

DN76 User Manual



Statement

The copyright of this manual belongs to Shenzhen JIEHE Technology Development Co., Ltd. (Giada, JIEHE's global brand) and all rights are reserved. The company reserves the right to change this manual at any time without notification. Specifications here are for reference only, please take the real product as standard.

Without official authorization of Giada, other company or individual may not copy, plagiarize, translate or disseminate this manual for commercial purpose.

The information provided in this manual is accurate and reliable. The company does not take any legal responsibility for the consequences of infringement use of this manual.

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 JIEHE Technology Development Co., Ltd.

Website: www.giadatech.com

Phone: +86-755-3330 0336

Email: support@giadatech.com

Address: 1~2/F, Block A, Tsinghua Information Harbor, North Section, Shenzhen Hi-tech Park, Nanshan District, Shenzhen, China

Table of Contents

1. Product Introduction	3
2. Interface Description and Hardware Specifications	3
2.1 Interface Description	3
2.2 Hardware Specifications.....	4
3. Accessories Installation Steps	5
3.1 3G/4G Installation	5
3.2 SIM Card Installation	6
4. How to play different videos on two screens.....	7
5. Firmware Upgrade Guide.....	7
5.1 Preparation	8
5.2 Upgrade the firmware.....	8
5.2.1. Install the driver in your host PC by following steps	8
5.2.2. Connect the DN76 with host PC	8
5.2.3. Start the firmware updating	9
6. JAHC APP	11
5.1 JAHC APP function	11
5.2 Startup(open) & shutdown(close) time setup	11
7. ADB SOP	14
7.1 Use command ADB version to check if Windows ADB tool is installed...14	
7.2 Install Rock chip driver	14

1. Product Introduction

Giada DN76 is powered by RK3568 quad-core Cortex-A55 processor. With Mali-G52 GPU, DN76 can support a 4K video and a 1080P video playback simultaneously. DN76 can support up to two screen output, with an HDMI2.0 and an HDMI1.4 display ports, and it also supports both landscape & portrait display mode. It also features Android 11 operation system. The player is suitable to be applied in high-end Android digital signage.

2. Interface Description and Hardware Specifications

2.1 Interface Description

Front I/O Port



Rear I/O Port



2.2 Hardware Specifications

DN76		Giada DN76-3568R41E4G-GIA
Processor	CPU	Rockchip RK3568, 4 Cores Cortex-A55
	Frequency	2.00 GHz
	Chipset	SOC
Memory	Type	DDR4
	Socket	Onboard
	Capacity	2GB(Optional: 4G)
Graphics	GPU	ARM Mali-G52
	Graphic Engine	OpenGL ES 1.1/2.0/3.2, OpenCL 2.0, Vulkan 1.1
	HDMI	1 x HDMI (Max. 4096 x 2160 @60 Hz) (CEC) 1 x HDMI (Max. 2560 x 1440 @30 Hz)
	Multi-Media	4K 60fps H.265/H.264/VP9 decoders, 1080P 60fps H.265/H.264 encoders
Network	Controller	1 x Realtek RTL 8211E Gigabit Ethernet
	Interface	1 x RJ45
I/OInterface	USB	1 x USB3.2 Gen1 (OTG), 1 x USB3.2 Gen1, 2 x USB2.0
	Serial Port	1 x RS232
	Audio	1 x 2-IN-1 headset (MIC-IN & AUDIO-OUT)
	Mini-PCle	1 x Full-size Mini-PCle for 3G/4G
	WiFi+BT Module	WiFi+BT Module Onboard (2.4GHz/5GHz)
	SIM Slot	1 x SIM Slot
Storage	eMMC	Onboard eMMC 32GB
JAHC	JAHC	Auto power on/RTC
Operation System	OS	Android 11
Power	Power Type	DC-IN
	Input Voltage	12V/2.08A
Mechanical	Construction	Metal
	Fanless	Yes
	Mounting	Desk/VESA Mounting (JC502)
	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%@45℃ (non-condensing)
Certification		CE/FCC Class B

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 play different videos on two screens

The two HDMI port on DN76 support clone mode, but you can play different videos on two screens by following setup:

- Connect DN76 with two HDMI screens, you can see they are clone mode.
- Open "DualDisplay" APP and allow dualdisplay video player to load photos, media and files on your device.
- Then the user can click "Subordinate" button to load and play one video. The video will show on the first screen.
- Move mouse to another screen, click the "main" button to load and play another video. You can see the two screens show different videos.

Note: According to DN76's decoding capabilities, one output can be up to 4K@60FPS and the other one will be 1080P@60HZ at the same time.

5. Firmware Upgrade Guide

5.1 Preparation:

- DN76 player
- Archive of DN76 firmware provided by Giada technical support
- Host PC with screen and installed 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:

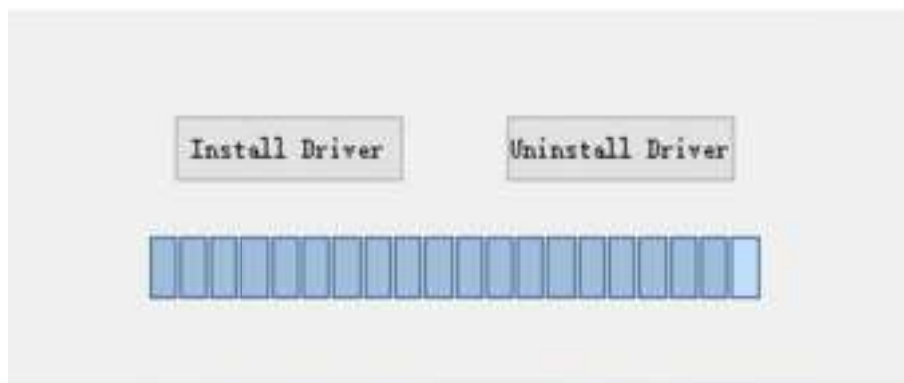
- Android Tool - tool for updating
- DN76 Firmware image.
- DriverAssitant - tool to install drivers and firmware image file

DN76-JHS562-R-GIADALOGO-20220...	2022/5/27 14:03	光盘映像文件	1,640,085...
DriverAssitant_v5.1.1.zip	2022/1/11 14:17	WinRAR ZIP 压缩...	9,584 KB
RKDevTool_v2.93.rar	2022/6/19 16:35	WinRAR 压缩文件	1,979 KB

5.2 Upgrade the firmware

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

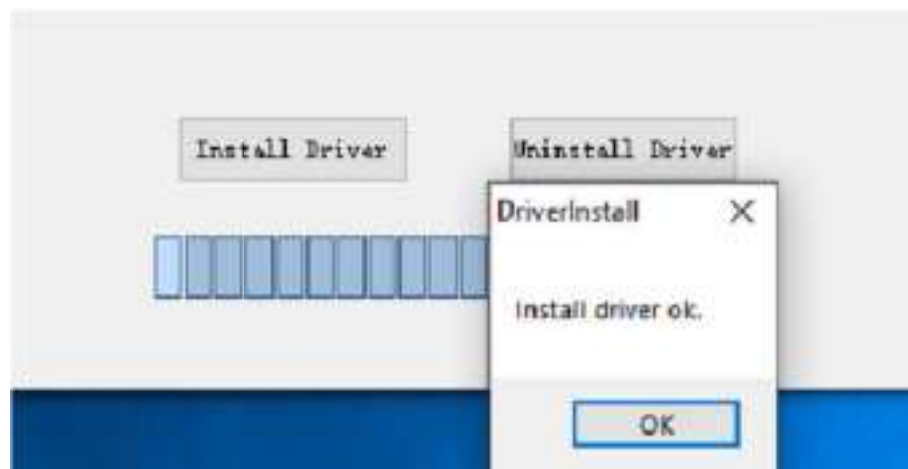
- a. Click the DriverAssitant file. Launch RK DriverAssitant and press “Install Driver”.



Apply all changes and warnings during the installation.



b. Click "ok" after the installation is finished.



5.2.2. Connect the DN76 with host PC

In order to connect the DN76 with Host PC and run bootloader mode, you should perform following steps:



- Please ensure that the power of the DN76 player is disconnected.
- Run RKAndroid tool V2.93 under the windows of the host PC.
- Connect the DN76 player to the host PC via usb OTG port (please refer to Fig 1 for location of the OTG port).

- d. Firstly, hold the DN76 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)

5.2.3. 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).

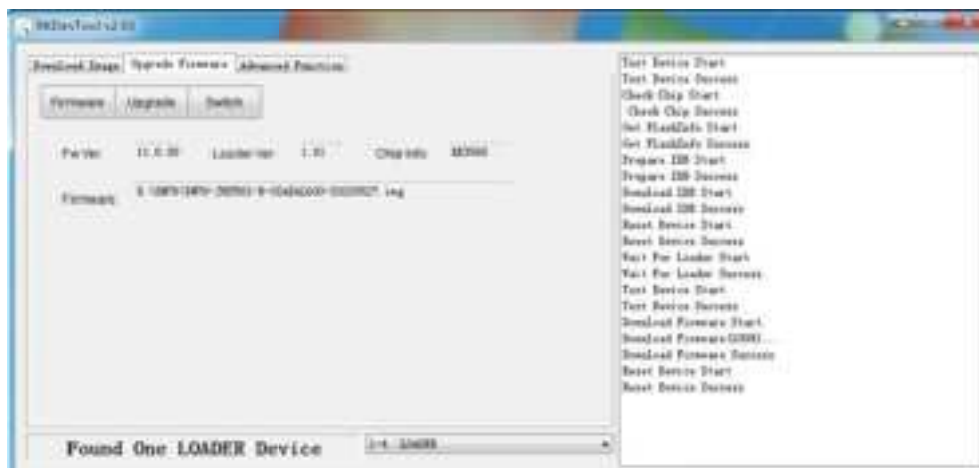


(Fig3)



(Fig4)

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



6. JAHC APP

6.1 JAHC APP functions

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

6.2 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)

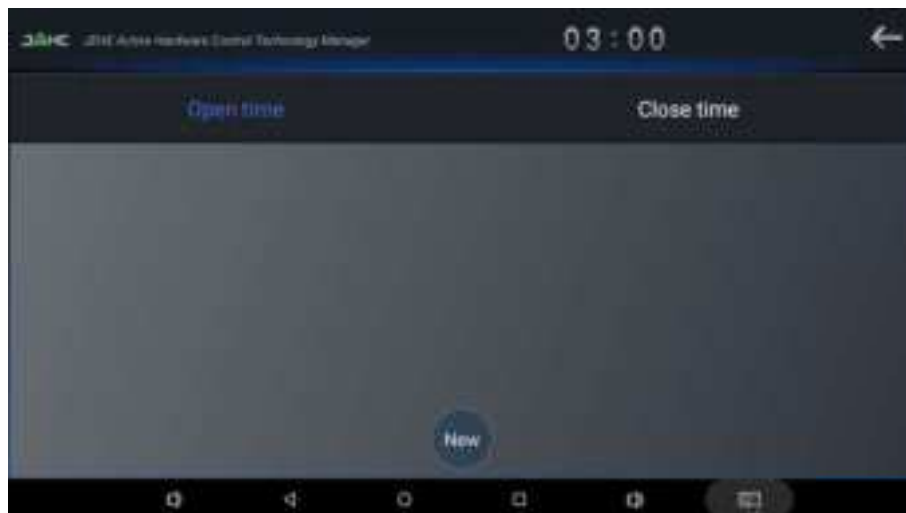


Fig2

- 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

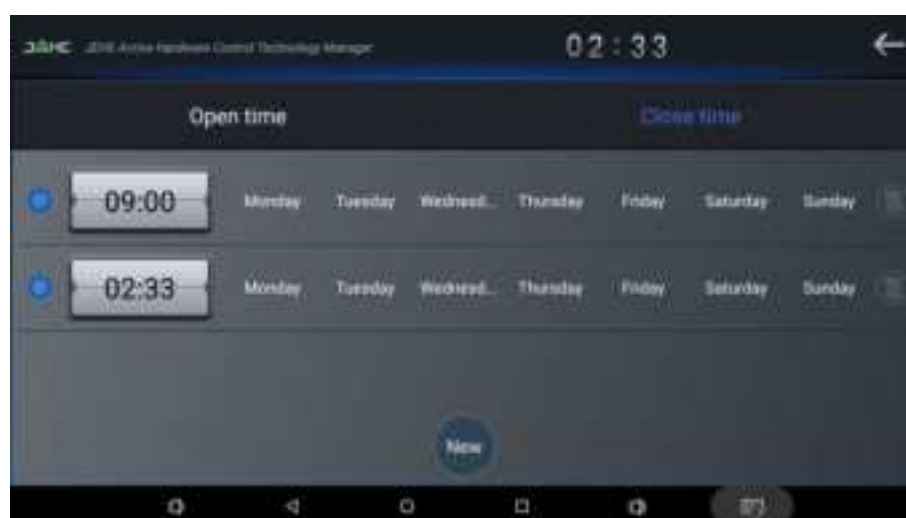


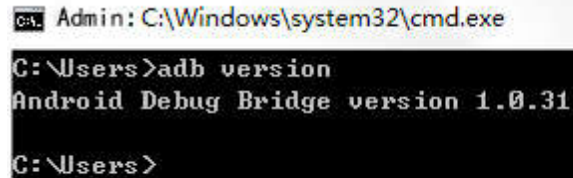
Fig5

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

7. ADB SOP.

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

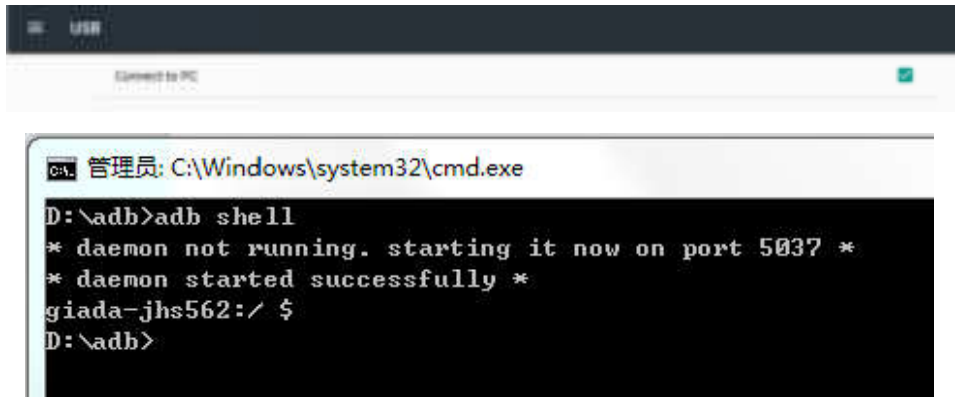
7.1 Use command ADB version to check if Windows ADB tool is installed.



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

7.2 Install Rock chip driver.

- Connect DN76 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.



```
USB
Connect to PC
D:\adb>adb shell
* daemon not running. starting it now on port 5037 *
* daemon started successfully *
giada-jhs562:/ $
D:\adb>
```




Shenzhen JIEHE Technology Development Co., Ltd.

Website: www.giadatech.com

Phone: +86-755-33300336

Email: support@giadatech.com

Address: 1~2/F, Block A, Tsinghua Information Harbor, North Section
Shenzhen Hi-Tech Park, Nanshan District, Shenzhen, China



The terms HDMI, HDMI High-Definition Multimedia Interface, and the HDMI Logo are trademarks or registered trademarks of HDMI Licensing Administrator, Inc.