



### FRONT PROJECTOR ATS MODEL 7600A

Chroma 7600A is an automatic test system developed in compliance with ANSI/NAPM IT 7.228-1997 which is defined by American National Standard Institute, JBMIA-ISO21118 (2005.8) which is defined by Japan Business Machine & Information Industry Association, IEC61947-1 (2002) which is defined by International Electrotechnical Commission and SJ/T 11340-2006 (2007.1.1) which is defined by Ministry of Industry and Information Technology of the People's Republic of China to test the front projectors. The chroma meter used in the system is designed with advanced microprocessor and precision optical components along with filters closely approximate to CIE 1931 Color Matching Function and Cosine Correction. It can offer accurate and high-speed illuminant and chromatic measurements performance and quality judgments for LCD, DLP and LCOS projectors.

The software of Chroma 7600A is a Window™ based control program with comprehensive graphic user interface that can enhance testing efficiency of the projector manufacturers and lower down the test and labor cost. With the integration of video pattern generator of Chroma, the user can complete all the ANSI-1997 testing items, acceptance criteria and file saving with just one click.

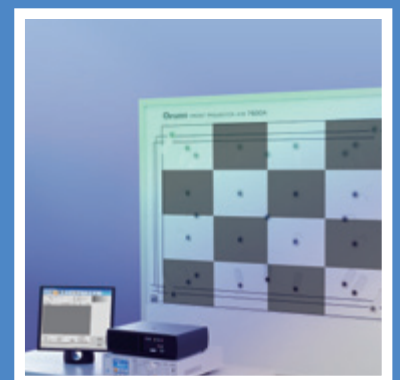
To accommodate the diversified needs users may have, Chroma 7600A provides various test results including ANSI Lumens, Light Uniformity, Color Uniformity, Contrast Ratio and Correlated Color Temperature for one's choice. In addition, a flexible formula editing wizard is offered for the user to edit the desired calculation formula. The "Pre-Test" function in the software allows the user viewing the measured values in real time to integrate into the convergence, grayscale tests and VR adjustments etc. before performing ANSI tests. And with the user-defined calibration function Chroma 7600A provides, it is very convenient for the system maintenance which can reduce the calibration cost in the future effectively.

When the performance of illuminance-chrominance has become the key factor for the value of front projector, the chromaticity measurements must comply with more standards and test benchmarks. As the demand of compact, high brightness and resolution display devices is increasing quickly now, the front projector will play a leading role in the near future. Every front projector make is looking for the most cost-effective test solution to keep up with this trend. Such a versatile and easy-to-use instrument like Chroma 7600A must satisfy your intent to win competitive advantages.

## MODEL 7600A

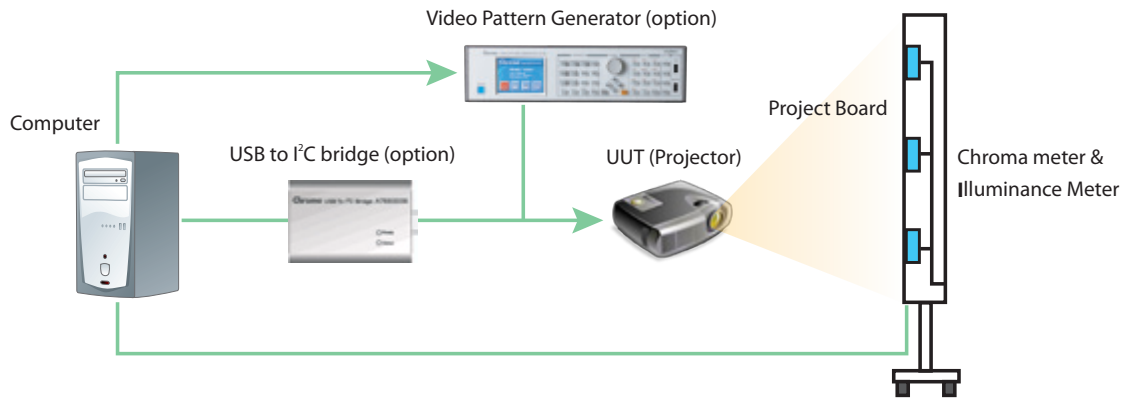
### Key Features :

- 0.001 Lux ultra low illumination display range
- Comply with ANSI-1997 , JBMIA,IEC&SJ/T projector testing standards
- 29 sets chroma meter & Illuminance meter measuring at the same time, high test throughput
- Integrated with Video Pattern Generator and one click to complete all measurements
- Accurate chroma meter with tuned color filters (closely approximates CIE 1931 color matching functions), and cosine correctors
- User-defined calibration function facilitates the system maintenance
- Testing criteria storage for various models requirements
- "Pre-Test" function to edit testing items setting for non-ANSI standard tests
- Automatic white balance adjustment
- Auto maximum brightness selection and DC-index compliance with chromaticity specification
- Complete test items:  
ANSI Lumens, Light Uniformity, Color Uniformity, Contrast Ratio and Correlated Color Temperature
- High accuracy measurement:  
Y :  $\pm 2\% \pm 1$  digit  
x, y :  $\pm 0.002$
- Precise repeatability measurement:  
Y :  $\pm 0.5\% \pm 1$  digit  
x, y :  $\pm 0.0005$
- NIST traceable calibration
- User authority control for system management



# Chroma

## SYSTEM ARCHITECTURE



## SPECIFICATIONS

Model	7600A		
Photo Sensor	13 chroma meters (13 points) or 13 chroma meters plus 16 Illuminance meters (29 points) closely approximates CIE 1931 Color Matching Function, and cosine correctors		
Illuminance Range	0.05 to 30,000 Lux		
Display Range	0.001 to 30,000 Lux		
Operation System	Windows® 7 (32bit)		
Software User Interface	Based on ANSI Test Standard Illuminance & Chromaticity test (13 points) readings: Y, x, y/ CCT/ Y, u', v'/ Δu'v'/ ANSI Lumens/ Uniformity/ Max/ Min/ Avg. Contrast Ratio analysis (16 points) readings: Y/ Contrast Ratio/ Max/ Min/ Avg. User-defined testing parameters, calculating formula, white balance adjustment, auto maximum brightness selection and DC-index compliance with chromaticity specification Data storage and uploading to MES		
Measuring Area	100 inch (13 points & 29 points)	60 inch (13 points & 29 points)	25 inch (13 points) <sup>*1</sup>
Body Modular	Fixed : 4:3, 16:9,16:10 3 in 1 : 4:3/16:9/16:10	Fixed : 4:3, 16:9,16:10 3 in 1 : 4:3/16:9/16:10	Fixed : 4:3, 16:9,16:10 3 in 1 : 4:3/16:9/16:10
Chroma Meter Measuring Area	ø22mm		
Repeatability (2σ) <sup>*2</sup>	Y : ±0.5% ± 1 digit x, y : ±0.0005		
Accuracy <sup>*2</sup>	Y : ±2% ± 1 digit x, y : ±0.002		
Data Communication	USB		
Power	1ø 110~240V ± 10%V <sub>LN</sub> , 47~63Hz, 50VA		
Power Consumption	55VA max. (110V AC 60Hz)		
Operating Temperature / Humidity Range	5°C to 40°C (41°F to 104°F) ; < 75% R.H. (without condensation)		
Storage Temperature / Humidity Range	0°C to 50°C (32°F to 122°F) ; < 75% R.H. (without condensation)		

\*1: 25 inch supports 13 chroma meters only

\*2: Measurement condition is under 500 Lux illuminant A

All specifications are subject to change without notice. Please visit our website for the most up to date specifications.

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## ORDERING INFORMATION

**7600A** : Front Projector ATS

**Project Board** : 100 inch ,60 inch ,25 inch ; project ratio : Fixed - 4:3 / 16:9 / 16:10, 3 in 1 - 4:3/16:9/16:10

**71507** : Chroma meter (13 points)

**71508** : Illuminance meter (16 points)

**A760020** : RS232 to UART bridge

**A766006** : USB to I²C bridge

**LCD Display**

**Chroma Series Video Pattern Generators**

Developed and Manufactured by :

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