

DN75 User Manual



Statement

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Safety Notice

- Read the user manual carefully before setting up the Giada product.
- Disconnect the power cord before installing the internal components
- Most electronic components are sensitive to static electrical charge, please wear a wrist-grounding strap when installing the internal components.
- Don't disconnect the power cord when the system is running to avoid damage to the sensitive components by instantaneous surge voltage.

Contact Information

Shenzhen JEHE Technology Development Co., Ltd.

Website: www.giadatech.com

Phone: +86-755-3330 0336

Email: support@giadatech.com

Address: 1~3/F, Block A, Tsinghua Information Harbor, North Section, Shenzhen Hi-tech Park, Nanshan District, Shenzhen, China

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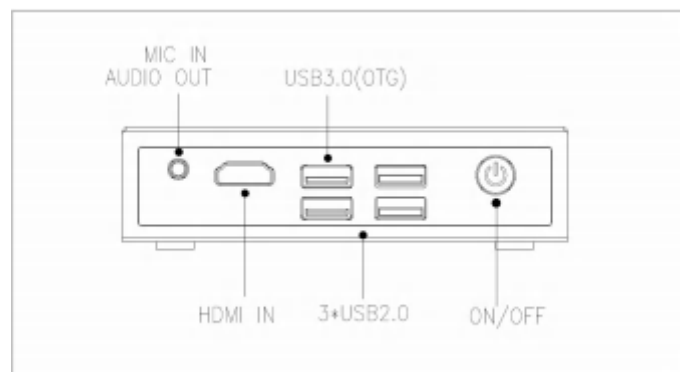
1. Product Introduction

Giada DN75 adopts RK3399 Dual-core ARM Cortex-A72 and Quad-core ARM Cortex-A53 CPU, Onboard memory and eMMC. The dual HDMI display outputs support 1*4K and 1*2K resolution separately. With HDMI input, it can play the content from external device. Featured with Android 8.1 operation system, the player is suitable to be applied in high-end Android digital signage applications.

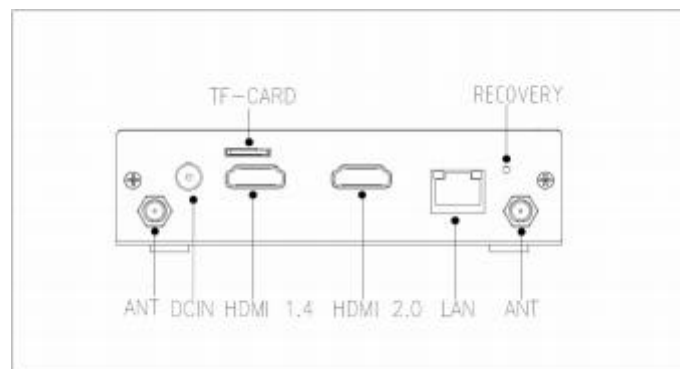
2. Interface Description and Hardware Specifications

2.1 Interface Description

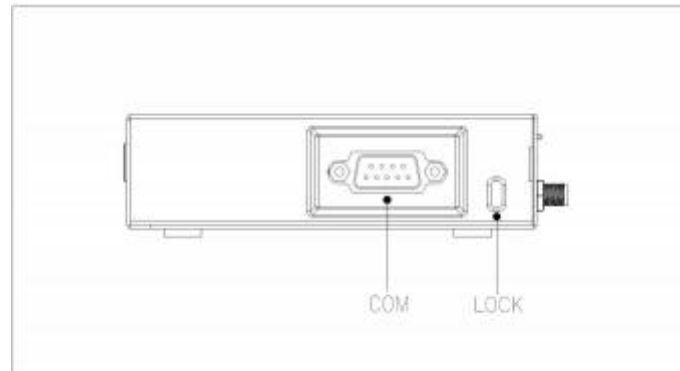
Front I/O Port



Rear I/O Port



Right I/O port



2.2 Hardware Specifications

| DN75 | | DN75-3399R42E5G |
|----------------------|-----------------------|---|
| Processor | CPU | RK3399 Dual-core ARM Cortex-A72 and Quad-core ARM Cortex-A53 CPU |
| | Frequency | Up to 1.8GHz |
| | Chipset | SOC |
| Memory | Type | LPDDR4 support 2 channels |
| | Socket | Onboard |
| | Capacity | 4GB (Optional: 2GB) |
| Graphics | GPU | Mali-T860MP4 GPU |
| | Graphic Engine | 4K H.264/H.265 video decoder |
| | HDMI | 1 x HDMI (Max 4K@60Hz), support CEC 1 x HDMI (Max 2K@30Hz) 1 x HDMI-IN (Max. 2k@30Hz) |
| Network | Controller | Realtek RTL8211E Gigabit Ethernet |
| | Interface | 1 x RJ45 |
| I/O Interface | USB | 1 x USB3.0 (OTG), 3 x USB2.0 |
| | Serial Port | 1 x RS232 |
| | Audio | 1x 2- in 1 Headset (1 x MIC-IN, 1 x AUDIO-OUT) |
| | Mini-PCle | 1 x Full-size Mini-PCle for 3G/4G |
| | WiFi+BT Module | WiFi+BT Module Onboard (WiFi 5GHz) (Optional: 2.4GHz) |
| | SIM Slot | 1 x SIM Slot |
| | LED Indicator | 1 x HDD LED, 1x Power LED |

| | | |
|-------------------------|------------------------------|---------------------------------------|
| Storage | eMMC | Onboard eMMC 32GB (Optional: 16G) |
| | TF Card Reader | 1 x TF Card Reader |
| JAHC | JAHC | Auto power on/IR Remote Control / RTC |
| Operation System | OS | Android8.1 |
| Power | Power Type | DC-IN |
| | Input Voltage | 12V/2A |
| Mechanical | Construction | Metal |
| | Fanless | Yes |
| | Mounting | Desk/VESA Mounting (JC530) |
| | Dimension (W x D x H) | 116.6mm x 107.4mm x 30mm |
| | Color | Black |
| Environment | Operating Temperature | 0-40°C at 0.7m/s Air Flow |
| | Relative Humidity | 95%@40°C (non-condensing) |
| Certification | | CE/FCC |

3. Accessories Installation Steps

▲ For safety reasons, please ensure that the power cord is disconnected before opening the case.

How to open bottom cover

Unscrew the four screws and remove the bottom cover. (mini PCIE slot for 3G/4G and SIM card slot are on this side)



3.1 3G/4G Installation

▲ Default SMA connector and cable is for WIFI. Please change to 3G/4G SMA connector and cable.

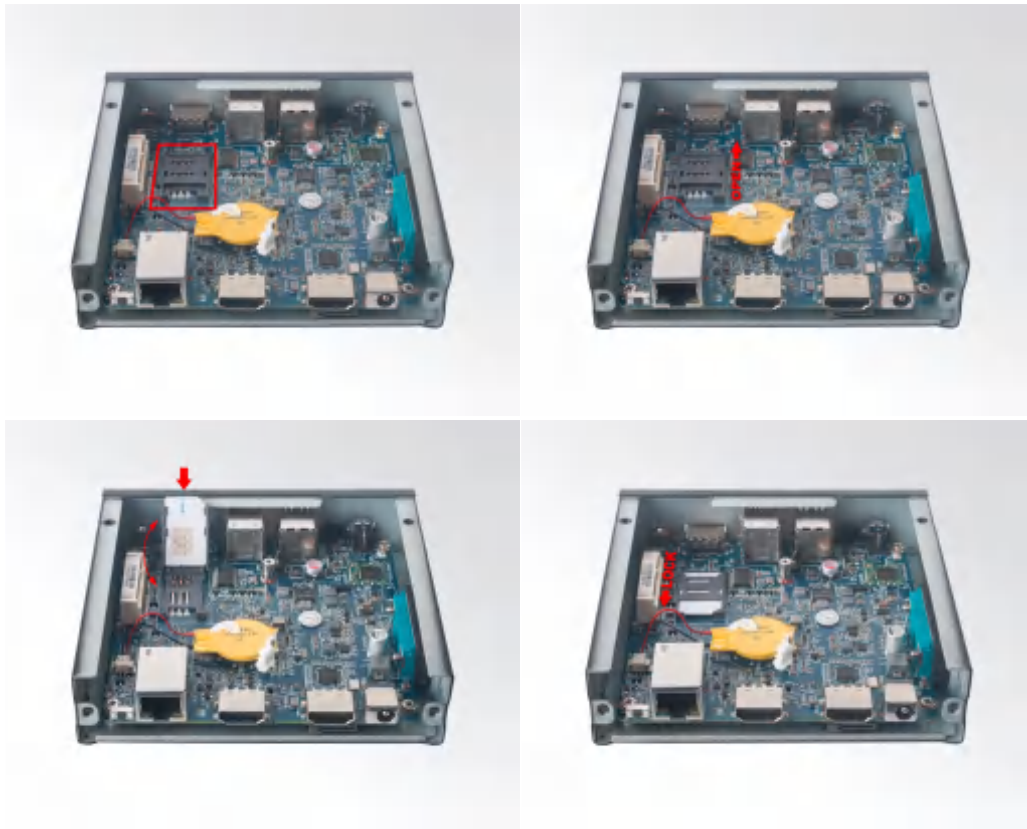
1. Plug the 3G/4G module into the mini PCIE slot.
2. Secure the module to the carrier by tightening up the screw.
3. Connect the cable to **Main** and install the antenna.



3.2 SIM Card Installation

▲ This product supports standard SIM card with the size of 25mm × 15mm.

1. [Open] the SIM card holder and pull it up.
2. Insert the SIM card.
3. [Lock] the card holder.



4. How to use Giada HdmiIn APP?

With HDMI input and two HDMI outputs on DN75, the device can support clone display and PIP display or extended mode. You can set the different display modes on two screens by following setup:

a. Connect DN75 HDMI OUT 01 and HDMI OUT 02 with two HDMI screens and connect DN75 HDMI_IN with an external device to provide video source (Please refer to FIG1).



FIG1

b. Click 'Giada HdmiIn' APP, the input signal from the external device is switched automatically to DN75. There are two choices:

- Show on two screens: two screens display HDMI input signal with clone mode.
- Show on vice screen only: two screens show different HDMI signal. The HDMI 02 would show HDMI input signal from external device and HDMI 01 would show its' own signal (Please refer to FIG2)

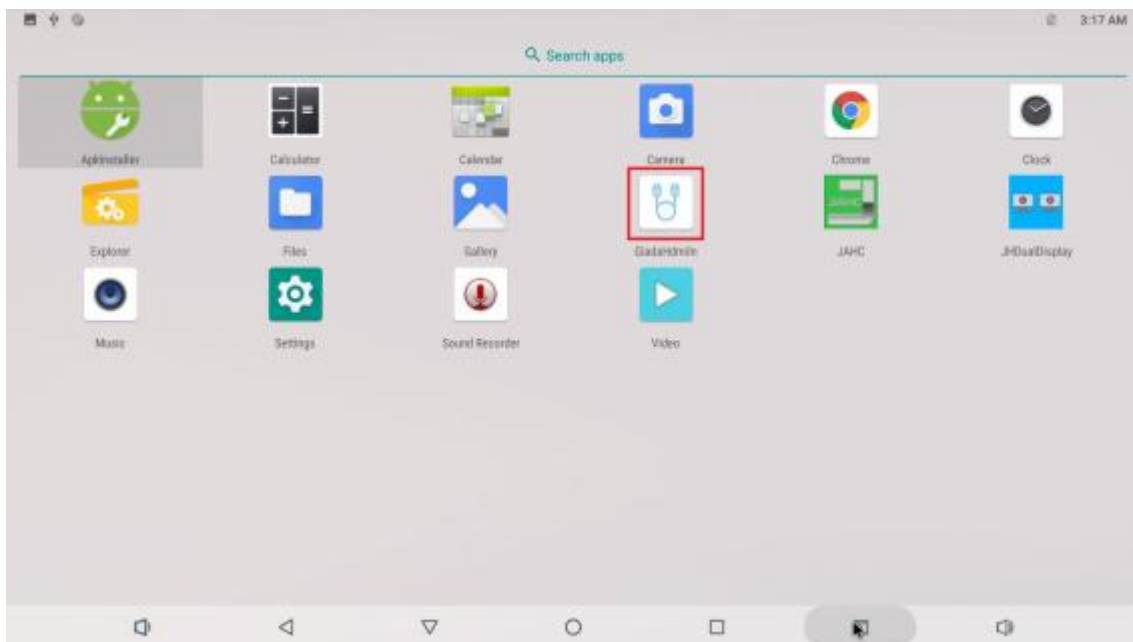




FIG2

c. Record is used for recording HDMI input signal and the PIP is used for picture-in-picture function. **When you choose the clone mode or use only one monitor, you can set PIP to support picture insert picture display (Please refer to FIG3 and FIG4)**

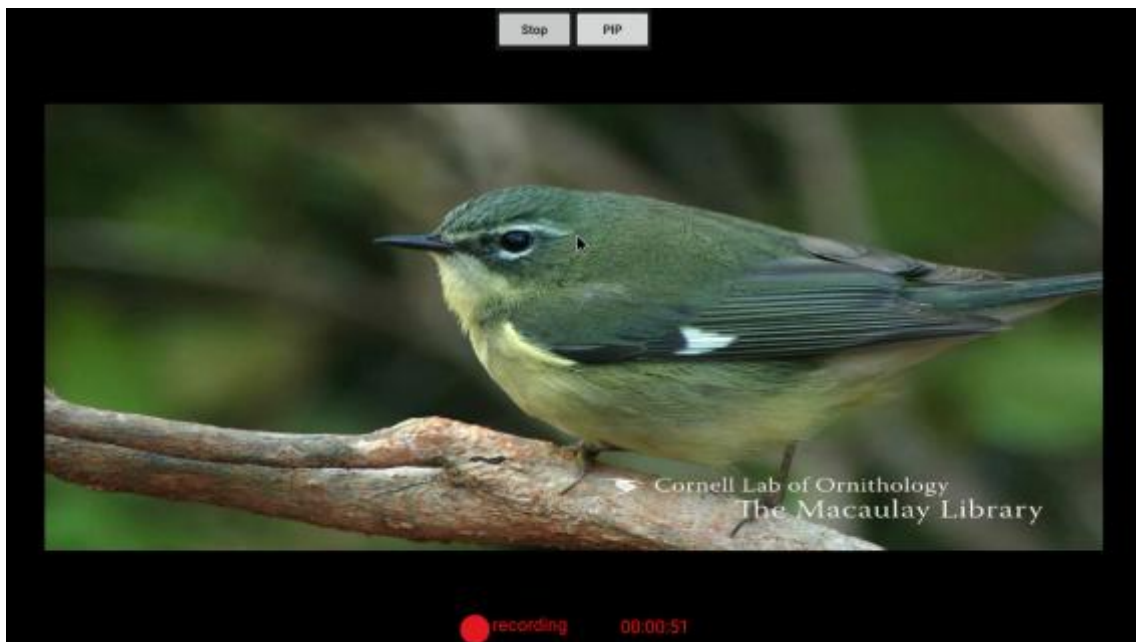


FIG3



FIG4

5. How to play different videos on two screens

The two HDMI ports on DN75 support clone mode, but you can play different videos on two screens by following setup:

- Connect DN75 with two HDMI screens, you can see they are clone mode
- Click 'JHDualDisplay' APP and "ALLOW" JHDualDisplay video player to load photos, media and files on your device. Then video player will show as FIG1.

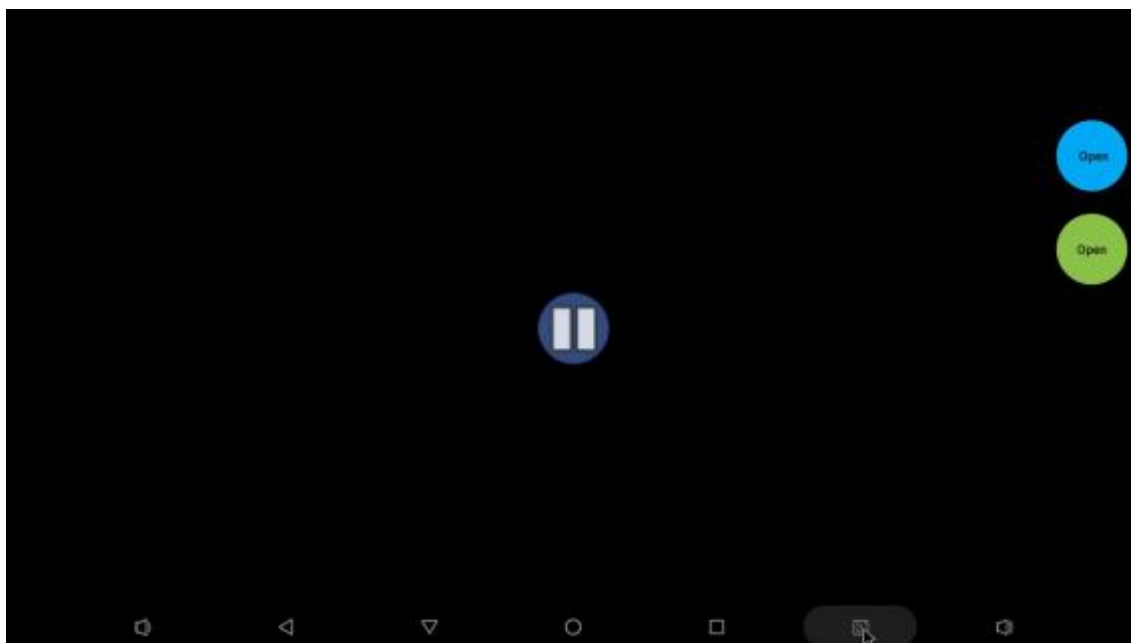


FIG1

- Then click the 2nd 'Open' buttons to load and play one video. The video will show on the 2nd

screen.

d. Move mouse to the main screen, click the first 'Open' button to load and play another video. You can see the two screens show different videos.

Note: According to DN75's decoding capabilities, one output can be up to 4K@30FPS and the other one will be 2K@30FPS at the same.

6. Firmware Upgrade Guide




6.1 Preparation:

- DN75 player
- Archive of DN75 firmware provided by Giada technical support
- Host PC with screen and installed the Windows operation system.
- USB OTG Cable (RP-SMA Male↔RP-SMA Male)



After you get the Archive from Giada technical support, copy the Archive to your host PC, you will find below files inside:

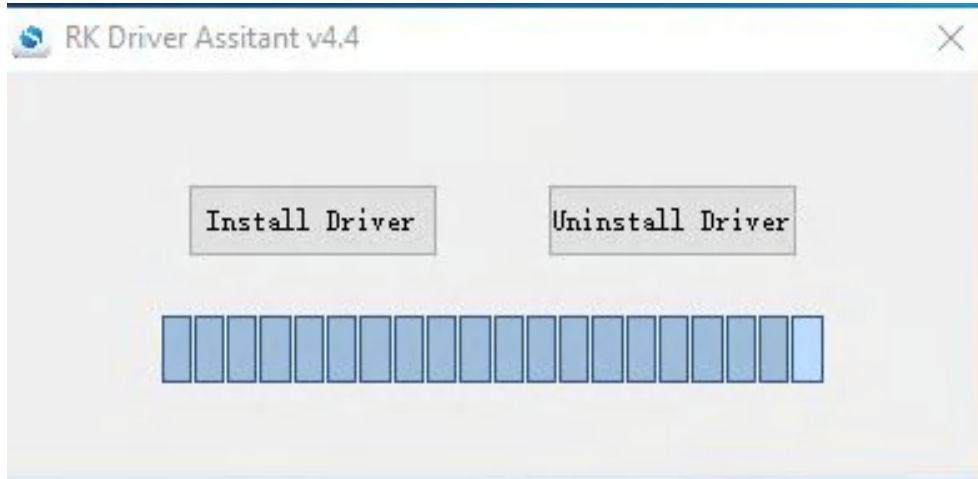
- Android Tool - tool for updating
- DN75 Firmware image.
- DriverAssitant - tool to install drivers and firmware image file

| | | | |
|---|-----------------|------------------|--------------|
|  AndroidTool_Release_v2.63 | 2020/6/16 17:56 | 文件夹 | |
|  DN75_JHS561_20200612_GIADA_LOGO.img | 2020/6/12 15:46 | IMG 文件 | 1,475,981... |
|  DriverAssitant_v4.5.zip | 2019/9/20 15:36 | WinRAR ZIP 压缩... | 9,549 KB |

6.2 Upgrade the firmware

6.2.1. Install the driver in your host PC by following steps:

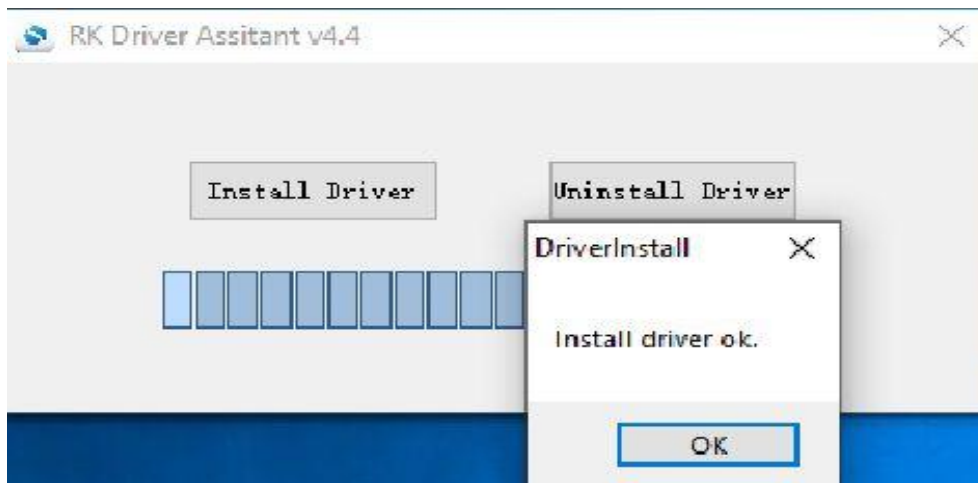
a. Click the DriverAssitant file. Launch RK DriverAssitant and press “Install Driver”.



Apply all changes and warnings during the installation.



b. Click “ok” after the installation finish



6.2.2. Connect the motherboard with host PC

In order to connect the motherboard with Host PC and run bootloader mode, you should perform following steps:



- a. Please ensure that the power of the DN75 player is disconnected
 - b. Run RKAndroid tool V2.63 under the windows of the host PC.
 - c. Connect the DN75 player to the host PC via usb OTG port (please refer to Fig 1 for location of the OTG port).
 - d. Firstly, hold the DN75 player recovery button (please refer to Fig1 for the location of the button), then connect the power adaptor to the player, you will see “Found a MSC Device” or “Found One Loader Device”. (Please refer to Fig2)
- ▲ Please don't loosen the button and don't press twice until you see the 'Found a MSC Device' or 'Found One loader device'



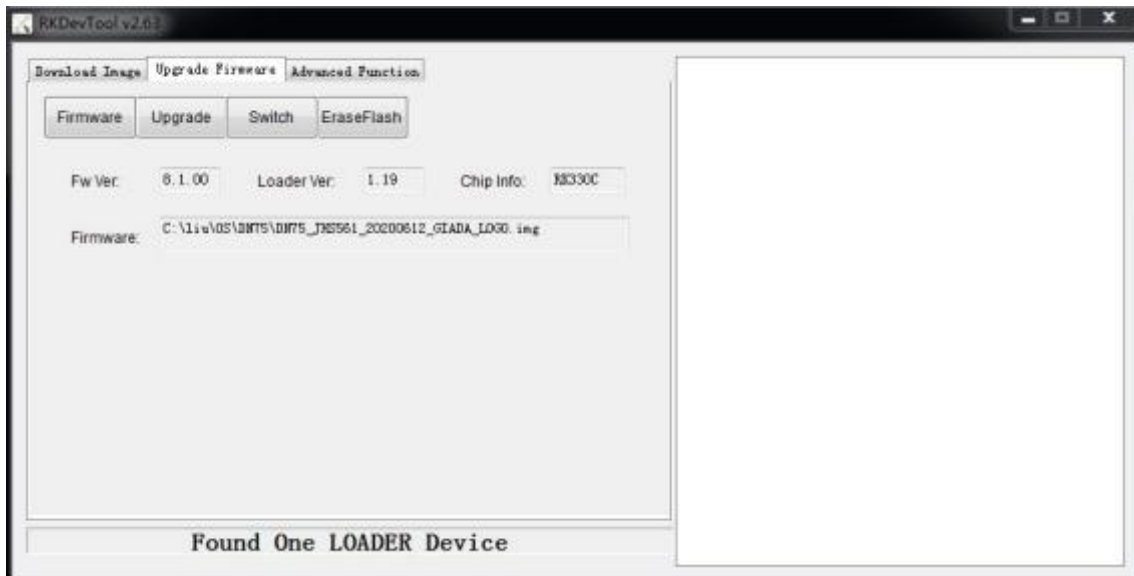
(Fig1)



(Fig2)

6.2.3. Start the firmware updating.

- Click "Firmware" button and specify the path to the firmware file which is stored in the host PC (Please refer to Fig2).
- Wait around 5 seconds to upload the program, FW information will display on the screen. After the "Upgrade" button turns to black, you can click "Upgrade" to update the firmware (please refer to Fig3 and Fig4).

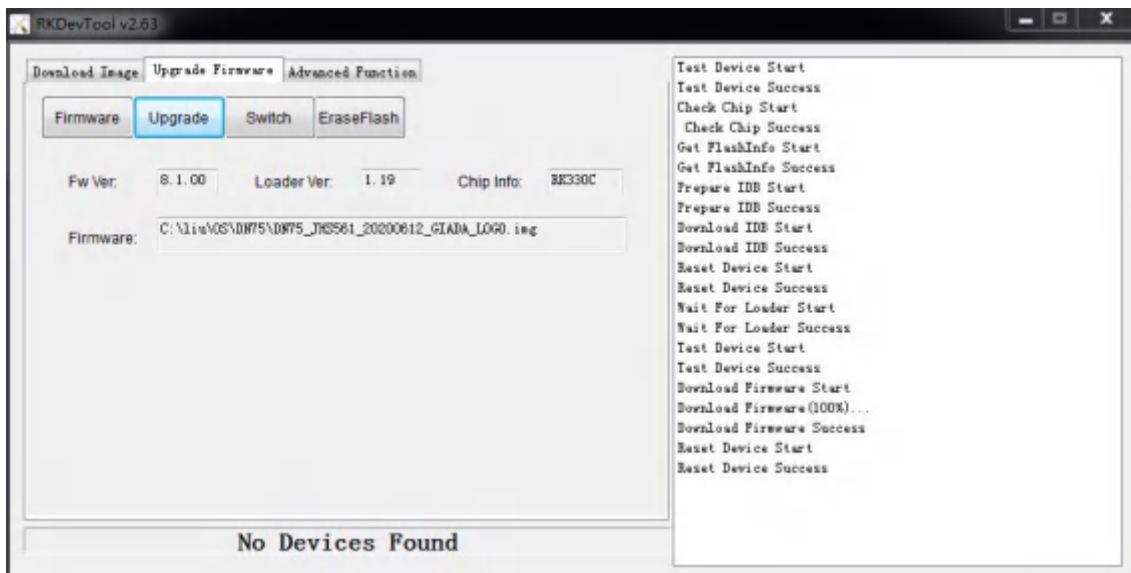


(Fig3)



(Fig4)

c. In the end, you will see a report indicating a successful operation.



7. JAHC APP

7.1 JAHC APP functions

The user can set up automatic startup and shutdown, one week as a circle

7.2 Startup(open) & shutdown(close) time setup

System Requirements:

- Giada player with JAHC APP function.
- Android OS includes JAHC APP (please refer to Fig1) .

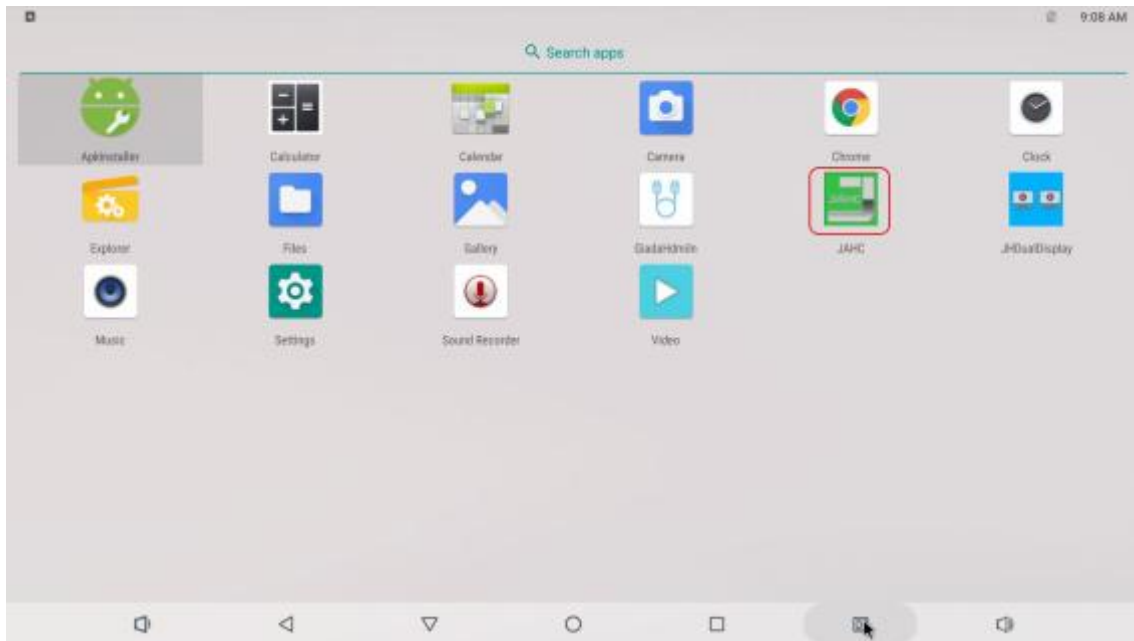


Fig1

a. After enter the android desktop, click the JAHC APP icon and the JAHC interface will pop up (please refer to Fig2)

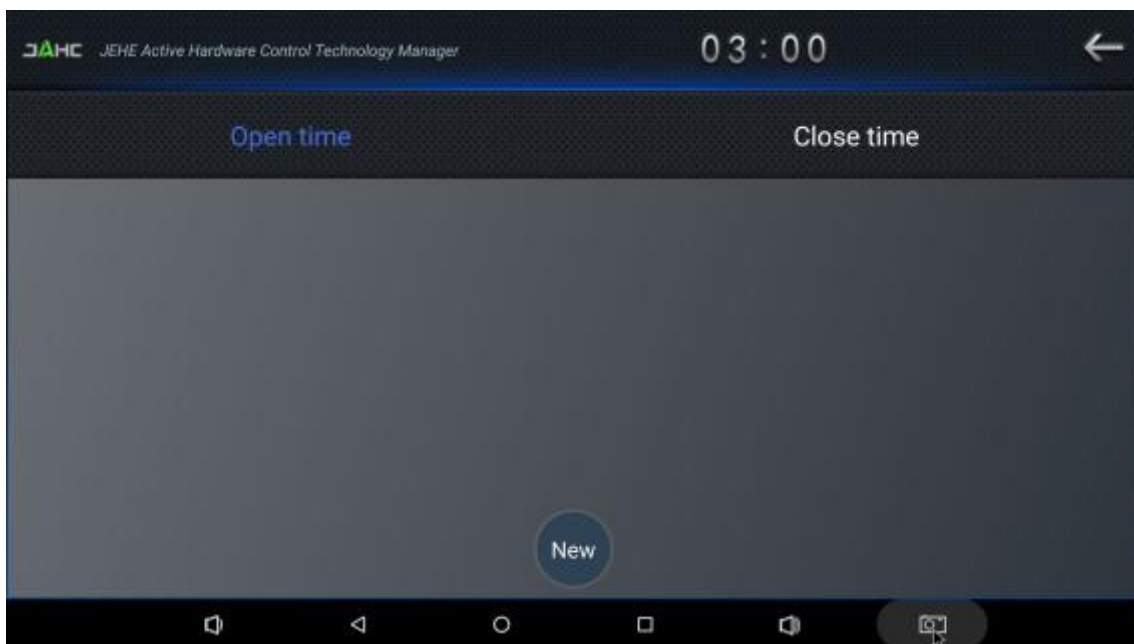


Fig2

b. Click 'New' button to set open time (Fig3) and then click Close time button to set close time. One week as a circle, maximum 3 schedules per day. Select each schedule to set up the Open time and Close time.

c. After finishing the setup, click circles to launch the schedule.
User can click delete to remove the schedule.

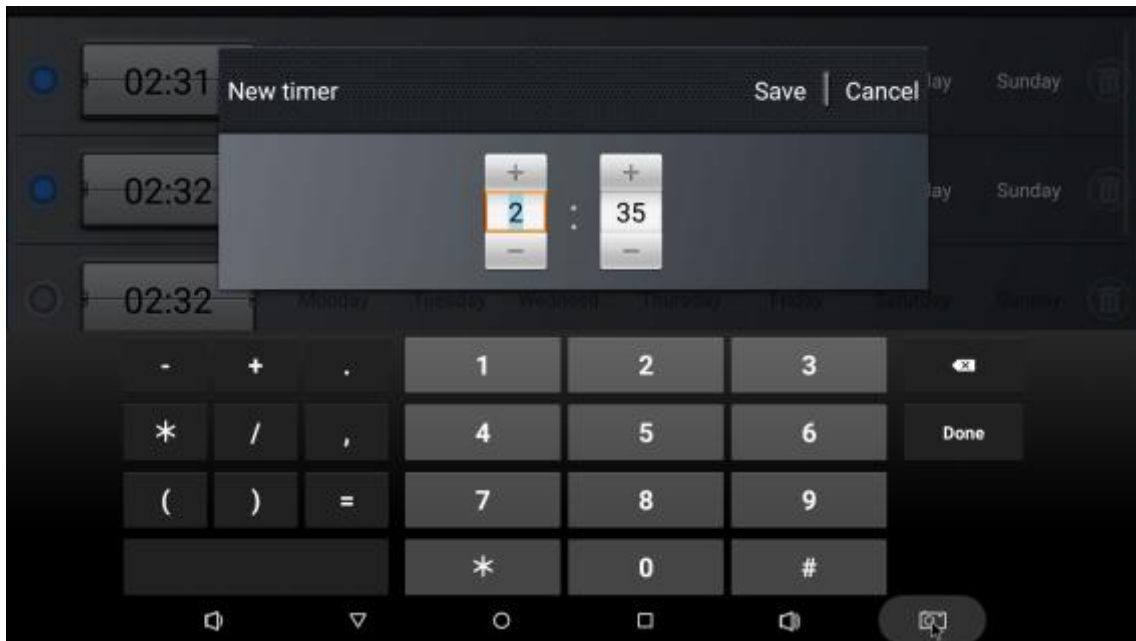


Fig3

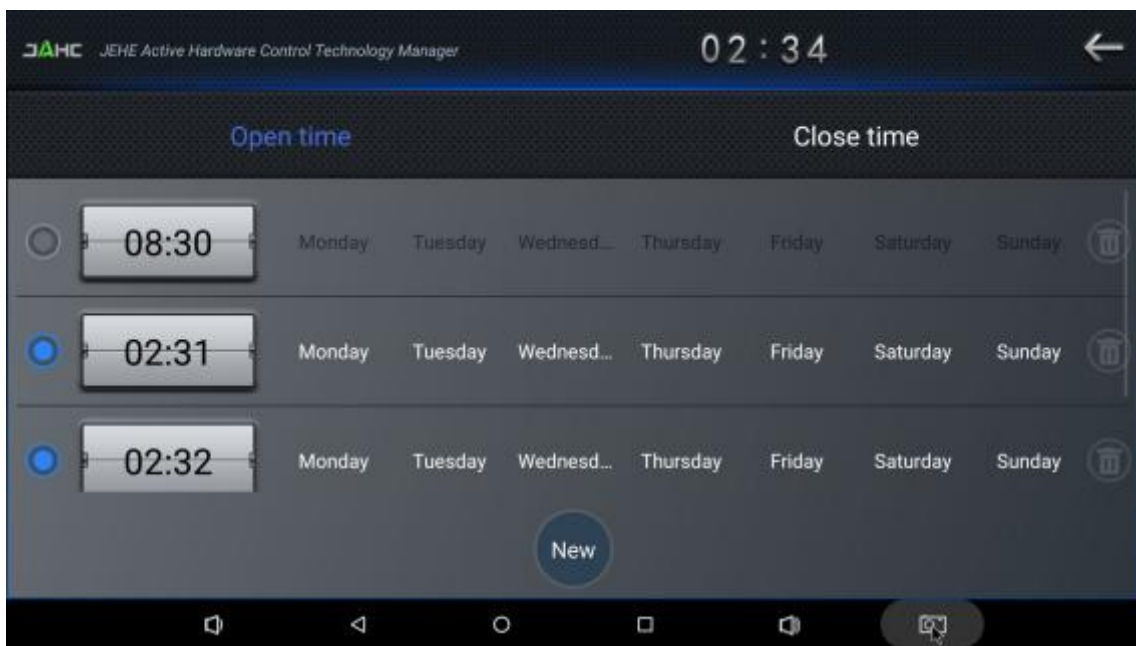


Fig4

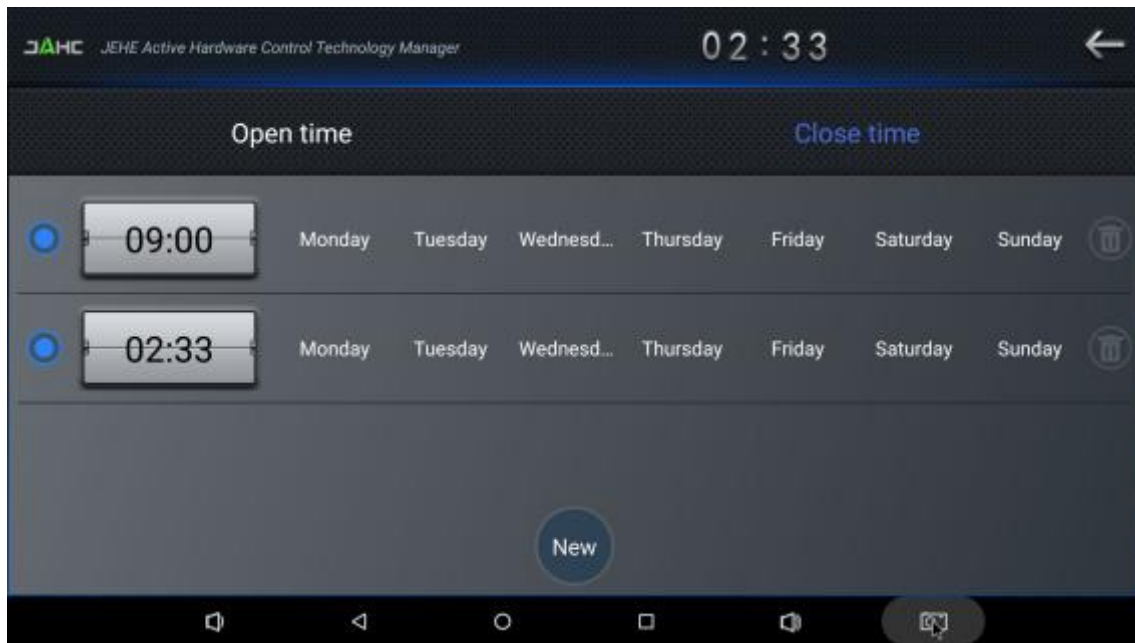


Fig5

▲ Caution: If the interval from shutdown time to next resume time is less than 3 minutes, the system will not shut down.

8. ADB SOP

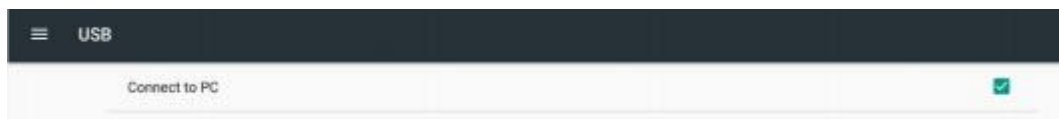
The user can debug APP with ADB driver by below steps:

8.1 Use command ADB version to check if Windows ADB tool is installed.

```
Admin: C:\Windows\system32\cmd.exe
C:\Users>adb version
Android Debug Bridge version 1.0.31
C:\Users>
```

8.2 Install Rock chip driver.

- Connect DN75 with OTG cable to windows PC host.
- Select 'Connect to PC' under android OS->Settings->USB->connect to PC.
- Then you can use ADB shell command to enter ADB





Shenzhen JEHE Technology Development Co., Ltd.

Website: www.giadatech.com

Phone: +86-755-33300336

Email: support@giadatech.com

Address: 1~3/F, Block A, Tsinghua Information Harbor, North Section,
Shenzhen Hi-tech Park, Nanshan District, Shenzhen, China



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