Dobot M1 Firmware Update Guide

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The user has the responsibility to make sure following the relevant practical laws and regulations of the country, in order that there is no significant danger in the use of the robotic arm.

Certification specification

Dobot M1 has been certified as follows.

CE FC RoHS KC

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Preface

Purpose

This Document describes how to update firmware, making it easy for users to fully understand and use it.

Intended Audience

This document is intended for:

- Customer Engineer
- Sales Engineer
- Installation and Commissioning Engineer
- Technical Support Engineer

Change History

Date	Change Description
2018/12/15	The first release

Symbol Conventions

The symbols that may be founded in this document are defined as follows.

Symbol	Description
⚠DANGER	Indicates a hazard with a high level of risk which, if not avoided, could result in death or serious injury
⚠WARNING	Indicates a hazard with a medium level or low level of risk which, if not avoided, could result in minor or moderate injury, robotic arm damage
⚠NOTICE	Indicates a potentially hazardous situation which, if not avoided, can result in robotic arm damage, data loss, or unanticipated result
🕮NOTE	Provides additional information to emphasize or supplement important points in the main text

Contents

1. Updating Firmware

When the firmware or other applications need to be upgraded, you can use the web management to upgrade the firmware or the application. For example, if you want to use the collision detection or IP address forced configuration function, you can upgrade Dobot M1 firmware.

⚠DANGER

When updating firmware, please do not perform any other operation on Dobot M1 or power off Dobot M1, to avoid Dobot M1 in abnormal condition. Otherwise, it will be vulnerable to injury the device or the person.

Prerequisites

- You have connected Dobot M1 to a PC over a network cable, and the IP address of Dobot M1 and the PC must be in the same network segment. For details, please see *Dobot M1 User Guide*.
- You have powered on Dobot M1.
- You have obtained the latest A9 firmware **a9_app-00*xx*.tar**. *xx* indicates the firmware version, please replace it based on site requirements.

  The download path is https://www.dobot.cc/downloadcenter/dobot-m1.html#most-download.
- You have connected Dobot M1 to an emergency stop switch.
- You have obtained the latest M1Stuido.

  The download path is https://www.dobot.cc/downloadcenter/dobot-m1.html#most-download.

Procedure

Step 1 Select the corresponding IP address from the IP drop-down list on the upper left pane of the M1Studio page.

Step 2 Select **Tools > Web Management** on the M1Studio page.

The **Web Management** page is displayed.

Step 3 Select **Update A9 Program** in the navigation tree on the left.

The **Update A9 Program** page is displayed, as shown in Figure 1.1.

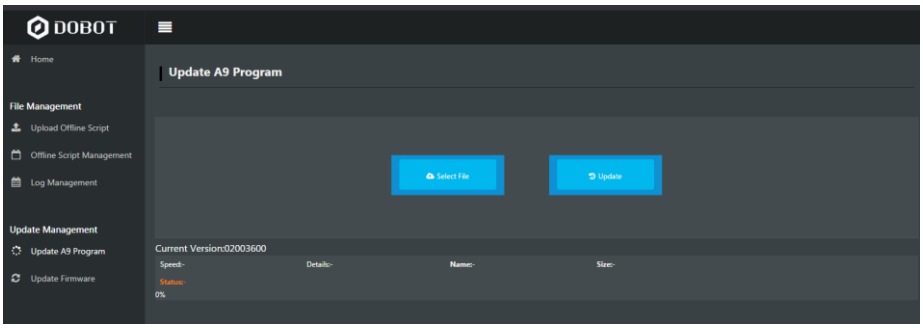

Figure 1.1 A9 Program GUI

Step 4 Click **Select File** and upload the obtained firmware.

Step 5 Click **Update**.

⚠NOTICE

If the version of the obtained firmware is **0058** or later, please click **Update** again after **Status** is **100%**, to avoid update failure.

Step 6 Right-click **Reload** after **Status** is **Update Finish**, as shown in Figure 1.2.

If the A9 firmware version changes to the updated version, it indicates that the update is successful.

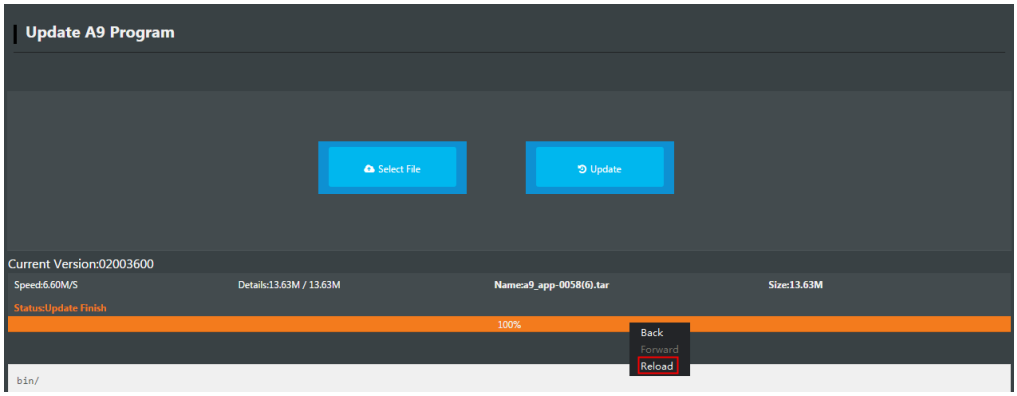

Figure 1.2 Update A9 firmware

Step 7 Restart Dobot M1.

Step 8 Select **Update Firmware** in the navigation tree on the left.

The **Update Firmware** page is displayed, as shown in Figure 1.3.

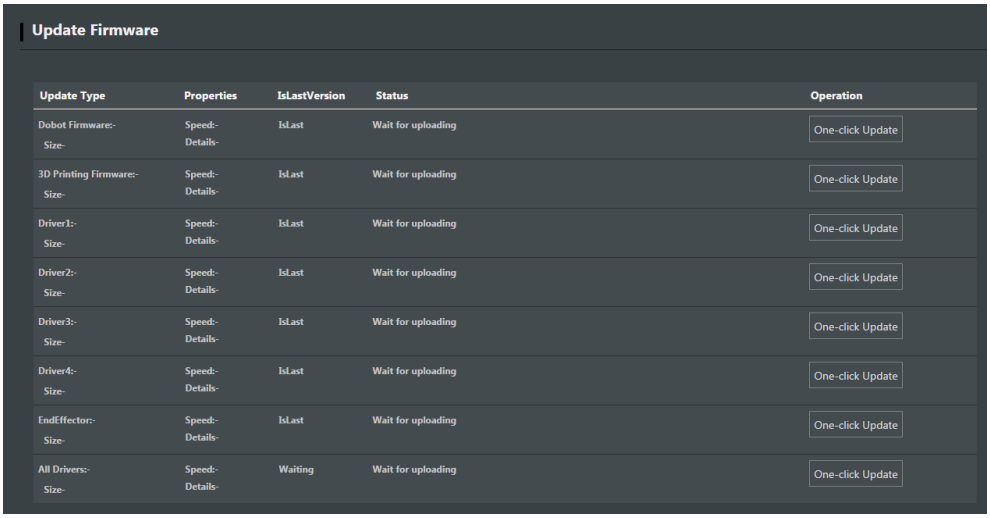

Figure 1.3 Update Firmware GUI

Step 9 Select firmware exactly as the order shown in Figure 1.4 and click **One-click Update**.

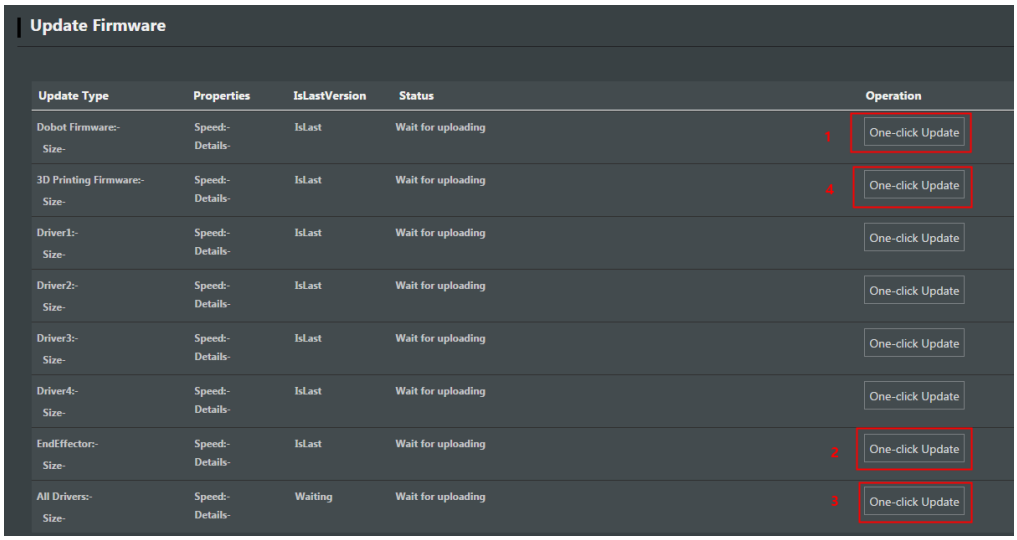

Figure 1.4 Update order

You can view the process of the firmware upgrade. If the progress bar is 100% and the green LED indicator on the base of Dobot M1 is blinking, the update is completed, as shown Figure 1.5 and Figure 1.6. And then the next firmware update can be started.

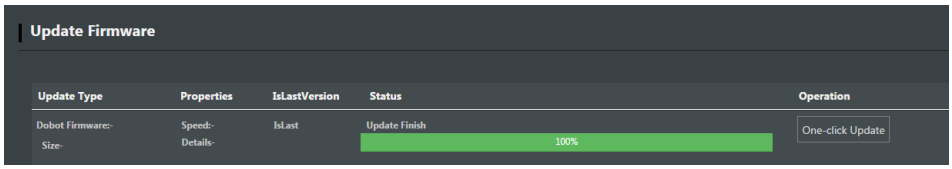

Figure 1.5 Process of the firmware upgrade

Figure 1.6 LED indicator status

⚠NOTICE

- Please update firmware exactly as the order shown in Figure 1.4 and the next firmware update should not be started until the current one is completed. Otherwise, the update will fail.
- When updating firmware, please do not perform any other operation on Dobot M1 or power off Dobot M1, to avoid Dobot M1 in abnormal condition. Otherwise, it will be vulnerable to injury the device or the person.

Step 10 Select **3D Printing Mode** from the drop-down list on the **Mode Switch Controlling** pane of the **Home** page, as shown in Figure 1.7.

After the 3D printing firmware is updated, Dobot M1 will switch to 3D printing mode, you need to switch Dobot M1 to Dobot mode. Otherwise, Dobot M1 cannot work normally.

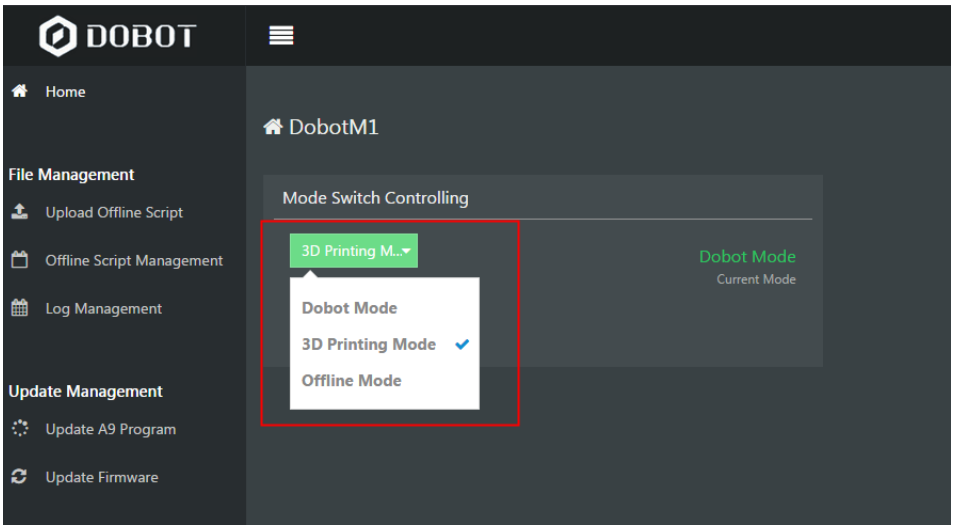

Figure 1.7 Mode switch

