Color Expert Pro

User Guide

Color Expert Pro is designed to use a calibrator to set screen color settings for a Samsung LFD to standard values or finely customize the screen color settings.

SAMSUNG

Contents

1 Before getting started

1-1   About Color Expert Pro

Colors displayed on LFDs may appear different from the original colors, depending on the screen settings
and the environment where the LFDs are used. To improve the quality of colors on the screen, adjusting
the screen colors may be required.

Color Expert Pro is designed to use a calibrator to set screen color settings for a Samsung LFD to standard
values or finely customize the screen color settings. When you calibrate a VideoWall product that places
multiple LFDs adjacent to one another though Color Expert Pro, more consistent quality can be provided
by setting the same colors for each LFD.

1-2 Configuring the environment to use the program

To use Color Expert Pro, first configure your environment following the instructions below:
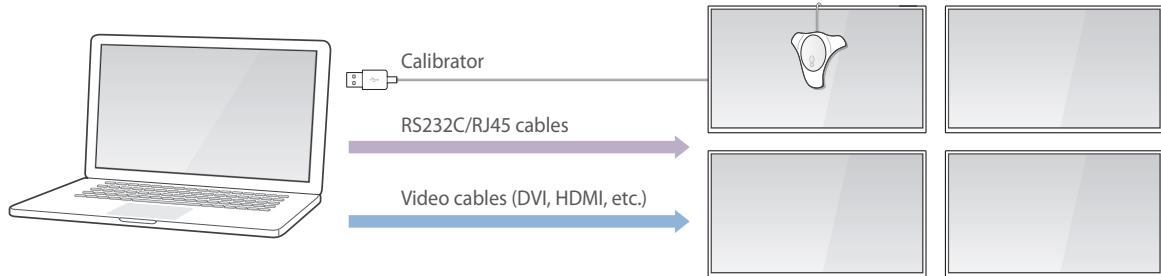
1   Connect the LFDs to the computer using cables.
For further details, refer to the following: ▶ Connecting LFDs to a computer

2   Connect the calibrator to the computer.
For further details, refer to the following: ▶ Connecting a calibrator to the computer

3   Install Color Expert Pro on your computer.
For further details, refer to the following: ▶ Installing Color Expert Pro

4   Update the firmware on the LFDs to the latest version.

5   Calibrate the screen colors using Color Expert Pro.
For further details, refer to the following: ▶ Using Color Expert Pro

1-3 Requirements to use the program

Restrictions for LFDs

Color Expert Pro is compatible with Samsung LFDs. Depending on the LFD model, available functions in Color Expert Pro may vary. Some models may support part of them.

📖 This user guide describes the operations based on the LFD that supports all available functions by Color Expert Pro.

Supported calibrator models

The following calibrators are compatible with Color Expert Pro.

- Konica Minolta CA210
- Konica Minolta CA310
- Konica Minolta CA410
- X-Rite i1 Display Pro (i1D3)
- X-Rite Color Munki
- Datacolor Spyder 4
- Datacolor Spyder 5

Compatible operating systems to install the program

Install Color Expert Pro on a desktop or laptop computer connected to LFDs. The operating systems that can install Color Expert Pro are as follows:

- Windows 7 32bit/64bit
- Windows 8 32bit/64bit
- Windows 10 32bit/64bit

1-4   Connecting devices

Connecting LFDs to a computer

Connect the cable to the computer in which the LFD for tuning screen colors and Color Expert Pro are to be installed. The method to connect devices may vary depending on the cable type.

📖 Multiple LFDs can be connected to a single computer.

Using RS232C cables

Connect the RS232C cables between the computer and LFDs and between an LFD and another LFD, as shown in the illustration.

📖 The method to configure the LFD ID and connection cable settings may vary depending on the LFD device type. Refer to the LFD user guide for further details.

Video cables (DVI, HDMI, etc.)
RS232C cable
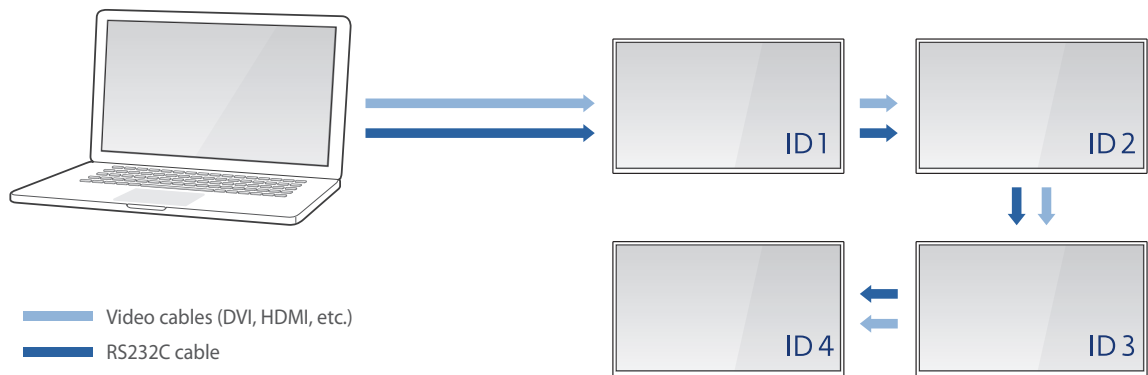
Configuring LFD information

Device connection is complete after individual IDs and connection settings are configured for all the LFDs. After connecting cables, register information about the LFDs using the remote control.

1 Specify the device ID from an LFD.

> When connecting multiple LFDs, ensure a duplicate ID is not assigned to the LFDs. If a duplicate ID is assigned, calibration will not work.

2 Set the connection cable to **RS232C cable** from the LFD.

> - If devices cannot connect even after LFD information is configured, check the type and connection status of the connected cables again.
> - With UDA-series models, check whether the Factory mode's BaudRate is set to 9600.

Using RJ45 and RS232C cables together

As shown in the illustration, connect the RJ45 cable between the computer and the main LFD, and connect the RS232C cables between different LFDs.

> - In this user guide, the main LFD indicates the first LFD in the group of LFDs that are connected to the computer by RJ45 cables.
> - The method to configure the LFD ID and connection cable settings may vary depending on the LFD device type. Refer to the LFD user guide for further details.

ID 1   ID 2   ID 4   ID 3

Video cables (DVI, HDMI, etc.)
RS232C cable
RJ45 cable
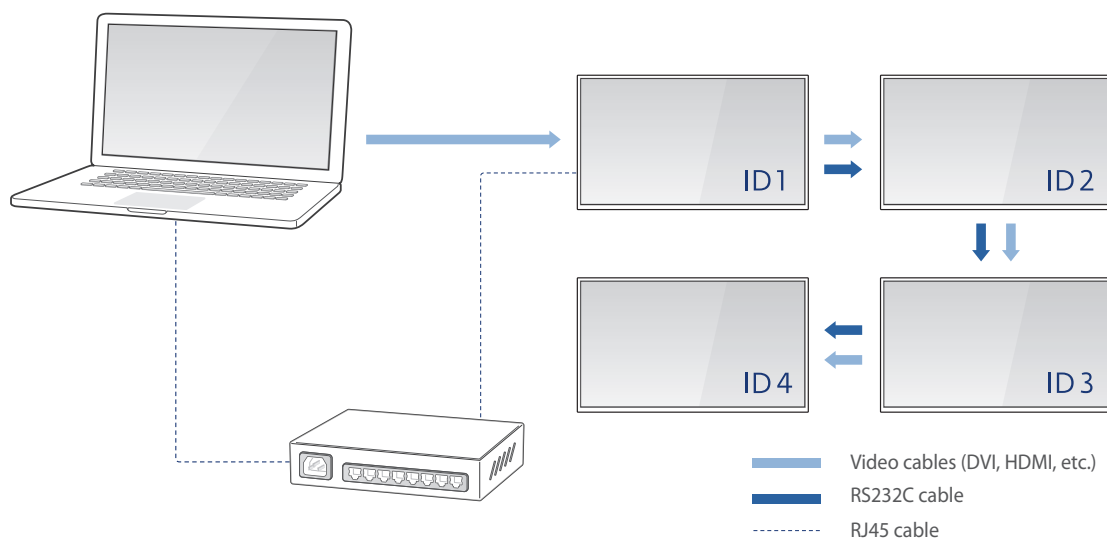
Configuring LFD information

Device connection is complete after individual IDs and connection settings are configured for all the LFDs. After connecting cables, register information about the LFDs using the remote control.

1 Set the connection cable from the main LFD to the target LFD to "**RJ45 (LAN) cable**."

2 After configuring the cable settings, select **Enter manually** in **Home** > **Network Settings** > **IP Setting** on the main LFD, and then enter the following information.

 – **IP Address**: Enter the IP address of the main LFD. Ensure that the IP address of each LFD is different from the IP address of the computer.

 – **Subnet mask**: Enter a Subnet mask value.

 – **Gateway**: Enter a Gateway value.

3 Specify the device ID from the main LFD.

 – The main LFD has been connected successfully.

4 Specify the device ID from the other LFD that is not the main LFD.

 📖 When connecting multiple LFDs, ensure a duplicate ID is not assigned to the LFDs. If a duplicate ID is assigned, calibration will not work.

5 From the other LFD that is not the main LFD, set the connection cable to **RS232C cable**.

 📖 • If two or more LFDs are connected, repeat steps 4 to 5 to configure information about LFDs except for the main LFD.
 • If devices cannot connect even after LFD information is configured, check the type and connection status of the connected cables again.
 • With UDA-series models, check whether the Factory mode's BaudRate is set to 9600.

Using RJ45 (LAN) cables

LFDs can be connected to a computer using a router and RJ45 cables.

As shown in the illustration, connect the router to the computer and LFDs with RJ45 cables.

The method to configure the LFD ID and connection cable settings may vary depending on the LFD device type. Refer to the LFD user guide for further details.

Video cables (DVI, HDMI, etc.)
- - - - - RJ45 cable
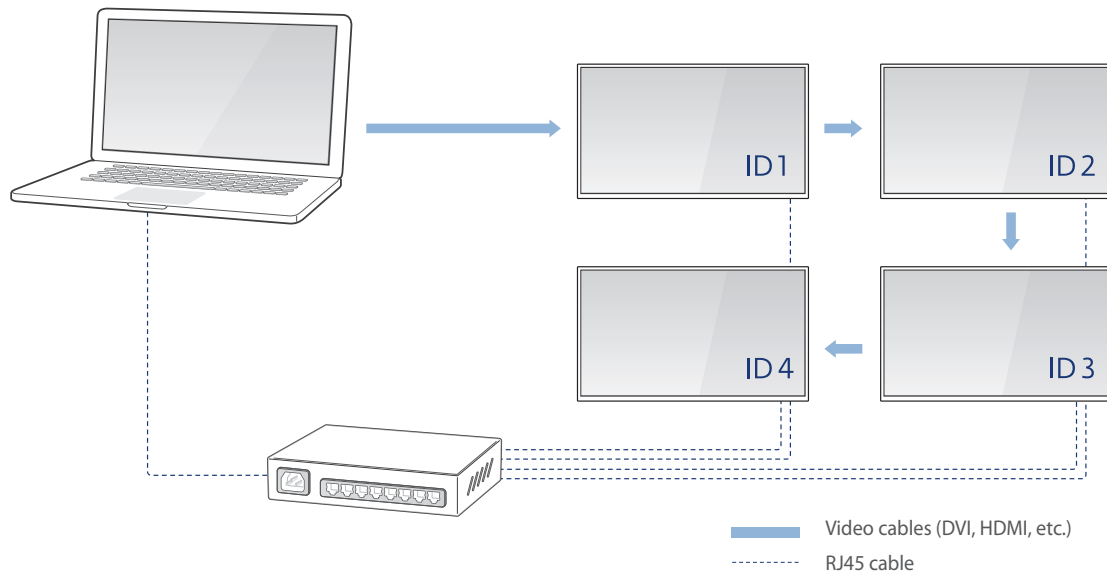
Configuring LFD information

Device connection is complete after individual IDs and connection settings are configured for all the LFDs. After connecting cables, register information about the LFDs using the remote control.

1   Set the connection cable from an LFD to the target LFD to "**RJ45 (LAN) cable**."

2   Select **Enter manually** in **Home** > **Network Settings** > **IP Setting** on the LFD, and then enter the details.

   –   **IP Address**: Enter the IP address of the LFD. Ensure that the IP address of each LFD is different from the IP address of the computer.

– **Subnet mask**: Enter a Subnet mask value.

– **Gateway**: Enter a Gateway value.

3 Specify the device ID from an LFD.

> • When connecting multiple LFDs, ensure a duplicate ID is not assigned to the LFDs. If a duplicate ID is assigned, calibration will not work.
> • If two or more LFDs are connected, repeat steps 1 to 3 to configure the LFD information.
> • If devices cannot connect even after LFD information is configured, check the type and connection status of the connected cables again.

Connecting a calibrator to the computer

Connect the calibrator to a USB port on the computer where Color Expert Pro will be run.

> If a driver is needed, install the driver following the instructions in the calibrator user guide. Refer to the calibrator user guide for further details.

1-5   Installing/uninstalling Color Expert Pro

Install or uninstall the Color Expert Pro program on the desktop or laptop computer connected to the LFDs.
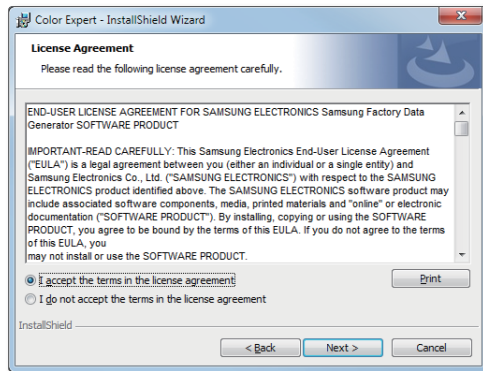
Installing Color Expert Pro

Install the Color Expert Pro program on the desktop or laptop computer connected to the LFDs. This allows you to calibrate the screen colors for the LFDs.

1   Using a web browser on your PC, access http://v3.samsunggsbn.com and then log onto the system.

2   In **SLM** > **Display Solution Download Center**, search for "**Color Expert Pro**."

3   Download the install file for Color Expert Pro.

4   Run the downloaded program install file.

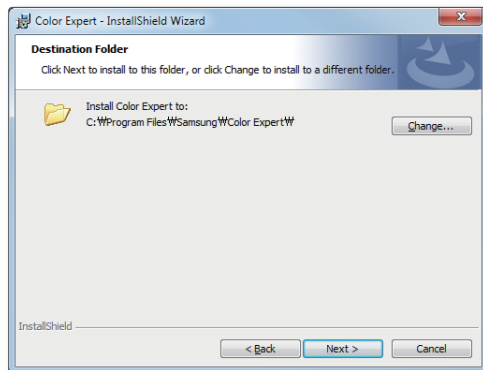5   Read the instructions, and then click **Next**.
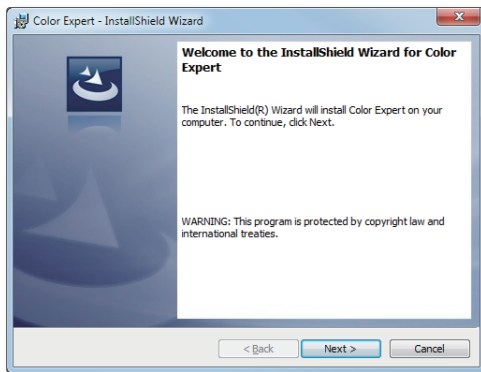
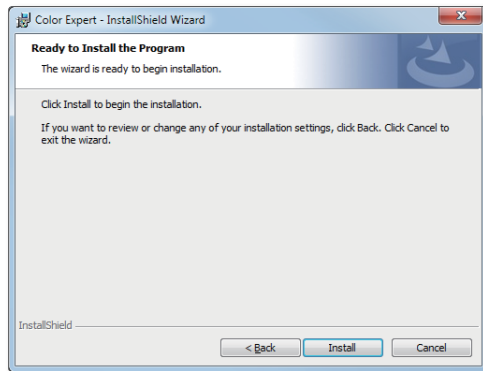6   Agree to the license agreement, and then click **Next**.

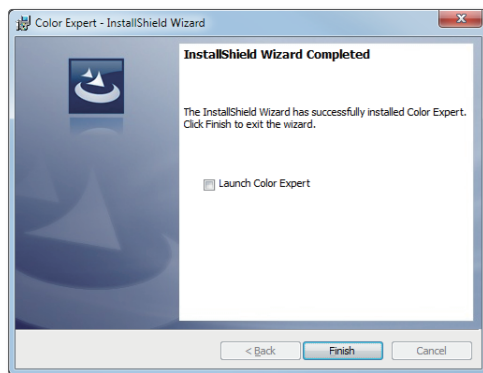7   Enter user information, and then click **Next**.
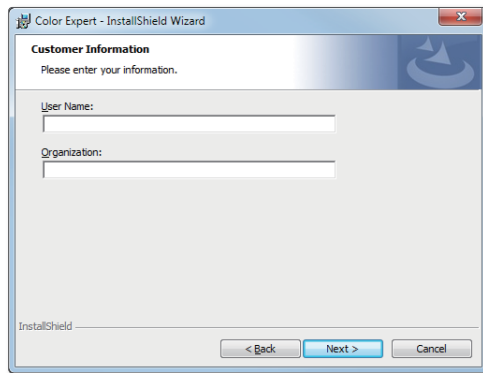
8   Specify the destination folder, and then click **Next**.

9   Read the instructions, and then click **Install**.

10   After installation is complete, click **Finish**.

Uninstalling Color Expert Pro

If you encounter a problem when using the program, uninstall the program following the instructions below:

Open the list of programs from Control Panel and then click **Color Expert Pro** > **Uninstall**.

> The instructions to uninstall the program may vary depending on the computer operating system.

2 Using Color Expert Pro

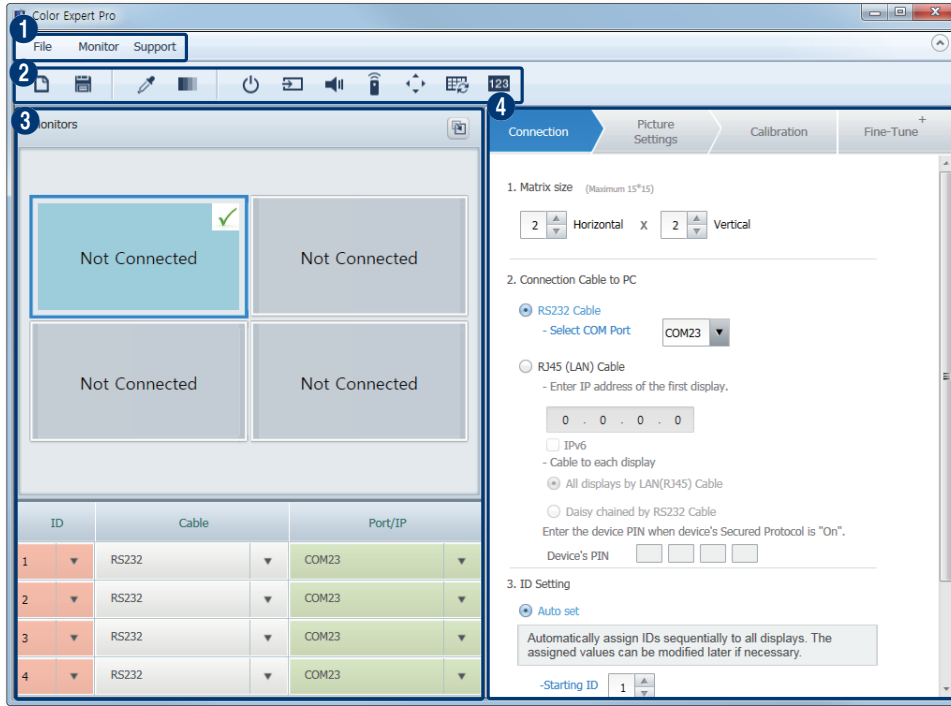## 2-1 Running/closing Color Expert Pro

Running Color Expert Pro

Click   on the desktop.

Closing Color Expert Pro

At the top of the software screen, click   .

2-2 Screen layout of Color Expert Pro

When Color Expert Pro is run, the following initial screen appears.

① These menu items are fixed at the top. Clicking a menu item displays sub-menu items.

- **File**: Create and save a new calibration settings file. Import a saved calibration settings file. For further details, refer to the following: ▶ Managing files containing connection details

- **Monitor**: Access additional features for LFDs, such as configuring settings and firmware updates. For further details, refer to the following: ▶ Using additional features

- **Support**: You can check and update the version of Color Expert and you can see Help information.

❷　This tool group is fixed at the top of the screen. You can run the desired function quickly without clicking the menu.

- 🗋 : Can create new connection settings.
- 💾 : Can save the current connection settings.
- 🖊 : Can measure the LFD screen by using the calibrator.
- ▮▮ : After configuring the color patterns, you can see the screen status of an LFD.
- ⏻ : Turn an LFD on or off.
- ⊡ : Can change the input source of an LFD.
- 🔊 : Can adjust the volume of an LFD.
- 📶 : Can set the remote control reception for an LFD.
- ✣ : Use the virtual remote control to manipulate an LFD.
- 🖼 : Can initialize the uniformity to defaults.
- 123 : Shows the assigned ID for each LFD on their screen.

❸　Preview the screen outputs from LFDs. View the screen settings for LFDs.

The numbers shown in the preview section refer to the sequence the LFDs will be calibrated.

❹　Menu items to calibrate the screen colors for LFDs are provided with step by step instructions using tabs. Color calibration is performed in the order of **Connection** > **Picture Settings** > **Calibration**. The current step is highlighted in blue.

After all steps are completed, click a desired tab to calibrate colors again, if required.

Resizing panes in the Color Expert Pro

Drag a border to resize panes in the program screen. Change the mode to view the preview section.

📖 Restarting the program after resizing panes will display the panes in default sizes.

---
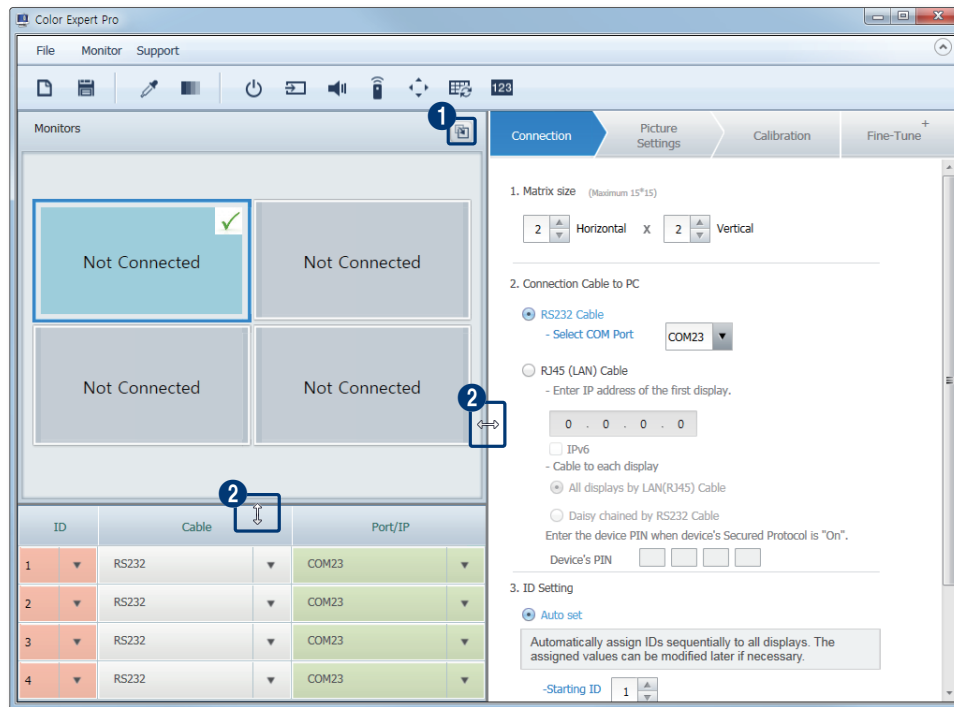
❶ Display the preview section in a separate window.
  • To return the preview section to default mode, click 🖼.

---

❷ Click and then drag the border between panes in a desired direction to resize the panes.

2-3 LFD connection settings

To connect Color Expert Pro to an LFD, you can enter LFD information. This configuration can be performed from the **Connection** tab.

LFD layout settings

Register the layout of LFDs connected to the computer.

Under **Matrix size**, enter the number of horizontal and vertical LFDs connected to the computer.

- The layout of the LFDs will appear in the preview section based on the entered number of columns and rows.
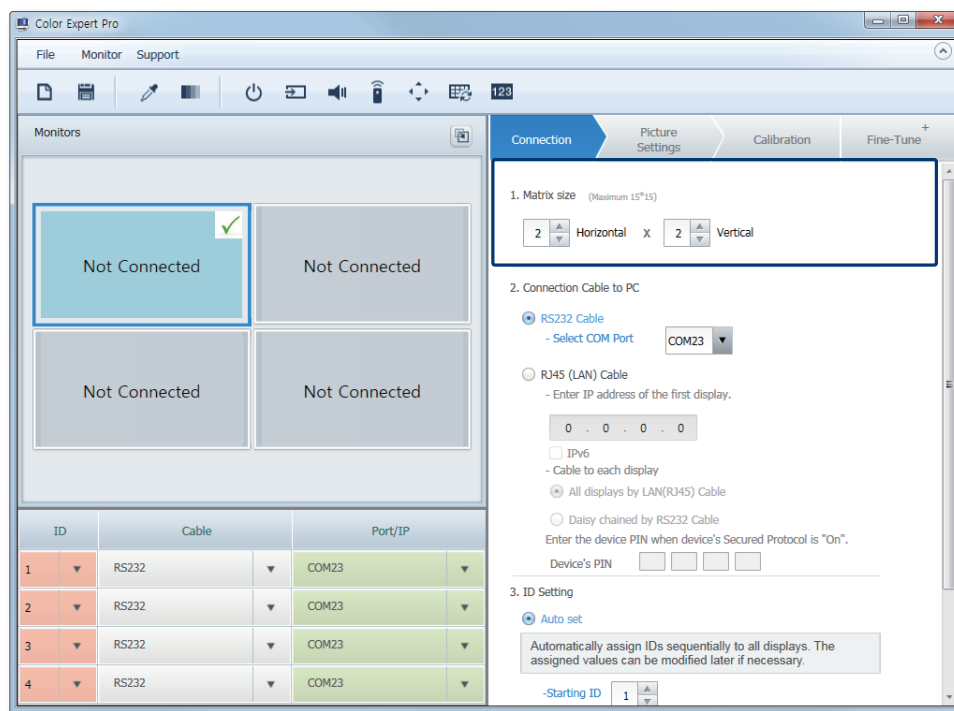
Horizontal	Enter the number of horizontal LFDs connected.
Vertical	Enter the number of vertical LFDs connected.

Make sure the number of devices is at least 1.

Cable settings

After selecting the cable type used to connect the LFDs to the computer, enter details based on the cable type.

Under **Connection Cable to PC**, select the cable type used to connect the LFDs to the computer. Enter details about the cable.

- Entered details can be viewed from the list of LFDs found at the bottom of the preview section.

RS232 Cable	If you connect the RS232C cable between the computer and an LFD, select this option and then select the LFD port in **Select COM Port**.
RJ45 (LAN) Cable	If you connect the RJ45 cable between the computer and an LFD, select this item and then enter the details. • **Enter IP address of the first display.**: Enter the IP address of the main LFD. To connect by using the IPv6 address, select the **IPv6** checkbox. • **Cable to each display**: Select a mode to connect an LFD to another LFD. If each individual LFD is connected using the RJ45 cable via the router, select **All displays by LAN(RJ45) Cable**. If all LFDs are connected using RS232C cables as a chain, select **Daisy chained by RS232 Cable**. • **Enter the device PIN when device's Secured Protocol is "ON".**: Enter your password when security mode for the LFD is on.

Setting LFD IDs

Specify the IDs of the LFDs connected to the computer.

1   Under **ID Settings**, select a mode to set LFD IDs.

   –   Entered details can be viewed from the list of LFDs found at the bottom of the preview section.
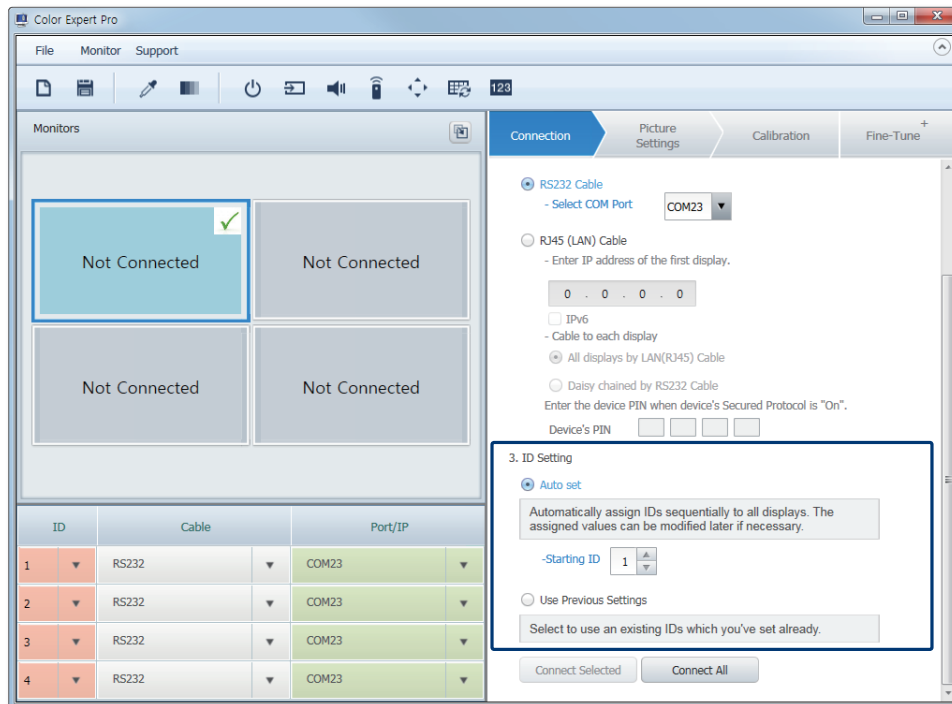
Auto set	Select this mode if you want IDs to be automatically assigned to the LFDs. Select a start number from **Starting ID**.
Use Previous Settings	Select this mode if you want to assign the same IDs as the unique IDs of the LFDs assigned using the remote control.

2   After entering the required information, sync the information with the LFDs. For further details, refer to the following: ▶ Syncing LFDs with Color Expert Pro

Syncing LFDs with Color Expert Pro

After entry of LFD information, you can synchronize LFD information in Color Expert Pro to the LFD.

1 Specify the range of LFDs that will be synced.

 – Click a button to start syncing.
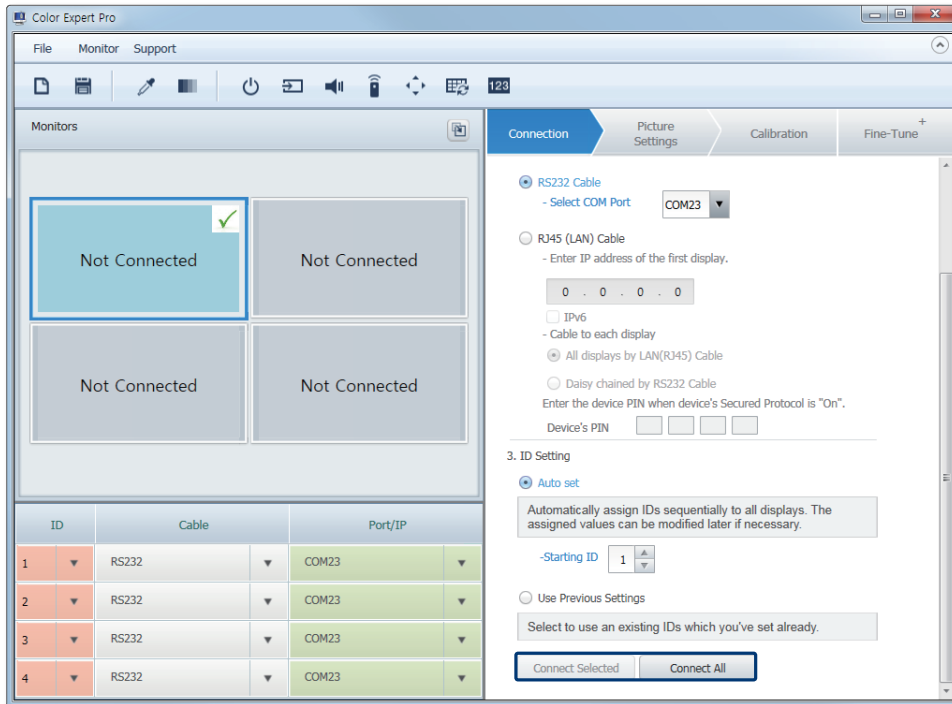
Connect Selected	You can synchronize information in Color Expert Pro to the LFD selected on the preview section.
Connect All	You can synchronize information in Color Expert Pro to all LFDs on the preview section.

2 The edit ID window appears after syncing is done successfully. Click a button to run a desired function.

① Sync the IDs of actual LFDs in the device layout with the IDs shown in the preview section. To change the IDs, click the IDs in sequence in the preview section.

- Clicking the left mouse button: assigns the specified IDs in sequential order.

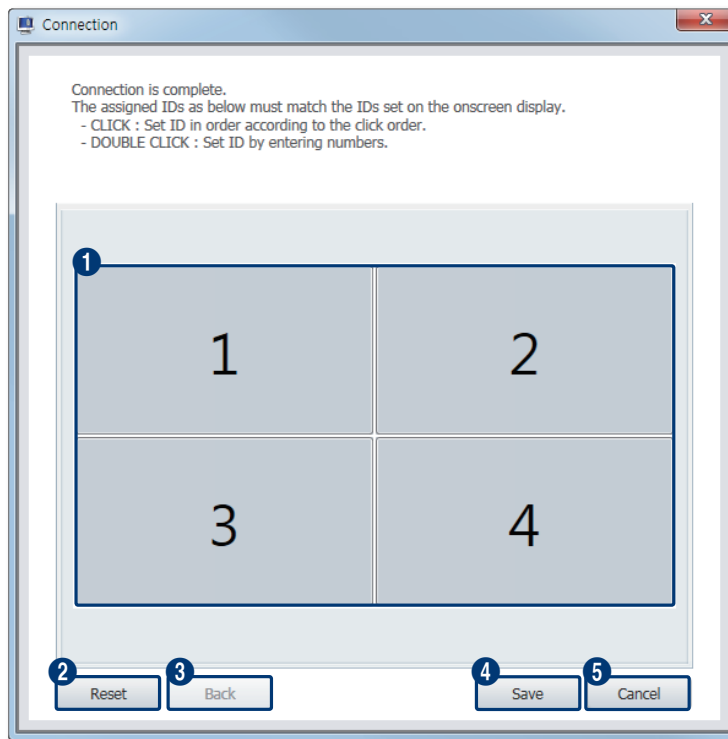- Clicking the right mouse button: assigns the specified IDs in reverse order.

- Double-clicking the mouse button: allows IDs to be manually entered using the keyboard.

② Reset the IDs.

③ Restore the previous IDs.

④ Apply the specified IDs and proceed to the **Picture Settings** step to set picture quality.

⑤ Close the edit ID window without saving the new IDs.

A failure message appears if syncing fails. If syncing fails, check to see that the LFDs are properly connected and that no duplicate ID is found.

2-4 Setting the picture quality

Before calibrating the LFD screen colors, specify the target values for gamma, uniformity and white balance settings first. This configuration can be performed from the **Picture Settings** tab.

> If the target values configured in the **Picture Settings** tab are larger or smaller than the values available on the actual LFDs, the target values will automatically be changed to the maximum or minimum values.

Gamma settings

Adjust the color contrast level for an LFD screen by calibrating the gray scale chromaticity and the gamma value.

When displaying low gray scale content on LFDs that are connected to one another, the color white may appear different between the LFDs. The gamma value calibration feature can be useful in resolving this kind of issue.

1 From the preview section, click the LFD you want to adjust the gamma value for.

2 Under **Gamma**, specify the criterion to adjust the gamma value and the target level.

  – Select **Not Use (Monitor Native Gamma)** if you do not want to use the gamma calibration feature. The current gamma value set for the LFD will be applied.
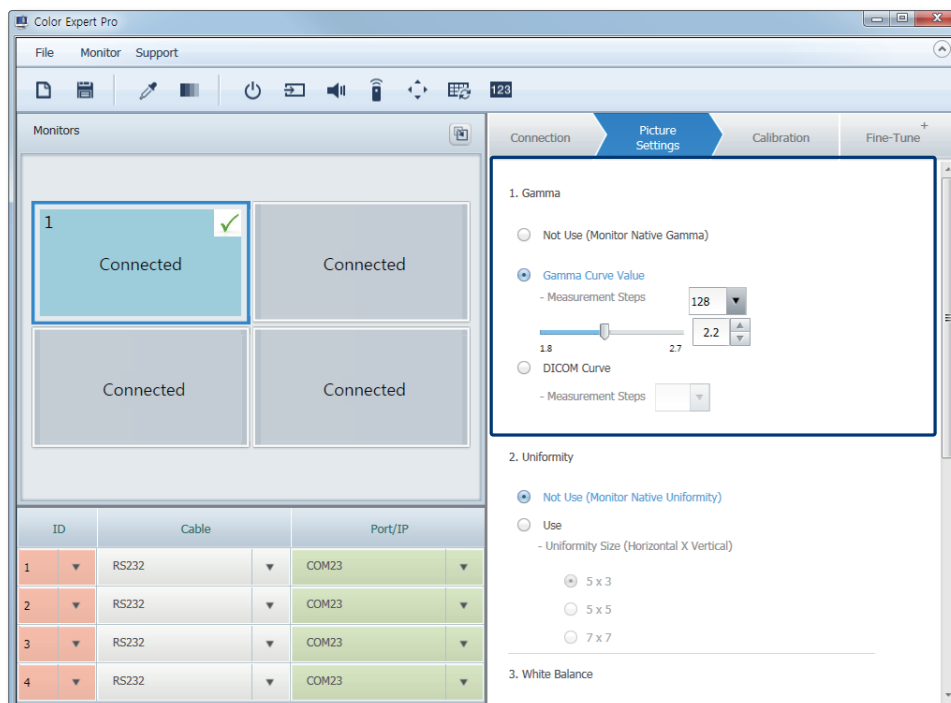
Gamma Curve Value	Adjust the gamma value based on **Gamma Curve Value**. Select a gamma level from the **Measurement Steps** dropdown list.
DICOM Curve	Adjust the gamma value based on **DICOM Curve**. Select a gamma level from the **Measurement Steps** dropdown list.

A higher gamma value produces more vivid colors but increases the contrast. A lower value produces softer colors.

Uniformity settings

Calibrate the screen uniformity. Panels do not usually have uniform brightness and colors. Screen uniformity can be improved using this step.

1 From the preview section, click the LFD you want to adjust the screen uniformity for.

2 Under **Uniformity**, select **Use**, and then specify the number of columns and rows to split the screen.
   – Select **Not Use (Monitor Native Uniformity)** if you do not want to use the uniformity calibration feature. The current uniformity set for the LFD will be applied.
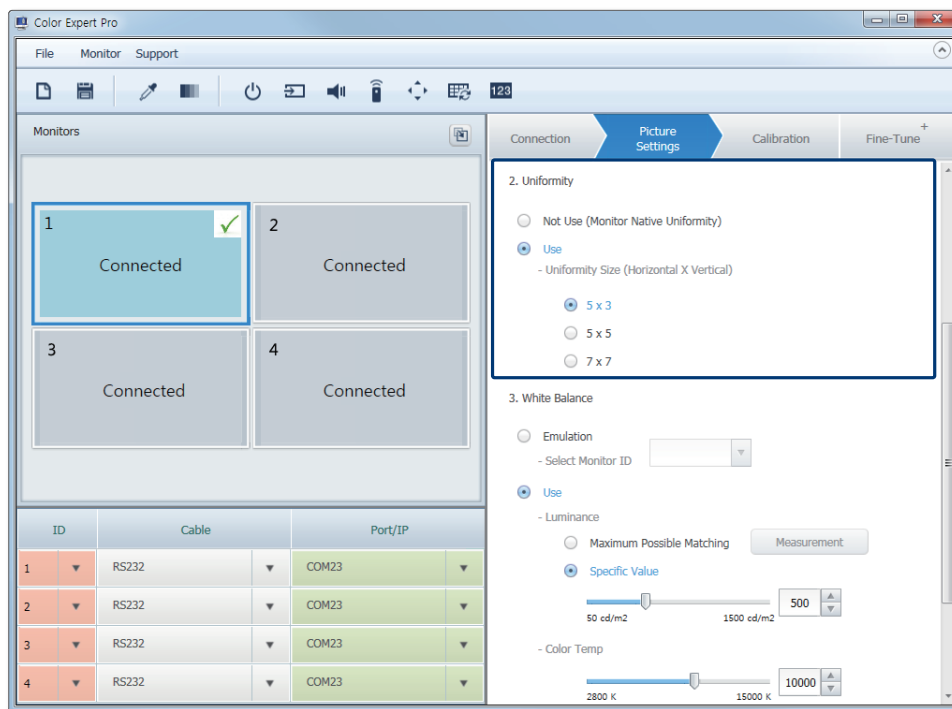
Uniformity Size (Horizontal X Vertical)	Specify the number of columns and rows to split the screen you want to calibrate the uniformity for.

📖 Splitting the screen into a larger number of sections will take longer to calibrate but the uniformity will be better.

White Balance settings

Adjust the luminance and color temperature to make the color white look correct.

Applying the same picture quality

Apply the same white balance of a specific LFD screen to the LFD selected from the preview section.

1 From the preview section, click the LFD you want to copy the picture settings of another LFD to.

2 Select **Emulation** under **White Balance**.

3 From **Select Monitor ID**, select the LFD ID you want to copy picture settings from.
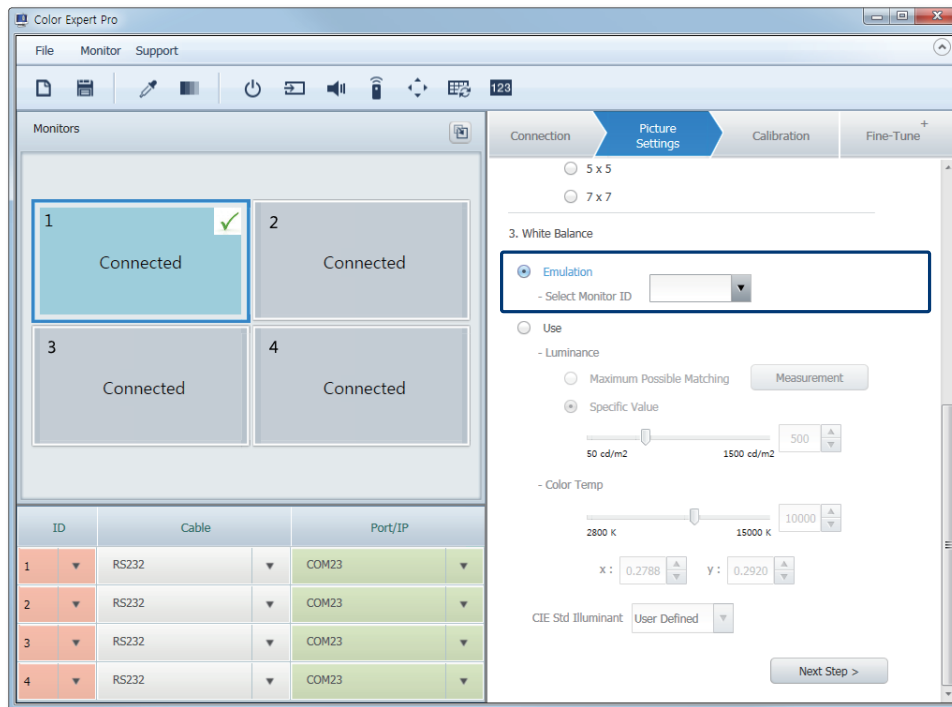
4 After configuring the required settings, click **Next Step** at the bottom.
   – Calibrate the LFD screen using the displayed **Calibration** step.

Using input values

Adjust the white balance by customizing the LFD luminance and color temperature.

1 From the preview section, click the LFD you want to adjust the white balance for.

2 Under **White Balance**, select **Use**, and then enter a desired value.

Luminance	Specify the target brightness.
	• **Maximum Possible Matching**: Measure and apply the maximum brightness available on the LFD. To measure the brightness, click **Measurement**.
	• **Specific Value**: Manually enter a desired brightness level. A higher value increases the screen brightness.
	📗 The range of available luminance levels may vary depending on the LFD model.

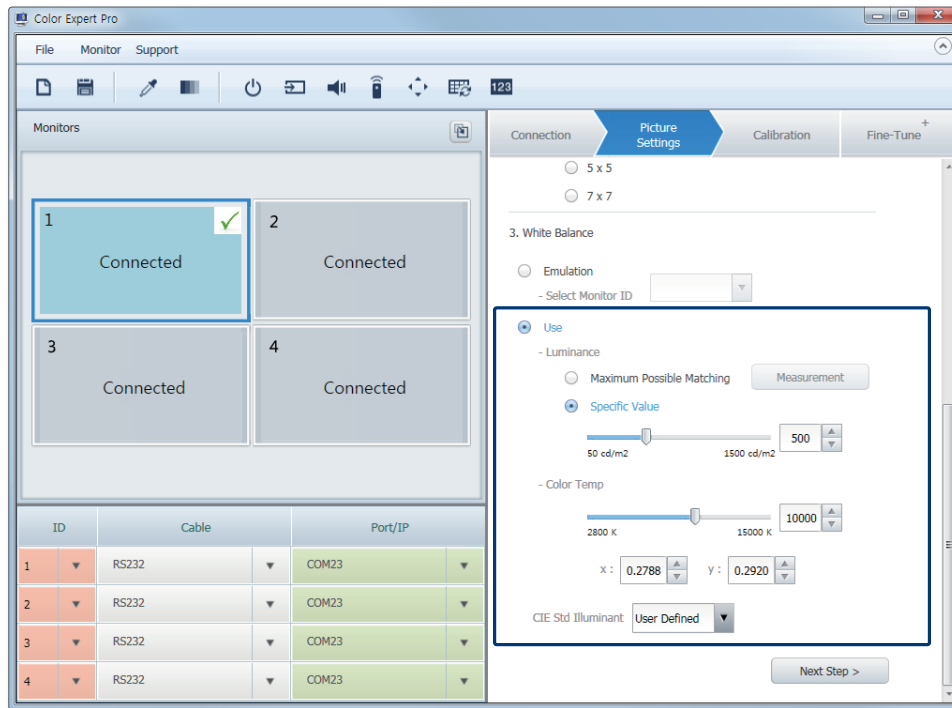|	
Color Temp	Manually enter a desired color temperature. You can also use a standard light source color temperature specified by the International Commission on Illumination (Commission Internationale de l'Eclairage: CIE). Select a desired color temperature from **CIE Std Illuminant**. • **User Defined**: Manually enter a desired color temperature. Decreasing the color temperature value makes the screen look more red. Increasing the value makes the screen look more blue. • **B**: Use the color temperature 4,874K. • **C**: Use the color temperature 6,774K. This color temperature is CIE standard color white. • **D50**: Use the color temperature 5,003K. • **D55**: Use the color temperature 5,503K. • **D65**: Use the color temperature 6,504K. This color temperature is CIE standard daylight color. • **D75**: Use the color temperature 7,504K This color temperature is similar to the daylight on a cloudy day. • **E**: Use the color temperature 5,454K • **F1**: Use the color temperature 6,430K This color temperature is similar to the color of fluorescent lamps. • **F2**: Use the color temperature 4,230K • **F5**: Use the color temperature 6,350K This color temperature is similar to the color of fluorescent lamps. • **F6**: Use the color temperature 4,150K. The range of available color temperatures or displayed CIE standard color temperatures may vary, depending on the LFD model.

3 After configuring the required settings, click **Next Step** at the bottom.

– Calibrate the LFD screen using the displayed **Calibration** step.

2-5 Starting calibration

Calibrate an LFD screen based on the target values specified in the **Picture Settings** tab. Calibration can be performed from the **Calibration** tab.

Viewing target values

Before starting calibration, you can view the target values specified in the **Picture Settings** tab.

To edit the target values, go to the **Picture Settings** tab.
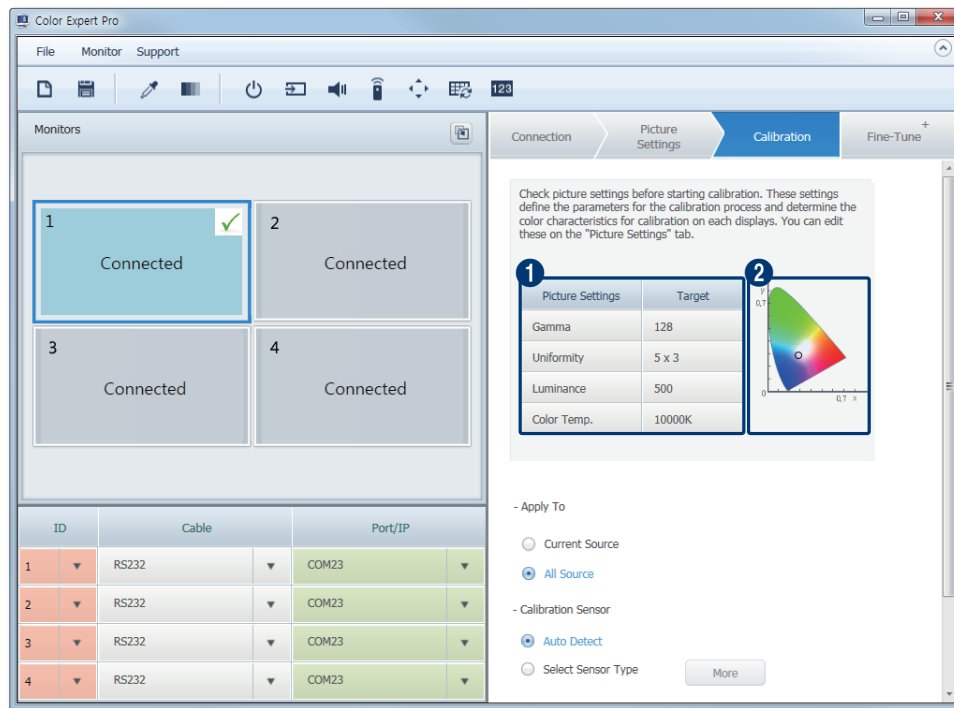

❶	Target values specified in the **Picture Settings** tab are shown in a table.

❷	Target values specified in the **Picture Settings** tab are shown as a color space.
	The specified target values are marked with a circle in the color space.

Specifying the source range

Specify the range of input sources the calibration results will be applied to.

📖 This feature may not be supported on some types of LFD devices.

1 From the preview section, click the LFD you want to specify the source range for.

2 Under **Apply to**, select a source range for the calibration.
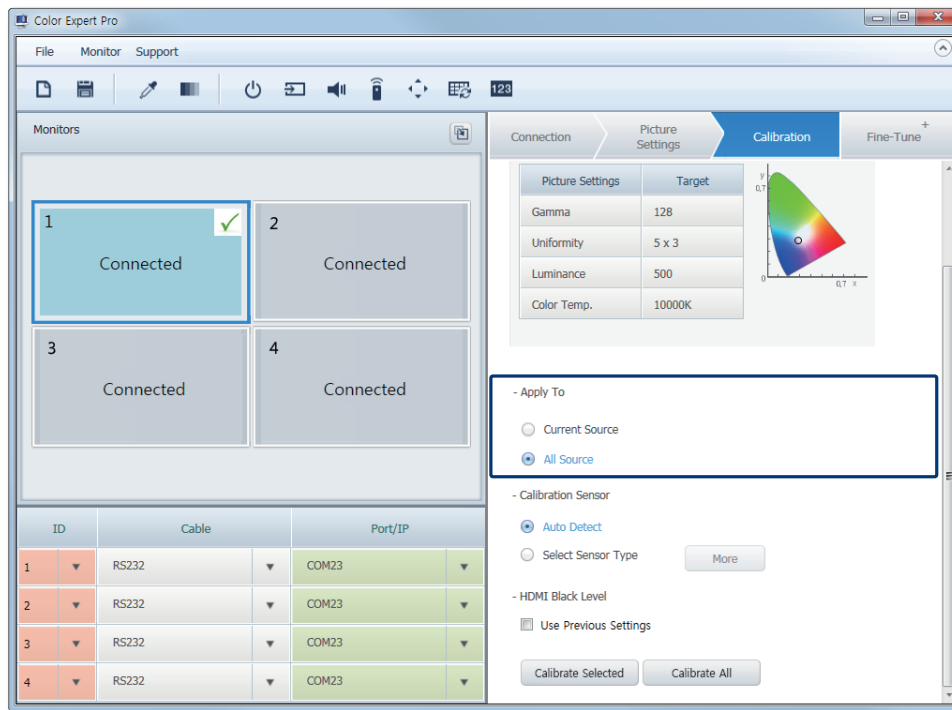
| Current Source	Apply the calibration results only to the active source on the LFD selected from the preview section.
All Source	Apply the calibration results to all the sources connected to the LFD selected from the preview section.

Selecting a calibrator

Select a calibrator that will be used to calibrate devices.

1 From the preview section, click the LFD you want to calibrate.

2 Under **Calibration Sensor**, select a mode to select a calibrator.
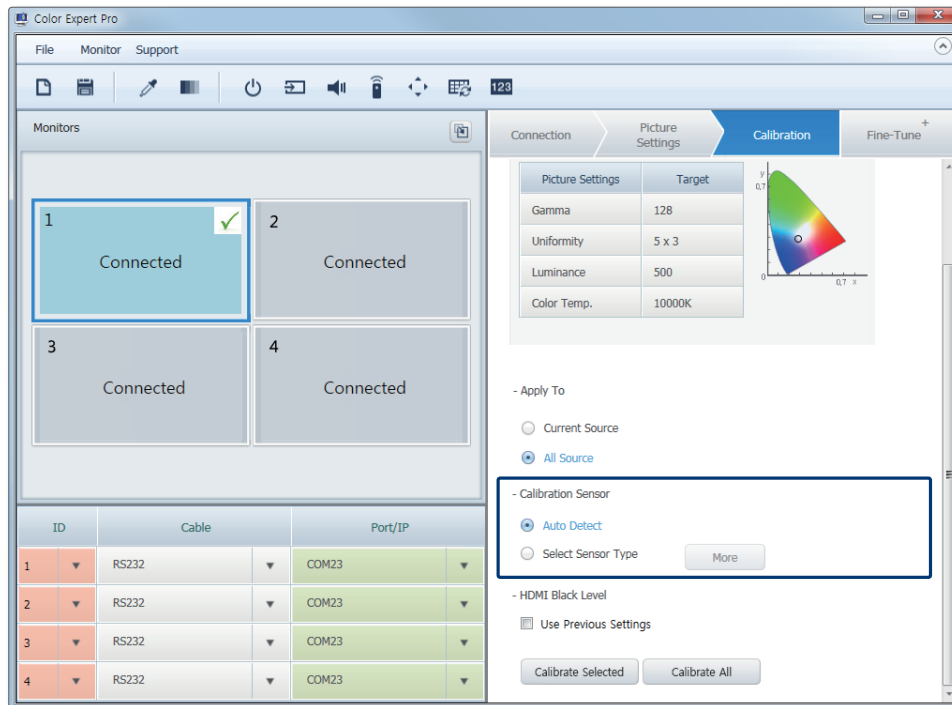
Auto Detect	This mode is applicable when only one calibrator is connected to the computer. The calibrator will automatically connect for use.
Select Sensor Type	This mode is applicable when two or more calibrators are connected to the computer. You can select and use one of the calibrators. Click **More** to open a list of calibrators, and then select a calibrator.

3 After selecting a calibrator, calibrate devices. For further details, refer to the
following: ▶ Calibrating devices

If the input source is set to HDMI, configure the settings to calibrate the black level. For further details, refer to the
following: ▶ Using custom HDMI black level settings

Using custom HDMI black level settings

If the input source is set to HDMI, you can use custom HDMI black level settings or the default settings.

This menu appears only when the input source is set to HDMI.

1 From the preview section, click the LFD you want to calibrate.

2 Under **HDMI Black Level**, select whether you want to use custom settings.

– To use custom settings, select the **Use Previous Settings** checkbox. If you do not select the checkbox, the black level will use the default settings.
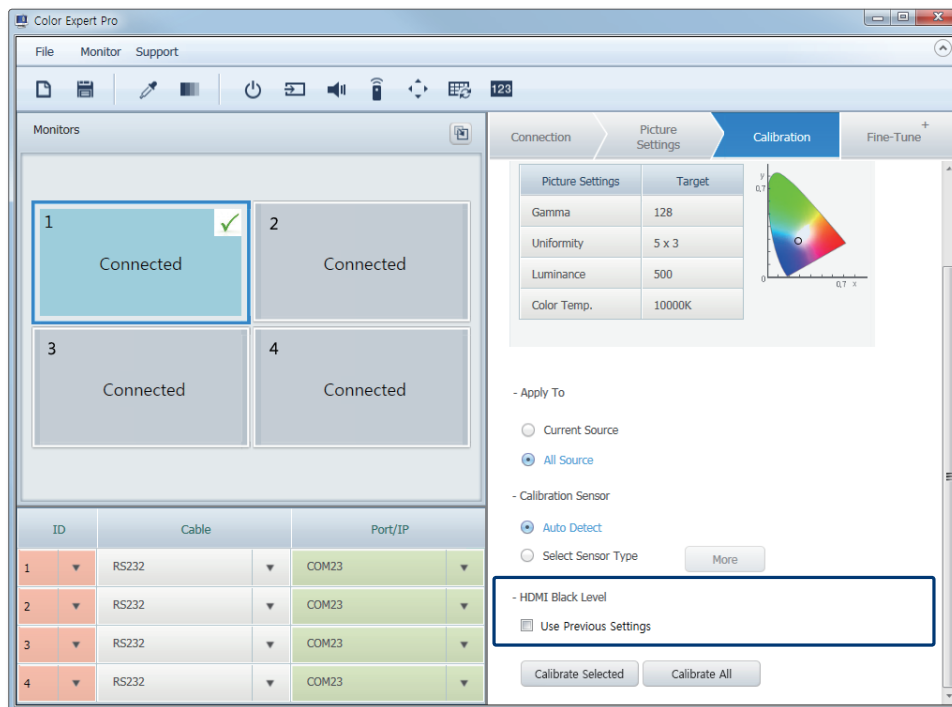
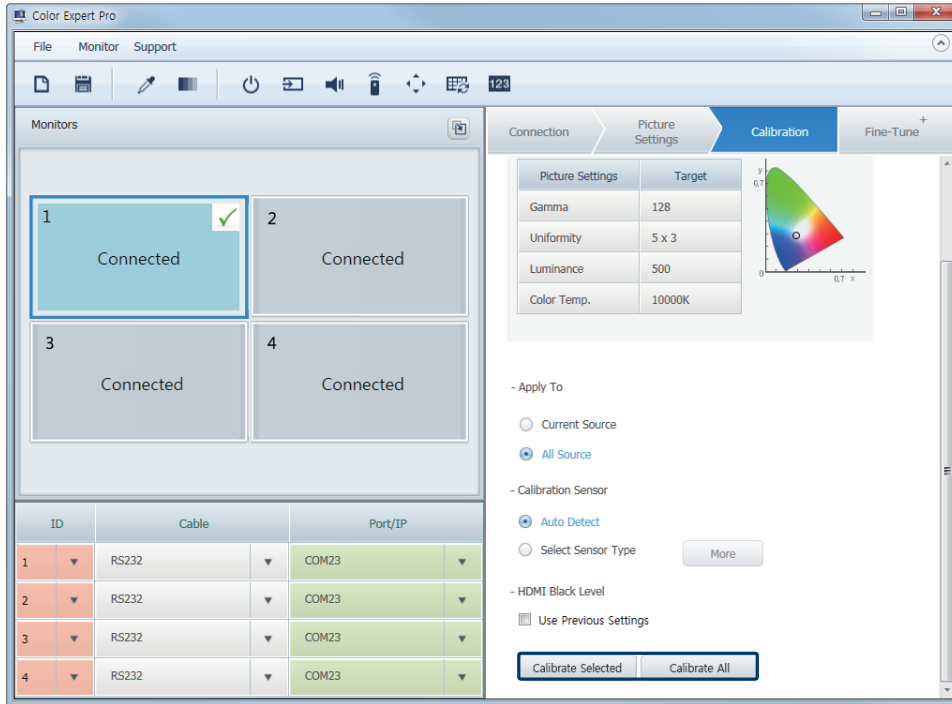3 After configuring the settings, start calibration. For further details, refer to the following: ▶ Calibrating devices

Calibrating devices

Calibrate devices using the selected calibrator.

1 Specify the range of LFDs that will be calibrated.

| Calibrate Selected	Calibrate only the LFDs selected from the preview section.
Calibrate all	Calibrate all the LFDs displayed in the preview section.

2   When the calibration screen appears on an LFD, place the calibrator on the target spot. Click **Next**.

– Calibration will automatically proceed. With the calibrator placed on the target spot, follow the displayed instructions.

– The displayed calibration screen may vary depending on the item being calibrated.

– If the screen uniformity calibration mode is enabled, calibration will be performed for each of the split screen sections. Position the calibrator on a split section of the screen and press **Enter** on the keyboard.
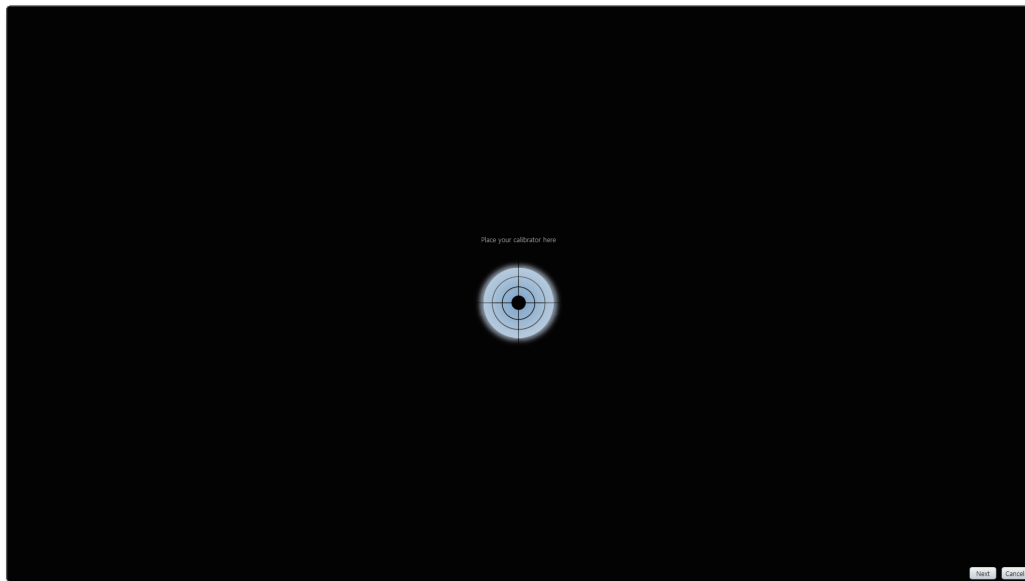
- The time it takes to calibrate may vary depending on the LFD device type and version.
- A warning message may appear during calibration if the target values are larger or smaller than the values available on an actual LFD. To ignore the warning message and proceed, click **YES**.
- To cancel an ongoing calibration, press **ESC** on the keyboard. The target values are not applied, and the Calibration tab page appears. The time it takes to cancel may vary depending on the LFD device type and version.

3 The calibration results window appears. Use available functions as desired.
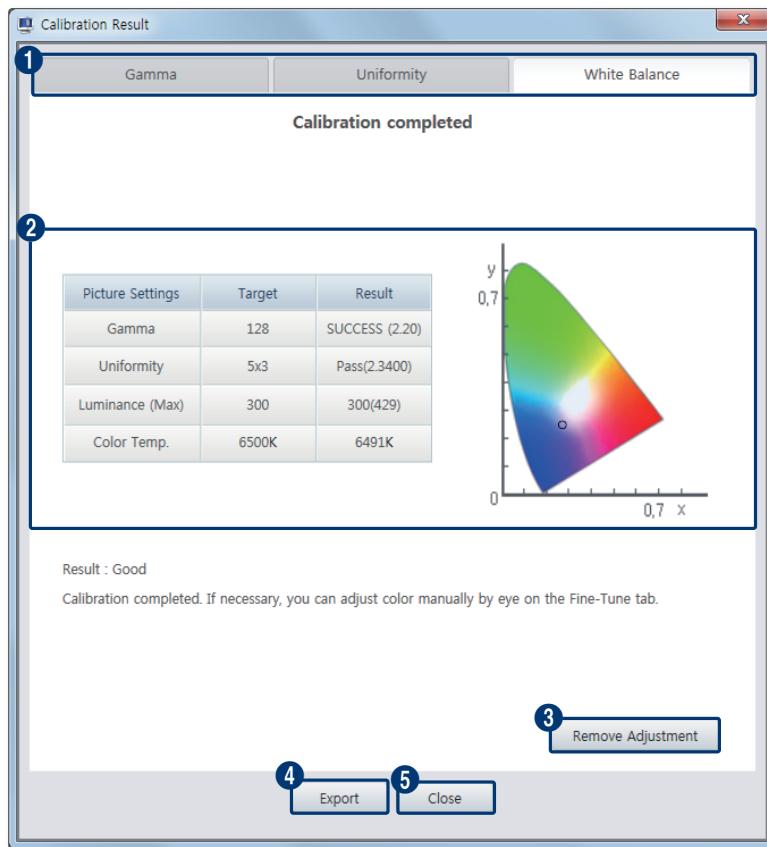
|		
1	View calibration results by calibration item.
2	View the target values and the calibration results as a table and graph.
3	Delete the calibration results without applying the results to the LFD.
4	Save the calibration results as a file to the computer.
5	Apply the calibration results to the LFD and close the results window.

2-6 Manual adjustment/Measuring results

If the calibration results are not satisfactory or the colors do not look correct, manually adjust the colors or restore the screen to the settings before calibration. Incorrect looking colors may be due to the inaccuracy of the measuring sensor, the ambient light intensity or lighting from the surrounding environment. This configuration can be performed from the **Fine Tune+** tab.

Specifying the source range

Specify the range of input sources the manual adjustment results will be applied to.

📖 This feature may not be supported on some types of LFD devices.

1 From the preview section, click the LFD you want to specify the source range for.

2 Under **Apply to**, select a source range the manual adjustment results will be applied to.
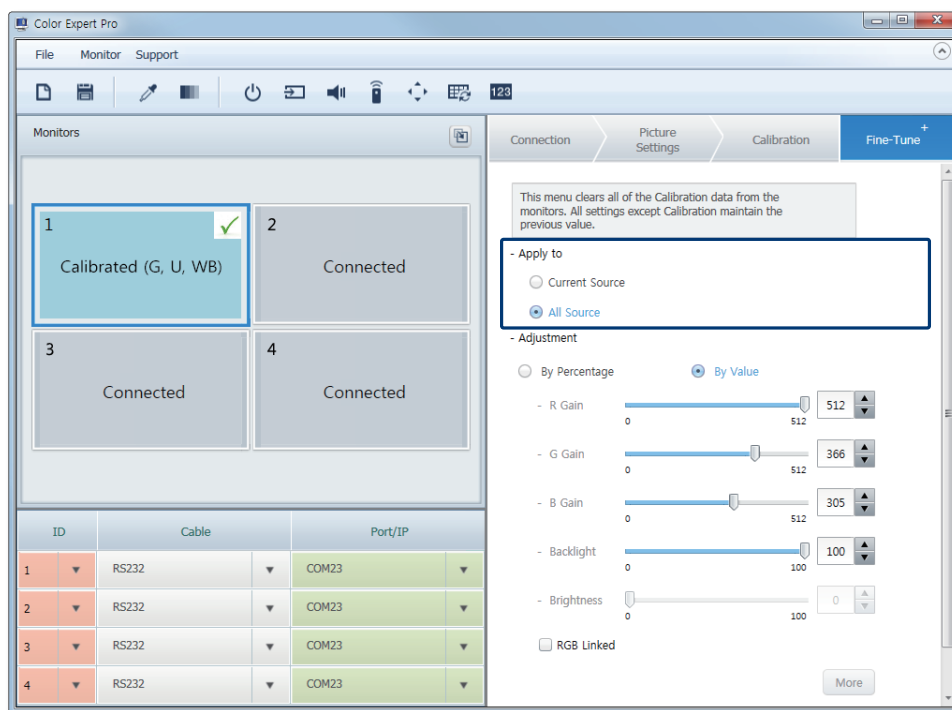
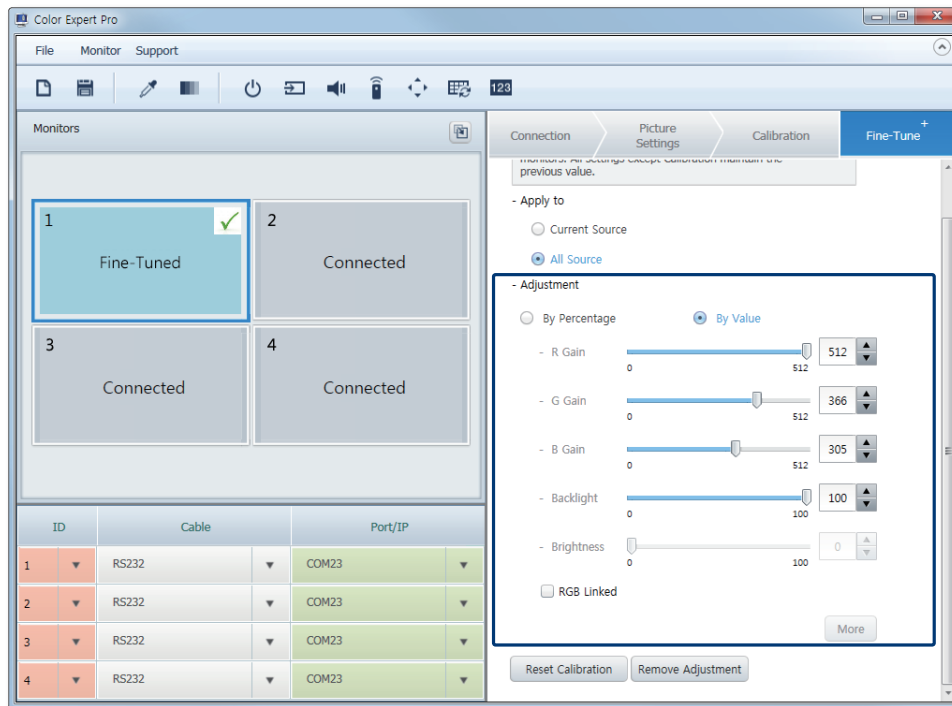|	
Current Source	Apply the manual adjustment results only to the active source on the LFD selected from the preview section.
All Source	Apply the manual adjustment results to all the sources connected to the LFD selected from the preview section.

Manual adjustment after calibration

After calibration, manually adjust the backlight, brightness or RGB settings in more detail, if required.

1 From the preview section, click the LFD you want to manually adjust the color settings for.

2 Adjust the backlight, brightness or RGB settings using the appropriate slidebar.

– Changes will instantly be applied to the LFD screen.

> • The range of adjustment values may vary depending on the LFD device type.
> • RGB offset values can be adjusted for specific models only.

By Percentage	View the range of adjustment values as percentages.
By Value	View the range of adjustment values as absolute values.
RGB Linked	Adjust the RGB values collectively. Adjusting an R, G or B value will automatically adjust the other two values accordingly.
More	Adjust the RGB offset values. Adjust the RGB offset values using the appropriate slidebar from the RGB offset adjustment window. Changes will instantly be applied to the LFD. If you do not want to apply changes, click **Remove Adjustment**.

3 After adjustment is complete, you can measure the updated screen status. For further details, refer to the following: ▶ Measuring the screen settings after manual adjustment
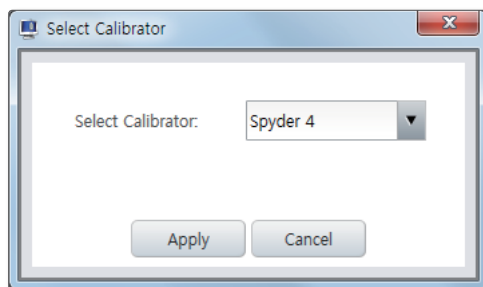
Measuring the screen settings after manual adjustment

Measure the updated screen status using a calibrator after manual adjustment.
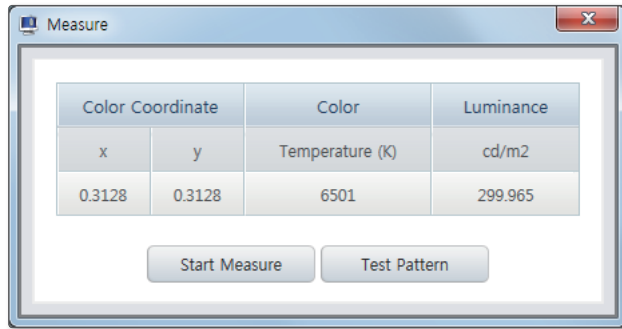
1 After manual adjustment, click **Monitor** > **Measure**.

 – The measure window will appear.

2 Click **Start Measure** in the measure window.
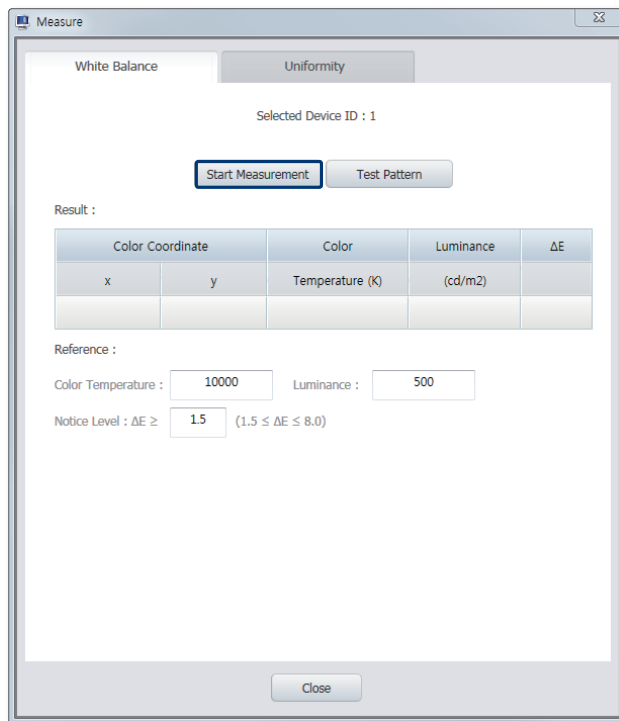
3 Select a calibrator type from the **Select Calibrator** dropdown list and click **Apply**.

4 Place the calibrator on the screen.

– Measurement will automatically proceed.

5 When measurement is complete, view the results.

| Color Coordinate		Color	Luminance
x	y	Temperature (K)	cd/m2
0.3128	0.3128	6501	299.965

Start Measure   Test Pattern

Luminance and color temperature results can vary after calibration, depending on the input source (DisplayPort or HDMI). To adjust, change the HDMI signal output level or check HDMI Black Level on the LFD screen.
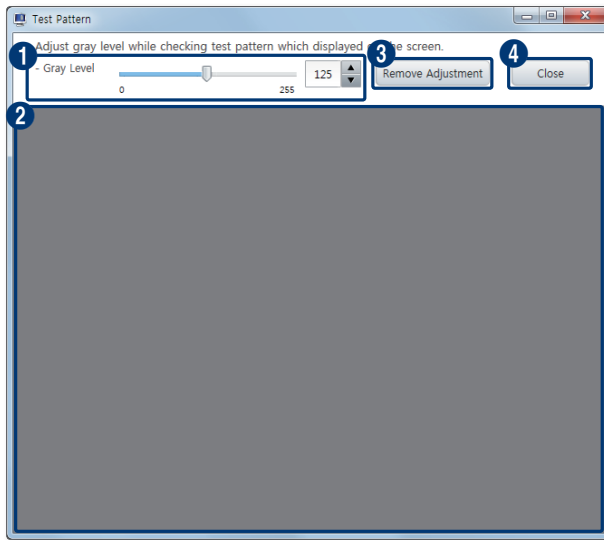
Test screen settings

Configure settings for the test screen that will be used to measure the screen status.

1 Click **Monitor** > **Measure**.

– The measure window will appear.

2 Click **Test Pattern** in the measure window.
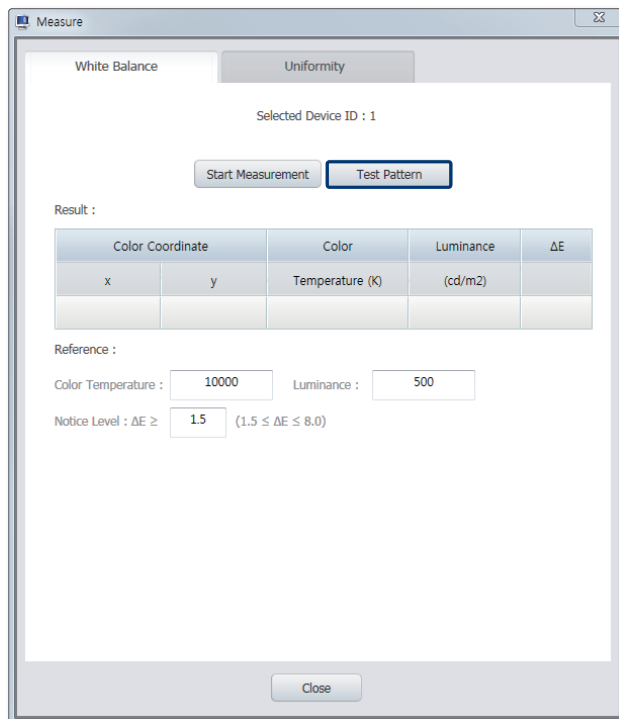
3   The gray level adjustment window appears. Use available functions as desired.

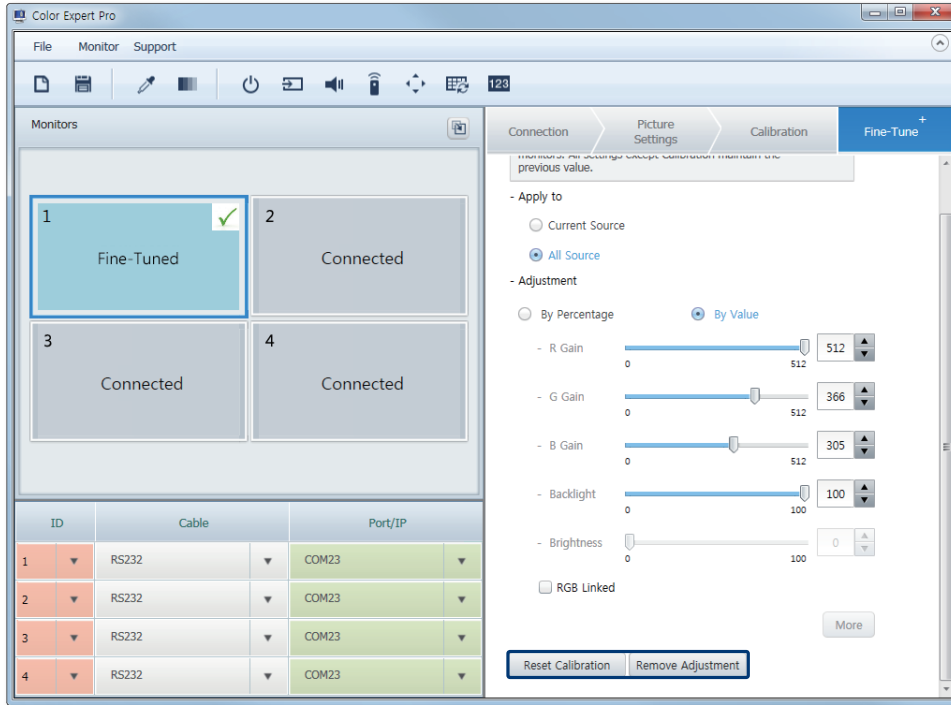|	
①	Adjust the gray level using the slidebar.
②	View the updated gray level.
③	Reset the gray level.
④	Close the gray level adjustment window.

Canceling screen calibration

Return the LFD screen to the settings before calibration.

Reset Calibration	Cancel all the changes made from calibration performed in the **Calibration** tab. To delete calibration results and restore the previous screen settings, click **Reset** from the confirmation window.
Reset Adjustment	Cancel changes made from manual adjustment performed in the **Fine Tune+** tab. To delete manual adjustment results and restore the previous settings, click **Reset** from the confirmation window.

⚠ Please note that deleted screen calibration results cannot be restored.

2-7 Managing files containing connection details

Create and save new connection details as a file. You can also import saved files.

Creating a file containing connection details

You can create files containing screen connection details using Color Expert Pro.

1 Click **File** > **New Project** from the fixed menu items at the top.

2 Use Color Expert Pro to configure connection details.

– For details on how to configure each item, refer to the following: ▶ LFD connection settings

> If you select **File** > **New Project** during screen configuration, there will be a confirmation prompt to save the unsaved files. Select whether to save the current settings from the confirmation window.

Importing a saved file containing connection details

Import a file containing connection details previously saved on the computer. You can edit or apply the imported file to connected LFDs.

1 Click **File** > **Open Project** from the fixed menu items at the top.

2 Select a file containing connection details, and then edit or apply the file to display devices.

Saving a file containing connection details

Save the connection details currently configured in Color Expert Pro as a file.

1 Click **File** > **Save** from the fixed menu items at the top.

   – To save the file as another name, click **File** > **Save as**.

2 Specify the file name and destination folder, and then save the file.

2-8 Using additional features

Use additional features for LFDs, such as configuring settings and firmware updates. View and update the Color Expert Pro program version.
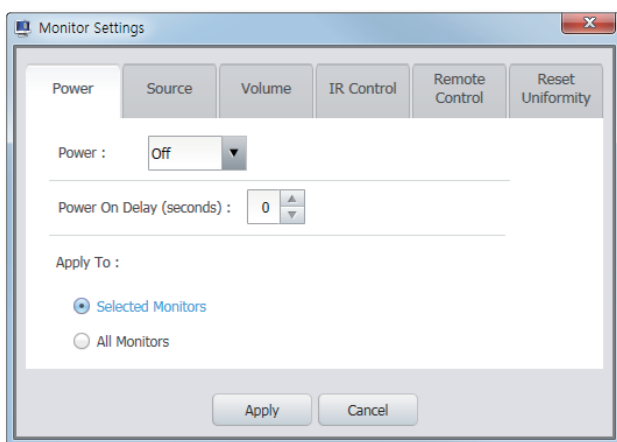
Additional LFD feature settings

Easily manage the power supply, IR remote control reception, audio and input source settings for LFDs connected to the computer by configuring additional LFD features in the Color Expert Pro program.

1 From the preview section, click the LFD the additional features will be applied to.

2 Click **Monitor** > **Monitor Settings** from the fixed menu items at the top.

   – The additional LFD feature configuration window appears.

Controlling the power supply for LFDs

Control the power supply for LFDs connected to the computer.

1 Click the **Power** tab from the additional feature configuration window.

2 Configure the power control settings as desired, and then click **Apply**.

   – Configured settings will instantly be applied to the LFDs. The updated settings can be viewed from the preview section.
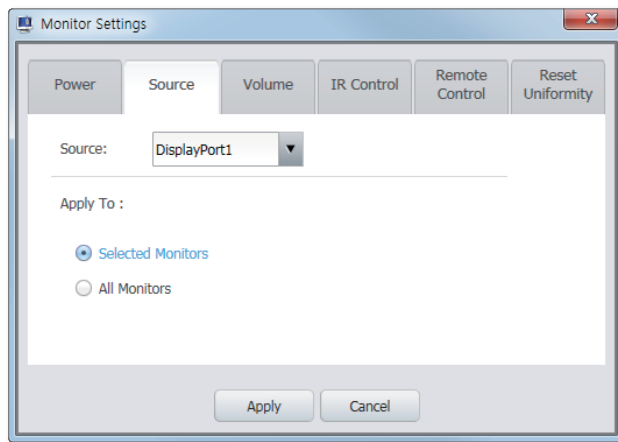
Power	Turn an LFD on or off. Select a desired mode from the dropdown list.
Power on Delay(seconds)	Set connected multiple LFDs to turn on one after another over a specified interval. Click ▲/▼ to specify the interval.
Apply to	Select LFDs you want to apply the power control settings configured in the **Power** tab to. • **Selected Monitors**: Apply the power control settings only to the LFDs selected from the preview section. • **All Monitors**: Apply the power control settings to all the LFDs displayed in the preview section.

Input source settings for LFDs

Specify the input source for the LFDs connected to the computer.

1 Click the **Source** tab from the additional feature configuration window.

2 Specify the input source type, and then click **Apply**.

   – Configured settings will instantly be applied to the LFDs. The updated settings can be viewed from the preview section.
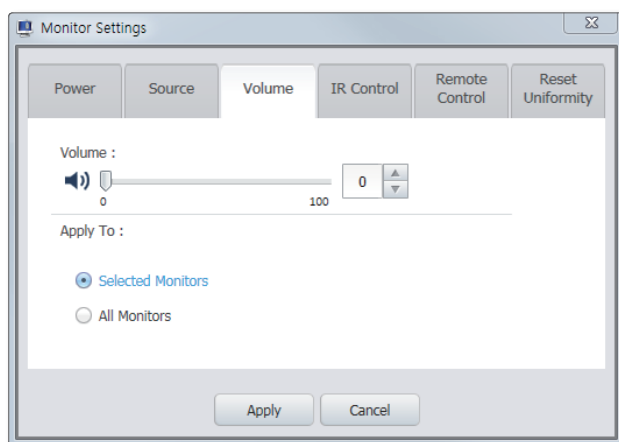

Source	Select a source type that will be connected to the LFDs.
Apply to	Select the LFDs you want to apply the input source specified in the **Source** tab to. • **Selected Monitors**: Apply the input source only to the LFDs selected from the preview section. • **All Monitors**: Apply the input source to all the LFDs displayed in the preview section.

Managing audio for LFDs

Manage audio settings for LFDs connected to the computer.

1 Click the **Volume** tab from the additional feature configuration window.

2 Configure the audio settings as desired, and then click **Apply**.

  – Configured settings will instantly be applied to the LFDs. The updated settings can be viewed from the preview section.
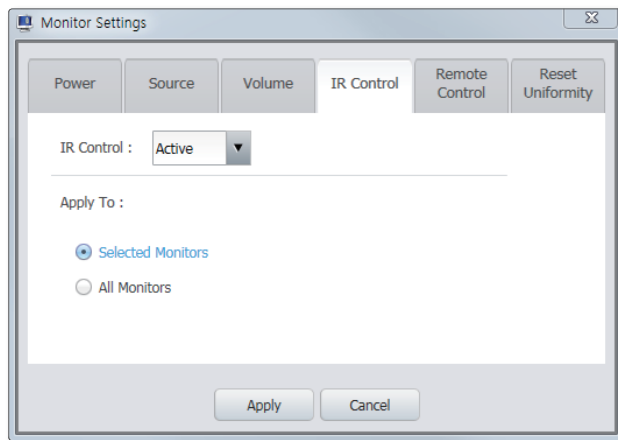
Volume	Drag the slidebar left or right or click ▲/▼ to adjust the volume for the LFDs. Click 🔊 if you want to mute the sound.
Apply to	Select the LFDs you want to apply the audio settings configured in the **Volume** tab to. • **Selected Monitors**: Apply the audio settings only to the LFDs selected from the preview section. • **All Monitors**: Apply the audio settings to all the LFDs displayed in the preview section.

Managing the IR remote control reception for LFDs

Manage the IR remote control reception settings for LFDs.

1 Click the **IR Control** tab from the additional feature configuration window.

2 Configure the IR remote control reception settings, and then click **Apply**.

– Configured settings will instantly be applied to the LFDs. The updated settings can be viewed from the preview section.
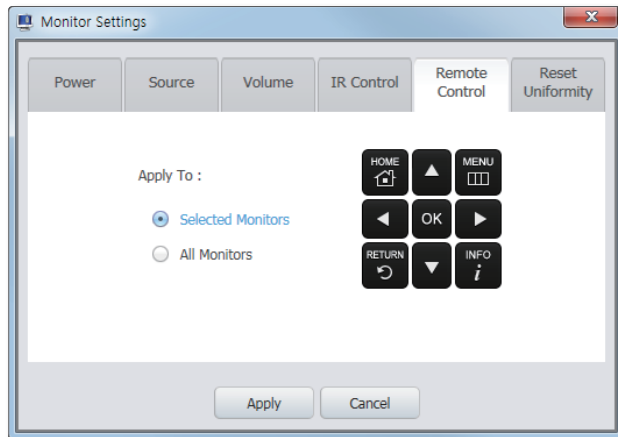

| IR Control	Enable or disable the mode in which LFDs can be controlled using the IR remote control. Select a desired mode from the dropdown list.
Apply to	Select the LFDs you want to apply the IR remote control reception settings configured in the **IR Control** tab to. • **Selected Monitors**: Apply the IR remote control settings only to the LFDs selected from the preview section. • **All Monitors**: Apply the IR remote control settings to all the LFDs displayed in the preview section.

Using the remote control

Control an LFD connected to the computer with the remote control.

1 Click the **Remote Control** tab from the additional feature configuration window.

2 Click remote control functions as required.

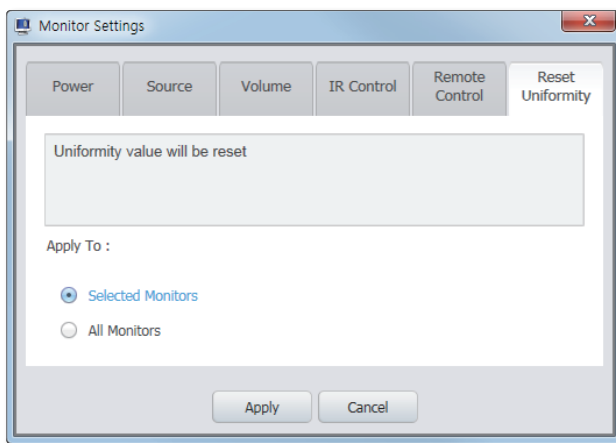– Configured settings are immediately applied to the LFD.

Apply to	Select LFDs to apply the remote-control function to. • **Selected Monitors**: Apply the remote-control function only to the LFDs selected from the preview screen. • **All Monitors**: Apply the remote-control function to all LFDs displayed on the preview screen.
HOME	Display the LFD home screen.
MENU	Display or hide menus on the LFD screen.
RETURN	Return to the previous menu.
INFO	Display information about the current input source.

▲ / ▼ / ◄ / ►	Move up, down, left or right to access another menu item.
OK	Confirm your menu selection.

Initializing the screen uniformity settings

Reset the screen uniformity settings for LFDs connected to the computer.

1 Click the **Reset Uniformity** tab from the additional feature configuration window.

2 Select LFDs you want to reset the screen uniformity settings for and click **Apply**.

|	
Apply to	Select LFDs to reset the screen uniformity settings for: • **Selected Monitors**: Reset the screen uniformity settings for the LFDs selected from the preview screen. • **All Monitors**: Reset the screen uniformity settings for all LFDs displayed on the preview screen.

Updating the firmware on LFDs

Update the firmware on LFDs to the latest version.

📖 This function is available only when the input source is connected using the RJ45 cable.

1 Click **Monitor** > **Update Monitor** from the fixed menu items at the top.

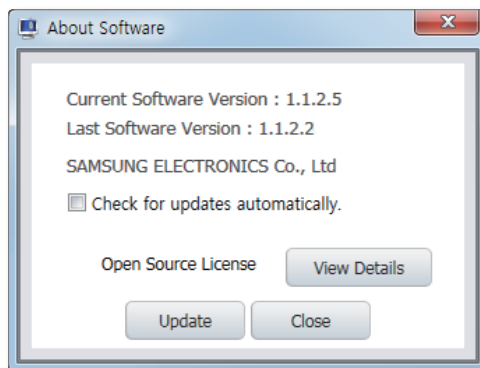2 From the update window, click **Browse** and select the latest firmware file.
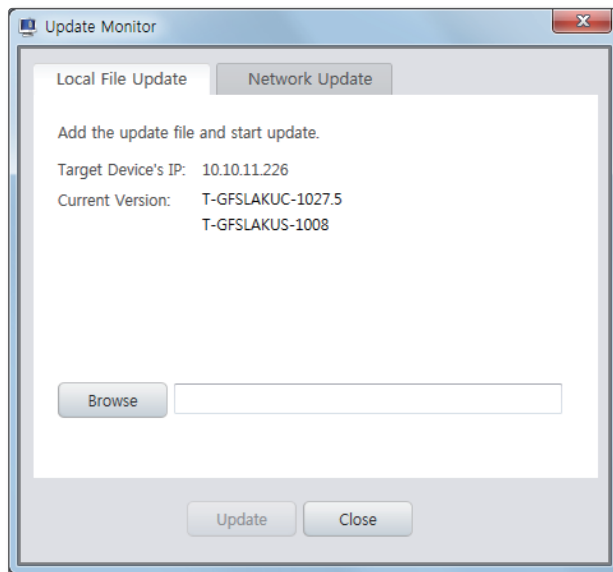
3   After the update is complete, click **Close**.
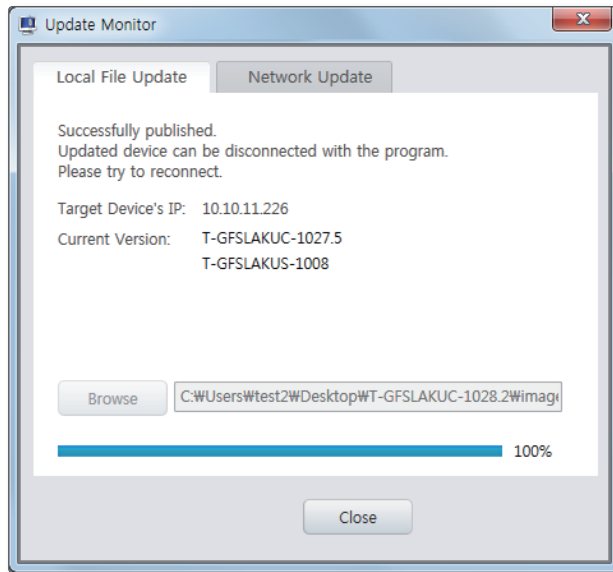
Updating Color Expert Pro

Color Expert Pro View and update the **Color Expert Pro** program version to the latest version.

1   Click **Support** > **About Software** from the fixed menu items at the top.

2   View the version information. To update to the latest version, click **Update**.
   – To automatically check to see if an update is needed each time the program runs, select the **Check for updates automatically** checkbox.

SAMSUNG