APPOTRONICS®



M Pro New Series

Breathtaking Color Immersive World

4K UHD Laser Projector

AL-MK550A / AL-MK650A / AL-MK750A
AL-MH550A / AL-MH650A / AL-MH750A

ALPD® Technology
Red Ratio>12%

4K/1080P

Optional Lenses

100% REC.709

5,500 to 7,500lm Brightness

Advanced Geometric Corrections

Integrated Control System

Premium 4K UHD Visuals

- ALPD laser light source delivers high brightness ranging from 5,500 to 7,500 lumens
- High Red ratio >12% delivers vibrant, lifelike images without distortion
- Four times pixel-shifting technology, producing an exceptionally smooth and detailed 4K UHD image quality
- Support HDR, HDR10+ & HLG. Full pipeline 10-bit color bit depth, faithful HDR image reproduction for an extraordinary visual experience
- MEMC dynamic frame interpolation, refresh rates up to 120Hz with less than 13ms latency, enabling smooth images free of stutter and tearing
- Advanced image enhancement comprehensively boosts image details and improves local contrast
- High native contrast ratio ≥1300:1 delivers deep blacks
- Advanced dynamic contrast enhancement, with frame-by-frame fast current response, delivering an 8x performance improvement

Robust Reliability

- 20,000-hour light source lifespan
- Fully sealed light engine design with IP5X
- Patented internal circulating cavity heat dissipation for high efficiency and low noise
- Supports 5,000m high-altitude operation
- Modular design enables easy assembly, disassembly and maintenance

Flexible Installation Compatibility

- Standard lens AL-ML100MA (1.0–1.6:1) included as standard configuration. Optional lenses available for alternative throw ratios from 0.5:1 to 2.48:1.
- Motorized lens shift, supporting ±50% vertical and ±20% horizontal shift
- 360°installation, easily adapting to complex applications
- Multi-point geometric correction, supporting up to 62×32 control points
- Equipped with built-in the Graphic Mode, enabling accurate and consistent multi-color reproduction
- 100~240V AC support, enabling operation at low voltage without brightness loss

APCS

APCS: Appotronics Control Software, easily manage your projectors and enhance functionality

- Automatically detects devices on the local area network (LAN)
- Supports RS232 and RJ45 command control
- Supports schedule setting function
- Powerful multi-point geometric correction
- Real-time operational status monitoring and proactive error warnings
- Supports firmware upgrade and configuration file import

M Pro Specification

Model	AL-MK550A	AL-MK650A	AL-MK750A	AL-MH550A	AL-MH650A	AL-MH750A
Display Technology	DLP™ chip x 1, DLP™ projection system					
Panel Size	0.47″DMD					
Resolution	3,840×2,160			1,920×1,080		
Brightness①	5,500lm	6,500lm	7,500lm	5,500lm	6,500lm	7,500lm
Light Source	ALPD® Laser Phosphor					
Light Source Lifetime②	20,000h					
Contrast	Native Contrast: ⩾1300∶1 Full On/full Off: ⩾100,000∶1					
Uniformity	⩾95%					
Color Gamut③	Rec.709					
Lenses④	Standard: TR 1.0–1.6∶1 | Optional: TR 0.5:1 (manual), 0.7–0.9:1, 1.54–2.48:1					
Screen Size	80″~300″					
Blending	Vertical & Horizontal Adjustment: V: ±35°, H: ±35° 4-Point Keystone Correction, Curved Surface Correction (9 Points), Multi-Point Correction⑤					
Lens Shift	Vertical: ±50%, Horizontal: ±20%, Motorized					
Input Resolution	4K 60HZ, 1080P 120HZ					
Terminal Interfaces – Signal Interfaces	HDMI in ×2; HDMI out; USB-A×2 (Supports 5V⎓2A) ; HDBaseT					
Terminal Interfaces – Audio Interfaces	S/PDIF out					
Terminal Interfaces – Control Interfaces	LAN(RJ45); RS232(DB9); 3D SYNC×2(in/out); 3D IR OUT; USB-B					
Power Supply	100~240VAC 50/60Hz					
Power Consumption – Typical Power	450W	550W	600W	450W	550W	600W
Power Consumption – Standby Power	0.5W					
Installation	360° Installation					
Operation Noise⑥	36dB (Standard)					
Dimensions⑦	460mm×388mm×138mm (L×W×H 18.1″× 15.3″×5.4″)					
Weight⑧	12.5kg (27.6lbs)					
Temperature⑨	0~40°C (32°F~104°F)					
Humidity	10%~80% RH (No Condensation)					

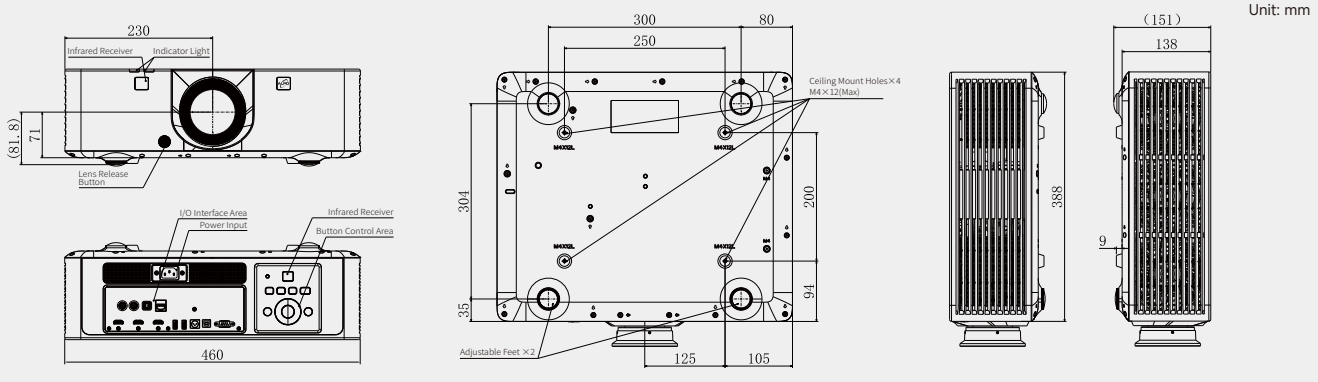
① Based on ISO21118 standard.
② Around this time, light output will have decreased by approximately 50%. Actual time may vary according to the operating modes, environment and other user behaviors.
③ Calculated based on the equivalent area of the color gamut.
④All standard models include AL-ML100MA (1.0–1.6:1) standard lens. Optional lenses are available separately to meet specific throw ratio requirements.
⑤Multi-point correction supported by APCS.
⑥ The test data was obtained at ambient temperature of 25°.
⑦ Structural protrusions and the lens are not included.
⑧ Lens is not included.
⑨ Light source brightness may decrease depending on operating temperature. When projector is operating at high temperature or at high altitude, brightness will decrease correspondingly. Light output of projector will be reduced to 50% if ambient temperature exceeds 40°C(104°F).

Optional Lenses

Model	AL-ML050FR (Optional)	AL-ML070FR (Optional)	AL-ML100MA (Standard)	AL-ML153MA (Optional)
Throw Ratio	0.5:1	0.7~0.9:1	1.0~1.6:1	1.54~2.48:1
Zoom/ Focus Mode	Manual Focus	Motorized Focus & Zoom	Motorized Focus & Zoom	Motorized Focus & Zoom
Lens Shift	V:-5%,+40%; H:±10%	V:±50%; H:±20%	V:±50%; H:±20%	V:±50%; H:±20%

Product dimensions

Unit: mm



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