Twido
Twido Windows Executive Loader Wizard
Online Help
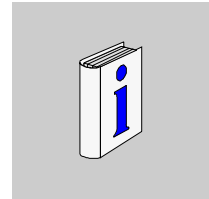
eng   Version 2.0

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Document Scope This is Online Help for the Twido Windows Executive Loader Wizard. The Executive Loader Wizard is a Windows-based program that provides step-by-step guidance for updating the Firmware Executive on a Twido programmable controller.

Validity Note The information in this manual is applicable **only** for Twido programmable controllers.

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Using the Twido Executive Loader Wizard

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At a Glance

Overview

Detailed instructions are provided for using the Twido Windows Executive Loader Wizard to update the Firmware Executive of your Twido programmable controller.

What's in this Chapter?

This chapter contains the following topics:

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Step #1 - Welcome to the Exec Loader

Introduction   This is the first step of the procedure for updating the Firmware Executive of your Twido programmable controller. This first step provides an overview of this procedure and an introduction to the Twido Windows Executive Loader Wizard.

⚠	**WARNING**
	Updating the executive of your Controller will delete the current control application from the Controller's RAM.
	It is recommended that you reload the control application using TwidoSoft after you complete updating the executive.
	Failure to follow this precaution can result in death, serious injury, or equipment damage.

Exec Loader   The **Twido Windows Executive Loader** is a Windows-based wizard program that guides you through the steps necessary to update the **Firmware Executive** in your Schneider Electric Twido programmable controller. The Firmware Executive is the operating system that runs your applications and manages controller operation. The wizard provides an intuitive point-and-click interface that progressively steps you through the updating procedure to quickly download the latest version of the executive for your controller.

Opening the Executive Loader Wizard   You can open the Executive Loader Wizard from TwidoSoft by selecting **Tools → Update Firmware Executive** from the main menu, or by double-clicking on the program to open it directly. The wizard program, TWEL.EXE, is included in the TwidoSoft installation and can be found in the default install directory.

Basic Steps   There are four steps required to upgrade your executive. The wizard provides a screen for each step and online help is available for each screen. The following table summarizes each step.

Step	Screen	Function
1	Welcome	Introduction to the Executive Loader Wizard.
2	Settings	Select the correct executive file to transfer to your controller and the PC serial port to communicate with the controller.
3	File and Device Properties	Compare the hardware IDs and the executive version information for the executive file and the controller.
4	Transfer Progress	Monitor the transfer of the executive file to the controller.

Supported Twido Controllers   The following table lists all Twido devices that are supported by the Executive Loader Wizard program.

Controller Module	Description
TWDLCAA10DRF	Base Unit AC, 6 In DC, 4 Out Relay, Terminal Block
TWDLCAA16DRF	Base Unit AC, 9 In DC, 7 Out Relay, Terminal Block
TWDLCAA24DRF	Base Unit AC, 14 In DC, 10 Out Relay, Terminal Block
TWDLMDA20DUK	Base Unit DC, 12 In DC, 8 Out Transistor Sink, Connector
TWDLMDA20DTK	Base Unit DC, 12 In DC, 8 Out Transistor Source, Connector
TWDLMDA40DUK	Base Unit DC, 24 In DC, 16 Out Transistor Sink, Connector
TWDLMDA40DTK	Base Unit DC, 24 In DC, 16 Out Transistor Source, Connector
TWDLMDA20DRT	Base Unit DC, 12 In DC, 8 Out, 6 Relay, 2 Transistor Sink, Terminal Block

Updating the Firmware Executive   To continue:
- Select **Next** to continue the procedure and display the next screen, Step#2 - Settings (See *Step #2 - Settings, p. 10*).
- Select **Close** to close the screen without changing the executive on your controller.

Step #2 - Settings

Introduction

In this second step of the procedure for updating the operating system for your controller, select the following:
- The file to update your controller to the latest OS version,
- The PC serial port to connect the PC to the controller.

Locating an Executive File

The following table catalogs OS's according to controller model.

Controller Model	Software Versions	Binary File Name
TWDLCAA10DRF	SV2.0	TWIDO10_V2000P00.tfw
TWDLCAA16DRF	SV2.0	TWIDO16_V2000P00.tfw
TWDLCAA24DRF	SV2.0	TWIDO24_V2000P00.tfw
TWDLMDA20DUK	SV2.0	TWIDO20r_V2000P00.tfw
TWDLMDA20DTK	SV2.0	TWIDO20t_V2000P00.tfw
TWDLMDA40DUK	SV2.0	TWIDO40_V2000P00.tfw
TWDLMDA40DTK	SV2.0	TWIDO40_V2000P00.tfw
TWDLMDA20DRT	SV2.0	TWIDO20r_V2000P00.tfw

Selecting Settings

To select an executive file and a serial port:

Step	Action
1	In **Settings**, click on the **Browse** button and select the correct file for your controller model. The path and file names are displayed in the **File Name** box.
2	Click on the **Serial Port** box and select the PC serial port to communicate with the controller. **Note:** If a serial port is not displayed in this box, then it is used by another application.
3	When settings are completed: • Select **Next** to continue to Step #3 - Files and Device Properties (See *Step #3 - File and Device Properties, p. 11*). • Select **Back** to return to the previous screen. • Select **Close** to close the screen without changing the executive on your controller.

Step #3 - File and Device Properties

Overview
In this step of the procedure for updating the Firmware Executive of your controller, the following information is checked by the Executive Loader Wizard for both the executive file and the device (your controller) before the procedure can continue:
- **Controller State** - the controller is not running.
- **Hardware ID** - the selected executive file is correct for the target controller.
- **Executive Version Number** - the selected executive file is newer than the currently installed executive.

The states of the above file and device properties are displayed in check boxes next to the **Device Properties**.

Hardware ID
The **Hardware ID** is a unique identifier for each Twido controller model, and must be the same for both the executive file and the controller. The wizard compares the hardware IDs and displays one of the following results:
- Green check mark - hardware IDs are identical.
- Red "X" - hardware IDs do not match.

If the hardware IDs do not match, select a different executive file.

Exec Version Number
The **Exec Version Number** identifies the version of the executive. The wizard compares the version numbers and displays one of the following results:
- Green check mark - the version of the executive file is **newer** than the version number read from the controller. This file will update the executive of the controller.
- Yellow check mark - the version number of the executive file is **older** than or **equal to** the version number read from the controller. A transfer may not be necessary since the executive file will not update the executive of the controller.

Controller State and Stop
Immediately upon entering this step, a connection to the controller is attempted. The Exec Loader checks the device information for the controller. A red "X" is displayed if the controller is in "RUN" mode. Use the "Stop controller" button to get to a state to perform the transfer.

File, Exec Size, and Controller Description

The name of the file you selected in the previous step and the size of the executive in bytes are displayed. A description of the controller is also displayed.

	WARNING
⚠	**Updating the executive of your Controller will delete the current control application from the Controller's RAM.**
	It is recommended that you reload the control application using TwidoSoft when you complete updating the executive.
	Failure to follow this precaution can result in death, serious injury, or equipment damage.

Starting the Transfer

To update your controller with the executive file:

Step	Action
1	Confirm that the Hardware ID is the same for both the executive file and the controller (green check). If not, select **Back** to return to Step #2 - Settings (See *Step #2 - Settings, p. 10*) and locate the correct executive file for your controller.
2	Confirm that the **Exec Version Number** for the executive file is newer than the version already in the controller (green check). If not, select **Close** to exit the wizard without changing the firmware.
3	Confirm that the **Controller State** indicates that the controller is not running (green check). If the controller is running (red "x"), press **Stop Controller** to halt the controller. **Note**: If a connection could not be established, a warning dialog is displayed informing you of the problem. Please check all cables to be sure that the connection can be established.
4	Once all of the above steps are valid (green checks), press **Next** to start the transfer of the updated executive file to the controller. The next screen, Step #4 - Transfer Progress (See *Step #4 - Transfer Progress, p. 13*), is displayed.
5	Once all of the above steps are valid (green checks): ● Select **Next** to to start the transfer of the updated executive file to the controller and go to the last screen, Step #4 - Transfer Progress (See *Step #4 - Transfer Progress, p. 13*). ● Select **Back** to return to the previous screen. ● Select **Close** to close the screen without changing the executive on your controller.

Step #4 - Transfer Progress

Overview

In the final step of the procedure for updating the Firmware Executive of your controller, you can monitor the transfer of the executive file to the controller. The following information is available in the **Transfer Progress** section of this screen:

- The file being transferred (file name and its location).
- A progress bar displaying the amount of the file already transferred.
- The number of bytes transferred.
- Remaining time in the transfer including transfer rate.

If Transfer is Successful

If the transfer is successful, a message box is displayed to allow for another transfer. Two options are available:

- Yes - the wizard returns to Step #2 - Settings (See *Step #2 - Settings, p. 10*) and you can set up another transfer.
- No - click on the **Close** button to exit the wizard. This completes the update procedure.

The new firmware will try to load a backed up control application from internal EEPROM or a backup cartridge. If all is compatible with the new firmware, the application will be loaded into the controller's RAM and return in the stopped state.
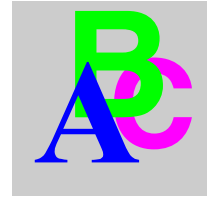
If Transfer Fails

If the transfer fails (for example, due to a communications problem), a message box is displayed allowing a retry of the transfer. Two options are available:

	WARNING
	Controller may become inoperative.
⚠️	If power or communications fail during the transfer of the executive, your controller may become inoperative. **Do not cycle power** on the controller if the transfer fails since this also could cause the controller to become inoperative.
	Failure to follow this precaution can result in death, serious injury, or equipment damage.

- Yes - the wizard returns to Step #3 - File and Properties (See *Step #3 - File and Device Properties, p. 11*) and you can try another transfer.
- No - click on the **Close** button to exit the wizard.

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