

BETACOLOR VIEWER

Mark III with UV

THE BEST TOOL SINCE
THE DENSITOMETER

INSTRUCTION MANUAL



SEE  IT

THE WORLD STANDARD
FOR VIEWING COLOR



 **BETA INDUSTRIES**
The Quality Control Company

Telephone: 800-272-7336 (toll free) 201-939-2400 (U.S.)
www.betascreen.net, email: sales@betascreen.net

Flexo Analyzers & Calibration, Densitometer-Spectros, Color Viewers, Magnifiers, Testing Equipment

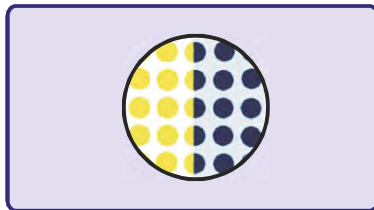
The **BETACOLOR VIEWER MARK III** is an advanced system for viewing film, plates, color proofs, and printed sheets. It is the perfect companion to the densitometer for complete quality control from the first to last step.



Pressing and holding any button will cause white LED's to illuminate the subject for general viewing. Releasing the button will initiate a specific color LED illumination.

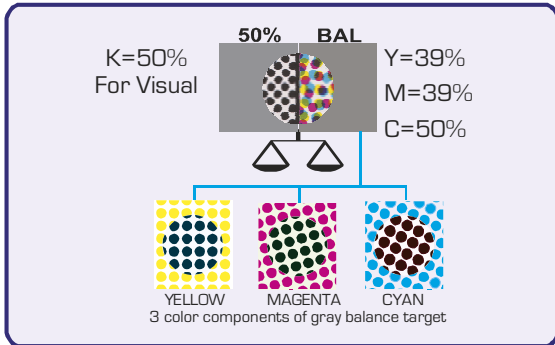
For example, to examine a yellow image, pressing and releasing the yellow coded button will cause the blue LED to illuminate the field with contrasting light. The nearly invisible yellow ink is transformed and visually enhanced.

See Yellow



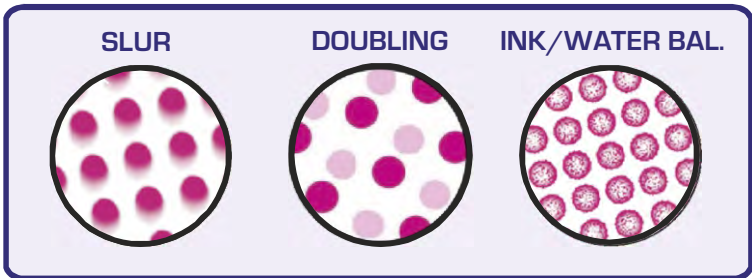
Note: In the event of a malfunction, fully charge the Beta Color Viewer before proceeding.

Multi color images and gray balance can be viewed and visually separated one layer at a time by sequentially tapping the yellow, magenta, and cyan buttons.



This feature is useful for comparing discrepancies between color proofs and press sheets.

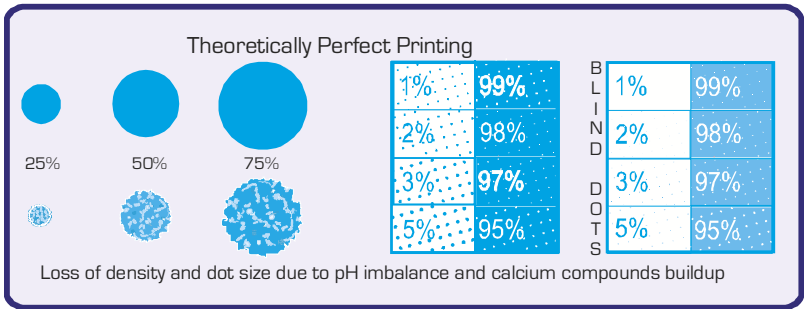
COMMON PRESS PROBLEMS



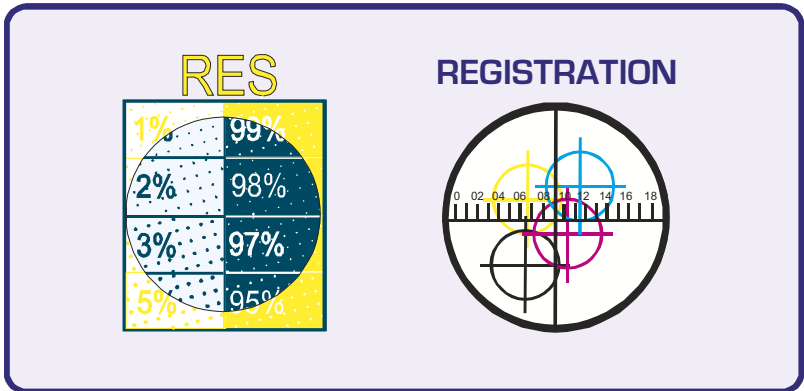
SLUR can be caused by improper packing, worn grippers or a loose or stretching blanket.

DOUBLING generally is caused by worn grippers or other press components.

INK WATER IMBALANCE can readily be seen in all colors due to its recognizable appearance.



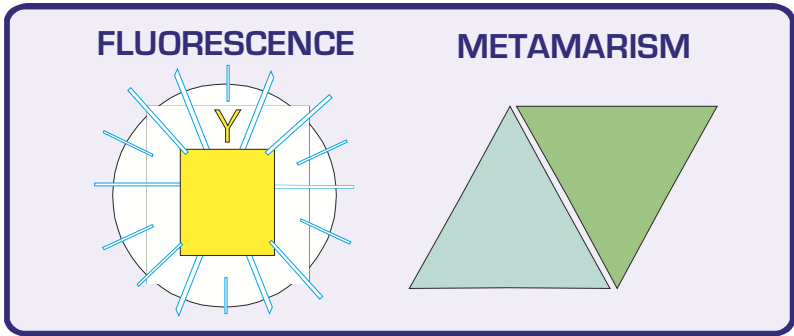
CALCIUM CARBONATE compounds deposits on plates, rollers, and blankets can cause poor ink transfer resulting in low ink density. First affected are disappearing highlight dots that are measurable with a press densitometer in the dot gain mode, but are better seen with the BETACOLOR VIEWER. Other factors are roller stripping, ink mottling, hickies, plate blinding, higher water speeds, ink emulsification, slow ink drying, and out of control conductivity and pH levels.



RESOLUTION TARGETS indicate the ability of the printing process to accurately reproduce the full range of dots from 1% to 99%. The BETACOLOR VIEWER can recognize errors at any source, whether it is film, plate or press.

REGISTER Measurements with an optional microscopes will greatly improve make ready time with far less wasted sheets. The internal reticule with the microscope option will show exact deviation correction adjustments.

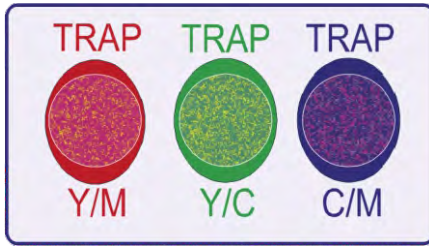
FLUORESCENCE and METAMERISM



FLUORESCENCE in paper, inks, and coatings occurs when ultra violet light striking a surface causes it to emit longer wavelength light and resulting color shift.

METAMERISM is the phenomenon where two color appear to match under one light source, yet do not match under a different light source. Two such colors are called a metamer pair.

The **BETACOLOR VIEWER III** features an ultra violet light source that will indicate fluorescence if present. This feature alerts the pressman to take corrective measures so that the color proof and press sheet will be in greater agreement according to what type of illumination the prints will be viewed in.



PEARL FACTOR exists in two color print combinations as found in Trapping when the substrate voids of the first transparent ink are overprinted with the ink of the second color. Laminate layer proofs similar to Matchprint (tm) or Chromalin (tm) will show no Pearl Factor, while ink and laser jet proofs will show varying degrees of pearl factor.



OPTIONAL OPTICS (10x, 12x, 25x, 50x, 100x) on interchangeable magnetic plates can be snapped on and off. This feature allows rapid interchangeability of optical magnifications with the need to refocus everytime.

CHARGER - The BETACOLOR VIEWER III will operate for months on a single charge due to its innovative high efficiency LED's. It is safe to use while charging. It is advisable NOT to leave it charging mode for prolonged periods of time. The chargers are available in 110 or 220 volts.

CAUTION - Avoid looking directly into the UV light source.

SPECIFICATIONS

OPTICS.....10X, 12X, 20X flat field color corrected,
3-element multi coated design with locking ring

MICROSCOPES.....25X, 50X, 75X, 100X
Metric or Inch measuring reticle

LIGHT SOURCE.....High efficiency LED's for months of
viewing between charges

POWER SOURCE..... 4 - AA Ni Cad batteries

DIMENSIONS.....5.75x2.5x2in. (14.5x6.5x5cm)

WEIGHT.....1.28lbs. (580g)

GUARANTEE.....3-Years excluding batteries

Other Beta Products

BetaColor Densitometers & Spectros

The Advantages of LED Technology

FAST • EASY • AFFORDABLE

24/7/365 Reliability WITHOUT Recharging



**BETACOLOR
PRESTO SPECTRO**
Spectro-Densitometer
AT \$3,499!



**BETACOLOR
PRESTO**
Basic Densitometer
ENTRY LEVEL PRICING



**BETACOLOR
PRESTO DELTA E**
at Densitometer Pricing

Features | Benefits

- **Superior Price** Compare & Take Advantage of our 10-Day Free Trial
- **Superior Speed** 1/10th Second Measuring, Superior Reliability
- **Superior Warranties** 1-Year, LED's 7-Years
- **NO Recharging or Calibration Needed** - 1,000,000 Measurements from 2 "AA" Batteries
- **THE MOST USER FRIENDLY** - All Features Automatic



Precision Electronic Rulers

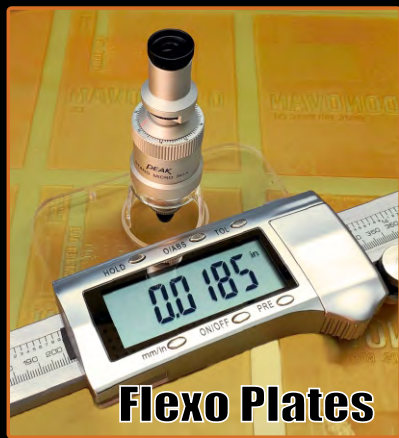
EXACT NON-CONTACT MEASUREMENT OF MATERIALS & STRETCH
Measure Films, Plates, Dies, Prints, Circuit Boards & More
For Flexo, Offset, Screen, Wide Format, Electronics



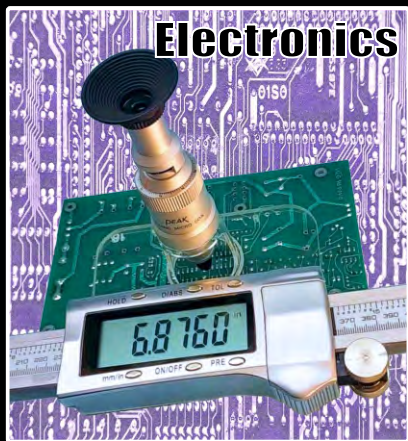
Labels



The Precision Digital Electronic Ruler's Non-Contact measurement system accommodates samples of any thickness in lengths up to 80 inches / 2000 mm. The digital readout displays absolute or incremental measurements with 0.0005" / 0.01mm resolution.



Flexo Plates



Electronics

BetaFlex PRO **PLATE & IMAGE ANALYZER**

Better, More Cost Effective Flexo From Superior Image Analysis In One Affordable Easy-To-Use Device

Technology For Today's Flexo

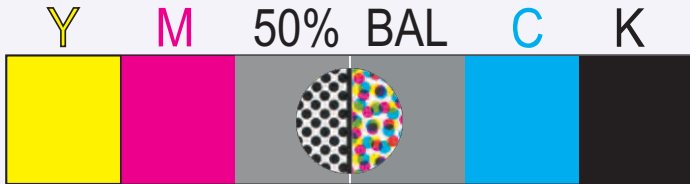
**Measure
& Control**

**.5% Highlights & Better (2D)
HD FLEXO (3D Measuring)
& More**



Other Beta Products

CUSTOMIZED "EYE SCAN" COLOR BARS



**FASTER
MAKE READY**



**FASTER
TURN AROUND**



BETA OPTICS & BETACOLOR VIEWER - FOR EVERY USE & PURPOSE



**FEATURING OUR
BEST SELLING
BETAMAG 12X
WITH DUAL LED'S!**



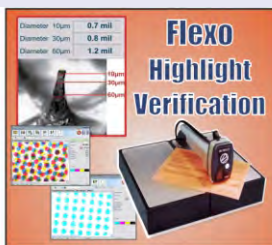
Beta Quality Control Products



BETACOLOR LED DENSITOMETERS

Affordable, Advanced, User Friendly, LED technology.

No light bulbs to replace, chargers or cables. Seven year warranty on LED's.



BETAFLEX PRO FLEXO IMAGE ANALYZER

Measure & Control 0.5 highlights at 300 lpi & better, 3D Dot Analysis, Masks, Stain Density, Dot Area, Screen Ruling, Film, & Much More



BETA FOLD CREASE & FOLD ANALYZER

Portable, hand-held analysis of crease height, width, angles, and symmetry.

Also see BetaCorr Corrugated Analyzer

FREE 10-Day Trial



BETA FLUO - UV INK MEASURING DENSITOMETER

Measure the unique properties of invisible UV ink in both 365nm & 254 nm for security printing Banknote printing, Security Ink manufacturers, Security Label printers & more.



PRECISION DIGITAL ELECTRONIC RULERS

Precise, non-contact, measurement of distances on films, plates, dies, electronics & prints. Electronic readout with .0005" resolution



BETA OPTICS & BETAMAG 12X WITH DUAL LED'S

Optics for Every Need & Budget, microscopes, loupes, and the well known BetaColor Viewer 3