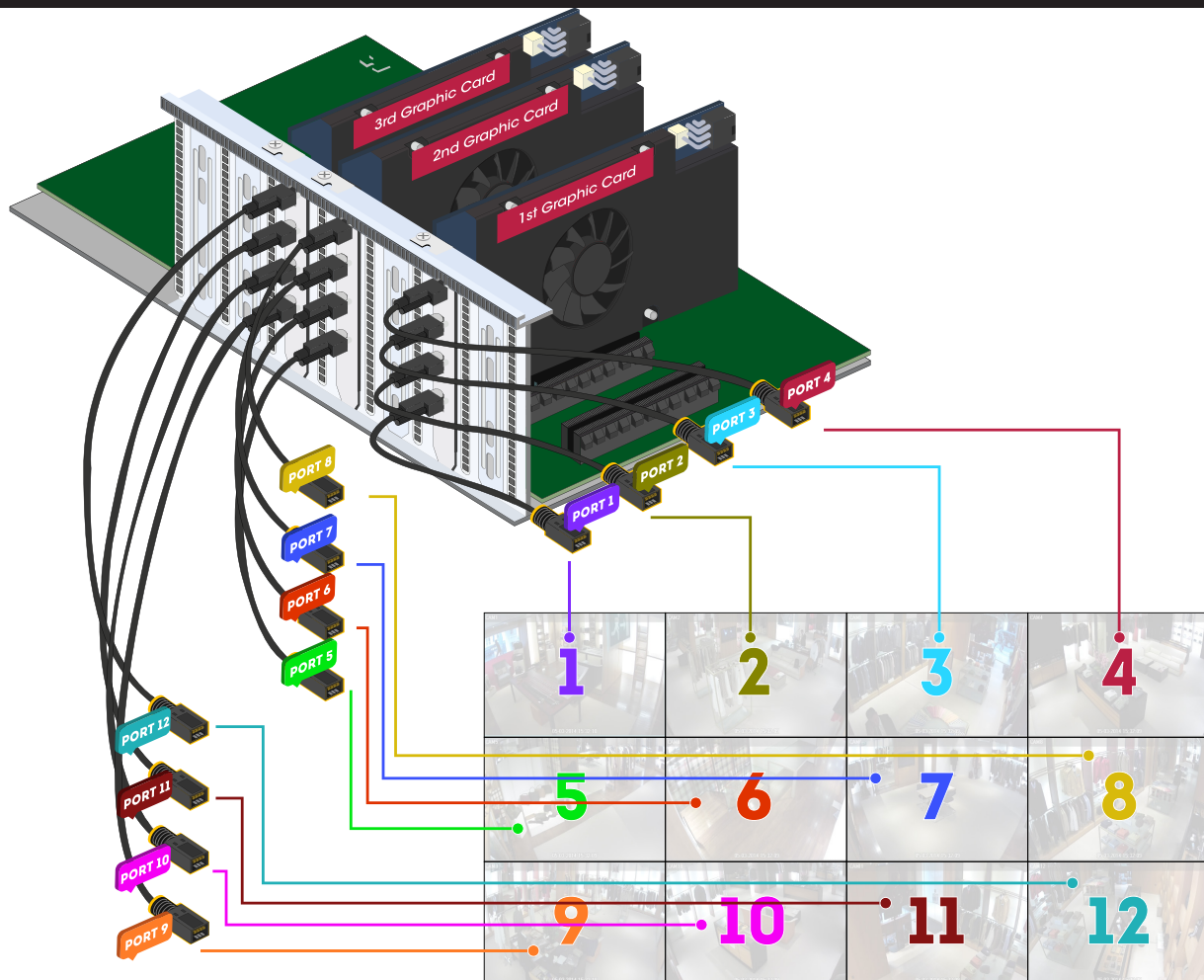
4x3 Video wall monitor layout / **Monitor Cabling**

Video wall monitor group

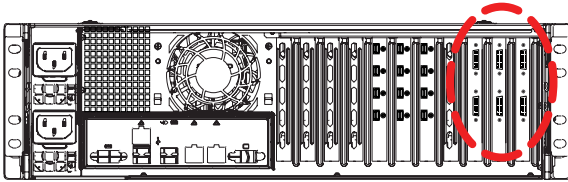| Monitor (D1-1)	Monitor (D1-2)	Monitor (D1-3)	Monitor (D1-4)
Monitor (D2-1)	Monitor (D2-2)	Monitor (D2-3)	Monitor (D2-4)
Monitor (D3-1)	Monitor (D3-2)	Monitor (D3-3)	Monitor (D3-4)

4 x 3 Video wall

- Video wall monitor group 1
- Video wall monitor group 2
- Video wall monitor group 3
- Video wall monitor group 4
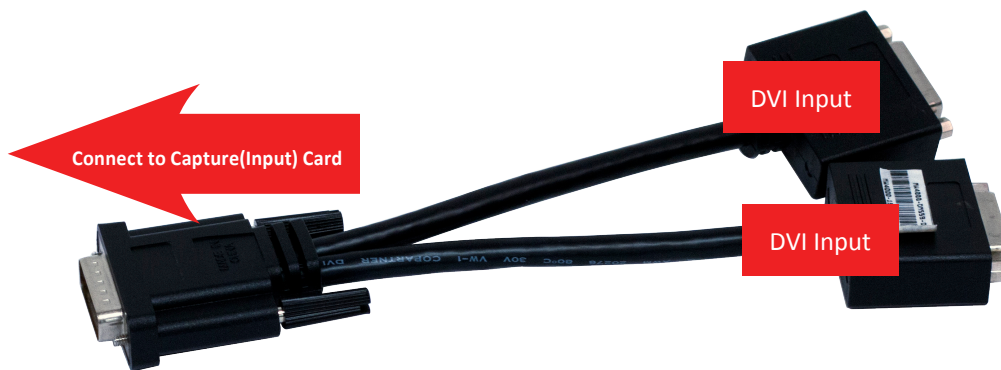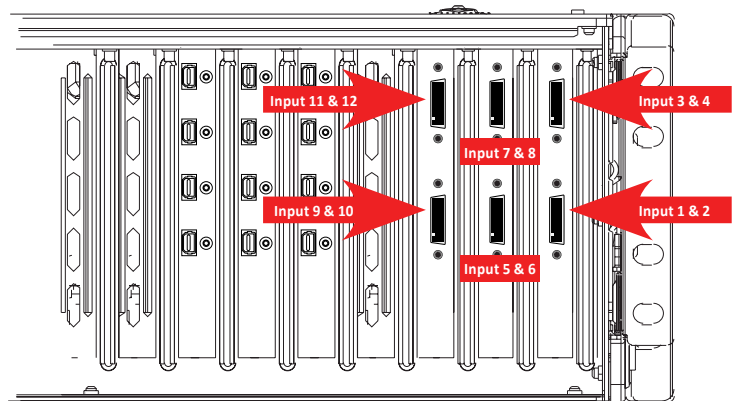- Video wall monitor group 5
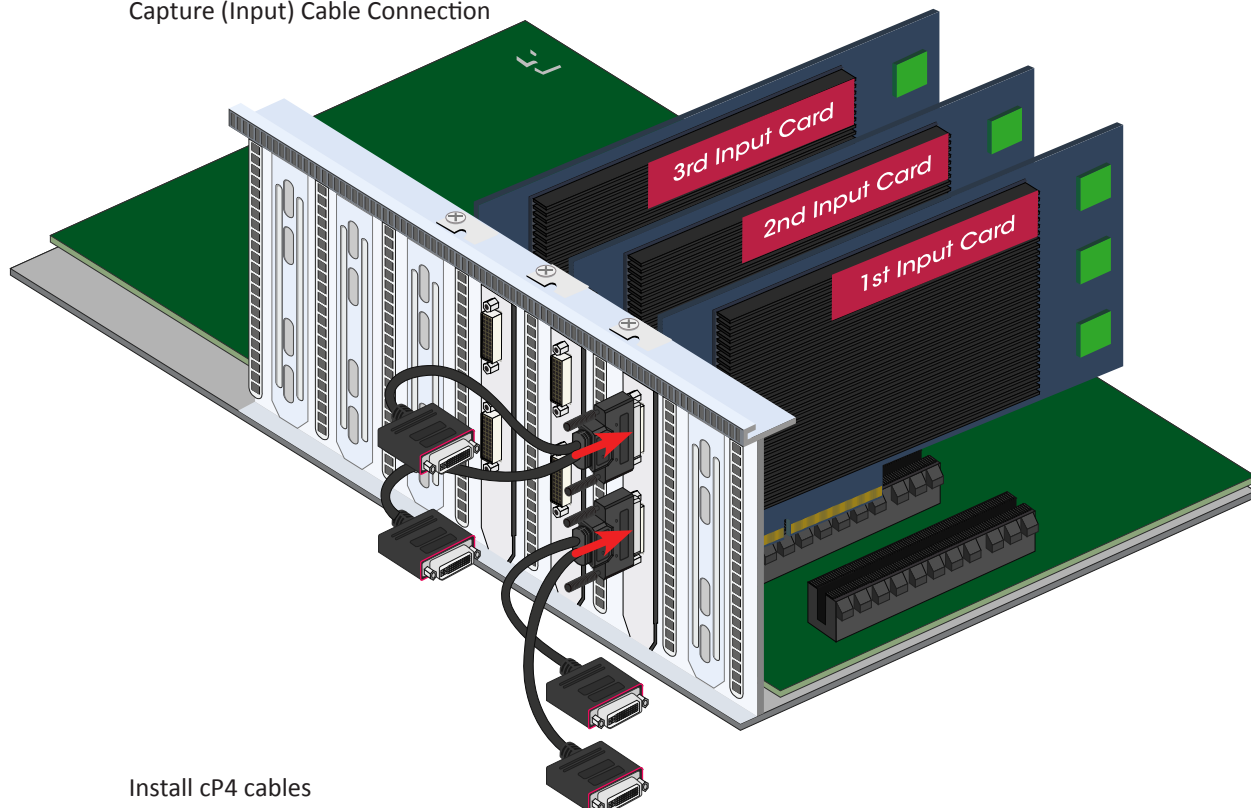- Video wall monitor group 6

VZ-PRO12 - uD8 Cable (Output) Connection

VZ-PRO12 - Capture (Input) Card

Three cP4 Capture(Input) Cards

Input 11 & 12

Input 3 & 4

Input 7 & 8

Input 9 & 10

Input 1 & 2

Input 5 & 6

DVI Input

Connect to Capture(Input) Card

DVI Input

Capture (Input) Cable Connection

3rd Input Card

2nd Input Card

1st Input Card

Install cP4 cables

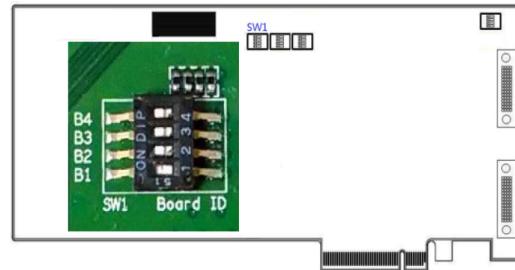## Capture (Input) Card Configuration | Capture Board ID

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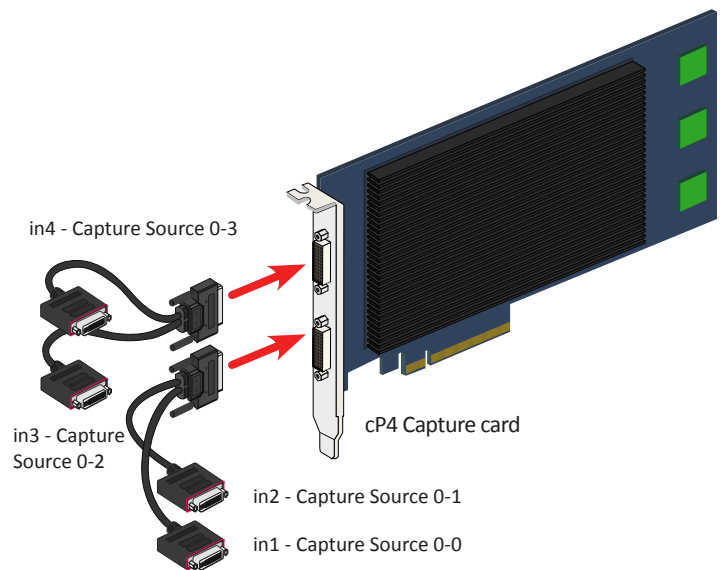
Switch to ON, bit define as 0,
Switch to OFF, bit define as 1.
The board/card ID can be set from 0 to 15.

cP4 Capture card - Board ID 1

Card Number	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

in4 - Capture Source 0-3

in3 - Capture Source 0-2

cP4 Capture card

in2 - Capture Source 0-1

in1 - Capture Source 0-0

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 | No.1 = 0-1 | No.2 = 0-2 | No.3 = 0-3
For example, if the Board ID is set to 4, then its input port numbers are
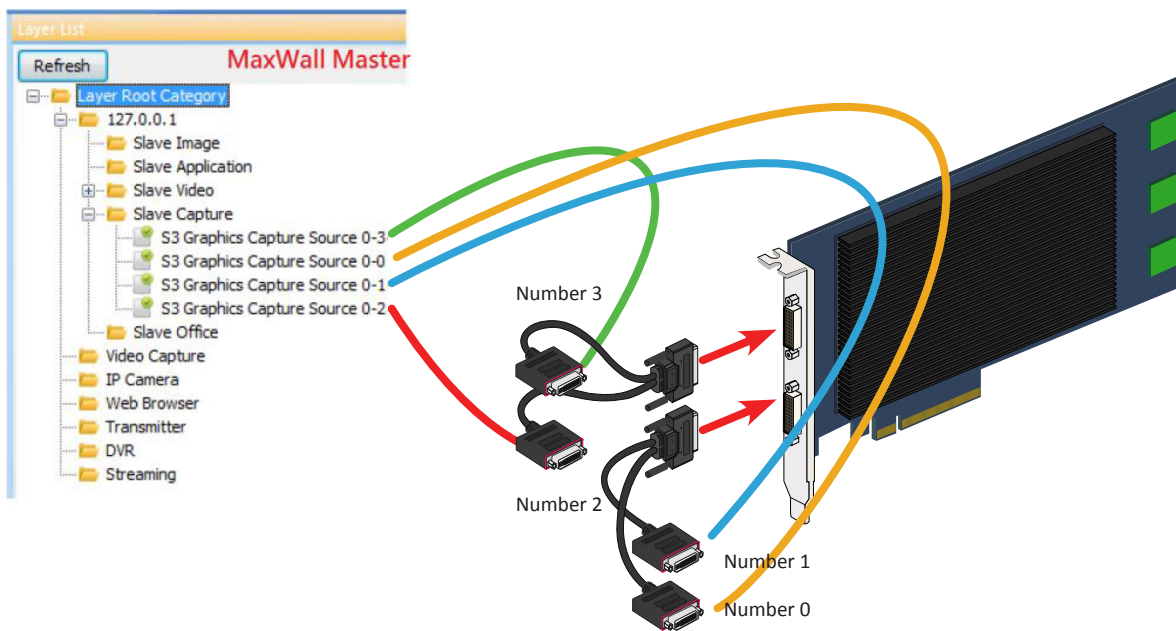   No.0 = 4-0 | No.1 = 4-1 | No.2 = 4-2 | No.3 = 4-3
For example, if the Board ID is set to 12, then its input port numbers are
   No.0 = 12-0 | No.1 = 12-1 | No.2 = 12-2 | No.3 = 12-3

Capture (Input) Card Configuration | Capture Board ID

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

| Card Number	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-PRO12, 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.
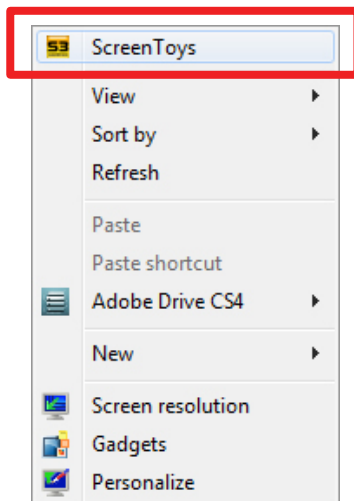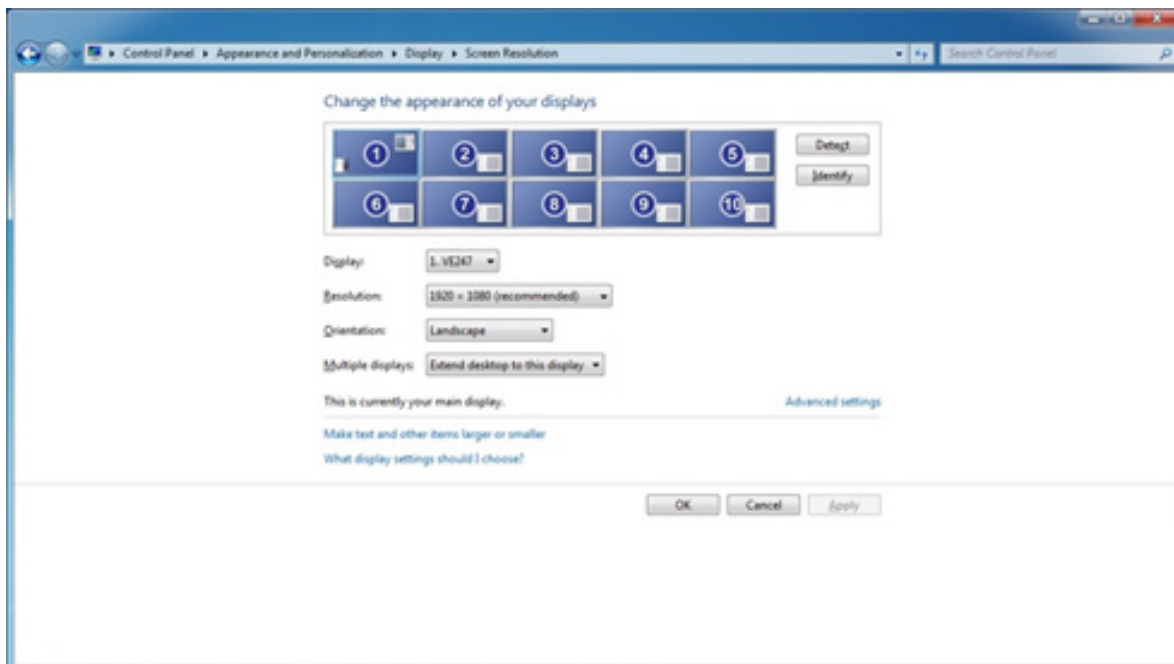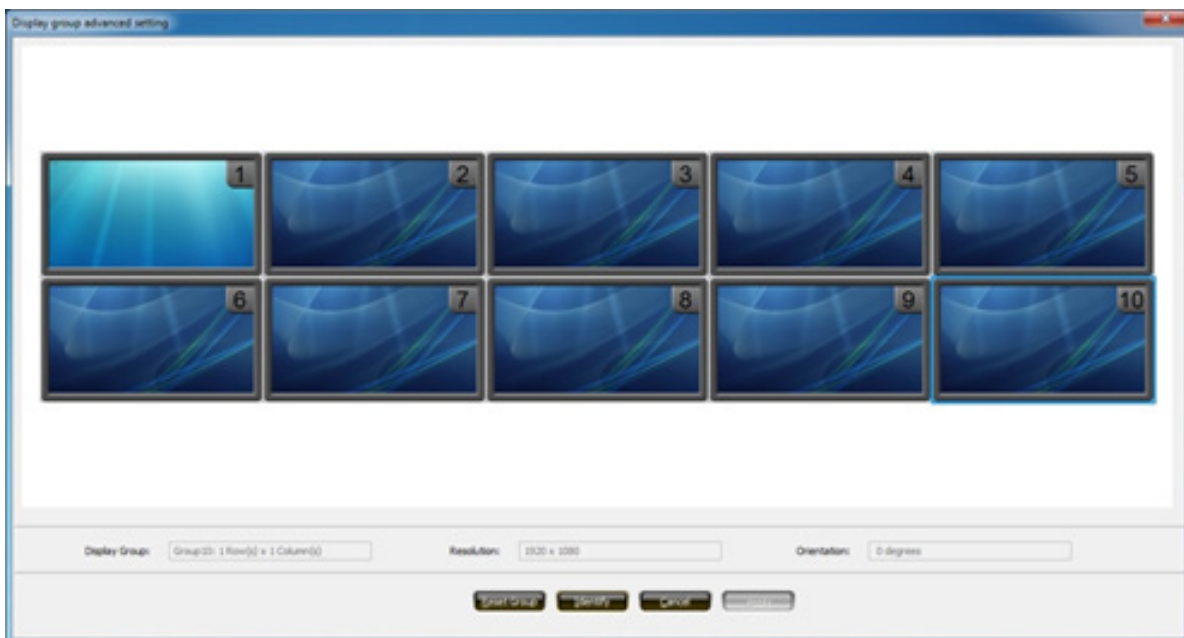

Multi-Display Setup

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.
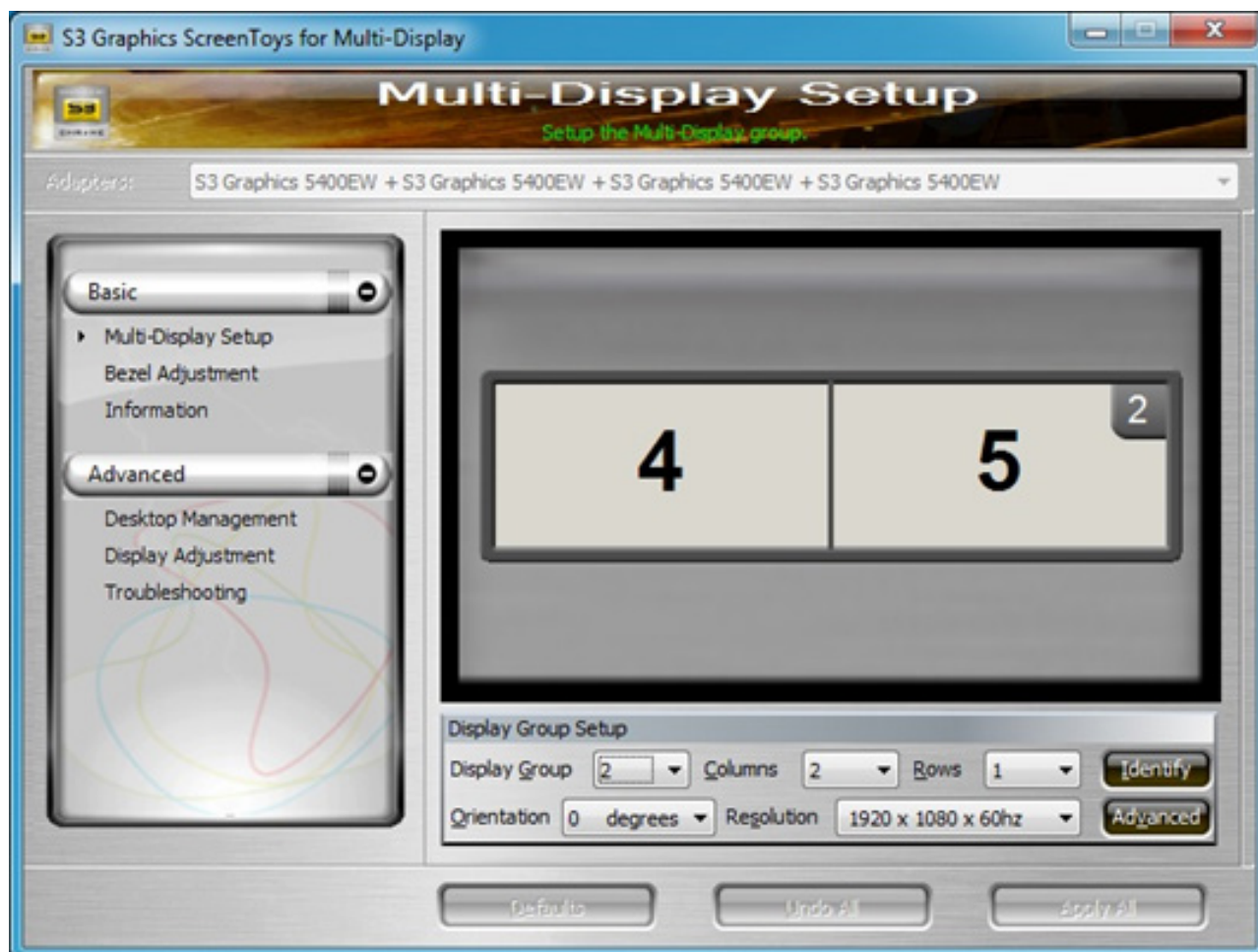
For 10-Display configuration, we will set up 4 groups. (One GPU supports one display group)
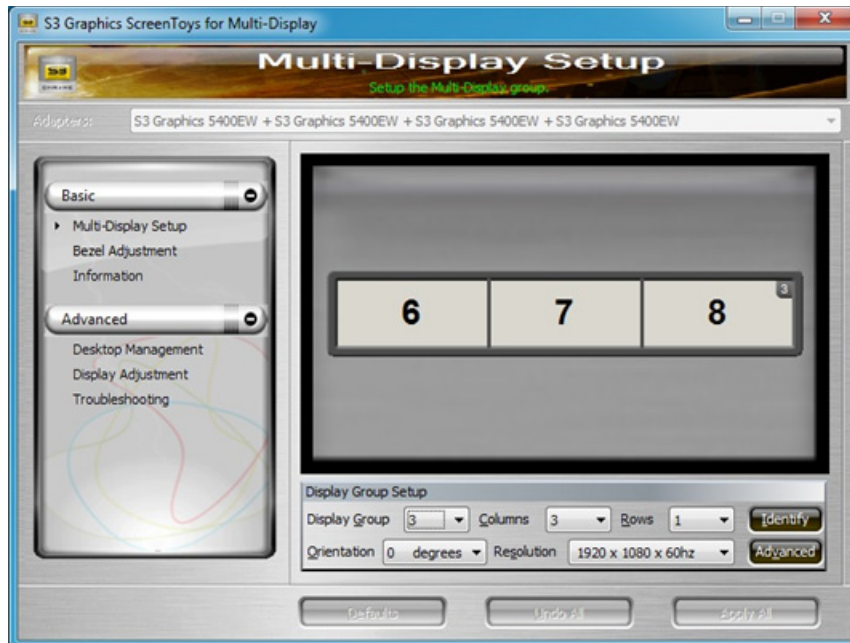
Display group 1 set up
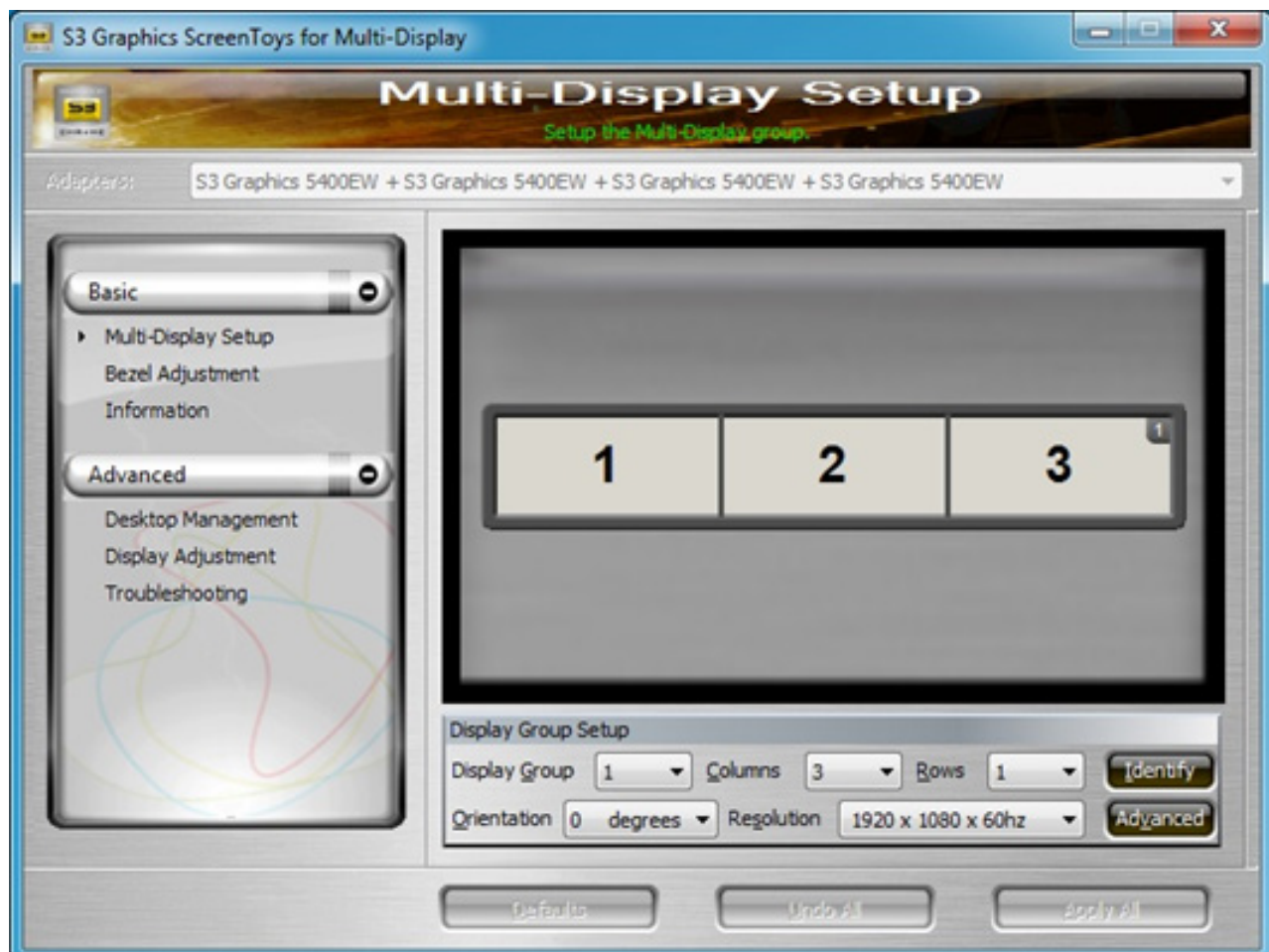
Configure Multi-Display Driver (cont'd) - 10 Monitor Configuration
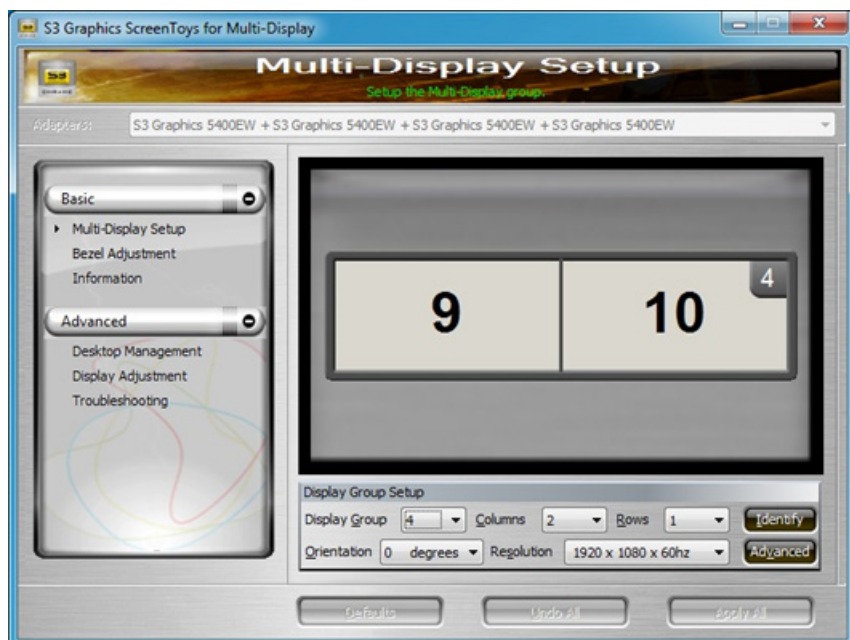
Display group 2 set up

Configure Multi-Display Driver (cont'd) - 10 Monitor Configuration
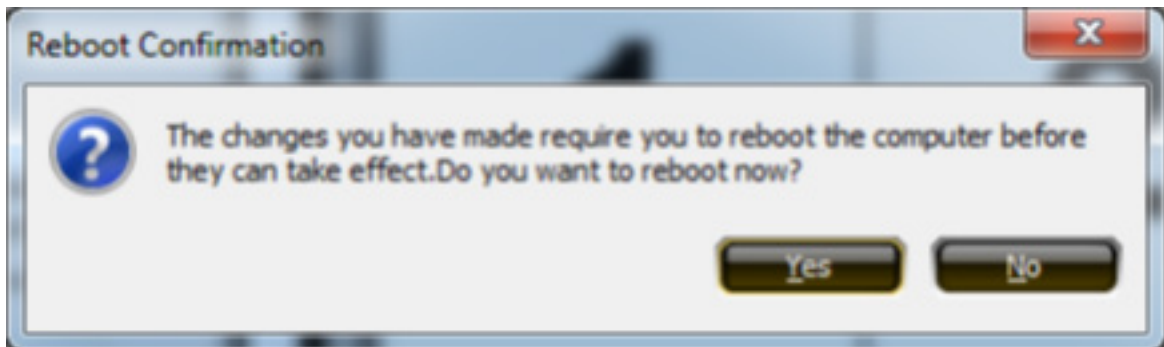
Display group 3 set up

Display group 4 set up

Configure Multi-Display Driver (cont'd) - 10 Monitor Configuration

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.
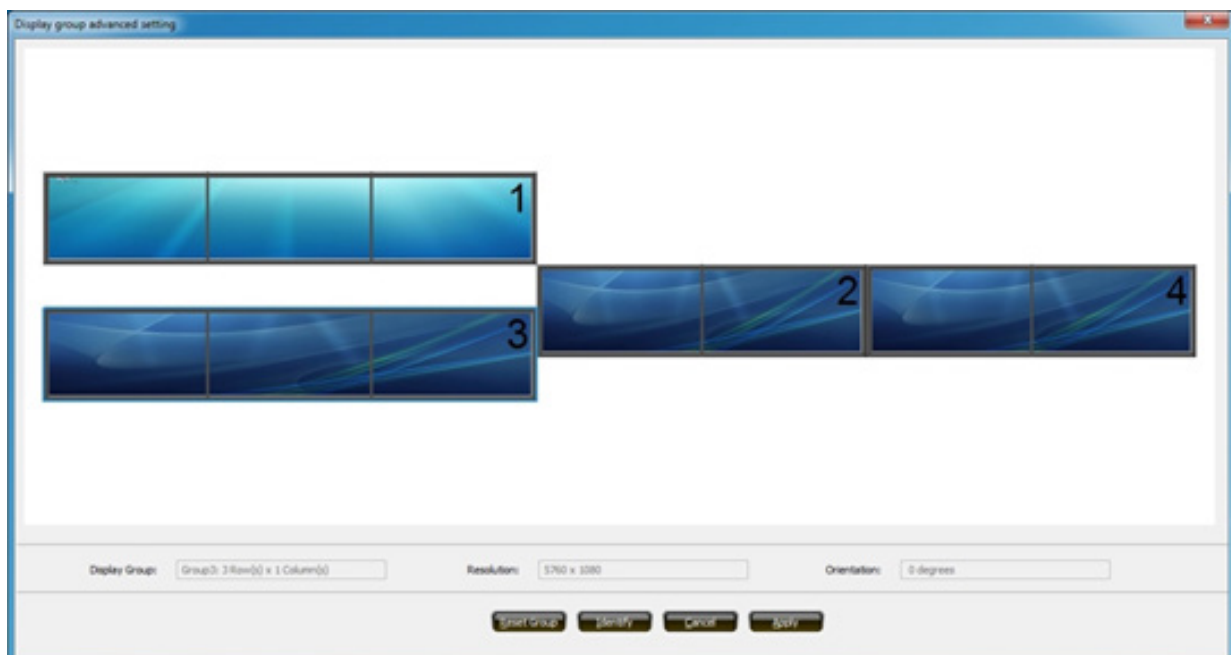

Step 6. After system reboots, in Win7, launch the *S3ScreenToy* again to finalize the group setup. You probably will see the group layout as shown below. Please use mouse to drag and drop each group to its final location as shown in screen shots below

Configure Multi-Display Driver (cont'd) - 10 Monitor Configuration

Before adjustment

Moving groups by mouse

Configure Multi-Display Driver (cont'd) - 10 Monitor Configuration

After adjustment