

GL530MG Firmware Upgrade User Guide

TRACGL530MGUG001

V2.02



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History

Revision	Date	Author	Description of Change
1.00	June 21, 2022	Tammy Tian	Initial.
2.00	September 30, 2022	Tammy Tian	Changed the MCU upgrade method.
2.01	October 26, 2022	Tammy Tian	Added Firmware upgrade method.
2.02	November 17, 2022	Mihoo Zhu	Revised some description.

1. Tool Introduction

Queclink_Firmware_Upgrade_Tool_MDM is a PC tool which can be used to upgrade firmware provided by Queclink.

1.1. System Requirements

The tool can run directly on a PC with no installation required and can run on all Windows operating systems. You will receive a notification when there is an upgrade of this tool by Queclink.

2. Upgrade Preparation

Get the following list of items ready:



Name	Picture	Use
GL530MG Locator		
USB Cable 0.5M		1. Upgrade the firmware through USB Driver: Driver_qud.win.1.1_installer_x.x
UART Cable 0.5M		1. Configure the device; 2. Upgrade the firmware through UART Driver: PL2303_Prolific_DriverInstaller_Vxxxx or CH340G_Cable_Driver_Installer_V3.7

Table 1: Device List

3. Firmware Upgrade

3.1. Upgrade the firmware through USB

3.1.1. Prepare

	Name
Cable	GL530MG USB Data Cable
File	FULL package
Tools	Queclink_Firmware_Upgrade_Tool_MDM_Vx.xx

Note: Please use Version 1.52 (and above).

3.1.2. Step

Install **Driver_qud.win.1.1_installer_x.x** for the USB cable before upgrading the firmware with the tool.



Figure 1: USB cable connect with device

Note: Make sure the USB cable is connected to the PC before the upgrade.

Step 1

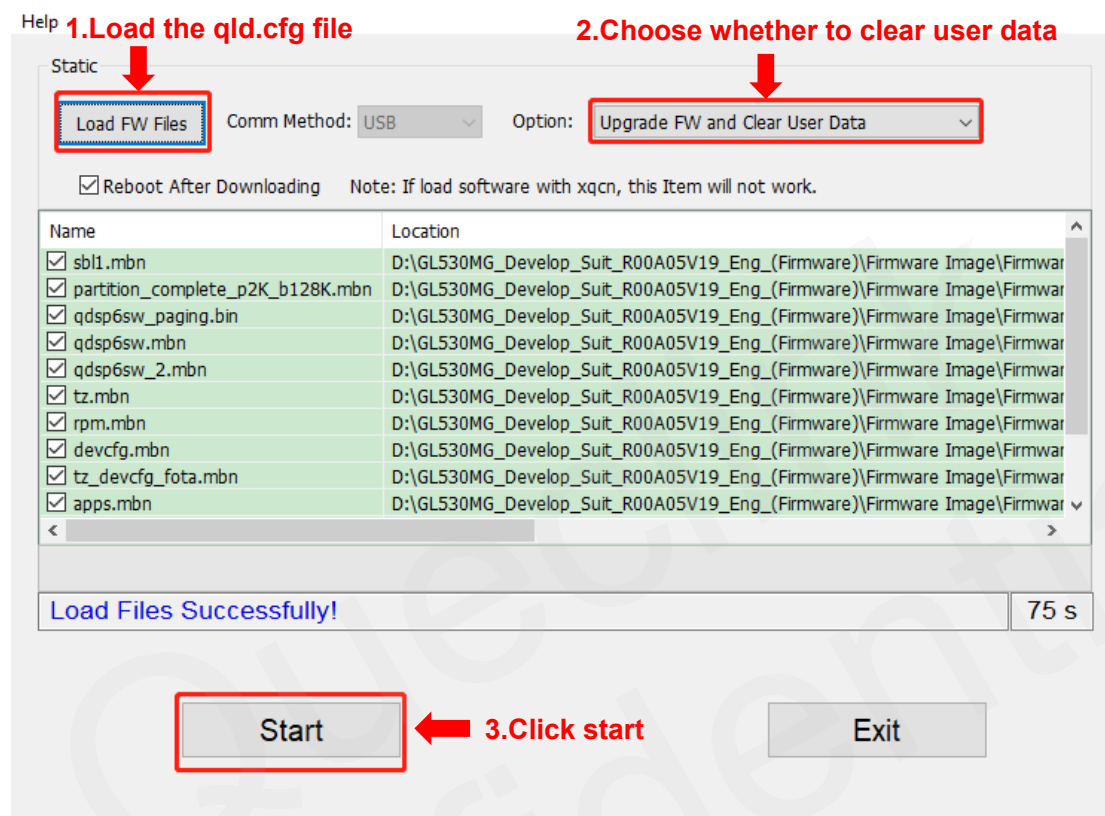
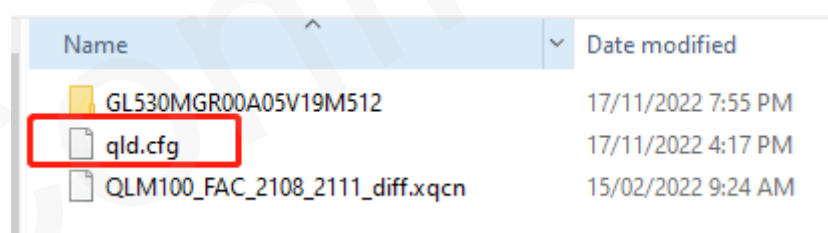
Open Queclink_Firmware_Upgrade_Tool_MDM_Vx.xx.exe. Click **Load FW Files** and select **qld.cfg** file in **GL530MGR00AxxVxxM512_FULL** folder.

Step 2

For **Option**, you can choose whether to clear user data

Step 3Select **Start**.**Step 4**

Wait for the firmware upgrade to succeed.

**Figure 2: Basic setting****Figure 3: Load Firmware File**

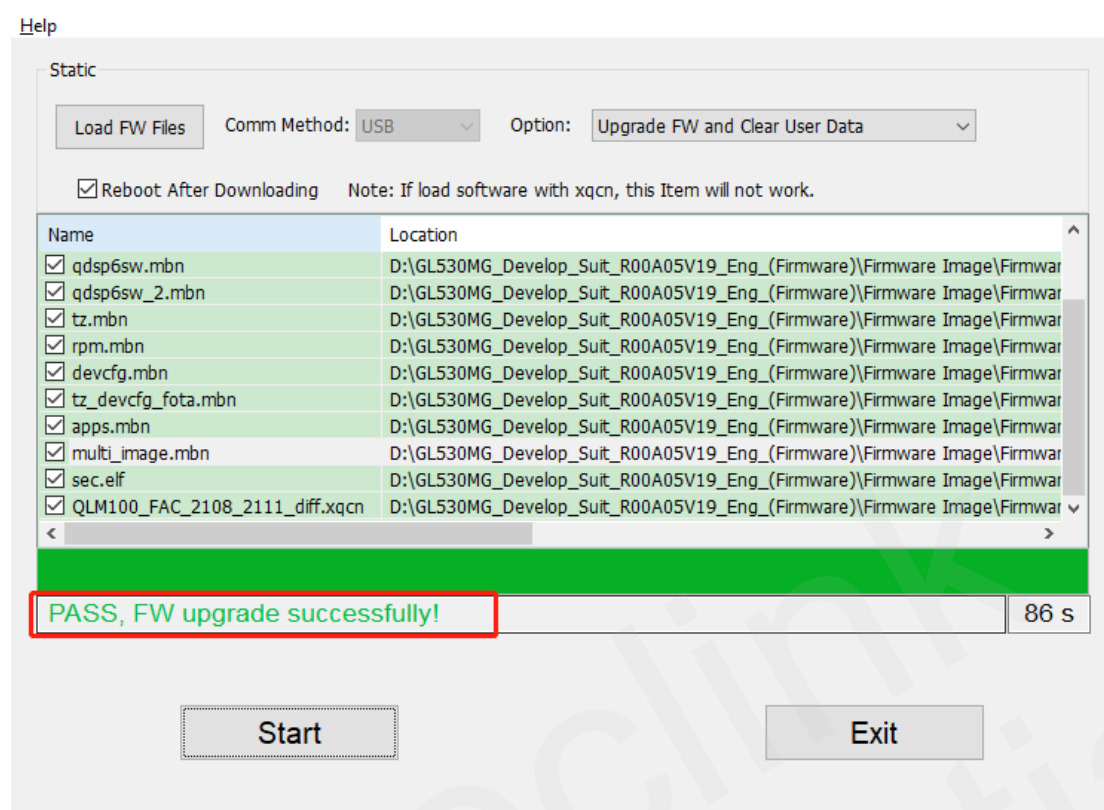


Figure 4: Upgrade success

3.2. Upgrade the firmware through UART

3.2.1. Prepare

	Name
Cable	GL530MG UART Data Cable
File	UPD package
Tools	Queclink_Firmware_Upgrade_Tool_MDM_Vx.xx

Note: Please use Version 1.52 (and above).

3.2.2. Step

Install the driver (**PL2303_Prolific_DriverInstaller_Vxxxx** or **CH340G_Cable_Driver_Installer_V3.7**) for the UART cable before upgrading the firmware with the tool.



Figure 5: UART cable connect with device

Note: Make sure the UART cable is connected to the PC before the upgrade.

Step 1

Open Queclink_Firmware_Upgrade_Tool_MDM_Vx.xx.exe. Click **Load FW Files**, and select **qld.urt** file in **GL530MGR00AxxVxxM512_UPD** folder.

Step 2

Select the correct UART port for upgrading.

Step 3

For **Clear Mode**, you can choose whether to clear user data

Step 4

Select **Start**

Step 5

Wait for the firmware upgrade to succeed.

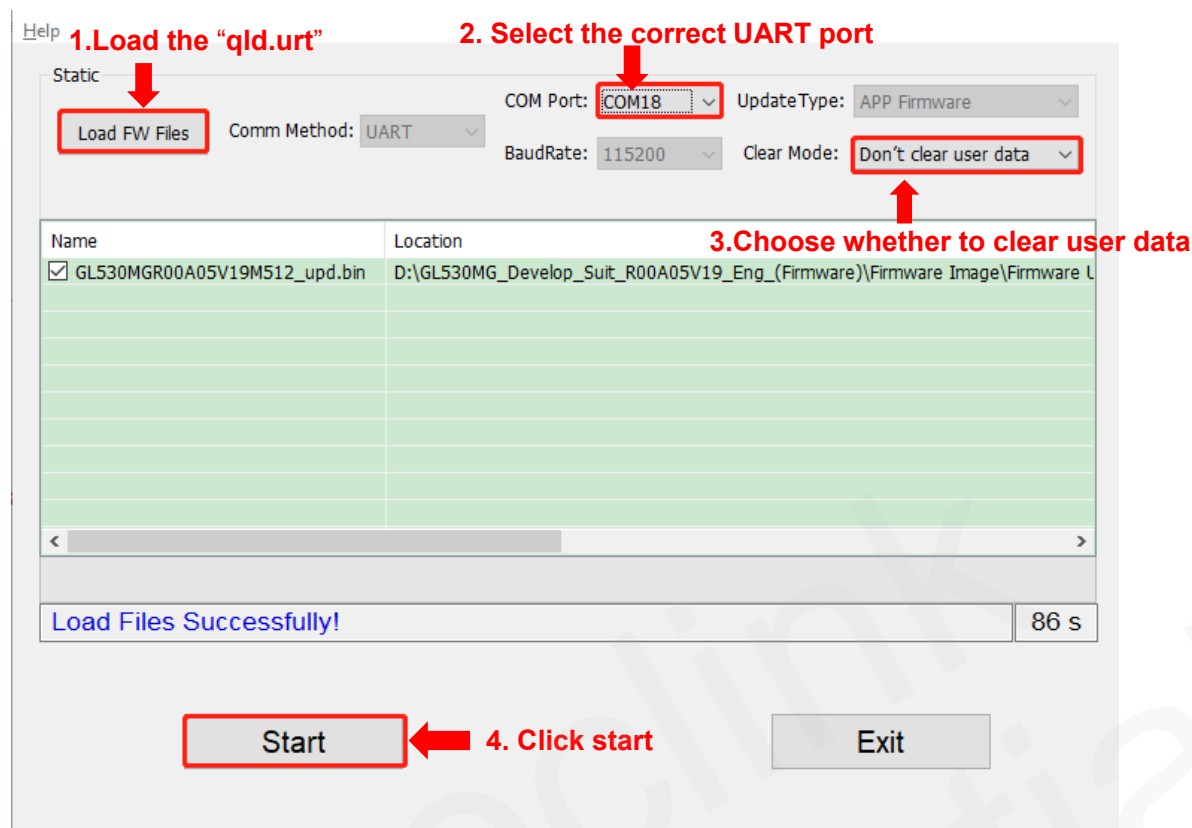


Figure 6: Basic setting


Name	Date modified	Type
 qld.urt	17/11/2022 6:38 PM	URT File

Figure 7: Load Firmware File

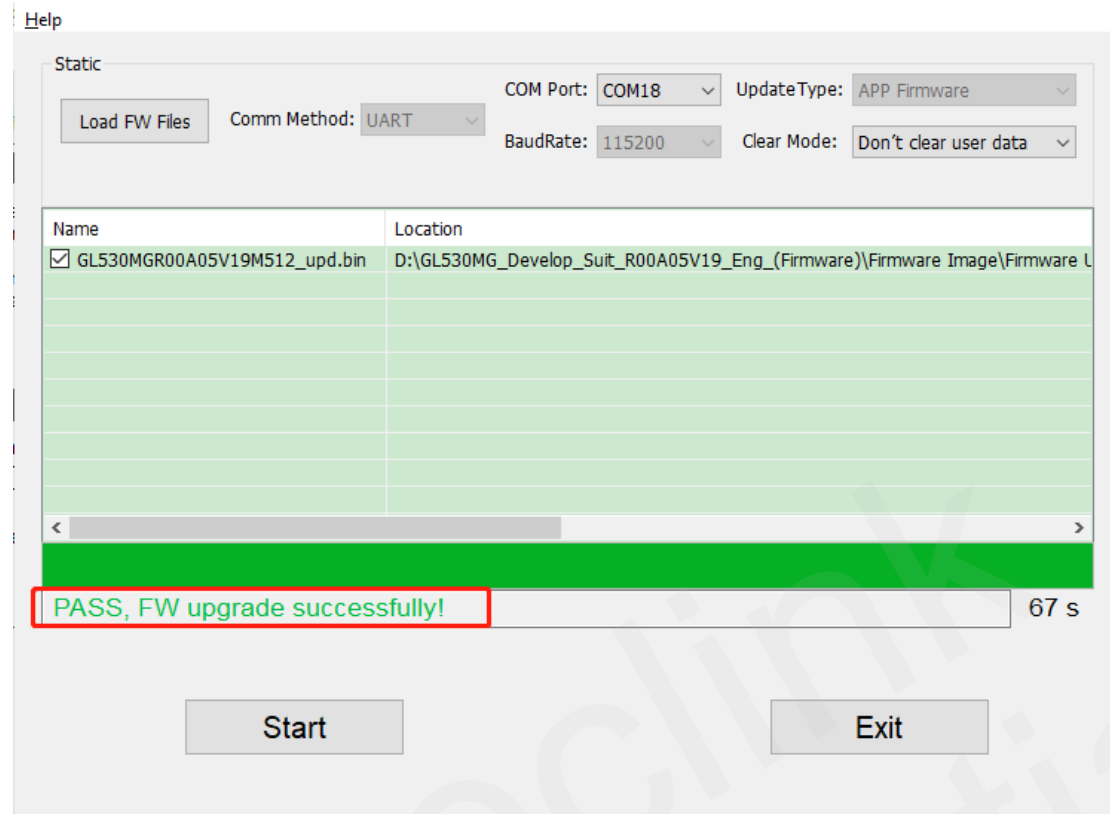


Figure 8: Upgrade success

4. MCU Firmware Upgrade

Install the driver (**PL2303_Prolific_DriverInstaller_Vxxxx** or **CH340G_Cable_Driver_Installer_V3.7**) for the UART cable before upgrading the MCU firmware with the tool.

4.1. Prepare

	Name
Cable	GL530MG UART Data Cable
File	MCU Firmware Image
Tools	Queclink_Firmware_Upgrade_Tool_MDM_Vx.xx

Note: Please use Version 1.52 (and above).

4.2. Step

Install the driver (**PL2303_Prolific_DriverInstaller_Vxxxx** or **CH340G_Cable_Driver_Installer_V3.7**) for the UART cable before upgrading the MCU firmware with tools.



Figure 9: UART cable connect with device

Note: Make sure the UART cable is connected to the PC before the upgrade.

Step 1

Open Queclink_Firmware_Upgrade_Tool_MDM_Vx.xx.exe. Click **Load FW Files** and

select **qld.urt** file in **MCU Firmware Image** folder.

Step 2

Select the correct UART port for upgrading.

Step 3

Select **Start**.

Step 4

Wait for the upgrade to succeed.

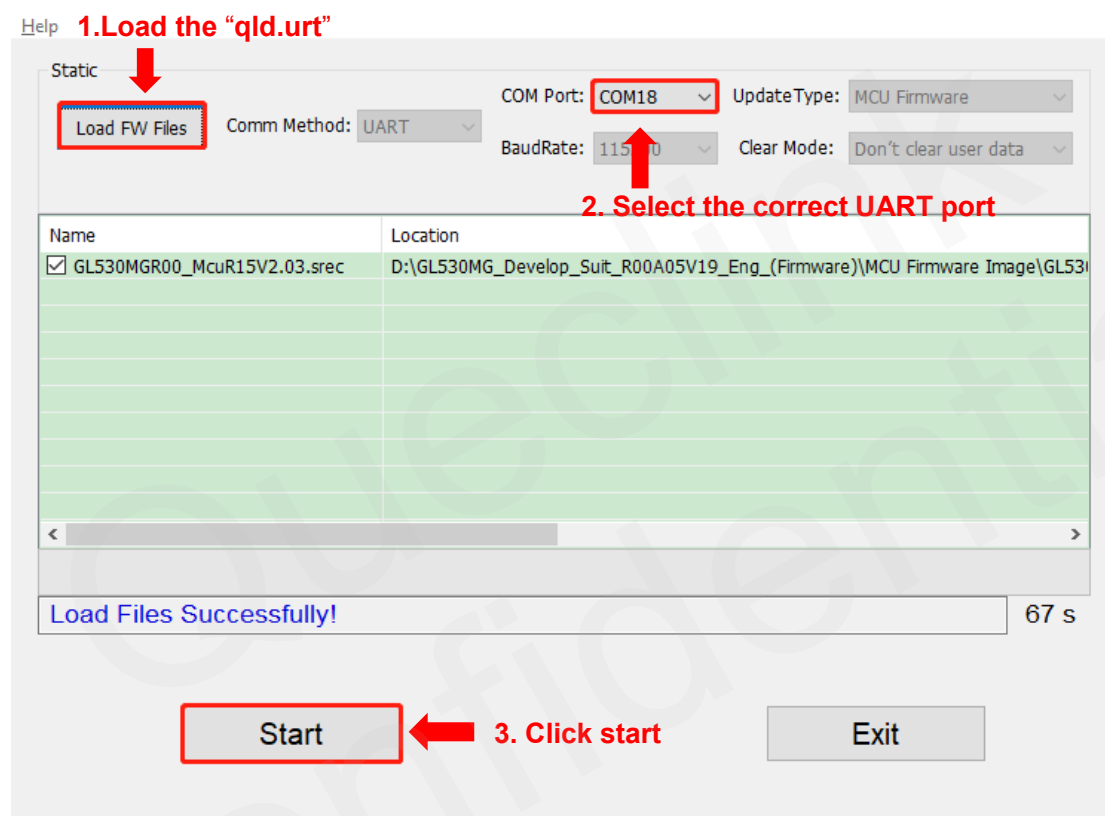


Figure 10: Basic setting

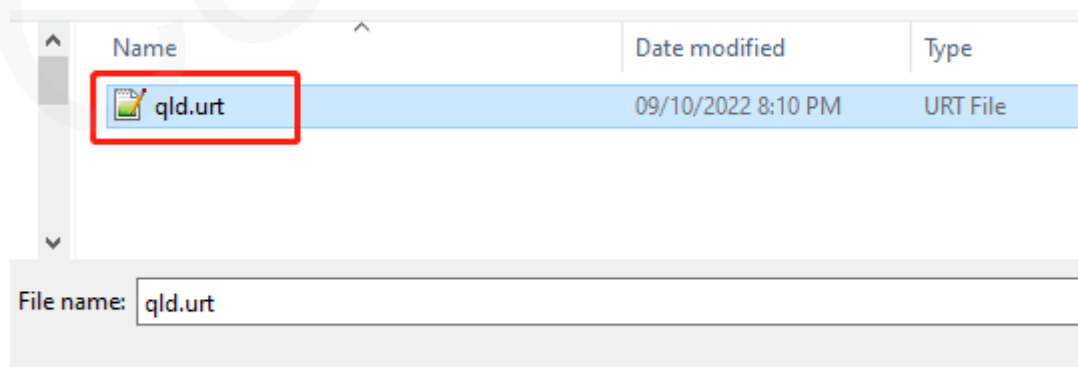


Figure 11: Load FW files

Help

Static

Load FW Files

Comm Method: UART

COM Port: COM18

UpdateType: MCU Firmware

BaudRate: 115200

Clear Mode: Don't clear user data

Name	Location
<input checked="" type="checkbox"/> GL530MGR00_McuR15V2.03.srec	D:\GL530MG_Develop_Suit_R00A05V19_Eng_(Firmware)\MCU Firmware Image\GL530MGR00_McuR15V2.03.srec

PASS, FW upgrade successfully!

55 s

Start

Exit

Figure 12: Upgrade success

5. Troubleshooting

5.1. Port Error

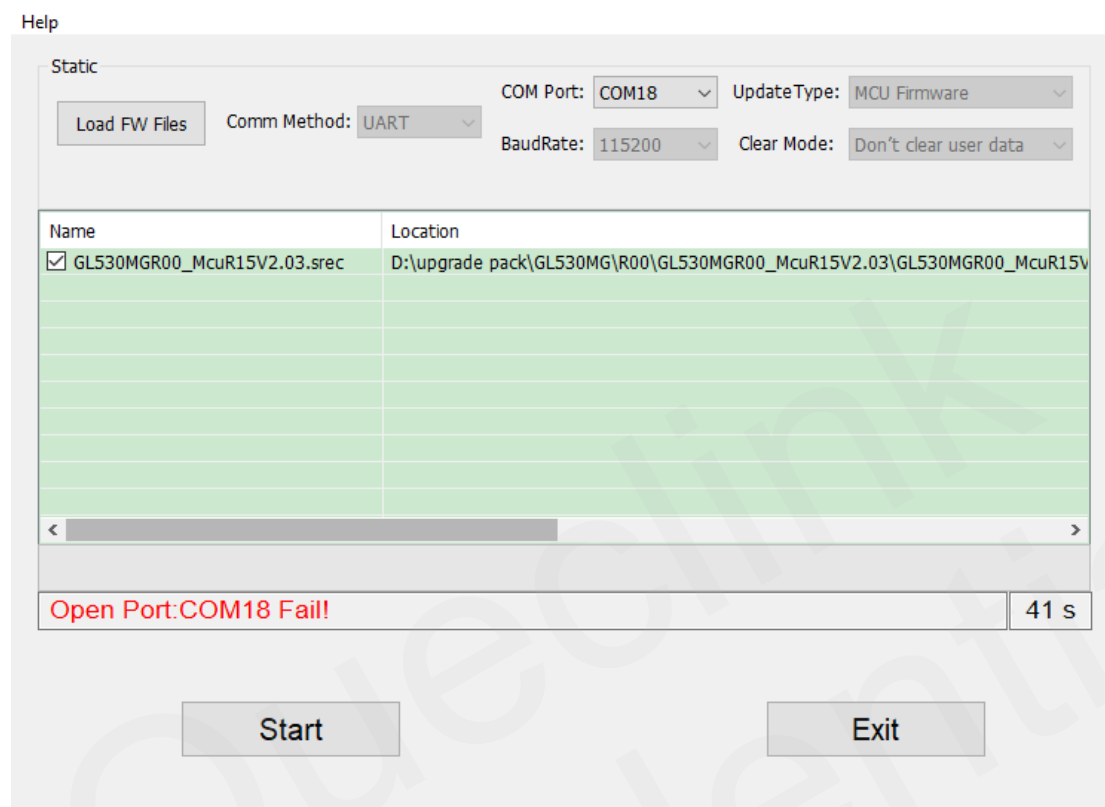


Figure 13: The USB port is not available

Note: We suggest to operate only one device for upgrade; when multiple devices are together, the serial port may not work.

5.2. Caution

- If the USB port keeps disconnecting while downloading the firmware, the upgrade tool will stop downloading and prompt Download Fail in seconds. In this case, please disconnect the external power supply, reconnect and try again.
- If the upgrade tool is closed while downloading the firmware, open the upgrade tool but an error message will appear. In this case, please disconnect the external power supply, reconnect and try again.
- If other unexpected errors occur, please disconnect the external power supply, reconnect and try again.
- Because the upgrade cable is charged, we recommend to turn off the internal battery switch during the upgrading.

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