

## Product Overview

3D kinetic LED display is an advanced visual technology that uses moving LED panels or modules to create dynamic, depth-perceptive animations and holographic-like effects. By synchronizing motion with precise lighting, it produces eye-catching, multi-dimensional visuals ideal for advertising, art installations, and entertainment. This innovative technology is widely used in stage performances, exhibitions, and digital signage for its striking visual impact.

### JR VISUAL TEC LIMITED

[www.jrvisualtec.com](http://www.jrvisualtec.com) [info@jrvisualtec.com](mailto:info@jrvisualtec.com) +86 136 3251 7086 [@jrvisualtec](https://www.facebook.com/jrvisualtec) [@jrvisualtec](https://www.linkedin.com/company/jrvisualtec)  
Building 9, XinMu Innovative Industrial Park, PingHu Street, LongGang District, Shenzhen, China



## 3D Kinetic LED Screen

Creative LED Display Solution

# 3D Kinetic Screen with Die-casting Cabinet Design

Quick Installation And Disassemble Die-casting Aluminum Cabinet For Exhibition, Event And Rental



## Cabinet Structure Design

640mm x 480mm, 12 motion units in 1 die-casting aluminum cabinet, more accurate and faster installation.



## Noise Reduction Design

Using closed-loop stepping drive system, effectively reduce 70% noise.



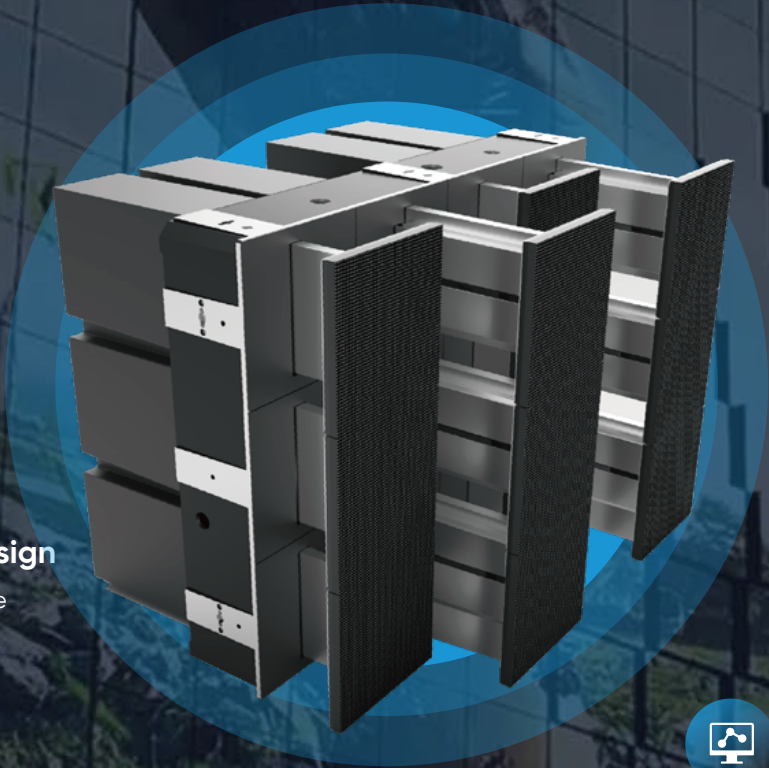
## Front Maintenance Ultra-thin Design

Front maintenance ultra-thin design suitable for embedded compact installation.



## Digital content Editing Software

JR VISUAL own-developed digital content generation software and visual edit-ing interface, make it easy for user to operate.



## Precision Machining Technology

Industrial-grade linear guide rails are used to ensure that themodule gap is only 1 mm.



## Forward Stroke

The forward stroke can reach 200mm,which makes the 3D visual effect more realistic.



## Fast Response

Max, forward speed 300mm/s and Min, forward-back cycle timeless than 0.7s



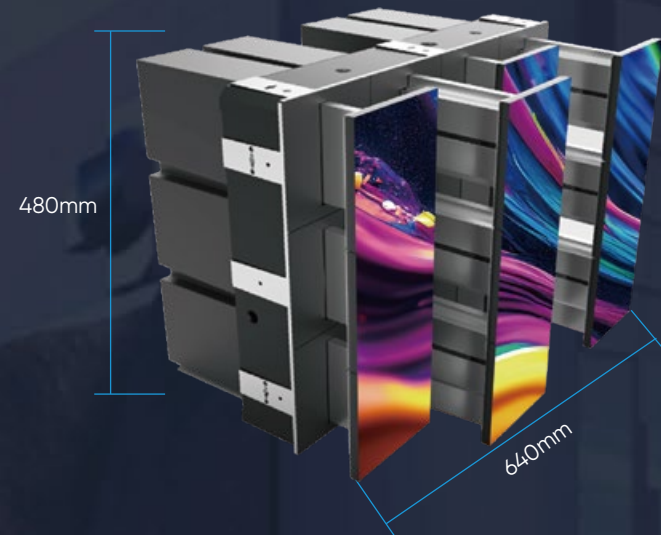
## JR VISUAL Own-developed Control System

Using JR VISUAL own-developed controlling system to realize the synchronization between the video and movement.

# Specification

| Application                         | Indoor                                                                   |                                                                          |           |         | Outdoor                                     |
|-------------------------------------|--------------------------------------------------------------------------|--------------------------------------------------------------------------|-----------|---------|---------------------------------------------|
| Model                               | 160x160mm                                                                | 250x250mm                                                                |           |         | 495x495mm                                   |
| Pixel Pitch                         | 1.98mm                                                                   | 1.5625m                                                                  | 1.94mm    | 2.604mm | 10mm                                        |
| LED Module Dimension(WxH)           | 160 x 160mm                                                              | 248.5 x 248.5 mm                                                         |           |         | 495 × 245 mm                                |
| Gap between Units                   | 1 (0.5~1.5) mm                                                           | 1.5 (1.0~2.0) mm                                                         |           |         | 5(3.5~6.5) mm                               |
| Motion Unit Dimension(WxH)          | 160 x 160mm (0.0256m²)                                                   | 248.5 x 248.5mm (0.0618m²)                                               |           |         | 495 × 495 (0.25m²)                          |
| Resolution of Unit                  | 80×80                                                                    | 160 x 160                                                                | 128 x 128 | 96 x 96 | 48×48                                       |
| Cabinet Dimension(Motion Units Qty) | 640 x 480mm (4×3)                                                        | 500 x 500mm (2x2)                                                        |           |         | 1000 × 1000mm (2×2)                         |
| Cabinet Thickness (Standby mode)    | 320mm                                                                    | 320mm                                                                    |           |         | 1400mm                                      |
| Max. Forward Stroke                 | 200mm                                                                    | 200mm                                                                    |           |         | 600mm                                       |
| Max. Forward Speed                  | 300mm/s                                                                  | 500mm/s                                                                  |           |         | 800mm/s                                     |
| Min. Forward-back Cycle Time        | <0.7s                                                                    | 0.5s                                                                     |           |         | <1.5s                                       |
| Motion Qty per Sqm                  | 39                                                                       | 16                                                                       |           |         | 4                                           |
| Weight per Sqm                      | 80Kg/m²                                                                  | 52Kg/m²                                                                  |           |         | 180Kg/m²                                    |
| Max. Power Capacity                 | 900W/m²                                                                  | 720W/m²                                                                  |           |         | 1,500W/m²                                   |
| Power Supply Requirement            | ≤3KW:220V Single phase                                                   | ≤3KW:220V Single phase                                                   |           |         | ≤3KW:220V Single phase                      |
|                                     | ≥3KW:380V Three phases / Five wires                                      | ≥3KW:380V Three phases/Five wires                                        |           |         | ≥3KW:380V Three phases/Five wires           |
| Screen Brightness                   | ≥700 nits                                                                | ≥600 nits                                                                |           |         | ≥7,000 nits                                 |
| Ambient Temperature                 | 0~40 C                                                                   | 0~40 C                                                                   |           |         | -10~60 C                                    |
| IP Rating                           | IP40                                                                     | IP40                                                                     |           |         | IP65                                        |
| Environmental Attentions            | Indoor use, no corrosive gases, no flammable gases, no oil mist and dust | Indoor use, no corrosive gases, no flammable gases, no oil mist and dust |           |         | Outdoor use                                 |
| Heat Dissipation                    | Open self-cooling (with fan cooling)                                     | Open self-cooling (with fan cooling)                                     |           |         | Semi-closed Self-cooling (with fan cooling) |

## Indoor - 640x480mm Model



### Motion Unit Size

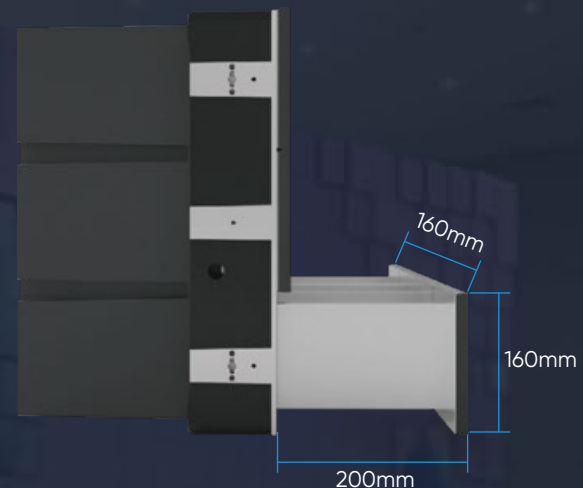
160 x 160mm (0.0256m<sup>2</sup>)

### Cabinet Size(Motion Units Qty)

640 x 480mm (4×3)

### Cabinet Weight

24kg



## Ultra-thin Gap

- ▶ Gap between Units of Indoor 250-I is ≤1.5mm.
- ▶ The precise sliding structure and the extremely fine gap between the screens present more complete and clear content.



## Forward Stroke

- ▶ The forward stroke can reach 200mm.
- ▶ More realistic 3D visual effect.

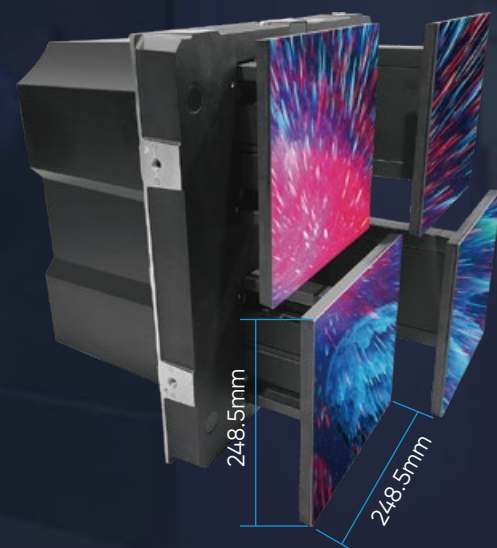


## Precision Machining Technology

- ▶ More than 90% of mechanical parts are precision processed.
- ▶ Industrial linear guides ensure accurate operation.



## Indoor - 500x500mm Model



### Motion Unit Size

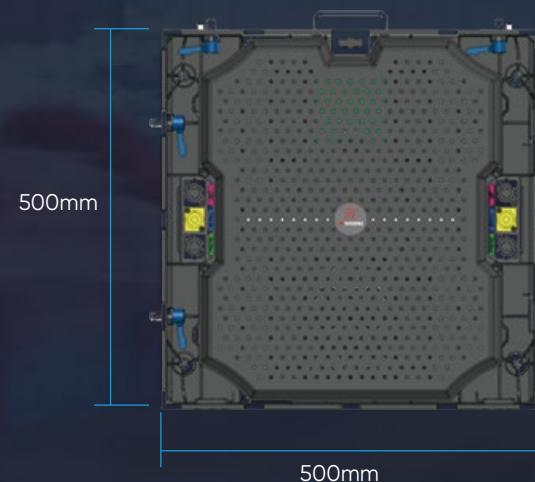
248.5 x 248.5 (0.0618m<sup>2</sup>)

### Cabinet Size(Motion Units Qty)

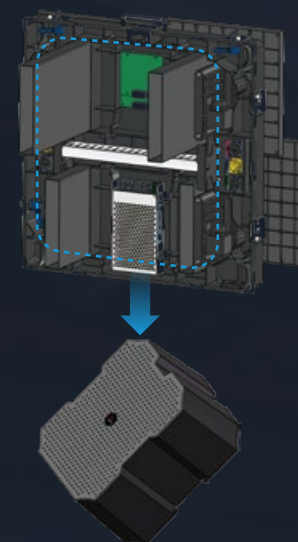
500 x 500mm (2×2)

### Cabinet Weight

13kg

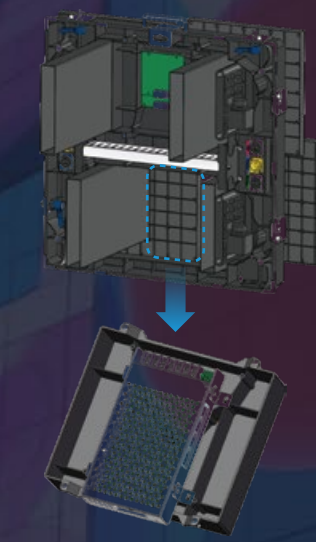


## Maintenance Steps



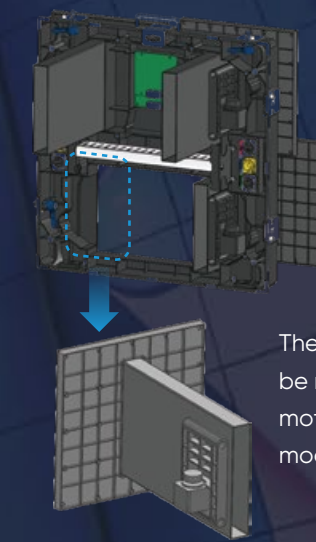
A

Open the back cover to repair the entire circuit, receiving card, and power supply.



B

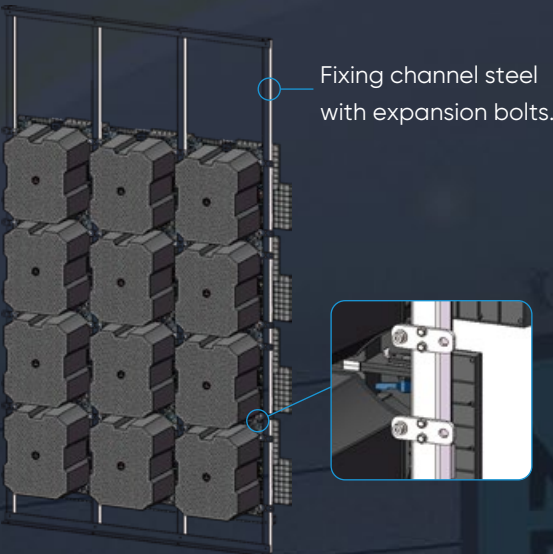
Removed the power supply mounting plate, revealing a large hole.



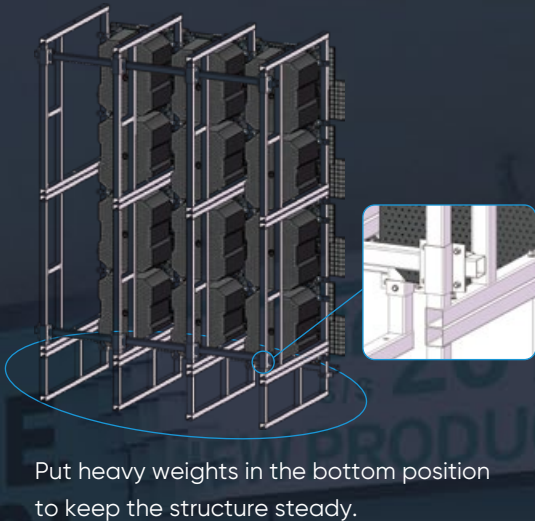
C

The entire motion unit can be removed, and then the motion mechanism and modules can be repaired.

### Fixed To Ceiling Structure



### Stacking Structure



### Exceptionally Slim Profile

The 32cm thickness of the unit effectively minimizes floor space consumption



### Multiple noise reduction design

Low-noise indoor  
Max. Noise Value:  
55dB (A)

Library

Sleeping

Conversation



45dB(A)

55dB(A)

60dB(A)



### Outdoor – 1,000x1,000mm Model



#### Motion Unit Size

495 x 495mm (0.025m<sup>2</sup>)

#### Cabinet Size(Motion Units Qty)

1000 x 1000mm (2×2)

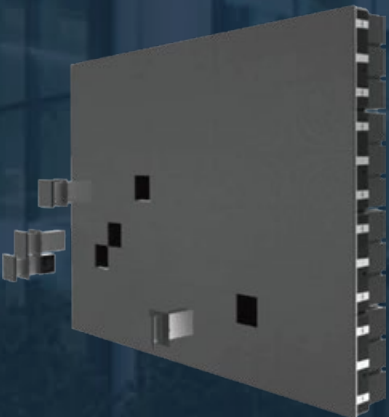
#### Weight Per Sqm

180kg



### Convenient Maintenance

- ▶ The front maintenance which is convenient and fast.
- ▶ The Outdoor adopts internal maintenance, which is safe and completely waterproof.



Indoor

Front Maintenance



Outdoor

Rear Maintenance

## Extremely Fine Gap

The 3D Kinectic LED Screen feature an exceptionally narrow gap between modules, creating a virtually seamless viewing experience. The result is a unified, continuous image, free from distracting lines or separations.



Competitors



JR Visual

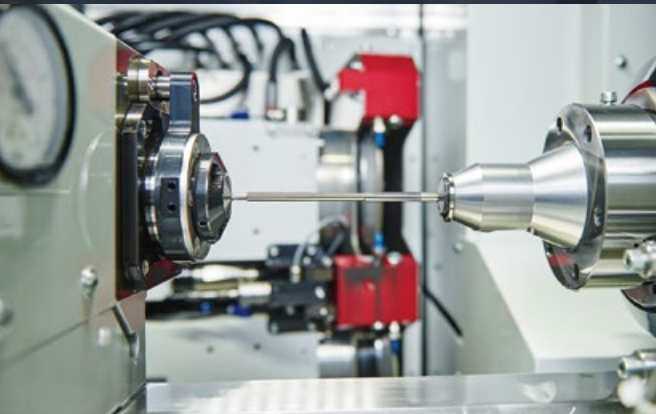
## Independent Development

The digital content editing software especially suitable for the wave screen simplifies the production process of movies and actions.



## Precision Machining

More than 90% are precision processed



## Stable Power Supply

Well-known branded switching power supply with PFC function



## High Precision Linear Guide

Industrial linear guide ensure accurate Operation



## High-Quality Motor

Use high-quality stepping motors to ensure control accuracy



## Interactive Experience

Through telescopic motion, the unit presents content in three dimensions and interacts with the audience by sensing their movements.

It supports event-triggered, real-time, and other interactive methods, creating engaging and participatory experiences for viewers.



Project Case

