

GrowSphere™

Manual Firmware Upgrade process

Purpose

The purpose of this document is to provide instructions for Manual Firmware upgrade process for the GrowSphere™ MAX controller (PLC).

Preparation

1. **SD Card**






You need a clean 16-32GB SD card formatted to FAT32.

2. **Download**

Download the latest firmware version from the [Digital Farming Resource](#) section of the Netafim USA website.

Upgrade Instructions

1. **Extract the Files** The download is a .zip file. Extract the files and folders to a known location on your computer. You will see these five items:

Name	Type
 FIRMWARE	File folder
 USERDATA	File folder
 SDCARD.INI	Configuration sett...
 Version.txt	Text Document
 Version.txt.sig	SIG File

2. **Load the SD Card**

Copy these five items and paste them onto your prepared SD card.

3. **Insert the Card**

Power off the Controller (PLC). Remove the original SD card and insert the new SD card containing the firmware files.

4. **Start the Update**

Power on the Controller. The **RUN** and **ERR** LEDs will blink every second once the system detects the new firmware.

5. **Wait for Completion**

Wait approximately five minutes. The update is complete when only the **RUN** LED blinks.

6. **Reboot the System**

Power off the Controller and remove the SD card. Power the Controller back on.

7. **Finalize**

Wait one minute. The Controller will reboot automatically. It will resume full function within three minutes.

8. **Last step**

Insert the original SD card.