

# Additional Instructions

## **P52T-SERVICE**

Service manual for updates, passwords and further languages



Includes the following features:

- Flashing Firmware update
- Update of the user interface
- Changing user passwords
- How to add further languages

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## 1 Update Firmware



### NOTE!

- The firmware contains all controller relevant components of the P52T unit.
- There is separate software for the user interface, which can be updated via USB stick. This update procedure is described in chapter 2 "Update User Interface".

To perform a firmware update, the "Renesas Flash Programmer V3" software and a commercially USB/TTL/Serial converter cable (TTL-232-3V3) is used (accessory Art. No.: 167500006). The Flash Programmer software tool as well as the corresponding documentation is available on <https://www.renesas.com>. After your registration the software is available for download.

### 1.1 Installation

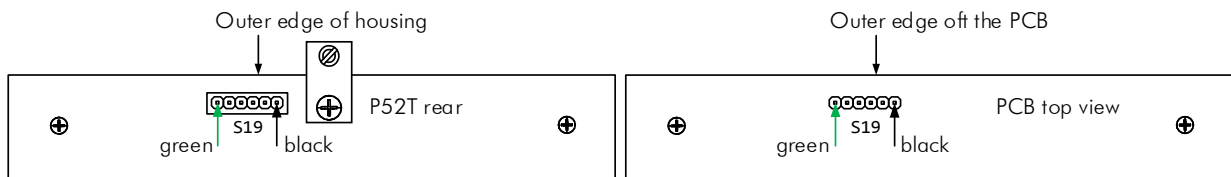
After downloading the "Renesas Flash Programmer V3" software, please install it on your PC or notebook.

### 1.2 Cable Connection

The TTL-232-3V3 cable must be plugged in as follows:

Compact version:

Decentralized version:



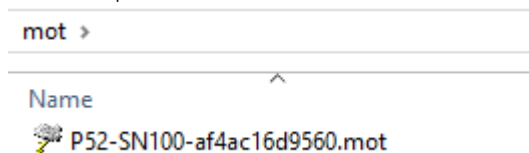
Plug the other end of the cable into a USB port of the PC or notebook, e.g. **COM6**.

### 1.3 Update File .mot

The latest version of the P52T firmware can be obtained from ELGO Electronic GmbH & Co. KG, and will be sent to you as a zip file.

1. First create an empty folder named "**.mot**" on the hard disc of your PC / notebook.
2. Unzip the zip file received from ELGO and save the **.mot** file in the new folder "**.mot**".

See example below:

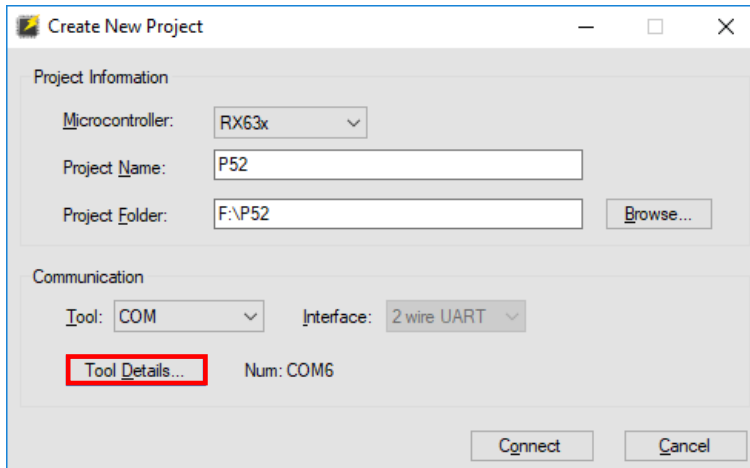


NOTE! The file name is version-dependent and can therefore differ from the example.

## 1.4 Create New Project (only when updating the first time)

If the P52T firmware update is performed for the first time, a new project must be created. After that, the last saved project can be selected. This is saved automatically and is then available for further updates.

1. Start the "Renesas Flash Programmer V3" software.
2. Go to "File" → "Create New Project". Then select Microcontroller: "RX63x" and assign a project name, e.g. "P52" into the corresponding field:



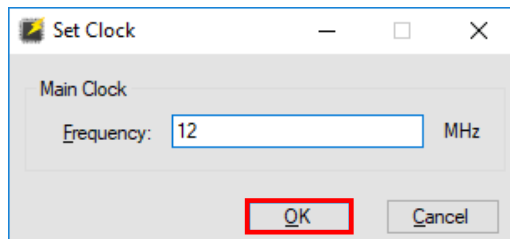
Then open "Tool Details" and select the COM-Port used (see 1.2) →

COM5 : USB Serial Port  
COM6 : USB Serial Port

3. If not done yet, plug in the TTL-232-3V3 cable and switch on the P52T. Then press the button "Connect":

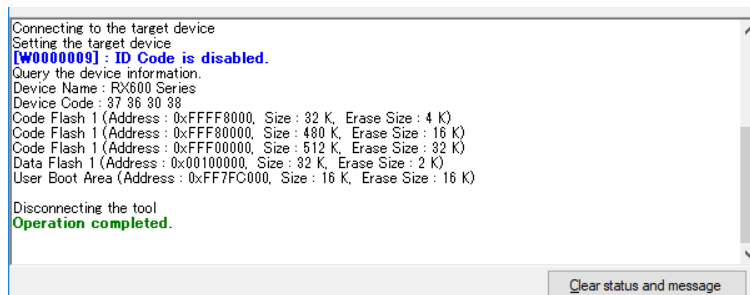


4. An intermediate window for entering the frequency appears:



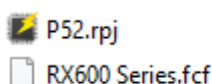
Enter value "12" and confirm with OK.

The following message must appear in the lower window of the mask:



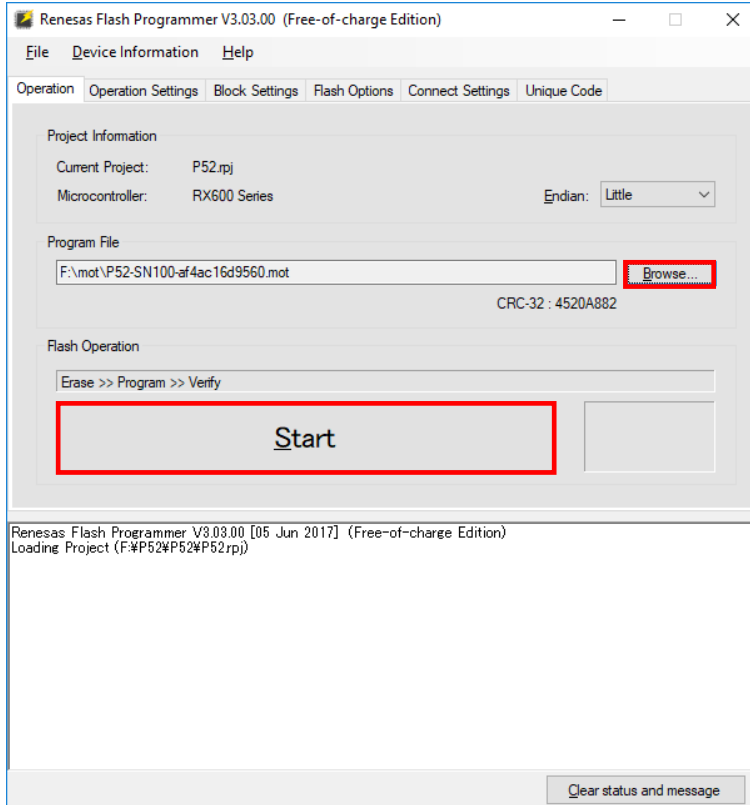
→ The creation of the project is now completed.

→ The folder "P52" now contains the following files:



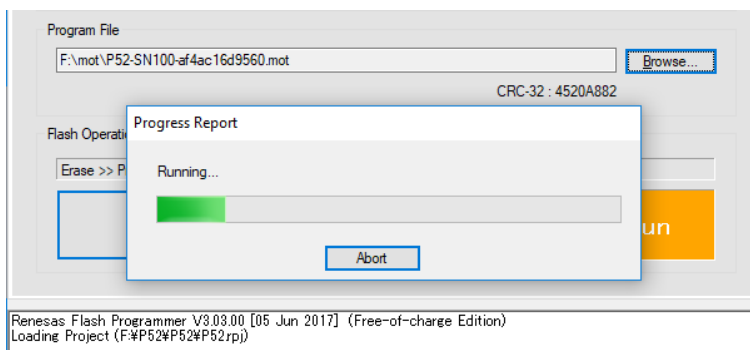
## 1.5 Flashing the Firmware Update

1. If not done yet, plug in the TTL-232-3V3 cable and switch on the P52T.
2. Start the "Renesas Flash Programmer V3" software.
3. Browse the **.mot** file from the folder "mot" created in section 1.3:

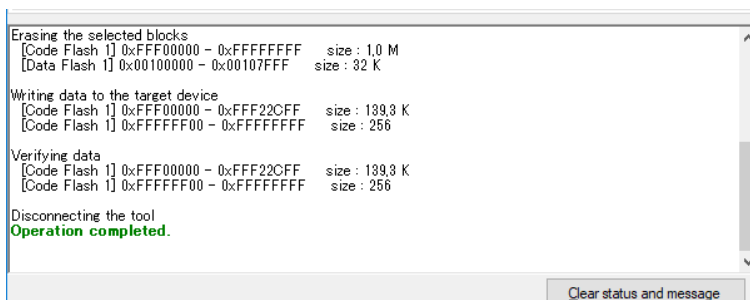


Then press the "Start" button...

4. The firmware is now transferred to the P52T:



5. After successful flashing the following message must appear in the lower window of the mask:



- The flashing operation is now completed.
- If flashing is to be repeated, the P52T must first be switched on and off.

## 2 Update User Interface



### NOTE!

- This software contains all user-related and operation-relevant components.
- All controller relevant components are included in the firmware. The update procedure for the firmware procedure can be found in chapter 1.

The latest version of the user interface software can be obtained from ELGO Electronic GmbH & Co. KG, and will be sent to you as a zip file. To update the user interface software, proceed as follows.

1. Unzip the zip file received from ELGO on your PC or notebook.
2. Save the contained file **system.update.tar.gz** to the root directory of a USB stick.
3. Switch off the P52T and insert the USB stick into the USB slot of the unit.
4. Switch the P52T on again.
5. The controller now boots via the USB stick and the update will be installed automatically.
6. When the boot process is finished, remove the USB stick.  
➔ The new user interface software is now active...

### 3 Password

The following default passwords have been defined for the corresponding user levels:

- Level 1 (User) → Password **123456**
- Level2 (Machine) → Password **200679**
- Level 3 (Admin) → Password **250565**

These passwords can be changed individually with the following procedure:

#### 3.1 Change Password(s)

##### Preparation

1. Insert a USB stick into the USB slot of the P52T unit.
2. Go to the menu "Service" → press the button "Create Backup" → and confirm with "Yes".  
→ the backup is running → then the application is restarted.
3. Now unplug the USB stick from the control unit and insert it into the USB slot of a PC or Notebook

##### Creating new passwords

4. Open the P52SNxxx folder on the stick and then → "backup" → "resources" → "settings"
5. A new file named **access.ini** must be created and saved into the settings folder.

For this WordPad, Notepad++ or a comparable editor can be used.

If you want to change the password for all 3 levels, write exactly the following code into the empty file. **Example for changing all 3 levels:**

```
[General]  
SHA1=true  
Level1=  
Level2=  
Level3=
```

If you only want to change 1 or 2 passwords, leave out the level(s) you don't want to change.

**Example for changing only one level (3):**

```
[General]  
SHA1=true  
Level3=
```

Make a note of the new passwords you want to assign. Then visit an online **SHA1** hashtag generator (e.g. <http://www.sha1-online.com>) and create from the new password(s) a hashtag for each level. Now copy the generated code to the respective level and save the file on the stick.

**Example for changing all 3 levels:**

```
[General]  
SHA1=true  
Level1=7c4a8d09ca3762af61e59520943dc26494f8941b  
Level2=3343909d6e74aea0487ea8b1eb363d71e1c7afaa  
Level3=37427a77f128acb5eba2737fd45219f8ca289d78
```

**Example for changing only one level (3):**

```
SHA1=true  
Level3=37427a77f128acb5eba2737fd45219f8ca289d78
```

6. After saving the file, remove the USB stick from the PC and plug it into the USB slot of the P52T.
7. Then go to the menu "Service" → press the button "Read Backup" → and confirm with "Yes".  
The backup is load and the application is restarted → now the new P52T passwords are active.






## 4 Add further Languages

To add further languages to the menu, proceed as follows:

### 4.1 Preparation

- Insert a USB stick into the USB slot of the P52T unit.
- Go to the menu "Service" → press the button "Create Backup" → and confirm with "Yes".  
→ the backup is running → then the application is restarted.
- Now unplug the USB stick from the controller and insert it into the USB slot of a PC or Notebook.

### 4.2 Configuration of Button- and Menu-Title

1. Open the P52SNxxx folder on the stick and then → "backup" → "resources" → "language"
2. → The following three files will appear:
  -  config.ini ← (contains the titles for button and menu)
  -  DEU.ini ← (contains the German menu texts)
  -  ENG.ini ← (contains the English menu texts)

3. Open resp. double-click the  config.ini with WordPad, Notepad++ or a comparable editor.

Now add the desired new language (e.g. French as marked yellow in the example):

```
;the language in three-letter code (ISO 639-3 standard)
```

```
[General]
Language="ENG"
```




```
[DEU]
Text="German"
```

```
[ENG]
Text="English"
```

```
[FRA]
Text="French"
```

4. Then save the file to the USB-stick (without renaming it).

### 4.3 Translation of the entire Menu Texts

5. Depending on desired source language, make a copy of the  ENG.ini or  DEU.ini and rename the file exactly to the previously defined indication, e.g.  FRA.ini
6. Then open the new created file with WordPad, Notepad++ or a comparable editor  
→ Now all texts can be translated as shown in the following example screenshot:

```
x00001 = "Menu de navigation"
x00002 = "Menu de travail"
x00003 = "Configuration"
x00004 = "Service"
;-----
x00010 = "Langue" etc.
```



**Important Note:**

Both files (config.ini and the language-file e.g. FRA.ini) must be saved in UTF-8 format.

If all texts have been translated, save the file on the USB stick and plug it into the P52T

→ go to the menu "Service" → press the button "Read Backup" → and confirm with "Yes".

→ the backup is load and the application is restarted → now the new language is available in the P52T.

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