

# PRODUCT SPECIFICATION

## Multimedia Player HD-A6L

Version 1.3



## **1. Product Overview**

A6L is an LED display multimedia player that supports playing videos, pictures, GIF animations, texts, WPS documents, tables, clocks, timing, and other programs. It integrates functions such as asynchronous playback, synchronous playback, and HDMI splicing playback, supporting multi-terminal control and release programs.

Standard configuration of dual-band Wi-Fi, support mobile phone APP - "LedArt" wireless control; support optional mobile phone/tablet wireless screen casting display; support access to the "XiaoHui Cloud" platform, easy to achieve Internet remote cluster management; The capacity storage space makes asynchronous playback worry-free; it supports external connection of various environmental monitoring sensors to realize real-time viewing of environmental monitoring data.

A6L has high video playback performance, added terminal network security protection mechanism, simple software operation, and complete functions. It applied to LED displays in various commercial display, smart display and other fields.

## **2. Product Features**

#### Input:

- 1. Support 1 Gigabit communication network port for debugging parameters, faster program sending speed;
- 2. Support 1 HDMI IN input interface, support automatic zooming of synchronous pictures, and support synchronous and asynchronous picture-in-picture functions;
- 3. Support 1 channel HDMI LOOP IN input interface, support any resolution synchronous picture, support splicing and cascading;
- 4. Support 1 channel USB2.0 (custom OTG/USB mode), 1 channel USB3.0 communication interface, which can be used for inserting programs and expanding capacity;
- 5. Supports 2 channels sensor input interface, externally connected to various environmental monitoring sensors.

#### Output:

- 1. Standard 4 Gigabit output network ports, directly cascaded HD-R series receiving card control display;
- 2. The maximum control range is 2.6 million pixels, the maximum horizontal (discounted) support is 65,536 pixels, and the maximum vertical support is 4096 pixels;



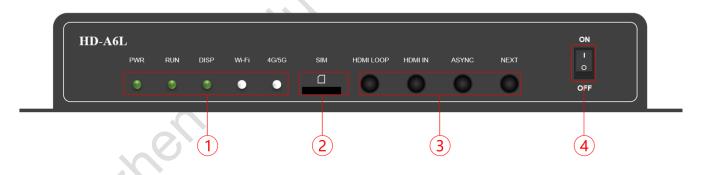
- 3. 1 channel TRS 3.5mm standard two-channel audio output;
- 4. 1 channel HDMI signal output, which can be used for data source or screen monitoring of HDMI input interface.

#### **Functions:**

- 1. Standard 2.4GHz and 5GHz Wi-Fi, support mobile phone APP wireless control (support STA mode, in this mode, the device can connect to the nearby Wi-Fi network);
- 2. Support HDMI splicing, used for LED advertising machine to realize multi-screen splicing playback;
- 3. Support multi-channel video window playback (support up to 2-channel 4K or 6-channel 1080P or 10-channel 720P or 20-channel 360P);
- 4. Support synchronous and asynchronous switching playback;
- 5. Support 4G/5G (optional) access to XiaoHui Cloud platform to realize Internet remote cluster management;
- 6. Support optional mobile phone, tablet and computer wireless screen casting.

## 3. Appearance Description

#### Front panel:



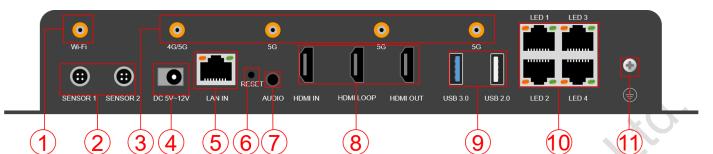
| Serial<br>number | Name          | Description   |
|------------------|---------------|---|
| 5                |               | <b>PWR</b> : Power indicator light, the green light is always on, and the power |
| 1                | Working light | input is normal   |
| 1                |               | RUN: System running light, the green light is flashing, the operating           |
|                  |               | system is running normally; the green light is always on or off, the system     |



|          |                 | is running abnormally  |  |  |  |
|----------|-----------------|--|--|--|--|
|          |                 | <b>DISP</b> : Display indicator, green light flashes, the FPGA system is running |  |  |  |
|          |                 | normally; the green light is always on or off and the system is running          |  |  |  |
|          |                 | abnormally   |  |  |  |
|          |                 | Wi-Fi: Wireless indicator light, in AP mode, the green light is blinking; in     |  |  |  |
|          |                 | STA mode, the green light is always on. The red light is blinking, the Wi-Fi     |  |  |  |
|          |                 | is abnormal, and the light is off; the Wi-Fi bridge cannot connect to the        |  |  |  |
|          |                 | server, and the yellow light is always on  |  |  |  |
|          |                 | 4G/5G: Communication network indicator, green light is always on, the            |  |  |  |
|          |                 | connection to the cloud server is successful; yellow light is always on, the     |  |  |  |
|          |                 | cloud service cannot be connected; red light is always on, there is no signal    |  |  |  |
|          |                 | or the SIM is in arrears or cannot dial; the red light is blinking, the SIM      |  |  |  |
|          |                 | cannot be detected; No light, no module detected                                 |  |  |  |
| 0        |                 | Micro SIM card slot, providing 4G/5G networking for remote control               |  |  |  |
| 2        | SIM card slot   | (optional 4G/5G module)  |  |  |  |
|          |                 | HDMI LOOP: HDMI stitching mode   |  |  |  |
| <u>_</u> |                 | HDMI IN: HDMI signal input, synchronous playback                                 |  |  |  |
| 3        | Function button | ASYNC: Asynchronous mode switching   |  |  |  |
| 5        |                 | NEXT: Switch program play  |  |  |  |
|          | 0.11            | Control the power of the player box, ON means power on and OFF means             |  |  |  |
| 4        | Switch          | power off  |  |  |  |
|          | •               |  |  |  |  |



#### Rear panel:



| Serial<br>number | Name               | Description  |  |  |  |  |  |
|------------------|--------------------|--|--|--|--|--|--|
| 1                | Wi-Fi antenna      | Connect Wi-Fi antenna to enhance wireless signal   |  |  |  |  |  |
| 2                | Sensor             | External temperature, humidity, brightness, wind speed, wind direction, noise, PM2.5, PM10, CO <sub>2</sub> and other sensors  |  |  |  |  |  |
| 3                | 4G/5G antenna      | Connect 4G/5G antenna (4G with 1 antenna, 5G with 4 antennas, optional)  |  |  |  |  |  |
| 4                | Power supply       | 5V 3A ,12V 1.5A  |  |  |  |  |  |
| 5                | Input network port | Gigabit input network port, connect to computer to debug and release programs, can be used to access LAN or Internet   |  |  |  |  |  |
| 6                | Reset              | Reset pinhole  |  |  |  |  |  |
| 7                | Audio output       | TRS 3.5mm standard two-channel audio output port   |  |  |  |  |  |
| 8                | HDMI               | <ul> <li>HDMI IN: HDMI1.4 synchronous signal input interface, support adaptive scaling</li> <li>HDMI LOOP: HDMI1.4 synchronous signal input or splicing input interface</li> <li>HDMI OUT: HDMI1.4 output interface</li> </ul> |  |  |  |  |  |
| 9                | USB                | <b>USB</b> : USB3.0 for updating programs, inserting programs or expanding capacity  |  |  |  |  |  |



|    |                     | OTG: Used for debugging or upgrading firmware (default U disk function, |  |  |
|----|---------------------|---|--|--|
|    |                     | factory configurable)   |  |  |
| 10 | Output network port | Gigabit output network port, cascaded with HD-R series receiving card   |  |  |
| 11 | Ground wire         | Ground wire connection port   |  |  |

## 4. Dimensions

## Dimensions (mm): 259 $\bigcirc$ $\bigcirc$ 0 0 0 0 0 $\bigcirc$ Г 42.3 7.5 <sup>∲</sup> 3.5 140.3 81.3 272 $\rightarrow$ Ф 287

Tolerance: ±0.3 Unit: mm



## 5. Parameters

### 1. Product Specifications:

| Electrical               | Input power   | DC 5V-12V                      |  |  |  |
|--------------------------|---|--------------------------------|--|--|--|
| parameters               | Maximum power consumption   | 18W                            |  |  |  |
| Storage Space            | Random access memory  | 2GB                            |  |  |  |
| Storage Space            | Internal storage  | 16GB                           |  |  |  |
| Storage                  | Temperature   | -40°C ~ 80°C                   |  |  |  |
| environment              | Humidity  | 0%RH~80%RH (No condensation)   |  |  |  |
| Working                  | Temperature   | -40°C ~ 70°C                   |  |  |  |
| environment              | Humidity  | 0%RH ~ 80%RH (No condensation) |  |  |  |
| Packaging<br>information | list:<br>1×A6L<br>1 × HDMI cable<br>1 × power adapter<br>1×WiFi Glue Stick Antenna<br>1× Certificate of qualification<br>Note: 4G/5G antennas are optional with 4G/5G modules 1/4 |                                |  |  |  |
| Size                     | 287mm×140.3mm×42.3mm  |                                |  |  |  |
| Net weight               | 1004g   |                                |  |  |  |
|                          | IP20  |                                |  |  |  |
| Protection degree        | Please pay attention to water resistance, e.g. prevent water dripping into the product,   |                                |  |  |  |
|                          | do not get wet or rinse the product   |                                |  |  |  |



|                 | Android11.0 operating system software |
|-----------------|---------------------------------------|
| System software | Android terminal application software |
|                 | FPGA software                         |
|                 |                                       |

### 2. Pictures Decoding Specifications:

| Category | Decoding                 | Size                             | Format    | Remarks   |  |
|----------|--------------------------|----------------------------------|-----------|---|--|
| JPEG     | JFIF file<br>fommat 1.02 | 96x32piels to<br>817×8176 pixels | JPG, JPEG | Non-interlaced scanning is not<br>supported; SRGB JPEG is supported;<br>Adobe RGB JPEG is supported |  |
| BMP      | BMP                      | Unlimited                        | BMP       | NA  |  |
| GIF      | GIF                      | Unlimited                        | GIF       | NA  |  |
| PNG      | PNG                      | Unlimited                        | PNG       | NA  |  |
| WEBP     | WEBP                     | Unlimited                        | WEBP      | NA  |  |
|          |                          |                                  |           |   |  |

## 3. Videos Decoding Specifications:

| Category  | Decoding | Resolution                             | Maximum<br>frame rate | Maximum<br>bit rate | Format                                 | Remarks  |
|-----------|----------|--|-----------------------|---------------------|--|--|
| MPEG-1/2  | MPEG-1/2 | 48×48 pixels to<br>1920×1088<br>pixels | 30fps                 | 80Mbps              | DAT, MPG,<br>VOB, TS                   | Support Field<br>Coding                                |
| MPEG-4    | MPEG-4   | 48×48 pixels to<br>1920×1088<br>pixels | 30fps                 | 38.4Mbps            | AVI, MKV,<br>MP4, MOV,<br>3GP          | MS, MPEG4<br>v1/v2/v3, and<br>GMC are not<br>supported |
| H.264/AVC | H.264    | 48×48 pixels to<br>4096×2304<br>pixels | 2304P@60f<br>ps       | 80Mbps              | AVI, MKV,<br>MP4, MOV,<br>3GP, TS, FLV | Field Coding,<br>MBAFF are<br>supported                |



| MVC            | H.264<br>MVC   | 48×48 pixels to<br>4096×2304<br>pixels                          | 2304P@60f<br>ps | 100Mbps  | MKV , TS                  | Only Stereo<br>High Profile is<br>supported    |
|----------------|----------------|---|-----------------|----------|---------------------------|--|
| H.265/HEVC     | H.265/HE<br>VC | 64×64 pixels to<br>4096×2304<br>pixels                          | 2304P@60f<br>ps | 100Mbps  | MKV , MP4,<br>MOV , TS    | Main Profile,<br>Tile & Slice are<br>supported |
| GOOGLE<br>VP8  | VP8            | 48×48 pixels to<br>1920×1088<br>pixels                          | 30fps           | 38.4Mbps | WEBM , MKV                | NA   |
| GOOGLE<br>VP9  | VP9            | 64×64 pixels to<br>4096×2304<br>pixels                          | 60fps           | 80Mbps   | WEBM , MKV                | NA   |
| H.263          | H.263          | SQCIF(128×96)<br>QCIF(176×144)<br>CIF(352×288)<br>4CIF(704×576) | 30fps           | 38.4Mbps | 3GP, MOV,<br>MP4          | H.263+ is not<br>supported                     |
| VC-1           | VC-1           | 48×48 pixels to<br>1920×1088<br>pixels                          | 30fps           | 45Mbps   | WMV, ASF, TS,<br>MKV, AVI | NA   |
| MOTION<br>JPEG | MJPEG          | 48×48 pixels to<br>1920×1088<br>pixels                          | 60fps           | 60Mbps   | AVI                       | NA   |

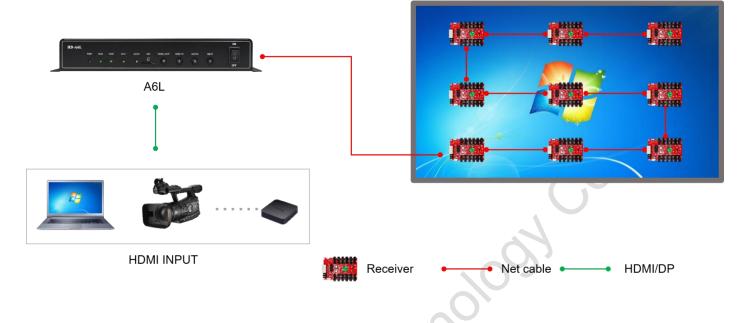


## 6. Application Scenarios

1. Single-node control, support Wi-Fi, network port direct connection, USB interface for communication.







3. Synchronous control, through HDMI signal input, synchronous playback.

4. Multi-screen splicing application: use HDMI high-definition signal lines to splice in series, and automatically splice the contents of multiple display screens into an overall picture.





5. Mobile phone/tablet wireless screen casting display (Optional).



SENSOR 1

SENSOR 2

DC 5V~12V

LAN IN

AUDIO

HDMI IN

HDMI LOOP

HDMI OUT

USB 3.0

USB 2.0

LED 2

LED 4







#### Illustration:

Welcome to choose Huidu Technology products. There may be differences between the product pictures in the specification and the actual appearance (such as interface caps, antenna installation, etc.), please refer to the actual product. If you have any questions, please contact technical support or salesperson for confirmation.

#### Version Description

V1.1 Update the loading capacity to 2.6 million pixels and update the USB interface tag.

V1.2 Update the description of the wireless screen casting feature.

V1.3 Update the Max width up to 65,536 pixels.