

S300/S400/S600 Serial Upgrade Procedure



Valid for revision 2.16

The field upgrade of the SERVOSTAR® 300 & 400 & 600 series product requires the application program *DriveDownloadUtility_CAN_LPT_216.exe*, which can be obtained from our [website](#). Source files for upgrading Firmware are accessible from our [website](#) as well. This document only details the Serial Download.

You can use the download utility to upgrade:

- firmware
- motor database
- profile table
- PLC program (contact customer support)

Possible interfaces:

- serial PC interface (COM1...4) with standard serial (nullmodem) cable
- parallel PC interface (LPT1 or 2) with CAN-dongle (contact customer support)
- USB interface with the CAN-dongle is possible with special software (contact customer support).

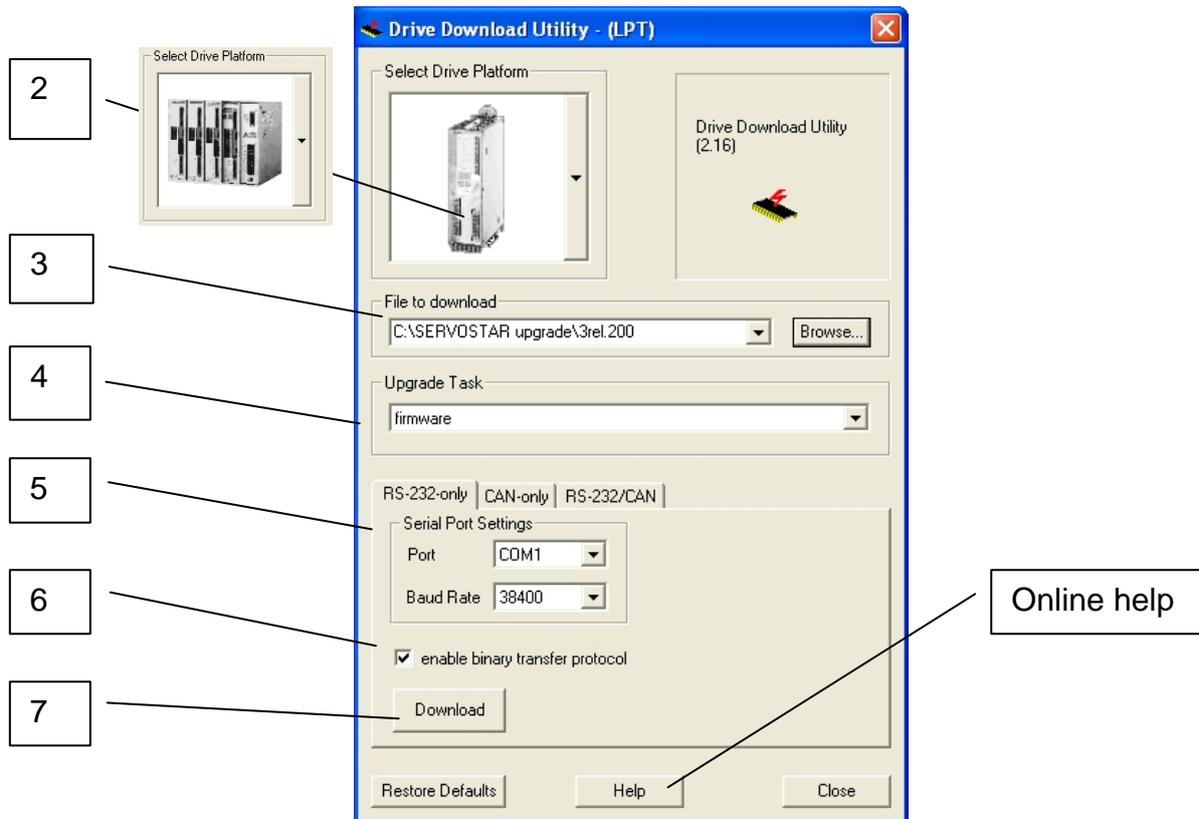
Usually the serial connection is used.

Preparation for serial transmission:

- mains power must be switched off
- DC link voltage must be <100V
- 24 VDC power supply must be on to the servo amplifier
- an RS-232 serial port connection (null modem) between the computer and the servo amplifier (connector X6) must exist
- The selected RS-232 serial port must not be used by another software
- *DriveDownloadUtility_CAN_LPT_216.exe*, along with the source file for the upgrade, must be accessible by your computer
- Parameters and motion tasks must be saved in the EEPROM or in external files, Flash Eprom will be cleared

Upgrade S300/ S400:

- 1) Run the *DriveDownloadUtility_CAN_LPT_216.exe* software.



- 2) Select the amplifier platform from the picture (S300 or S400)
- 3) Select the file to download in the *File to Download* selection box. Use the *Browse* button to locate the appropriate directory in which the file is stored and select the file.

Attention! Take care that you use the correct file.

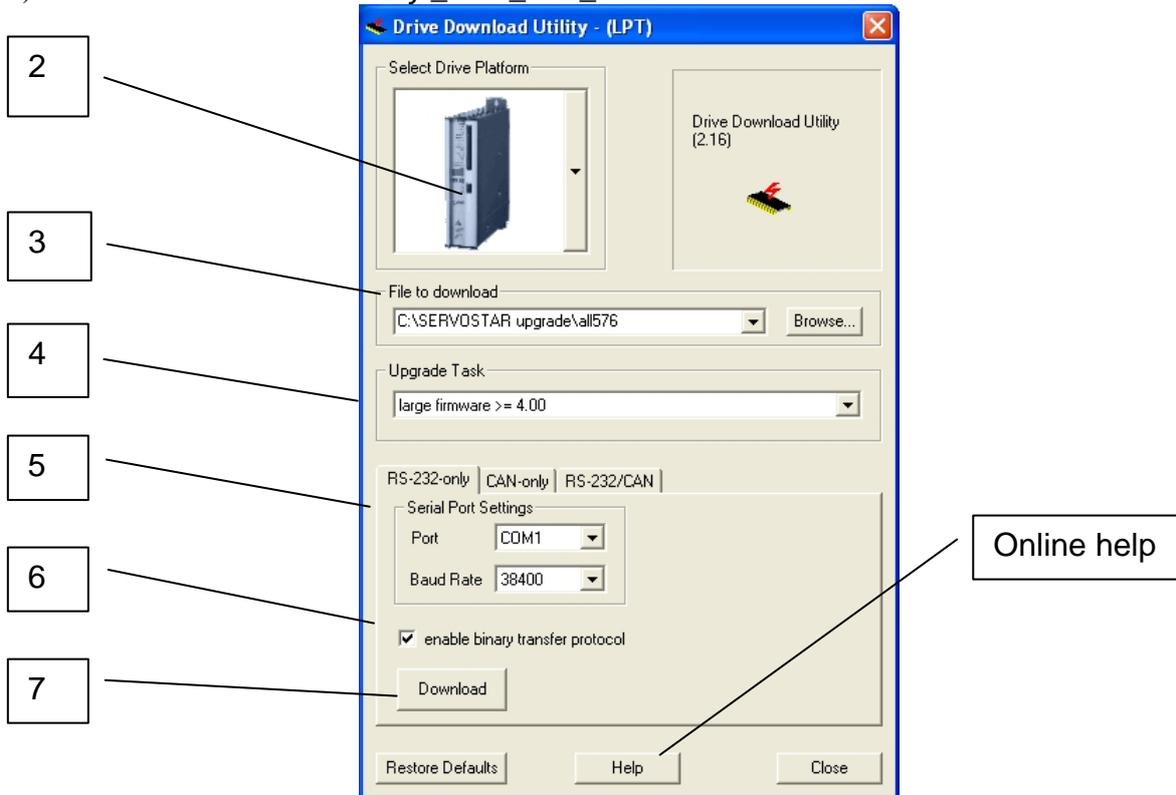
Example: Don't use a motor database file for a firmware upgrade.

- 4) Select the task (defines the firmware segment) in the *Upgrade Task* selection box.
Firmware upgrade: select **firmware**
Motor Database upgrade: select **motor database**
Profile Table upgrade: select **profile table**
PLC Program upgrade: select **PLC program**
- 5) Select *RS232-only*. Set the communication Port and Baud Rate in the *Serial Port Settings* selection box.
Port: select the computer port were the drive is connected to (usually **COM1**)
Baud Rate: **38400**
- 6) Set the download mode: place a check mark in the **binary** box.
- 7) Press **Download**.

Proceed on page 4 of this document.

Upgrade S600:

1) Run the *DriveDownloadUtility_CAN_LPT_216.exe* software.



2) Select the amplifier platform from the picture (S600)

3) Select the file to download in the *File to Download* selection box. Use the *Browse* button to locate the appropriate directory in which the file is stored and select the file.

Attention! Take care that you use the correct file.

Examples: - don't use a motor database file for a firmware upgrade.

- don't upgrade a 3.xx Firmware of S600 with a 5.xx file.

4) Select the task (defines the firmware segment) in the *General Settings* selection box.

Firmware upgrade:

- the "old" firmware version is 3.99 or lower - select **small firmware <=3.XX**

- the "old" firmware version is 4.00 or higher - select **large firmware >=4.00**

Motor Database upgrade:

- the firmware version is 3.99 or lower - select **motor database FW<=3.XX**

- the firmware version is 4.00 or higher - select **motor database FW>=4.00**

Profile Table upgrade:

- the firmware version is 4.86 or higher - select **profile table FW>=4.86**

PLC Program upgrade:

- the firmware version is 6.00 or higher - select **PLC program FW>=6.00**

5) Select RS232-only. Set the communication Port and Baud Rate in the *Serial Port Settings* selection box.

Port: select the computer port were the drive is connected to (usually **COM1**)

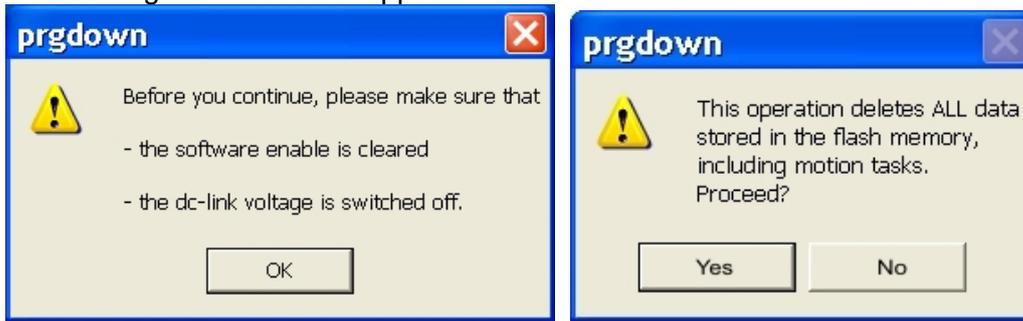
Baud Rate: **38400 (old amplifiers, which have been delivered until Dec 2001, can communicate only with 9600 Baud max!)**

6) Set the download mode: place a check mark in the **binary** box (**old amplifiers, which have been delivered until Dec 2001, cannot communicate binary!**).

7) Press **Download**

After Starting the Download Process

1) The warning screens below appear.



Make sure that

- the high voltage power supply is switched off
- the DC link voltage is below 100V
- you have saved your setup parameters and motion tasks

If you are not sure about the parameters, start the amplifier's setup software and save parameters/motion tasks to EEPROM. Close the setup software. Proceed upgrading with **OK / YES**

2) If the amplifier is (software) enabled, the download utility can disable it:



Proceed upgrading with **YES**.

- 3) The software initiates communication and set-up for the amplifier. The amplifier displays '-' in the left most character or "del" on the 3 digit display while it is setting up.
If problems occur click *Help* and go to the troubleshooting section.
- 4) When set-up is complete, the '-' moves to the center character or "Prg" appears on the 3 digit display and the data transfer begins. The upgrade utility monitors the progress with a status bar.
- 5) When the process is complete, a success screen pops up.
- 6) Cycle the 24 VDC supply to the servo amplifier (turn off then back on) and the firmware download is complete! Close the download utility and your servo amplifier is ready to set-up for your application.

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| Danaher Motion Customer Support Europe Internet: www.DanaherMotion.net E-Mail: support@danahermotion.net Phone: +49(0)203 - 99 79 - 0 Fax: +49(0)203 - 99 79 - 155 | Danaher Motion Customer Support USA Internet: www.DanaherMotion.com E-Mail: DMAC@danahermotion.com Phone: +1-540-633-3400 Fax: +1-540-639-4162 |
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