DN73 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.

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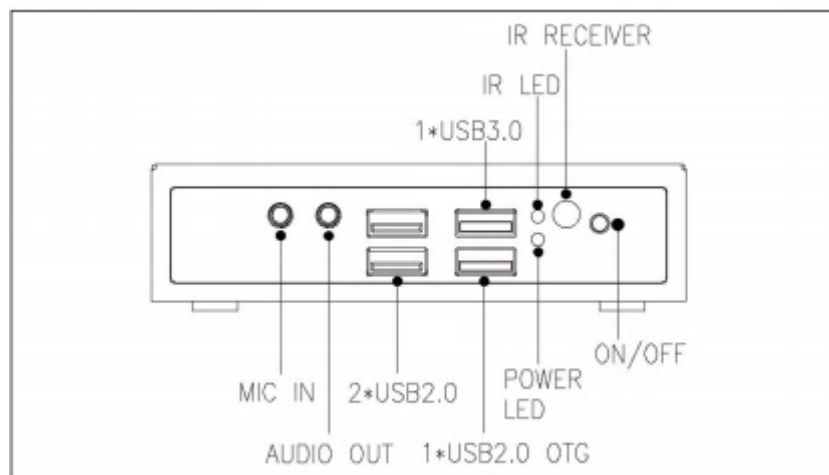Park, Nanshan District, Shenzhen, China

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1. Product Introduction

Giada DN73 adopts RK3328 Quad-core ARM Cortex-A53 CPU, onboard memory and eMMC. The player is featured with Android 7.1 operation system. With one HDMI (Optional: VGA) display output, it supports 4K resolution. The player is suitable to be applied in entry-level digital signage applications.
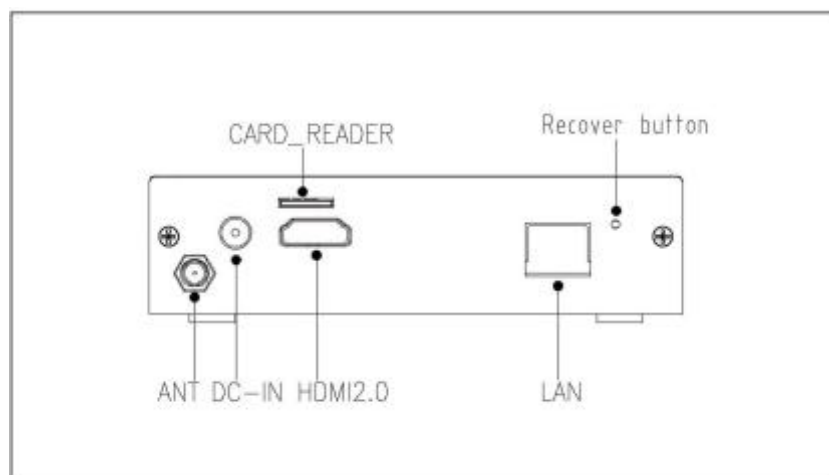
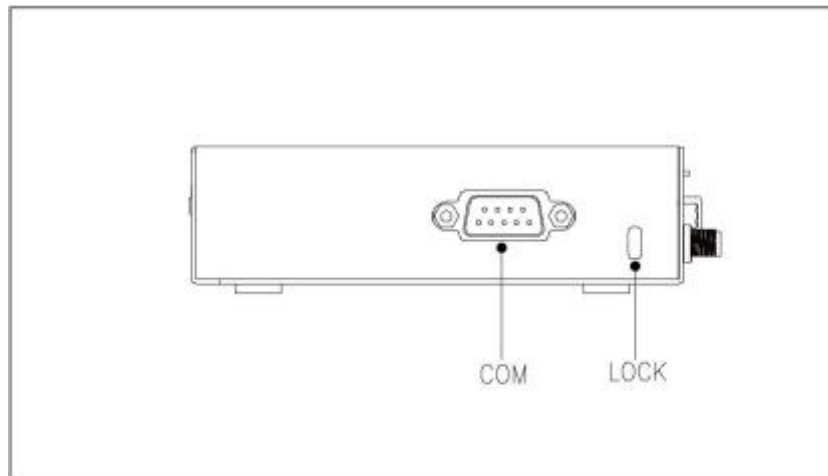# 2. Interface Description and Hardware Specifications

2.1 Interface Description

Front I/O Port

Rear I/O Port

Right I/O port

2.2 Hardware Specifications

DN73		DN73-3328R32E4G-GIA
Processor	CPU	RK3328 Quad-core ARM Cortex-A53
	Frequency	Up to 1.5GHz
	Chipset	SOC
Memory	Type	DDR3L-1333MHz
	Socket	Onboard
	Capacity	2GB（Optional: 1GB）
Graphics	GPU	Mali-450MP2 GPU
	Graphic Engine	4K video decoder, 1080P video encoder/1080P 60fps video decoders
	HDMI	1 x HDMI (Max. 3840x2160@60Hz) support CEC or 1 x VGA for option
Network	Controller	Realtek RTL8211E Gigabit Ethernet
	Interface	1 x RJ45
I/O Interface	USB	1 x USB3.0, 2 x USB2.0, 1 x USB2.0 OTG
	Serial Port	1 x RS232
	Audio	1 x MIC-IN, 1 x AUDIO-OUT
	Mini-PCIe	1 x Full-size Mini-PCIe for 3G/4G
	WiFi+BT Module	WiFi+BT Module Onboard (WiFi 2.4GHz/5GHz)
	SIM Slot	1 x SIM Slot
	LED Indicator	1 x HDD LED, 1x Power LED
Storage	eMMC	Onboard eMMC 16GB (Optional: 32G)
	TF Card Reader	1xTF Card Reader

JAHC	JAHC	Watchdog/Auto power on/IR Remote Control/RTC/Wake On Lan
Operation System	OS	Android 7.1
Power	Power Type	DC-IN
	Input Voltage	12V/2A
Mechanical	Construction	Metal
	Mounting	Desk/VESA Mounting（JC530）
	Fanless	Yes
	Dimension (W x D x H)	116.6mm x 107.4mm x 30mm
	Color	Black
Environment	Operating Temperature	0-40℃ at 0.7m/s Air Flow
	Relative Humidity	95%@40℃ (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 the 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.
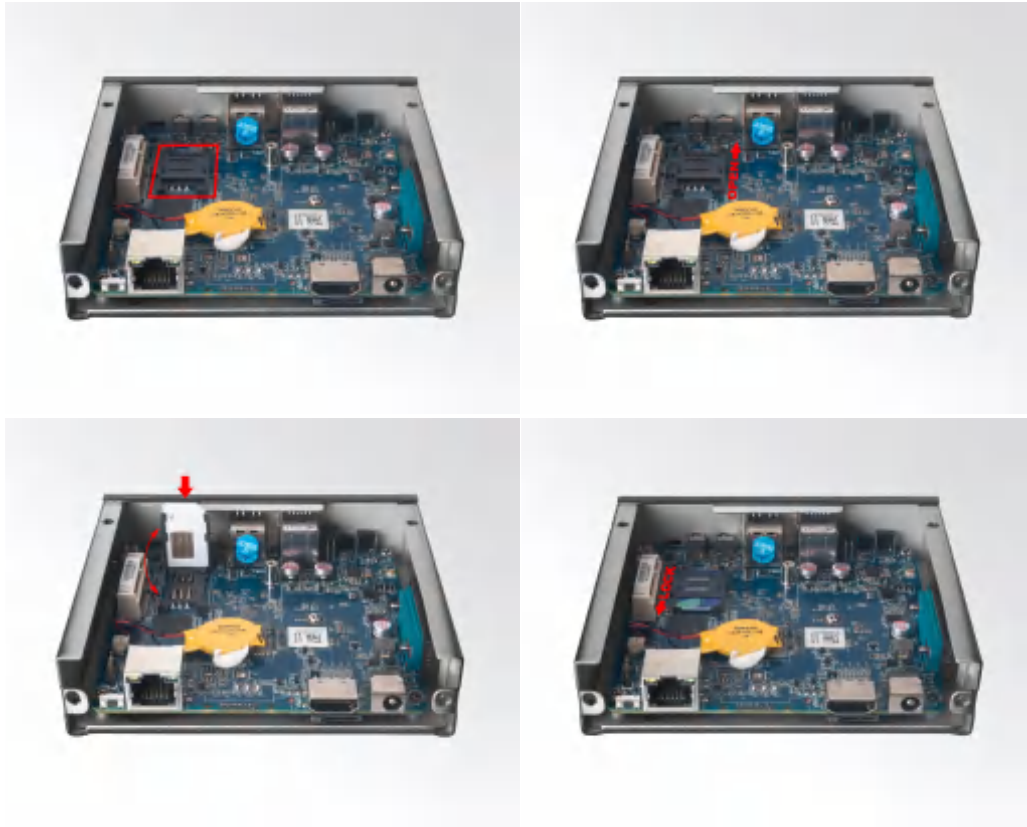
1. Plug the 3G/4G module into the mini PCIE slot.
2. Secure the module to the carrier by tightening up the screw.
3. Connect the cable to **Main** and install the antenna.

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.

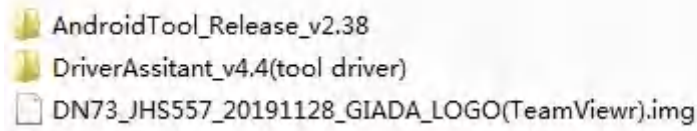# 4. Firmware Upgrade Guide

4. 1 Preparation:

- DN73 player
- Archive of DN73 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:
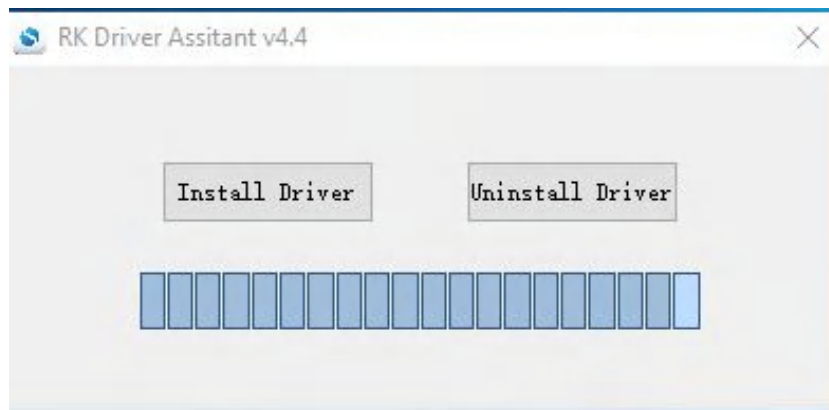
- Android Tool - tool for updating
- DriverAssitant - tool to install drivers and firmware image file
- DN73 Firmware image.

4.2 Upgrade the firmware
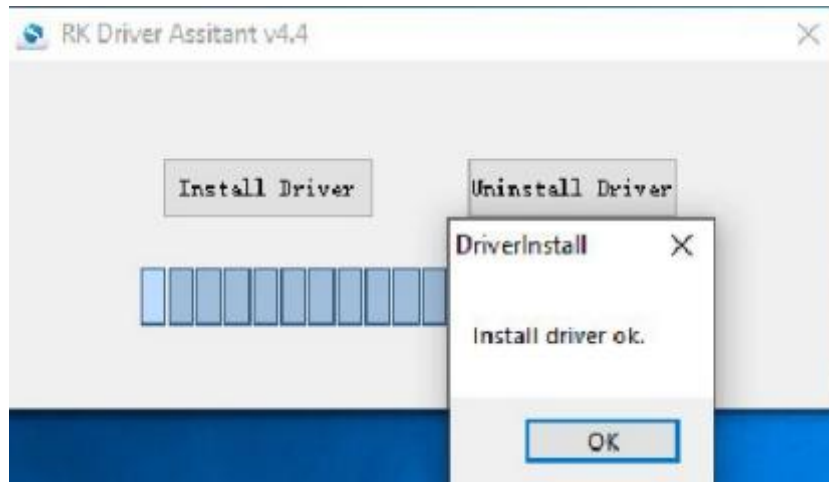### 4.2.1. Install the driver in your host PC by following steps:

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

4.2.2. Connect the DN73 with host PC

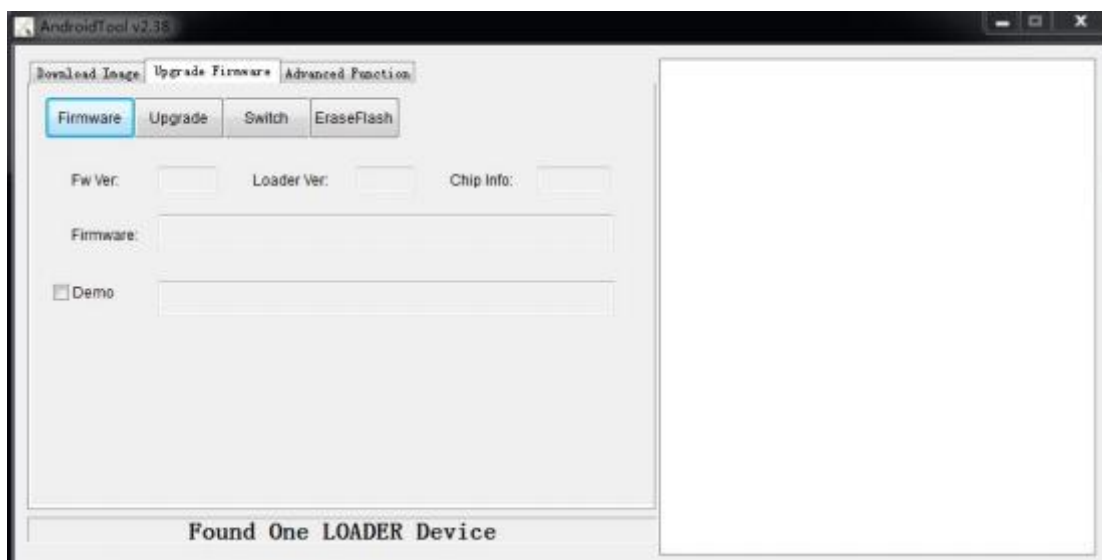In order to connect the DN73 with Host PC and run bootloader mode, you should perform following steps:

a. Please ensure that the power of the DN73 player is disconnected
b. Run Android tool V2.38 under the windows of the host PC.
c. Connect the DN73 player to the host PC via USB OTG port (please refer to Fig1for location of the OTG port)
d. Firstly, hold the DN73 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)
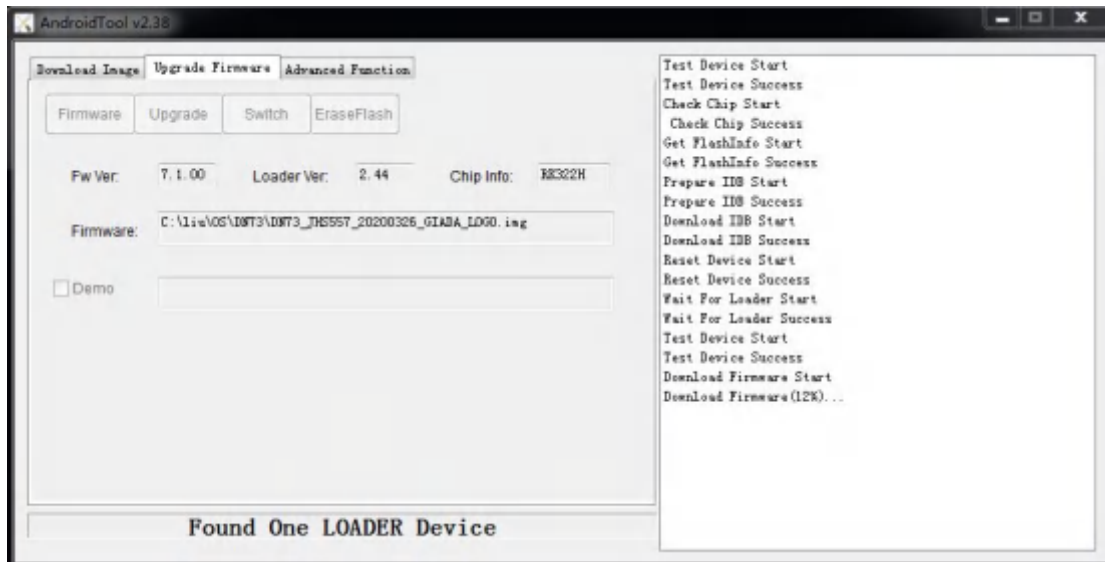

(Fig2)

4.2.3. Start the firmware updating.
a. Click "Firmware" button and specify the path to the firmware file which is stored in the host PC (Please refer to Fig2).
b. 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).
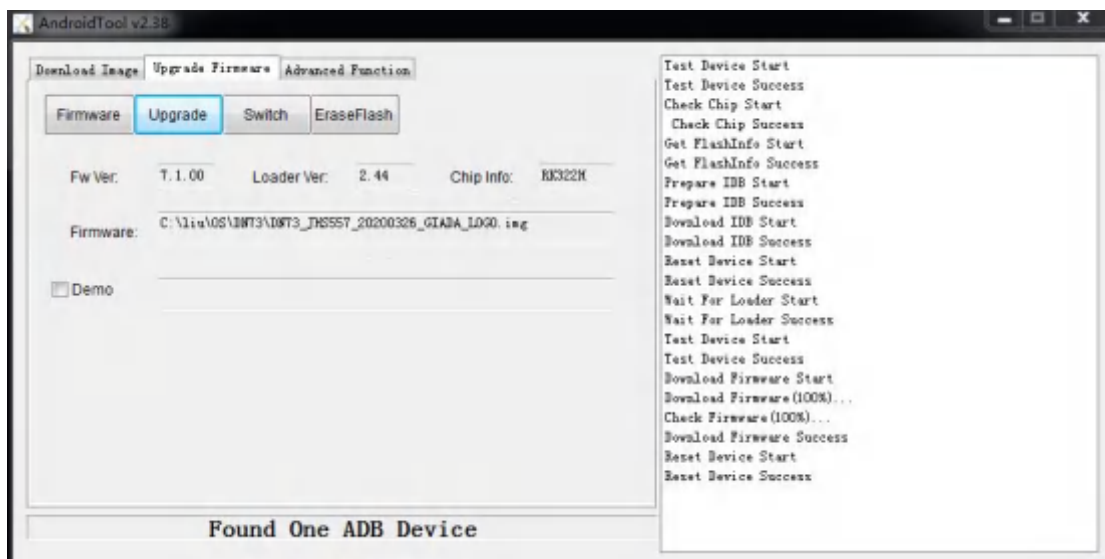
(Fig3)

(Fig4)

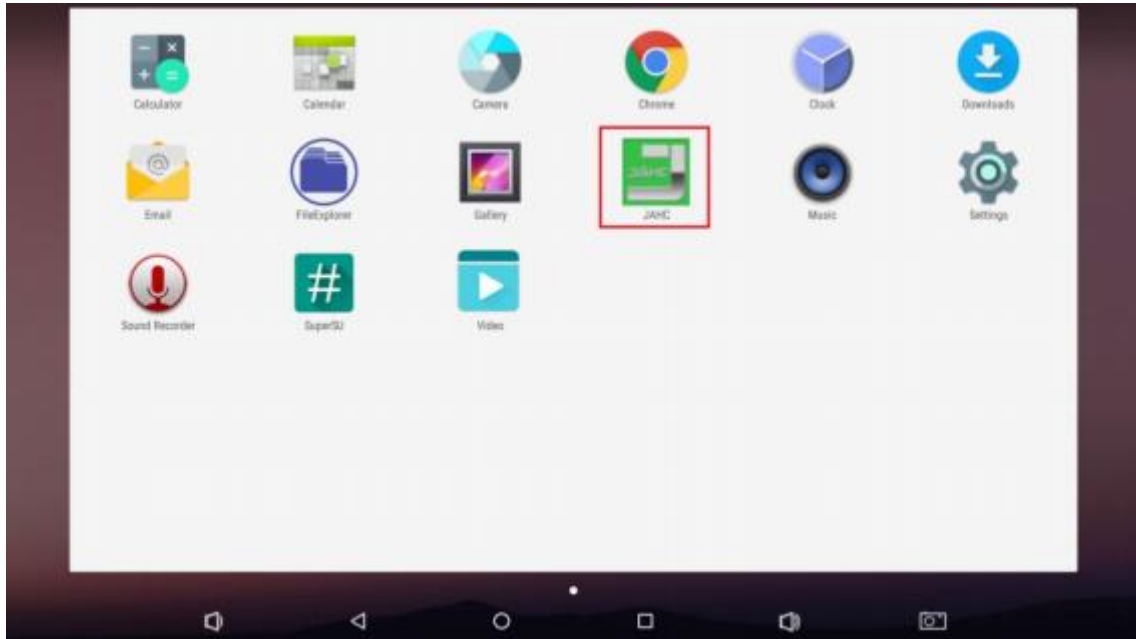c. In the end, you will see a report indicating a successful operation.

5. JAHC APP

5.1 JAHC APP functions

The user can set up automatic startup and shutdown, one week as a circle
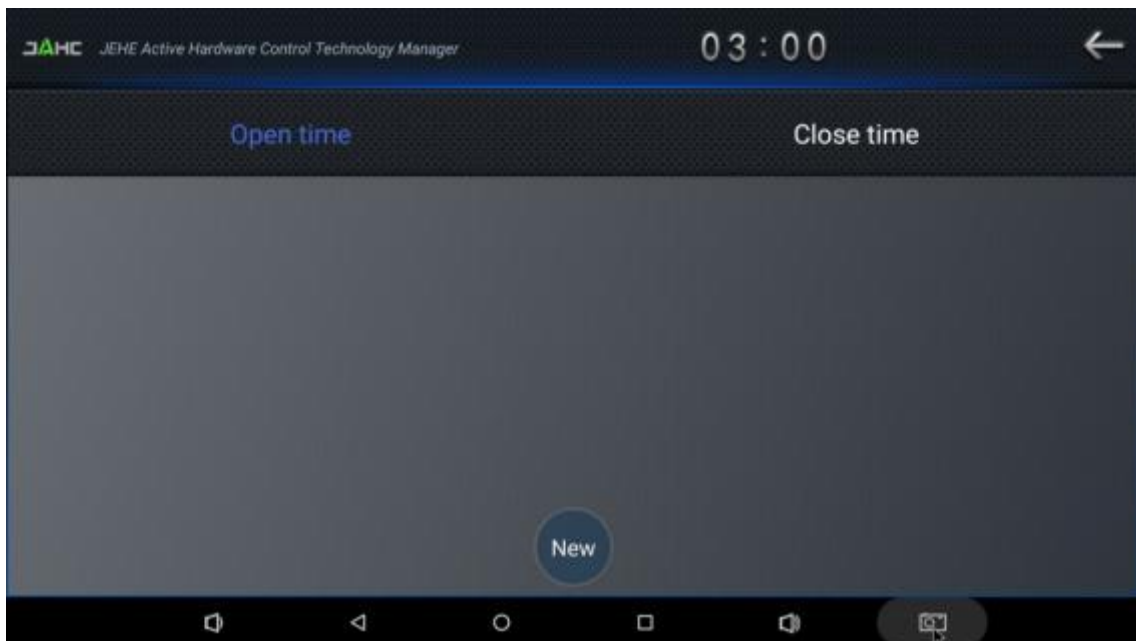
5.2 Startup (open) & shutdown (close) time setup

System Requirements:

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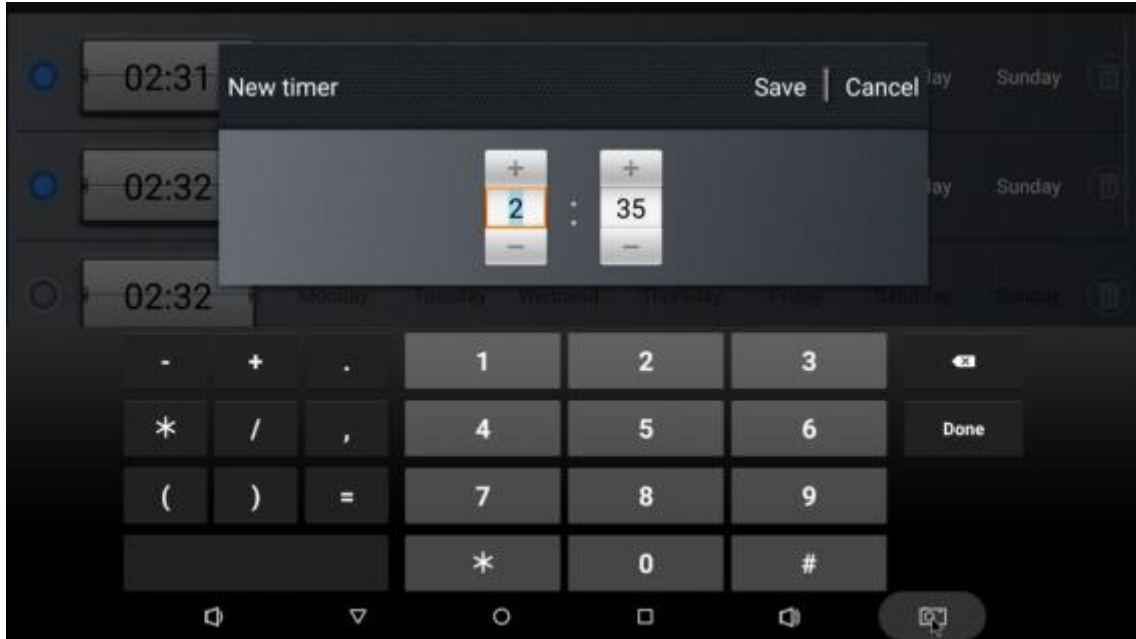- Android OS includes JAHC APP（please refer to Fig1）.

(Fig1)

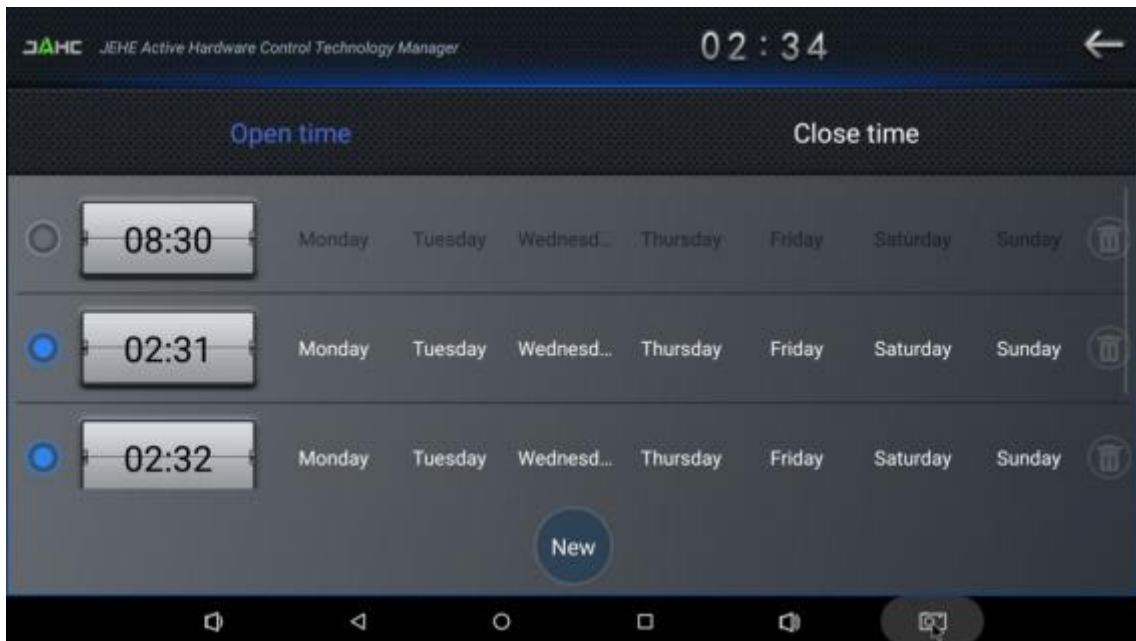a. After enter the Android desktop, click the JAHC APP icon and the JAHC interface will pop up (please refer to Fig2)
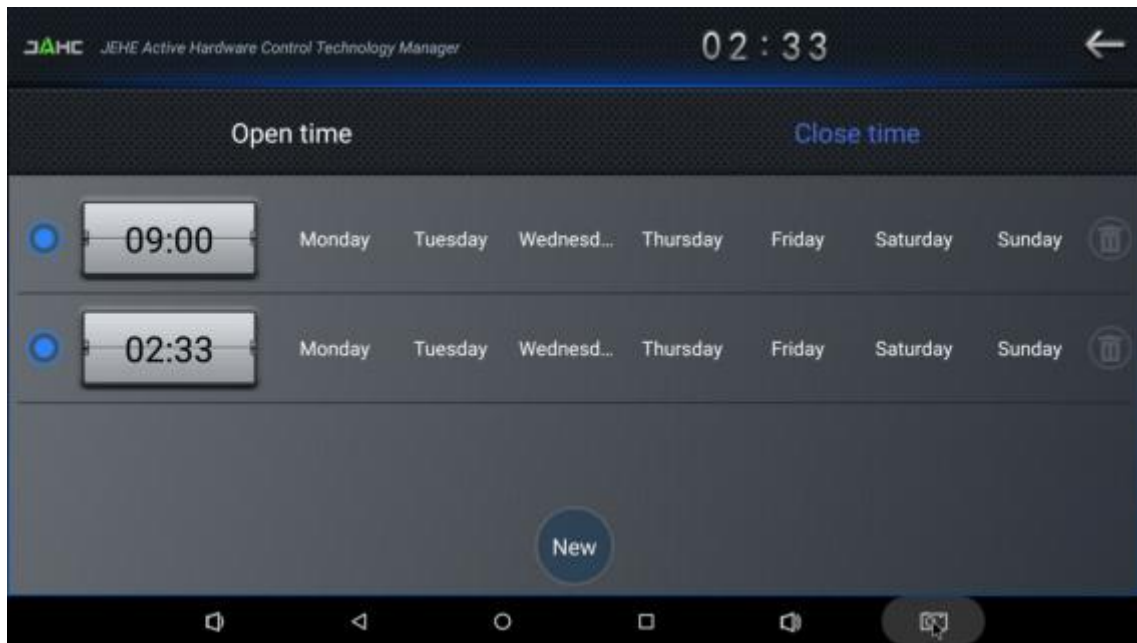

(Fig2)

Shenzhen JEHE Technology Development Co., Ltd.

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.
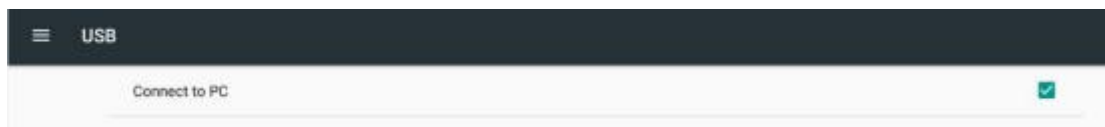
6. ADB SOP

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

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

b. Install Rock chip driver.
- Connect DN73 with windows PC host by OTG cable.
- Select 'Connect to PC' under android OS->Settings->USB->connect to PC.
- Then you can use ADB shell command to enter ADB.

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