



Studio-Tools

Download-Tool

Contents:

Download-Tool

elrest[®]
automationssysteme

DIN EN ISO 9001



Download-Tool

Software description

The download-program is a special tool for up- and download between PC and target hardware.

Since firm- and userware V1.48 a history function is available. The last 8 userware-downloads are shown. The history script contains, name, comment and date of the download.

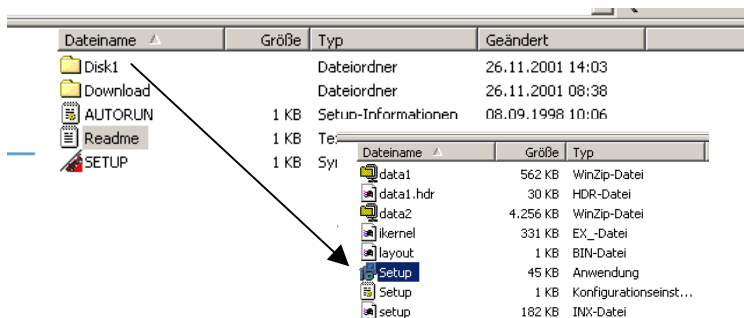
PC-System

Microsoft Windows 2000 or Windows NT 4.0

Installation:



Take the Download-Tool installations CD-ROM in CD drive



Program start

If auto-start is active, the installation program starts automatically when the CD-ROM slides in to the CD drive.

If auto-start is inactive, use the EXPLORER to start the installation program.

Change in to the file: \Disk1
and start: setup.exe.



The Set-up program is started.

On the first displayed window you may chose between the language German and English

This setting takes to the **installation and the Download Tool**

The installation program leads you interactively through following steps



Operation



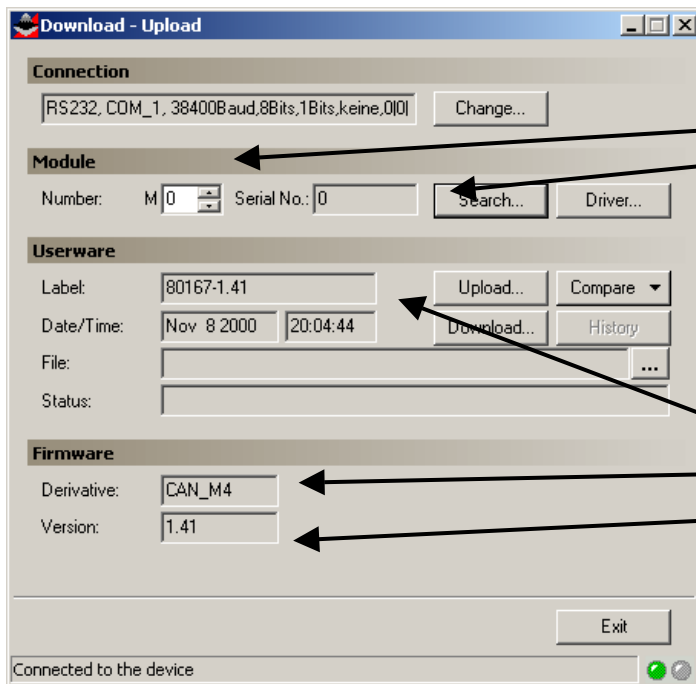
For starting, click on the program symbol

This setting is with the first program active:

Interface: RS 232
 Slot: COM 1
 Baud rate (RS): 38400 Baud
 Module number: 0

The program starts with the setting parameter.

After the connection the program reads automatically all characteristics from the module:



CAN-ADR

Series number

Userware version

Module derivate

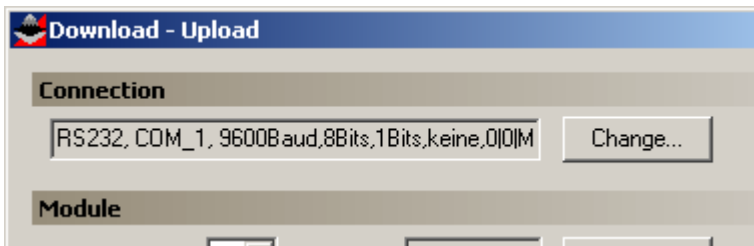
Firmware version

After a correct connection and module check, the status bottom change from red to green.

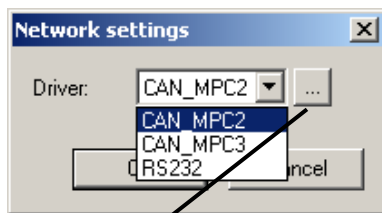


Interface configuration via menu

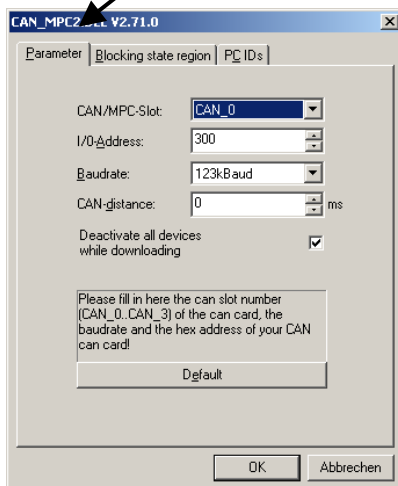
Setting: connection



At the menu item "Connection" => "change " its possible to choice to interface and driver from the PC

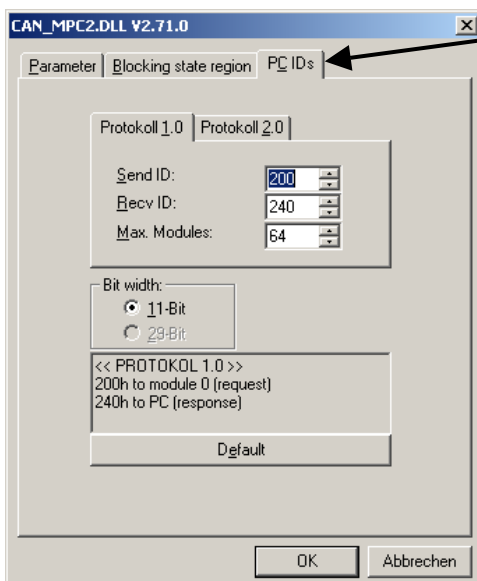


Interface and driver choice from PC (RS, CAN, ...)



After the interface selection the parameter has to be set.

Here CAN-interface



At CAN interface it is necessary to set the PC Ids too.

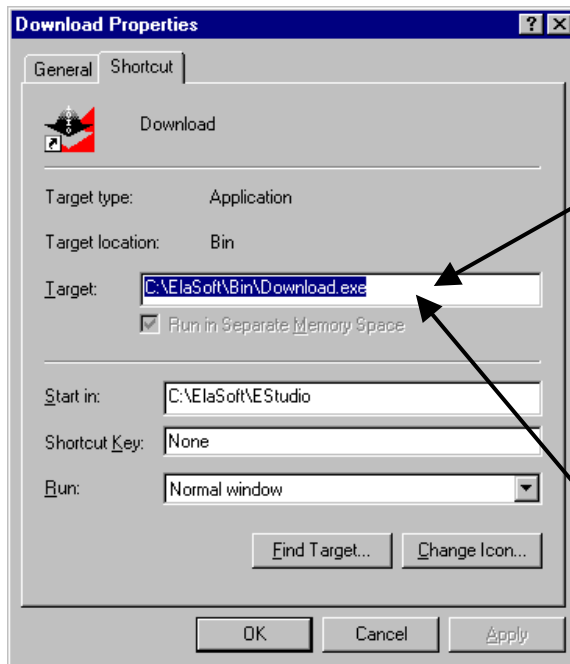
Important:
The correct setting of the protocol 1.0 (single master) or 2.0 (multi master)

Wrong settings will cause male functions!



Interface configuration via set up

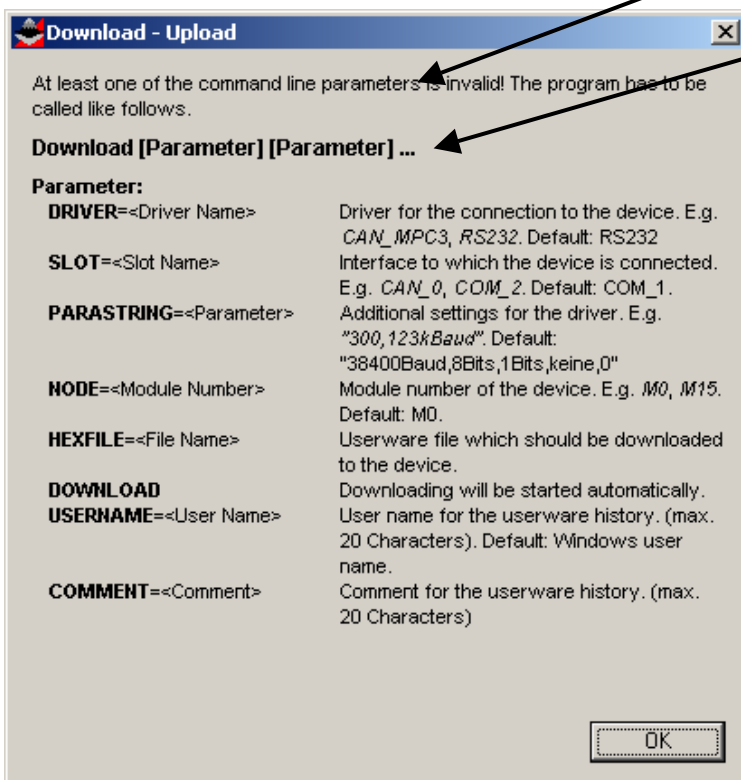
Setting under windows-properties



The Download-Tool offers you the possibility to make a user specific configuration.

The setting parameter can be written in the menu "properties" in the line "Target" between the parameter left one SPACE

The parameter listing will be opened automatically on wrong parameter inputs.

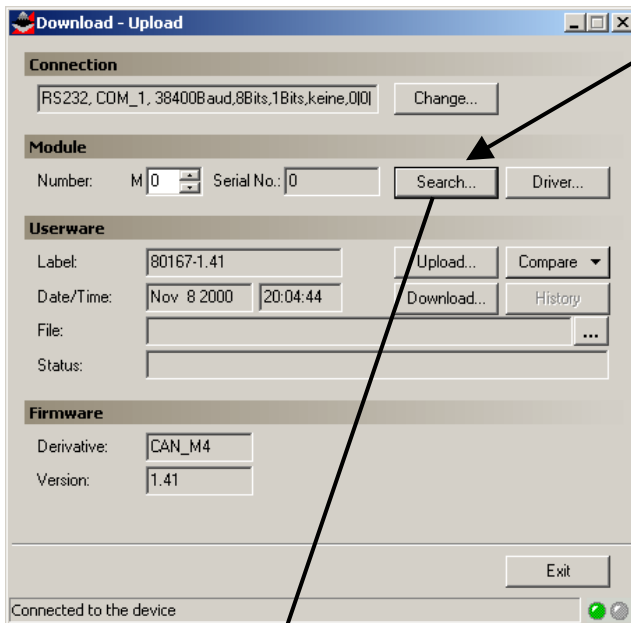


Here an overview from the useable setting parameters:



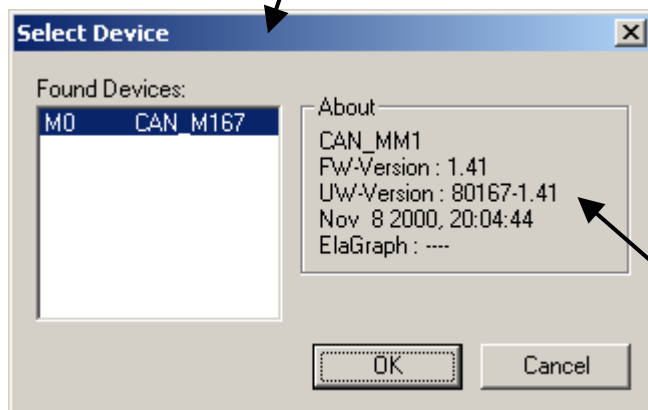
Autoscan (Module search)

Menu: search



Function „search“

This is very helpful, for the module selection in a network, with more than one active module.



The system detects following parameters and data:

The info windows:

- Module type
- Module address
- Firmware version
- Userware version with μ P-type (only by ElaGraph userware)
- Application (only by ElaGraph)

Its displayed in the “Select Device” window:

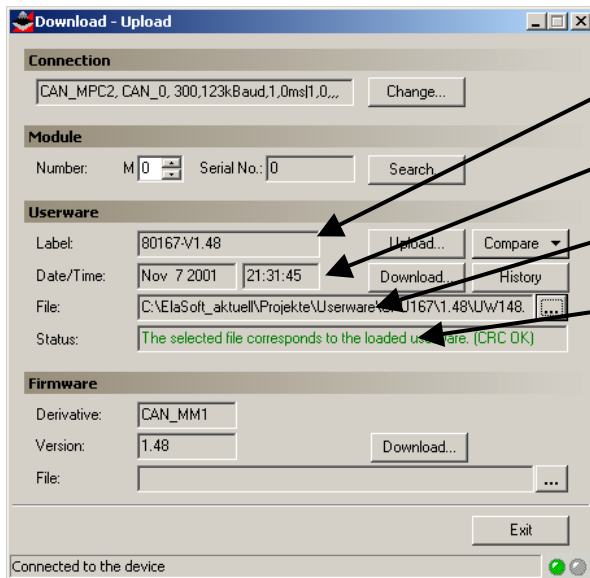
Close the windows with OK

Consider:

Select the displayed device with a mouse click!



Userware Download / Upload



Label: displayed type of uP and userware

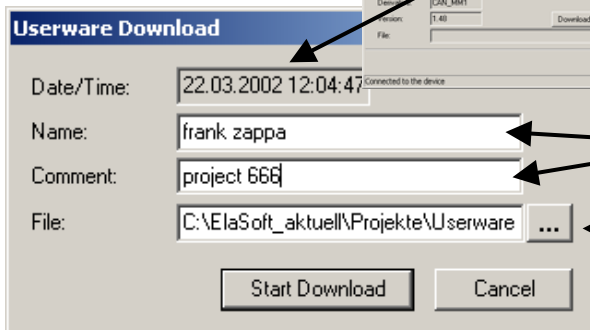
Userware creation date and time

File: the loaded file is displayed with path

Status: for error- and info messages

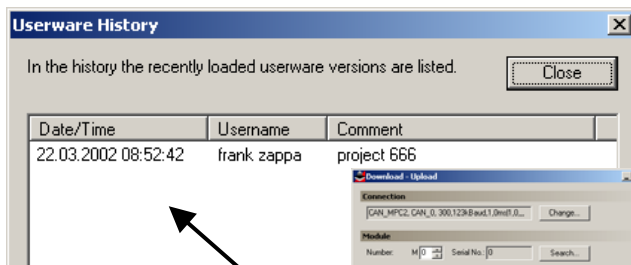


Start in main menu userware "Download"



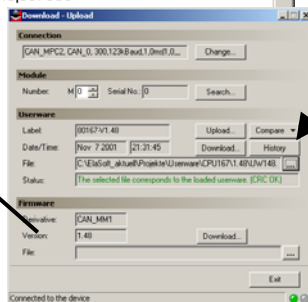
In this lines you can write individual data

Choice the source from the userware file
With the bottom: its easier.

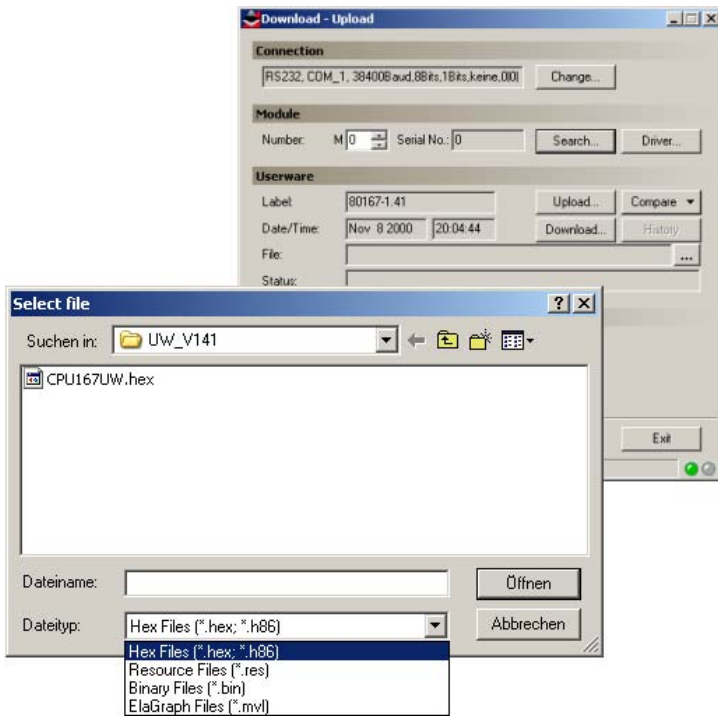


Userware History

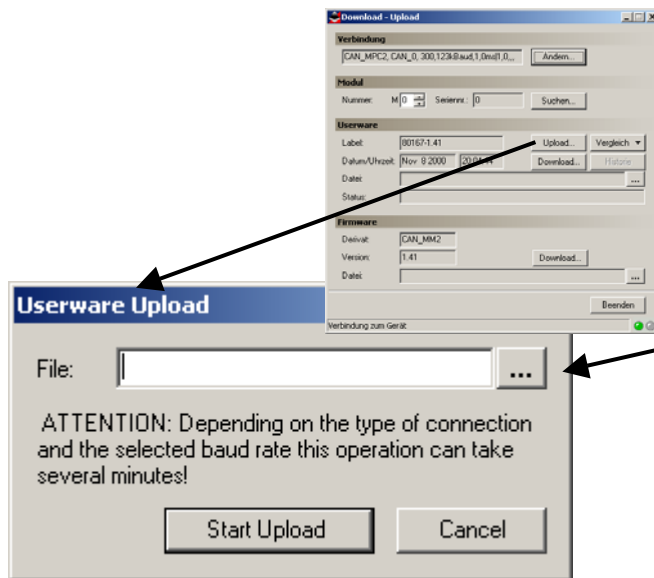
In "history" you can show the last 8 downloads with, time and date, name and comment (only by userware over V1.48)



Consider:
The history info are deleted, if an userware downloaded older then V1.48



Since version 2.80 it's possible to download also resources and ElaGraph programs. To do so follow the steps for downloading the userware. In the 'Select file' dialog select the file type 'Resource Files' or 'ElaGraph Files' respectively. Select then the file you want to download and click OK. From this point on the procedure is the same as for the userware upload. If you want to download an ElaGraph program the corresponding attribute file must be in the same directory.

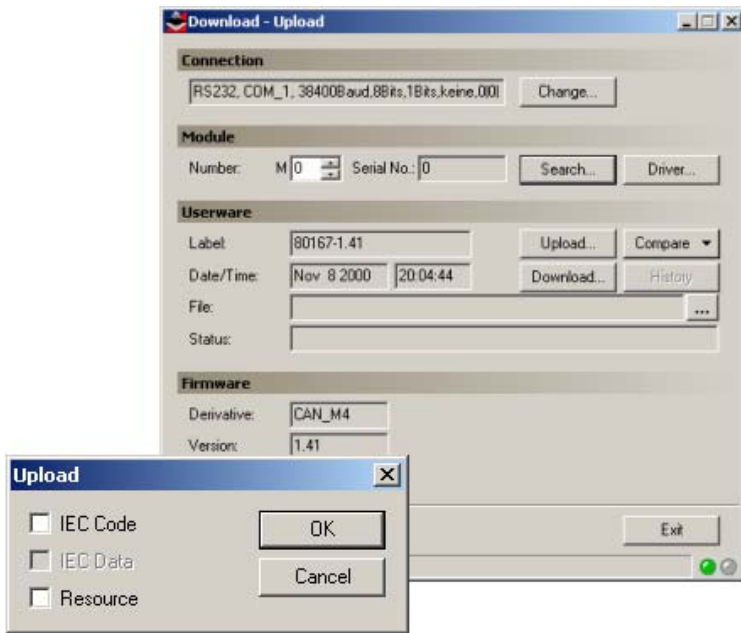


Function: Upload

Select the path and filename. After start with the button "Start Upload" the process.

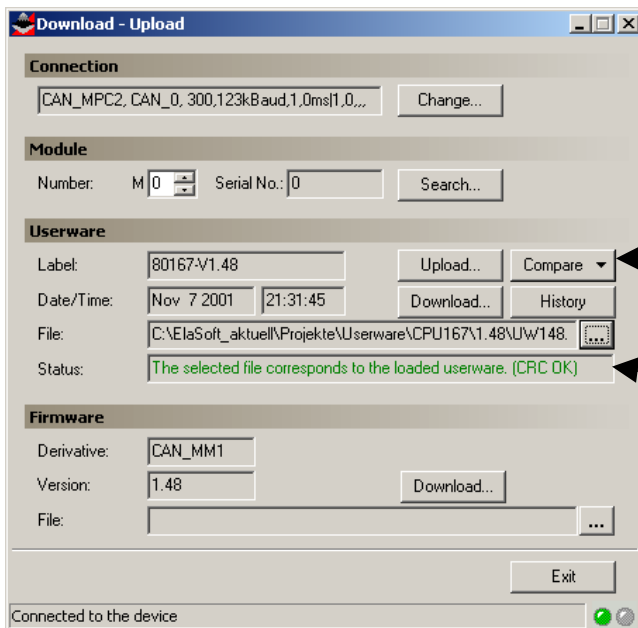
With the button easy to search the path and file

Consider:
Data transfer can take more than 10 minutes, dependent on interface and baud rate.



Since version 2.80 it's possible for devices of the fred-Mx and fred-P1xx series to upload also resources and CoSeSys programs. To do so follow the steps for uploading the userware. In the upcoming dialog select the files you want to upload and click OK. From this point on the procedure is the same as for the userware upload.

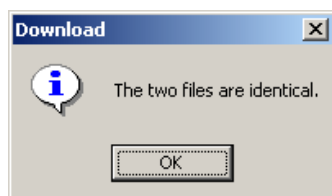
Compare



With "compare" its possible to compare 2 files. Load both files sequentially, and show the message.

In the field "Status", the result of the comparison between the loaded program and the software in the device is displayed automatically.

You can see quickly if a download is necessary or not.



Files are identical

or:



Files are NOT identical

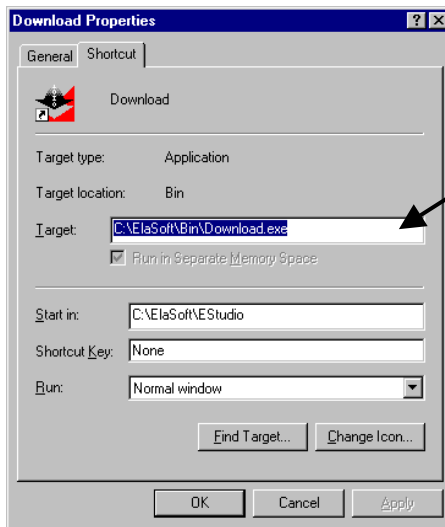


Firmware Download (only by experienced personnel!)

The firmware download should be executed only by trained personnel. Therefore this program part is protected by a password.

Attention:

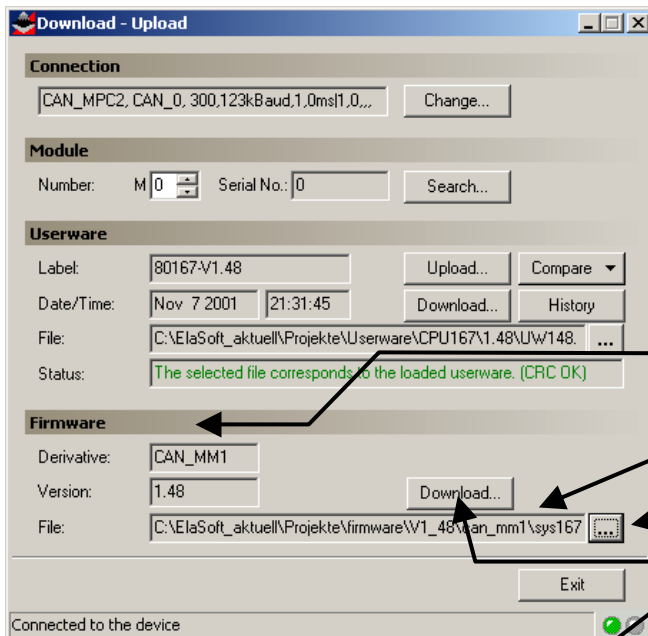
- To download the firmware you have to switch the module into the service mode (instructions please to consider!).
- First load the module specific firmware file (shown in the Window: "File:") into the download tool. After pushing the button "download" the process will be started.
- Only the specific firmware from the module type can be used
- If a wrong firmware was loaded into the module, its necessary to send the module to elrest for service
- Don't repair the module by your self!



password:


The password code has to follow the parameters in the menu item "target":

Now start the download tool again.



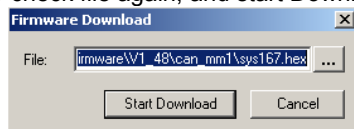
The download bottom is now active
1. switch module in firmware-download mode (show module manual)

2. write the correct path and the correct filename in to window „File“.

or use the button:  its easier.

3. start the transfer with the button „Download“.
4. after the firmware transfer, switch the back the module to normal mode and reset the power supply.

after check file again, and start Download:



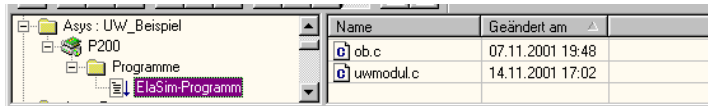
Consider:

If the download button is inactive, look for the password in properties!



Userware- terms and conditions for History

To use the history functions there are terms and conditions necessary. Please consider the example: „UW_Beispiel“



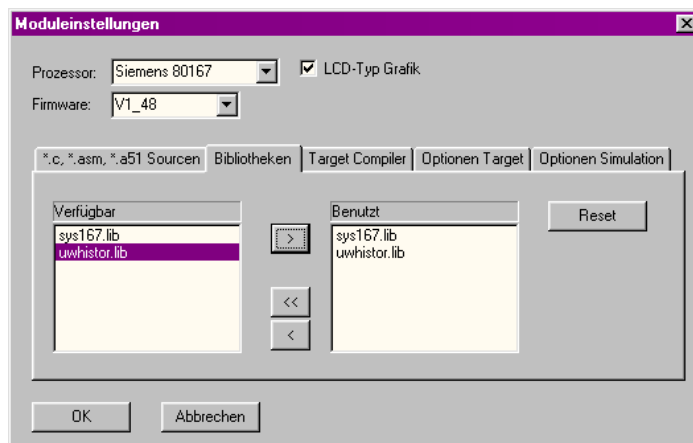
Additional to the file „ob.c“ the file „uwmodul.c“ is necessary.

```

...
void ob22 ()
{
    ...
    bInit_ob1 = FALSE;
    ...
}
...
void ob1 ()
{
    ...
    if ( !bInit_ob1 )
    {
        bInit_ob1 = TRUE;
        UWModul_TargetInit();
    }
    UWModul_TargetMainLoop();
    ...
}
...
void ob13 ()
{
    ...
    UWModul_TargetTimer0Call();
    ...
}
...
void ob14 ()
{
    ...
    UWModul_TargetTimer1Call();
    ...
}
...
void can_recv_telegram(char modul,can_telegram HUGE* daten)
{
    ...
    ElaGraphRecvTelegram(modul, daten);
    ...
}
    
```

The bold letter **program lines** have to be insert in you're program code.

Show also the program example file: "ob.c"



After insert the library "uwwhistor.lib" and compiling the history function will be active.



Note:

elrest product information: Automation system ElaCAN II

Hardware manuals		Best. Nr.
Chapter 1	Overview Hardware	E 5001
Chapter 2	Programming	E 5002
Chapter 3	HMI – human machine interface	E 5003
Chapter 4	PLC – process logic control	E 5004
Chapter 5	Technical data	E 5005
Chapter 6	Accessory	E 5006
Chapter 7	Order number system	E 5007
Chapter 8	Service	E 5008
Chapter 9	Introduction	E 5009
Chapter 10	Systems and net ware	E 5010
Chapter 11	Service and security	E 5011
Chapter 12	Warranty	E 5012
Chapter13	Control technology	E 5013

© 2001 automation systems GmbH all rights reservation

elrest Automationssysteme GmbH reserves the right to make changes in specifications described in this document without notice. elrest Automationssysteme GmbH does not assume any responsibility for the use of information included in this document.

The software described in this document is provided under privacy and license agreements. The software and/or the databases can only be used or copied as described in those agreements.

It is illegal to copy or reproduce the software unless it is expressly permitted in the privacy or license agreements.

Neither the whole nor any part of the information contained in this document may be adapted or reproduced in any material form except with the prior written permission of elrest Automationssysteme GmbH.

Diagrams, descriptions, dimension and technical data described in this document were valid at the time of publication of this document. elrest Automationssysteme GmbH reserves the right to any kind of modifications, especially those related to technical improvements, economical considerations or similar. External interconnections of the device are sole responsibility of the user.

elrest Automationssysteme GmbH
D- 73230 Kirchheim/Teck
Leibnizstraße 10

Telefon: ++49 (0) 7021 / 92025-0
Telefax: ++49 (0) 7021 / 92025-29

E- mail: vertrieb@elrest.de Internet: www.elrest.de

The logo for elrest automationssysteme is located in the bottom right corner. It consists of a red triangle pointing downwards and to the right. Inside the triangle, the word "elrest" is written in a large, white, sans-serif font, with a registered trademark symbol (®) to its upper right. Below "elrest", the words "automationssysteme" are written in a smaller, white, sans-serif font, following the slope of the triangle's bottom edge.