

PORTABLE
INSTRUMENT FOR
CONTROLLING
COLOR

—metallic, pearlescent and
special effect paint finishes

MA68II

MULTI-ANGLE SPECTROPHOTOMETER

- Five angles of measurement (15°, 25°, 45°, 75°, 110°)
- Color values displayed in various formats: $L^*a^*b^*$, $\Delta L^*\Delta a^*\Delta b^*$, $L^*C^*h^\circ$, $\Delta L^*\Delta C^*\Delta H^*$, Flop Index, Δ Flop Index, $\Delta E_{L^*a^*b^*}$ and ΔE_{cmc}
- Interfaces with X-Rite's QA-Master® 2000 Quality Assurance Software
- DRS measurement technology
- Battery operated for remote use
- Rugged construction
- Easy to use
- 2 year warranty



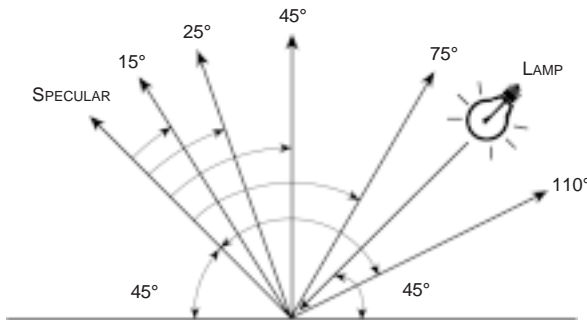
EXPERIENCE
the measurable color difference.™

MA68II

MULTI-ANGLE SPECTROPHOTOMETER

The MA68II is the ultimate portable multi-angle spectrophotometer, designed to give fast, precise and accurate color measurement information on metallic, pearlescent and special effect finishes.

The MA68II is the ultimate portable multi-angle spectrophotometer. It's full range of angular viewing (15° to 110°) allows accurate evaluation of the changes exhibited in metallic, pearlescent and special effect paint finishes. The remote operation feature allows measurement data to be stored. The stored data can be printed directly to a serial printer in a QA report format or down-loaded to QA-Master® 2000, X-Rite's Windows®-based quality control software package.



MA68II ILLUMINATION AND VIEWING ANGLES

DYNAMIC ROTATIONAL SAMPLING (DRS)

X-Rite's Dynamic Rotational Sampling technology utilizes a simple, robust optical system which provides simultaneous measurement of all angles. Rugged reliability, long-term performance and outstanding features are trademarks of all X-Rite instruments.

2-YEAR WARRANTY

The MA68II is covered by an unprecedented 2-year limited warranty.

X-Rite standards are traceable to NIST (National Institute of Standards and Technology, USA) Calibration report (MCSL-18).

SPECIFICATIONS:

MEASURING GEOMETRICS

- 45° illumination
- 15°, 25°, 45°, 75°, 110° aspecular viewing
- Angular accuracy $\pm 0.15^\circ$
- Fiber optic pick-up, coupled with DRS technology

MEASURING AREA

0.5 in. diameter (12mm)

LIGHT SOURCE

Gas-filled tungsten lamp, color corrected to approx. 4000°K

ILLUMINANT TYPES

C, D₆₅, D₅₀, A, F2, F7, F11 & F12

STANDARD OBSERVERS

2° & 10°

RECEIVER

Blue-enhanced silicon photodiodes

SPECTRAL RANGE

400nm - 700nm

SPECTRAL INTERVAL

28 band spectral measurement:

- 10nm interval from 400nm - 640nm
- 20nm interval from 640nm - 700nm
- 15nm bandwidths

SPECTRAL DATA OUTPUT

Spectral reflectance values are available for output from the RS-232 port for 5 angles at 10nm intervals from 400nm - 700nm

MEASUREMENT RANGE

0 to 400% reflectance

MEASURING TIME

Approx. 2.0 seconds

INTER-INSTRUMENT AGREEMENT

- 0.18 ΔE^* avg. on reference BCRA tile set
- 0.35 ΔE^* max. on any chromatic tile
- 0.15 ΔE^* max. on any grey tile

SHORT-TERM REPEATABILITY

0.10 ΔE^*_{ab} on white ceramic

LAMP LIFE

Approx. 500,000 measurements

POWER SUPPLY

Six rechargeable AA Ni-metal hydride batteries included - Removable battery pack; 7.2 VDC rated @ 1400 mAh

AC ADAPTER REQUIREMENTS

- MA68: 90-130VAC, 50-60Hz, 15W max
- MA68X: 180-260VAC, 50-60Hz, 15W max
- 12 VDC @ 700 mA.

CHARGE TIME

In Instrument - 4 hrs (50%)
16 hrs (100%)

MEASUREMENTS PER CHARGE

1,000 5-angle measurements (continuous measurements @ 10 sec. intervals)

DATA STORAGE (FIVE ANGLES)

200 Standards
850 Samples

DATA INTERFACE

Patented bi-directional RS-232, 300-19,200 baud

DISPLAY

4-row by 20-character supertwist dot matrix LCD

OPERATING TEMPERATURE RANGE

50° to 104°F (10° to 40°C)
85% Relative humidity max (non-condensing)

STORAGE TEMPERATURE RANGE

-4° to 122°F (-20° to 50°C)

WEIGHT

3 lbs. 2 oz. (1.4 kg)

DIMENSIONS

4.56" H 3.00" W 8.85" L
(11.6cm 7.6cm 22.5cm)

ACCESSORIES PROVIDED

Calibration standards, operation manual, AC adapter & carrying case



www.x-rite.com

X-Rite, Incorporated – World Headquarters • 3100 44th Street, S.W. • Grandville, Michigan 49418 USA • (616) 534-7663 • (800) 248-9748 • FAX (616) 534-8960
X-Rite Ltd. • The Acumen Centre • First Avenue • Poynton, Cheshire • The United Kingdom SK12 1FJ • 44 (0) 1625 871100 • FAX 44 (0) 1625 871444
X-Rite Méditerranée • Parc du moulin de Massy • 35, rue du Saule Trapu • 91300 Massy • France • 33 1-69.53.66.20 • FAX 33 1-69.53.00.52
X-Rite Asia Pacific Ltd. • Room 808-10 • Kornhill Metro Tower • 1 Kornhill Road • Quarry Bay • Hong Kong • (852) 2-568-6283 • FAX (852) 2-885-8610
X-Rite Asia Pacific Ltd. • Japan Office • 7F, IMAS HamamatsuOcho Bldg. • 2-10-4, Hamamatsu-cho, Minato-ku • Tokyo, 105-0013 Japan • 81-3-5777-5488 • FAX 81-3-5777-5489
X-Rite GmbH • Stollwerckstr. 32 • 51149 Köln • Germany • (49) 2203-91450 • FAX (49) 2203-914519
X-Rite GmbH • Czech Office • Sochorova 705 • CZ-682 11 Vyskov • Czech Republic • (420) 507-328197 • FAX (420) 507-328138

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