BSC-100

boland System

Controller

User's Manual

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1. Introduction to Boland System Controller

This PC program is designed to be a user friendly method for controlling a large number of Boland broadcasting monitors through RS-232C and TCP/IP interface.

1). Program Functions & Features

• Create & Edit the Boland broadcasting monitor System Controller Map.

  This is available to save the layout of the System Controller Map as a file format.

• Control a Large Number of Monitors.

  By using the Control Panel it is possible to control one or more monitors.

• Status Display

  The status of each Monitor can be displayed.

• Designate Names for Each Monitor

  Each monitor can be given a name & ID. Each monitor can show its channel name on screen.

2). System Specifications Required for Operation

• This program only runs on Windows XP sp2 or above.

• Microsoft .NET framework 4.0 or later.

System Spec & Program can be upgraded & changed at any time for better quality of the program.
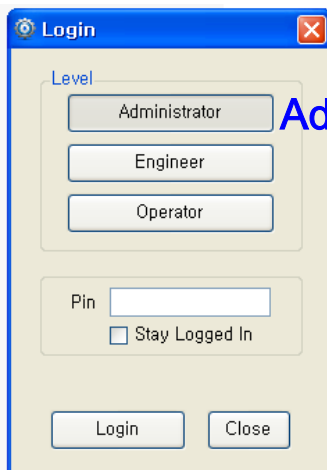
2. Installation of Boland System Controller

• To install the program on user pc, select "System Controller.msi" file, and follow the "Boland System Controller Setup Wizard" instructions.
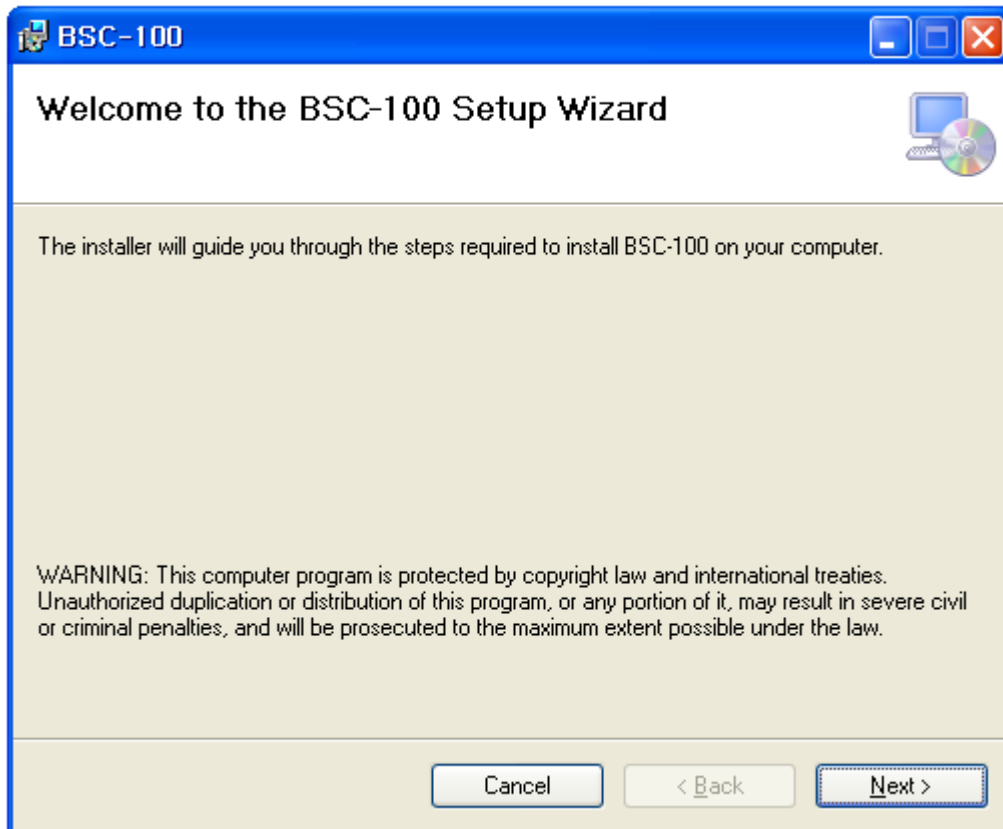
After installation is completed, a shortcut button will be shown on the desktop and in the start menu.
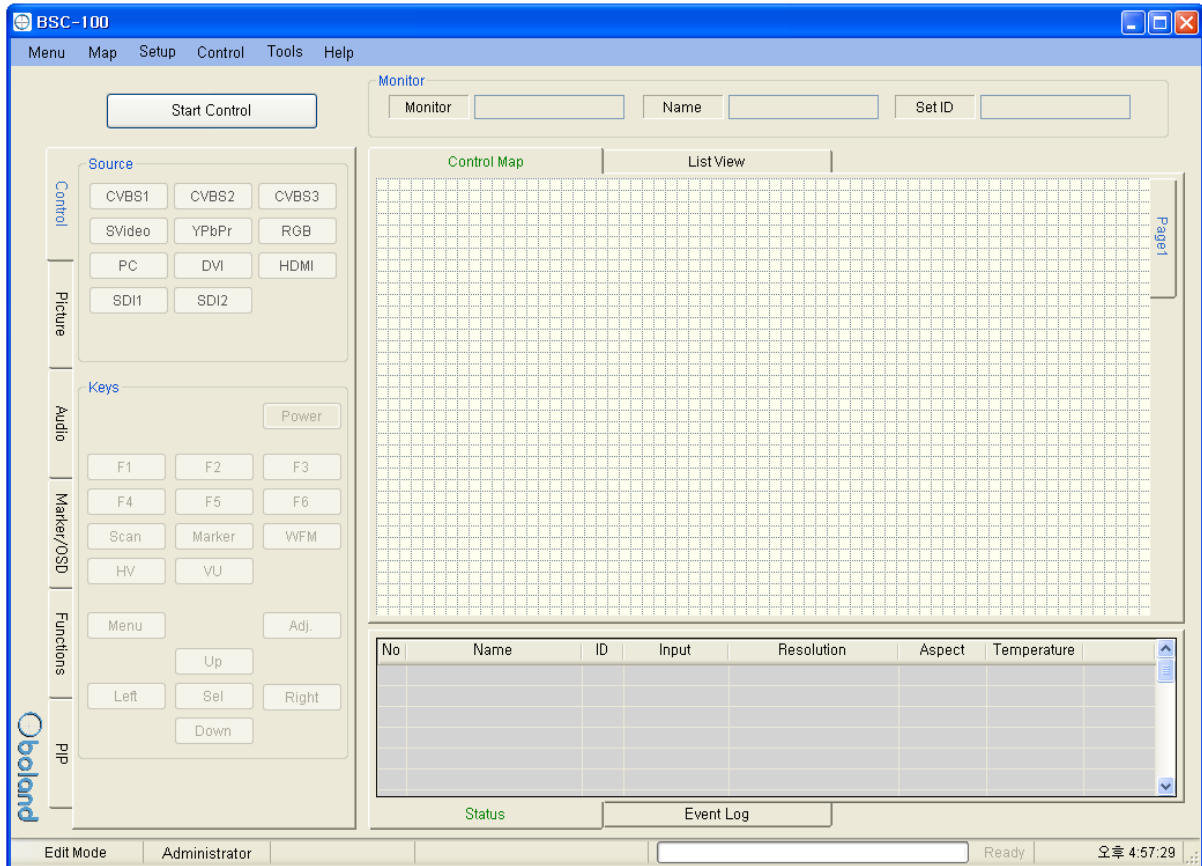
3. User Login

• Administrator: Open all items

• Engineer: Engineer access ALL below items except. (FPGA & Firmware update)

• Operator: Mode Start & Stop Control/ Open Map/Exit/Help /About

Administrator PIN: vboland

4. Contents of Boland System Controller

1). Menu strip

   a) Menu: New, Open Map, Save as…

   - New: start a new Map.

   - Open Map: Load a control map from a saved file.

   - Save as…: Save the control map to file.

   b) Map: Control Map Wizard, Add Monitor, Delete Monitor, Add Page, Delete Page

   c) Setup: User Level, Shortcut, Network

   d) Control: Function Key, GPI

   e) Tools: FPGA ISP, F/W ISP
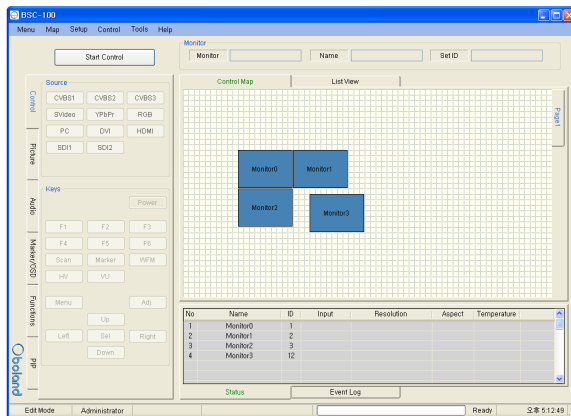
   f) Help: About

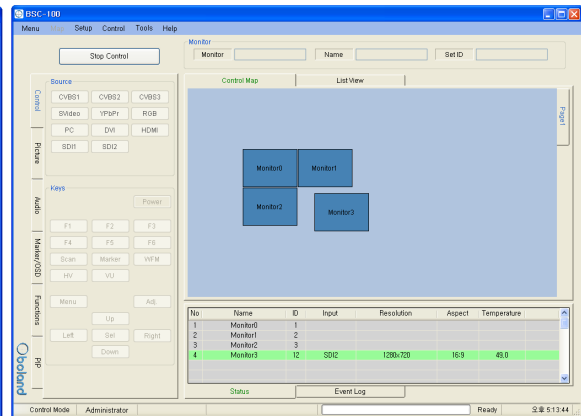## 2). Monitor Properties Group

- Displays the selected monitor's model, name and ID.

3) Control Table

- Displays currently opened control Map.

- User can edit the control map and control the monitor on this table.

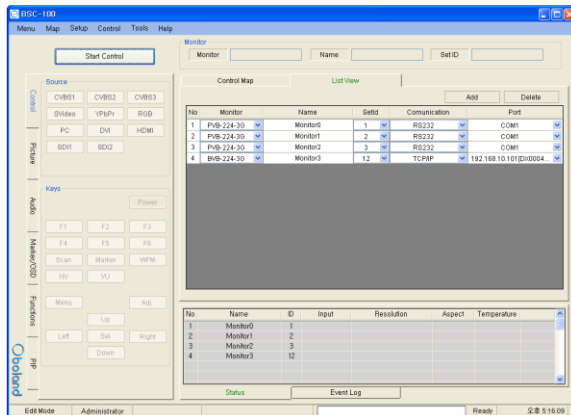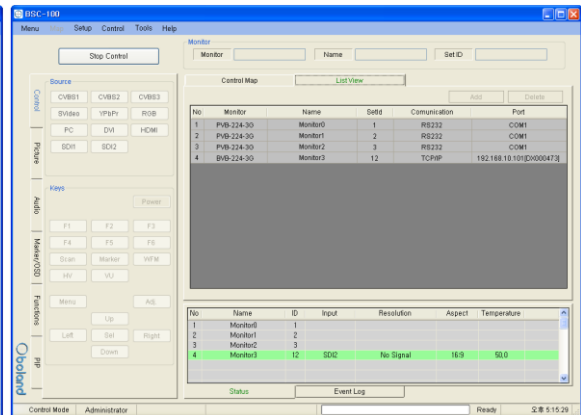- This table is changed according to the mode changing as below.

(Edit Mode) (Control Mode)

4) List View

- Displays list of currently opened control Map.

- User can edit and control the monitor.

(Edit Mode) (Control Mode)

5) Information

- Displays each monitor's information which is added on control table.
- User can see the Monitor ID, Signal Locking status, Input resolution, Aspect and Board temperature.

No	Name	ID	Input	Resolution	Aspect	Temperature	
1	Monitor0	1					
2	Monitor1	2					
3	Monitor2	3					
4	Monitor3	12	SDI2	1920x1080	16:9	50,0	

Status	Event Log

6) Log

- It shows the major events that occurred in system controller.
- Clear: Clear the log window.

```
TCP: Disconnected
TCP: Disconnected
TCP: Disconnected
TCP: Disconnected
TCP: QBOXDX000473System: [COM1] Port Closed!
TCP: Disconnected
System: [COM1] Port Open!
TCP: 192,168,10,101 Connected at port 5009
System: [COM1] Port Closed!
TCP: Disconnected
System: [COM1] Port Open!
```

Status	Event Log

7) Controller Tap

- User can control the monitor easily thought this tap.
- Controller Tap is only available when monitor is selected in the control mode.

Source
CVBS1	CVBS2	CVBS3
SVideo	YPbPr	RGB
PC	DVI	HDMI
SDI1	SDI2	

Keys
		Power
F1	F2	F3
F4	F5	F6
Scan	Marker	WFM
HV	VU	
Menu		Adj.
	Up	
Left	Sel	Right
	Down	

Tabs: Control, Picture, Audio, Marker/OSD, Functions, PIP
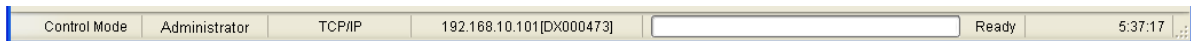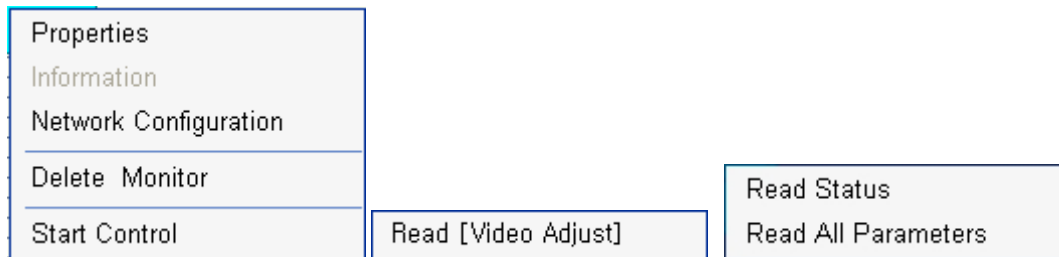
8) Status Bar

- It displays Mode, User Level, Com port or Target IP address, Progress bar and current time.

| Control Mode | Administrator | TCP/IP | 192.168.10.101[DX000473] | | Ready | 5:37:17 |

9) Context Menu

- Right-clicking or Double-clicking on Control Table or Controller Tap will bring up the commands used to control.

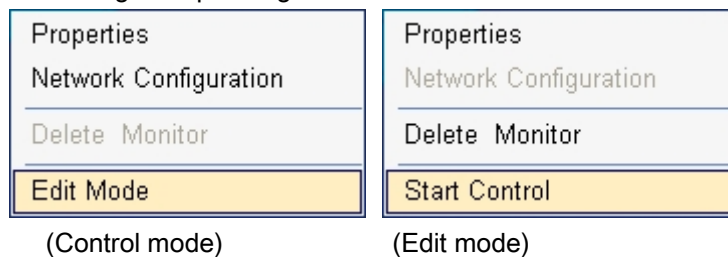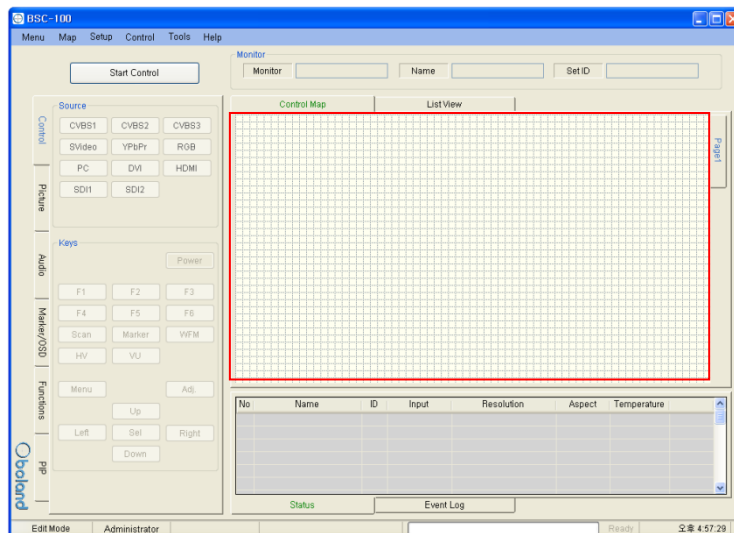| Properties |
| Information |
| Network Configuration |
| Delete Monitor |
| Start Control |

| Read [Video Adjust] |

| Read Status |
| Read All Parameters |

5. Edit Control Map

- User can edit the control map in EDIT MODE.
- Edit mode is only to use the Editing map. User cannot control any monitor in this mode.

1) Start Edit Mode

- User can change to edit mode through Mode items on menu strip, context menu on control table or mode changing button on control table.
- Below Context menu strip is opened by mouse right-clicking on the Control Table.
- It is changed depending on status of mode.

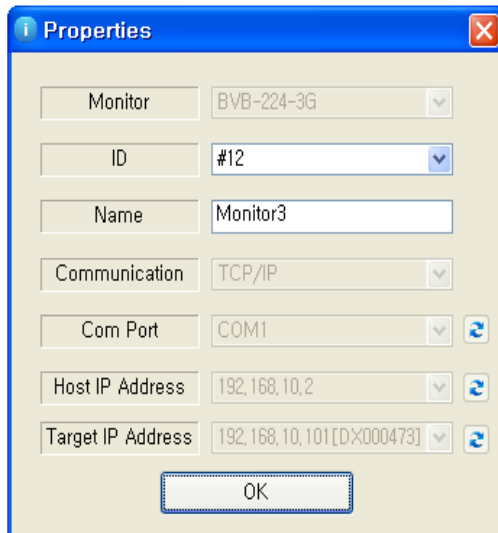| Properties |
| Network Configuration |
| Delete Monitor |
| Edit Mode |

| Properties |
| Network Configuration |
| Delete Monitor |
| Start Control |

      (Control mode)   (Edit mode)

- If mode is edit state, Control table is grid pattern as below.

- In control table, user can locate the monitor icon any place.
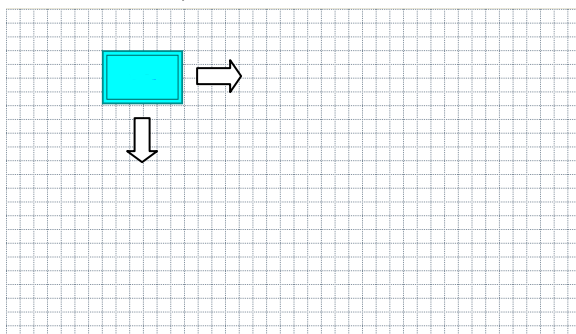
2) Open and Save Map.

- User can save the control map and open the saved one.

- Filename extension is .pc3.
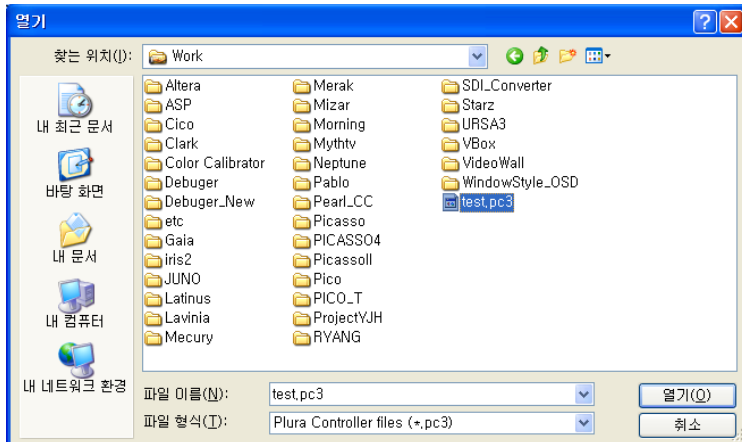
3) Add and Delete monitor

- User can add the monitor for use in control table by Add Monitor form as below.

- User can open the Add Monitor form by the Edit menu or context menu strip on control table.

a) Monitor: Select the target model. Icon size is changed by model.

b) Monitor ID:

  - Select the target monitor's ID number.

  - If ID is different, User cannot control the monitor.

  - Cannot select same ID with other monitors.

c) Name:

  - It appears in the center of the monitor icon.

  - Cannot make same name with other monitors.

d) Communication: select communication interface between RS232 and TCP/IP.

e) Com Port: select RS232 Comport of available in PC.

f) My IP Address: select PC IP address of available in PC..

g) Target IP: select target IP address of linked monitor.

h) Add and Cannel button: Add monitor or cannel the add monitor.

- If monitor is successfully added, user can see the monitor icon on control table and information as bellow.
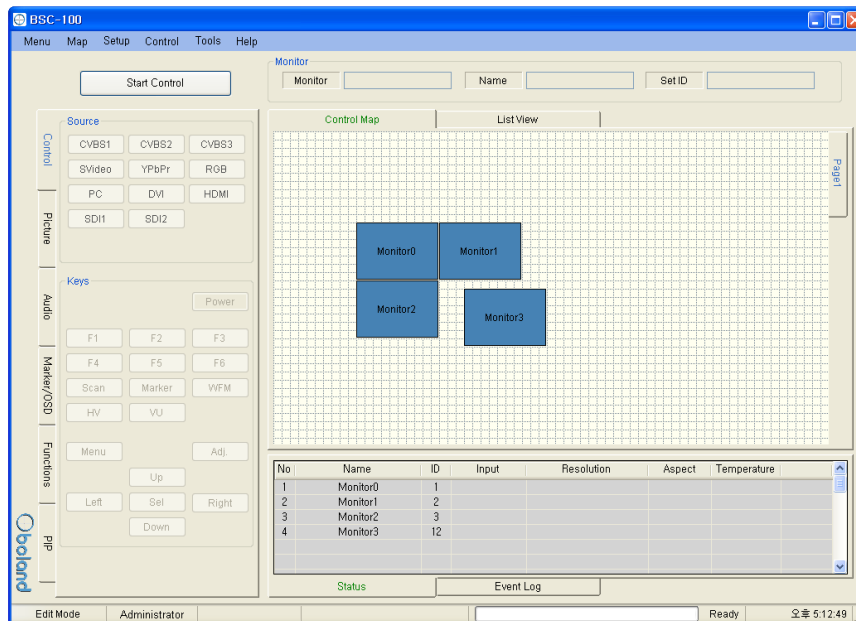
- User can delete the selected Monitor by Edit item on menu or context menu on control table.

4) Properties

- User can change all properties of selected monitor that already added on control table.

- User can open the properties form of the selected Monitor by Edit item on menu or context menu on control table.

- It is changed depending on the mode
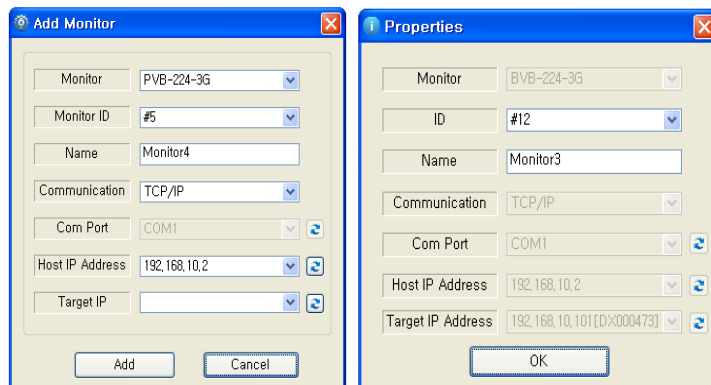
(Edit Mode)   (Control Mode)

6. Control Mode

- User can control the selected monitor in this mode.

- Only for control, cannot edit.

1) Start Control

- User can select the control mode thought Mode items in menu strip, context menu strip or mode changing button on control table.

- Context menu strip is opened by mouse right-clicking on Control Table.
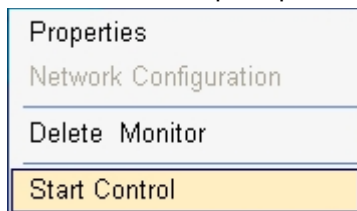
- If mode is control state, Control table is changed as below.
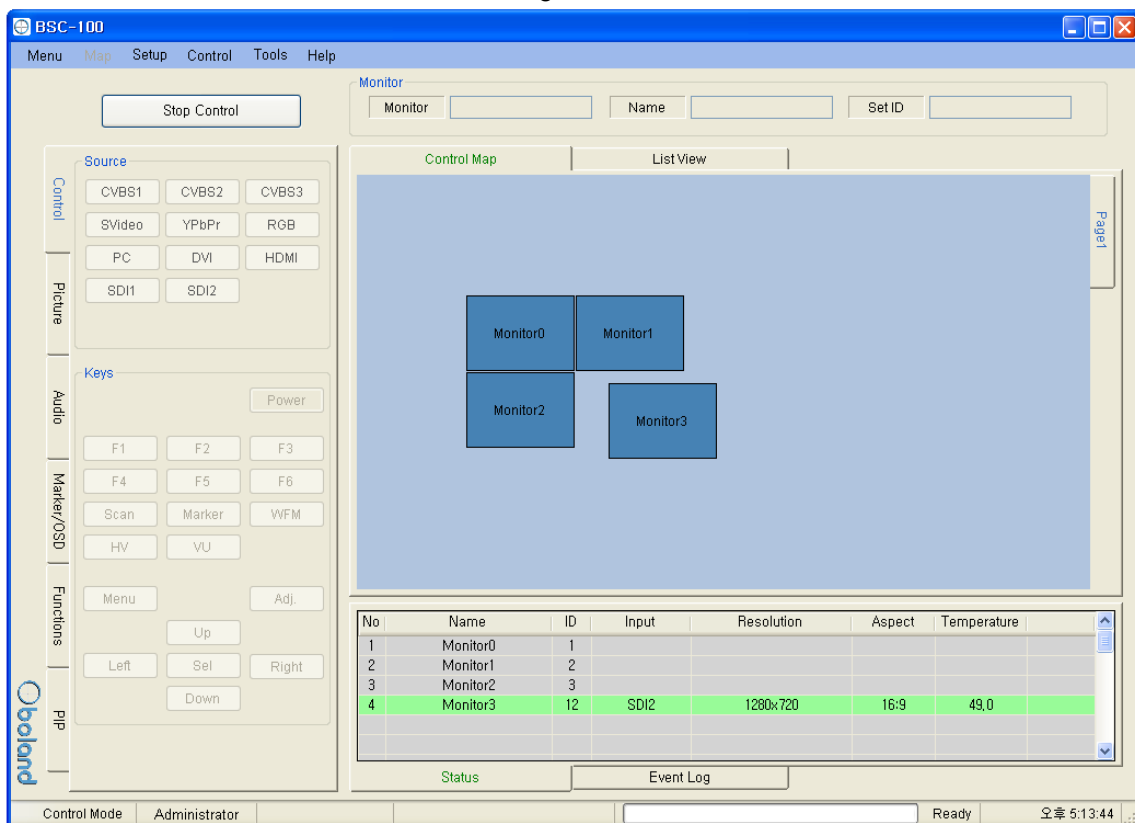
2) Properties

- User can only change ID and name through the properties form in this mode.

  Properties form is opened by the Edit menu or context menu.
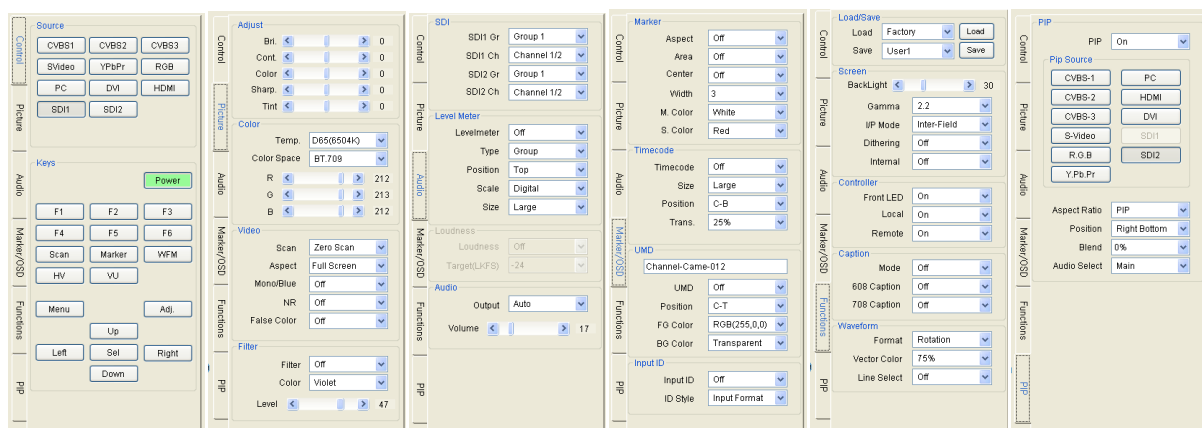
3) Controller Tap

- User can control the monitor thought this tap.

- Controller Tap is only available when monitor is selected in control mode.

- It consists of Control, Video, Audio, Marker/OSD and Functions Tap.

- Each controls are changed depend on model type. SFP module is only available in SFP model.

- User can read each parameter's value from target monitor by context menu on control table or group box. Each context menu as below is opened by mouse right-clicking or double-clicking.
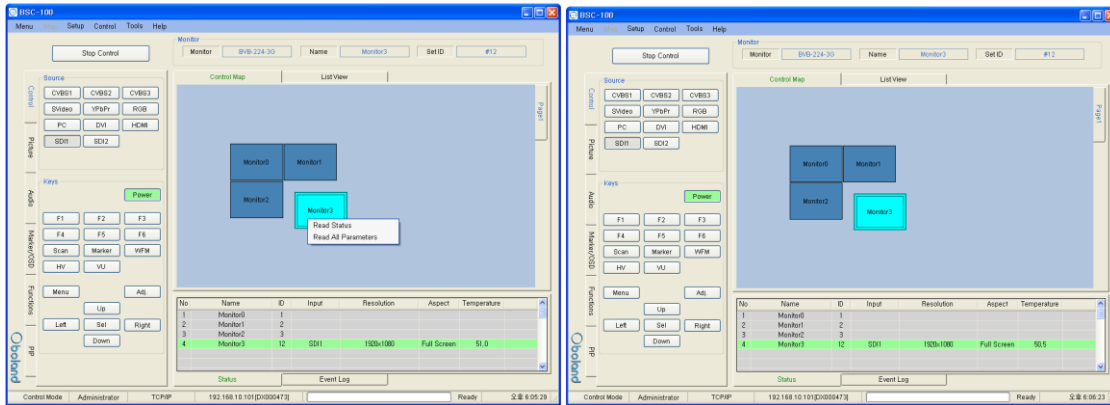
(On Icon of Control Table)   (On Group Box)

- Read All Parameter: read all of parameter in system controller from selected monitor.

- Read [Video Adjust(Group Box name)]: To open this context menu, use the mouse right button to click in group box.

4) Network Configuration

- Use this form to configure the network settings.

- Open the Network form on the Setup menu.
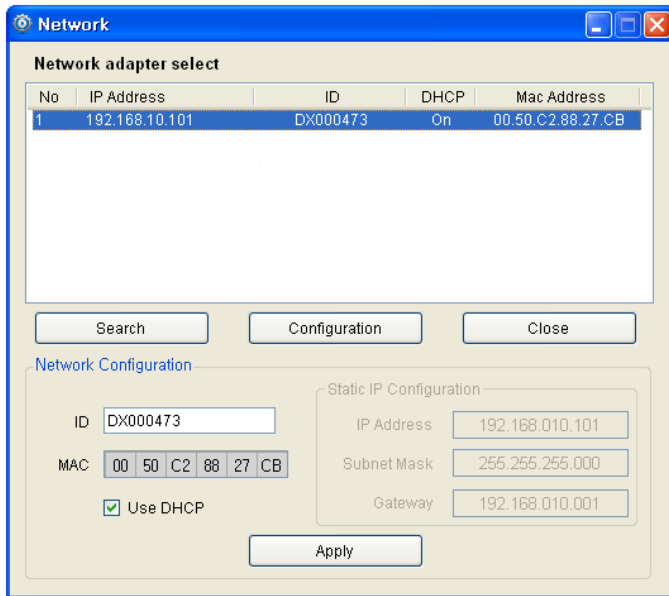
- Click the item on list to connect the network board.

- If connected, Configuration button is enabled.

- Network Configuration box is enabled with clicking the Configuration button.
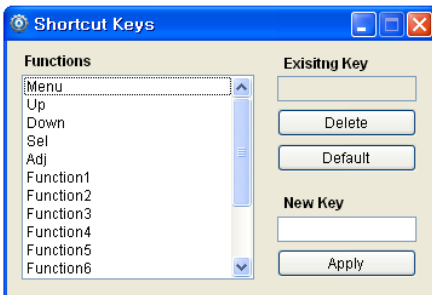
5) Shortcut Keys

- Shortcut keys save user having to click the button.

- User can set up the shortcut keys with this form on Setup menu.
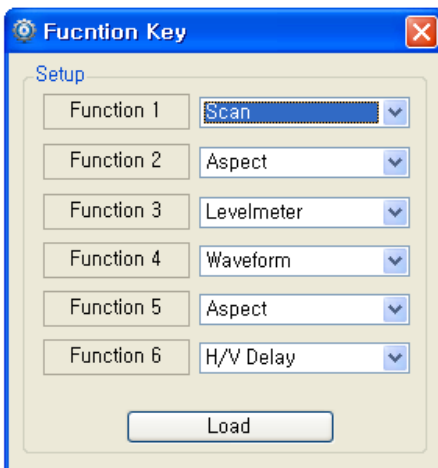
6) Function Key

- User can open the Function Key setting form on the Advanced menu.

- Name Button: Same as function key on keypad.

- Combo Box: Select a wanted function. It can be changed depending on the model.
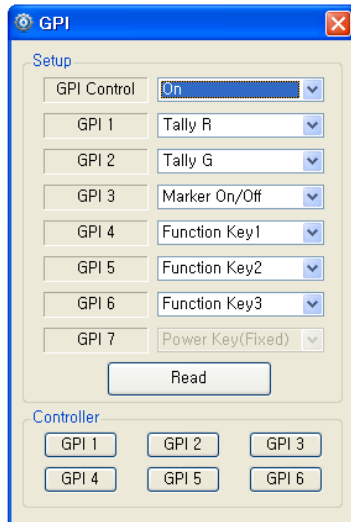
7) GPI

- User can open the GPI setting form on the Advanced menu item.

- Setup: User can select GPI function.

- Controller: simulated GPI controller.

8) Grouping

User can group monitors in list by holding ctrl key while clicking, or dragging mouse
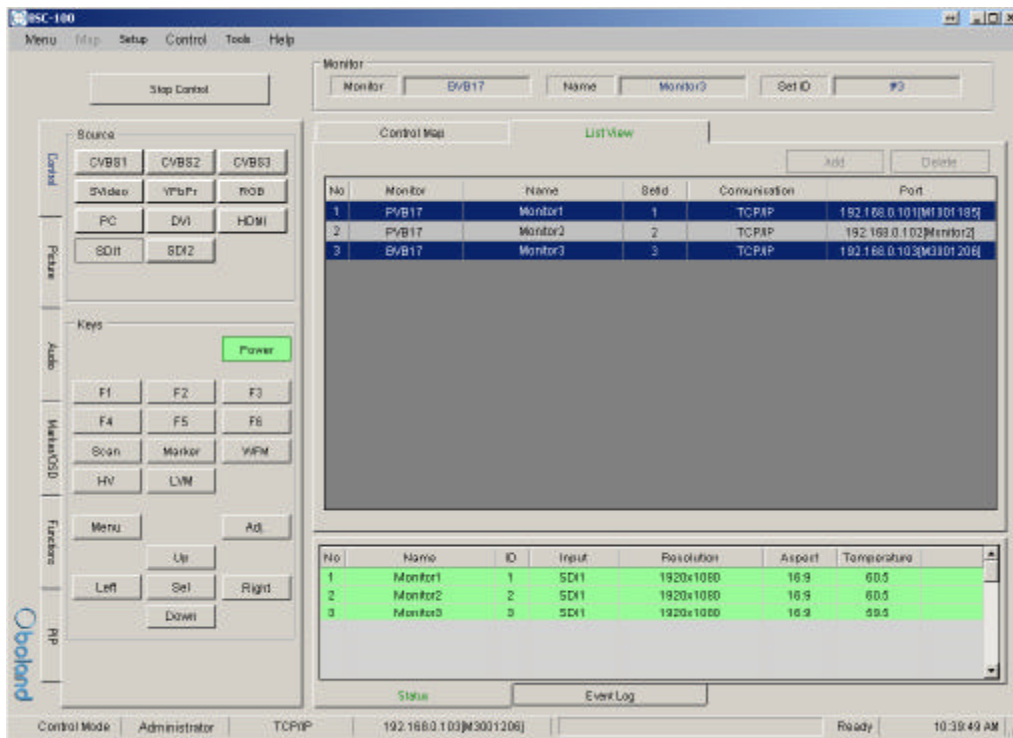
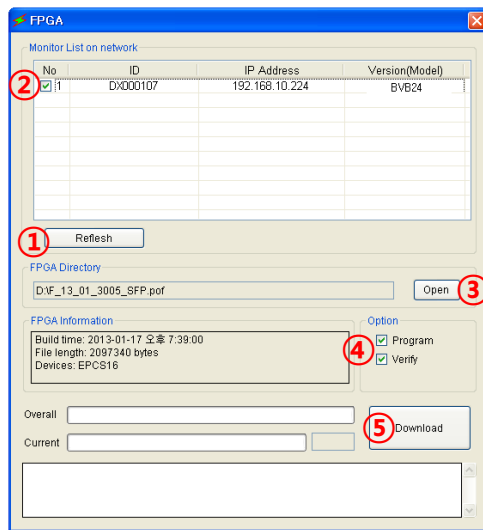
User can group monitors in map by dragging mouse around monitors
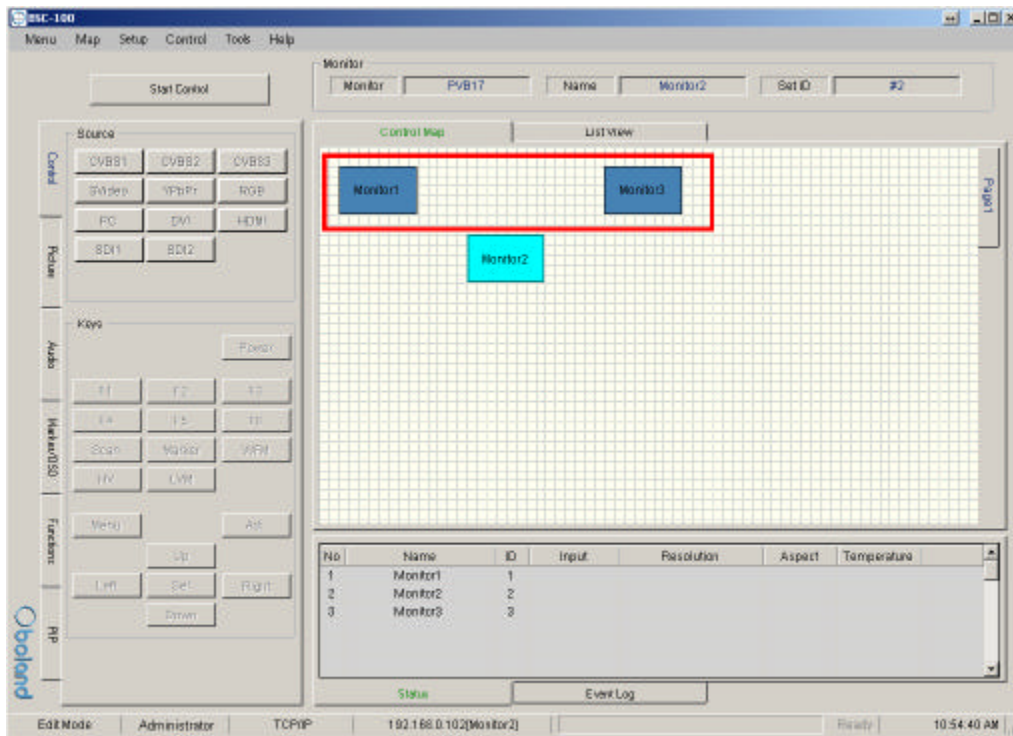
7. FPGA Download
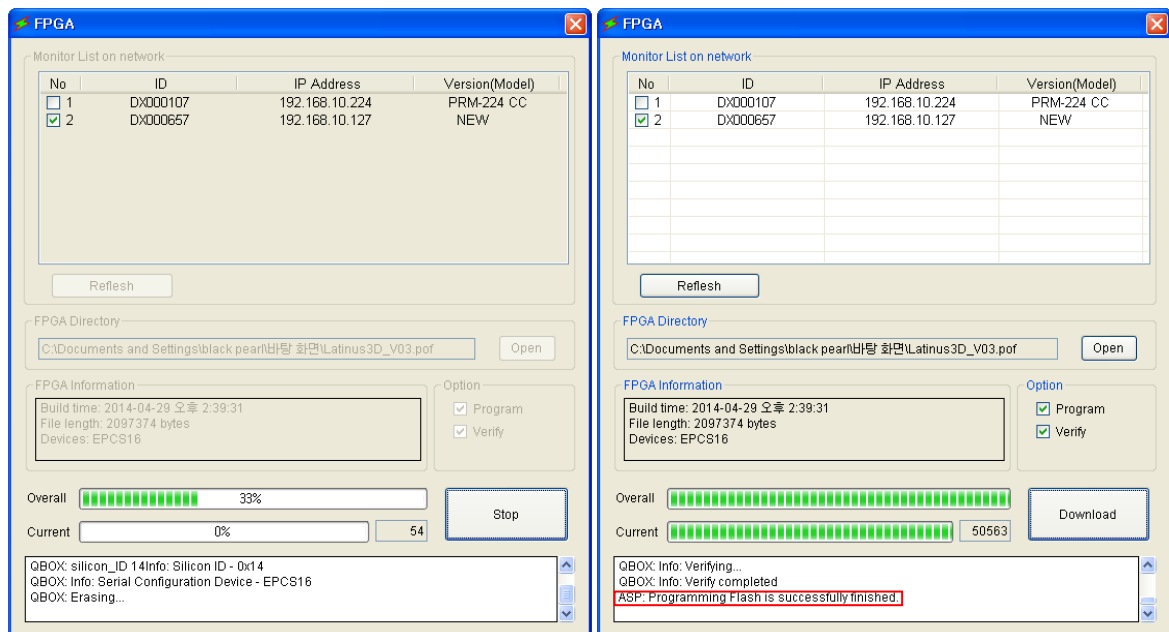
- Menu > Tool > FPGA ISP

1) Reflesh Click.

-Appears on the monitor connected to the network.

2) Monitor select.

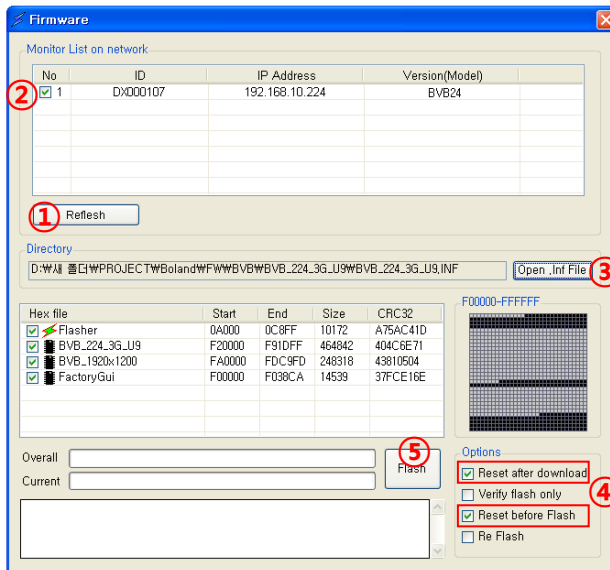3) FPGA File Open (*.pof).

4) Program & Verify Click.

5) Download Click.

>Download finish.

8. Firmware Download
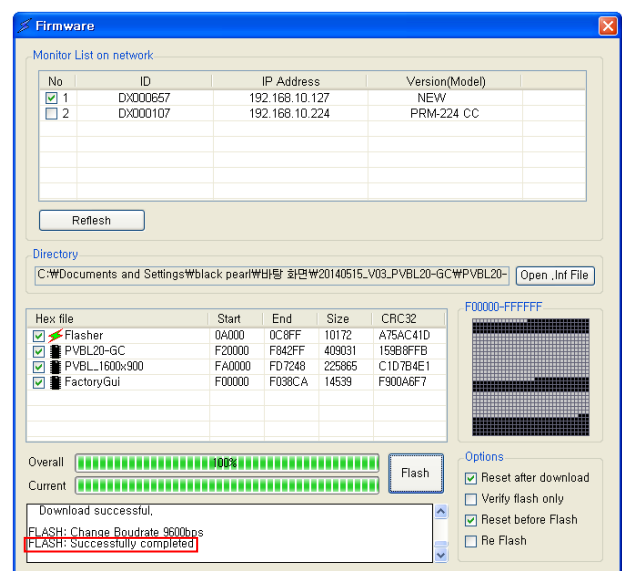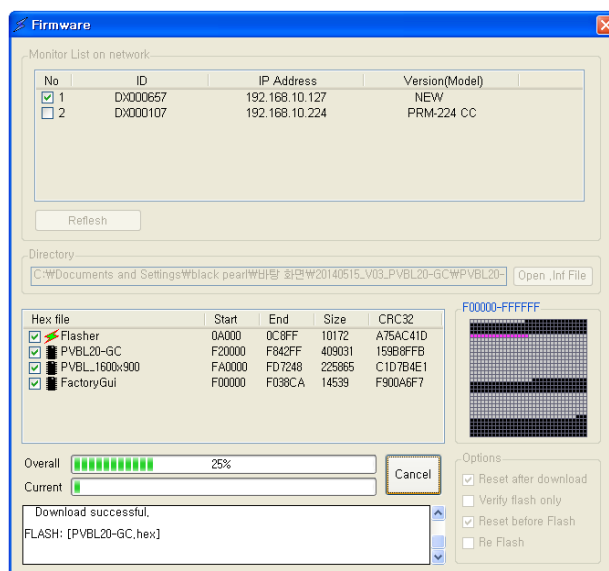
- Menu > Tool > F/W ISP

1) Reflesh Click.

-Appears on the monitor connected to the network.

2) Monitor select.

3) F/W File Open (*.inf).

4) Reset after download & Reset before Flash Click.

5) Flash Click.

>Download finish.