

System Specifications

2.1 Specifications **Marquee 8110+/8500/8500LC/9500LC**

Note: Due to constant research, specifications are subject to change without notice. Specifications may vary with projector vintage.

- Model** ▶
 - 8110+: 38-P11075-95
 - 8500: 38-P13085-95
 - 8500LC: 38-P130LC-95
 - 9500LC: 38-P13095-95

- Optics** ▶
 - High definition hybrid lens
 - Optical resolution: 10 line pairs per mm
 - 8110+/8500: HD8 lens, 8" electromagnetic focus CRTs
 - 8500LC: HD10 lens, 8" liquid coupled electromagnetic focus CRTs
 - 9500LC: HD10 lens, 9" liquid coupled electromagnetic focus CRTs
 - Optional lenses available for 8500LC and 9500LC, optimized for different throw distances
 - Scheimpflug adjustment for top, bottom, and side to side focus
 - Liquid coupling of 8500LC and 9500LC for optimized contrast ratio

- Resolution** ▶
 - 2500 x 2000 addressability
 - 8110+/8500/8500LC: 1350 x 1100 ANSI pixels
 - 9500LC: 1500 x 1200 ANSI pixels

- Brightness** ▶
 - 8110+: 200 ANSI lumens
 - 8500: 225 ANSI lumens
 - 8500LC: 235 ANSI lumens
 - 9500LC: 240 ANSI lumens (260 without filter on green)

- Display** ▶
 - Electronic geometry circuits separately correct top, bottom and sides for flat or curved screens up to 25 feet diagonal
 - Keystone circuitry to correct pictures for angles up to $\pm 15^\circ$ vertically from screen axis
 - Color temperature adjustment for precise setup
 - S and C vertical and horizontal linearity controls
 - Adjustable top, bottom and side blanking
 - 8500/8500LC/9500LC: 9 zone electronic astigmatism correction
 - 8500/8500LC/9500LC: 8 zone Contrast Modulation control

- Input Signals** ►
- Video Input Level: 0.5 to 1.0 volts p-p, $75\Omega \pm 1\%$ terminated
 - Sync Input Level: 0.5 to 5.0 volts p-p, 75Ω terminated
 - Automatically switches to separate sync, composite sync, or sync on green
 - Separate and composite sync are automatically accepted in either polarity
 - Audio Input Level: 1.0 volts nominal

- Output Signals** ►
- Stereo audio outputs with volume control

- Gamma Correction** ►
- Gamma correction circuitry provided for improved video performance and gray-scale tracking

- Frequency Response** ►
- 8110+/8500/8500LC: 100 MHz bandwidth (-3 dB)
 - 9500LC: 120 MHz bandwidth (-3 dB)
 - 8110+/8500/8500LC: Accommodates 4 nanosecond pixels and digital clock rates over 250 MHz
 - 9500LC: Accommodates 3 nanosecond pixels and digital clock rates over 300 MHz

- DC Restoration** ►
- Keyed clamp, better than 1% accuracy

- Geometry** ►
- Rectilinear Accuracy: 1.0% of picture height maximum
 - Horizontal Linearity: 2.0% maximum (keypad adjustable)
 - Vertical Linearity: 1.0% maximum (keypad adjustable)

- Deflection Circuits** ►
- Smartlock™ circuitry for quick lock-in and ultra steady images

Vertical Deflection

- Frequency Range: 38 Hz to 180 Hz autolock
- Size automatically regulated over frequency range and adjustable to $\pm 15\%$ of nominal
- Retrace Time: less than 300 microseconds

Horizontal Deflection

- 8110+: 15 kHz to 110 kHz autolock
- 8500/8500LC/9500LC: 15 kHz to 130 kHz autolock
- Size automatically regulated over frequency range and adjustable to $\pm 15\%$ of nominal
- Retrace Time:
 - 15-30 kHz: 5.5 μ s (short)
 - 30-60 kHz: 3.3 μ s (short)
 - 60-130 kHz: 1.6 μ s (short)
 - 30-45 kHz: 5.0 μ s (long)
 - 60-100 kHz: 2.5 μ s (long)
- Blanking Time:
 - 15-30 kHz: 6.5 μ s (short)
 - 30-60 kHz: 3.6 μ s (short)
 - 60-130 kHz: 1.8 μ s (short)
 - 30-45 kHz: 5.6 μ s (long)
 - 60-100 kHz: 3.2 μ s (long)

- High Voltage** ▶
 - 34.9 kV regulated to better than $\pm 1\%$
- Power Requirements** ▶
 - 90 VAC to 264 VAC universal input
 - Line Frequency: 50 to 60 Hz nominal
 - Power: 650 watts maximum
 - Power factor corrected
- Inputs** ▶
 - Built-in RGBHV interface, with stereo audio inputs. Optional input modules install in interface slot.
 - Image Shifter Module (standard on 9500LC only) which slowly moves the image to lengthen the life of the CRT phosphors while maintaining a high brightness picture
 - Built-in RS-232 for computer control, with loop-thru for connection of multiple projectors
 - HDTV compatible with optional interface module
- Optional Source Expansion** ▶
 - The *Marquee* Signal Switcher allows use of up to nine additional input modules. Up to nine switchers can be connected.
 - Maximum Number of Inputs: 78
- Control Features** ▶
 - Multi-language software (user selectable)
 - Menu driven interface with on-screen help
 - Built-in set up tutorials
 - Auto power up after power interruption
 - Five built-in test patterns
 - Internal frequency generator
 - Programmable events and real time clock
- Servicing** ▶
 - Modular design provides ease of servicing
 - Most service adjustments are made using the keypad
- Environment** ▶
 - Maximum Operating Range**
 - Temperature: 0 to 35°C
 - Humidity: 0 to 90% non-condensing
 - Altitude: 0 to 3000m (0-10,000 ft.)
 - Storage**
 - Temperature: -30°C to 65°C
 - Heat Dissipation**
 - 2450 BTU/Hr (approximate)
- Mounting** ▶
 - Can be ceiling mounted on its optional ceiling mount or placed on a castered cart for portable applications
- Weight** ▶
 - 8110+: 144 lbs (65 kg) / 194 lbs (88 kg) shipping weight
 - 8500: 145 lbs (66 kg) / 210 lbs (95 kg) shipping weight
 - 8500LC: 175 lbs (79 kg) / 234 lbs (106 kg) shipping weight
 - 9500LC: 186 lbs (84 kg) / 240 lbs (109 kg) shipping weight

Accessories ► **Included**

- 1 IR remote multi-use, backlit, full function keypad
- 1 Internal multi-use, backlit, full function keypad
- Tool Kit
- User's manual
- Line cord

Available Options ► **& Accessories**

- A variety of input interface modules including an RGB Input Module, an RGB Loop Thru Module, a Composite/S-Video Module, a HDTV Input Module, and a PC Analog Input Module
- Image Shifter Module which slowly moves the image to lengthen the life of the CRT phosphors while maintaining a high brightness picture (comes standard on 9500LC)
- ACON II (Automatic Convergence) which completely automates the convergence process, performing complete convergence in less than three minutes
- *Marquee* Signal Switcher
- *Marquee* Case/Power Supply to allow input modules to be used as stand-alone interfaces
- Adapter cables
- Wired keypad
- P43 short persistence phosphor CRTs for 3D applications
- Ceiling mount and rear screen equipment
- RETRO III rear screen projection enclosure
- Castered cart
- Optional lenses (8500LC and 9500LC only)
- Multistandard Video Decoder Module
- Contrast Module Upgrade Kit (for model 8110+)
- *Marquee* Librarian software
- *Marquee* Encyclopedia software

Contact your dealer or Electrohome for more information about the above products and accessories.

Regulatory ► **Approvals**

- FCC Class A, DHHS and HWC requirements, EN55022 Class B
- CSA/UL/EN 60 950
- EU Directives 73/23/EEC, 89/336/EEC (CE marked)

Warranty ►

- One year parts and labour (see user's manual)
- Extended warranties available