Small Panel Color Analyzer

Model No. 71701/71702

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KEY FEATURES

- Selectable display modes in xyY, T Δ uvY and u'v'Y
- Measuring area :
  20 mm diameter (Model 71701)
  5 mm diameter (Model 71702)
- Miniature probe end for tight space arrangement
- High accuracy measurement :
  Y : ±2% ±1digit
  x,y : ±0.002
- Precise repeatability measurement :
  Y : ±0.3% ±1digit
  x, y : ±1% ±1digit (2 cd/m² ≦ Y < 30 cd/m²)
  ±0.3% ±1digit (30 cd/m² ≦ Y ≦ 4000 cd/m²)
- Fast measurement rate : 5 times/sec
- Friendly graphic user interface
- NIST traceable calibration
- Data output for statistical analysis
- Memory for storing 12 channels of standard color data and calibration data, expandable to 100 channel with optional card

The Chroma 71701/ 71702 is a versatile instrument for measuring Small Panel Displays. Designed with advanced microprocessor and A/D converter, and using precision optical components and electrical circuit, it is capable of making high speed color measurement accurately to tight specification.

It uses sensors filtered to closely match the CIE 1931 color-matching functions to measure the energy of the light emitted by the Backlight, OLED panel and other Flat Panel Displays. The user can display the measured data in xyY(xy as chromaticity coordinates, Y as luminance), T Δ uvY (T as correlated color temperature, Δ uv as color difference from black body locus, and Y as luminance value), or RGB mode. A wide luminance measurement range from 2.0 to 4000 cd/m², or 0.58 to 1167fL makes the measurement of any Backlight, OLED Panel and other Small Panel Displays possible.

The advanced graphic control software facilitates fast and simple colorimetric measurements. The software is a Windows™-based control program with graphical user interface. The standard graphics screen shows the relative intensity of the RGB, color coordinates, luminance, and pass/fail testing of Backlight, OLED Panel and other Small Panel Display.

As the demand of thin, lightweight and low radiation monitor is increasing quickly, the Backlight, OLED Panel and other Small Panel Displays will play an important role in the near future. Every maker is looking for a high value-added but cost-effective test solution to keep up with the trend. Such a versatile and easy-to-use instrument like Chroma 71701/ 71702 must satisfy your intent to win competitive advantages.

ORDERING INFORMATION

71701 : Small Panel Color Analyzer (measuring area: ø20mm)
71702 : Small Panel Color Analyzer (measuring area: ø5mm)

SPECIFICATIONS		
Model	**71701**	**71702**
Photo Sensor	Three sensors with tuned color filters (closely approximates CIE 1931 color matching functions).	
Luminance Measuring Range	2~4000 cd/m² or 0.584 ~ 1167fL	1~999 cd/m² or 0.292 ~ 291.7fL
Luminance Unit	cd/m² or fL, selectable via front panel key	
Display Modes	xyY; T Δ uvY; u' v' Y	
Display Values	Digital : xyY; T Δ uvY; u' v'Y Analog : Δ x Δ y Δ Y	
Memory	12 channels(standard); 100 channels with optional PCMCIA type II memory card	
Accuracy	Y : ±2% ± 1digit x, y : ±0.002 (Measurement conditions 20 ± 2°C, Standard illuminant A, 50 cd/m² or above)	
Repeatability	Y : ±0.3% ±1 digit x, y : ±1% ±1 digit (2 cd/m² ≦ Y < 30 cd/m²) ± 0.3% ±1 digit (30 cd/m² ≦ Y ≦ 4000 cd/m²)	
Measurement Rate	Approx. 5 times/second (Measurement condition : display mode : xyY)	
Measuring Area	ø20 mm	ø5 mm
Other Functions	Calibration of user-selected color reference, storage of channel ID name, variable analog display range, measurement hold, remote control	
Data Communication	RS-232	
Operating Environment		
Temperature	5°C ~ 40°C	
Humidity	Less than 85% relative humidity (at 35°C/95° F with no condensation)	
Power	115/230 Vac, 50/60 Hz	
Dimension (H x W x D)	132.6 x 425 x 250.5 mm / 5.22 x 16.73 x 9.86 inch	
Measuring Probe	ø43 x 144 mm Cord Length : 2.5m (8.2ft)	
Weight		
Main Unit	6.1 kg / 13.44 lbs	
Measuring Probe	250 g / 0.55 lbs	