

DLP

# REFLECTION™ CL-510/CL-510LT

RUNCO INTERNATIONAL  
DIGITAL LIGHT PROCESSING™



1024 X 576 WIDESCREEN NATIVE RESOLUTION  
INTEGRATED VIDEO PROCESSING WITH 3:2 PULLDOWN  
900 ANSI LUMENS/1700:1 CONTRAST RATIO  
MULTIPLE ASPECT RATIOS



The World's Finest Home Theater Products™

GEN3  
TECHNOLOGY

**R**unco's Reflection CL-510 and CL-510LT features our new GEN 3 technology. Runco has engineered its GEN 3 products to make more efficient use of optical light engine design. The result is deeper blacks, greater contrast, rich color saturation and plenty of brightness.

Runco has implemented a host of advancements into this new engine to take full advantage of Texas Instrument's latest widescreen high definition DMD™ chip.

Among the advances Runco has developed are a sophisticated color balancing system resulting in the industry's best gray scale tracking. This far surpasses the capabilities of CRT projectors. Accurate gray scale reproduction is vital to rich, deeply saturated, true-to-life color reproduction, as well as superior black level and white level performance.

The CL-510/CL-510LT also offer great versatility and extensive features to achieve outstanding image quality and operational ease. The integrated video processing/scaling incorporates 3:2 pulldown compensation. The CL-510 offers a variable throw distance of 1.75:1 to 2.0:1, while the CL-510LT provides a longer variable throw distance of 2.3:1 to 3.0:1. Both models include electronic keystone correction for installation flexibility and discrete I/R and RS-232 control to make operational control a breeze.



**THE WORLD'S FINEST  
HOME THEATER PRODUCTS™**  
Runco International®

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**FEATURES:**

- Runco-engineered, GEN 3 Technology
- 16:9 Widescreen Native Resolution
- 1024 x 576 DMD™ with 12° Tilt
- 1700:1 Contrast Ratio
- HDTV Ready
- DVI Input with HDCP

**SPECIFICATIONS:**

<b>Projector Type:</b>	Digital Light Processing™ (DLP™), Single DMD™ Chip
<b>Native Resolution:</b>	1024 x 576 (16:9)
<b>Aspect Ratios:</b>	4:3, Letterbox, 16:9 Anamorphic, VirtualWide
<b>Video Standards:</b>	NTSC, PAL
<b>DTV Compatibility:</b>	480p, 720p, 1080i
<b>Scan Frequency:</b>	Horizontal: 15–68 kHz Vertical: 50–100 Hz
<b>Picture Size (16:9 Screen):</b>	Recommended Width: 72–96 in. Maximum Width: 200 in.
<b>Throw Distance: (Factor x Screen Width):</b>	CL-510 Zoom 1.75–2.00 CL-510LT Zoom 2.30–3.00
<b>Light Output:</b>	CSMS** Specifications: Home Theater Calibration: 471 ANSI Lumens; 17.8 Foot-Lamberts (fL); 900 ANSI Lumens*
<b>Contrast Ratio:</b>	CSMS** Contrast Ratio: 149:1; 1700:1
<b>Lamp:</b>	210W
<b>Lamp Life:</b>	2000 hours @ 6500° Kelvin

<b>Inputs:</b>	(1) Composite Video, (1) S-video, (1) RGB/Component (via BNC), (1) RCA Component Video, (1) DVI w/ HDCP, (1) RS-232
<b>Memories:</b>	21 memories
<b>12V Output:</b>	Max .250 Amp, active when the projector is on
<b>Power Requirements:</b>	100–240V AC, 50/60 Hz, 300W
<b>Operating Environment:</b>	41°–95° F, (5°–35° C), 20%–80% Humidity (non-condensing)
<b>Dimensions (w/out feet):</b>	Width: 16 1/8 in. (410.16 mm) Depth: 14 1/2 in. (370 mm) Height: 5 1/4 in. (132.2 mm) with feet 5 3/4 in. (146 mm) Weight: 22 lbs. (10 kg) (includes lens)
<b>Regulatory Approvals:</b>	UL, CSA, GS-TUV, CCIB, CB, FCC, CE, VCCI and C-Tick
<b>Limited Warranty:</b>	<u>Projector:</u> (2) Two year parts and labor from the date of delivery to the end user. <u>Lamp Warranty:</u> 1000 hours or (6) six months, which ever comes first.

**\*ANSI Lumen specification:**

This is the typical projector luminosity (brightness) specification found in most sales literature. This measurement is included in RUNCO literature to allow for direct comparison with other manufacturer's projectors. These measurements can be taken at 9,000 to 13,000°Kelvin to get expected performance data when the projector is used in professional, commercial, and industrial displays.

**\*\*CSMS Home Theater Calibration ANSI Lumen Specification:**

These measurements are taken from the projector as set up in a home theater environment. The projector is calibrated to ISF specifications including setting the color temperature to 6500°Kelvin, the standard for reproducing video.

**\*\*CSMS Home Theater Calibration foot-Lambert (fL) Specification:**

This is the unit of measurement used in commercial movie theaters to express image brightness. The Society of Motion Picture and Television Engineers (SMPTE) specifies 16 fL as the target image brightness for film-based projectors using an open gate (without film in the projector). More importantly, today SMPTE specifies 12 fL as the target image brightness in Digital Cinema theaters using DLP™ technology. The foot-Lambert is dependant on screen size, screen gain, and projector light output.

All measurements are made at RUNCO to ANSI/NAPM IT7.228-1997 specifications using the Photo Research PR-650 SpectraColorimeter and Minolta LS-100 Luminance Meter, Video Essentials test DVD, and a Stewart Filmscreen StudioTech 130, 1.3 gain, 72-inch wide screen. The projector is calibrated to a color temperature of 6500° Kelvin and has a minimum of 150 hours of usage.