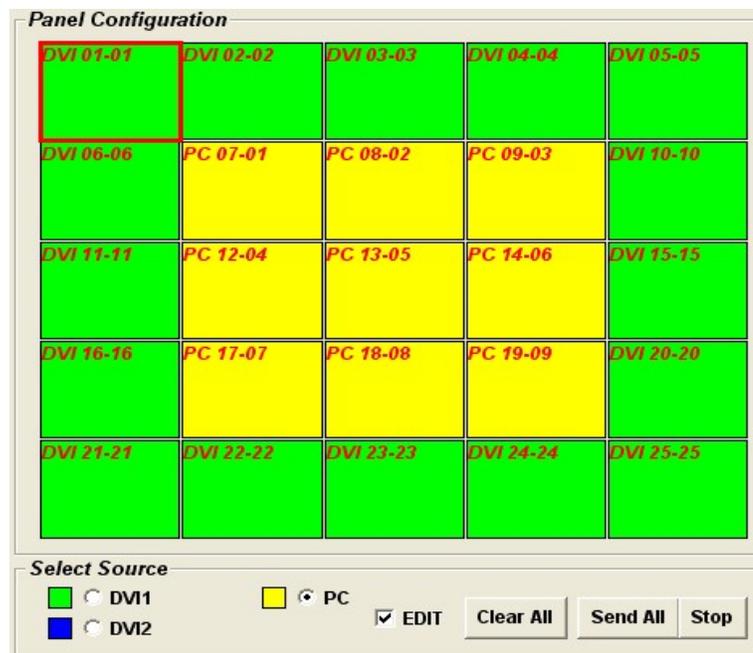


SICP [EN Series] User Manual



◆ SICP (Serial Interface Communication Protocol)

This document defines all the command and messages exchanged between the Master (a PC or the other controller) and the Slave (the displays).

It also describes the ways to send or read the commands or the messages.

1. Protocol definition

SICP stands for “Serial Interface Communication Protocol”.

The protocol is specifically designed to allow data communication in half duplex multi-point environments, but it can also be used for half duplex point-to-point RS-232C communication.

2. Communication characteristics

A half duplex communication is implemented starting from the concept of a master-slave structure, where the display is supposed to be the slave.

The first action is always taken by the master, which can be either a PC or any controlling device (acting as server) interfaced to the monitor. After sending a command or a request in the appropriate format the master receives from the slave an acknowledgement, which tells the transmitter whether the command is not valid (or not executable, anyway) or it is accepted. In case of a request, the requested information is sent back and it becomes the acknowledgement by itself.

3. How to connect control devices

Female Pin number	Male Pin number
2 <----->	2
3 <----->	3
5 <----->	5

4. Hardware Protocol

Baud rate : 9600 bps

Data bits : 8 bit

Parity bits : None

Stop bits : 1 bit

Handshake : None

◆ How to Install SICP

1. Introduction

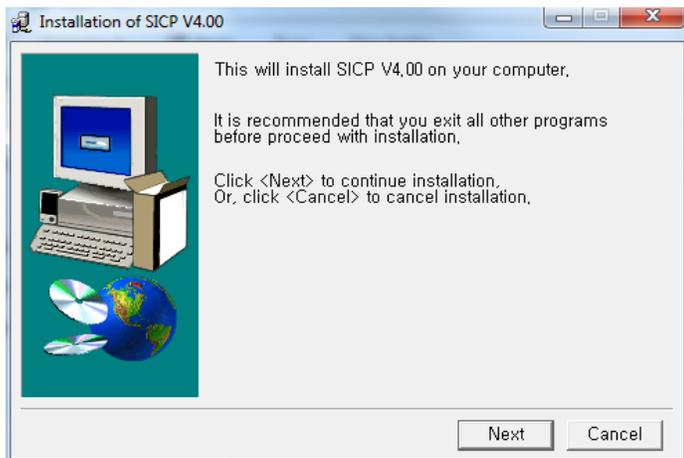
This manual booklet describes how to manage and utilize the product (Video Wall set) through remote control by RS232 protocol. This will introduce SICP V4.01 (Software that enables you to control the Video Wall) and various applications will be possible with this software. As per different way of customizing, the functions and specifications of each product may vary.

Notice: Please extract VBRunTimesR7.zip and install the program for VISTA, WIN7 and 8 before installing SICP.

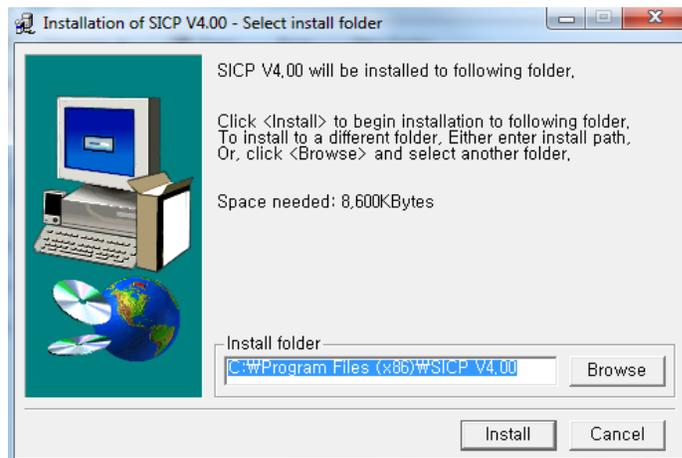
2. Installing SICP V4.00

Run the file named “SICP 4.00_Setup.exe” and follow the instruction below.

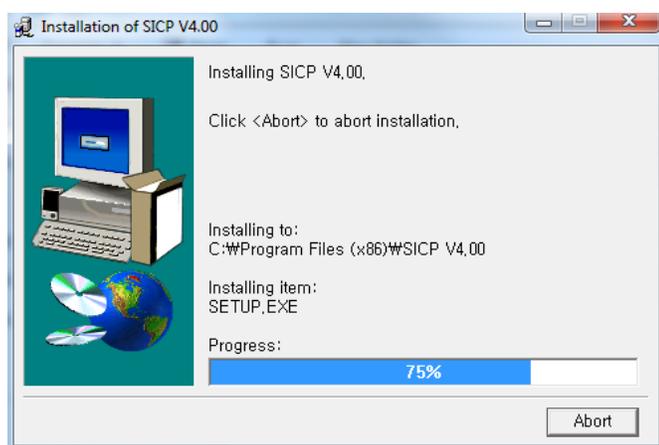
If you have SICP program installed previously, delete the previous one and re-install the new one.



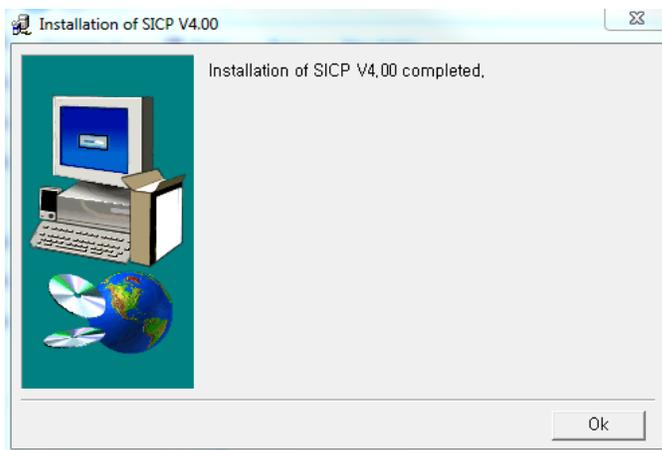
Press “Next”



Select the folder you wish to save the file in.
Press “Install” if you are ok with the designated folder.



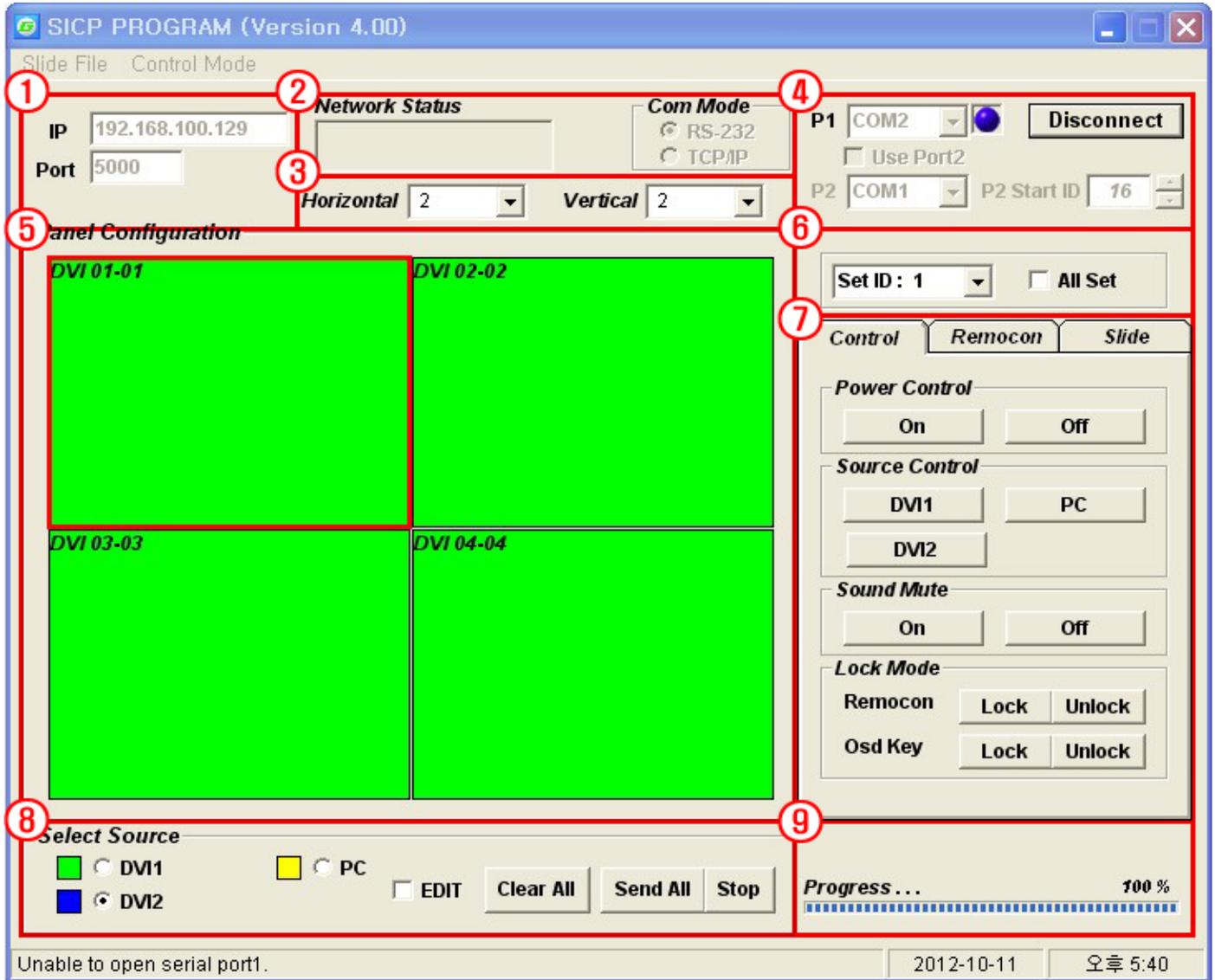
Wait until the installation is complete.



Once installation is complete, go to “Start” Menu -> Programs -> SICP V4.00 to run the program

3. Running SICP V4.00 and Structure

Go to "Start" Menu -> Programs -> SICP V4.00 to run the program.



1. Network IP Setting: Control IP Setting.
2. Com Mode: Select the Port connected to the Mode.
3. Horizontal & Vertical: Shows the type of display you can select.
4. Communication: Select the Port connected to the PC.
5. Panel Configuration: Indicates the information such as display configuration, source, Set ID and sequence number.
6. Set ID: Shows the Set ID you can control.
7. Control Button: Set of control buttons.
8. Edit tools: Set of edit tools.
9. Progress Bar: Shows the status of RS232 communication.

4. Connect & Disconnect

- You can connect RS232 input and control from your PC using the RS232 Cable.
- Select the Port into which you have connected to your PC (refer to ③ in the image above) and press connect button.

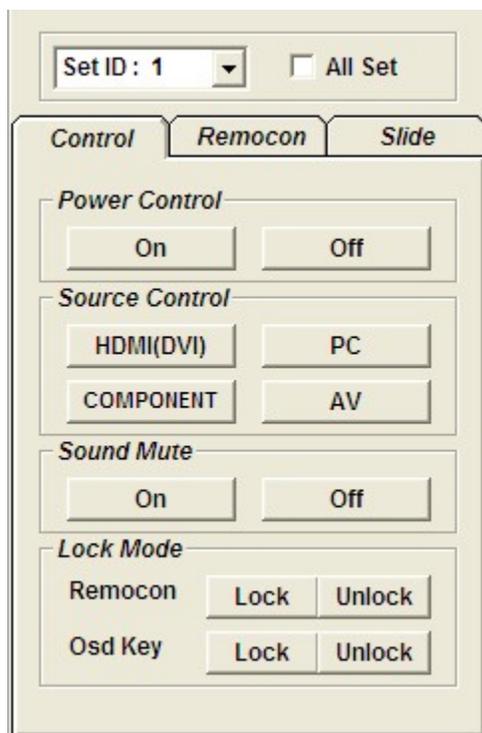
If connected properly, the lamp will be turned to BLUE (from RED). If not connected properly, one of the following messages will appear.

- *Unable to open serial port: The port may not be available in your PC or another program may be running under this port.
- *Cannot connect with Easy DID System: RS232 Cable may not be connected properly or Set ID may be incorrect. Re-check on Set ID.

5. Multi-vision Control

You can control each display separately. First, select the display you wish to control by selecting Set ID. You may click on it (Refer to ④ in the image above) or select it from the drag-down menu (Refer to ⑤ in the image above). If the set is selected, you may practice the following functions.

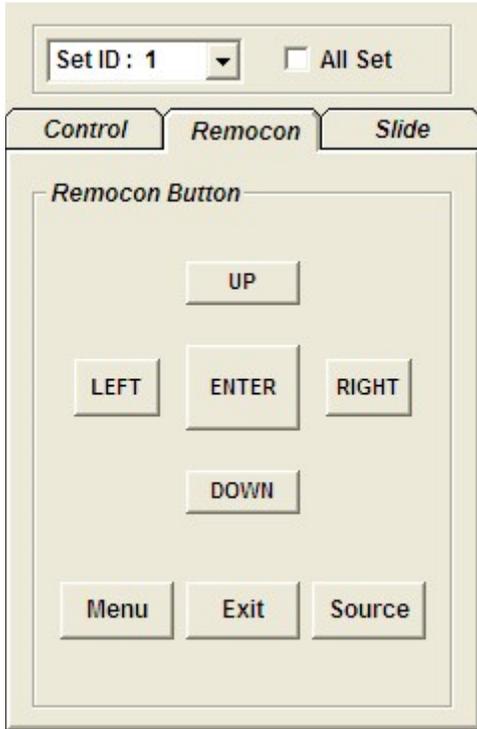
1) Basic Control



- Select Control Tab

- Power Control: Turn the Set On/Off
- Source Control: Select Source
- Sound Mute: Turn the Mute On/Off
- Lock Mode: Lock or unlock the IR or control key.

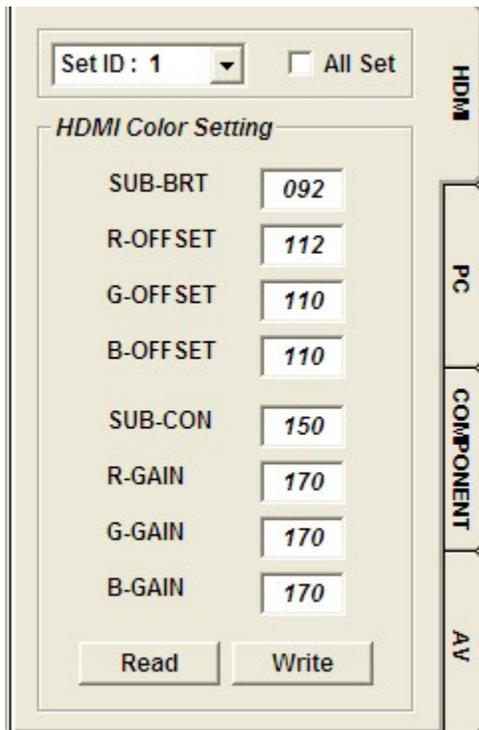
2) Virtual Remocon



- Select Remocon Tab
- This virtual remote controller controls the set through RS232.

Note: Functions in Slide Tab will be described in "6. Slide Function"

3) Color Setting

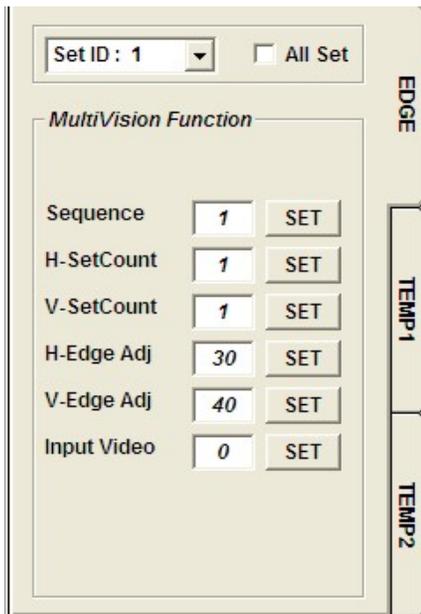


- You can access the "Color Setting" mode only if you enter Supervisor Mode. In order to enter Supervisor mode, go to "Control Mode" in the toolbar (top) and select "Setting Mode"
- Hot key: Ctrl+F2.



- Press "OK"
- Adjust the color (0~255). The color will be optimized in the testing after manufacturing. Adjusting the color is not recommended unless necessary.

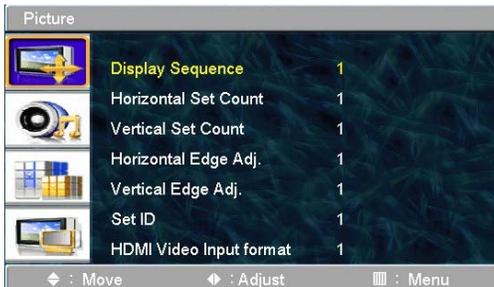
4) Edge Setting



- You can access "Edge Setting" only if you enter Supervisor Mode. In order to enter Supervisor mode, go to "Control Mode" in the tool bar (top) and select "Setting Mode"
- Hot key: Ctrl+F3.



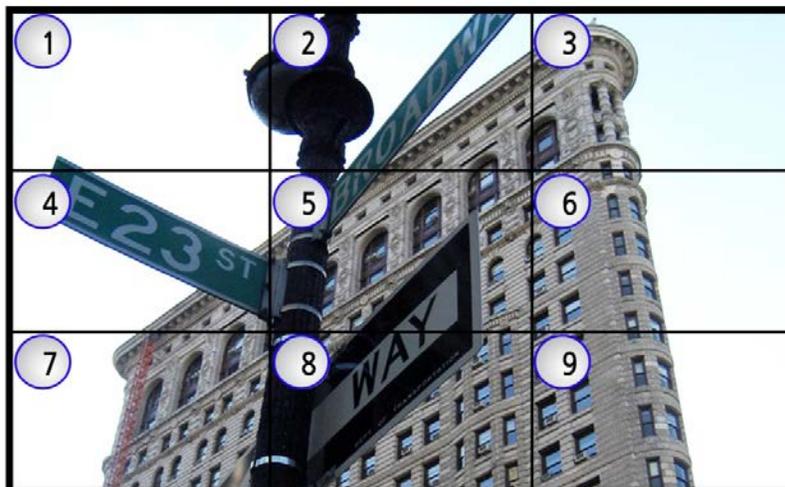
- Press "OK"
- It is not readable and only writable.



<OSD Menu>

< Others >

- Display Sequence: Set the panels to display the contents.(1~100)



- H-Set Count (Horizontal Set Count): Set the horizontal size of the

Video Wall (1~10)

E.g. If set as above, H-Set Count: 3

- V-Set Count (Vertical Set Count): Set the vertical size of the Video Wall (1~10) E.g. If set as above, V-Set Count: 3
- H-Edge Adj (Horizontal Edge Adjust): Set the horizontal gap of Video Wall (0~200)



- V-Edge Adj (Vertical Edge Adjust): Set the vertical gap of Video Wall (0~200)



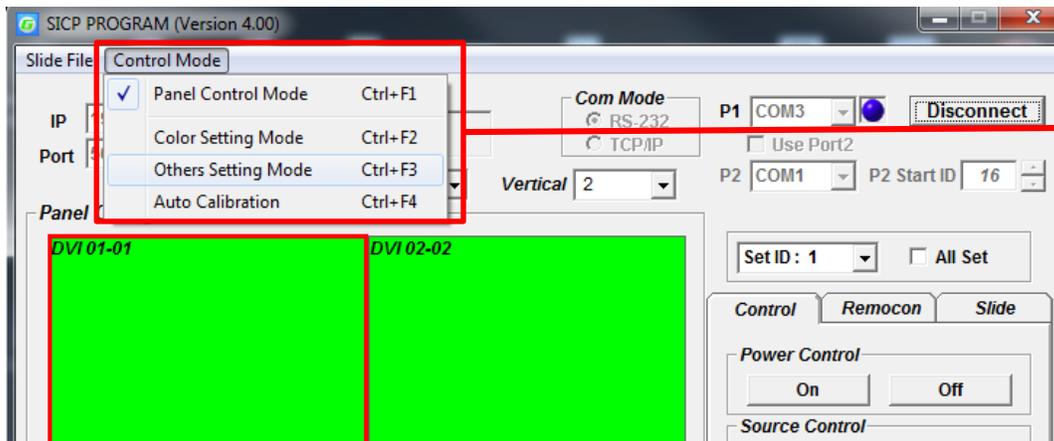
- HDMI Video Input format: Select video format of HDMI input data

0: RGB444

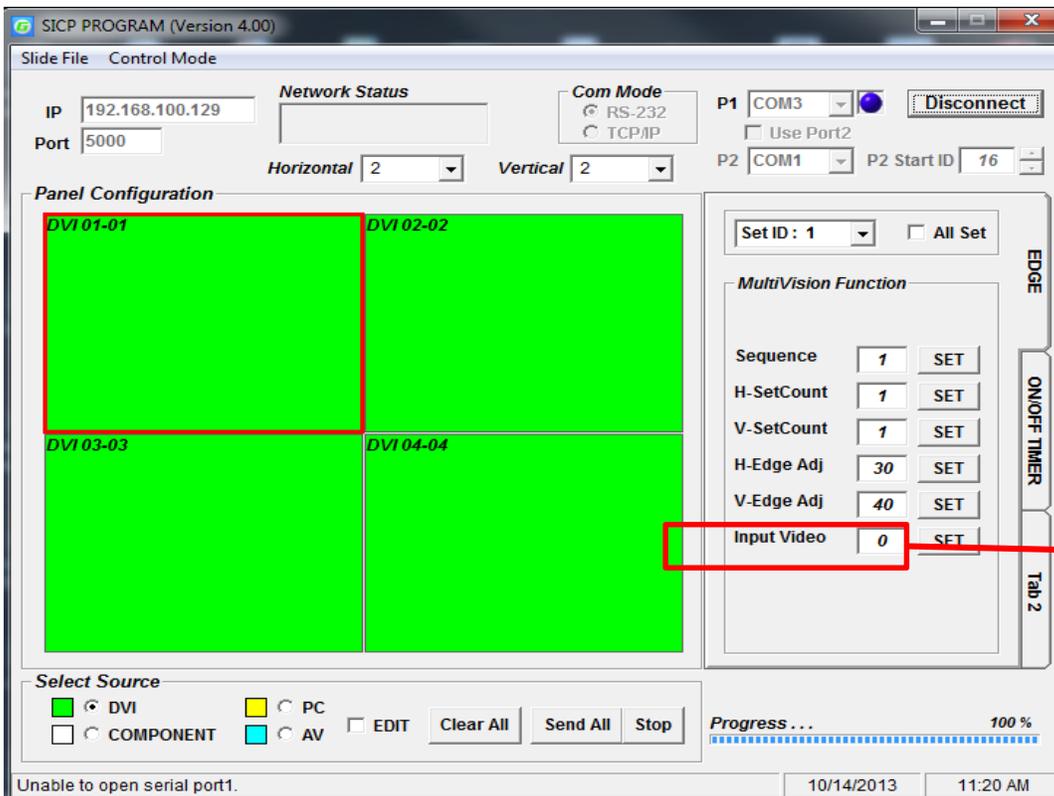
1: YPbPr444

2: YPbPr422

*HDMI Video Input format issues often manifest themselves in the form of a magenta/pink tint on display panels. If this issue arises, check the type of source being used. If, for example, a Blu-Ray player is being used, the HDMI Input Format on the displays must be set to "1" (default value is "0").



1. Click "Control Mode"
2. Select "Other setting "mode"



3. Change the input video format. (Ex. PC : 0, Blue-ray player: 1)

6. Slide Function

1) Edit



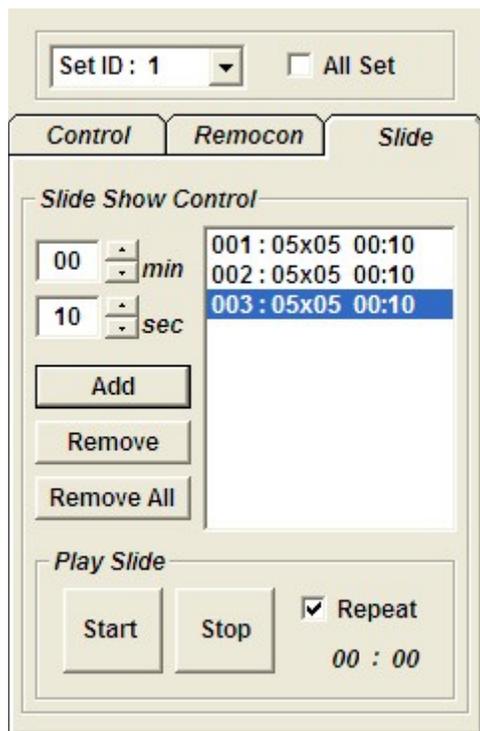
Example> When you wish to display a 5X5 background from DVI and display 3X3 (in the center) from PC.

- Click on Edit box as described in ① of the image above.
- Select PC as described in ② of the image above.
- Select the area by clicking and dragging as described in ③ of the image above.
- The complete image will appear as the picture on the right.

Send: Press “Send All” in order to test the setting you made so that you can decide if the adjustments are to your liking.

Initialize: Select DVI in Edit tool and press “Set All” in order to initialize. The setting will be then initialized.

Add & Delete in Slide Schedule



Total management is possible by inserting the page you edited. You can set the play time for each page separately.

You cannot change the sequence of play so you have to insert the schedule in order.

Add : Insert the edits (page) you made.

- Remove : Remove the page

- Remove All : Remove the schedule

2) Play

Press the start icon (refer to the image above) to play and press stop icon if you wish to stop playing.

- Repeat: Check "Repeat" to play continuously.

3) File Management

You can save the contents you have edited and replay the saved contents. You must save after you complete scheduling.

- Save a file: Go to "Slide File" (top left of SICP program) and press "File Save" in order to save the file in the folder you wish to select. Basically, the file format is *.sld.

- Open a file: Go to "Slide File" and press "File Open" in order to open the file you wish to play.