



Usage Guide

(First Edition)

ColorNavigator 7

Color Management Software

Version 7.0

Important

Please read this Usage Guide carefully to familiarize yourself with safe and effective usage.

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- The latest product information included in this Usage Guide can be checked on our web site.

www.eizoglobal.com

About This Manual

This manual is for those using ColorNavigator for the first time.

For how to install and run ColorNavigator 7

Read the ColorNavigator 7 Installation Guide.

For those upgrading from ColorNavigator 6

Please read the ColorNavigator 7 Usage Guide (ColorNavigator 6 Upgrade Edition).

For those upgrading from ColorNavigator NX

Please read the ColorNavigator 7 Usage Guide (ColorNavigator NX Upgrade Edition).

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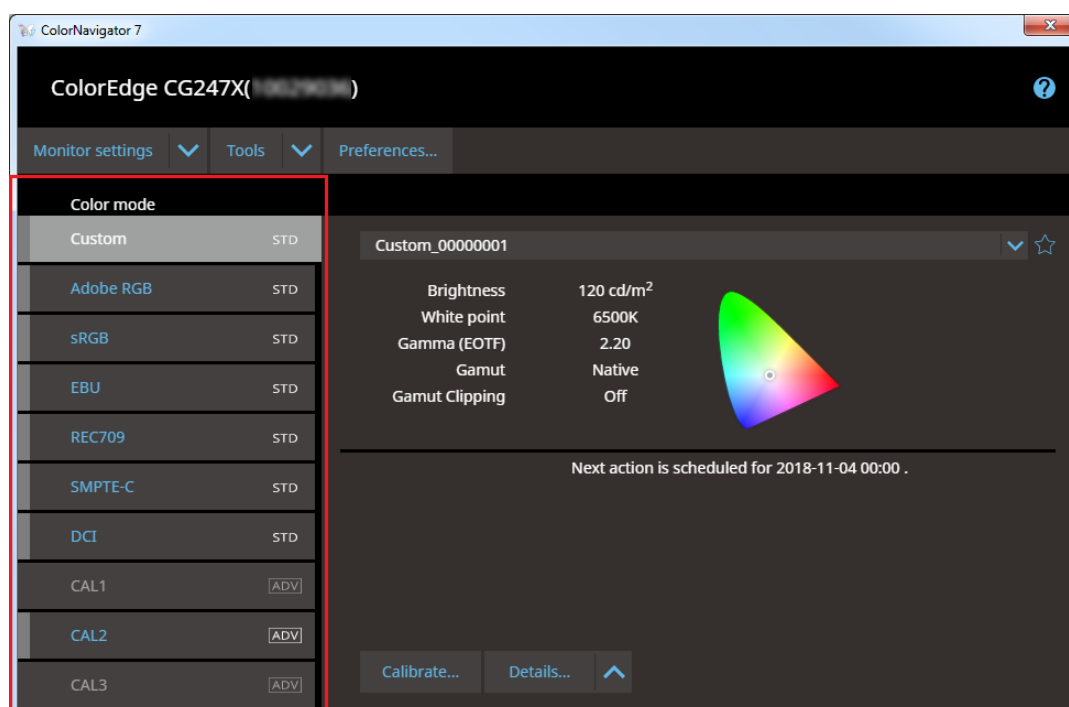
Chapter 1 Calibration Procedures According to Use

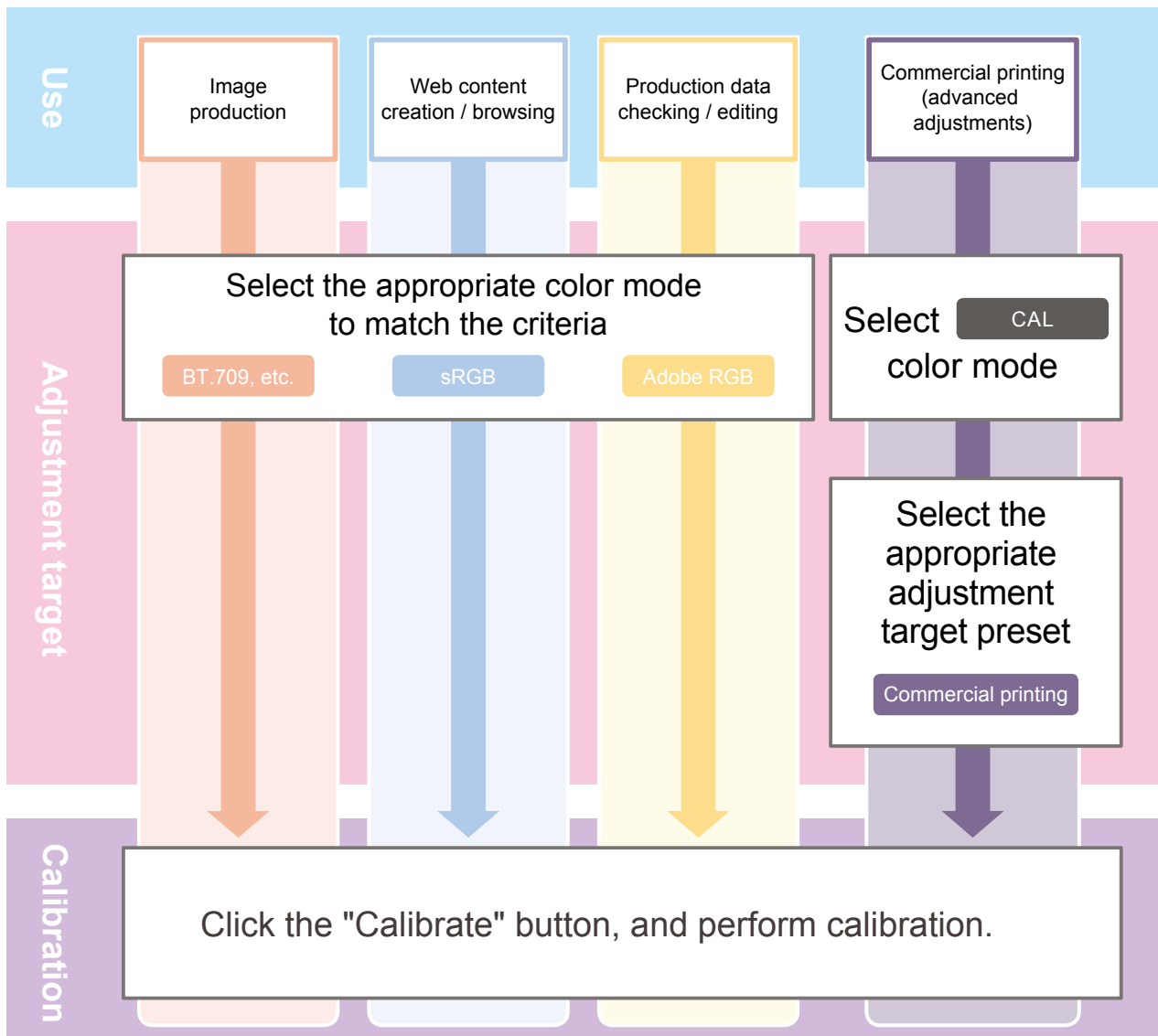
1. Check that the monitor and PC are correctly connected

For details, refer to the Setup Guide included with the monitor. When using a measurement device, check that the measurement device is connected to the main unit of the PC, or to the USB downstream port of the monitor.

2. Start up ColorNavigator 7

3. Select a color mode to be adjusted from the color mode list





If color mode (CAL) is selected, select an adjustment target preset from the target list according to its use.

4. Click “Calibrate”

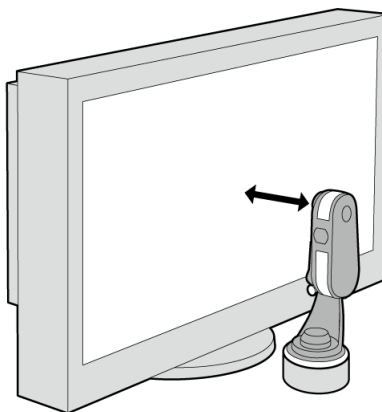
5. Select the measurement device

Select a measurement device according to the software instructions.

Attention

- Be sure that light does not seep through to the sensor of the measurement device during initialization. Precise adjustment results cannot be obtained if light is detected during the initialization process.
- Depending on the measurement device to be used, remove the check from the “Display automatically detected device” check box to display the device. For details, refer to Help for ColorNavigator 7.
- Select a measurement device that can use its own compensation function to display “Compensation function of the measurement device”. Select the compensation table to be used from the pull-down menu. For details, refer to Help for ColorNavigator 7.
- When calibrating the ColorEdge PROMINENCE CG3145, install the measurement device on a tripod or a similar fixing base, and place it approximately 5 cm to 20 cm away from the panel surface. If the measurement device is in contact with the panel during measurement, heat will accumulate on the panel, which may impair the measuring accuracy.

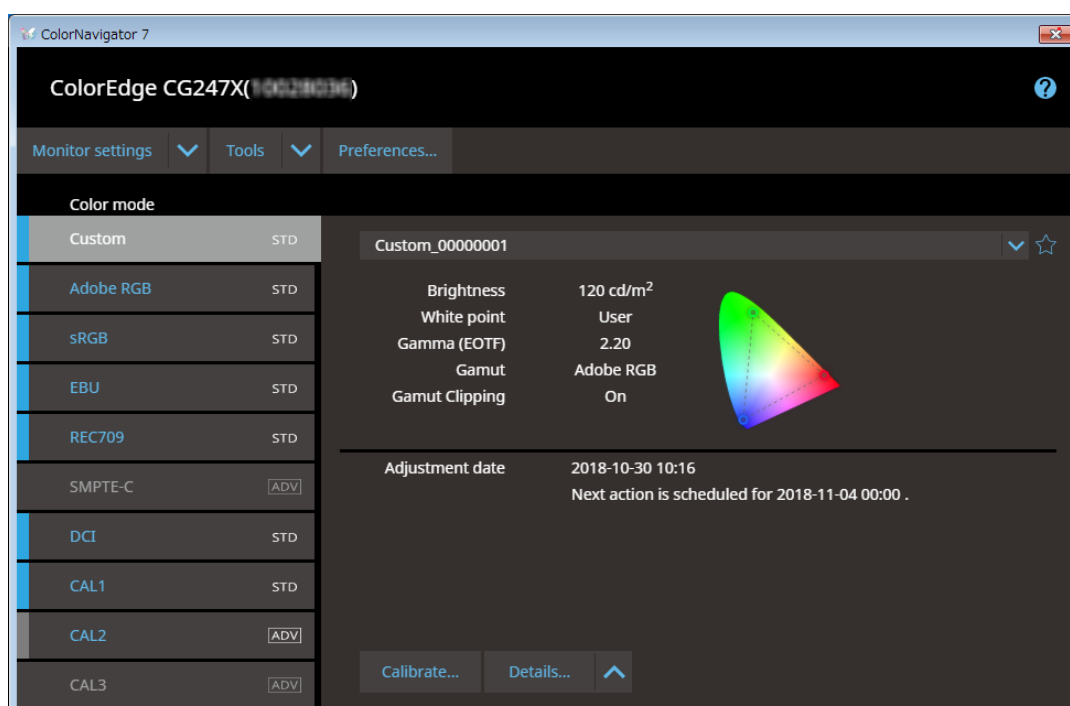
Example: i1 Pro2



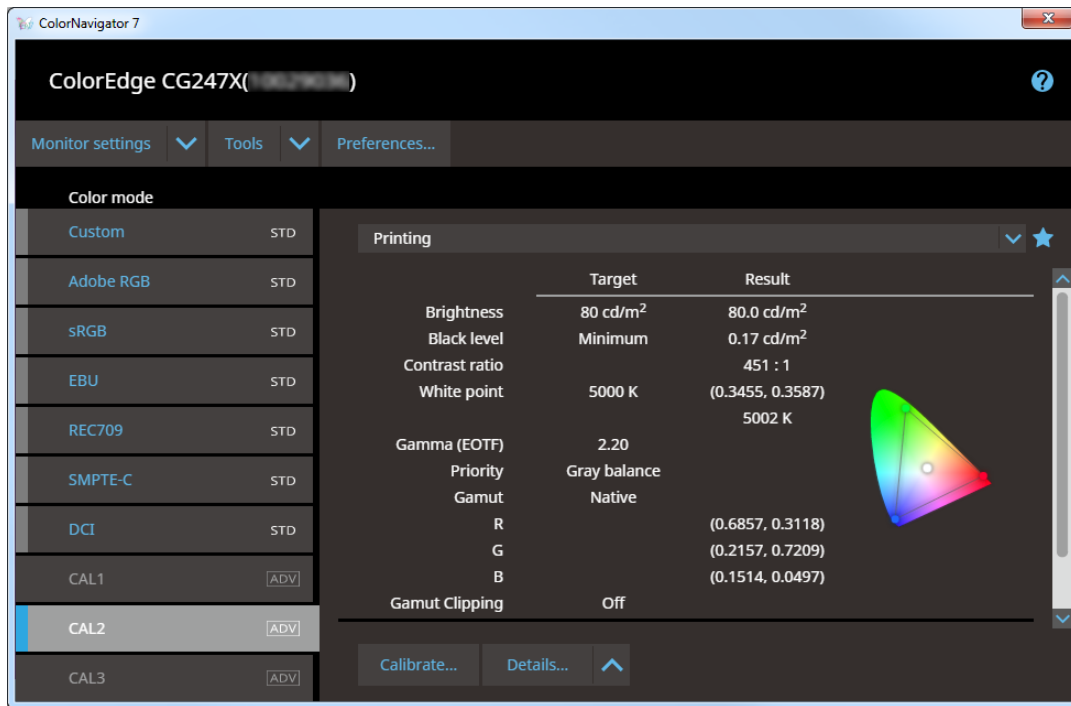
6. Calibration starts

The measurement window is displayed on the screen. Follow the instructions in the window to start calibration.

When a calibration for the Standard Mode finishes, the Finish screen is displayed. Clicking “Finish” will display the main window and put all of Standard Mode in calibration completed status.



When a calibration for the Advanced Mode finishes, the adjustment result is displayed. Click “Finish” on the calibration result screen to put the calibrated Advanced Mode into the calibration completed state.



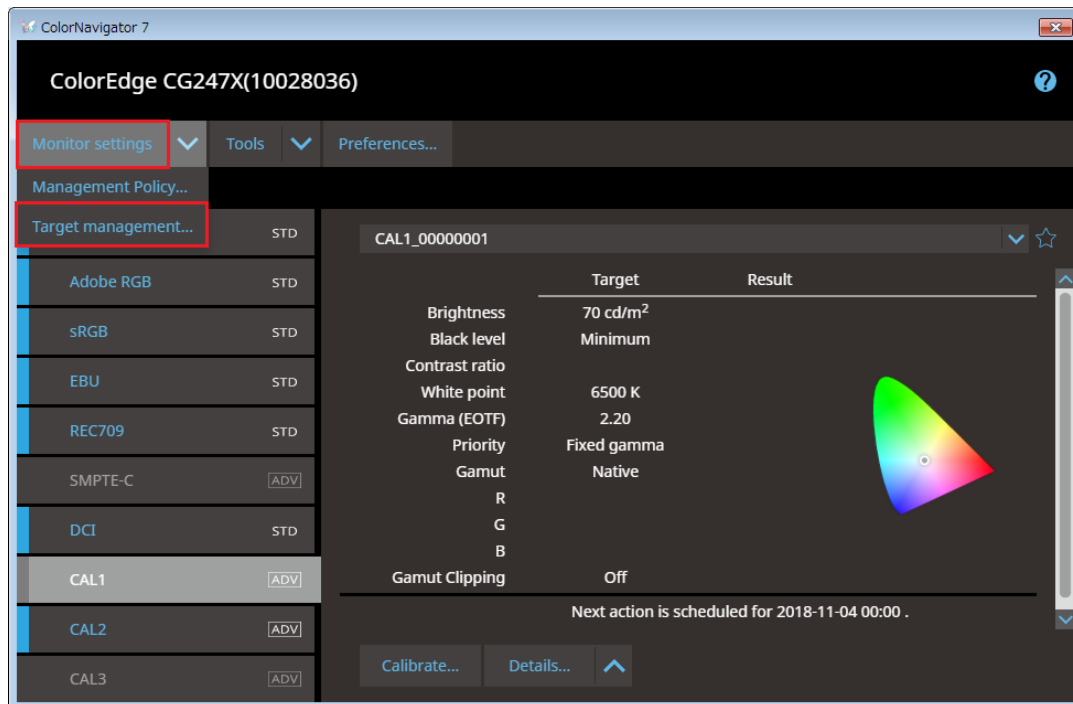
Note

- If a problem with monitor measurement occurs, refer to Help for ColorNavigator 7.

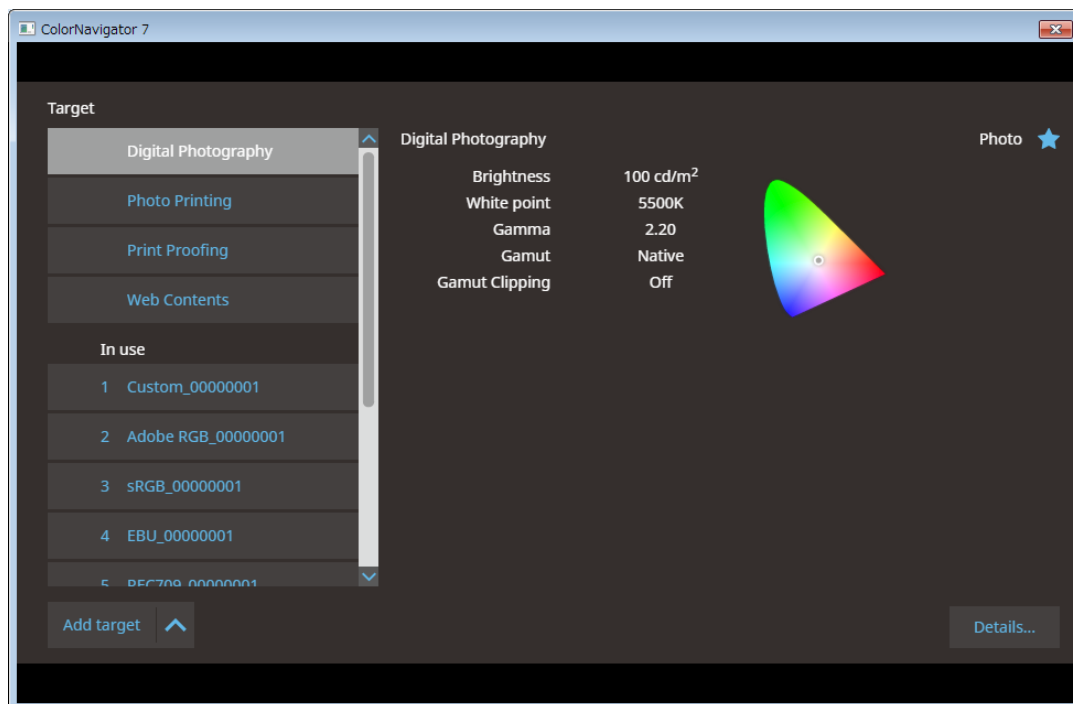
Chapter 2 Creating New Targets

New adjustment targets can be prepared based on their use.

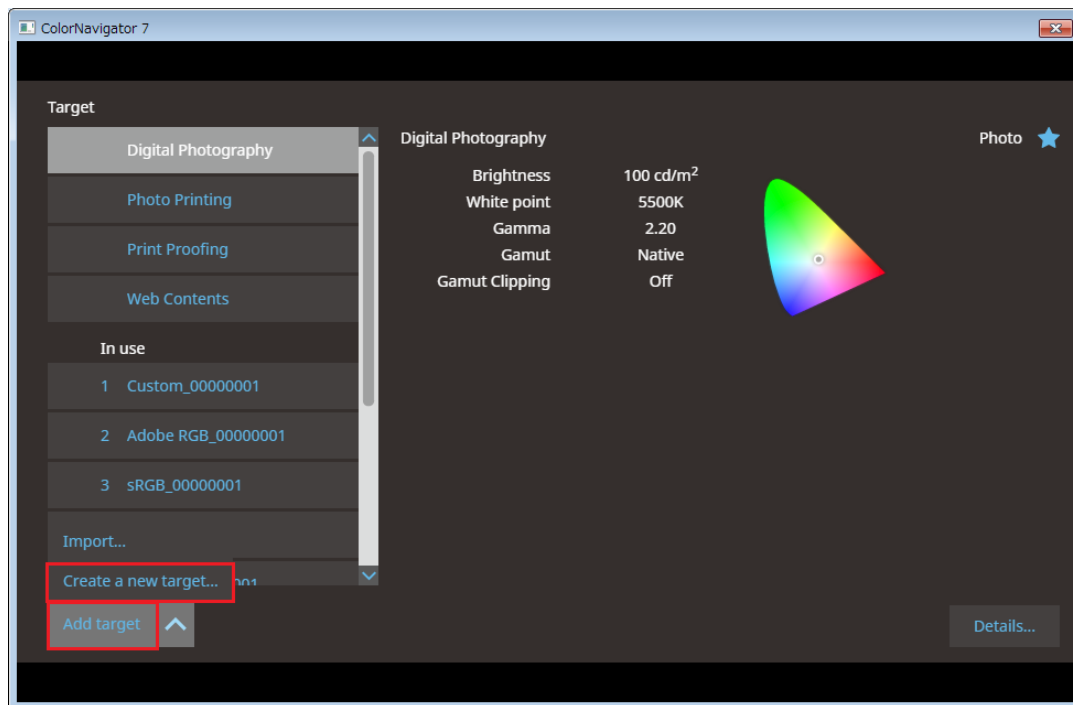
1. Open the main window
2. Click the “Monitor settings” menu, and select "Target management" from the pull-down menu



The Target Management window will be displayed.



3. Click the “Add target” menu, and select "Create a new target" from the pull-down menu



The Target Edit window will be displayed. Displayed content varies depending on the model of the monitor used.






4. Set each item of the adjustment target

For setting items, refer to ["Setting Items of Adjustment Targets" \(page 10\)](#).

5. After setting is completed, click the "OK" button

The adjustment target will be created.

Note

- When you click   at the top-right of the screen, you can switch between Disable () and Enable () for "Edit target".
To edit the target, select Disable ().

Perform calibration if Advanced Mode adjustment targets were created.

Setting Items of Adjustment Targets

Target Name

A screenshot of the 'Target Name' section. It features a text input field with the placeholder text 'Name the target.' and a checkbox labeled 'Set mode name' which is checked. To the right of the checkbox is a text field containing 'CAL1'.

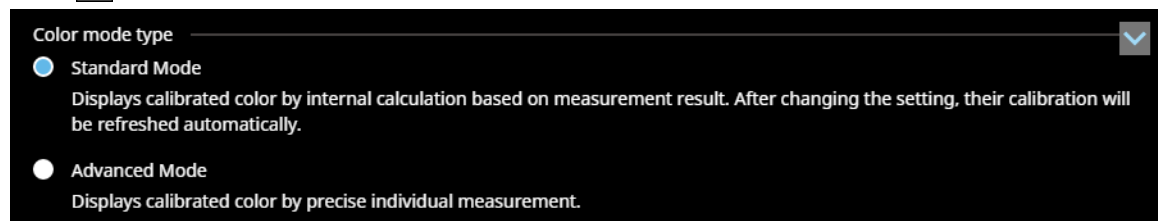
Set the name of the adjustment target. Checking the "Set mode name" check box allows you to set a color mode name.

Note

- There are limitations in characters and the number of characters you can use.

Color mode type

Click , and select Standard Mode or Advanced Mode.


A screenshot of the 'Color mode type' selection menu. It has a title 'Color mode type' and a dropdown arrow on the right. There are two radio button options: 'Standard Mode' (selected) and 'Advanced Mode'. Below 'Standard Mode' is the text 'Displays calibrated color by internal calculation based on measurement result. After changing the setting, their calibration will be refreshed automatically.' Below 'Advanced Mode' is the text 'Displays calibrated color by precise individual measurement.'

Attention

- Until you click "OK", settings before the change was made will be retained.
- The Color mode type change function cannot be used with the following models.
CG245W, CG246, CG275W, CG276, CS230, CX240, CX270

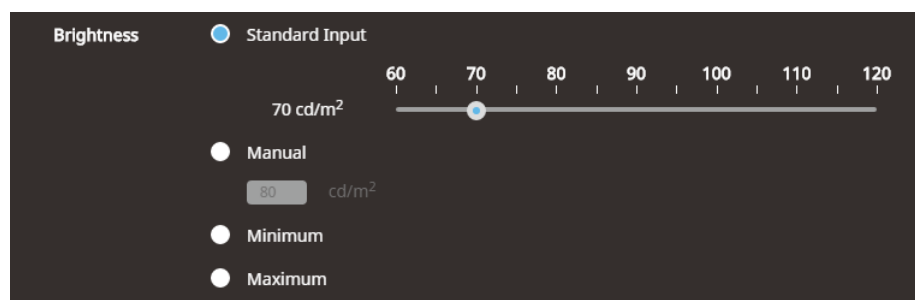
In the Case of Advanced Mode

Preset target

A screenshot of the 'Preset target' button. It is a dark blue button with the text 'Preset target' in white and a white dropdown arrow on the right.

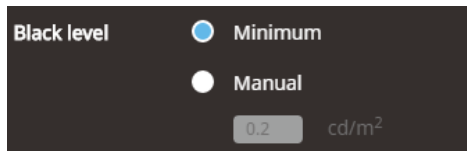
Click the "Preset target" menu, and select standard value from the pull-down menu as necessary. After selecting the standard value, the corresponding "Brightness", "White point", "Gamma", and "Gamut" settings will also be selected under the pull-down menu.

Brightness

A screenshot of the 'Brightness' adjustment interface. It has a title 'Brightness' and a radio button selection for 'Standard Input' (selected). Below this is a slider with a scale from 60 to 120. The slider is currently set to 70, with the unit 'cd/m²' displayed. Below the slider are three radio button options: 'Manual' (selected), 'Minimum', and 'Maximum'. The 'Manual' option has a text input field with the value '80' and the unit 'cd/m²'.

Item	Description
Standard Input	Use the slider to specify a value. Upper limit of brightness that can be set varies depending on models.
Manual	Allows you to enter a value
Minimum	Allows you to specify the target brightness to a minimum or maximum value.
Maximum	

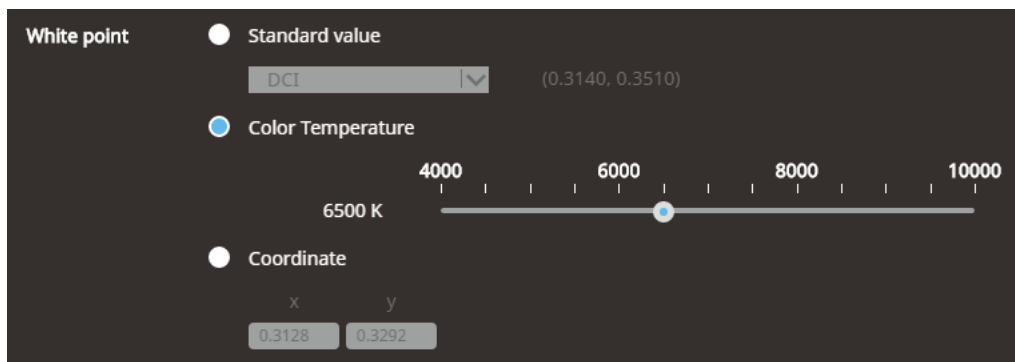
Black level

A dark-themed control panel for 'Black level'. It features two radio buttons: 'Minimum' (selected with a blue dot) and 'Manual'. Below the radio buttons is a text input field containing '0.2' and a unit label 'cd/m²'.

By raising the black level, dark parts of images displayed on the monitor can be made brighter. Raising the black level is effective when the contrast appears to be too high.

Item	Description
Minimum	Allows you to specify the black level to a minimum value. (Recommended)
Manual	Allows you to enter a value

White point

A dark-themed control panel for 'White point'. It has three radio buttons: 'Standard value' (unselected), 'Color Temperature' (selected with a blue dot), and 'Coordinate' (unselected). Under 'Standard value' is a pull-down menu showing 'DCI' and a coordinate pair '(0.3140, 0.3510)'. Under 'Color Temperature' is a horizontal slider with markers at 4000, 6000, 8000, and 10000. A blue dot on the slider is positioned between 6000 and 8000, with '6500 K' labeled below it. Under 'Coordinate' are two text input fields labeled 'x' and 'y', containing '0.3128' and '0.3292' respectively.

Item	Description
Standard Value	Selects the standard value from the pull-down menu.
Color Temperature	Specifies color temperature by using a slider.
Coordinate* ¹	Allows you to enter values for coordinate.

*¹ If you specify a white point with coordinate, set x and y values within a range between 0.24 and 0.45.

Gamma (EOTF)

Gamma (EOTF)

☒ Standard value

sRGB

☒ Standard Input

1.6 1.8 2.0 2.2 2.4 2.6 2.7

2.20

☐ Manual

2.20

☐ L*

☐ LUT

Import LUT file...

Item	Description
Standard Value	Selects the standard value from the pull-down menu. Standards that can be specified vary depending on the models.
Standard Input	Use the slider to specify a value. (Recommended value: 2.2)
Manual	Allows you to enter a gamma value.
L*	Specify L* gamma value.
LUT	Load LUT file and specify the gamma value. Click the "Import LUT file" button to load the LUT file. Conditions for LUT file are as follows. <ul style="list-style-type: none"> • Extension is "csv". • Records one numeric value per line. • Records 256 numeric values (in the case of 8 bit) or 1024 numeric values (in the case of 10 bit). • Records "0" or higher real numbers. • Records the greatest value at the end.

Priority

Set gamma priorities.

Priority

☒ Standard

☐ Gray balance

☐ Fixed gamma

Item	Description
Standard	Select this when correcting the whiteness in the middle tone area while maintaining contrast. (Recommended)
Gray balance	Select this when correcting with priority on the whiteness in the middle tone area. However, the following limitations apply when "Gray balance" is selected. <ul style="list-style-type: none"> • Contrast may be lowered. • The color gamut might be narrower than adjustment with other settings.
Fixed gamma	Fix the gamma value.

Gamut

Set the priority for the color reproduction area (color gamut) of the monitor.

Gamut

☒ Native

☐ Standard value

Adobe RGB ▼ R (0.6400, 0.3300)
G (0.2100, 0.7100)
B (0.1500, 0.0600)

☐ Gamut Clipping

☐ Manual

x y

R 0.6400 0.3300
G 0.2100 0.7100
B 0.1500 0.0600

☐ Gamut Clipping

Item	Description
Native	Displays as the color gamut native to the panel. (Recommended)
Standard value* ¹	Selects the standard value from the pull-down menu.
Manual* ¹	Allows you to manually enter the xy values for RGB.

*¹ Refer to “[Note: About Gamut Clipping](#)” (page 14).

In the Case of Standard Mode

Brightness

Displayed content varies depending on the model of the monitor used or color mode type.

Brightness

☒ Standard Input

60 70 80 90 100 110 120

70 cd/m²

☐ Manual

80 cd/m²

Item	Description
Standard Input	Use the slider to specify a value. Upper limit of brightness that can be set varies depending on models.
Manual	Allows you to enter a value

White point

White point

☒ Native

☐ Standard value

Adobe RGB ▼ (0.3127, 0.3290)

☐ Color Temperature

4000 6000 8000 10000

6500 K

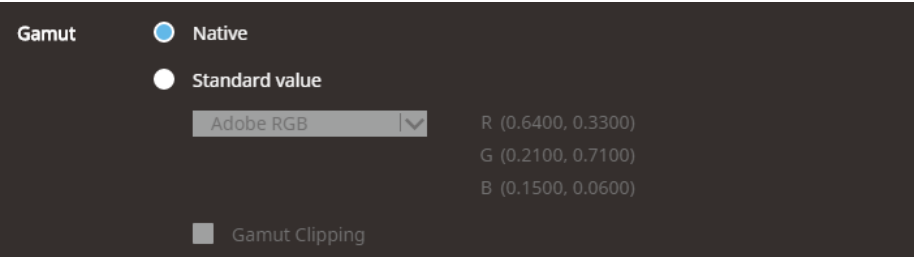
Item	Description
Native	Uses the white point that is set as a default value in the monitor.
Standard value	Selects the standard value from the pull-down menu.
Color Temperature	Specifies color temperature by using a slider.

Gamma (EOTF)



Item	Description
Standard value	Selects the standard value from the pull-down menu.
Standard Input	Use the slider to specify a value. (Recommended value: 2.2)

Gamut



Item	Description
Native	Uses the color gamut that is set as a default value in the monitor. (Recommended)
Standard value	Selects the standard value from the pull-down menu.

Note: About Gamut Clipping

- The method of displaying colors outside the monitor's displayable range within the color gamut can be set.
 - On
The range of colors that are displayable on the monitor will be accurately displayed in accordance with the standard. Colors outside the displayable range will be saturated.
-
- Off
Displays colors with priority on the color gradation rather than the color accuracy. The vertices of the color gamut defined in the standard move to a range that can be displayed by the monitor. This allows the closest colors displayable by the monitor to be displayed.
-

	Color gamut of monitor
	Color gamut defined by standard
	Color gamut displayed on screen

- * This is a conceptual diagram, and does not display the actual color gamut of the monitor.

 - This setting will be disabled if "Native" is selected at "Gamut".

Chapter 3 Manual Adjustment

The monitor allows you to manually make adjustments.
This section explains manual adjustment in Standard Mode.

Note

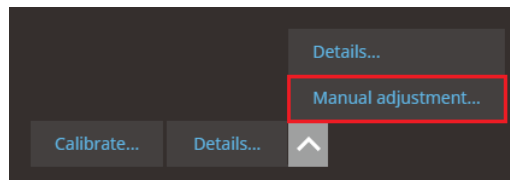
- In Advanced Mode, adjustable items differ depending on the model and content of the target. Also, measurement of the monitor is performed after manual adjustment.
For details, refer to Help for ColorNavigator 7.

1. Open the main window

2. Select a color mode in Standard Mode



The color mode of the monitor is switched and the current adjustment status is displayed.

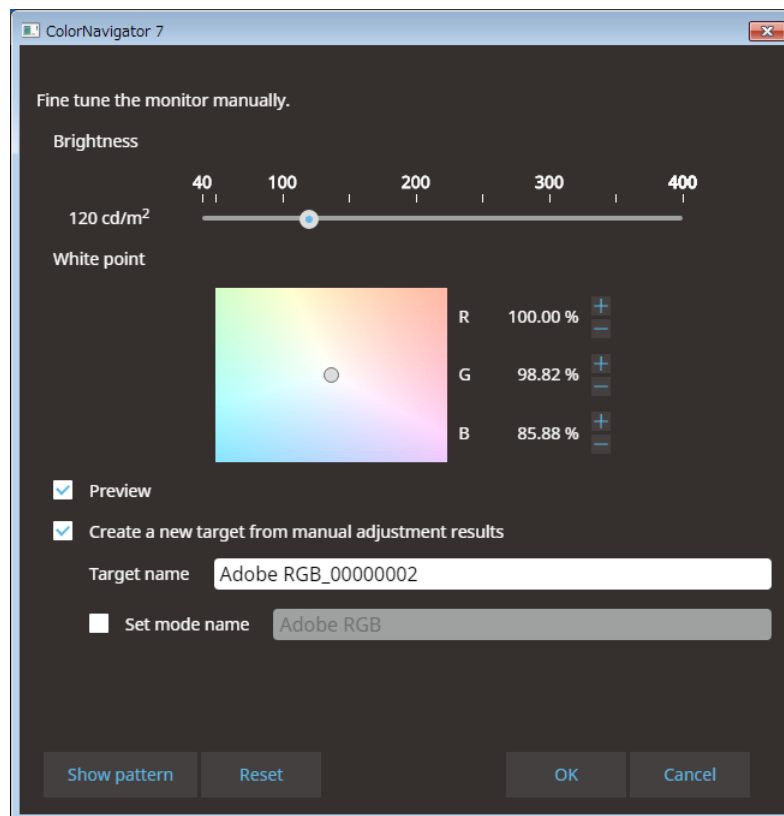
3. Click the operation menu, and select "Manual adjustment"



The manual adjustment menu appears.

4. Adjust brightness and white point

White point can be adjusted with the brightness slider, the white point R, G, and B  and  buttons, or by dragging the circle in the white point with mouse.



Item	Description
Preview	When it is turned on, you can immediately check the white point adjustment result on the monitor.
Create a new target from manual adjustment results	Turning it On creates new adjustment targets from manual adjustment results.
Show pattern	Test patterns for visually checking adjustment are displayed in full screen.
Reset	Resets the values to the ones before the manual adjustment.

5. Click the “OK” button

Chapter 4 Troubleshooting

Problem	Possible cause and remedy
Can't find the User's Manual	<ul style="list-style-type: none"> Click "❓" to display Help.
Can't find what I want to search for in the User's Manual (Help)	<ul style="list-style-type: none"> Try searching by key word.
I want to calibrate regularly	<ul style="list-style-type: none"> Select "Management Policy" from the "Monitor settings" menu, and set the management policy.
Can't edit the target	<ul style="list-style-type: none"> If it is a favorite target (marked ★), the target cannot be edited. Click the ★ mark to remove it from favorites (marked ☆), and then edit the target.
Can't change color mode names	<ul style="list-style-type: none"> There are limitations in characters and the number of characters that can be used for color mode names. The characters that can be used are alpha numerical characters, hyphen "-", round brackets "()", underscore "_", and spaces (all half size).
There are items that cannot be manually adjusted	<ul style="list-style-type: none"> Manually adjustable content will vary by adjustment target depending on the model of the monitor being used or the type of color mode being displayed. Edit targets when adjusting gamma (EOTF) or color gamut in Standard Mode. If it seems as though fine adjustments are not possible using manual adjustment in Standard Mode, perform manual adjustment after calibrating with Advanced Mode.
A "Not optimized for Mac." message appears.	<ul style="list-style-type: none"> There is no problem with the operation of this software. Click "OK" to use as is.
A "Requesting access to control "System Events"" message appears. (On Mac only)	<ul style="list-style-type: none"> Processing necessary to start up the software at system startup. Since it is required in order to enable the resident function (ColorNavigator Agent) of ColorNavigator 7, click "OK". Clicking "OK" will not have any serious effects on the system.

