FUJIFILM
Value from Innovation

How To Calibrate with the i1Pro2

GX Print Server for PrimeLink™

Version 1.0

FUJIFILM Business Innovation Corp.

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

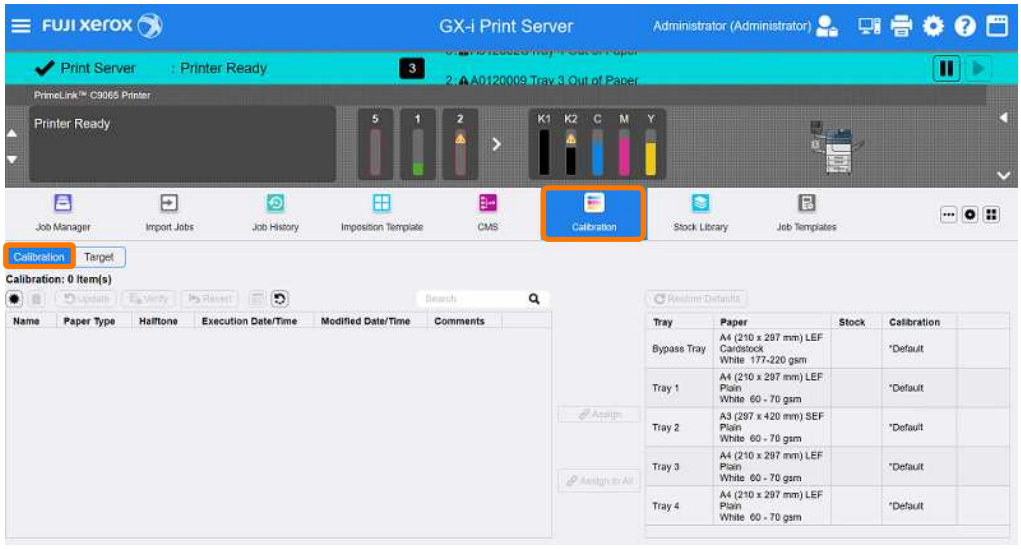
AFTER

After calibration:
Colour is uniform from page to page

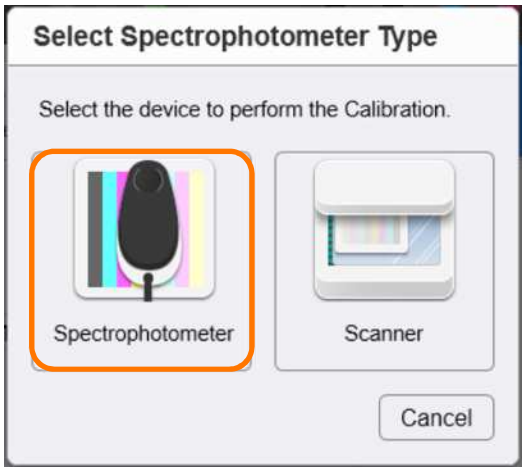
Create Calibration File

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.



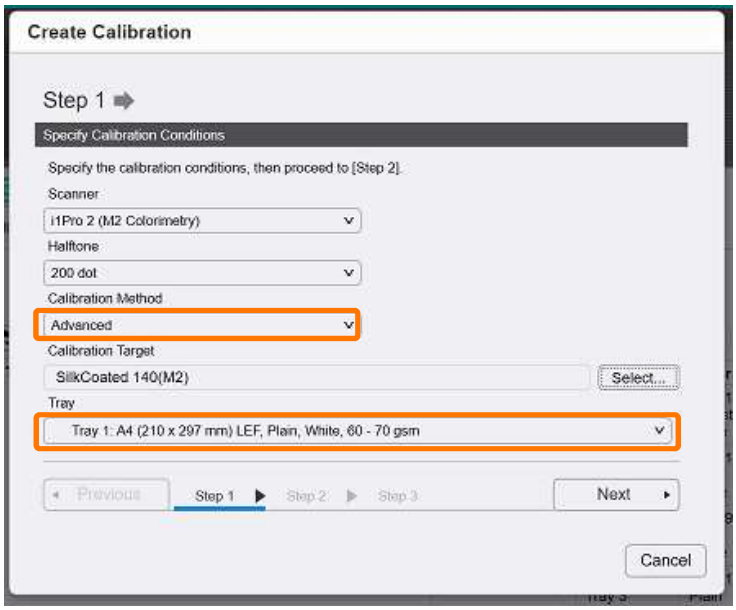
Ensure that the i1Pro 2 Spectrophotometer is connected via USB to the GX Print Server.

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

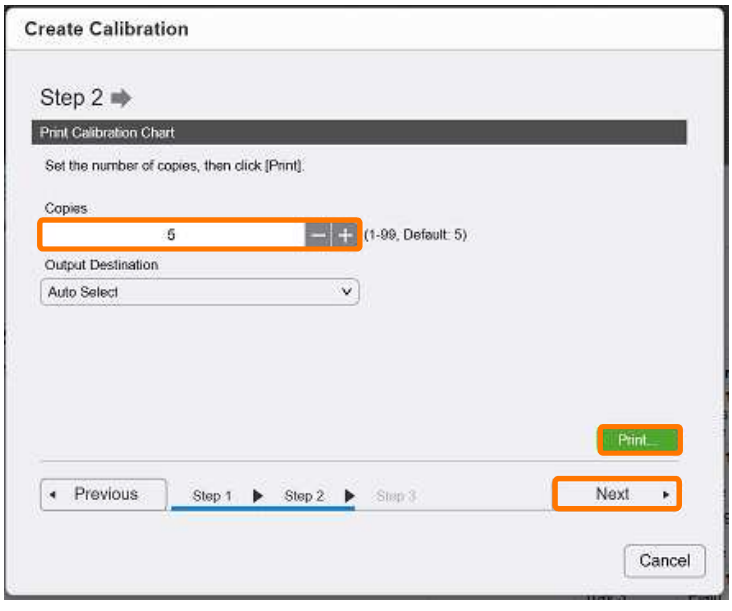
Figure 2: Connect other end to USB port on Spectrophotometer

5. 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].



6. 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].**



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.

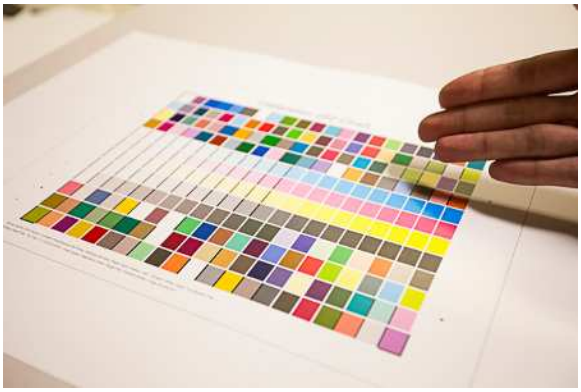
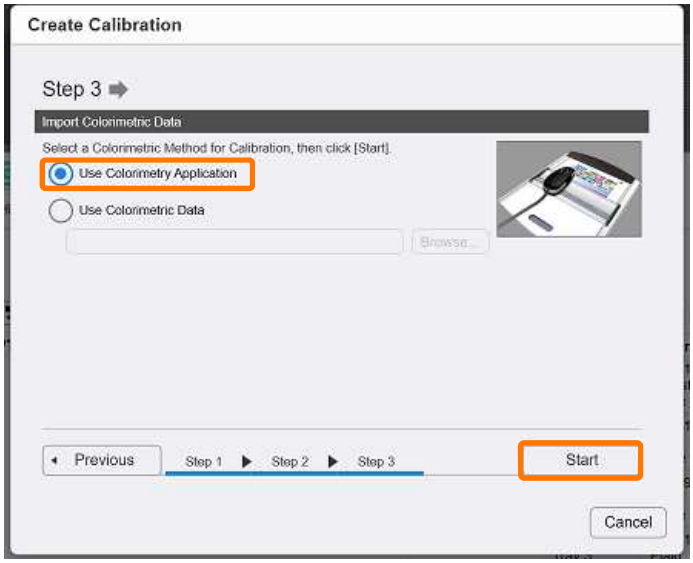


Figure 3: Check for image quality defects before proceeding.

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.

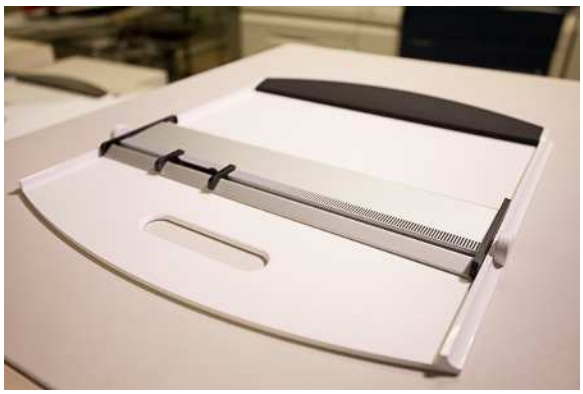


Figure 4: X-Rite Calibration “Backup Board” used for A4 paper

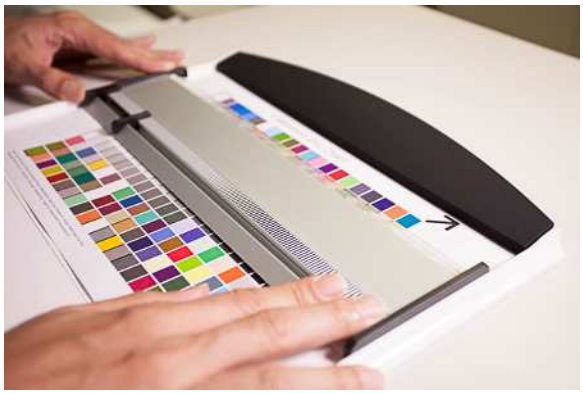


Figure 5: Place calibration chart into “Backup Board” (A4 paper)

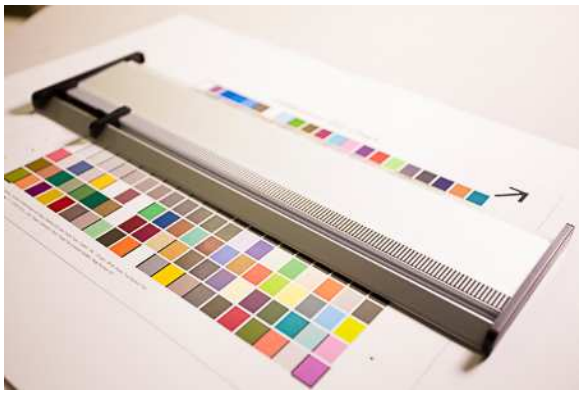
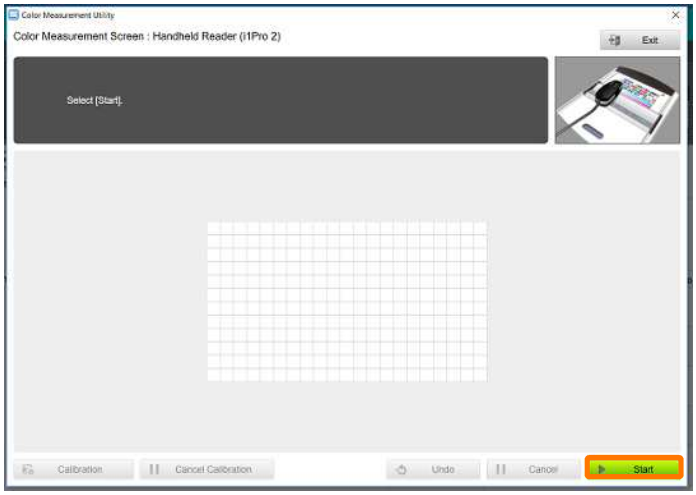


Figure 6: Don’t need “Backup Board” for A3 and larger paper

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**.

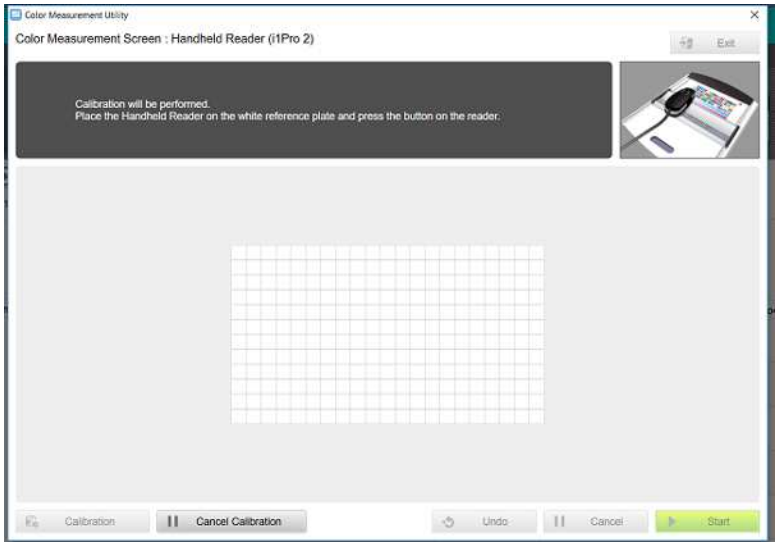
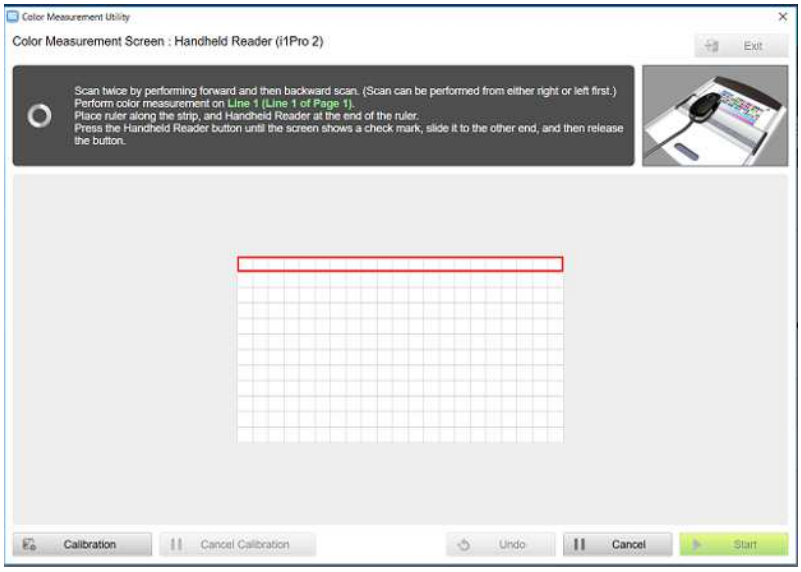


Figure 7: i1Pro 2 Spectrophotometer “White reference plate”

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.



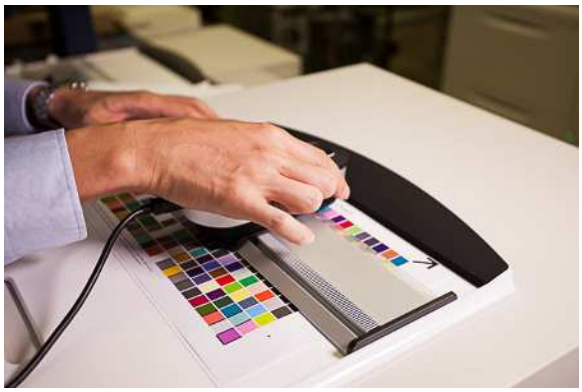
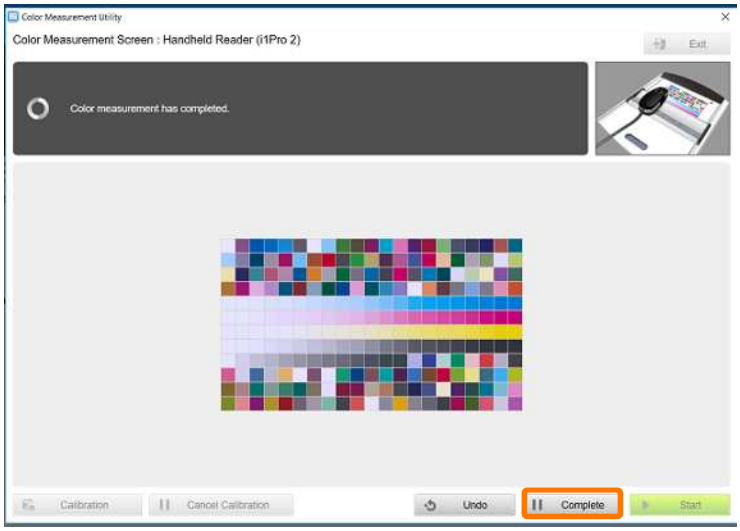


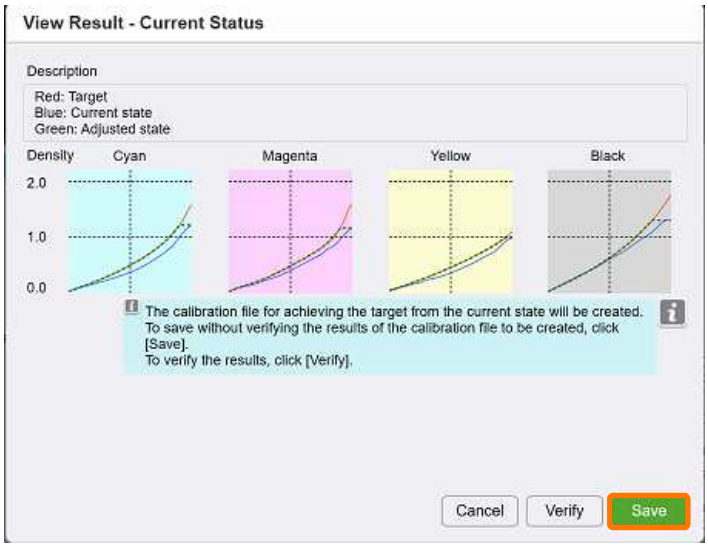
Figure 9: Calibration using the “Backup Board” (A4 paper)

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]**.

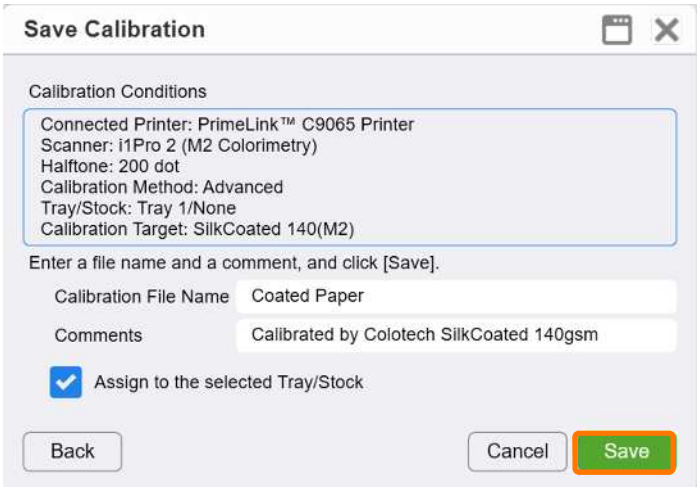


13. Check the result and click **[Save]**.



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



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].

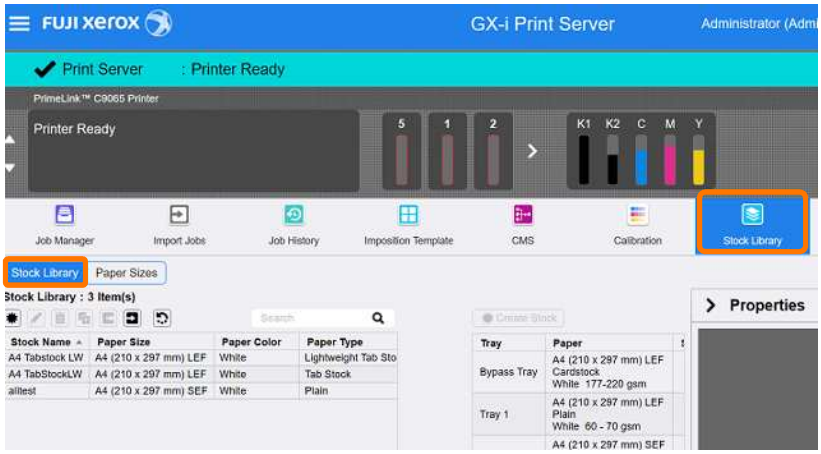
Congratulations you have now completed a Calibration of the GX Print Server.

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

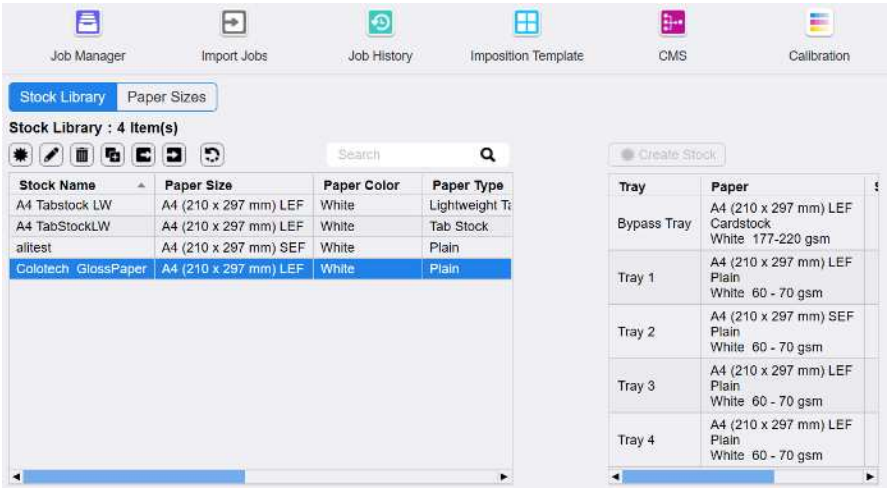
Assign the Calibration to the Stock.

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

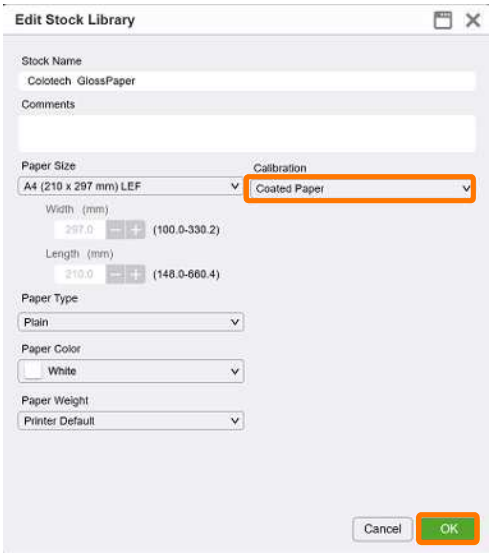
1. In the shortcut area, select **[Stock Library]**.



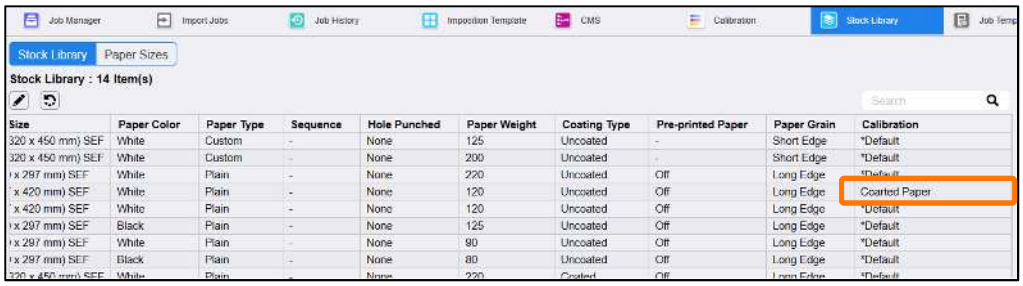
2. Select the stock which the calibration file is going to be assigned to.



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



4. The calibration file is assigned to the stock.



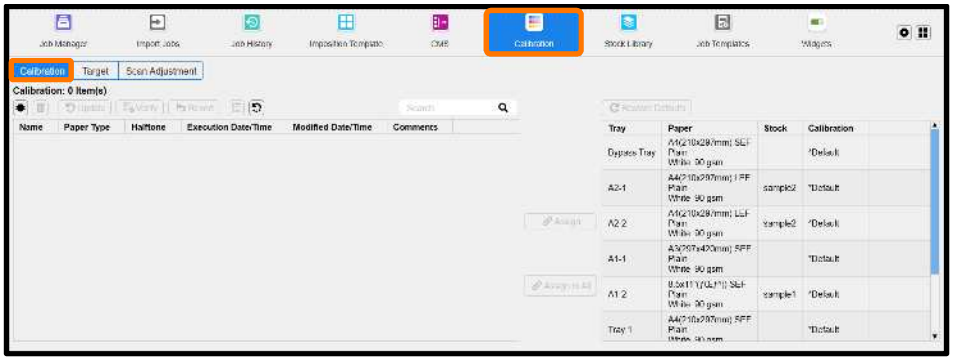
You have now assigned the calibration data to a stock in the stock library, and now any job that is sent using that paper type will use this calibration data. You have completed this exercise.

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

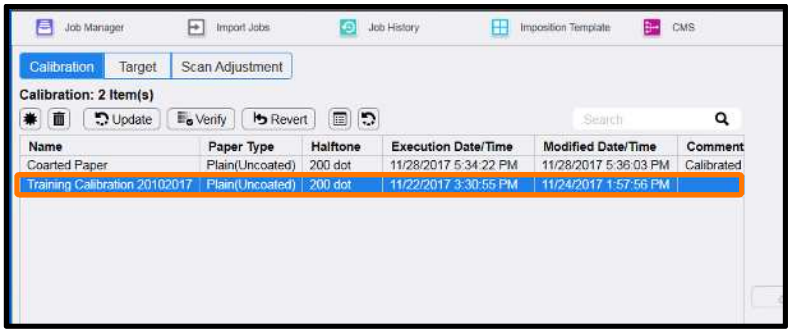
To learn how to update the calibration on a regular basis, please continue to the next exercise of updating the calibration.

Update the calibration

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

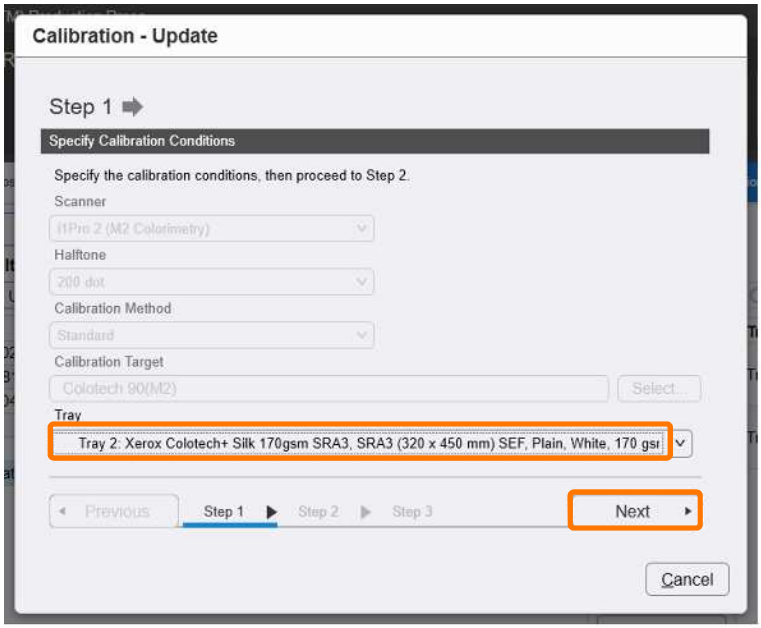


2. Select the calibration file to be updated.



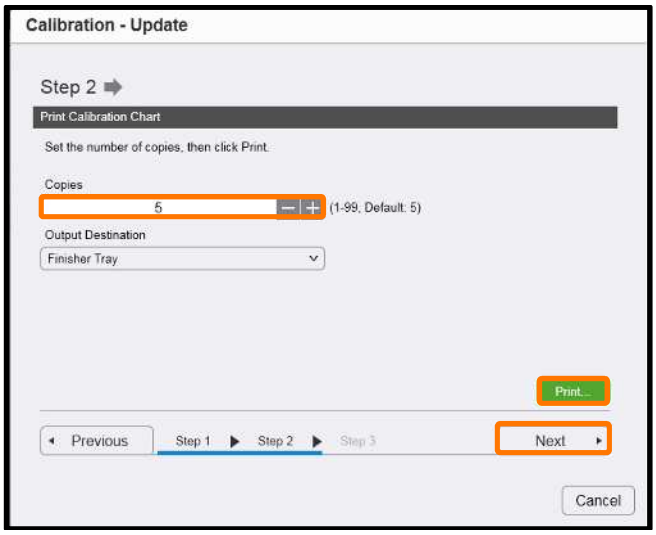
3. Click (Update).

4. Select the tray in **[Paper Tray]** and then click **[Next]**.

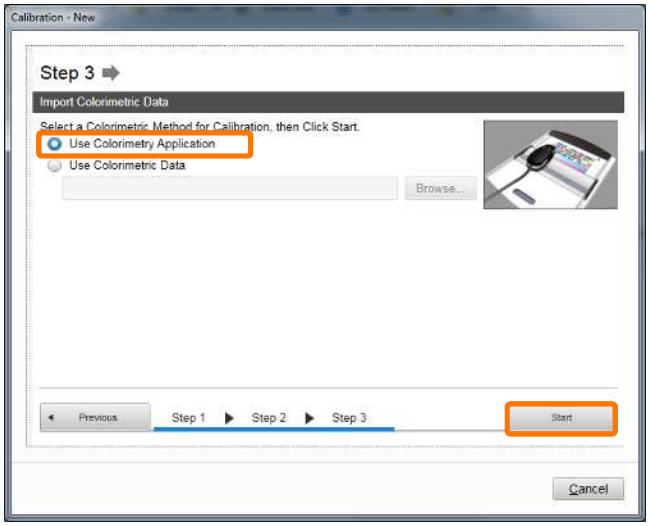


The items except [Paper Tray] are already set by the conditions that the calibration is created.

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]**.

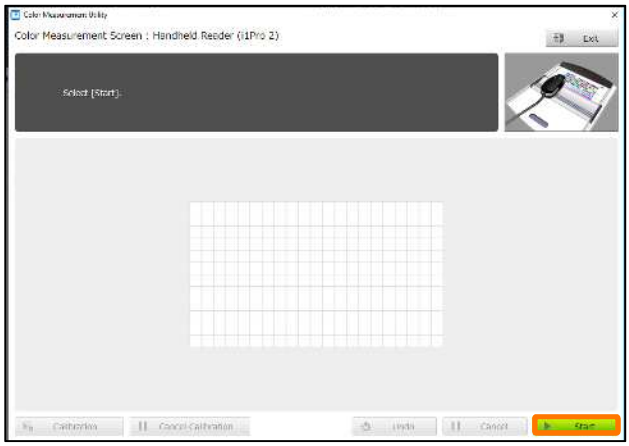


6. Click **[Use Colorimetry Application]** to select a Colorimetric Method for Calibration, then Click **[Start]**.

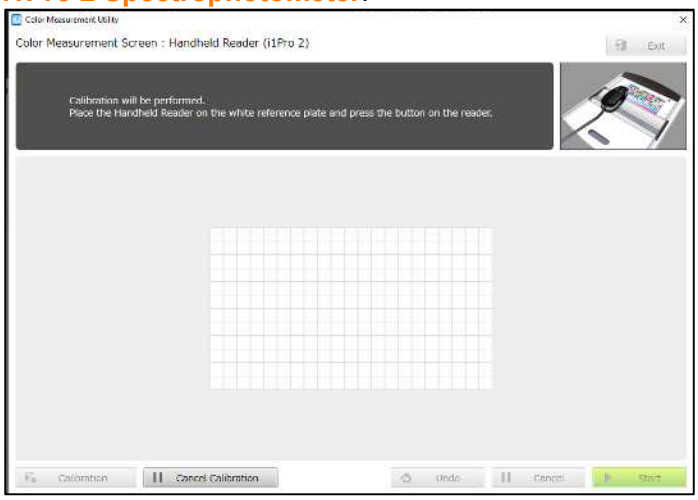


7. Place the printed output into the i1 calibration backup board with the arrow pointer to the top right of the carrier. Put five or more blank sheets of the same paper under the Calibration Chart.

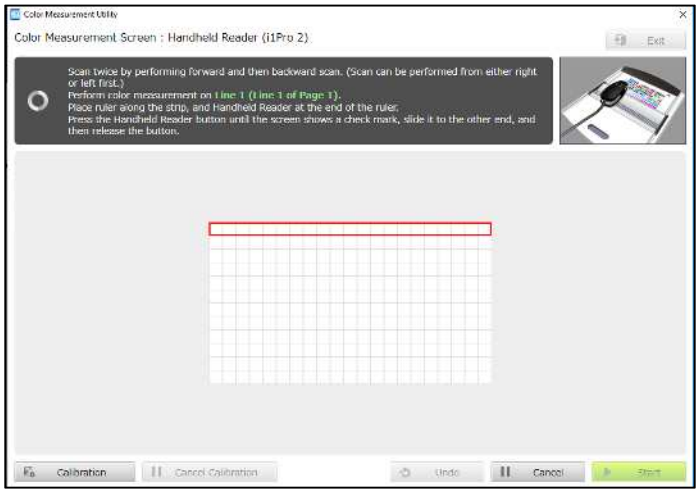
8. The Color Measurement Utility will be launched automatically, then click **[Start]**.



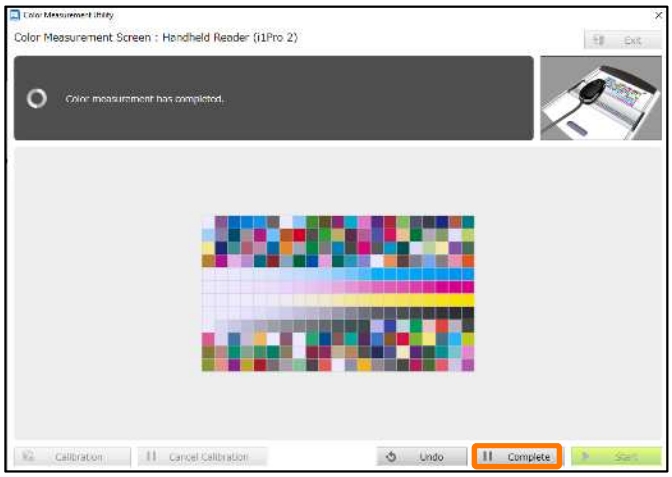
9. Follow the onscreen instructions, and place the i1Pro 2 into the "white reference plate" and press the buttons on the side of the unit to **calibrate the i1Pro 2 Spectrophotometer**.



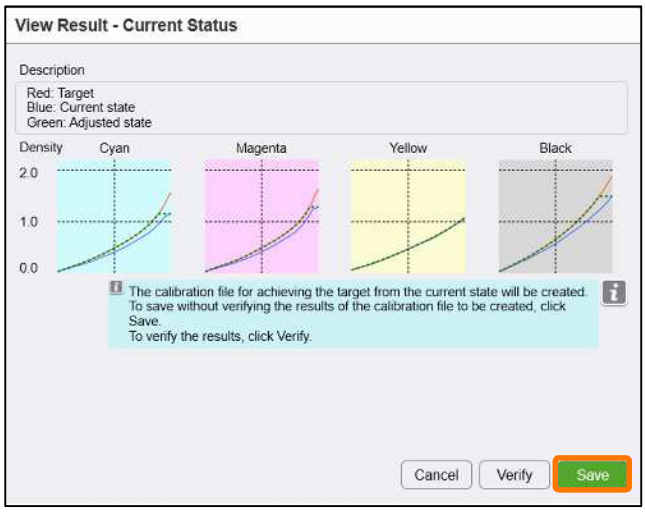
10. After the i1Pro 2 has been successfully calibrated, start measuring by pressing the buttons on the i1Pro 2 and slide the Spectrophotometer across the printed page as shown.



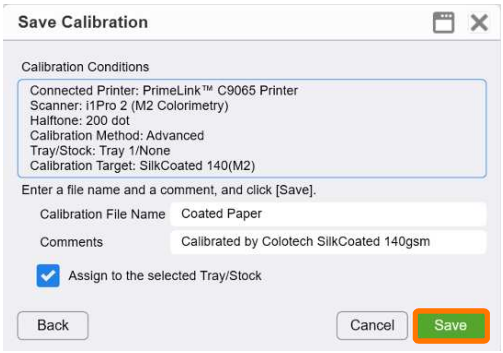
11. After measuring all the strips, the message “Color measurement has completed” will be displayed, and then click **[Complete]**.



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.