Calibration is the key to consistent and repeatable color in digital presses. It is also the most frequently overlooked step in the daily maintenance and care of a press.

COLORlynx is a calibration tool developed by Canon Solutions America, and brings unique stability, consistency and G7 gray balanced output to the imagePRESS digital press. COLORlynx software is available exclusively for imagePRESS digital presses from Canon Solutions America.

This Quick Start Guide will walk you through proper calibration procedures, and allow you to verify the status of your imagePRESS against a known standard using COLORlynx. When needed, COLORlynx enables customers to re-calibrate their presses on the fly, resolving most color issues quickly without the need to place a service call.
CALIBRATION PROTOCOL

1. After checking the printer and DFE default calibration settings, ensure your machine is in proper service condition. Print Chart 1 to verify the condition of the machine using your production settings. Chart 1 should allow you to visually detect any calibration defects. If you detect problems (e.g. dimples, scratches or imperfections from the belt or fuser rollers, scratches from internal rollers, etc.), engage local service to resolve the issue. When you engage service, retain and label the sheets illustrating the problem for the service technician to review when on-site. Repeat this step after the issue has been resolved, preferably before the service technician closes the call.

2. Bring your device to a point of stable temperature and performance. Print 60 sheets of Chart 2 using your production settings.

3. Perform all engine and DFE stability controls for the make and model of the imagePRESS/DFE combination you are using. This includes:
   a. imagePRESS printer linearization. Follow the instruction for your imagePRESS digital press.
      i. Shading correction.
      ii. Auto-gradation.
   b. Print Server calibration.
      i. Use the calibration procedure for the print server for your imagePRESS digital press.
      Note: your print server must support devicelink profiles to be compatible with COLORlynx.

4. While the machine is still warm, use COLORlynx software to verify your engine status. Log in at www.colorlynx.com.
   a. Print out the verification chart using your production settings.
   b. Read the verification chart using your spectrophotometer.
   c. Observe the result.
      i. If you pass verification, begin printing.
      ii. If you fail verification, initiate the COLORlynx Calibration procedure.

DEFAULT CALIBRATION SETTINGS

In order to ensure proper calibration performance of the engine, ensure that the imagePRESS and RIP are set up properly. These include:

1. Printer Linearization paper:
   Hammermill 28# color laser copy paper, 11”x17” (Ledger) Size, or your favorite approved production stock.

2. Calibration Paper: Hammermill 28# color laser copy paper, 11”x17” (Ledger) Size, or your favorite approved production stock.

3. DFE configured with the following Virtual Printers/Presets (details for creating virtual printers and color presets are contained in the COLORlynx on-line help).
   a. COLORlynx Calibration (for FIERY, use color presets).
   b. COLORlynx Production (for FIERY, use color presets).

ALWAYS CHECK THESE SETTINGS BEFORE BEGINNING YOUR DAILY CALIBRATION PROTOCOL.
COLORlynx verification and calibration work in the cloud. Using a patented 3-step iterative technology, COLORlynx objectively indicates when your imagePRESS is printing well, or needs further calibration.

HOW DOES IT WORK?
1. Print Test Chart
2. Measure Test Chart
3. Verify Test Chart
   - If in spec, all OK
   - If not in spec, initiate recovery procedures

imagePRESS CALIBRATION PROCEDURE

SHADING CORRECTION
Shading Correction corrects any slightly uneven densities that occur in halftone density areas of a printed image. This correction addresses uneven densities in the direction perpendicular to the feeding direction of the sheet. Always use the Print Server Correction Procedures below when performing shading correction.

PRINT SERVER CORRECTION PROCEDURE
Use this mode to adjust the density using data received from your print server. Follow the instructions for your print server for performing shading correction.

AUTO-GRADATION ADJUSTMENT
Auto-gradation adjusts for any irregularities in color output. Always use Full Adjust, Printer Only mode when performing this procedure.

The imagePRESS will perform the auto-gradation adjustment automatically without further operator intervention. When completed, you will have five (5) test prints. Proceed to print server calibration.

**NOTE:** Test prints are not counted as part of the copy or print total page counts on the imagePRESS meters.

PRINT SERVER CALIBRATION
Follow the manufacturer’s instructions for calibrating your print server.
COLORIynx VERIFICATION PROCEDURE

With your imagePRESS properly calibrated, it is now time to verify that your imagePRESS is producing color output as expected. COLORIynx allows you to verify the consistency and reliability of your output using a small test pattern, and if needed, the software will allow you to recalibrate your imagePRESS if your output is not as expected.

COLORIynx PRINTER VALIDATION
1. Print out the verification pattern from COLORIynx (always print out a fresh verification pattern from the software using your production settings).
2. Read the verification patterns using your X-Rite i1 iSis or i1pro2 spectrophotometer.
   
   NOTE: on Fiery controllers, you may use an iSis directly on the RIP with COLORIynx. If using an i1pro or i1pro2, use COLORIynx from a separate PC. Do not attempt to use COLORIynx and a hand-held spectrophotometer directly from a Fiery.
3. You will receive an indication of verification, or that recovery procedures are required.
4. If your printer fails COLORIynx printer validation, proceed to COLORIynx Calibration.

COLORIynx CALIBRATION

COLORIynx calibration walks you through the process for correcting the output of the imagePRESS when you do not pass verification. Before beginning this procedure, confirm that all your calibration routines and settings are correct. When you are ready:

1. Print out a test chart on the imagePRESS using the COLORIynx Calibration virtual printer.
2. Read the measurements into COLORIynx using your spectrophotometer.
3. COLORIynx will automatically read your measurements, and calculate a calibration set.
   a. The COLORIynx calibration is an iterative process, so when prompted, repeat steps 1 & 2, printing out a second test chart and reading it back in.
   b. If the imagePRESS fails to pass calibration on a third attempt, check your imagePRESS and print server settings one more time. If the settings are correct, this is a good indication that your imagePRESS requires a maintenance call. Keep your print-outs and the verification failure for your service technician. Don't forget, after the service call, you will need to recalibrate the imagePRESS again using this procedure.
4. When the calibration set meets the standard, you will receive a success message.
5. Download the COLORIynx calibration profile set, and load the file into the print server according to the manufacturer’s instructions.
6. After loading the COLORIynx calibration profile set, return to the COLORIynx verification procedure.
NEED HELP?
Contact the Canon Solutions America Helpdesk for assistance. The Canon Solutions America Helpdesk will help you directly, or escalate your call to CGS for a fast resolution.

Phone: 1-800-355-1385
Select prompt 1, then 2 and 2 again.

NEED FURTHER INFORMATION ABOUT COLOR MANAGEMENT SOLUTIONS?
Canon Solutions America offers a variety of robust and scalable color management solutions and services to help you automate, customize, and optimize your color workflow. These include:

• Full Portfolio of Color Management Software
• Color Assessment Professional Services
• G7 Master Qualification
• Profiling Services for the entire color workflow

CONTACT YOUR CANON SOLUTIONS AMERICA SALES REPRESENTATIVE FOR MORE INFORMATION.

UTILIZE COLOR|ynx TO ITS FULL POTENTIAL WITH PROFESSIONAL SERVICES FROM CANON SOLUTIONS AMERICA
Whether your business is large or small, remaining competitive in the global economy means you need to concentrate on what makes you successful—your core business. When selecting and implementing new technology, a highly skilled technical team makes the difference for a successful deployment.

Canon Solutions America has the team of experts you need to help you acquire the right technology, solutions, and services for your organization. From pre-sales analysis to post-sales support, our team of technical professionals draws upon decades of technical expertise and real-world experience to ensure you obtain the maximum benefit from your technology investment.