Firmware Loader Software





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See also our website: www.smac-mca.com

Software Manual

Revision 1.0



www.ingeniamc.com

Firmware Loader – Software Manual

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Icons

Icons that the reader may encounter in this manual are shown below, together with their meanings.



Additional information

Provides the user with tips, tricks and other useful data.



Warning

Provides the user with important information. Ignoring this warning may cause the device not to work properly.



Critical warning

Provides the user with critical information. Ignoring this critical warning may cause damage to the device.

1 Introduction

The Ingenia Firmware Loader is a graphical tool through which you can upgrade the firmware of your Ingenia Servo Drive controller.

1.1 Getting Started

Minimum computer requirements to run Firmware Loader software are:

- Microsoft Windows OS version 2000, XP, Vista or 7.
- Processor 1GHZ or higher with at least 64Mb of RAM.
- At least 30MB of free disk space.
- RS-232 Serial COM port.

In order to install and run the Firmware Loader software, you must have Administrator privileges (for installation).

After installing the Firmware Loader software on your computer, you can run the application from your Start > Programs menu.

Upon accessing the Firmware Loader software, you will see a Dialog window like the one in Figure 1:

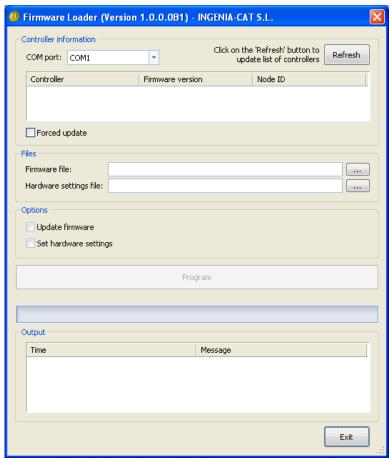


Figure 1: Firmware Loader Dialog window

Upgrading your Servo Drive

The Firmware Loader requires a serial RS-232 link between the PC and the drive you want to upgrade the firmware.

Upgrading the firmware can be done in two different ways. Regular update or Forced update.

Forced update is only recommended in cases where Regular update fails or when Ingenia specifically recommends using it.

Firmware Loader requires that your Servo Drive UART configuration is set to 115200bps (default).

2.1 Regular update

To update the firmware of your servo drive controller, connect it to a free serial COM port of a PC and power up the controller.



Firmware Loader requires that your Servo Drive UART configuration is set to 115200bps (default).

Then open Firmware Loader and click on the Refresh button to update the controller list.

If the connection is properly done, the controller information (name, firmware version and node ID) should be displayed in there.

You can refresh the list at any time by clicking on the Refresh button.



Make sure that the serial COM port used for updating is not used by any other software while using Firmware Loader.

Choose the controllers to be programmed from the controller list.

Only the controllers with checked boxes will be programmed with the new firmware.

Then, select the firmware file to be loaded. To do that the Browse button () and select the desired file.

To begin loading the firmware, check the Update firmware checkbox and click on the Program button. While the process executes, the messages in the Output Log describe the action that is currently being performed.. The progress bar shows the progress of the current stage of the operation.



Do not disconnect power from the controller(s) while the firmware is loading. Doing so can cause severe damage and you will have to send the unit back to Ingenia for repair.



All parameters on the controller will be reset to their default values when the new firmware is loaded. Use MotionLab software to save a backup file of the current parameters before upgrading the firmware of the controller..

2.1 Forced update

When the regular update procedure fails and Ingenia explicitly recommends it, a forced update can be performed in your servo drive controller.

To perform a forced update, follow the next instructions:

- 1. Select the COM port were your Servo Drive controller is connected
- 2. Power off the servo drive
- 3. Select the firmware file to be loaded. To do that the Browse button () and select the desired file.
- 4. Click on the Program button. A progress bar will start.
- 5. Power on the servo drive before the progress ends.

The system will start the update process.

While the process executes, the messages in the Output Log describe the action that is currently being performed. The progress bar shows the progress of the current stage of the operation.



Do not disconnect power from the controller(s) while the firmware is loading. Doing so can cause severe damage and you will have to send the unit back to Ingenia for repair.



Forced update should be only used when Ingenia specifically recommends this procedure.