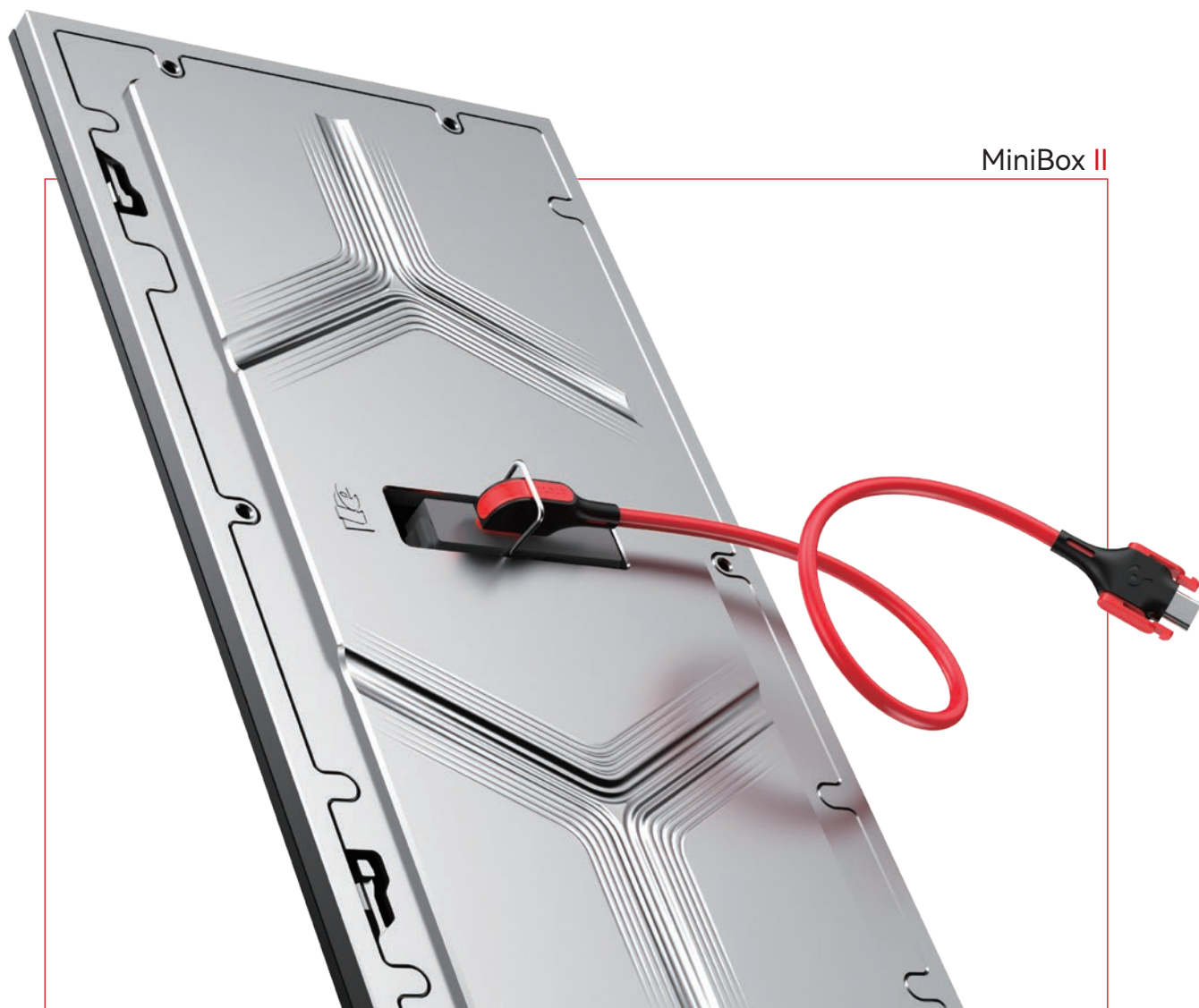


MiniBox II

FINE PITCH LED DISPLAY MODULE

Integrated | Intelligent | Type-C

MiniBox II



AN INNOVATIVE FINE PITCH LED DISPLAY MODULE

MiniBox II is a new generation of LED display products independently developed by Leyard, adopting the industry's first Type-C interface, combining the power and signal cables into one, with faster transmission efficiency and more stable data, and realizing the blind plug-in function of power and signal in the industry for the first time. MiniBox II also highly integrates the power supply, adapter board, and receiver card to create the intelligent control box M16A, which makes the installation, Maintenance and upgrading become simpler, improving the reliability and stability of the display.

LCH II



320MM x 160MM

LCH II Plus



320MM x 180MM



HDR DISPLAY
TRUE-TO-LIFE COLOR

4800HZ

High
Refresh
Rate

800NITS

High
Brightness

18BIT+

High
Gray
Scale



TWO SIZES AVAILABLE

320×160mm / 320×180mm
LED Module Sizes Optional

DTL PROTOCOL

Smart and Fast

NEW CONNECTION TYPE-C CONNECTOR

2 in 1 (Power & Signal)
Stronger Stability, Easier to Install

SEAMLESS SPLICING

Customizable for Any Splicing

SELF-DEVELOPED CHIP

Smart Auto-detect
Strong Anti-EMI Ability

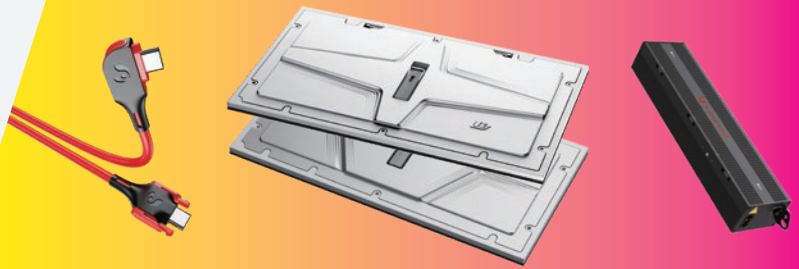
INTELLIGENT CONTROLLER M16A

Highly Integrated
Safe and Reliable

MiniBox II Series

PROFESSIONAL LED DISPLAY KIT MAKE INSTALLATION EASIER

- MiniBox II LED Display Modules
- Intelligent Control Box M16A
- Type-C Cable (Power&Data All in 1)



LCH II & LCH II Plus Module

TWO SIZES AVAILABLE

320x160mm / 320x180mm Optional



LCH II

GENERAL MAINSTREAM SIZE
320MM x 160MM



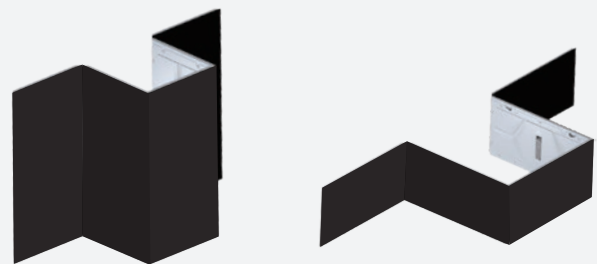
LCH II Plus

16:9 STANDARD FORMAT
320MM x 180MM

SEAMLESS SPLICING

for Any Customizable Solution

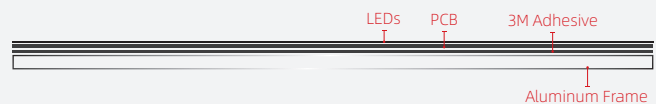
- > Installation without cabinet
- > Customizable Right-angle Splicing



0° FLATNESS

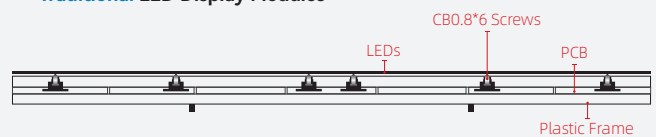
Thermally Conductive 3M Adhesive

► MiniBox II LED Display Modules



MiniBox II, between the PCB and the aluminum shell, is bonded with thermal conductive adhesive to ensure the surface flatness to the greatest extent

► Traditional LED Display Modules

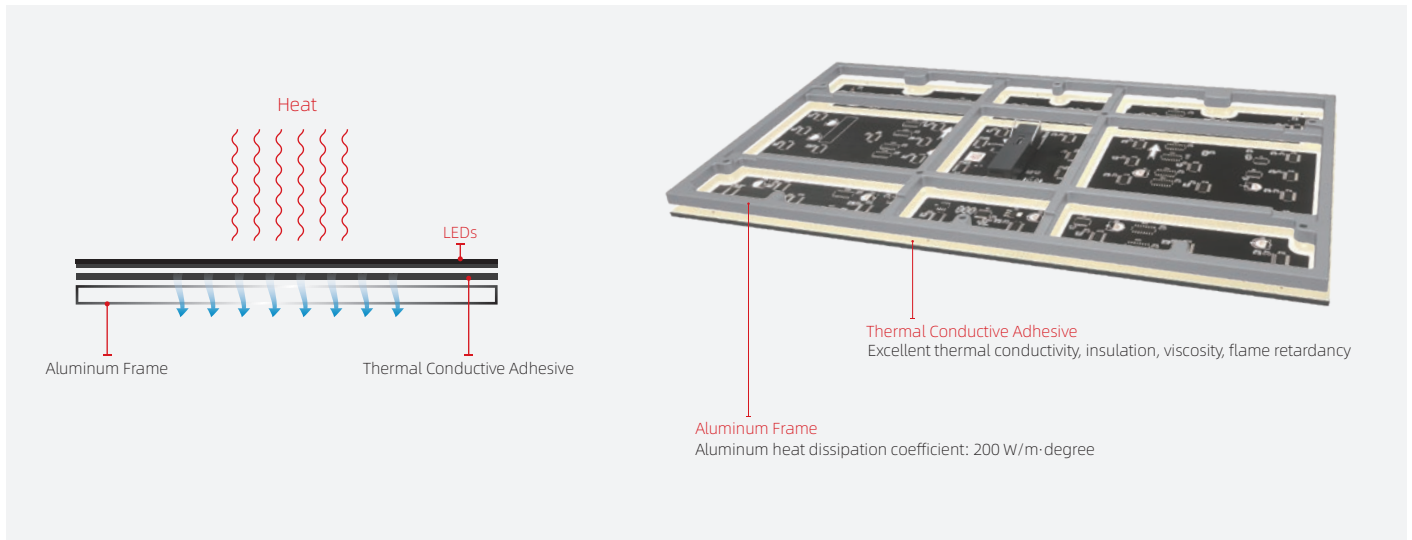


The PCB board is elastic, so after the plastic bottom shell is fixed by locking screws in a conventional assembly, it is prone to arching and deformation at this position, which affects the flatness.

COOLING SYSTEM

Aluminum Frame + Thermal Conductive Adhesive

MiniBox II adopts Cooling system heat dissipation, which greatly improves the physical heat dissipation intensity.



LCH II Flex Module

FLEXIBLE MODULE WITH TYPE C INTERFACE

Power & Data All in One Port



CYLINDER WALL

The Minimum Diameter Can be 1m Formed by LCH II Flex



Controller

INTELLIGENT CONTROLLER M16A



Safe and Reliable

Detection & Protection

- > Intelligent voltage detection
- > Intelligent over-current, over-voltage and over-temperature protection
- > All aluminum frame, excellent heat dissipation



Innovative Integration

Hardware Integrated

Power Supply + HUB Board + Receiving Card



Integrated Power & Signal Unified Output



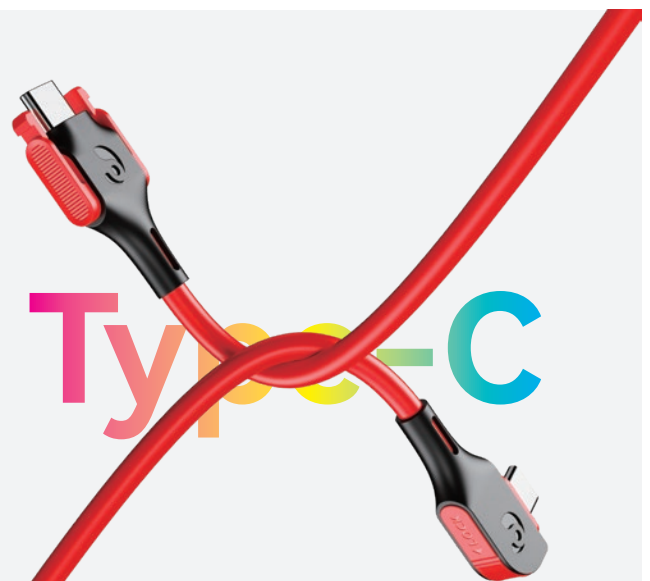
Type-C

TYPE-C CONNECTOR

Highly Integrated - Power and Data in One Cable

It is more convenient to insert the cable's connector into the port of LED module without distinguishing the correct direction.

- > MORE CONVENIENT CONNECTION
- > MORE EFFICIENT INSTALLATION



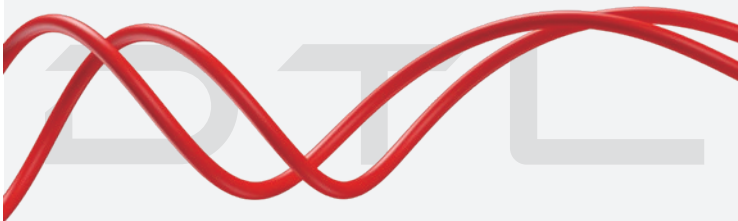
SAFETY BUCKLE DESIGN

Safety buckle design of the module's back cover which locks the connector position to ensure that the cables are secure and no loose.



DTL TRANSMISSION PROTOCOL

Self-developed



INTELLIGENT DATA TRANSMISSION

Meets USB3.1 transmission, more efficient and stable

EASY INSTALLATION AND MAINTENANCE

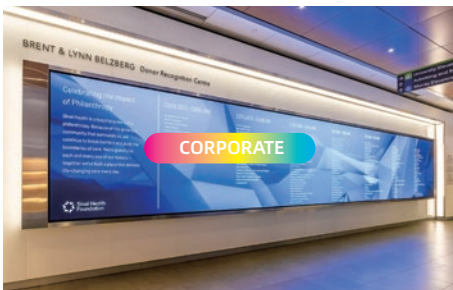
- Highly Integrated
- High Speed Transmission
- Easy Installation Maintenance
- More Stable



EXTENSIVE APPLICATIONS

Vertical Markets & Projects Reference

Leyard MiniBox II is extensively used due to their high-resolution visuals and versatile applications in various indoor settings, including control rooms, conference halls, retail stores, and hotels. They offer a seamless viewing experience with vibrant colors and sharp images, making them ideal for delivering captivating and immersive visual content.



CORPORATE



CONFERENCE



RESIDENTIAL



HOTEL



CONTROL ROOM



RETAIL & STORE

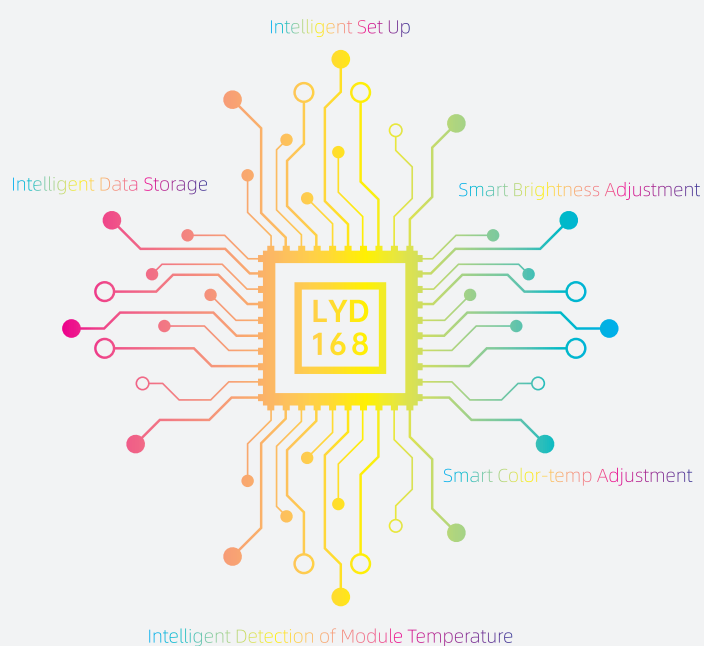


IMPROVE THE DISPLAY EFFECT

Higher Grayscale Level | Higher Refresh Rate

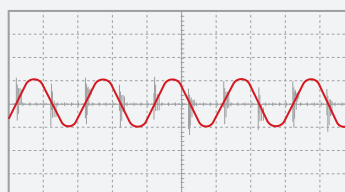
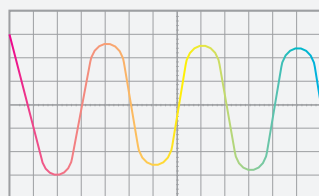
CHIP LYD168

Self-developed



ANTI-EMI CAPABILITY

Strong anti-electromagnetic interference ability



ULTRA HIGH REFRESH RATE - 4800HZ



HIGH REFRESH RATE



LOW REFRESH RATE

* High refresh rate display brings smoother video playback and also can avoid problems such as unclear display, flickering or moire pattern when using a mobile phone or camera to record or photograph the LED screen.

ULTRA HIGH BRIGHTNESS - 800NITS



HIGH BRIGHTNESS



LOW BRIGHTNESS

* LED display screens with too low brightness often lead to dim and unclear images.

ULTRA HIGH GRAYSCALE - 18BIT+



HIGH GRAYSCALE



LOW GRAYSCALE

* Higher grayscale makes the images presented by the LED display more colorful and delicate, and shows more image details.

ULTRA WIDE COLOR GAMUT

MiniBox II LED displays with a wide color gamut can maintain consistent color reproduction across different viewing angles, ensuring that the colors remain accurate and uniform, resulting in more lifelike and visually stunning images and videos.



HDR DISPLAY / SUPPORT 3D/HDR

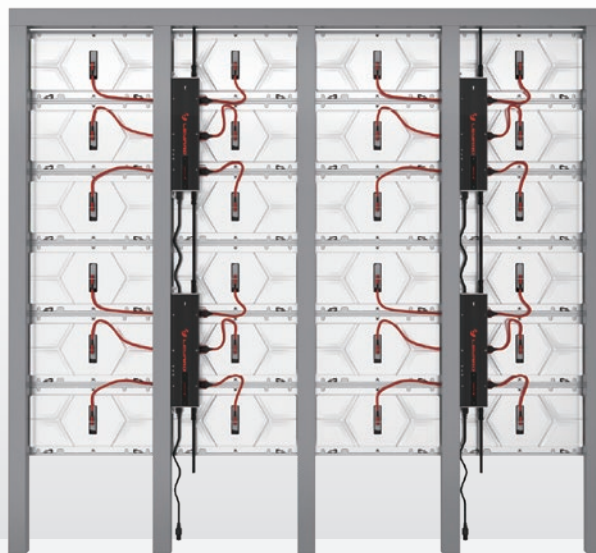
Compared with ordinary images, MiniBox II can provide more dynamic range and image details. According to LDR (Low-Dynamic Range) images with different exposure times, and use the best details of the LDR image corresponding to each exposure time to synthesize the final HDR image, which can better reflect the visual effect in the real environment.



SIMPLIFY INSTALLATION

Installation Without Cabinet

Designed for Easier Installation and Greatly Improve Its Efficiency of the Whole Engineering Process



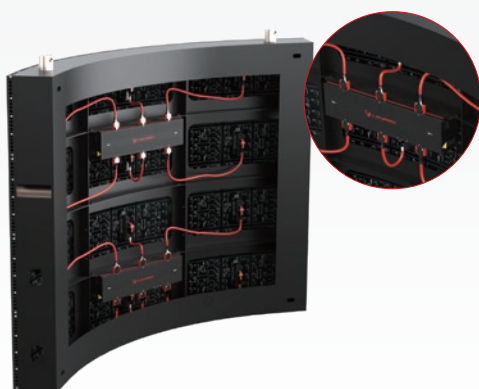
Note: The order of connecting modules is according to the serial number marked on the ports of the intelligent controller M16A.

FLEX MODULE WITH SIMPLE CABINET

Easy and Fast Intallation & Maintenance for Concave and Convex Applications

TIDY STRUCTURE

Highly Integrated, Clean and Clear

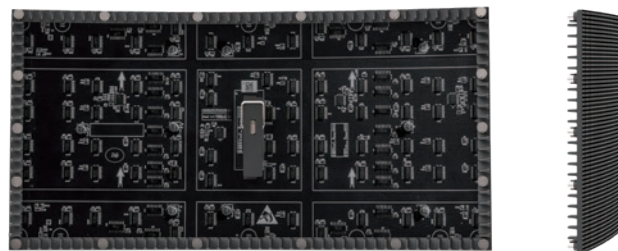


SIMPLE CABINET

Can be Customized According to Specific Requirement



SPECIFICATIONS - LCH II Flex



Item	LCH1 II Flex	LCH1.2 II Flex	LCH1.5 II Flex	LCH1.8 II Flex	LCH2 II Flex	LCH2.5 II Flex
Pixel Configuration	SMD					
Pixel Pitch (mm)	1	1.25	1.53	1.86	2	2.5
Module Resolution (WxH)	320x160	256*128	208*104	172*86	160*80	128*64
Module Size (mm)(WxH)	320x160					
Module Weight(Kg)	0.21±0.05					
Unit Area (m²)	0.0512					
Pixel Density	1,000,000	640,000	422,500	288,906	250,000	160,000
Brightness (nits)	≥550	≥550	≥500	≥500	≥500	≥600
Color Temperature (K)	3000~38000 Adjustable					
Horizontal Viewing Angle (°)	160					
Vertical Viewing Angle (°)	140					
Deviation of LED Luminance Center	<3%					
Brightness Uniformity	≥97%					
Contrast Ratio	8000:1					
Min Diameter of Concave & Convex Application (m)	1					
MAX. Power Consumption (W/m²)	≤430	≤430	≤345	≤345	≤345	≤390
AVG. Power Consumption (W/m²)	≤144	≤144	≤115	≤115	≤115	≤130
Power Supply	DC:4.2					
Single Module Current (A)	5	5	4	4	4	4.5
Drive Mode (Constant Current Drive)	54S	64S	52S	43S	40S	64S
Frame Rate(Hz)	50&60					
Refresh Rate(Hz)	≥4800					
Lifetime(hrs)	100,000					
Operation Temperature (°C)	-10~40					
Storage Temperature (°C)	-20~60					
Operation Humidity (RH)	10~80% no condensation					
Storage Humidity (RH)	10~85% no condensation					

Remark: Above data is subject to change without prior notice.