



# How To Calibrate with the i1Pro2

## GX Print Server for PrimeLink™

Version 1.0



# Overview

This exercise will demonstrate the process of calibrating the colour data between the GX Print Server and the print engine. The purpose of this is to monitor the variation of colour reproduced by the print engine. The process allows the GX Print Server to compensate for variables such as changes in the installation environment, printer components, printing substrates and other factors. The value of this activity is to achieve consistent colour reproduction between the GX Print Server and the print engine.

## Objective

By the end of this exercise users will be able to:

- Navigate to the location of the setting on the GX Print Server
- Create a Calibration file
- Assign the Calibration to the Stock
- Update the Calibration

### BEFORE



Before calibration:  
Printed colour consistency issues

### AFTER



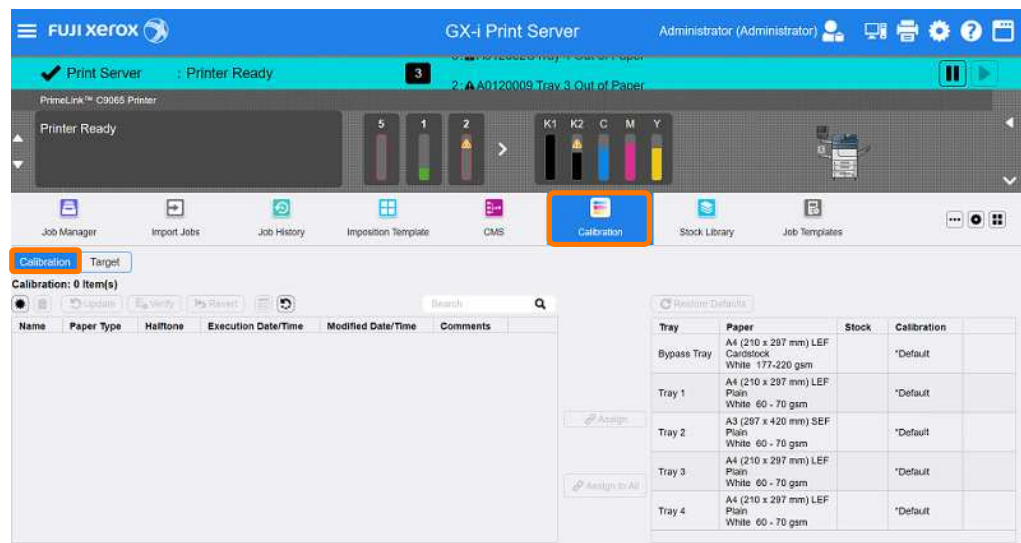
After calibration:  
Colour is uniform from page to page


# Create Calibration File

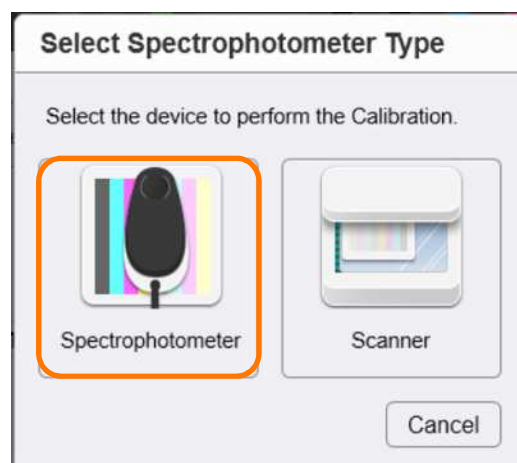


For information about creating a stock in the stock library go to the Help of GX-I Print Server for PrimeLink™ (User Guide- Server Settings)

1. Create stock in the stock library and assign to the tray.
2. In the shortcut area, select **[Calibration]** >> **[Calibration]**.



3. Click  (Create New) in the Calibration management window
4. Select Spectrophotometer to perform the calibration.





Ensure that the i1Pro 2 Spectrophotometer is connected via USB to the GX Print Server.



**Figure 1:** Connect USB port on the front of the GX Print Server



**Figure 2:** Connect other end to USB port on Spectrophotometer

- Set up Calibration Mode  
Select [i1Pro2(M2 Colorimetry)] in [Scanner], [200 dots] in [Halftone],  
[Advanced] in [Calibration Method], [Silk Coated 140(M2)] in [Calibration  
Target], select the tray in [Paper Tray] and then click [Next].



If another halftone is used to print the job, please select the halftone to be used in [Halftone].

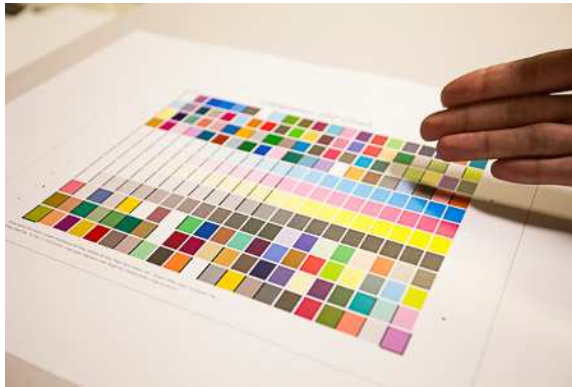
The screenshot shows the 'Create Calibration' dialog box at Step 1. The title is 'Create Calibration'. Below it, 'Step 1' is followed by a right-pointing arrow. The section 'Specify Calibration Conditions' is highlighted with a dark header. Below this, a sub-header says 'Specify the calibration conditions, then proceed to [Step 2]'. The form contains several fields: 'Scanner' with a dropdown menu showing 'i1Pro 2 (M2 Colorimetry)'; 'Halftone' with a dropdown menu showing '200 dot'; 'Calibration Method' with a dropdown menu showing 'Advanced' (this field is highlighted with an orange border); 'Calibration Target' with a dropdown menu showing 'SilkCoated 140(M2)' and a 'Select...' button; and 'Tray' with a dropdown menu showing 'Tray 1: A4 (210 x 297 mm) LEF, Plain, White, 60 - 70 gsm' (this field is also highlighted with an orange border). At the bottom, there are navigation buttons: 'Previous' (disabled), 'Step 1' (active, highlighted with a blue bar), 'Step 2' (disabled), 'Step 3' (disabled), 'Next' (disabled), and 'Cancel'.

- Select [Copies] and choose the number of sheets to be output (Please note the default is 5 which is the recommended minimum). Select [Output Destination], and then click [Print]. After printing the calibration charts, click [Next].

The screenshot shows the 'Create Calibration' dialog box at Step 2. The title is 'Create Calibration'. Below it, 'Step 2' is followed by a right-pointing arrow. The section 'Print Calibration Chart' is highlighted with a dark header. Below this, a sub-header says 'Set the number of copies, then click [Print]'. The form contains two fields: 'Copies' with a text input box containing '5' and a spinner control (this field is highlighted with an orange border), and 'Output Destination' with a dropdown menu showing 'Auto Select'. To the right of the 'Copies' field, there is a note '(1-99, Default: 5)'. At the bottom right, there is a green 'Print...' button. At the bottom, there are navigation buttons: 'Previous' (disabled), 'Step 1' (disabled), 'Step 2' (active, highlighted with a blue bar), 'Step 3' (disabled), 'Next' (disabled, highlighted with an orange border), and 'Cancel'.

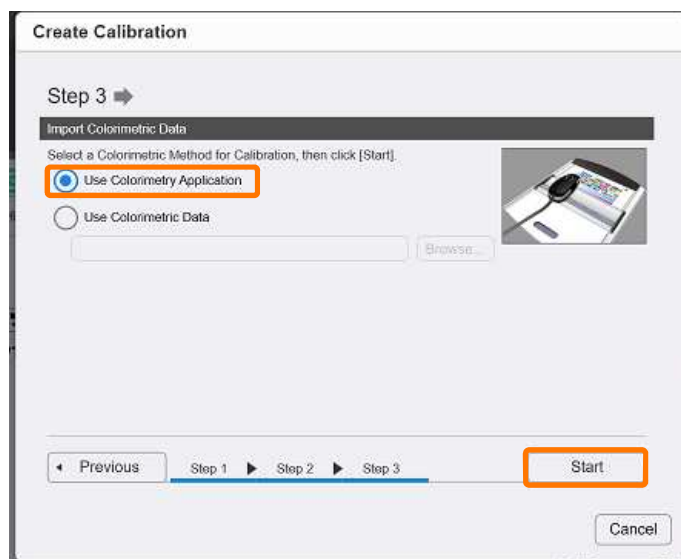


Please check the quality of the output color charts to ensure that no print engine image quality artifacts are on the printed output. This is to ensure that the best colorimetric data can be captured during the next step.



**Figure 3:** Check for image quality defects before proceeding.

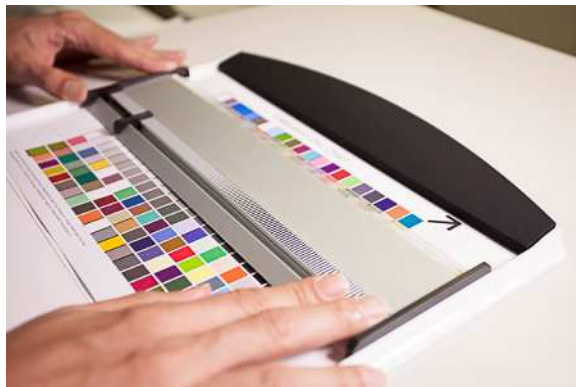
7. Click **[Use Colorimetry Application]** to select a Colorimetric Method for Calibration, then Click **[Start]**.



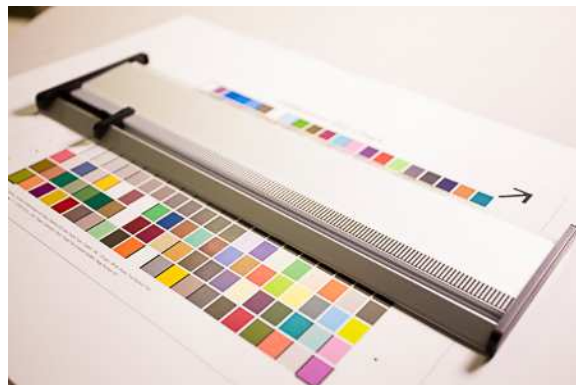
8. Place the printed output into the i1Pro 2 calibration backup board with the arrow pointer to the top right of the carrier. Put five or more blank sheets of the same paper under the Calibration Chart.



**Figure 4:** X-Rite Calibration “Backup Board” used for A4 paper



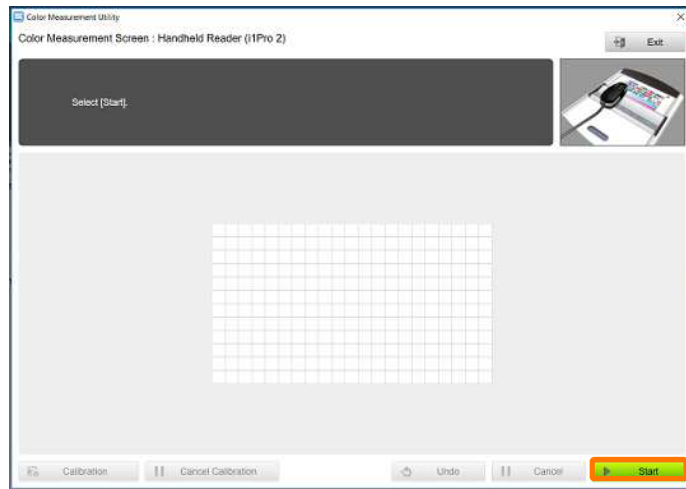
**Figure 5:** Place calibration chart into “Backup Board” (A4 paper)



**Figure 6:** Don't need “Backup Board” for A3 and larger paper

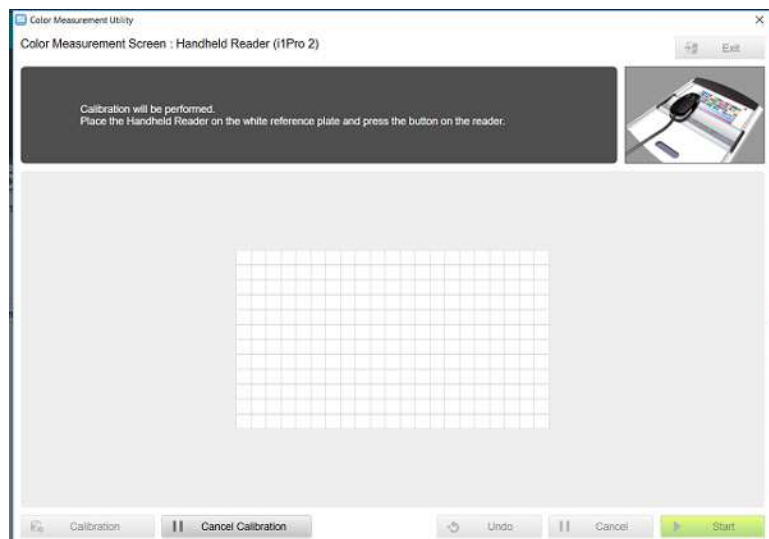


9. The Color Measurement Utility will be launched automatically, then click **[Start]**



If i1Pro 2 is not connected, please connect i1Pro2 and click Rescan. (See Figure 2 & 3 of this procedure for pictures).

10. Follow the onscreen instructions, and place the i1Pro 2 into the “white reference plate” and press the buttons on the side of the unit to **calibrate the i1Pro 2 Spectrophotometer**.





**Figure 7:** i1Pro 2 Spectrophotometer “White reference plate”

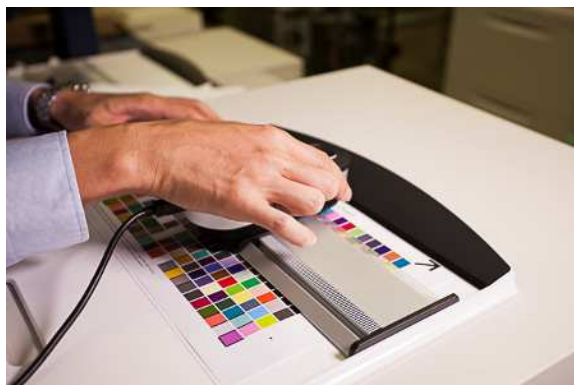
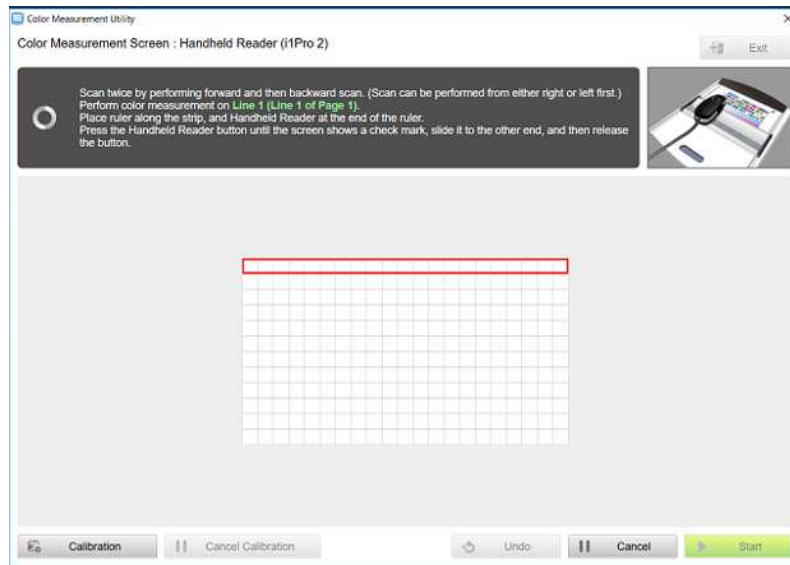


**Figure 8:** Calibrating the Spectrophotometer

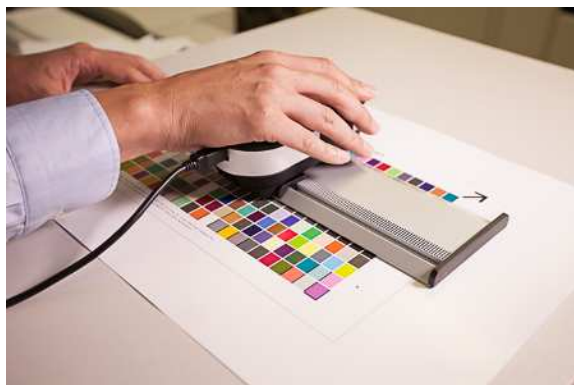


Please note that in the following step, if 5 minutes have passed after i1Pro 2 calibration, the i1Pro 2 will need to be placed on the “white reference plate” and will start another calibration measurement.

11. After the i1Pro 2 has been successfully calibrated, start measuring by pressing the buttons on the i1Pro 2 and slide the Spectrophotometer across the printed page as shown.

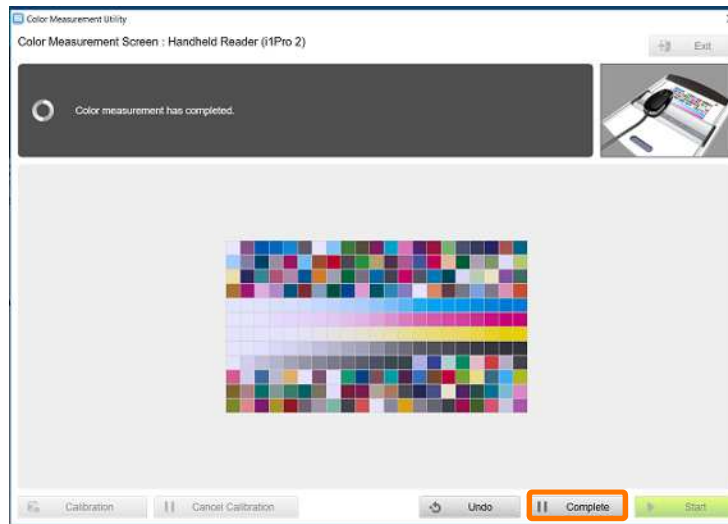


**Figure 9:** Calibration using the "Backup Board" (A4 paper)

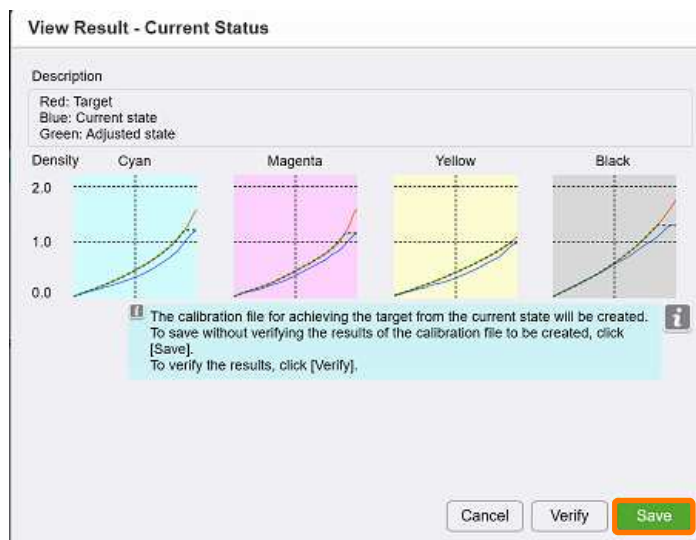


**Figure 10:** Don't need "Backup Board" for A3 and larger paper

12. After measuring all the strips, the message “Color measurement has completed” will be displayed, and then click **[Complete]**.

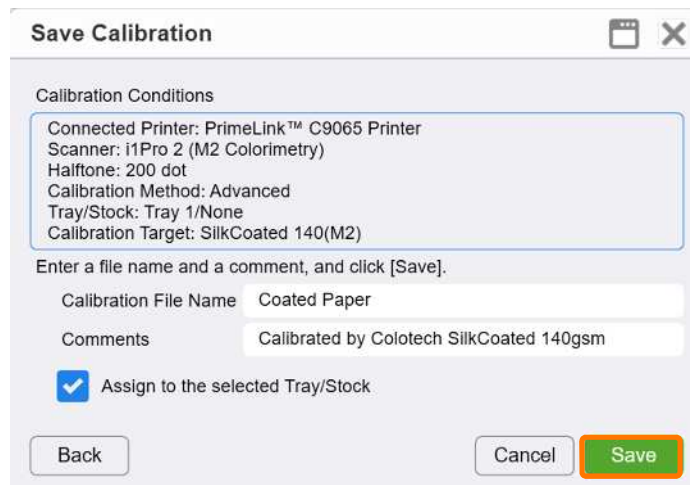


13. Check the result and click **[Save]**.



Please note that in the following step, a standard naming convention should be adopted so that the calibration can be easily identified.

14. Enter [Calibration File Name] and [Comments] as necessary and click **[Save]**.  
Example = Calibration File Name : Coated Paper  
Comments: Calibrated by Colotech SilkCoated 140gsm



**Save Calibration**

Calibration Conditions

Connected Printer: PrimeLink™ C9065 Printer  
Scanner: i1Pro 2 (M2 Colorimetry)  
Halftone: 200 dot  
Calibration Method: Advanced  
Tray/Stock: Tray 1/None  
Calibration Target: SilkCoated 140(M2)

Enter a file name and a comment, and click [Save].

Calibration File Name: Coated Paper

Comments: Calibrated by Colotech SilkCoated 140gsm

☒ Assign to the selected Tray/Stock

Back Cancel Save



When [Assign to the Selected Paper Tray/Stock] is checked, the file is both saved and assigned to Stock. The assignment of the calibration file can be changed in [Calibration] or [Stock Library].

Congratulations you have now completed a Calibration of the GX Print Server.

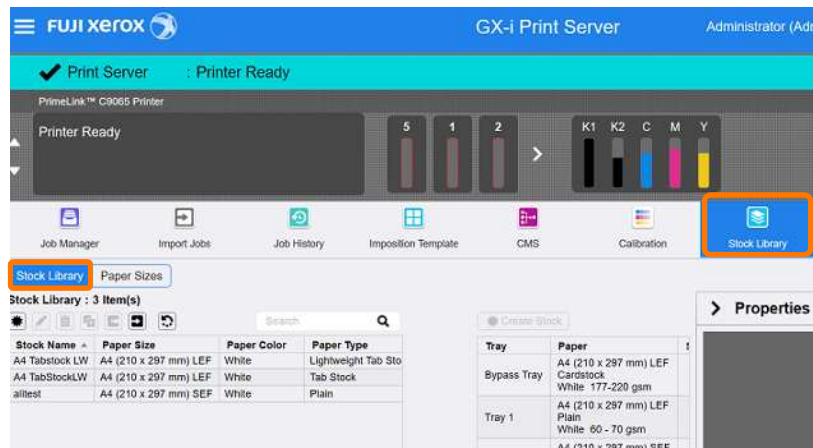
Please continue to the next exercise of assigning the calibration data to a stock.

# Assign the Calibration to the Stock.

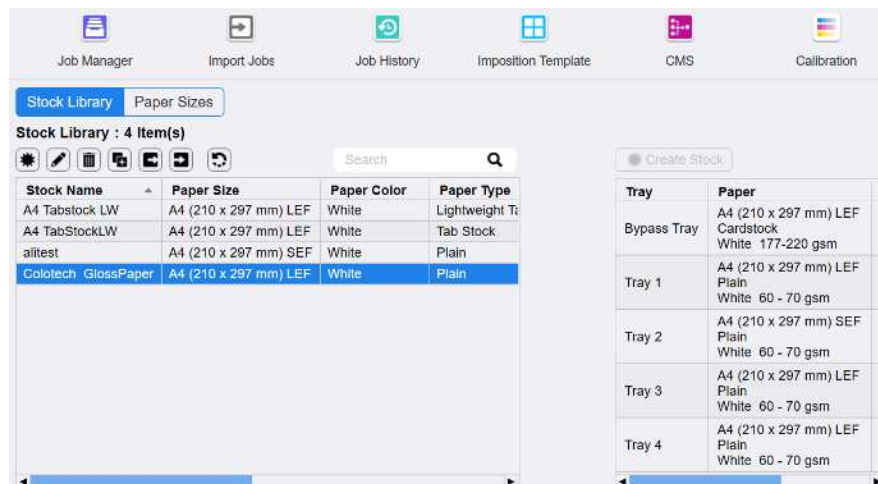


It is possible to assign the calibration to Tray. In that case, this exercise can be skipped.

1. In the shortcut area, select **[Stock Library]**.



2. Select the stock which the calibration file is going to be assigned to.



- Double-click the selected item and select the calibration file name in **[Calibration]** and then click **[OK]**.

**Edit Stock Library**

Stock Name: Colotech GlossPaper

Comments:

Paper Size: A4 (210 x 297 mm) LEF

Width (mm): 297.0 (100.0-330.2)

Length (mm): 210.0 (148.0-660.4)

Paper Type: Plain

Paper Color: White

Paper Weight: Printer Default

Calibration: Coated Paper

Buttons: Cancel, OK

- The calibration file is assigned to the stock.

**Stock Library : 14 Item(s)**

Size	Paper Color	Paper Type	Sequence	Hole Punched	Paper Weight	Coating Type	Pre-printed Paper	Paper Grain	Calibration
320 x 450 mm) SEF	White	Custom	-	None	125	Uncoated	-	Short Edge	*Default
320 x 450 mm) SEF	White	Custom	-	None	200	Uncoated	-	Short Edge	*Default
1 x 297 mm) SEF	White	Plain	-	None	220	Uncoated	Off	Long Edge	*Default
1 x 420 mm) SEF	White	Plain	-	None	120	Uncoated	Off	Long Edge	Coated Paper
1 x 420 mm) SEF	White	Plain	-	None	120	Uncoated	Off	Long Edge	*Default
1 x 297 mm) SEF	Black	Plain	-	None	125	Uncoated	Off	Long Edge	*Default
1 x 297 mm) SEF	White	Plain	-	None	90	Uncoated	Off	Long Edge	*Default
1 x 297 mm) SEF	Black	Plain	-	None	80	Uncoated	Off	Long Edge	*Default
320 x 450 mm) SEF	White	Plain	-	None	220	Coated	Off	Long Edge	*Default

You have now assigned the calibration data to a stock in the stock library, and now any job that is sent using that paper type will use this calibration data. You have completed this exercise.

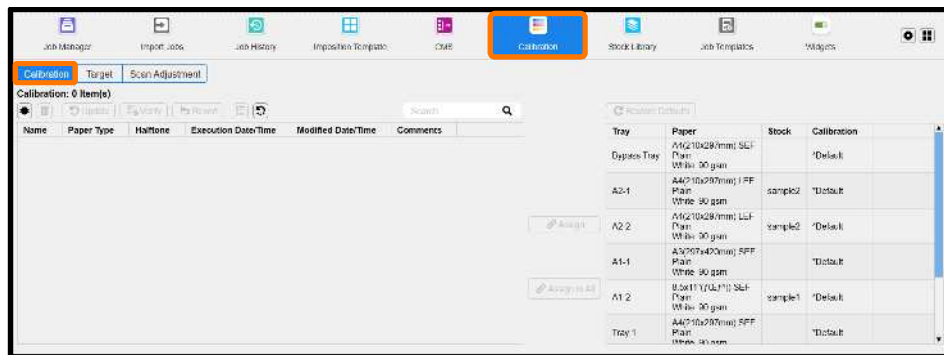


It is recommended that calibration be performed on regular basis.  
(i.e. Daily or weekly)

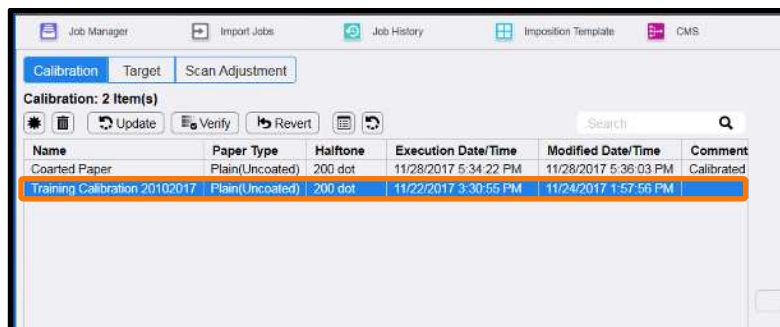
To learn how to update the calibration on a regular basis, please continue to the next exercise of updating the calibration.

# Update the calibration

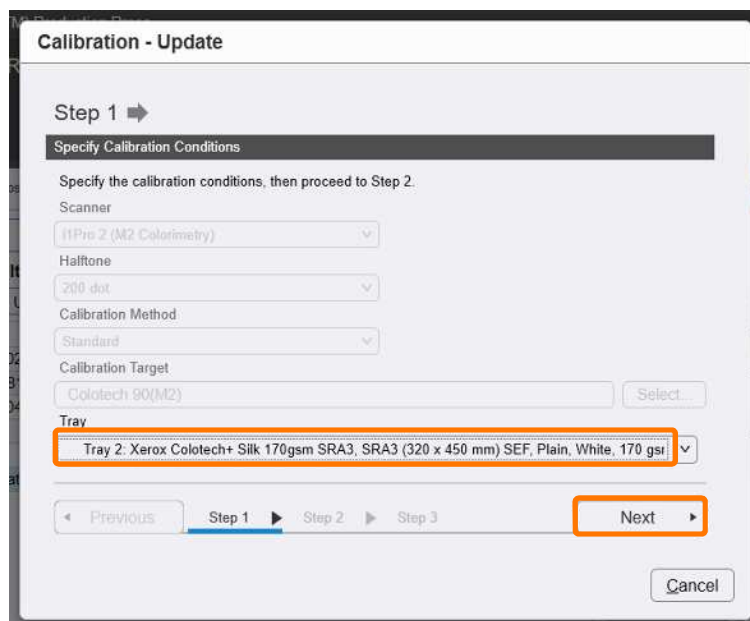
1. In the shortcut area, select **[Calibration]** > **[Calibration]**.



2. Select the calibration file to be updated.



3. Click **[Update]** (Update).
4. Select the tray in **[Paper Tray]** and then click **[Next]**.



The items except [Paper Tray] are already set by the conditions that the calibration is created.



5. Select **[Copies]** and chose the number of sheets to be output 5 is the recommended minimum. and then click **[Print]**. After printing the calibration charts, click **[Next]**.

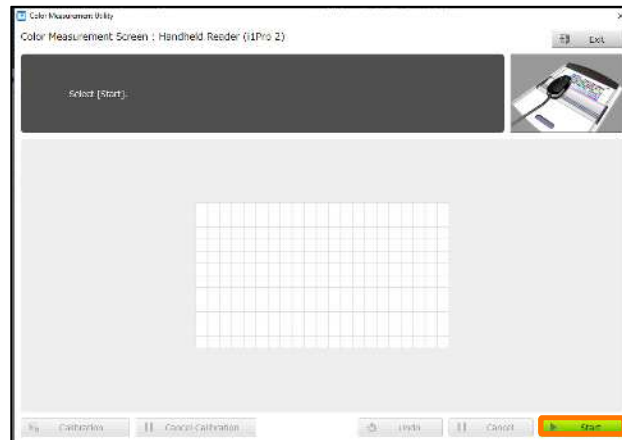
The screenshot shows the 'Calibration - Update' dialog box, specifically Step 2: Print Calibration Chart. The dialog has a title bar 'Calibration - Update' and a subtitle 'Step 2 ➡'. Below the subtitle is a section titled 'Print Calibration Chart' with the instruction 'Set the number of copies, then click Print.' There are two input fields: 'Copies' with a value of 5 and a range '(1-99, Default: 5)', and 'Output Destination' with a dropdown menu set to 'Finisher Tray'. A green 'Print...' button is located at the bottom right. At the bottom of the dialog, there is a navigation bar with buttons for 'Previous', 'Step 1', 'Step 2', 'Step 3', and 'Next'. The 'Next' button is highlighted with an orange box. A 'Cancel' button is at the bottom right.

6. Click **[Use Colorimetry Application]** to select a Colorimetric Method for Calibration, then Click **[Start]**.

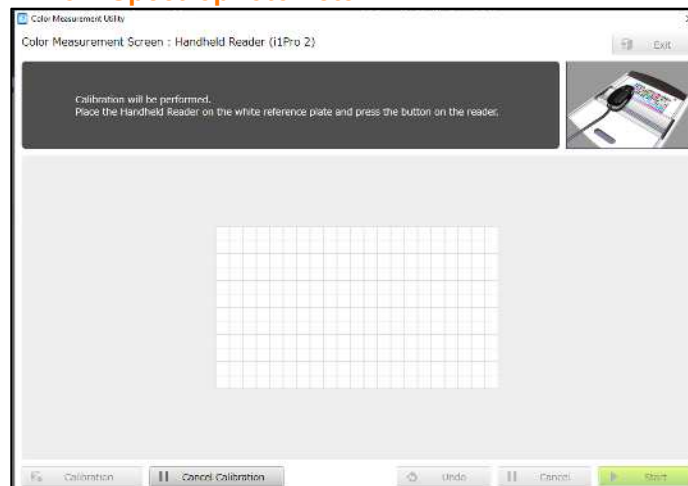
The screenshot shows the 'Calibration - New' dialog box, specifically Step 3: Import Colorimetric Data. The dialog has a title bar 'Calibration - New' and a subtitle 'Step 3 ➡'. Below the subtitle is a section titled 'Import Colorimetric Data' with the instruction 'Select a Colorimetric Method for Calibration, then Click Start.' There are two radio button options: 'Use Colorimetry Application' (which is selected and highlighted with an orange box) and 'Use Colorimetric Data'. Below the radio buttons is a text input field and a 'Browse...' button. To the right of the input field is a small image of a calibration chart. At the bottom of the dialog, there is a navigation bar with buttons for 'Previous', 'Step 1', 'Step 2', 'Step 3', and 'Start'. The 'Start' button is highlighted with an orange box. A 'Cancel' button is at the bottom right.

7. Place the printed output into the i1 calibration backup board with the arrow pointer to the top right of the carrier. Put five or more blank sheets of the same paper under the Calibration Chart.

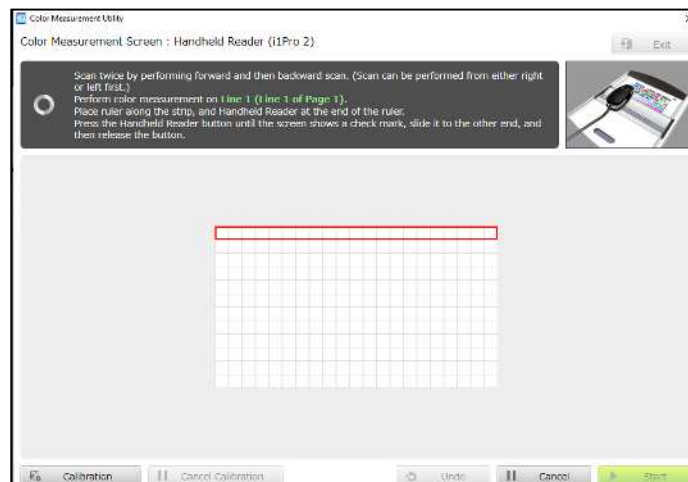
8. The Color Measurement Utility will be launched automatically, then click **[Start]**.



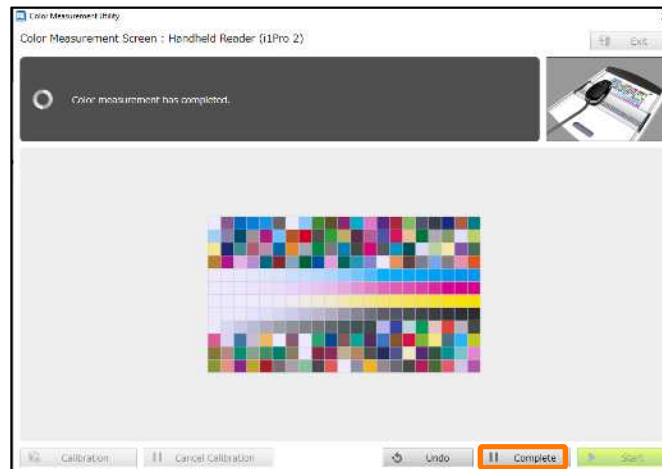
9. Follow the onscreen instructions, and place the i1Pro 2 into the “white reference plate” and press the buttons on the side of the unit to **calibrate the i1Pro 2 Spectrophotometer**.



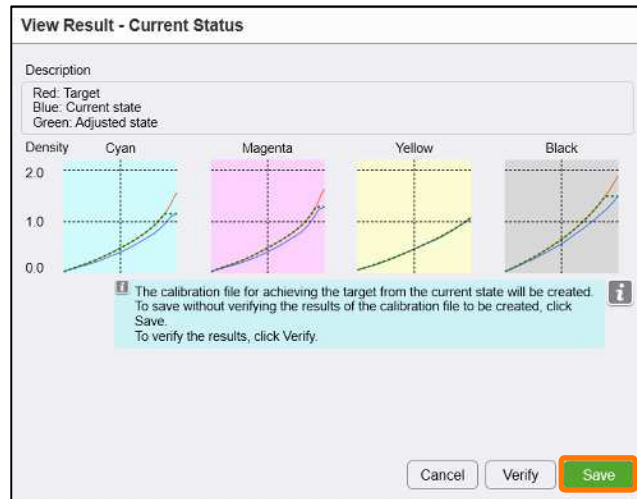
10. After the i1Pro 2 has been successfully calibrated, start measuring by pressing the buttons on the i1Pro 2 and slide the Spectrophotometer across the printed page as shown.



11. After measuring all the strips, the message “Color measurement has completed” will be displayed, and then click **[Complete]**.



12. Check the result and click **[Save]**.



13. Modify [Comments] as necessary and click **[Save]**.  
Example = Calibration File Name : Coated Paper  
Comments: Calibrated by Colotech SilkCoated 140gsm

Congratulations, you have now completed this exercise.