



# Product specification

LCD Controller

**HD-M10B**

V0.1 20201010

## Table of Contents

Chapter 1 Product Overview.....	3
One. Overview .....	3
Tow. Features .....	3
Chapter 2 Product Specifications .....	4
One. Basic parameters.....	4
1. Hardware parameters .....	4
2. Software parameters.....	5
Tow. Product size specifications .....	6
Three. Product interface diagram .....	6
Four. Interface parameter description.....	7
1. PWR / DC (power input) interface.....	7
2. HDMI output.....	7
3. SIM card slot.....	8
4. TF card slot .....	8
5. RJ45 .....	9
6. USB.....	9
7. Wi-Fi antenna interface .....	10
Chapter 3 Communication Methods .....	11
One. Update programs via Wi-Fi .....	11
1. Mobile Wi-Fi connection diagram .....	11
2. Mobile APP-"Screen Control" download.....	11
Tow. Update program through U-disk.....	12
Three. Update program through TF card .....	12
Four. Update programs via the Internet.....	13
Chapter 4 Attachment: Product Appearance .....	13

# Chapter 1 Product Overview

## One. Overview

HD-M10B is an Android player box, using Rockchip RK3188 quad-core chip solution, equipped with Android 4.4.4 system. RK3188 uses ARM quad-core A9 core chip, GPU uses Mali-400 series, and supports mainstream audio and video formats and picture decoding. Support 1080P output, support HDMI interface 1080P output, support 2K video playback. It supports U disk, TF card, Wi-Fi, network port and other interfaces, making the product more versatile, and is widely used in intelligent control fields such as advertising machines, interactive all-in-one machines, security, medical care, transportation, finance, industrial control, etc. Due to its hardware platform and Android intelligent features, it can be used on the smart terminal motherboard when human-computer interaction or network device interaction is required.

## Tow. Features

- ◆ High performance. The RK3188 chip adopts the quad-core ARM Cortex A9 architecture. Compared with the common single-core, dual-core and quad-core solutions on the market, it has a qualitative leap in performance. It can play various formats of high-definition video screens and can handle complex interactive operations.
- ◆ High stability. The RK3188 Android integrated board adds its own unique technology to the hardware and software to ensure the stability of the product, so that the final product can be unattended for 7\*24 hours.
- ◆ High integration. RK3188 Android integrated board integrates functions such as Ethernet, Wi-Fi, TF expansion card, USB expansion port, HDMI, etc., which greatly simplifies the installation of the whole machine.

# Chapter 2 Product Specifications

## One. Basic parameters

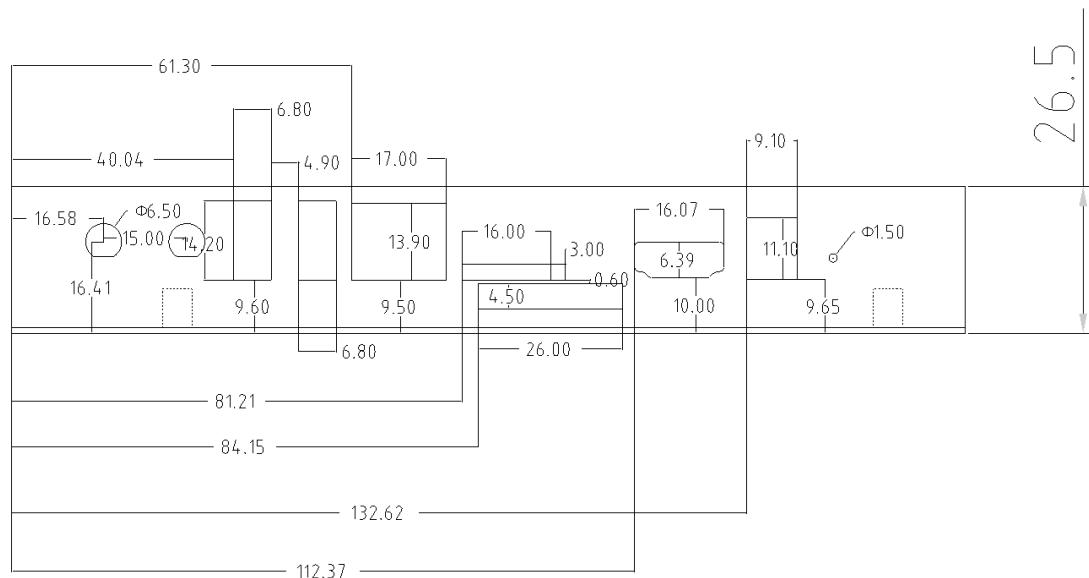
### 1. Hardware parameters

Hardware parameters	
CPU	Rockchip RK3188 (28 Nano process) ARM Cortex-A9 quad-core 32-bit processor, clocked at 1.6GHz
GPU	Mail-400 GPU MP4 Quad-core GPU Support OpenGL ES1.1/2.0,OpenVG1.1,OpenCL
RAM	DDR3 1G
Built-in storage capacity	eMMC 8GB TF Card expansion (can be used to expand SSD)
Connection	Support RJ45 100M Ethernet port and Ethernet. Support 2.4G Wi-Fi and Wi-Fi 802.11b / g / n protocol.
Image rotation	Support 0 degree, 90 degree, 180 degree, 270 degree manual rotation
Display interface	1 HDMI 1.4 supports 1080P 60Hz output
Audio	Support standard left and right channel line output (Need additional customization )
RTC	Built-in real-time clock function
USB	2 USB-2.0 HOST, 1 USB2.0 or OTG
Infrared	Infrared receiver, support infrared remote control function
LED	1 * power status LED (green), 1 * system LED (green, blinking by default)
Button	1 * Recovery button
Power Adapter	Input: AC100-240V.50-60Hz, output: DC12V 1.5A (Requires that the surge voltage is less than 18V and the ripple voltage is less than 100mV)

## 2. Software parameters

Software parameters	
operating system	Android 4.4.4
Audio	MP3,WMA,WAV, APE, FLAC, AAC, OGG,M4A,3GPP, etc.
video	Support H.264, VP8, MAV, WMV, AVS, H.263, MPEG4 and other video formats 1080P multi-video decoding
image	Support various picture formats such as JPG, BMP, PNG
System comes with application software	APK installer, email, calculator, browser, recorder, calendar, settings, clock, video player, search, contacts, gallery, download, camera, music, explorer, etc.
Language	support multi-language
Typewriting	Standard Android keyboard, optional third-party input method
System Management	The original ecological Android system, open root permissions, can be customized product development
	Real-time remote monitoring, self-recovery of system crash, 7 * 24 hours unattended
	Support OTA remote upgrade; support U disk upgrade
	Support boot animation definition
	Support server / standalone mode switch
System watchdog	Support Wi-Fi hotspot
System watchdog	Support software watchdog

## Tow. Product size specifications



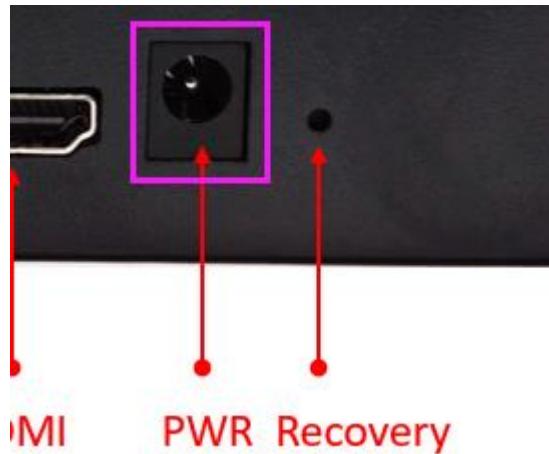
### Three. Product interface diagram



## Four. Interface parameter description

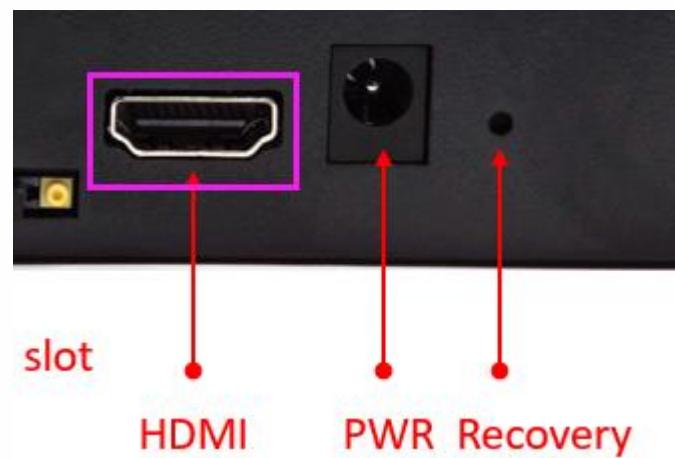
### 1. PWR / DC (power input) interface

12V DC power supply is used to supply power to the board subsystem only from the DC socket and power Socket.



### 2. HDMI output

Connect to the LCD screen for program display.



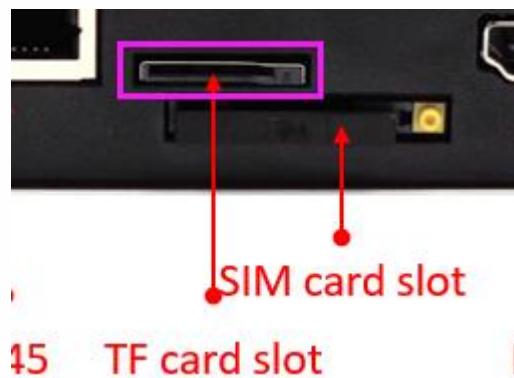
### 3. SIM card slot

Install the 4G mobile phone card interface, and realize remote cluster management after connecting to the Internet (4G module needs to be installed, 4G module is not standard configuration, according to user needs to install before leaving the factory).



### 4. TF card slot

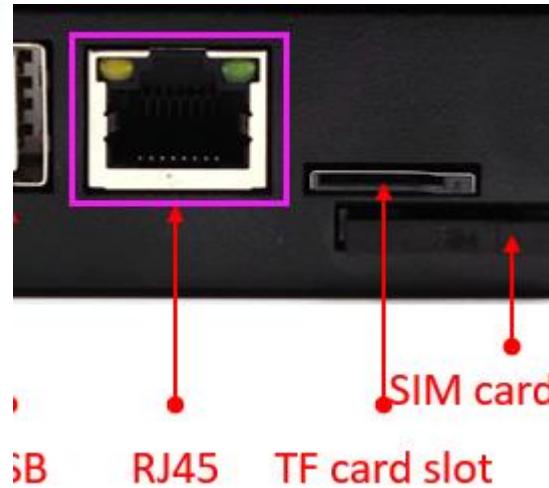
Insert the TF card to update the program content.



45    TF card slot

## 5. RJ45

Connect to the Internet/LAN to realize Internet remote cluster management and LAN cluster management (LAN needs to be implemented through third-party software).



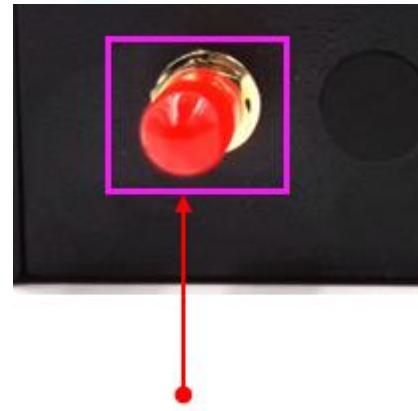
## 6. USB

Insert the U disk to update the program of the display screen. One of the USB interfaces can be switched to OTG or USB interface through jumpers (OTG and USB need to be set before the factory).



## 7. Wi-Fi antenna interface

Connect Wi-Fi antenna to enhance Wi-Fi signal.

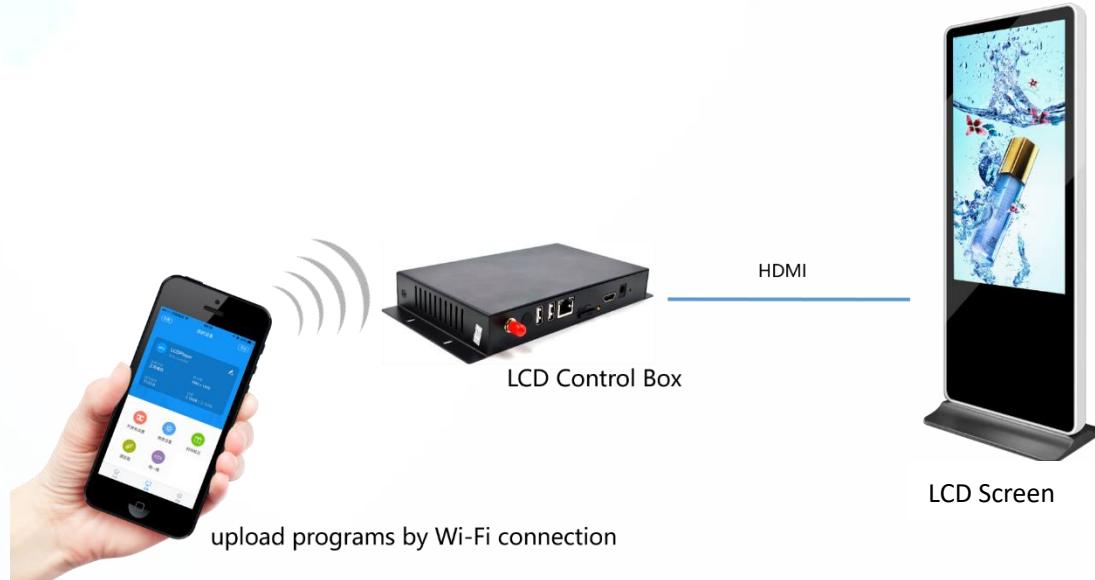


Wi-Fi antenna      USB port

# Chapter 3 Communication Methods

## One. Update programs via Wi-Fi

### 1. Mobile Wi-Fi connection diagram



### 2. Mobile APP-"Screen Control" download

Search and download "screen control" in major mobile phone application markets, or scan the following QR code to download and install

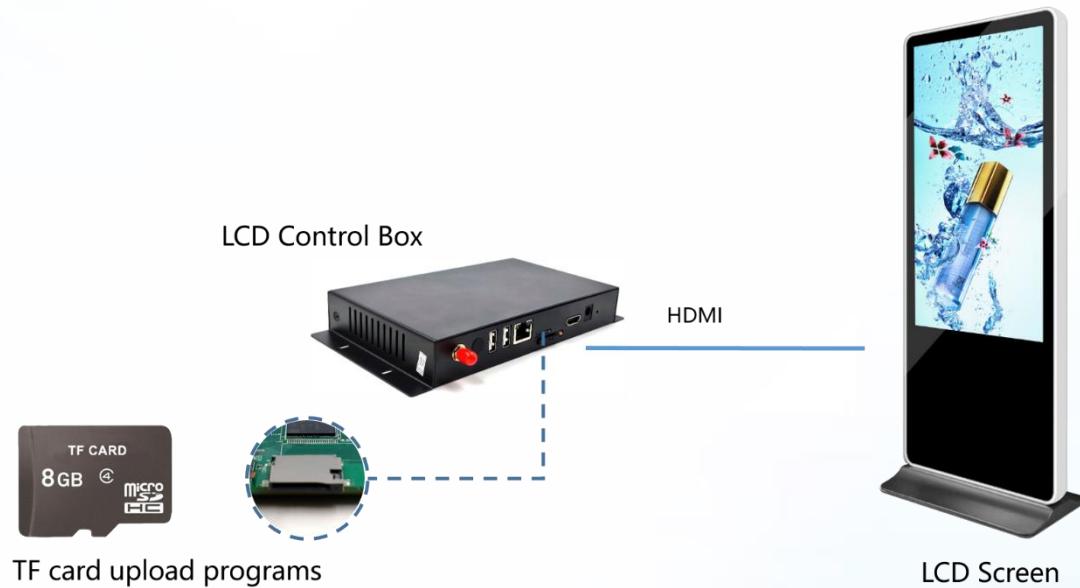


QR code download

## Tow. Update program through U-disk



## Three. Update program through TF card



## Four. Update programs via the Internet



## Chapter 4 Attachment: Product Appearance





Note:

The 1.4G module is an optional accessory, installed in the playback box before leaving the factory;

2. Non-standard features, the picture of the specification may be slightly different from the actual product, if you have any questions, please contact Huidu Technology for confirmation;

Note: