



PRODUCT SPECIFICATION

Multimedia Player
HD-A4L

Version 1.0

I . Product Overview

A4L 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, supporting multi-terminal control and release programs.

Standard configuration of Wi-Fi, support mobile phone APP - "LedArt" wireless control; support mobile phone/tablet wireless screen 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.

A4L has high video playback performance, added terminal network security protection mechanism, simple software operation, complete functions, and ultra-high cost performance. It can be applied to LED displays in various commercial display, smart display and other fields.

II. 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 USB2.0 (custom OTG/USB mode), 1 channel USB3.0 communication interface, which can be used for inserting programs and expanding capacity;

4. Supports 2 channels sensor input interface, externally connected to various environmental monitoring sensors.

Output:

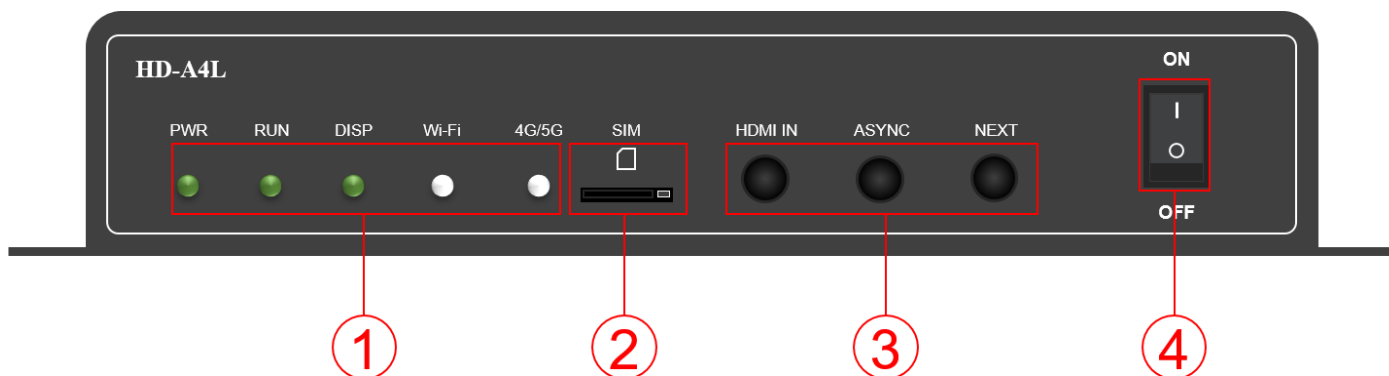
1. Standard 2 Gigabit output network ports, directly cascaded HD-R series receiving card control display;
2. The maximum control range is 655,360 pixels, the maximum horizontal (discounted) support is 16384 pixels, and the maximum vertical support is 4096 pixels;
3. 1 channel TRS 3.5mm standard two-channel audio output.

Functions:

1. Standard 2.4GHz 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 multi-channel video window playback (support up to 2-channel 4K or 6-channel 1080P or 10-channel 720P or 20-channel 360P);
3. Support synchronous and asynchronous switching playback;
4. Support 4G/5G (optional) access to XiaoHui Cloud platform to realize Internet remote cluster management;
5. Support mobile phone, tablet and computer wireless projection.

III. Appearance Description

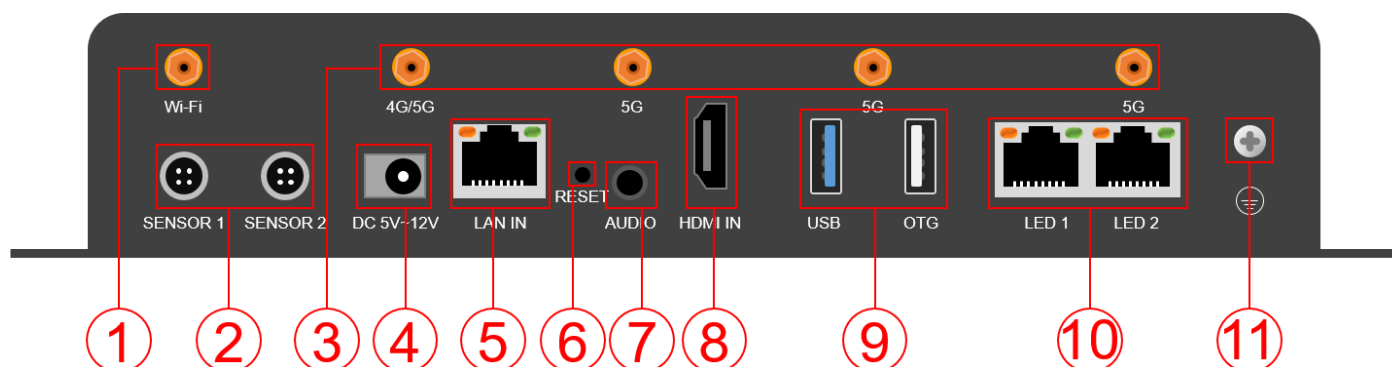
Front panel:



| Serial number | Name | Description |
|---------------|---------------|--|
| 1 | Working light | <p>PWR: Power indicator light, the green light is always on, and the power input is normal</p> <p>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</p> <p>DISP: 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</p> <p>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</p> |

| | | |
|---|-----------------|---|
| | | <p>bridge cannot connect to the server, and the yellow light is always on</p> <p>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</p> |
| 2 | SIM card slot | Nano SIM card slot, providing 4G/5G networking for remote control (optional 4G/5G module) |
| 3 | Function button | <p>HDMI IN: HDMI signal input, synchronous playback</p> <p>ASYNC: Asynchronous mode switching</p> <p>NEXT: Switch program play</p> |
| 4 | Switch | Control the power of the player box, ON means power on and OFF means power off |

Rear panel:

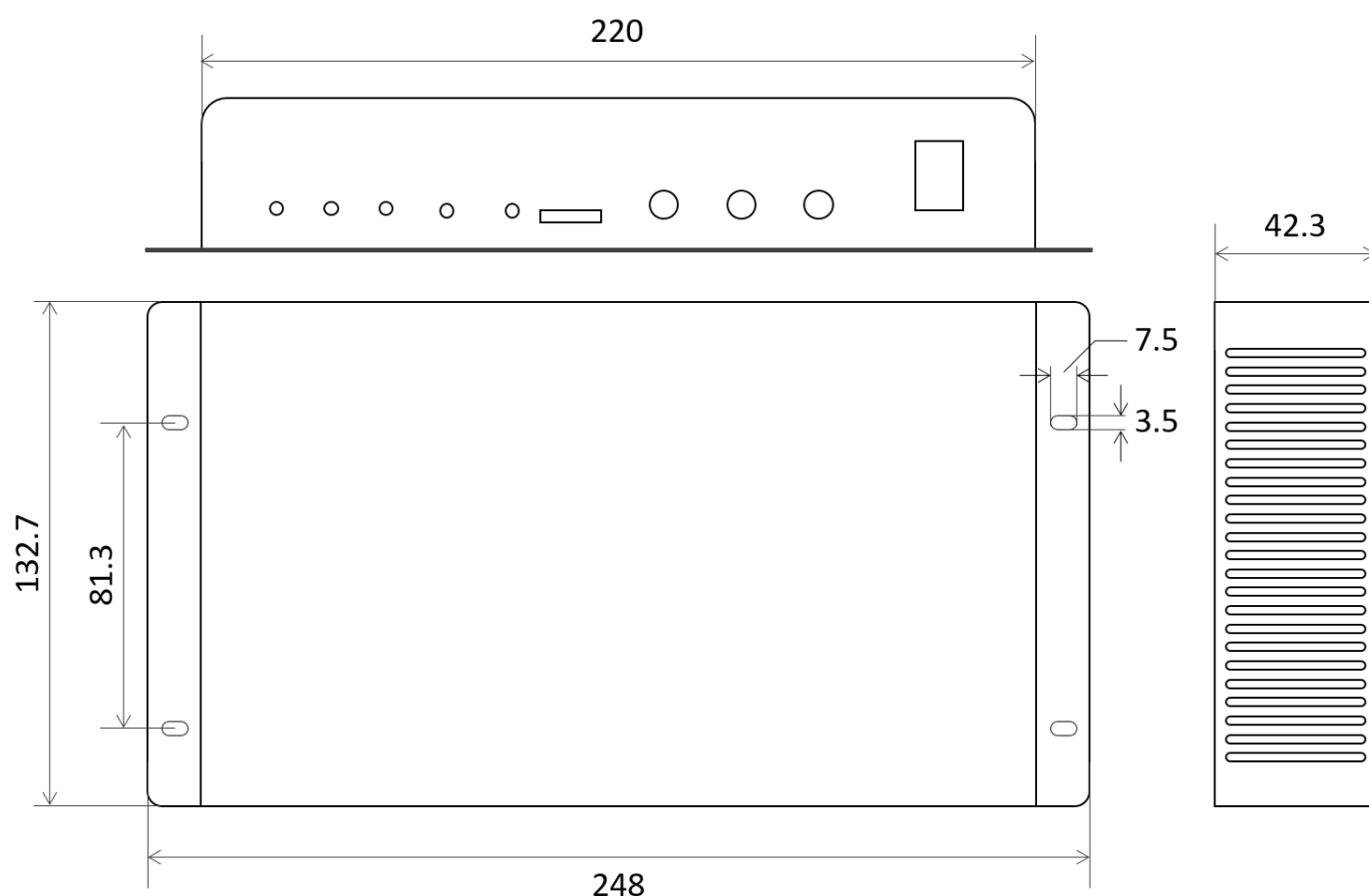


| Serial number | Name | Description |
|---------------|--------------------|---|
| 1 | Wi-Fi antenna | Connect Wi-Fi antenna to enhance wireless signal |
| 2 | Sensor | External temperature, humidity, brightness, wind speed, wind direction, noise, PM2.5, PM10, CO ₂ and other sensors |
| 3 | 4G/5G antenna | 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 | HDMI IN: HDMI1.4 synchronous signal input interface, support adaptive scaling |
| 9 | USB | USB: USB3.0 for updating programs, inserting programs or expanding capacity |

| | | |
|----|---------------------|--|
| | | OTG : Used for debugging or upgrading firmware (default USB 2.0 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 |

IV. Product Parameters

Dimensions (mm):



Tolerance: ± 0.3 Unit: mm

Product Specifications:

| | | |
|------------------------------|---|--------------------------------|
| Electrical parameters | Input power | DC 5V-12V |
| | Maximum power consumption | 18W |
| Storage Space | Random access memory | 2GB |
| | Internal storage | 16GB |
| Storage environment | Temperature | -40℃ ~ 80℃ |
| | Humidity | 0%RH ~ 80%RH (No condensation) |
| Working environment | Temperature | -40℃ ~ 70℃ |
| | Humidity | 0%RH ~ 80%RH (No condensation) |
| Packaging information | list: 1×A4L 1 x HDMI cable 1 x power adapter 1×WiFi Glue Stick Antenna 1× Certificate of qualification Note: 4G/5G antennas are optional with 4G/5G modules 1/4 | |
| Size | 287mm×140.3mm×42.3mm | |
| Net weight | 1004g | |

| | |
|--------------------------|--|
| Protection degree | <p>IP20</p> <p>Please pay attention to water resistance, e.g. prevent water dripping into the product, do not get wet or rinse the product</p> |
| System software | <p>Android11.0 operating system software</p> <p>Android terminal application software</p> <p>FPGA software</p> |

Media decoding specifications:

Pictures

| Category | Decoding | Size | Format | Remarks |
|----------|-----------------------|-------------------------------|----------|---|
| JPEG | JFIF file fommat 1.02 | 96x32piels to 817x8176 pixels | JPG、JPEG | Non-interlaced scanning is not supported; SRGB JPEG is supported; 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 |

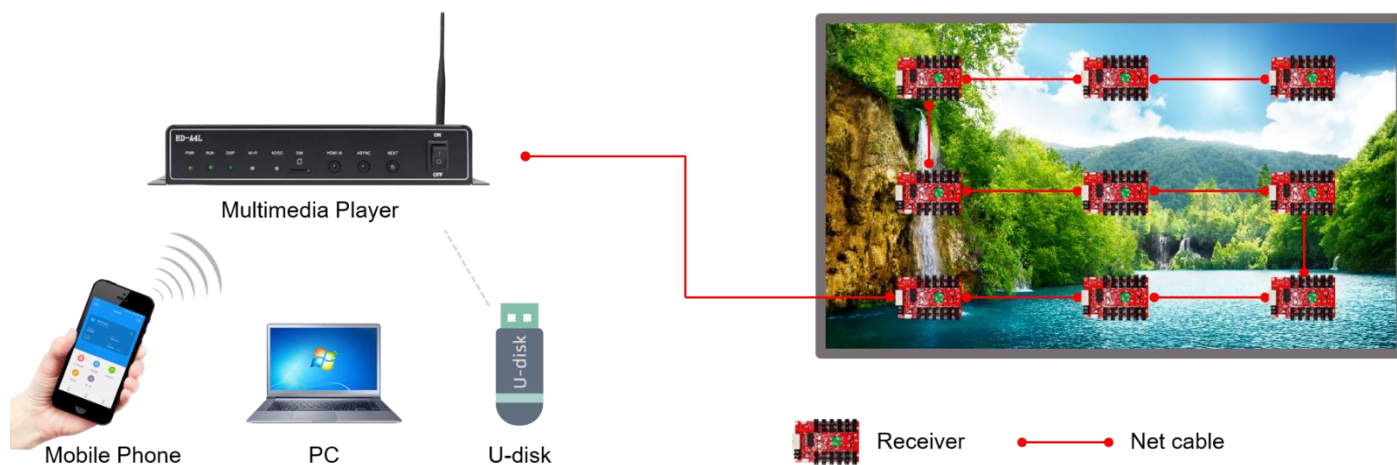
Videos

| Category | Decoding | Resolution | Maximum frame rate | Maximum bit rate (Ideal situation) | Format | Remarks |
|------------|------------|----------------------------------|--------------------|------------------------------------|----------------------------|---|
| MPEG-1/2 | MPEG-1/2 | 48x48 pixels to 1920x1088 pixels | 30fps | 80Mbps | DAT、MPG、VOB、TS | Support Field Coding |
| MPEG-4 | MPEG-4 | 48x48 pixels to 1920x1088 pixels | 30fps | 38.4Mbps | AVI、MKV、MP4、MOV、3GP | MS, MPEG4 v1/v2/v3, and GMC are not supported |
| H.264/AVC | H.264 | 48x48 pixels to 4096x2304 pixels | 2304P@60fps | 80Mbps | AVI、MKV、MP4、MOV、3GP、TS、FLV | Field Coding, MBAFF are supported |
| MVC | H.264 MVC | 48x48 pixels to 4096x2304 pixels | 2304P@60fps | 100Mbps | MKV、TS | Only Stereo High Profile is supported |
| H.265/HEVC | H.265/HEVC | 64x64 pixels to 4096x2304 pixels | 2304P@60fps | 100Mbps | MKV、MP4、 | Main Profile, Tile & Slice are supported |

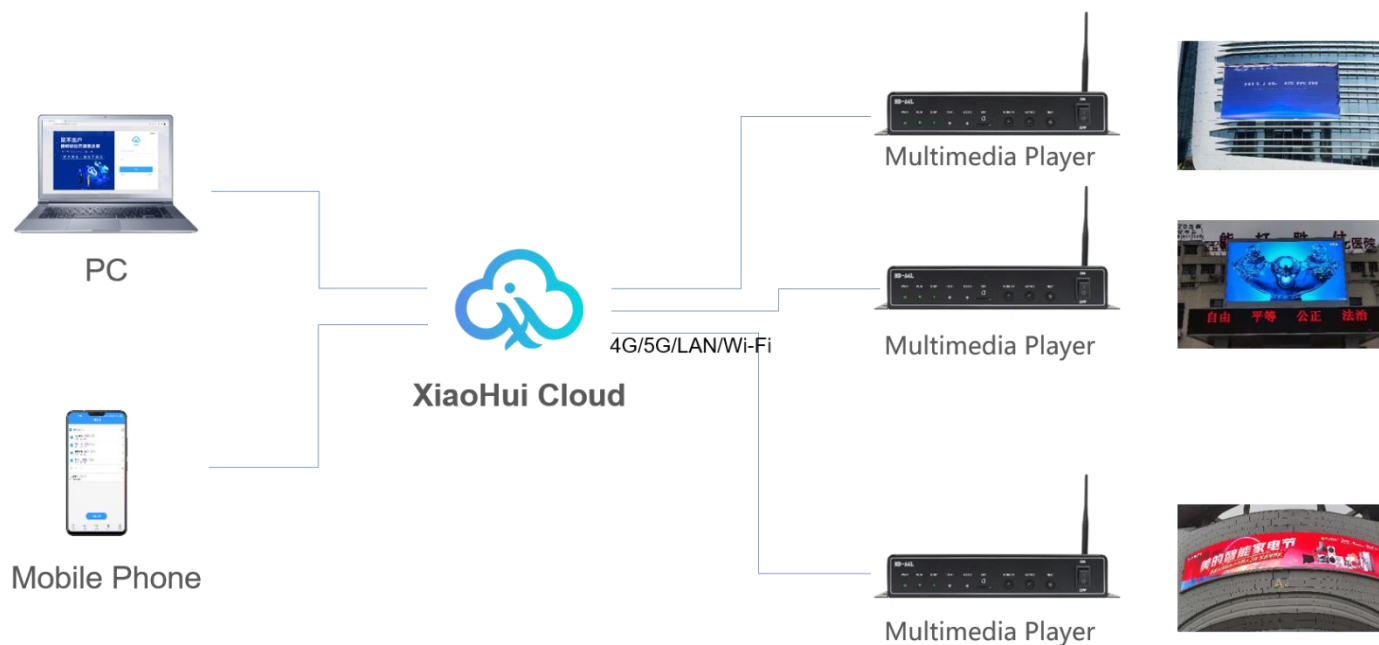
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|----------------|-------|---|-------|----------|------------------------------------|----------------------------|
| | | | | | MOV 、 TS | |
| GOOGLE VP8 | VP8 | 48x48 pixels to 1920x1088 pixels | 30fps | 38.4Mbps | WEBM 、 MKV | NA |
| GOOGLE VP9 | VP9 | 64x64 pixels to 4096x2304 pixels | 60fps | 80Mbps | WEBM 、 MKV | NA |
| H.263 | H.263 | SQCIF(128 x96) QCIF(176x 144) CIF(352x28 8) 4CIF(704x5 76) | 30fps | 38.4Mbps | 3GP、 MOV、 MP4 | H.263+ is not supported |
| VC-1 | VC-1 | 48x48 pixels to 1920x1088 pixels | 30fps | 45Mbps | WMV、 ASF、 TS、 MKV、 AVI | NA |
| MOTION JPEG | MJPEG | 48x48 pixels to 1920x1088 pixels | 60fps | 60Mbps | AVI | NA |

V. Application Scenarios

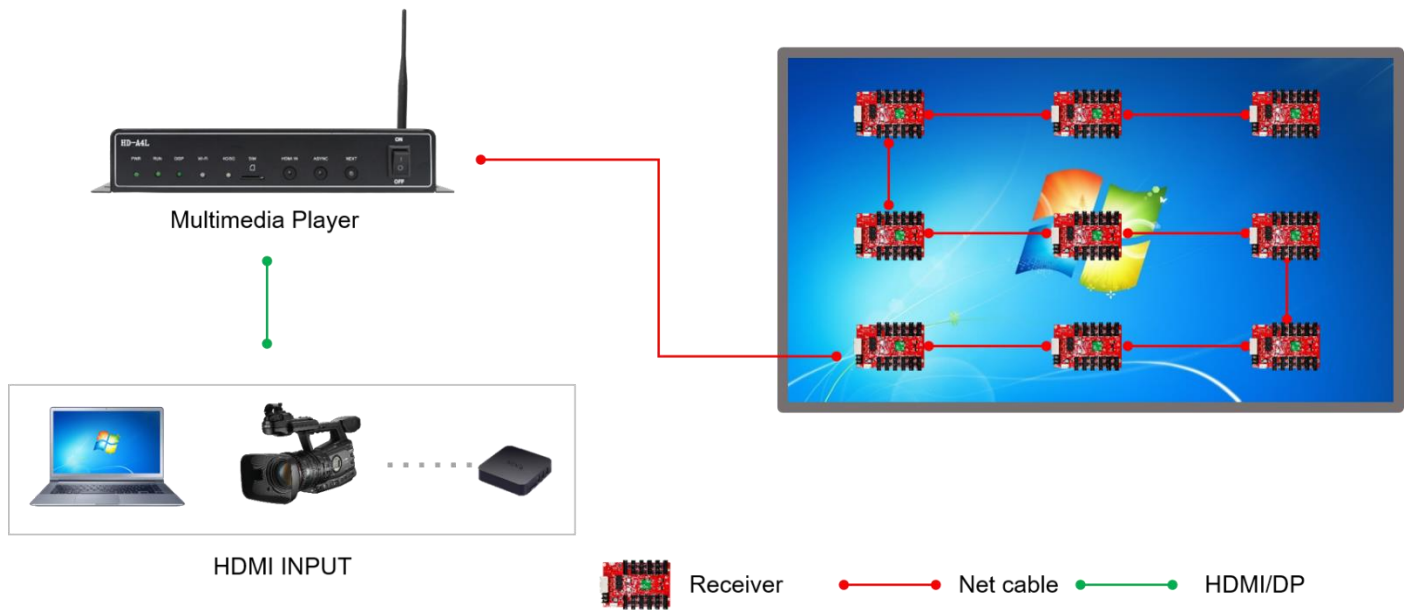
1. Single-node control, support Wi-Fi, network port direct connection, USB interface for communication.



2. Cluster control, support Internet remote control.



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



VI. Product Appearance





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.