

TeSys Programmer

Firmware Update Utility for LTMR & LTMCU User Manual

8536IB1915
November 2018



Legal Information

The Schneider Electric brand and any registered trademarks of Schneider Electric Industries SAS referred to in this guide are the sole property of Schneider Electric SA and its subsidiaries. They may not be used for any purpose without the owner's permission, given in writing. This guide and its content are protected, within the meaning of the French intellectual property code (Code de la propriété intellectuelle français, referred to hereafter as "the Code"), under the laws of copyright covering texts, drawings and models, as well as by trademark law. You agree not to reproduce, other than for your own personal, noncommercial use as defined in the Code, all or part of this guide on any medium whatsoever without Schneider Electric's permission, given in writing. You also agree not to establish any hypertext links to this guide or its content. Schneider Electric does not grant any right or license for the personal and noncommercial use of the guide or its content, except for a non-exclusive license to consult it on an "as is" basis, at your own risk. All other rights are reserved.

Electrical equipment should be installed, operated, serviced and maintained only by qualified personnel. No responsibility is assumed by Schneider Electric for any consequences arising out of the use of this material.

As standards, specifications and designs change from time to time, please ask for confirmation of the information given in this publication.

TeSys Programmer User Manual

Table of Contents

Document Scope	4
Safety Information.....	5
1. TeSys Programmer with LTMR: Modbus RTU, CANopen, DeviceNet and Profibus.....	6
1.1 Introduction and Setup.....	6
1.2 Prepare your PC: Connection through USB to Serial.....	7
1.3 Using TeSys Programmer Tool.....	8
2. TeSys Programmer with LTMR: Ethernet TCP/IP.....	13
2.1 Introduction and Setup.....	13
2.2 Prepare your PC.....	14
2.2.1 Connection through USB to Serial.....	14
2.2.2 Connection through Ethernet.....	15
2.3 Using TeSys Programmer.....	20
3. TeSys Programmer with LTMCU / LTMCUF / LTMUCUC	27
3.1 Introduction and Setup.....	27
3.2 Prepare your PC: Connection through USB to Serial.....	28
3.3 Using TeSys Programmer.....	29
4. Advanced Settings	34
4.1 Logging and Reporting.....	34
4.1.1 Reporting	34
4.1.1 Logging.....	34
4.2 Upgrade Modes	34
4.2.1 Optimized Mode (default):.....	34
4.2.2 Overwrite Mode:	34
4.3 Backup & Restore Feature.....	35

Document Scope


This User Manual describes how to upgrade / downgrade TeSys T product range (LTMR and LTMCU) firmware using the TeSys Programmer v2.1.0.0

- Chapter 1 describes how to use the TeSys Programmer with the following TeSys T communication versions: **Modbus RTU, CANopen, DeviceNet and Profibus.**
- Chapter 2 describes how to use the TeSys Programmer with the following TeSys T communication versions: **Modbus TCP, Ethernet IP.**
- Chapter 3 describes how to use the TeSys Programmer with LTMCU, LTMCUC and LTMCUF.
- Chapter 4 describes the new features and settings found in the Advanced Settings tab.

Safety Information

NOTICE:

Read these instructions carefully, and look at the equipment to become familiar with the device before trying to install, operate, or maintain it.

⚠ DANGER	
	<p>HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH</p> <ul style="list-style-type: none"> Apply appropriate personal protective equipment (PPE) and follow safe electrical work practices. See NFPA 70E or CSA Z462. <ul style="list-style-type: none"> This equipment must only be installed and serviced by qualified electrical personnel. Turn off all power supplying this equipment before working on or inside equipment. Always use a properly rated voltage sensing device to confirm power is off. Replace all devices, doors and covers before turning on power to this equipment. <p>Failure to follow these instructions will result in death or serious injury.</p>

⚠ WARNING
<p>UNINTENDED EQUIPMENT OPERATION</p> <ul style="list-style-type: none"> The application of this product requires expertise in the design and programming of controls systems. Only persons with such expertise should be allowed to program and apply this product. Follow all local and national safety codes and standards. Follow all electromagnetic compatibility rules described in the TeSys T user manual. Follow all installation and wiring rules described in the TeSys T user manual. <p>Failure to follow these instructions can result in death or serious injury.</p>

NOTICE
<p>RISK OF FIRMWARE CORRUPTION</p> <p>Updating the firmware on TeSys T returns the TeSys T device to its original factory settings. All product configurations will be lost. Product configurations should be saved and restored through the TeSys T Device Type Manager (DTM) inside SoMove Software.</p> <p>Once programming has begun, adhere to the following until the programming process is complete:</p> <ul style="list-style-type: none"> Close all other programs before starting programming. Do not close TeSys Programmer until the process is complete. Do not interrupt power to device. Do not disconnect the communication cable if programming is in progress. Remove all network cables except direct connections to this PC. <p>Failure to follow these instructions can result in injury or equipment damage.</p>

1. TeSys Programmer with LTMR: Modbus RTU, CANopen, DeviceNet and Profibus

1.1 Introduction and Setup

The current chapter describes how to upgrade / downgrade a TeSys T firmware version for **LTMRxxMxx** (Modbus), **LTMRxxCxx** (CANopen), **LTMRxxDxx** (DeviceNet) or **LTMRxxPxx** (Profibus). It explains how to prepare the LTMR and the PC, how to connect them and how to run the programmer.

IMPORTANT: When upgrading/downgrading from a firmware version lower than 2.6 to a firmware version greater than 2.6, you must first upgrade to firmware version 2.6 and then again to the higher firmware version. (for example FW2.4 > **FW. 2.6** >FW 2.7). The reverse is true for downgrading. For example, to downgrade from FW 2.7 to FW 2.4 use sequence (FW2.7 > **FW. 2.6** >FW 2.4).

One physical link shall be established between your PC and the LTMR, from a USB port of the PC to the “LTME/HMI” port on the left side of the front face of the LTMR unit, as in Figure 1. To do so, use the TCSMCNAM3M002P cable. Route the cable to the outside of the enclosure so the update can be performed without exposure to energized equipment (doors closed and interlocked). The Ethernet version of Tesys T requires a Cat 5 cable.

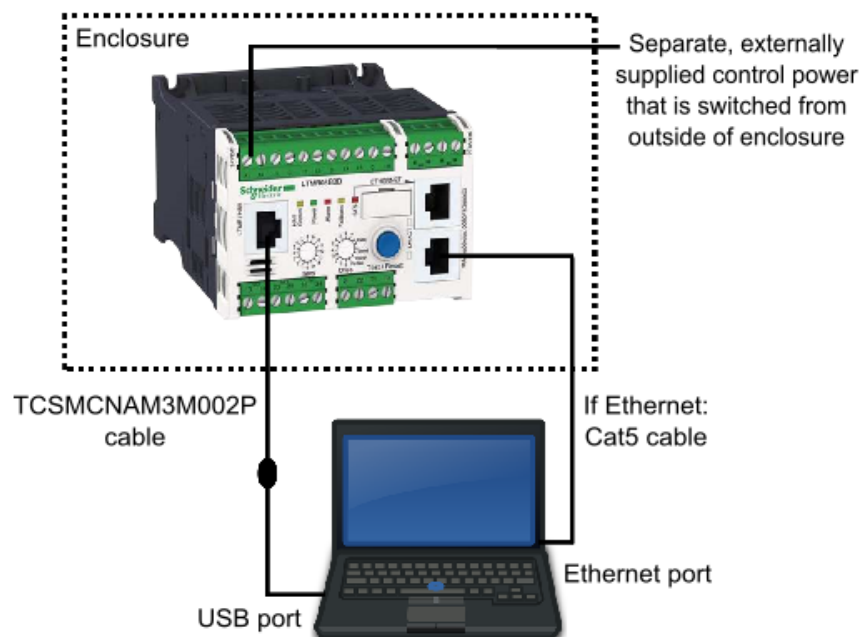


Figure 1

Note: it is recommended to make a direct link. Do not include the LTMCU or LTME in the link between the PC and the LTMR.

Use a separate, externally supplied control power connection that is switched from outside of the enclosure. The control voltage supply must match the LTMR input voltage. With the power OFF, connect power to the “A1, A2” terminals of the LTMR (input polarity is indicated for DC models). Route the cable to the outside of the enclosure so the update can be performed without exposure to energized equipment (doors closed and interlocked).

1.2 Prepare your PC: Connection through USB to Serial

1. Download and install BOTH “[SoMove v2.6](#)” or greater and “[Tesys DTM Library v2.10.0](#)” or greater.
2. Unzip and Run SoMove executable file.
NOTE: This will also install the Modbus Driver Suite for cable TCSMCNAM3M002P.
3. Unzip and Run the TeSys DTM Library executable file (**Note:** file may run with no pop-up windows)
4. Download the [Tesys T firmware](#) to be installed
5. Unzip the Tesys T firmware file
6. Identify the USB COM port used by the TCSMCNAM3M002P. To do so, connect the cable at both ends, click the Start menu on your PC and search for “Device Manager”, as in Figure 2. Open the Device Manager, then, click on Ports (Com & LPT) and read the number of the port “TSX C USB 485”: In the example below, it is **COM12**, as in Figure 3.

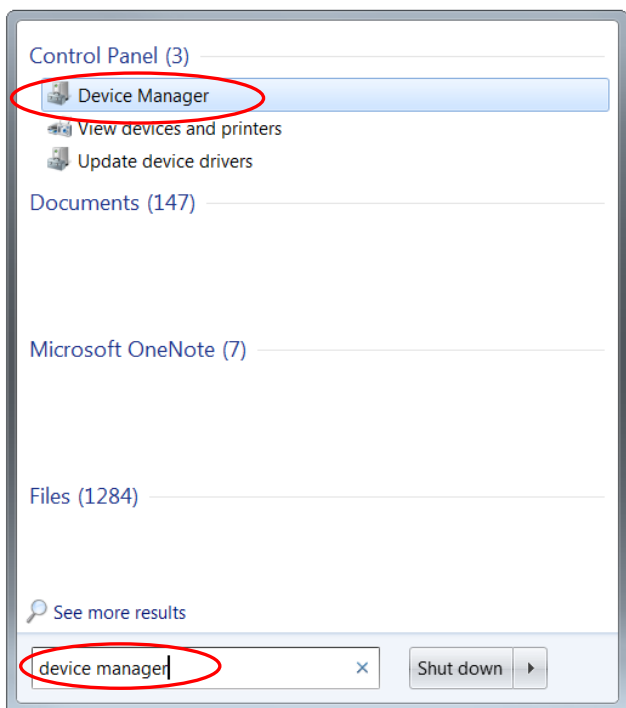


Figure 2

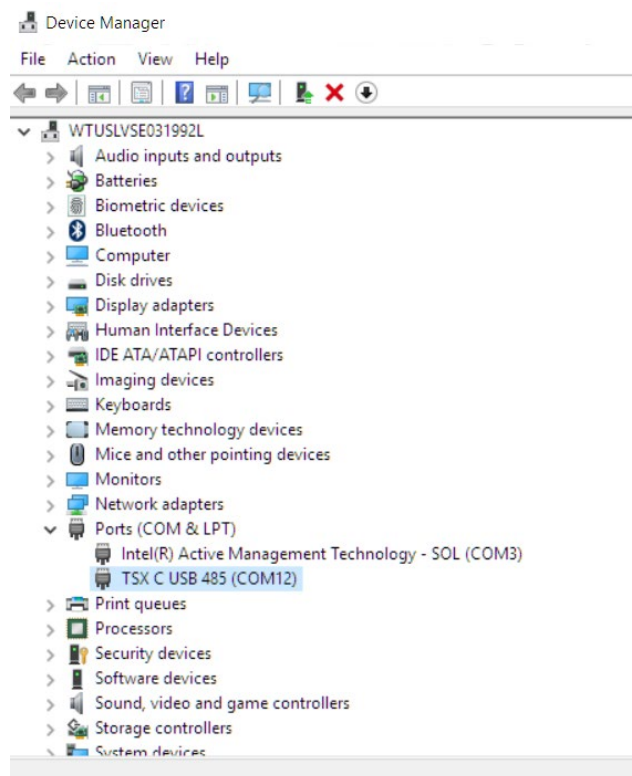

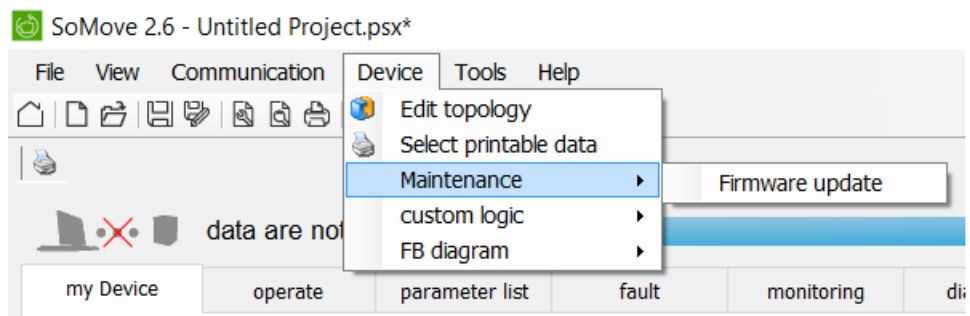


Figure 3

1.3 Using TeSys Programmer Tool

IMPORTANT: Changing the firmware version will restore configuration settings of the Tesys T to factory default. If desired, enable the backup & restore settings from the Advanced Settings or save configurations using SoMove software BEFORE changing firmware. The programmer can be used for both firmware upgrades and firmware downgrades. The example below is an example of downgrading the firmware from FW2.6 to FW2.5.

1. Open the TeSys Programmer Tool from one of the following locations:
 - a. Navigate to “C:\Program Files (x86)\Common Files\Schneider Electric Shared\TeSysDTMLibrary\TeSysT\TeSysProgrammer” and run “TeSysProgTool.exe”
 - b. In SoMove:
 - i. Click on “Disconnect from Device” icon  on the “Main” toolbar
 - ii. Choose “Firmware Update” from “Device → Maintenance”, as in the figure below.



A warning message is displayed, as in Figure 4, stating that the TeSys Programmer is to be used for TeSys T firmware change (upgrading to a new version or downgrading to a former version) and not for setting the configuration parameters of the TeSys T. If “Cancel” is selected, then the programmer exits.

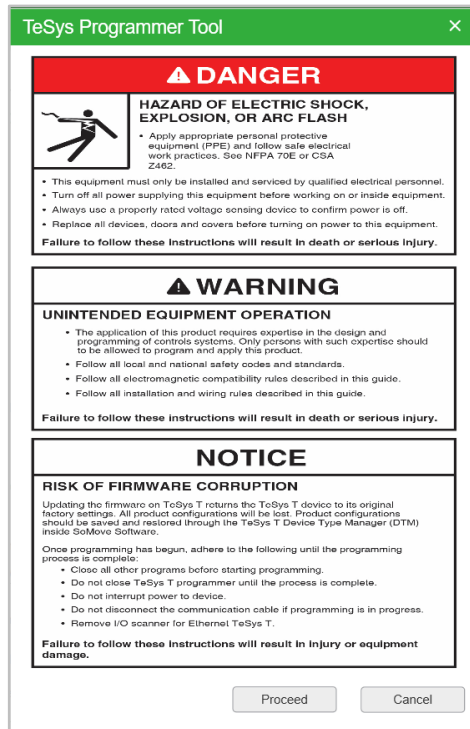


Figure 4

2. From the pull-down menu located underneath the Tesys T graphic, as in Figure 5, select the COM port for the “TSX C USB 485”. In this example, it is COM 12. Click on the “Connect” button to connect to the Tesys T. Once connected, the “Connected Device Info” fields will populate, as in Figure 6.

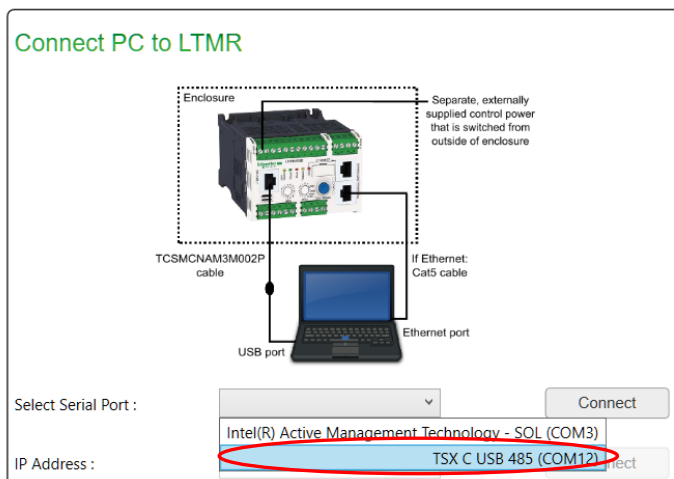


Figure 5

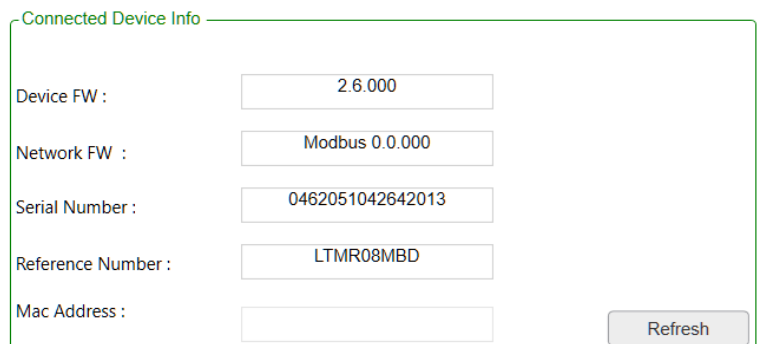


Figure 6

3. In the “Firmware Package Selection” field, click the “Browse” button, as in Figure 7, and navigate to the unzipped Tesys T firmware file, as in Figure 8. Open the file corresponding to the desired firmware, and verify that the correct version has appeared in the Device FW Version field, as in Figure 9.

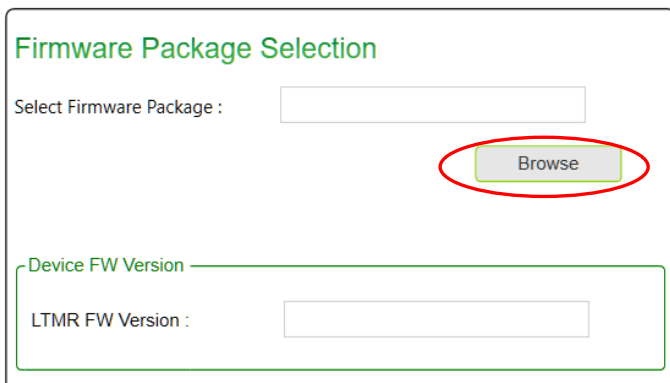


Figure 7

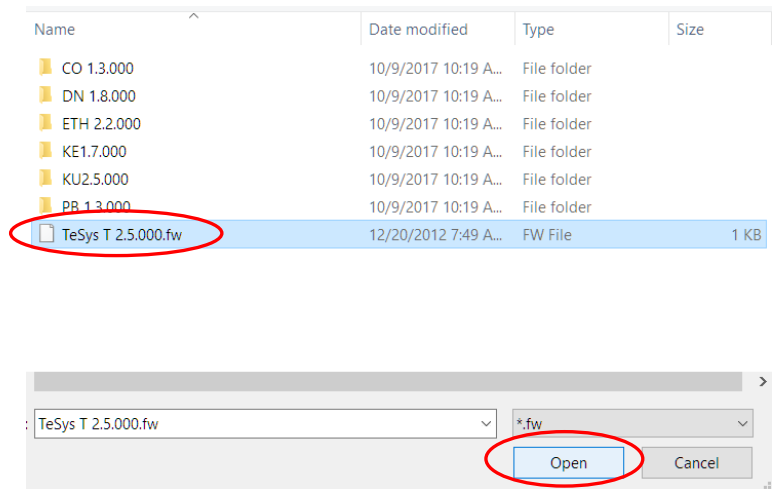


Figure 8

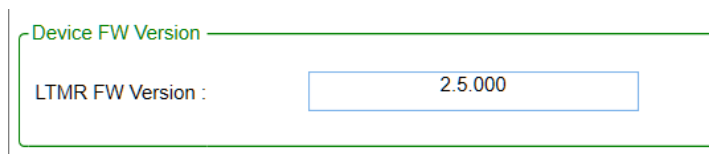
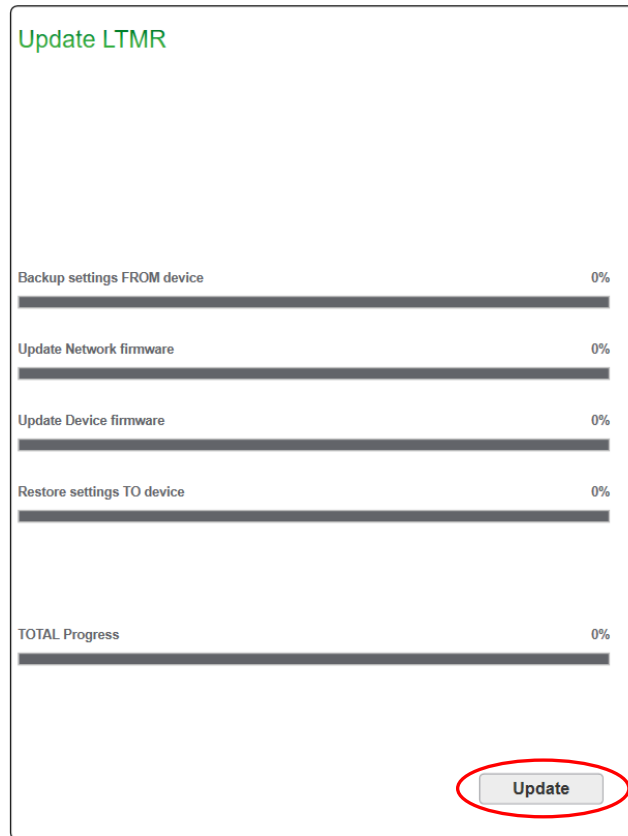


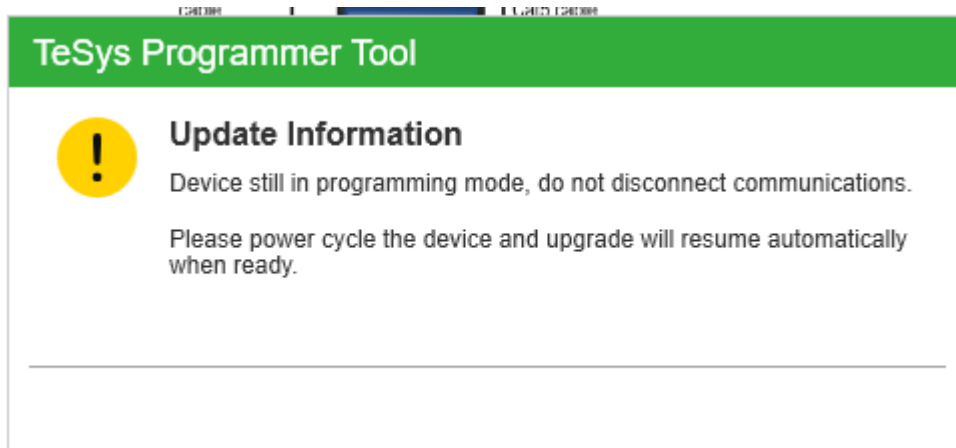
Figure 9

4. You are now ready to upgrade the Tesys T. To begin the firmware upgrade, click the “Update” button, as in the below figure.



IMPORTANT: Once the firmware upgrade has begun, DO NOT DISCONNECT THE DEVICE. Doing this can corrupt the hardware. Firmware upgrade can take up to 10 minutes.

5. A pop-up window, as in the below figure, will appear, requesting a to power cycle the LTMR.



6. Once the “Total Progress” bar reaches 100%, as per Figure 10, a pop-up window will appear, indicating successful LTMR Firmware Upgradation, as per Figure 11. At this time, Press “OK”, power-cycle the device again and wait 20 seconds. Then, click the “Connect” button.

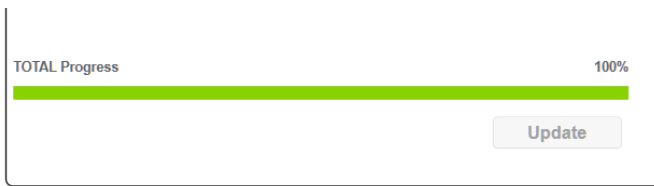


Figure 10

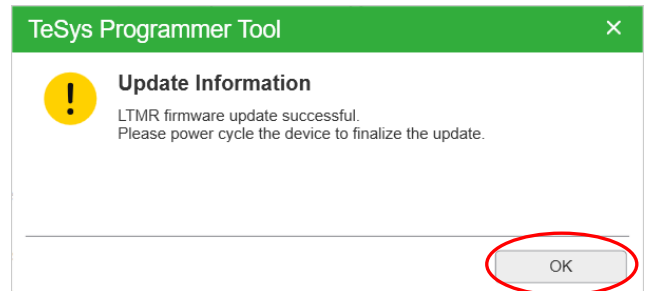


Figure 11

7. After clicking the “Connect”, the new firmware version should populate as shown in the below figure.

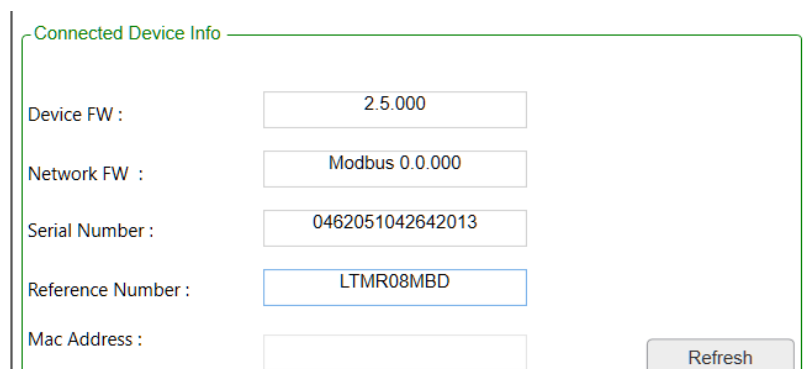


Figure 12

8. The FW update is finished and you can exit the TeSys Programmer or continue using the tool.

Notice: If you access your TeSys T through a LTMCU, depending on the firmware upgrade performed on TeSys T, you may have to update the language files of your TeSys T.

If this occurs, and languages files in LTMCU are not updated, the LTMCU displays “**Error in languages**” when connected to TeSys T.

It is nevertheless possible to operate **temporarily** both the TeSys T and the LTMCU, but the new TeSys T configuration parameters introduced by the new TeSys T FW version will not be accessible. It is recommended to update the LTMCU languages as soon as possible. To do so, use the LanDown tool and refer to the [LTMCU User Manual](#).

LTMCU language file update may be necessary when LTMR is upgraded based on the following compatibility rules as follows:

- LTMR FW version 2.5 or 2.6
 - LTMCU language version must be 1.200 or higher.
- LTMR FW version 2.7 or higher
 - LTMCU language version must be 1.300.

2. TeSys Programmer with LTMR: Ethernet TCP/IP

2.1 Introduction and Setup

IMPORTANT: When upgrading/downgrading from a firmware version lower than 2.6 to a firmware version greater than 2.6, you must first upgrade to firmware version 2.6 and then again to the higher firmware version. (for example FW2.4 > **FW. 2.6** >FW 2.7). The reverse is true for downgrading. For example, to downgrade from FW 2.7 to FW 2.4 use sequence (FW2.7 > **FW. 2.6** >FW 2.4).

The current chapter describes how to upgrade / downgrade a TeSys T LTMR Ethernet TCP/IP firmware version.

It is applicable to TeSys T with **LTMRxxExx** references.

It explains how to prepare the LTMR and the PC, how to connect them and how to run the programmer.

Two physical links shall be established between your PC and the LTMR, as per Figure 13.

One is a serial link from an USB port of the PC to the “LTME/HMI” port on the left side of the front face of the LTMR unit. It uses the TCSMCNAM3M002P cable.

The second link is from the Ethernet port of your PC to any of the Ethernet ports of the LTMR, using one Cat5 Ethernet cable. Route the cable to the outside of the enclosure so the update can be performed without exposure to energized equipment (doors closed and interlocked).

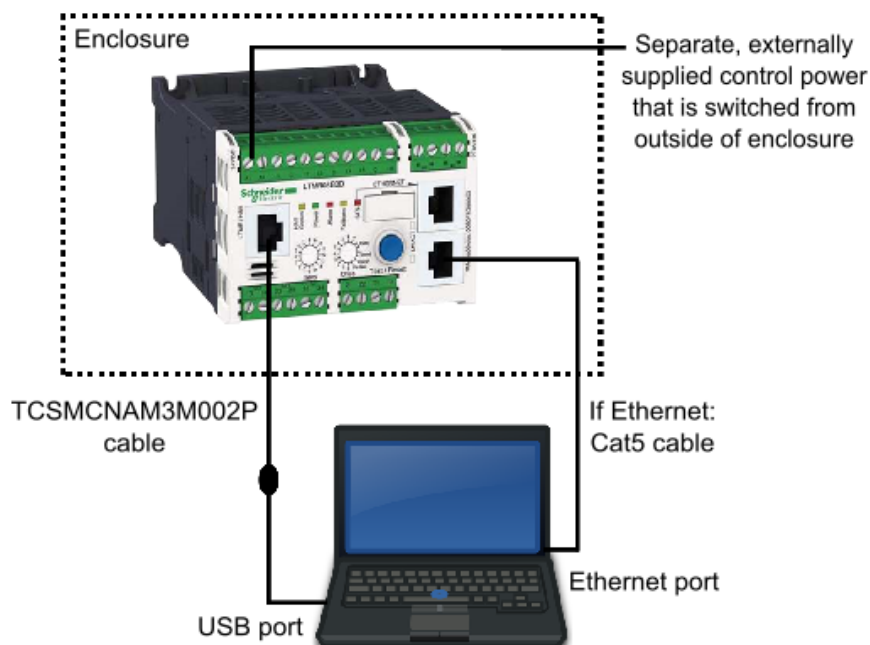


Figure 13

2.2 Prepare your PC

2.2.1 Connection through USB to Serial

1. Download and install BOTH “[SoMove v2.6](#)” or greater and “[Tesys DTM Library v2.10.0](#)” or greater.
2. Unzip and Run the SoMove executable file.
NOTE: This will also install the Modbus Driver Suite for cable TCSMCNAM3M002P.
3. Unzip and Run the TeSys DTM Library executable file (**Note:** file may run with no pop-up windows)
4. Download the [Tesys T firmware](#) to be installed
5. Unzip the Tesys T firmware file
6. Identify the USB COM port used by the TCSMCNAM3M002P. To do so, connect the cable at both ends, click the Start menu on your PC and search for “Device Manager”, as in Figure 14. Open the Device Manager, then, click on Ports (Com & LPT) and read the number of the port “TSX C USB 485”: In the example below, it is **COM12**, as in Figure 15.

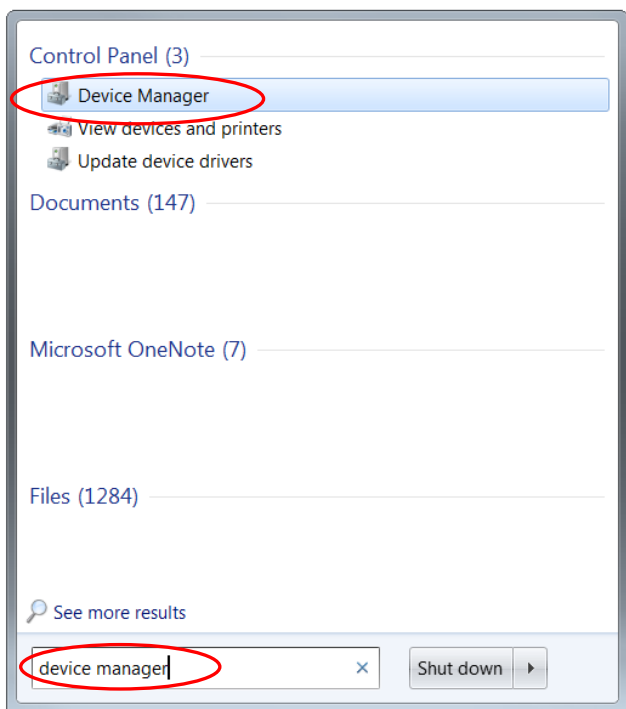


Figure 14

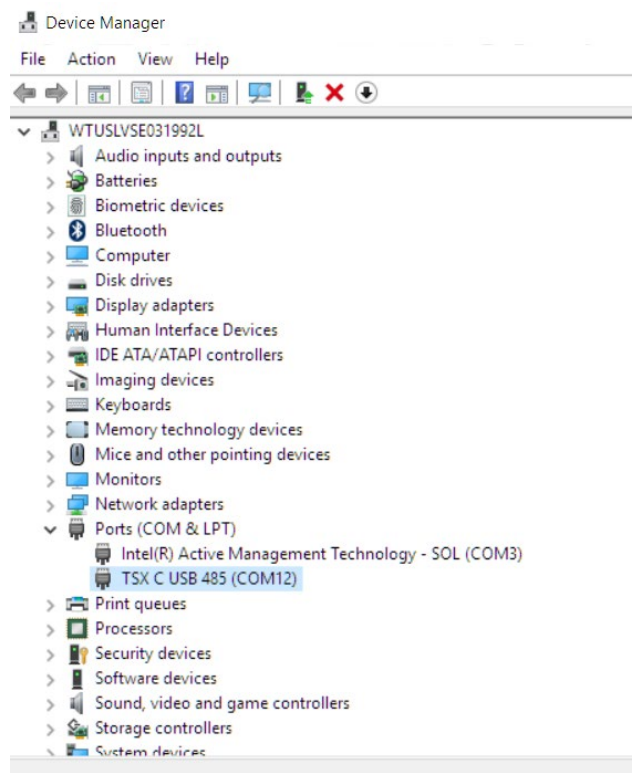


Figure 15

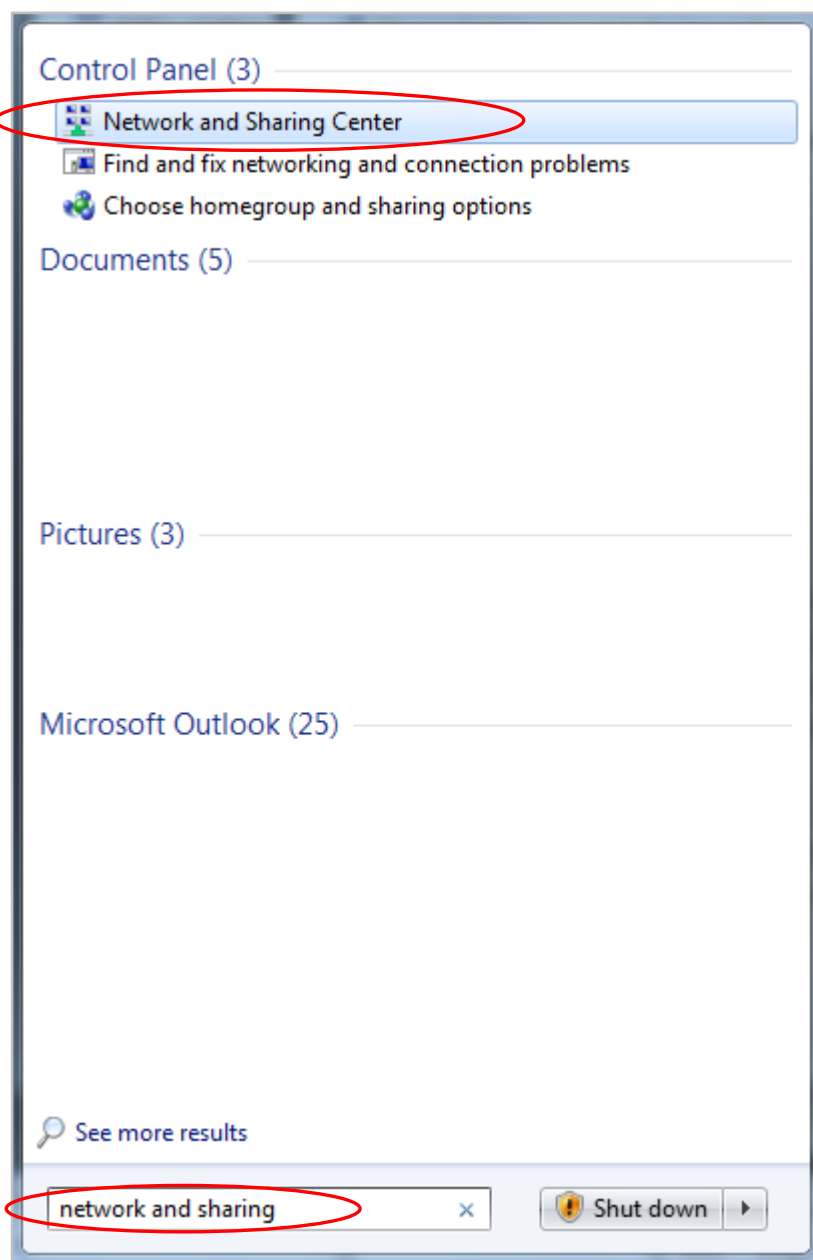
2.2.2 Connection through Ethernet

You must configure a fixed IP address on your PC. In the first step, during the software upgrade of the LTMR, the LTMR will use its **default** IP address; then, in a second step, it will use the address **192.168.16.1**.

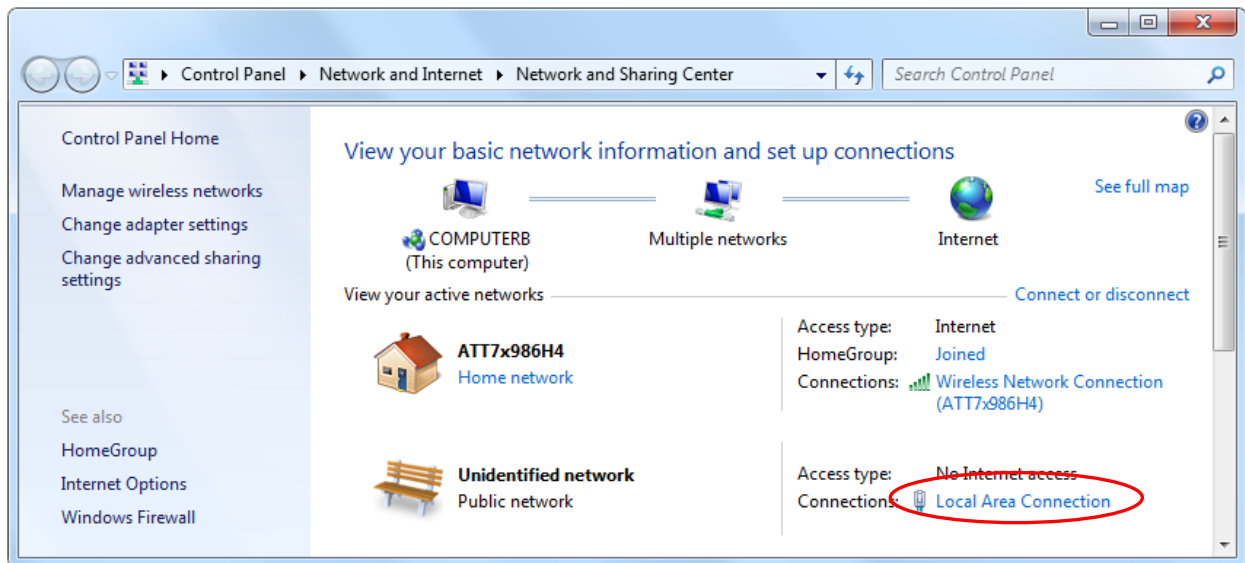
For each of these two LTMR addresses, it is mandatory to define in your PC a compatible IP address. This means that the PC and Tesys T must be in the same Ethernet sub network.

To configure these fixed IP addresses in your PC:

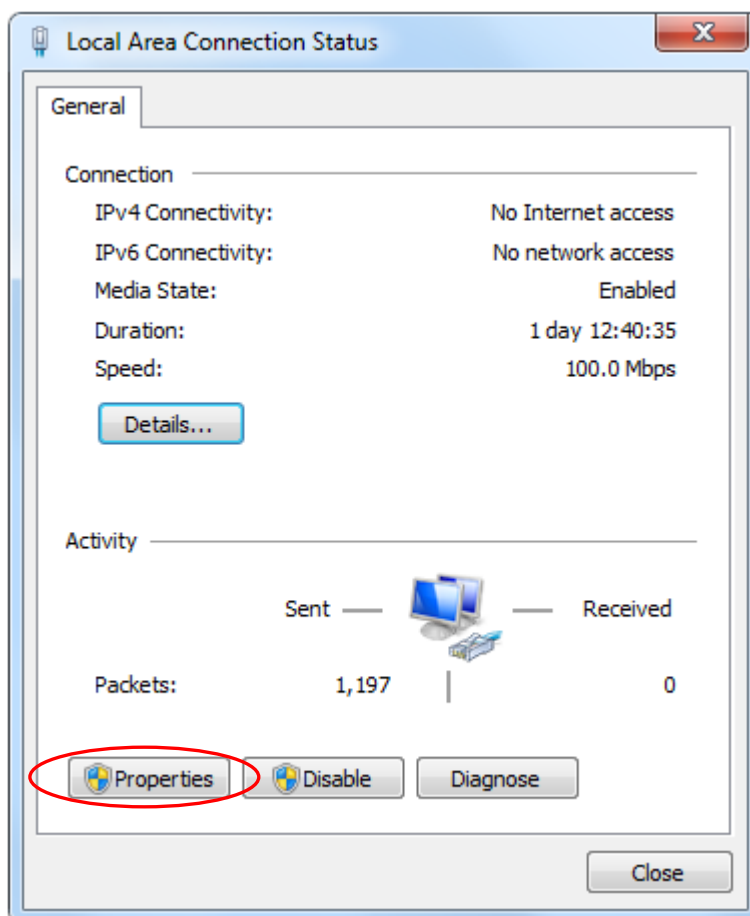
1. Connect the Ethernet cable as shown in the diagram on Figure 13.
2. From the Start Menu of your PC, search for the words “Network and Sharing”, then select “Network and Sharing Center” as per the below figure.



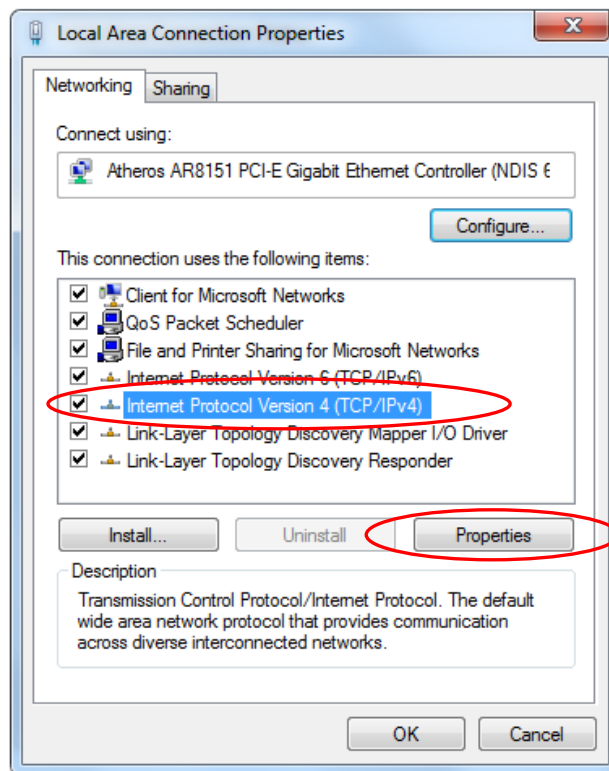
3. Click on Local Area Connection to which the LTMR is connected, as in the below figure.



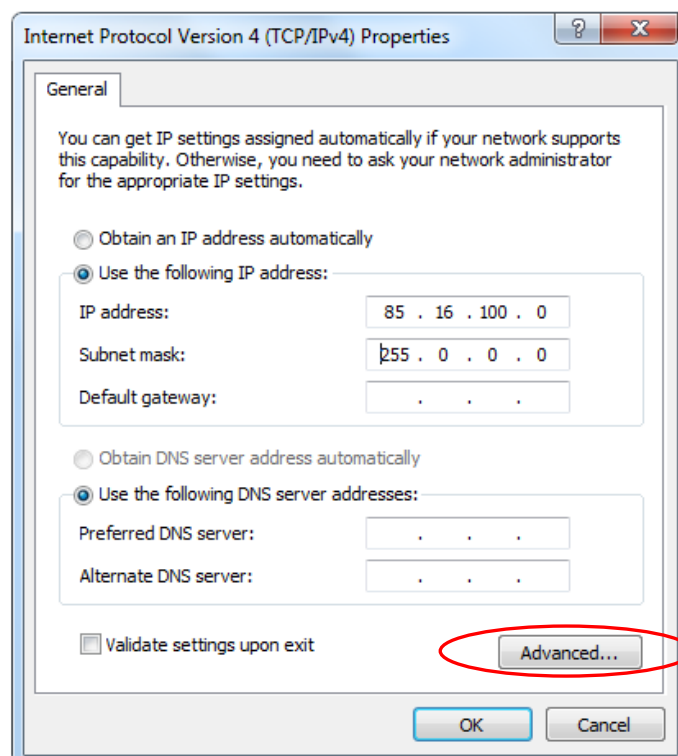
4. On the next window, click on "Properties", as in the below figure.



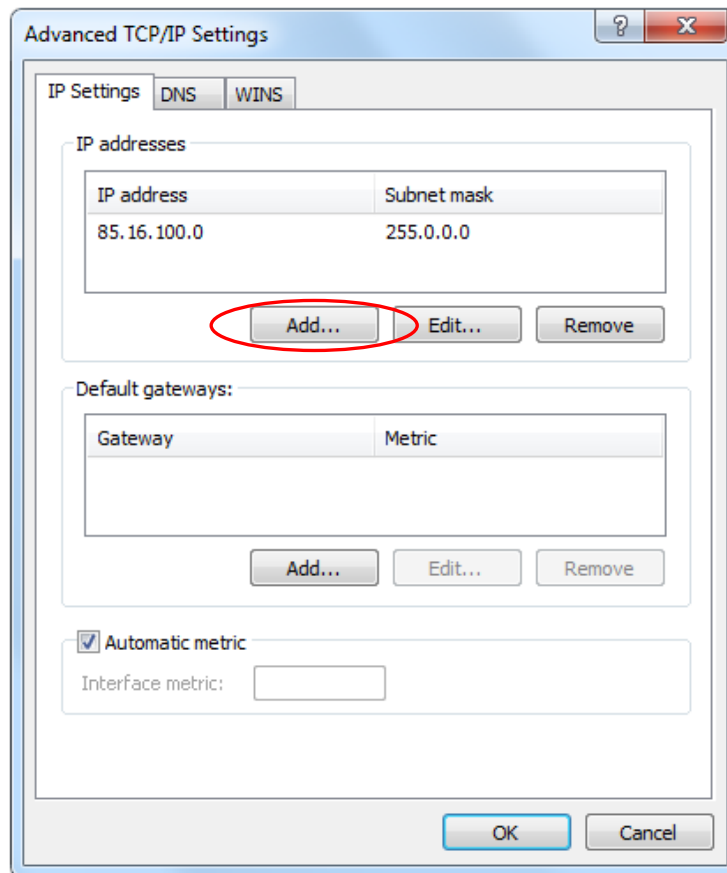
5. On the next window, select “Internet Protocol Version 4 (TCP/IPv4)” and click on “Properties”, as in the below figure.



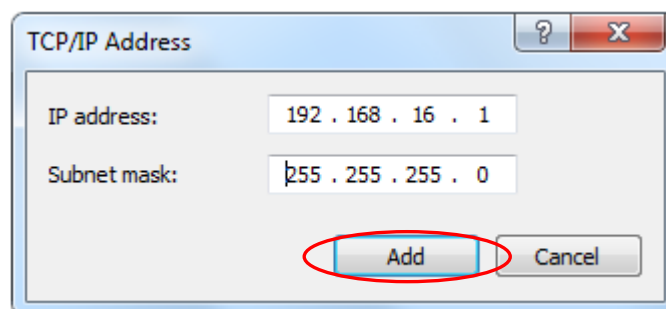
6. On the next window, select “Use the following IP address”. Enter **85.16.100.0** as IP address and **255.0.0.0** as subnet mask. Then, to define a **second** IP address for the PC, click on “Advanced”, as in the below figure.



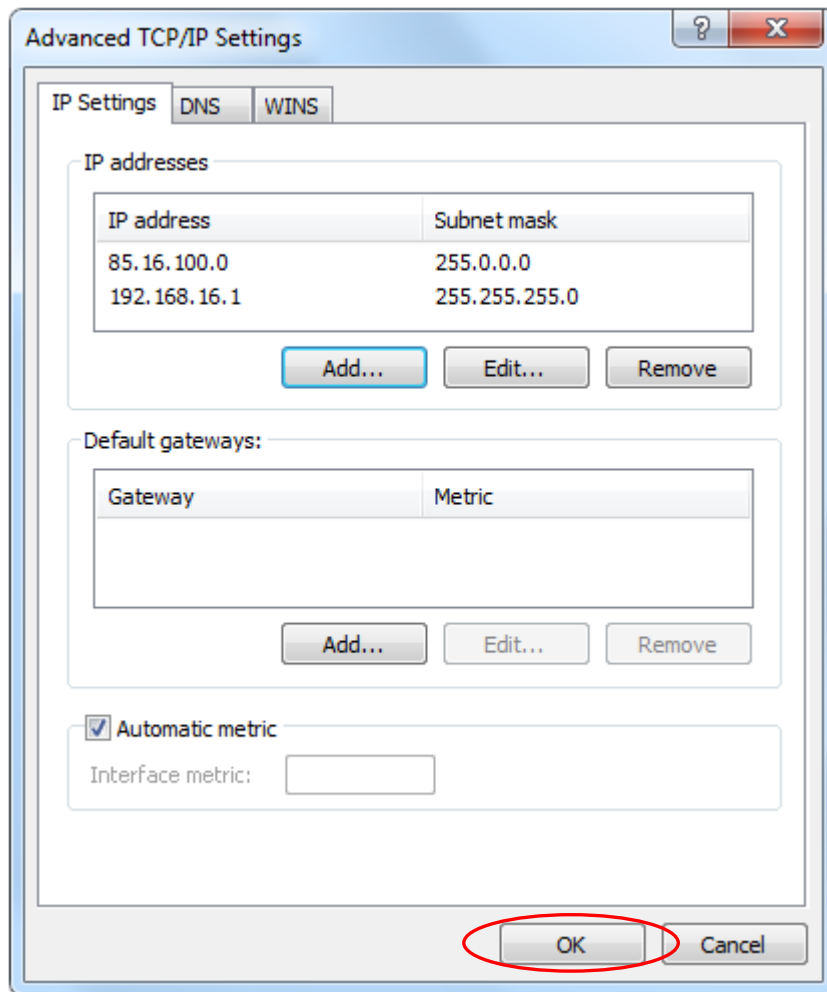
7. Then, on the next window, click “Add”, as in the below figure.



8. Now, enter the second IP address, **192.168.16.1** and click on “Add”. The subnet mask **255.255.255.0** is automatically selected and you a window, as in the below figure.




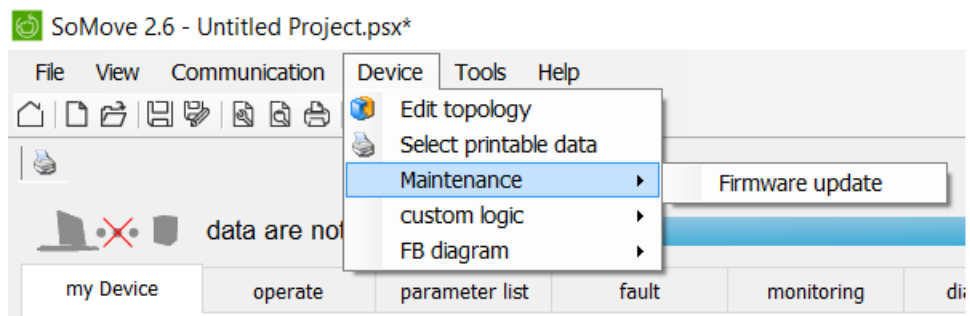
9. Both IP addresses for the PC are now registered, and you can exit the previous IP addressing windows by pressing “OK”.



2.3 Using TeSys Programmer

IMPORTANT: Changing the firmware version will restore configuration settings of the TeSys T to factory default. If desired, enable the backup & restore settings from the Advanced Settings or save configurations using SoMove software BEFORE changing firmware. The programmer can be used for both firmware upgrades and firmware downgrades. The example below is an example of upgrading the firmware from FW2.6 to FW2.7.

1. Run the tool “TeSysProgTool.exe” from the following locations:
 - a. Navigate to “C:\Program Files (x86)\Common Files\Schneider Electric Shared\TeSysDTMLibrary\TeSysT\TeSysProgrammer” and run “TeSysProgTool.exe”
 - b. In SoMove:
 - i. Open an
 - ii. Click on “Disconnect from Device” icon  on the “Main” toolbar
 - iii. Choose “Firmware Update” from “Device → Maintenance”, as in the figure below.



A warning message is displayed, as in Figure 16, stating that the TeSys Programmer is to be used for TeSys T firmware change (upgrading to a new version or downgrading to a former version) and not for setting the configuration parameters of the TeSys T. If “Cancel” is selected, then the programmer exits.



Figure 16

2. From the pull-down menu located underneath the Tesys T graphic, as in Figure 17, select the COM port for the “TSX C USB 485”. In this example, it is COM 12. Click on the “Connect” button to connect to the Tesys T. Once connected, the “Connected Device Info” fields will populate, as in Figure 18.

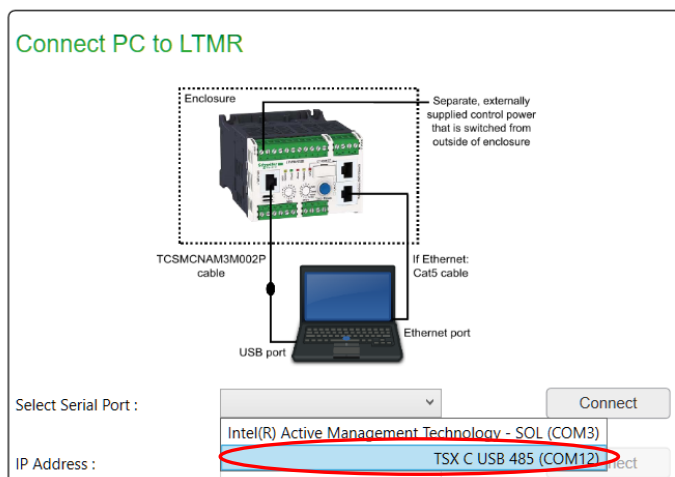
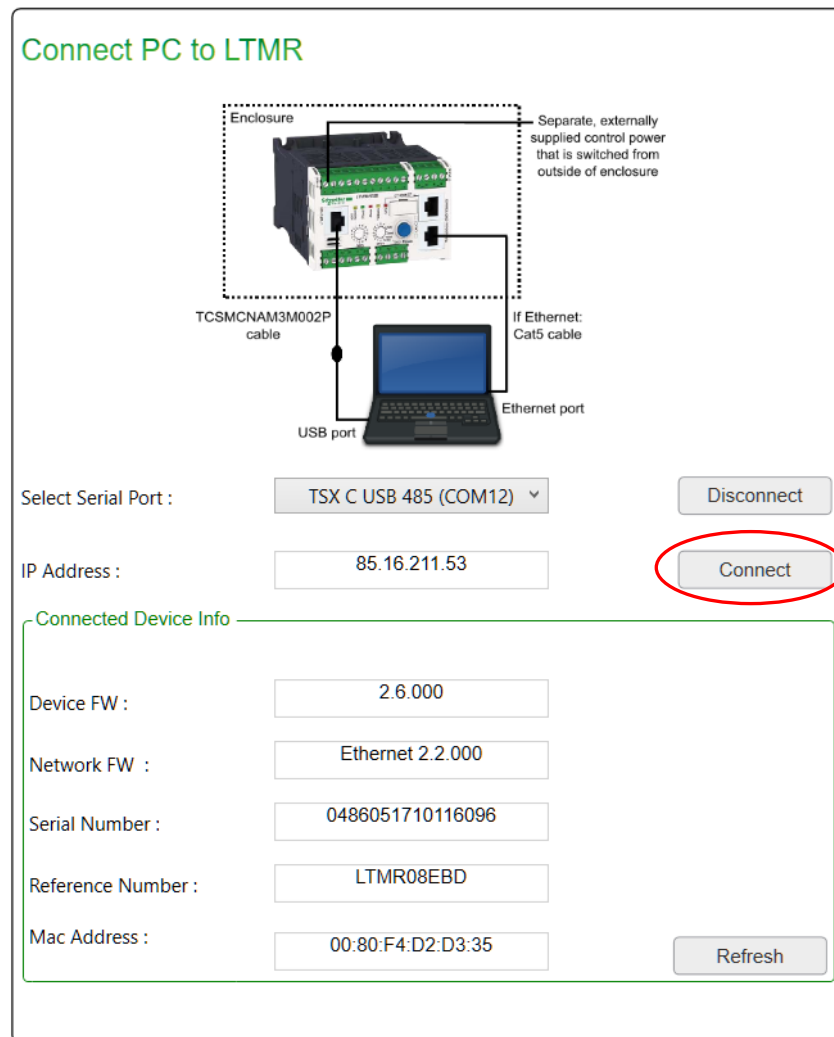


Figure 17

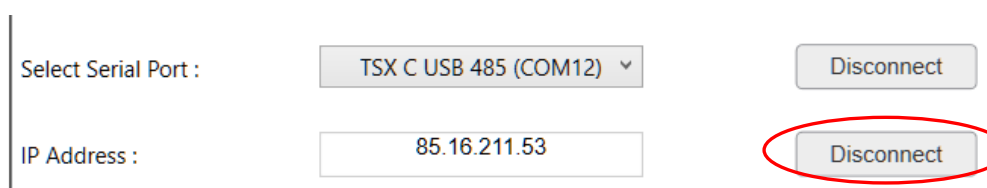


Figure 18

3. Once the USB connection is established, the Programmer will import the default “IP Address” and the “Connected Device Info” from the Tesys T as seen below. Click the “Connect” button beside the IP Address to connect to the device through the Ethernet Port, as in the below figure.



4. Once successfully connected through the Ethernet port, the button to the right of the IP address will read, “Disconnect” (giving you the option to now disconnect if desired), as in the below figure.



5. In the “Firmware Package Selection” field, click the “Browse” button, as in Figure 19, and navigate to the unzipped Tesys T firmware file, as in Figure 20. Open the file corresponding to the desired firmware, and verify that the correct version has appeared in the Device FW Version field, as in Figure 21.

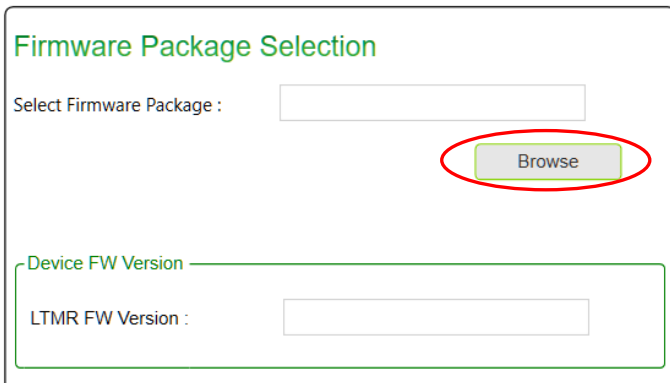


Figure 19

Name	Date modified	Type	Size
ETH_3.4.000	2/15/2018 10:37 A...	File folder	
KE_1.9.000	2/15/2018 10:36 A...	File folder	
KU_2.8.000	2/15/2018 10:22 A...	File folder	
TeSysT_Pack-10_FW2.8.fw	2/15/2018 10:46 A...	FW File	1 KB

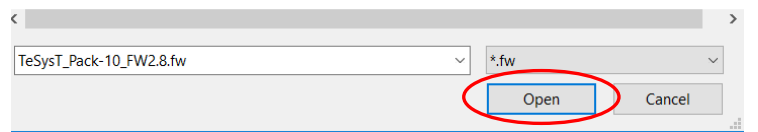


Figure 20

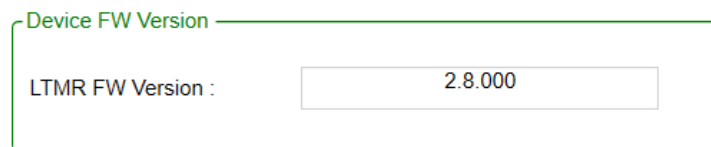
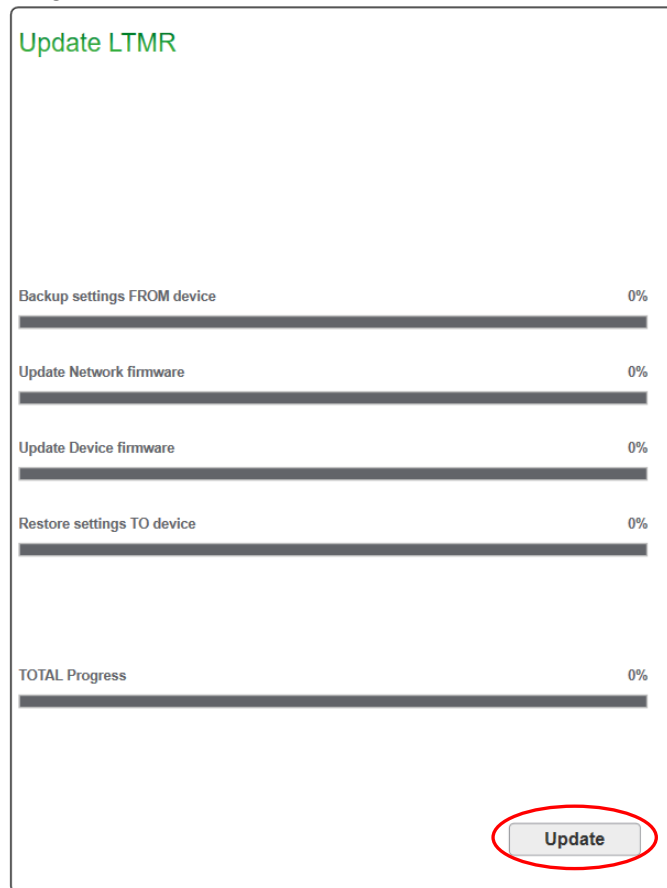


Figure 21

6. You are now ready to upgrade the Tesys T. To begin the firmware upgrade, click the “Update” button, as in the below figure.



IMPORTANT: Once the firmware upgrade has begun, DO NOT DISCONNECT THE DEVICE. Doing this can corrupt the hardware. Please allow up to 10 minutes for the firmware upgrade to finish.

7. Once the “Total Progress” bar reaches 100%, as per Figure 22, a pop-up window will appear, indicating successful LTMR Firmware Upgradation, as per Figure 23. At this time, Press “OK”, power-cycle the device again and wait 20 seconds. Then, click the “Connect” button.



Figure 22

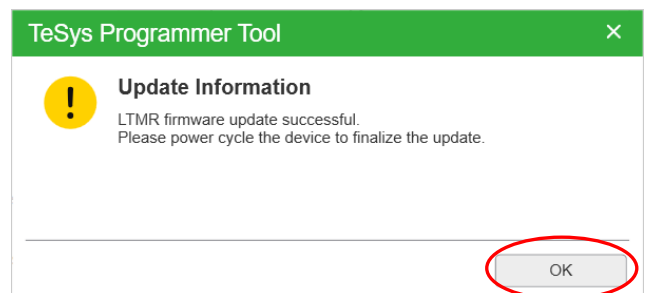
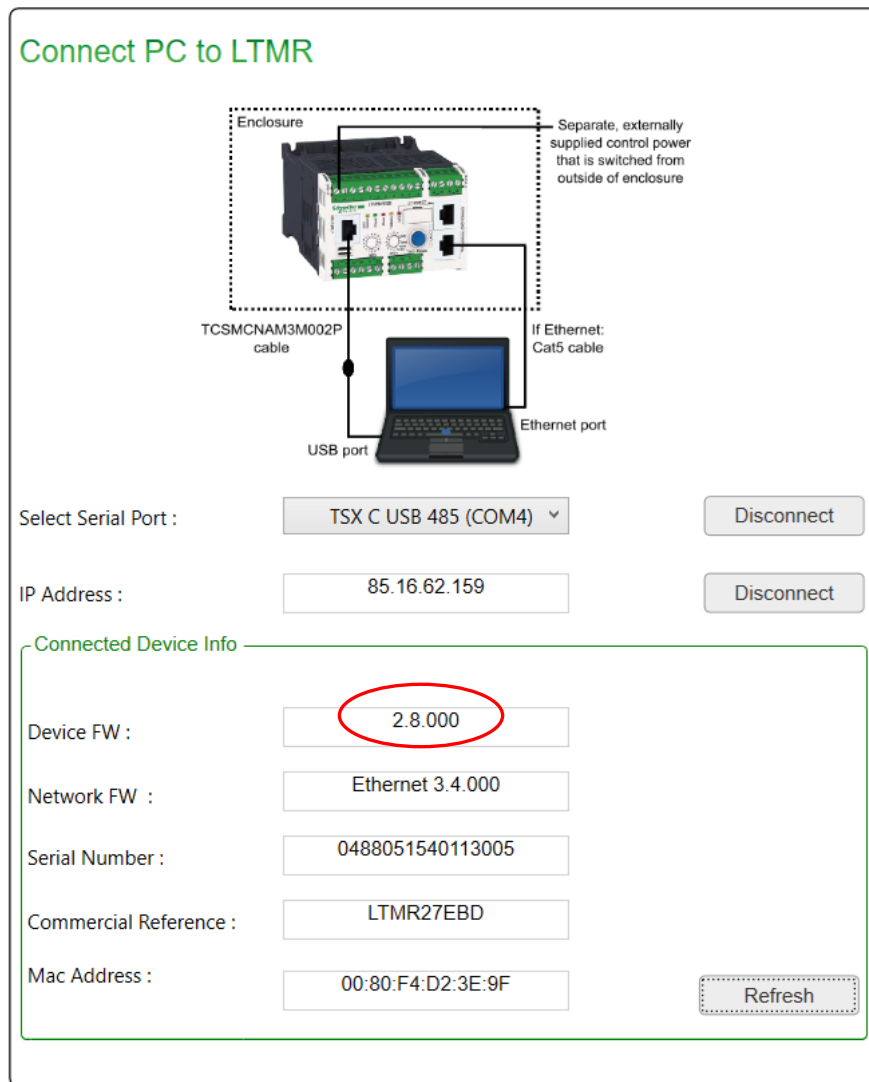


Figure 23

8. After clicking the “Connect” button, the new firmware version should populate as shown below.



9. The FW update is finished and you can exit the TeSys Programmer or continue using the tool.

Notice: If you access your TeSys T through a LTMCU, depending on the firmware upgrade performed on TeSys T, you may have to update the language files of your TeSys T.

If this occurs, and languages files in LTMCU are not updated, the LTMCU displays “**Error in languages**” when connected to TeSys T.

It is nevertheless possible to operate **temporarily** both the TeSys T and the LTMCU, but the new TeSys T configuration parameters introduced by the new TeSys T FW version will not be accessible. Proceed as soon as possible to the LTMCU languages update. To do so, use the Landown software and refer to the [LTMCU User Manual](#).

LTCMU language file update may be necessary when LTMR is upgraded based on the following compatibility rules as follows:

- LTMR FW version 2.5 or 2.6
 - LTMCU language version must be 1.200 or higher.
- LTMR FW version 2.7 or higher
 - LTMCU language version must be 1.300.

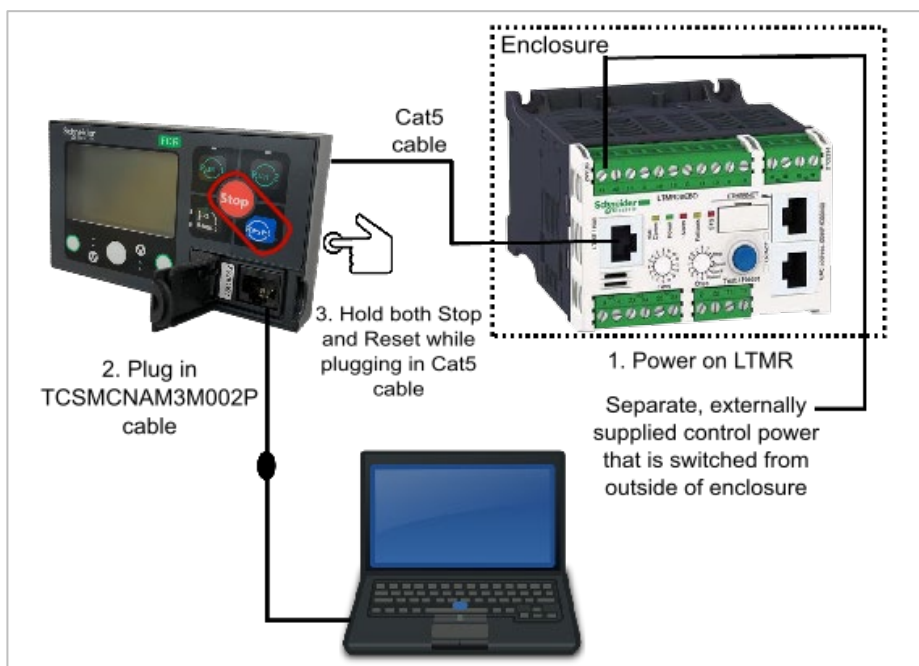
3. TeSys Programmer with LTMCU / LTMCUF / LTMUC

3.1 Introduction and Setup

Chapter 3 describes how to upgrade / downgrade the LTMCU firmware, not the Language Files. It explains how to prepare the LTMCU and the PC, how to connect them and how to start the programmer.

Note that the firmware update procedure is the same for the LTMCU, LTMCUF, and LTMUC so will be referred to as simply LTMCU throughout this manual

A physical link shall be established between your PC and the LTMCU and from your LTMCU to the Tesys T, as in the below figure. First, power on your Tesys T from a separate, externally supplied control power source that is switched from outside the enclosure. Secondly, connect the TCSMCNAM3M002P cable from a USB port of the PC to the RJ45 connector port on the front face of the LTMCU. Thirdly, connect the free end of the Cat5 cable to the “LTMCU/HMI” port on the left side of the Tesys T, then, while pressing both the “STOP” and “RESET” buttons (circled in red below) on the LTMCU, insert one end of the Cat5 cable into the rear RJ45 port of the LTMCU. Route the cables to the outside of the enclosure so the update can be performed without exposure to energized equipment (doors closed and interlocked).



Note: When connected properly, an hourglass will appear on the screen of the LTMCU. It is recommended to make a direct link between the Tesys T and LTMCU with the Cat5 cable. Do not include the LTME in the link between the Tesys T and LTMCU.

Use a separate, externally supplied control power connection that is switched from outside of the enclosure. The control voltage supply must match the LTMR input voltage. With the power OFF, connect power to the “A1, A2” terminals of the LTMR (input polarity is indicated for DC models). Route the cable to the outside of the enclosure so the update can be performed without exposure to energized equipment (doors closed and interlocked).

3.2 Prepare your PC: Connection through USB to Serial

1. Download and install BOTH “[SoMove v2.6](#)” or greater and “[Tesys DTM Library v2.10.0](#)” or greater.
2. Unzip and Run SoMove executable file.
NOTE: This will also install the Modbus Driver Suite for cable TCSMCNAM3M002P.
3. Unzip and Run the “TeSys DTM Library executable file (**Note:** file may run with no pop-up windows)
4. Download the [Tesys T firmware](#) to be installed
5. Unzip the Tesys T firmware file
6. Identify the USB COM port used by the TCSMCNAM3M002P. To do so, connect the cable at both ends, click the Start menu on your PC and search for “Device Manager”, as in Figure 24. Open the Device Manager, then, click on Ports (Com & LPT) and read the number of the port “TSX C USB 485”: In the example below, it is **COM12**, as in Figure 25.

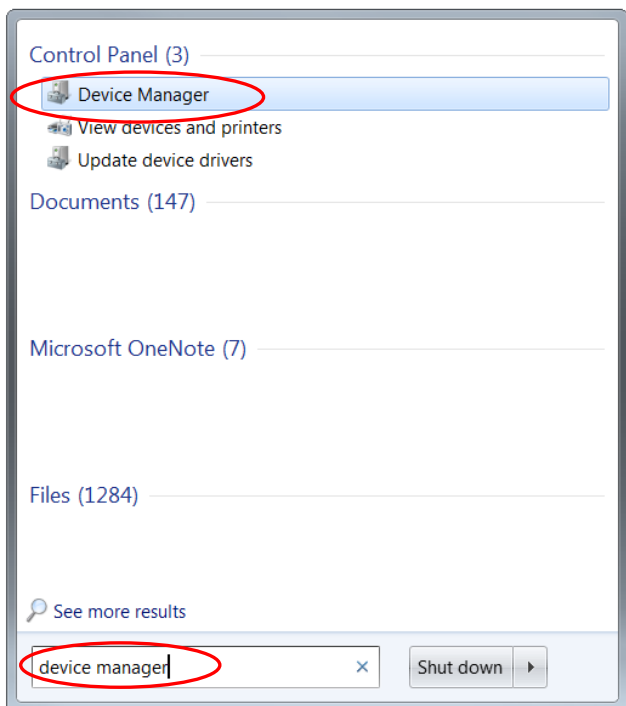


Figure 24

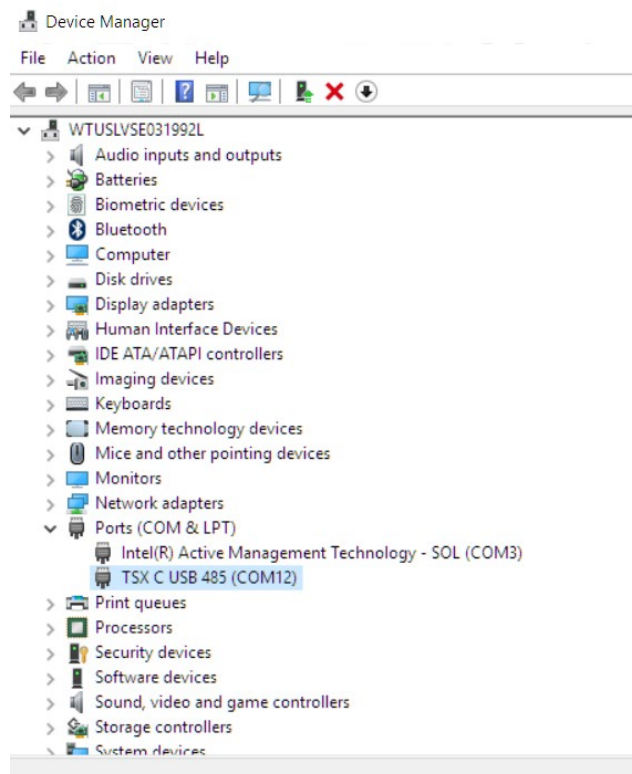

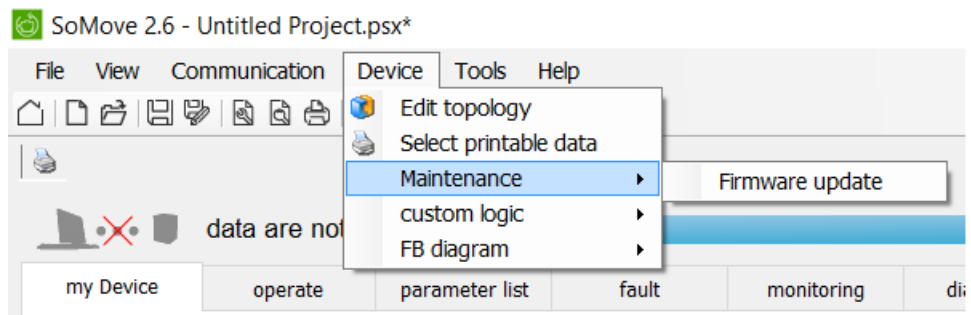


Figure 25

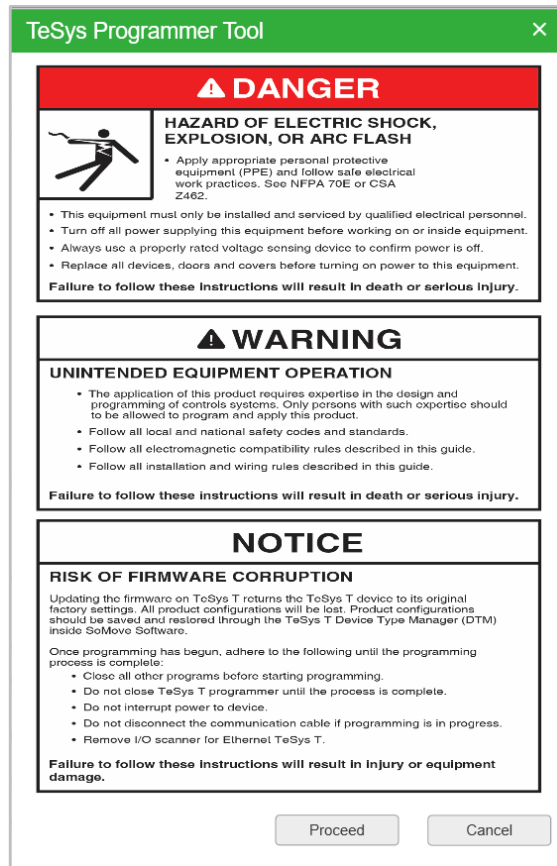
3.3 Using TeSys Programmer

The programmer can be used for both firmware upgrades and firmware downgrades. The example below is an example of upgrading the firmware to FW v3.0.

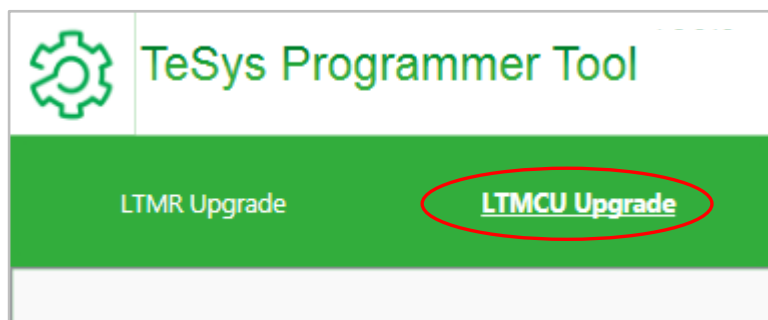
1. Run the tool “TeSysProgTool.exe” from one of the following locations:
 - a. Navigate to “C:\Program Files (x86)\Common Files\Schneider Electric Shared\TeSysDTMLibrary\TeSysT\TeSysProgrammer” and run “TeSysProgTool.exe”
 - b. In SoMove:
 - i. Click on “Disconnect from Device” icon  on the “Main” toolbar
 - ii. Choose “Firmware Update” from “Device → Maintenance”, as in the figure below.



A warning message is displayed, as in the below figure, stating that the TeSys T Programmer is to be used for TeSys T firmware change (upgrading to a new version or downgrading to a former version) and not for setting the configuration parameters of the TeSys T. If “Cancel” is selected, then the programmer exits.



2. From the home screen, click on “LTMCU Upgrade” in the upper-left corner of the screen as seen below.



3. In the “Firmware Package Selection” field, click on the “Browse” button, Figure 26, and navigate to the unzipped LTMCU firmware file, Figure 27, that will be put onto the device. The FW version will populate in the “LTMCU FW Version:” field, Figure 28.

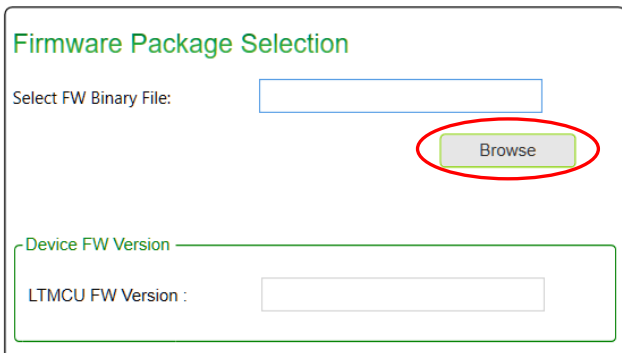


Figure 26

Name	Date modified	Type	Size
LTMCU_V3.0.000.bin	1/5/2018 3:41 PM	BIN File	500 KB
STM32_KCOU_V3.0.000.bin	1/5/2018 3:41 PM	BIN File	500 KB



Figure 27

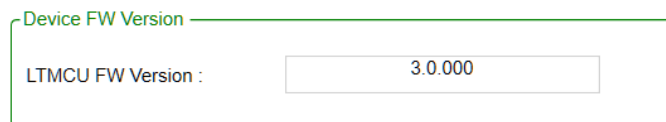


Figure 28

4. From the the pull-down menu located underneath the Tesys T graphic, Figure 29, select the COM port for the “TSX C USB 485”. In this example, it is COM 12. Click on the “Connect” button to connect to the Tesys T. A prompt will appear as in Figure 30. Refer to page 22 for more detailed instructions on how to complete the connection. If the prompt is followed and closed, the “Connected Device Info” field will populate, as in Figure 31

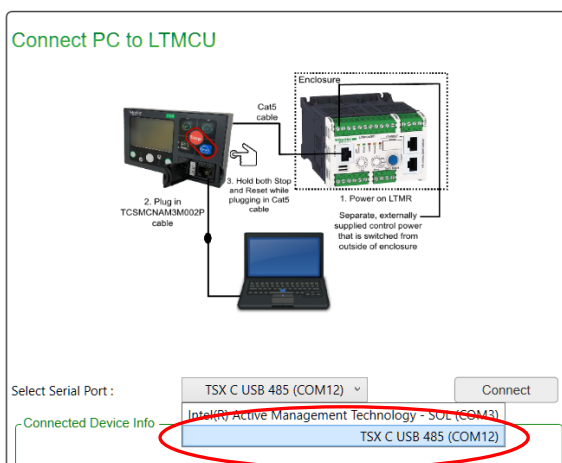


Figure 29

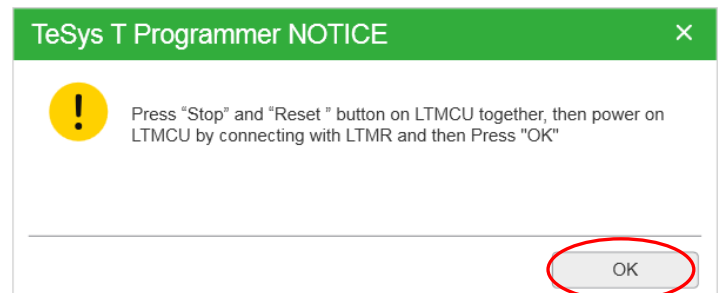


Figure 30

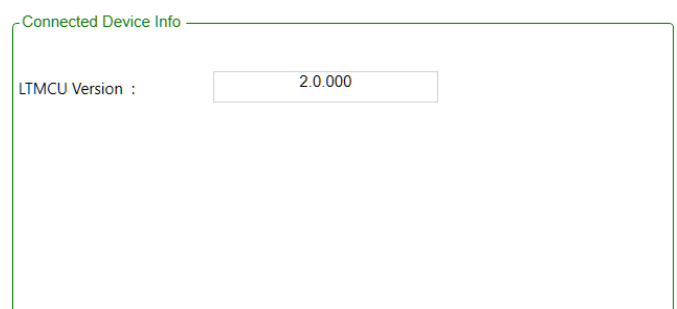
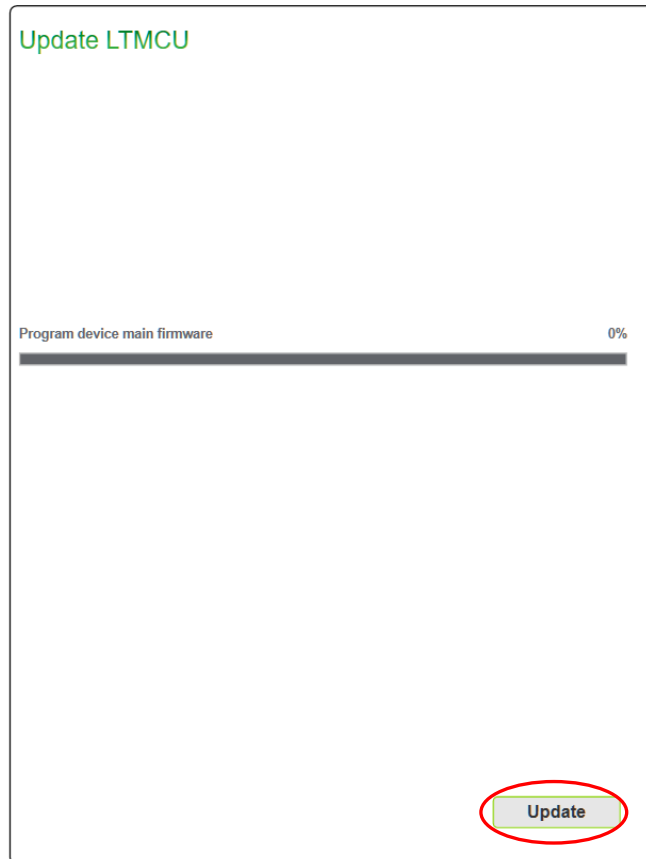


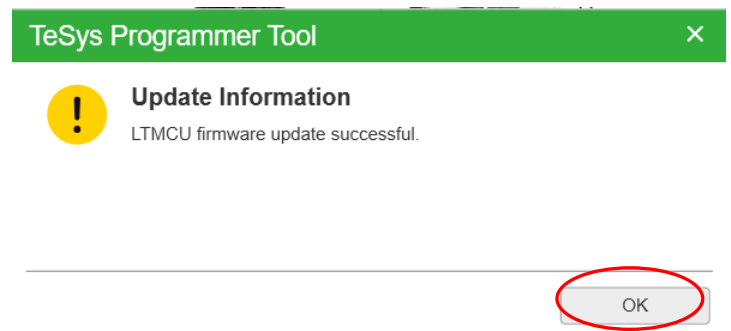
Figure 31

5. You are now ready to update the LTMCU. To begin the firmware update, click the “Update” button.

IMPORTANT: Once the firmware update has begun, DO NOT DISCONNECT THE DEVICE. Doing this can corrupt the hardware.



6. When the “Total Progress” bar reaches 100%, a pop-up window will appear stating that the “LTMCU firmware upgrade successful”. Click the “OK” button.



7. The updated firmware version will now appear in the “Connected Device Info” field.

Connect PC to LTMCU

Enclosure

Cat5 cable

2. Plug in TCSMCNAM3M002P cable

3. Hold both Stop and Reset while plugging in Cat5 cable

1. Power on LTMR
Separate, externally supplied control power that is switched from outside of enclosure

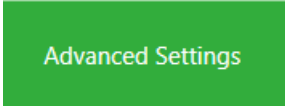
Select Serial Port : TSX C USB 485 (COM12) ▾ Disconnect

Connected Device Info

LTMCU Version : 3.0.000

8. The FW update is finished and you can exit the TeSys Programmer or continue using the tool.

4. Advanced Settings



4.1 Logging and Reporting

4.1.1 Reporting

TeSys Programmer supports report generation to help field services track job site progress and tracking by storing the file locally based on location defined in the Advanced Settings, as in the below figure. It will alert the user to start a new file when size increases to more than 1 MB.

Clear Report: to clear all the history reports.

4.1.1 Logging

TeSys Programmer supports simple logging of console/debug messages in text format. The log file size must not exceed 10 MB, beyond which the file will discard the beginning of the file. It provides an option in Advanced Settings screen for user to open the log file and change the file location, as in the below figure.

There is an option for user to set the message detail level as: ALL – DEBUG – INFO – ERROR

Log and Report Settings

Logging Level :

File Location :

Reporting Enable :

File Location :

4.2 Upgrade Modes

4.2.1 Optimized Mode (default):

Compares the Source FW Package and the Target Device Firmware of the Device & Network and upgrades the device to the selected FW package by only upgrading the microcontroller that does not match the package.

4.2.2 Overwrite Mode:

Upgrades both the device and network firmware to the Source Firmware Package by reflashing both FW regardless of existing version.

FW Upgrade Settings

Optimized: Only update the files that are different (Default)

Overwrite: Overwrite all files

4.3 Backup & Restore Feature

TeSys Programmer allows backup of complete LTMR configuration before start firmware upgrade and restore at end process over HMI port using Modbus serial communication protocol, when enabled (Default), as in the below figure.

Backup and Restore Settings

- Enabled: Restore the device settings after firmware update (Default)
- Disabled: Reset to factory default values

When Enabled, all Configuration Registers and Custom Logic will be backed up and then restored after the firmware upgrade.