

# Product

## F Series High Performance Installation Projector



The 1-Chip DLP Projector  
Comparable to a 3-Chip



7,200-8,200  
Lumens



ALPD® Laser  
Light Source



All Product  
Support 3D Sync



10% Red Ratio



5 Optional Lens



62% CLO



Built-in  
Blending & Wrapping  
Geometric Correction



Cinema Level  
Reliability

### Light Weight Design

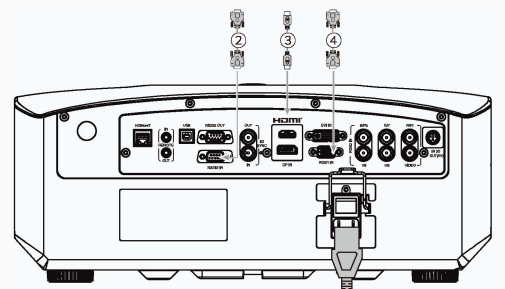
All-new design to reduce weight for 24%.

≤ 37.03lbs



### Rich I/O with HDBaseT as Standard

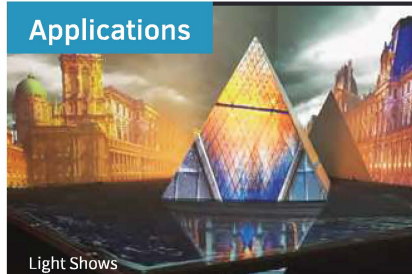
Rich array of input/output connection types, with HDBaseT interface as standard.



① Power ② RS23 ③ HDMI ④ VGA

① Power

### Applications



Light Shows



4D Ballrooms



Theme Parks

# Specifications

| Model                             | AL-FU750A                                                                                                                                                                                          | AL-FU820A                        |
|-----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|
| Display Technology                | DLP™x1, DLP™ projection system                                                                                                                                                                     |                                  |
| Panel Size                        | 0.67" DMD                                                                                                                                                                                          |                                  |
| Resolution                        | 1,920×1,200, WUXGA                                                                                                                                                                                 |                                  |
| Brightness Output <sup>①</sup>    | 7,200 lm                                                                                                                                                                                           | 8,200 lm                         |
| Light Source Type                 | ALPD® Laser (Laser type: Class1)                                                                                                                                                                   |                                  |
| Life Source Lifetime <sup>②</sup> | 20,000h (Standard Mode)                                                                                                                                                                            |                                  |
| Contrast <sup>③</sup>             | 100,000 :1                                                                                                                                                                                         |                                  |
| Uniformity                        | 90%                                                                                                                                                                                                |                                  |
| Display Gamut                     | REC.709                                                                                                                                                                                            |                                  |
| Edge Blending                     | Horizontal & vertical edge blending                                                                                                                                                                |                                  |
| Optional Lenses                   | 0.62:1, 0.8:1, 1.23-1.97:1, 1.62~2.96:1, 2.86-4.85:1, 4.68-7.96:1                                                                                                                                  |                                  |
| Screen Size                       | 40" ~ 300"                                                                                                                                                                                         |                                  |
| Keystone                          | Vertical/Horizontal ±20°                                                                                                                                                                           |                                  |
| Optical Axis Shift                | Vertical: ±100%, Horizontal: ±40%, powered                                                                                                                                                         |                                  |
| Input Resolution                  | 1,920x1,200 pixels ( higher resolution will be scaled into 1,920x1,200 pixels )                                                                                                                    |                                  |
| I/O                               | DVI × 1 / HDMI × 1 / DP × 1 / VGA × 1 / BNC × 5 / CVBS × 1 / 3D SYNC × 2(in/out) / Wired remote M3 × 2 (in/out) / HDBaseT × 1 (compatible with RJ45)/ RS232 × 2 (in/out) / USB × 1 / IR 3D OUT × 1 |                                  |
| Power Supply                      | 100-240V AC, 50/60Hz                                                                                                                                                                               |                                  |
| Power Consumption                 | Standard                                                                                                                                                                                           | 550W                             |
|                                   | Stand by                                                                                                                                                                                           | Power saving 0.5W/ Stand by 7W   |
| Orientation                       | 360°                                                                                                                                                                                               |                                  |
| Noise                             | 35dB (ECO)/37dB (Standard)                                                                                                                                                                         |                                  |
| Structure                         | Measurements <sup>④</sup>                                                                                                                                                                          | 17.9" × 17.9" × 7"               |
|                                   | Weight <sup>⑤</sup>                                                                                                                                                                                | 37 lbs                           |
| Working Environment               | Temperature <sup>⑥</sup>                                                                                                                                                                           | 32°F~104°F (95°F~104°F Eco Mode) |
|                                   | Humidity                                                                                                                                                                                           | 20%~80% (no condensation)        |
| Accessories                       | Power cable x1, wireless/wired remote control unit, remote control, batteries, software CD-ROM                                                                                                     |                                  |

①Based on ISO1118 standard. ② Full white/full black. ③ Not including protruding parts. ④ Including standard lens. Average value. ⑤ Operation temperature will be set to 32°F~95°F when working under High Altitude Mode. Output of projector will be reduced to 50% if ambient temperature exceeds 95°F. ⑥ The output of the projector will have decreased by approximately 50% around this time. Data from accelerated lab simulations. Actualtime may vary according to the operating modes, environment and other user behaviors.

| Projection Image Size |       |       |        |       | Projection Distance |           |          |           |            |       |            |       |            |           |          |           |            |           |          |           |
|-----------------------|-------|-------|--------|-------|---------------------|-----------|----------|-----------|------------|-------|------------|-------|------------|-----------|----------|-----------|------------|-----------|----------|-----------|
| Diagonal              | Width |       | Height |       | AL-120MA (Standard) |           |          |           | AL-EL062FR |       | AL-EL080FR |       | AL-EL300LZ |           |          |           | AL-EL470TZ |           |          |           |
| Inch                  | Meter | Feet  | Meter  | Feet  | Min. (m)            | Min. (ft) | Max. (m) | Max. (ft) | Meter      | Feet  | Meter      | Feet  | Min. (m)   | Min. (ft) | Max. (m) | Max. (ft) | Min. (m)   | Min. (ft) | Max. (m) | Max. (ft) |
| 70                    | 1.51  | 4.95  | 0.94   | 3.08  | 1.85                | 6.07      | 2.97     | 9.74      | 0.93       | 3.05  | 1.21       | 3.97  | 4.31       | 14.14     | 7.31     | 23.98     | 7.06       | 23.16     | 12.00    | 39.36     |
| 80                    | 1.72  | 5.64  | 1.08   | 3.54  | 2.12                | 6.95      | 3.39     | 11.12     | 1.07       | 3.51  | 1.38       | 4.53  | 4.93       | 16.17     | 8.36     | 27.42     | 8.06       | 26.44     | 13.72    | 45.00     |
| 90                    | 1.94  | 6.36  | 1.21   | 3.97  | 2.38                | 7.81      | 3.82     | 12.53     | 1.20       | 3.94  | 1.55       | 5.08  | 5.54       | 18.17     | 9.40     | 30.83     | 9.07       | 29.75     | 15.43    | 50.61     |
| 100                   | 2.15  | 7.05  | 1.35   | 4.43  | 2.65                | 8.69      | 4.24     | 13.91     | 1.34       | 4.40  | 1.72       | 5.64  | 6.16       | 20.20     | 10.45    | 34.28     | 10.08      | 33.06     | 17.15    | 56.25     |
| 120                   | 2.58  | 8.46  | 1.62   | 5.31  | 3.18                | 10.43     | 5.09     | 16.70     | 1.60       | 5.25  | 2.07       | 6.79  | 7.39       | 24.24     | 12.54    | 41.13     | 12.10      | 39.69     | 20.57    | 67.47     |
| 150                   | 3.23  | 10.59 | 2.02   | 6.63  | 3.97                | 13.02     | 6.36     | 20.86     | 2.00       | 6.56  | 2.58       | 8.46  | 9.24       | 30.31     | 15.67    | 51.40     | 15.12      | 49.59     | 25.72    | 84.36     |
| 200                   | 4.31  | 14.14 | 2.69   | 8.82  | 5.30                | 17.38     | 8.49     | 27.85     | 2.67       | 8.76  | 3.45       | 11.32 | 12.32      | 40.41     | 20.89    | 68.52     | 20.16      | 66.12     | 34.29    | 112.47    |
| 250                   | 5.38  | 17.65 | 3.37   | 11.05 | 6.62                | 21.71     | 10.61    | 34.80     | 3.34       | 10.96 | 4.31       | 14.14 | 15.40      | 50.51     | 26.12    | 85.67     | 25.20      | 82.66     | 42.86    | 140.58    |
| 300                   | 6.46  | 21.19 | 4.04   | 13.25 | 7.95                | 26.08     | 12.73    | 41.75     | 4.01       | 13.15 | 5.17       | 16.96 | 18.48      | 60.61     | 31.34    | 102.80    | 30.24      | 99.19     | 51.44    | 168.72    |
| 350                   | 7.54  | 24.73 | 4.71   | 15.45 | 9.27                | 30.41     | 14.85    | 48.71     | 4.67       | 15.32 | 6.03       | 19.87 | 21.56      | 70.72     | 36.56    | 119.92    | 35.28      | 115.72    | 60.01    | 196.83    |
| 400                   | 8.62  | 28.27 | 5.38   | 17.65 | 10.60               | 34.77     | 16.97    | 55.66     | 5.34       | 17.52 | 6.89       | 22.60 | 24.64      | 80.82     | 41.79    | 137.07    | 40.32      | 132.25    | 68.58    | 224.94    |
| 450                   | 9.69  | 31.78 | 6.06   | 19.88 | 11.92               | 39.10     | 19.09    | 62.62     | 6.01       | 19.71 | 7.75       | 25.42 | 27.72      | 90.92     | 47.01    | 154.19    | 45.36      | 148.78    | 77.15    | 253.05    |
| 500                   | 10.77 | 35.33 | 6.73   | 22.07 | 13.25               | 43.46     | 21.22    | 69.60     | 6.68       | 21.91 | 8.62       | 28.27 | 30.80      | 101.02    | 52.23    | 171.31    | 50.40      | 165.31    | 85.73    | 281.19    |
| 550                   | 11.85 | 38.87 | 7.40   | 24.27 | 14.57               | 47.79     | 23.34    | 76.56     | 7.34       | 24.08 | 9.48       | 31.09 | 33.88      | 111.13    | 57.46    | 188.47    | 55.44      | 181.84    | 94.30    | 309.30    |
| 600                   | 12.92 | 42.38 | 8.08   | 26.50 | 15.90               | 52.15     | 25.46    | 83.51     | 8.01       | 26.27 | 10.34      | 33.92 | 36.96      | 121.23    | 62.68    | 205.59    | 60.48      | 198.37    | 102.87   | 337.41    |

