boland

BSC-200

boland System Controller

User Manual

Copyright 2021©

1. Introduction to Boland System Controller 4
1). Program Functions & Features 4
2). System Specifications Required for Operation 4
2. Installation of Boland System Controller 5
3. Monitor Connection 6
1) RS-232 Connection 6
2) Network Connection 6
4. Contents of Boland System Controller 7
1). Menu strip 7
2). Monitor Properties Group 8
3) Control Table 8
4) List View 8
5) Information 9
6) Log 9
7) Controller Tap 9
8) Status Bar 10
9) Context Menu 10
5. Edit Control Map 11
1) Start Edit Mode 11
2) Open and Save Map. 12
3) Add and Delete monitor 12
4) Properties 13
6. Control Mode 15
1) Start Control 15

2) Properties 17
3) Controller Tap 17
4) Network Configuration 18
5) Shortcut Keys 19
6) Function Key 19
7) GPI 20
7. FPGA Download 21
- Menu > Tool > FPGA ISP 21
8. Firmware Download 22

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 “Run” installation 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. Monitor Connection

For monitor control, you need to select either RS-232 or TCP/IP to connect.

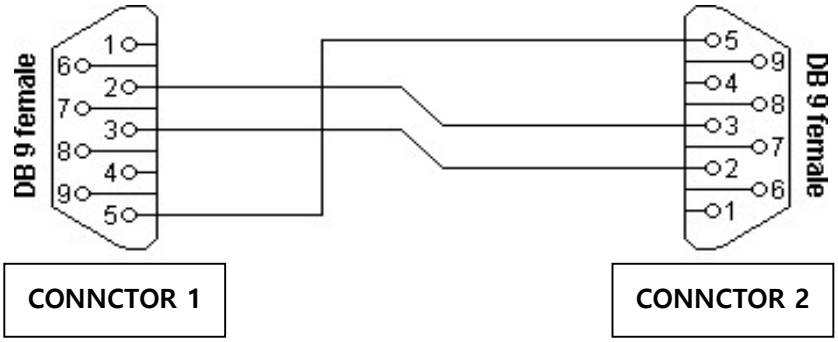
1) RS-232 Connection

a) Serial Setup

Item	Settings
Baud rate	9600bps
Data Bit	8bit
Stop Bit	1bit
Parity Bit	None
Stream Control	None

b) Serial Cable for PC to Monitor

CONNCTOR1	CONNCTOR2	FUNCTION		
2	3	RX		TX
3	2	TX		RX
5	5	SIGNAL GROUND		



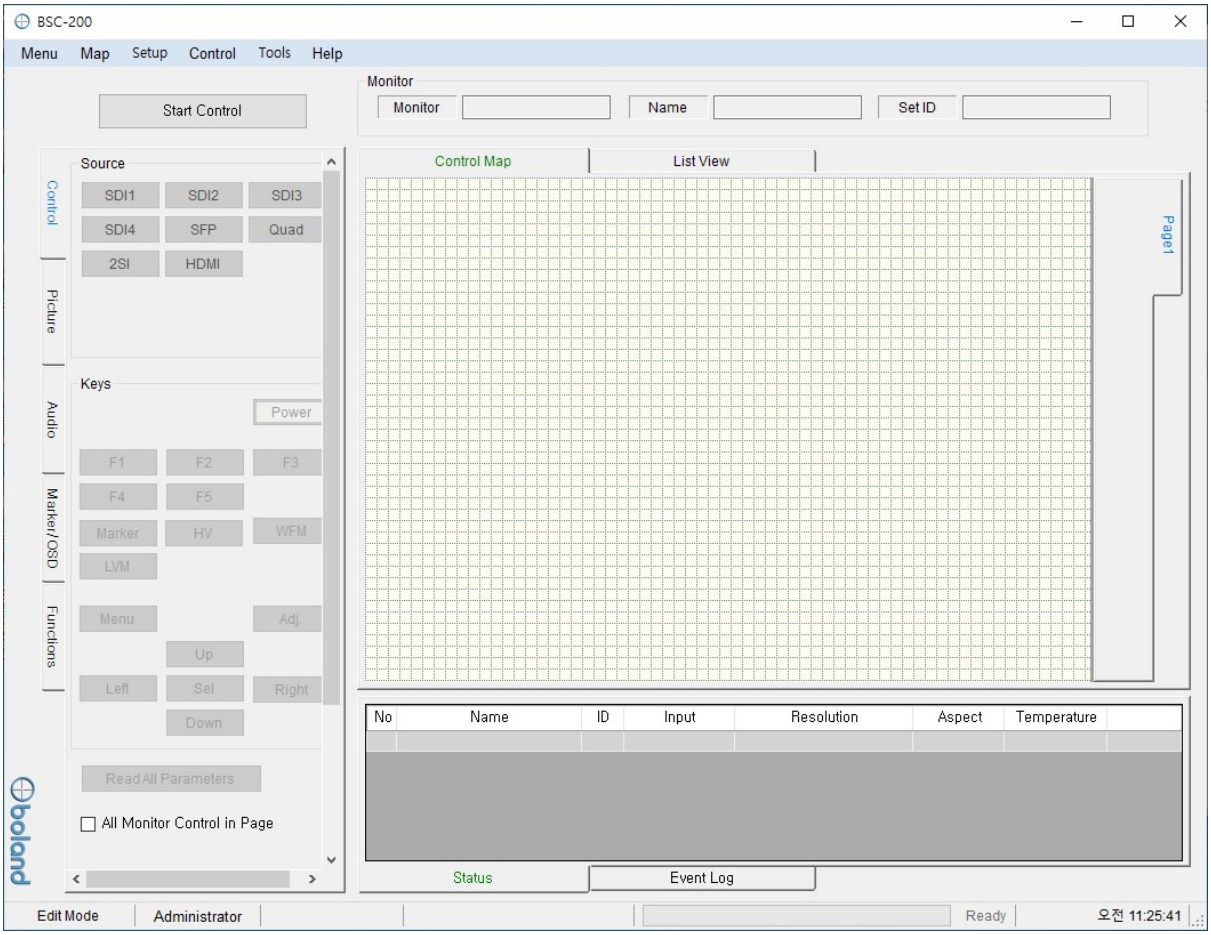
2) Network Connection

The easiest way for network connection is to connect the device to the network by wire, automatically obtain the IP address and DNS from the network without any settings on the device.

a) Check the Monitor IP

- Monitor Menu : Setup -> IP Config -> IP Address
- The checked IP is selected from Target IP when adding a monitor.

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: Shortcut, Network

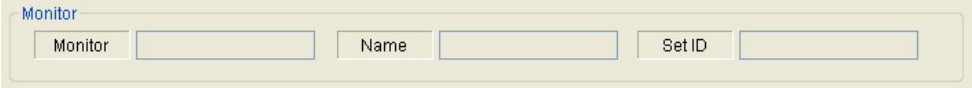
d) Control: Function Key, GPI

e) Tools: FPGA ISP, F/W ISP(ST),LUTs Download

f) Help: About

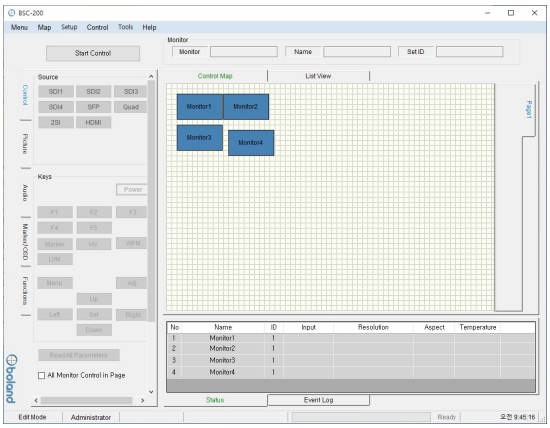
2). Monitor Properties Group

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

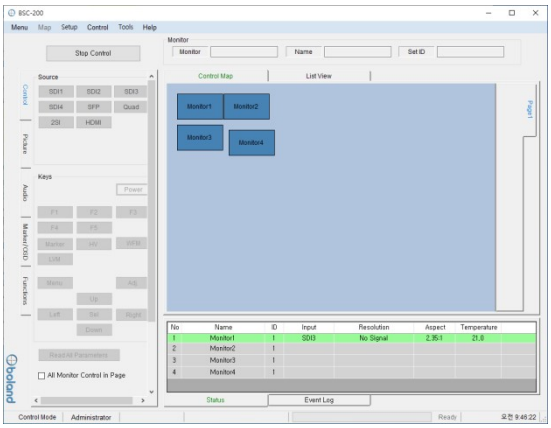


3) Control Table

- 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.



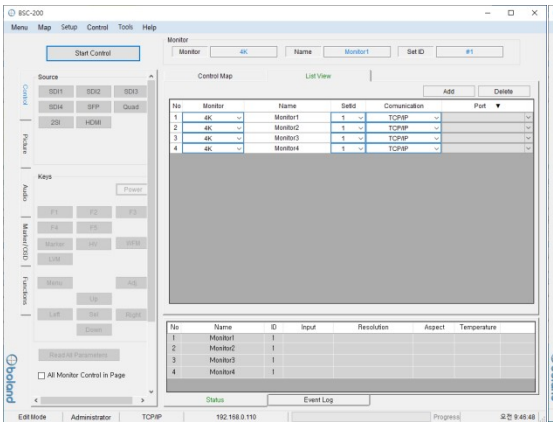
(Edit Mode)



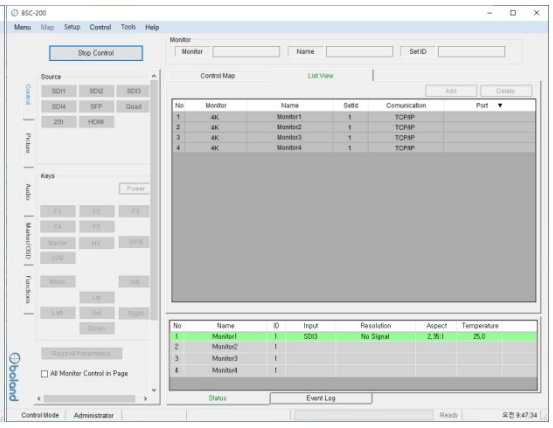
(Control Mode)

4) List View

- Displays list of currently opened control Map.
- User can edit and control the monitor.



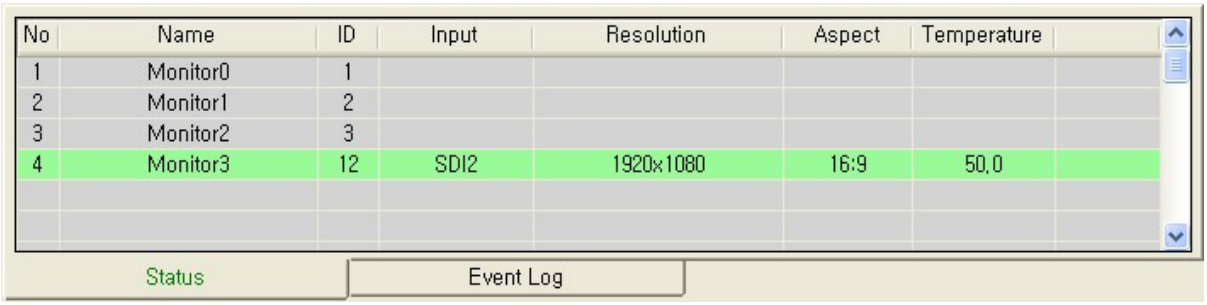
(Edit Mode)



(Control Mode)

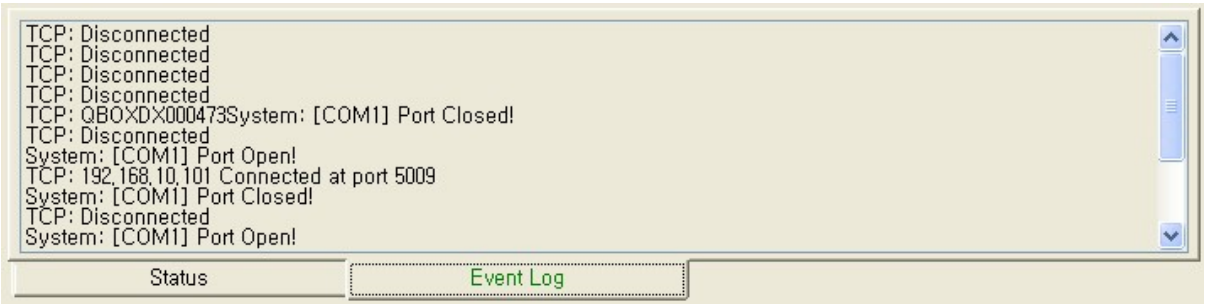
5) Information

- 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.



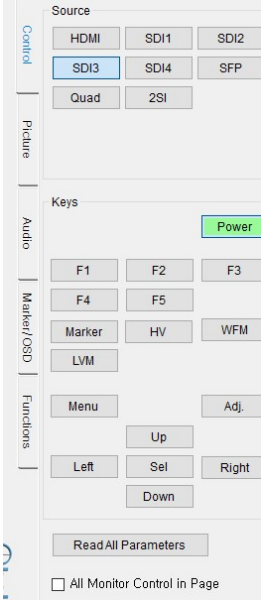
6) Log

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



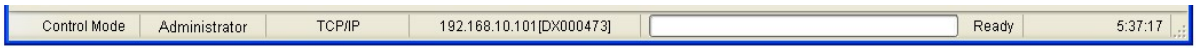
7) Controller Tap

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



8) Status Bar

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



9) Context Menu

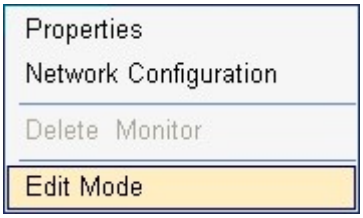
- Right-clicking or Double-clicking on Control Table or Controller Tap will bring up the commands used to control.

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

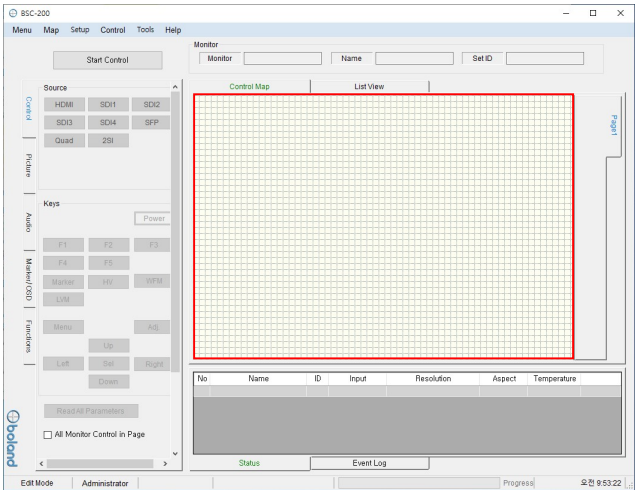
- User can change to edit mode through Mode items on menu strip, context menu on control table or mode changing button on control table.
- Below Context menu strip is opened by mouse right-clicking on the Control Table.
- It is changed depending on status of mode.



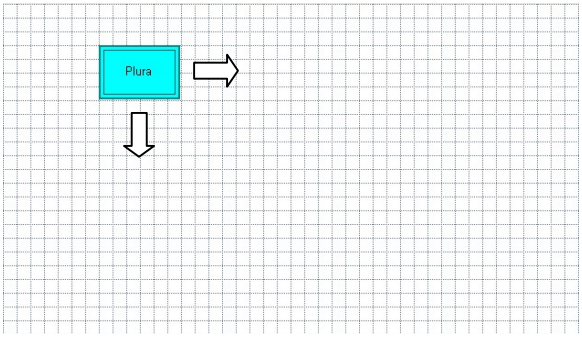
(Control mode)

(Edit mode)

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

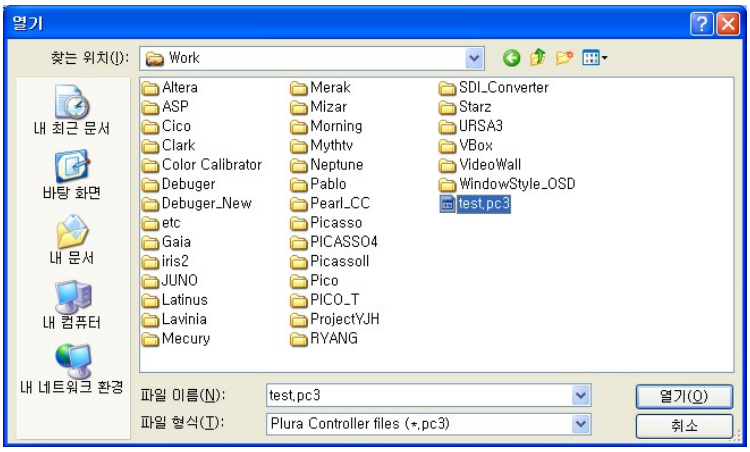


- In control table, user can locate the monitor icon any place.



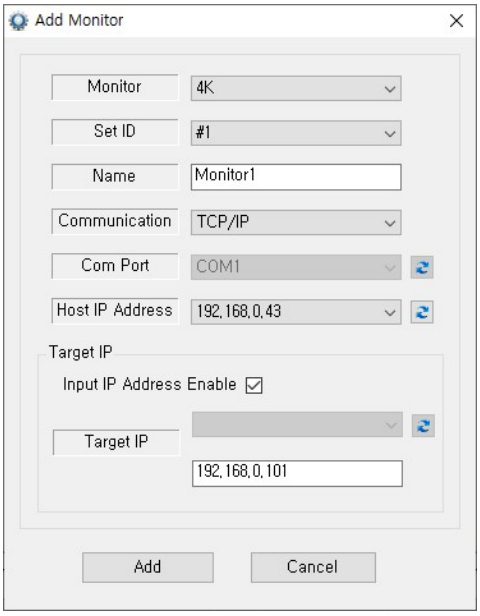
2) Open and Save Map.

- 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: Monitor Menu -> Setup -> Communication -> Set.ID

- Select the target monitor's ID number.

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) Host IP Address: select PC IP address of available in PC..

g) Target IP:

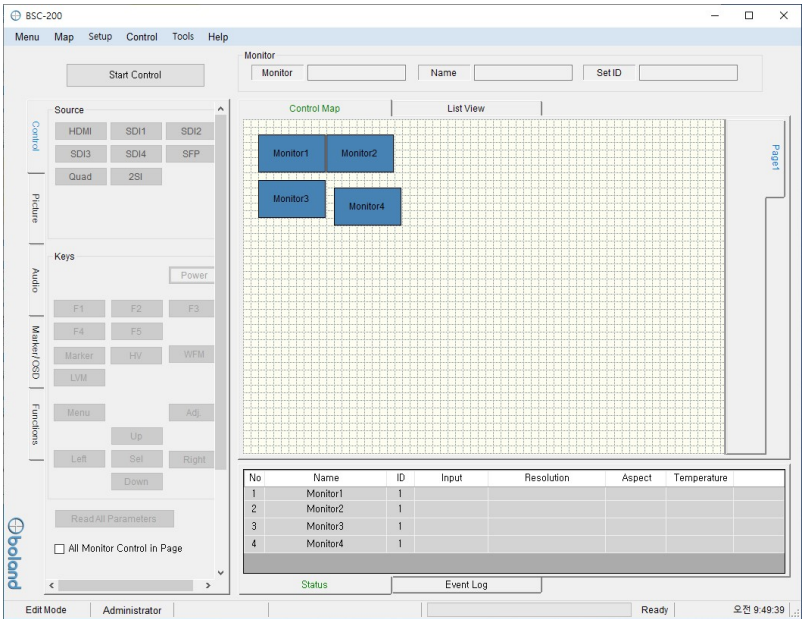
Select target IP address of linked monitor if Input IP Address Enable is unchecked.

User can enter the monitor IP address directly if Input IP Address Enable is checked.

- Monitor Menu: Setup -> IP Config -> IP Address

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.



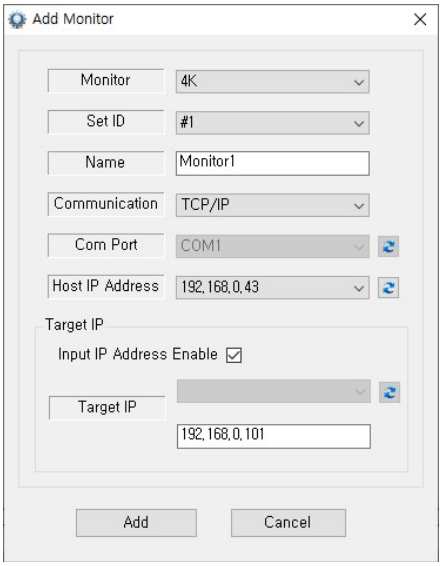
- User can delete the selected Monitor by Edit item on menu or context menu on control table.

4) Properties

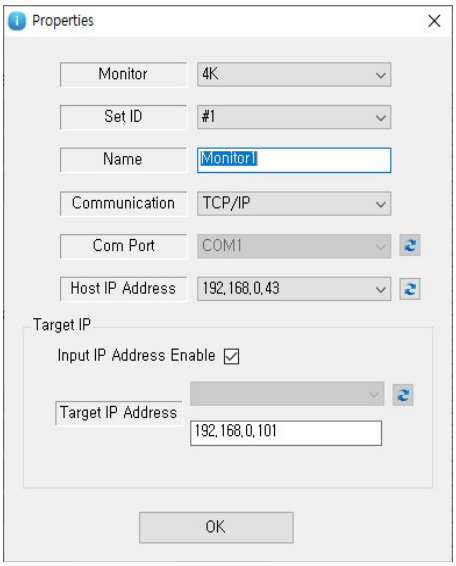
- User can change all properties of selected monitor that already added on control table.

- 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)

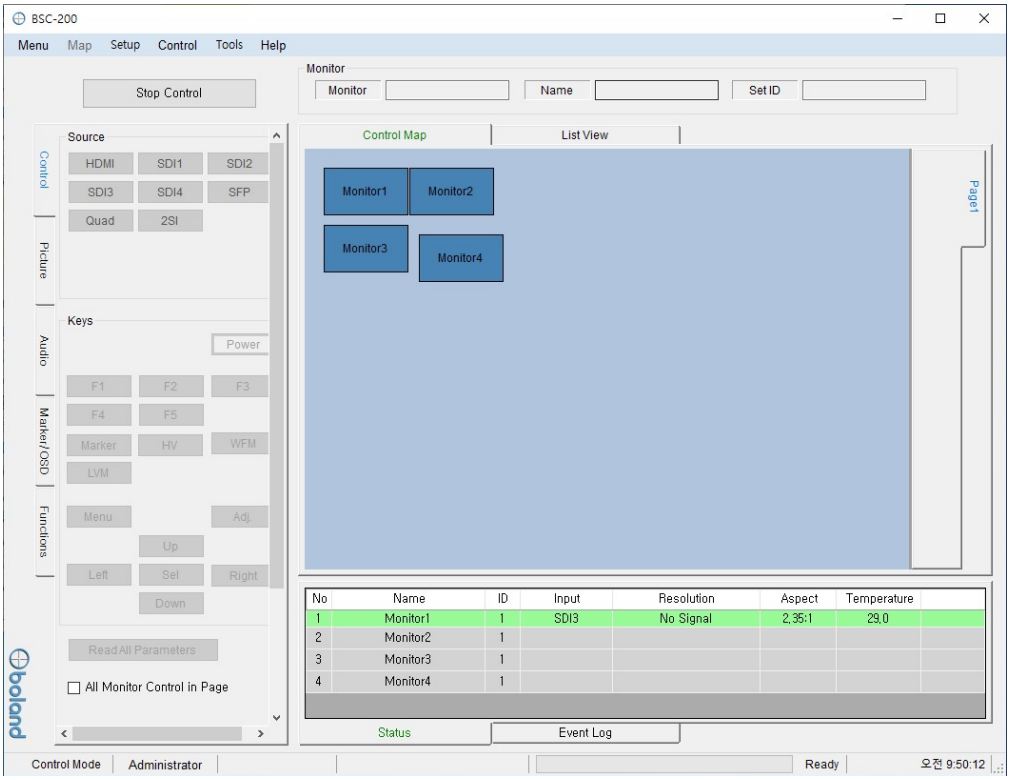
6. Control Mode

- 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.



Using new features in BSC-200, Networked Monitor System Controller

1-9-25 mb

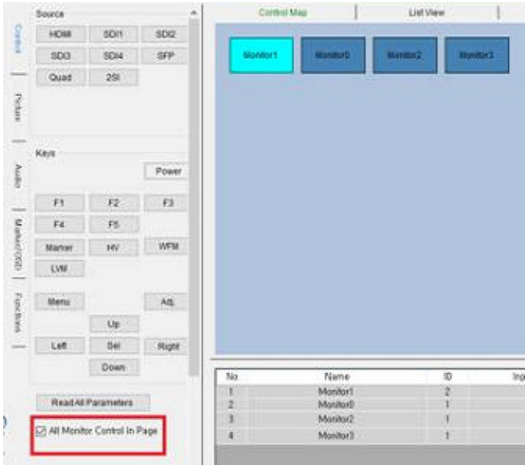
Please find and install the attached new version, 1v070 and later, of BSC-200.

In this version BSC-200, user can a control number of monitors three different ways.

Method 1, Control all monitors.

Checking the box below, “Control All Monitor on Page” as shown below.

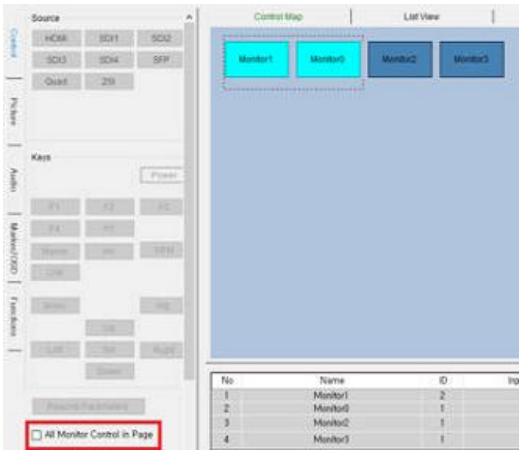
All the all monitors in the blue workspace will be controlled in parallel:



Method 2, Control selected monitors.

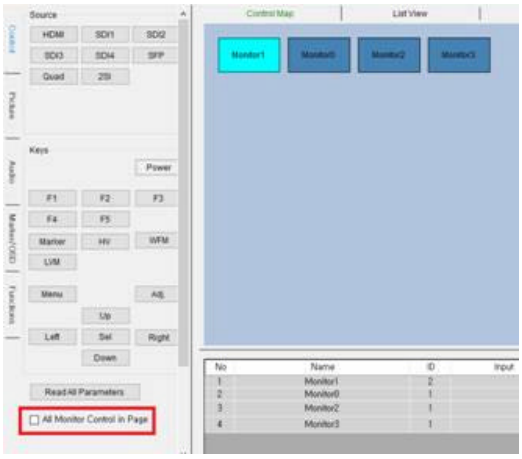
User can control partial monitors on the page like below.

Clear check box and select monitors with a mouse left button press:



3. Control a single monitor.

Click to highlight only one monitor:



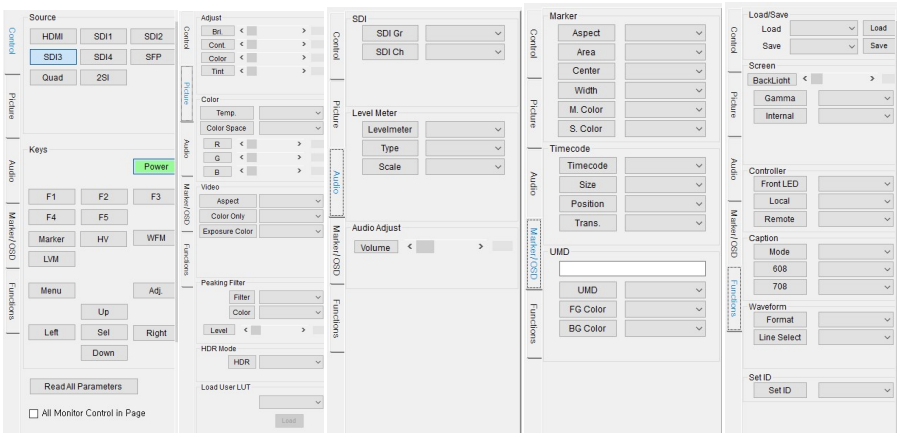
2) Properties

- 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.

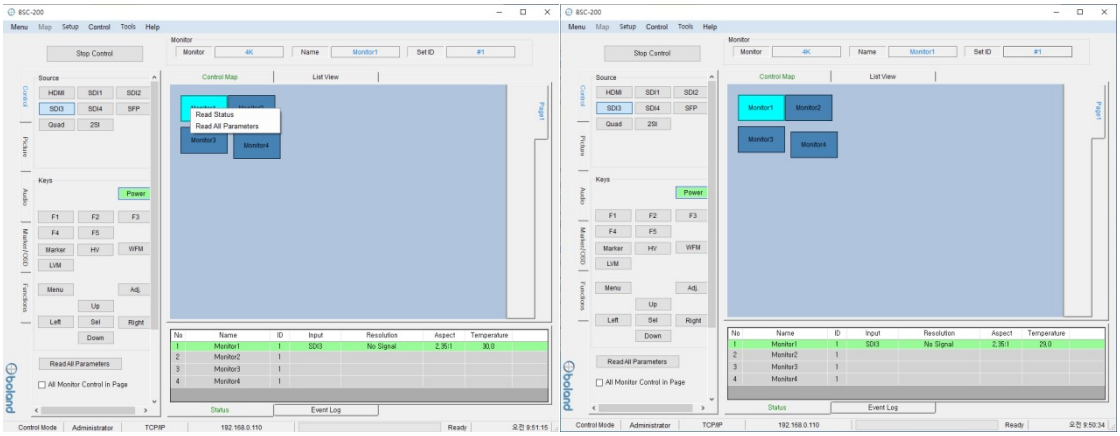


-.If the All Monitor Control in Page is checked, the entire monitor of the page shown in the Control Map in will execute the same write command

-.Click the button of the command to read the value of the selected monitor

- 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.

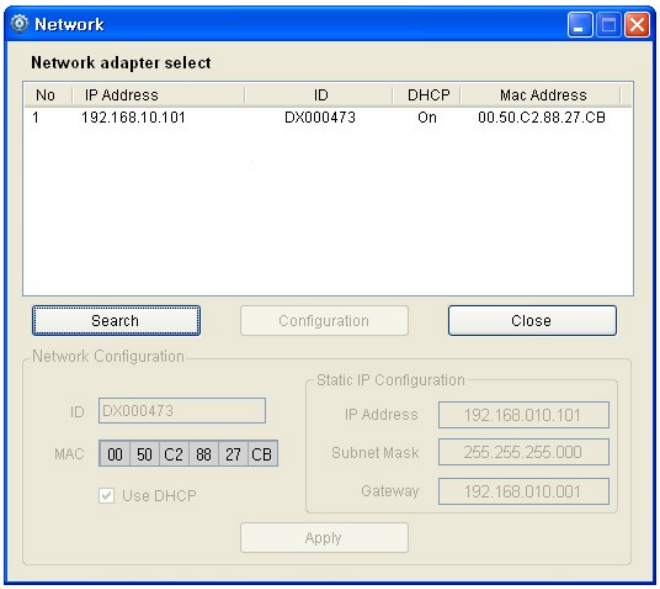


(On Icon of Control Table) (On Group Box)

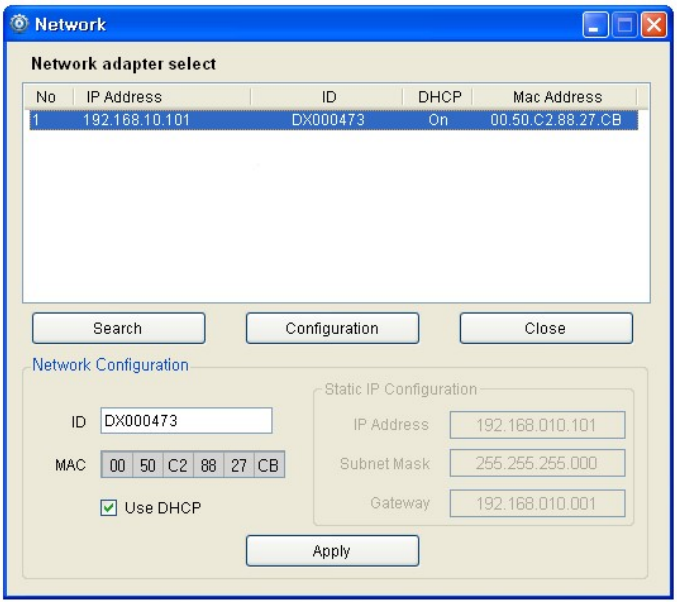
- Read All Parameter: read all of parameter in system controller from selected monitor.
- Read [Video Adjust(Group Box name)]: To open this context menu, use the mouse right button to click in group box.

4) Network Configuration

- Use this form to configure the network settings.
- Open the Network form on the Setup menu.

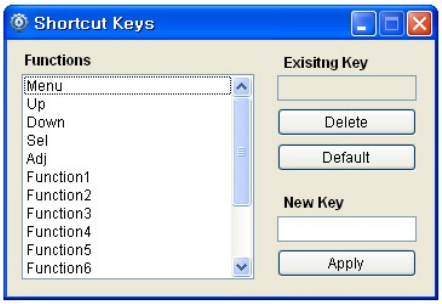


- Click the item on list to connect the network board.
- If connected, Configuration button is enabled.
- Network Configuration box is enabled with clicking the Configuration button.



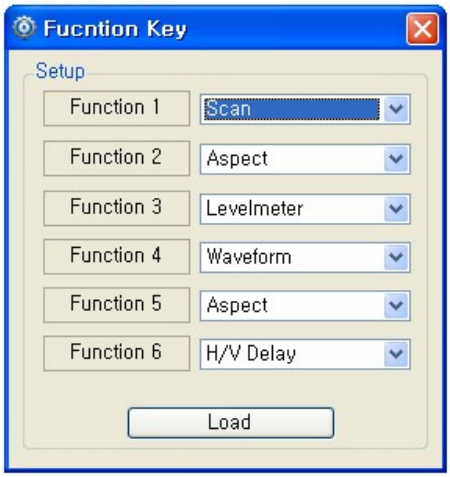
5) Shortcut Keys

- 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.

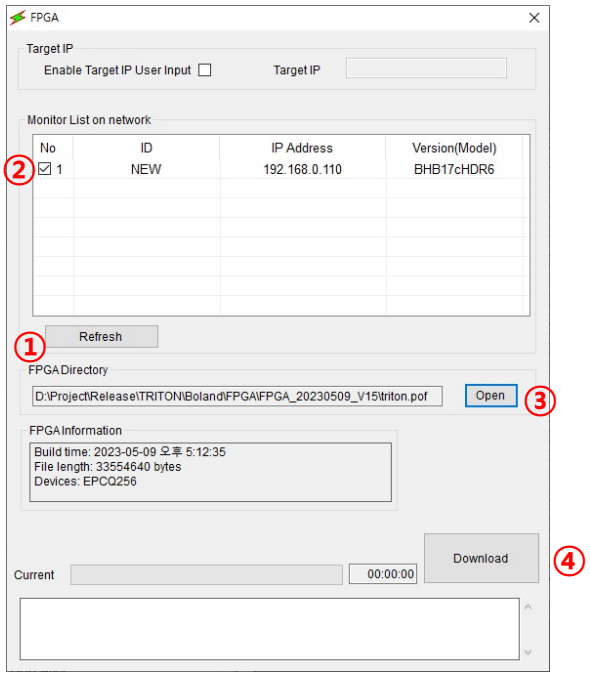


7) GPI

- User can open the GPI setting form on the Advanced menu item.
- Setup: User can select GPI function.
- Controller: simulated GPI controller.

7. FPGA Download

- Menu > Tool > FPGA ISP



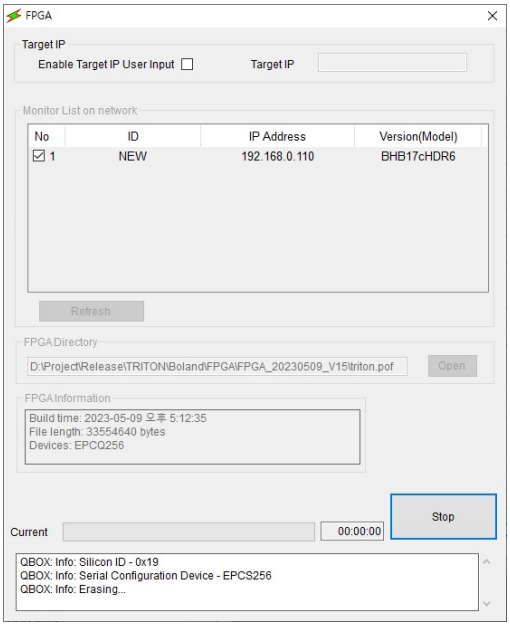
1) Refresh Click.

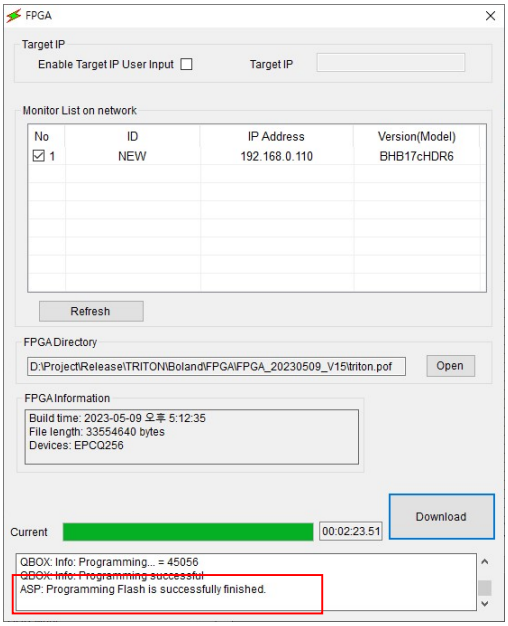
-Appears on the monitor connected to the network.

2) Monitor select.

3) FPGA File Open (*.pof).

4) Download Click.

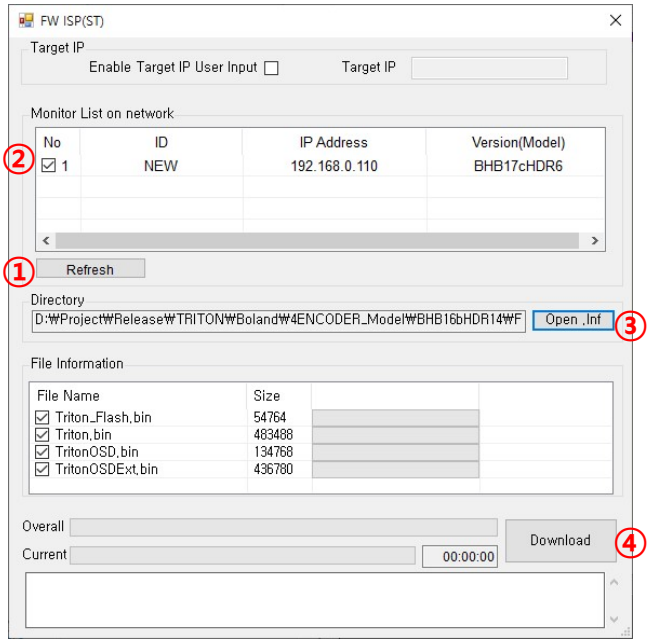




>Download finish.

8. Firmware Download

- Menu > Tool > F/W ISP(ST)



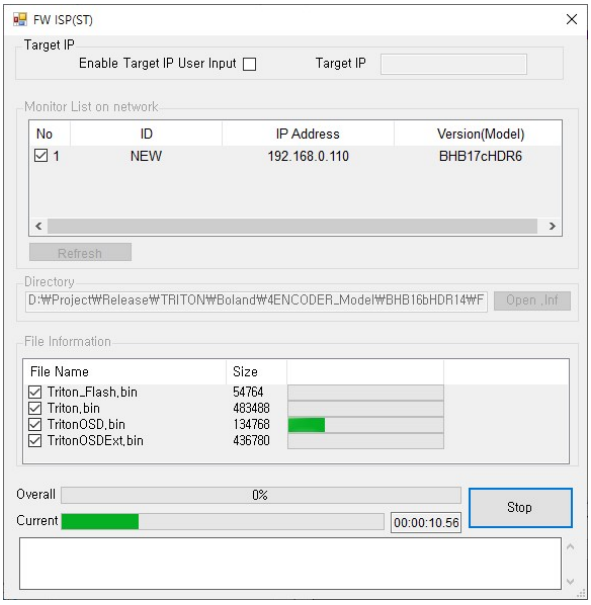
1) Refresh Click.

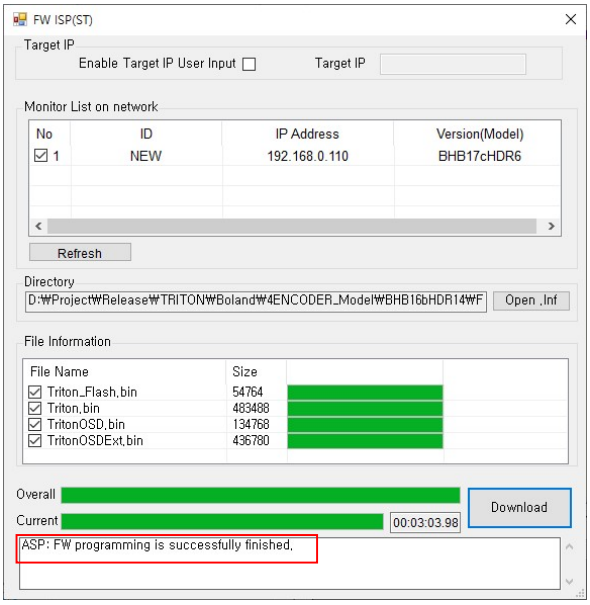
-Appears on the monitor connected to the network.

2) Monitor select.

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

4) Download Click.





>Download finish.