

Device Programming using TRWinProg

Software No.: _490-00416 _490-00416_WIN7



Installation and Operation Instruction

- Program Summary
- Safety instructions
- _System requirements
- _Program installation
- _Connecting devices to the PC
- _Program start
- User interface
- _Firmware update
- _Global error / warning messages

TR-Electronic GmbH

D-78647 Trossingen Eglishalde 6 Phone: (0049) 07425/228-0 Fax: (0049) 07425/228-33 E-mail: info@tr-electronic.de http://www.tr-electronic.de

Copyright protection

This Manual, including the illustrations contained therein, is subject to copyright protection. Use of this Manual by third parties in contravention of copyright regulations is not permitted. Reproduction, translation as well as electronic and photographic archiving and modification require the written content of the manufacturer. Violations shall be subject to claims for damages.

Subject to modifications

The right to make any modifications in the interest of technical progress is reserved.

Document information

Release date / Rev. date: 07/14/2017 Document / Rev. no.: File name: Author: MÜJ

TR - E - BA - GB - 0023 - 05 TR-E-BA-GB-0023-05.docx

Font styles

Italic or **bold** font styles are used for the title of a document or are used for highlighting.

Courier font displays text that is visible on the display or screen and in software menu selections.

" < > " indicates keys on your computer keyboard (such as <RETURN>).

Copyright notes (Copyright ©)

All MS Windows® versions and MS Internet / Windows Explorer are registered trademarks of Microsoft Corporation.



Contents

Contents	3
Revision index	5
1 Program Summary	6
2 Safety instructions	7
2.1 Definition of symbols	7
2.2 Organizational measures	7
3 System requirements	8
3.1 Software 490-00416	
3.2 Software 490-00416_WIN7	8
4 Program installation	9
5 Connecting devices to the PC	10
6 Program start	11
7 User interface	12
7 User interface 7.1 Main Menu Bar	12 13
7 User interface 7.1 Main Menu Bar 7.1.1 File Management	12 13 13
7 User interface 7.1 Main Menu Bar 7.1.1 File Management 7.1.2 Device communication	12 13 13 14
7 User interface 7.1 Main Menu Bar 7.1.1 File Management 7.1.2 Device communication 7.1.3 Settings	12
7 User interface 7.1 Main Menu Bar 7.1.1 File Management 7.1.2 Device communication 7.1.3 Settings 7.1.3.1 Logfile active	
7 User interface 7.1 Main Menu Bar 7.1.1 File Management 7.1.2 Device communication 7.1.3 Settings 7.1.3.1 Logfile active 7.1.3.2 Options	
7 User interface 7.1 Main Menu Bar 7.1.1 File Management 7.1.2 Device communication 7.1.3 Settings 7.1.3.1 Logfile active 7.1.3.2 Options 7.1.3.3 Global 7.1.3.1 COM port	 12 13 13 13 14 15 15 15 16 16
7 User interface 7.1 Main Menu Bar 7.1.1 File Management 7.1.2 Device communication 7.1.3 Settings 7.1.3.1 Logfile active 7.1.3.2 Options 7.1.3.3 Global 7.1.3.3.1 COM port 7.1.3.3.2 Language	 12 13 13 14 15 15 15 16 16 17
7 User interface 7.1 Main Menu Bar 7.1.1 File Management 7.1.2 Device communication 7.1.3 Settings 7.1.3.1 Logfile active 7.1.3.2 Options 7.1.3.3 Global 7.1.3.3 COM port 7.1.3.3.1 COM port 7.1.3.3.2 Language 7.1.3.3.3 DLL option	 12 13 13 14 15 15 16 16 16 17 17
7 User interface 7.1 Main Menu Bar 7.1.1 File Management 7.1.2 Device communication 7.1.3 Settings 7.1.3.1 Logfile active 7.1.3.2 Options 7.1.3.3 Global 7.1.3.3 Global 7.1.3.3 DL option 7.1.3.3 DLL option 7.1.3.3 Option file 7.1.3.3 Contemport 7.1.3.3 DL option file 7.1.3.3 Contemport 7.1.3.3 DL option file 7.1.3.3 Contemport 7.1.3.3 Contemport 7.1.3.3 DL option file 7.1.3.3 Contemport 7.1.3.3 Contemport .	 12
7 User interface 7.1 Main Menu Bar 7.1.1 File Management 7.1.2 Device communication 7.1.3 Settings 7.1.3 Logfile active 7.1.3.2 Options 7.1.3.3 Global 7.1.3.3 CoM port 7.1.3.3 DLL option 7.1.3.3 DLL option 7.1.3.3.5 Other buttons 7.1.3.3.6 Global settings	12 13 13 14 15 15 15 16 16 16 17 17 17 18 18 19
7 User interface	12 13 13 13 14 15 15 15 16 16 16 17 17 18 18 19 20
7 User interface	12 13 13 14 15 15 15 16 16 16 16 16 17 17 17 18 18 19 20 21
7 User interface	12 13 13 13 14 15 15 15 16 16 16 16 17 17 18 18 19 20
7 User interface 7.1 Main Menu Bar 7.1.1 File Management 7.1.2 Device communication 7.1.3 Settings 7.1.3 Logfile active 7.1.3.2 Options 7.1.3.3 Global 7.1.3.3 Global 7.1.3.3 DLL option 7.1.3.3 DLL option 7.1.3.3 Other buttons 7.1.3.3 Collean 7.1.3.3 Collean 7.1.3 Coll	12 13 13 14 15 15 15 16 16 16 16 16 17 17 18 18 19 20 21 22 23
7 User interface	12 13 13 14 15 15 15 16 16 16 16 17 17 20 21 22 23 24
7 User interface	12 13 13 14 15 15 15 15 16 16 16 16 17 17 18 18 19 20 21 22 22 23 24 24
7 User interface	12 13 13 13 14 15 15 15 16 16 16 16 17 17 18 18 19 20 21 22 23 22 23 24 24 24
7 User interface	12 13 13 14 15 15 15 16 16 16 16 17 17 17 18 18 18 19 20 21 22 22 22 22 22 22 22 22 22 22 22 22
7 User interface	12 13 13 14 15 15 15 16 16 16 16 16 20 20 21 22 23 24 24 24 24 24 26 26 26
7 User interface	12 13 13 14 15 15 15 16 16 16 16 17 17 18 18 19 20 21 22 23 24 24 24 24 24 24 24 24 24 24 24 24 24

9 Global error / warning messages	28
9.1 Causes and remedies	28
9.1.1 Status bar	28
9.1.2 😣 Error messages	
9.1.3 🕂 Warning messages	32



Revision index

Revision		Index
First edition	12/17/01	00
 General modifications Program installation Connecting devices to the PC Accessories 	5/13/02	01
General program modifications	10/21/03	02
Updating in accordance with software version 5.12	8/11/15	03
Final modifications in accordance with software version 5.12	10/5/15	04
As from Windows 7, executable on 32-Bit / 64-Bit systems		05

1 Program Summary

"TRWinProg" is a Windows PC program for the programming of TR devices. This means that all TR product areas such as rotary encoders, linear encoders, laser distance measuring devices, transformation measuring systems, displays, etc., can be programmed via a software.

Each device is defined by a so-called "Device file" (*.tr). All device-specific parameters are included in this device file and preset to a default value. When TRWinProg recognizes a device connected to the PC, the device file suitable for device is loaded into the PC program and the user interface is adjusted according to the device parameters required. In other words, only so many menus are displayed as tabs as is necessary for programming the connected device. A parameter list can additionally be used to specify which parameters to show or hide in each menu.

The user can therefore customize the user interface according to the requirements of his application. These settings can be saved to a so-called "parameter file" (*.prm) and restored by simply loading the file. Moving to a new application is therefore quick and easy.

PC and TR device communicate via an RS-232 or USB port on the PC. A PC adapter is required for converting the device, RS-422 or RS-485 signals to the RS-232 or USB signals. This ensures a potential separation between the PC and the connected device and longer ranges can be achieved.

TRWinProg also supports the connection of an infrared COM interface adapter according to the IrDA 1.0 standard. An external power supply for the adapter is not required as the power is supplied by the COM port of the PC. The communication distance between the IR adapter and the device is between 0 and about max. 200 cm and thus allows easy and wireless programming.



2 Safety instructions

2.1 Definition of symbols



indicates important information or features and application tips for the software used.

2.2 Organizational measures

Personnel working with the measuring system must have read and understood the applicable installation instructions, particularly the chapter "Basic safety instructions", prior to commencing work.

Internet download

• Installation instructions

3 System requirements

3.1 Software 490-00416

• PC (Windows[®] compatible)

Minimum requirements:

- From computer version 80-486
- 40 MB of free disk space
- 32 MB RAM
- CD-ROM drive
- a free USB 2.0 port or
- an additional COM port
- Operating system:

Windows® - 95 / -98 / -Me / -NT 4 / -2000 / -XP

• Interface adapter:

USB, RS232 <--> RS485, RS422, IrDA

3.2 Software 490-00416_WIN7

• PC (Windows[®] compatible)

Minimum requirements:

- From computer version 80-486
- 40 MB of free disk space
- 32 MB RAM
- CD-ROM drive
- a free USB 2.0 port or
- an additional COM port
- Operating system (32-Bit / 64-Bit):

Windows[®] - Vista / -7 / -8 / -8.1 and higher

• Interface adapter:

USB, RS232 <--> RS485, RS422, IrDA



4 Program installation

The PC program "TRWinProg" is usually delivered on a CD-ROM or can be downloaded from TR-Electronic at the following link:

http://www.tr-electronic.com/service/downloads/software.html

You can use Windows Explorer to find the file "Setup.exe" in the root directory of the CD-ROM if the default settings of your Windows system do not automatically start the setup program when you insert the TRWinProg CD into your CD-ROM drive.

The installation begins when you double click the "setup.exe" file with the left mouse button. Then follow the instructions of TRWinProg Setup Program.



5 Connecting devices to the PC



A PC adapter and possibly a control cabinet module are required for connecting devices. The descriptions of these programming tools are not part of this documentation. However they can be downloaded from the Accessories section on the website:

http://www.tr-electronic.com/products/rotary-encoders/accessories.html



Connection diagram, e.g. via PC adapter with SSI encoder

Connection diagram, e.g. via IR adapter





6 Program start

The program is started from the menu *Start --> Programs --> TRWinProg*.

You can register a shortcut of TRWinProg.exe in the Startup folder of Windows if TRWinProg is to be started automatically and immediately after Windows has started.

The following info window appears for about 2 seconds after starting the program:

Info			
	Loaded DLL :	Option	
	TRWPDLL	IRDA	
	COM-Port :		
	COM1		
G			
	·		

The window briefly informs the user about the global program default settings, but has no input options.

The information is limited to:

- loaded program libraries (*.DLL)
- used serial transfer options, e.g. IRDA, which means that an IR adapter is used for the communication between PC and device.
- COM port used
- language set

For communication between PC and connected device to occur requires that these settings have been adjusted the user's situation. Therefore make these settings first

(see menu Tools --> Global in offline mode, page 16).

7 User interface

/ TRWinProg			_
<u>File Device Extra H</u> elp			
	* <u>6</u>	?	
		<u> </u>	
Dasics			
Device-file	222	_	
Project			
-			
Worker			
Comment			
Online	1		
Device			
Firmware-version			
Firmware-date			

Main screen of TRWinProg in offline mode without device and parameter file loaded.



Main Menu Bar (Chapter 7.1 from page 13)



Tool bar (Chapter 7.2 from page 21)



Menu Bar (Chapter 7.3 from page 22)



Status bar (Chapter 7.4 from page 24)

7.1 Main Menu Bar



7.1.1 File Management

File	
Open	
Save	
Print	
Devicelist	•
Logfile displa	ау
End	

Initially, the options $Open^{\textcircled{O}}$, Save B and Print B under the File menu are inactive and only become active if a device file *.tr (definition of device type) has been selected and you are in **offline mode**. End D terminates the program TRWinProg.

Use the option *Open* to load a saved "TR parameter file" (*.prm) into the program. A check is made during loading to verify whether the device ID in the parameter file matches the device ID of the loaded device file. This verification ensures that the parameter file and device file are only associated with a single device type.

The file location for parameter files is the subdirectory "Data", which is pre-selected when you open or save parameter files.

The *Save* option saves every *Device* parameter, *Project* description, *Worker* and the related *Comment* in the parameter file belonging to a device file. The parameter file thus enables adjustments to be made to different customer applications. Several parameter files can therefore be associated with a single device file.

The *Print* option prints the currently loaded parameter file as a list on the selected printer.

The option *Device* list -> Actualise updates the list of all available devices files.

Use the option *Device* list -> Import device to include a new device file. The program might have to be restarted after including a new device file for the file to appear in the device list.

The option Log file display displays a list of system events that have been logged in the background of the program. Use the setting *Extra* -> Log file active to enable logging (see Chapter: 7.1.3.1).

7.1.2 Device communication

Device

Online Data read from device Data write to device Read DiagnosticMemory Device reset Default-Values restore In offline mode only the Online option is active. Data read from device , Data write to device and any other options are only active in online mode.

The program attempts to connect to the connected device when you click on the *Online* option. Once the connection is established, the offline mode switches to the online mode. The status bar (Chapter: 7.4) displays additional information about the operating condition. An error message is displayed and the program remains in the offline mode if no communication can be established. If this is the case, ensure that all components are properly connected and that all possibly required hardware drivers have been installed on the operating system.

The program analyzes the connected device and automatically loads the appropriate device file when establishing a connection.

The programmed device parameters are compared with those of the loaded parameter file if a parameter file has been previously created and loaded as being associated with the current device file. A message indicates whether differently set parameters have been identified. In this case, a window displays a list of the differing parameters and provides a possibility to accept the device date in the PC, to store the PC data in the device or to cancel the operation.



Data read from device causes the parameter data to be read from the device to the PC when in online mode. This action overwrites the PC data.

Data write to device causes the parameter data to be sent from the PC to a device when in online mode. The device is thus programmed with the new parameter data.

Read diagnosis memory permits reading the diagnostic memory for servicing purposes. This function must be supported by the measuring system.

Reset device causes all unsaved parameters to be reset to their original values. This function must be supported by the measuring system.

Default-Values restore resets the measuring system to the factory settings. This function must be supported by the measuring system.



7.1.3 Settings

Extra
Logfile active
Options
Global

The menu items *Logfile active*, *Options* and *Global* can be selected in offline mode only. A device file must always be also loaded for the menu item *Options* to be selectable.

7.1.3.1 Logfile active

Start and stop the logging of the communication by selecting *Logfile active*. This function can be activated only in **offline mode**. Use the option *File -> Log file display* (see Chapter: 7.1.1) to display the log file.

7.1.3.2 Options

The O_{ptions} menu provides an overview of all parameters relevant for a particular device type (device file).

ounting direction	Parameter - Nr : 0200
ingleturn Aultiture	Counting direction
1ath1	
1ath2	Type:2(BYTE)
1easurelength	Length : 1
lysteresis	Access-type : rw
unction Ext.Input	Selection: 2
reset-Value	Min-Value : 0
'osition	Max-Value : 1
entrai-Unip Setellite 1	
atellite 2	Selected : up
bsolut-Position	
PositionOffset	
leroPosition_1	ontimierte zyklische Darstellung
CeroPosition_2	
eroPosition_3	display graphic
revice-State	visible
tate ext Input	
estValue1	Read only
estValue2	Zuklisch Alles Bood antu
lagnet-State	
diastau infe	Denote OK Oliginal

Select the appropriate parameter and the button *visible* to hide the parameter from the user interface if certain parameters are not required.

Use the button *all visible* to display all listed parameters in the user interface. The button *Display info* shows some developers information and the currently used value of the selected parameter. Use the button *Remote* to establish a remote maintenance with the "Remote Control" for service purposes.

Remote-Control	
○ No Remote-Control	IP-Info IP-Address : 10.4.13.10 Host-Name :
C Internet (LAN/PR0XY)	OK

7.1.3.3 Global

Use the option *Global* to set global program settings for communication and language.

obal	×
CommPort : COM1 COM1	2
Language : ENG ENG	
Comm-DLL : TRWPDLL 9600 Baud DLL-Op	tion : 9600 Baud
Optionfile Optionfile automatic load <u>File</u> 	E R I

7.1.3.3.1 COM port

Use *CommPort* to specify which serial port of the PC is to be used by the program TRWinProg to communicate with the connected device. This option is used to specify the *virtual COM port* if the USB port is used for communication. It supports *COM1* - *COM6*.

Clicking the *Show Serial Ports* button displays all available COM ports. Double click the required port to select it.



7.1.3.3.2 Language

Sets the program's user interface language. The associated national flag is displayed.

You can select:

- GER (German)
- ENG (English)
- ITA (Italian)
- FRA (French)
- ESP (Spanish)
- SWE (Swedish) is currently not supported!
- SUO (Finnish) is currently not supported!
- POR (Portuguese) is currently not supported!

7.1.3.3.3 DLL option

Specifies the type of communication for the exchange of data:

- Auto:

The Baud rate is automatically selected by the program. The highest possible baud rate of both components (PC / measuring system) is determined and set and a PC adapter is used for communication.

- *9600:*

The baud rate is set to a fixed 9600 baud and an RS232-PC adapter is used for communication.

- IRDA(ACTISYS): An infrared adapter is used for communication.
- USB:

A standard interface adapter (third-party product) is used for communication.

- TR USB ADAPTER: A "TR-USB PC Adapter" is used for communication.
- TR I^2C Bus: An "I²C Bus" is used for communication.
- TR TCP/IP: An Ethernet-based "TCP/IP" connection is used for communication.
- USB-HID: A "USB PC adapter HID V5" is used for communication.

7.1.3.3.4 Option file

Click on the button is to load an option file. Check *Option file automatic load* to automatically load the selected option file during the program start.

7.1.3.3.5 Other buttons



Click on this button to set the path to the folders with the device files.



Click on this button to open the path to the device files "Devices".



Click on this button to open a window where global TRWinProg functions can be set (see Chapter: 7.1.3.3.6).



Click on this button to apply or save the settings that were changed in the window *Global*.



7.1.3.3.6 Global settings

A list of global program settings is displayed after clicking the button in the window *Global*:

The following service parameters may only be changed after consultation with TR-Electronic:

- Grafik Sample Time (in 50 ms-Steps) -> default value = 1
- CMD Delay (in µs) -> default value = 1000
- Char Delay (in µs) -> default value = 1000
- HID-Cycle (in ms) -> default value = 20

Click the check box to enable or disable the following parameters:

- Use Delayed Telegrams -> disabled by default: Enable / Disable service parameters.
- *Remote Enable* -> enabled by default: Enable / Disable remote maintenance.
- Search Registry Allowed -> disabled by default: Extend system access permissions for TRWinProg.
- Parameter Acknowledge Enabled -> enabled by default:
 A confirmation box appears when downloading modified device parameters and indicates whether the parameter list is valid.
- Parameter Quit Acknowledge Enabled -> enabled by default: A confirmation box appears before TRWinProg is closed.
- Comm Port Auto Search Enabled -> disabled by default: Enables / disables automatic Baud rate detection (disabled = 9600 baud).
- Printer Auto Search Enabled -> enabled by default: Enables or suppresses an alert to select a default printer.
- Additional Help Permanent -> enabled by default: Enables / disables additional help.
- File Copy at Startup -> disabled by default: Enables / disables comparing the local TRWinProg device directory with other device directories at program start. The program start is delayed if this parameter is enabled!
- Refresh Device List at Startup -> enabled by default: Enables / disables updating the device list at program start.
- Checking for Programm Updates -> disabled by default: Enables / disables the on-line search for new software updates at program start.
- TRIC Reading Enabled -> disabled by default: Enables / disables the display of the device TRIC number (TR Identification Code) on the Basics tab. This function must be supported by the measuring system.

Clicking the button 1 again closes the settings window.

7.1.4 Help functions

Help HelpFile Online help Program-Info Use the menu item Help-File or the icon 2 to open this document.

The menu item Online help starts the download of the most recent version of this document.

Programm-Info informs about

- Program version
- Driver name
- Driver version

An additional info symbol 📵 appears for some devices in the tool bar and enables an additional device-specific Help for individual parameters.

Hover the mouse pointer over an information symbol to display the help text of the respective parameter in a separate pop-up window.

Example:

TRWinProg (V5.12)		
File Device Extra Help		
📔 🖻 🖺 🛔 🛉 🐓 💋	0 ?	
Basics Basic parameter SSI-In	terface Failure-handling Mess-Values	Function Input Function Ou
Count-direction	Up	
Resolution	1 mm	3
Free Resolution	100	in 1/100mm
Mess-Dynamic	mid	
Switch-off Laserdiode	not automatic	mess-dynamic is an parameter, who characterise mathematic calculation of the measure-value, with high mess-dynamic there is no mathematic calculation
Mess-Output-Time	1ms 🔤	Gon the measure-value, but the noise of the measure-value is bigger, in case of small mess-dynamic the noise is lower,
Physical Resolution	0,76 mm	but there exist a small time-delay for the measure-value,
Signbit Position	24 Bit	3
Fieldbus	Disabled	0
		Offline!



7.2 Tool bar

	Program end	
--	-------------	--

Firmware update

>	Allows you to load a new firmware (optional)	online
---	--	--------

Help functions

0	Enables an additional device-specific Help for individual parameters (optional).
? ••	Displays this document

File Management (for more information see page 13)

	Open a parameter file (*.prm)	offline
3	Save a parameter file (*.prm)	offline
A	Print a parameter file (*.prm)	offline

Device communication (for more information see page 14)

4	Read device data into the PC	online
+	Write PC data to the device	online
\$	Offline> Online	offline
5	Online> Offline	online

7.3 Menu Bar

The *Basics* menu is always displayed, independent of the connected device or the loaded device file.

Other menus are added according to the device type when loading a device file in offline mode or when connecting a device in online mode. The associated version number of this file is displayed to the right of the device file display window.

🦆 TRWinProg			_ 🗆 🗙
<u>File Device Extra H</u> el	p		
	♦ Ø	?	
Basics Basic param	eter SSI-Interface Me	essValues	
Device-file	TR ADP200-SSI	from : 18.09.2002	2
Project	TEST ADP200-SSI-0	3	
Worker	Master		
Comment	Text, Text, Text, Text Text, Text, Text, Text	t, Text, Tex	ext. ext. ext. ext. ext. ext.
Online			
Device	TR ADP200-SSI	Art-No : 485-00250	
Firmware-version	V2.03	Ser-No: 0001	
Firmware-date	21.11.2002	in the second seco	
Daudrate	IUDA - 3000 RI(\\$		
Read cyclic		✓ Parameter-list ok 2:36	Online! @

Use the input fields *Project*, *Worker* and *Comment* to describe the settings for a specific customer application in greater detail and to save them as a parameter file (*.prm) together with the adjusted parameters using *File* --> *Save*.

In the online mode, the field *Online* provides information on:

- the connected Device (Device ID),
- the Firmware version,
- the Firmware-date,
- the Baud rate set,
- the article number (Art-No) and
- the serial number (Ser-No)

A product shot of the connected device appears on the right side of the field.



7.3.1 Parameter inputs

🎲 TRWinProg			
<u>File Device Extra H</u> elp			
	?	J	
Basics Basic parameter SSI-In	terface MessValues		
Count direction	SSI1-up, SSI2-up		
Units	SSI1-up, SSI2-up SSI1-down, SSI2-down SSI1-up, SSI2-down		
Steps/Round SSI1	SSI1-down, SSI2-up		
Steps/Round SSI2	4096		
Decimalpoint	0		
Start-Display	SSI1 kpl.(24Bit)		
Negative values	positive/negative values		
Front-Keyboard	Keys enabled		
Back-Keyboard	Preset clear		
Display-Refresh	5	[x/sec]	
Read cyclic	Rarameter changed !	0:41 0	nline! 🍥

You can make parameter changes in both offline mode and online mode. A requirement is that a device file has been loaded.

Parameter entries are either entered via a drop-down menu button if from a list of defaults or by directly inputting parameter values. A red entry window frame marks changed parameters.

The message *Parameter changed*! in the status bar (see also Chapter "Status messages", from page 24) informs the operator of a global parameter change. This message and the changed-parameter highlight will be deleted when the parameters are transfered to the device in online mode or by saving the parameters in the parameter file in offline mode.

The value range of direct parameter entries via the keyboard are checked for validity during entry. For example, the following error message indicates that the entry is either smaller or larger than the valid range:

Error	×
8	InputValue < MinValue ! ValueRange 1 to 4096
	OK

The parameter entry can be completed with a valid value only.

7.4 Status bar

	Communications reports [A]	Parameter reports [B]	Offline- / Online status [C]
ſ			1

7.4.1 Status messages

7.4.1.1 Communication messages [A]

Communication started

Appears when changing from offline to online mode. This message is invisible to the user if the connection could be established without problems. A series of initialization processes is started when a connection is established, during which process the message *Communication started* will appear only very briefly.

This message may remain in this status if the connection could not be established for any reason or is faulty.

Communication stopped

Appears when changing from online to offline mode.

Communication interrupted (see also Chapter 9.1, from page 28)

Appears when the online connection to the device is interrupted for longer than about 2 seconds. In this case, the online connection to the device must be reestablished manually via the program.

Search Baud rate

Appears when changing from offline mode to online mode and the baud rate is set by the initialization process.

This message may remain in this status until the connection is established, if the connection could not be established for any reason or is faulty.

Get Device-ID

Appears when changing from offline mode to online mode and when the initialization process compares the device ID of the loaded parameter file with the device.

This message may remain in this status if the connection could not be established for any reason or is faulty.



Waiting for parameter list

Briefly appears when changing from offline mode to online mode and when the initialization process provides the parameter list from the device for parameter comparison.

This message may remain in this status if the connection could not be established for any reason or is faulty. A warning message is issued in this context if different parameter data have been detected:

Warning	, X
⚠	Device-data changed !! Communication startup new !!
	OK

This error message is displayed when the warning message is acknowledged or when no parameter difference was detected:

Error		×
8	Device not identified !	
	OK	

The process is canceled upon acknowledging the error message, the program remains in the offline mode and the status

Device-file not available! is displayed.

Read parameter from device

Appears when changing from offline mode to online mode and when the initialization process transfers the parameters from the device to the PC program.

This message may remain in this status if the connection could not be established for any reason or is faulty.

Write parameter to device

Appears when parameters are sent to the device in online mode.

Read cyclic

Appears in online mode after the initialization process and when the communication with the device is working properly.

Device-file not available! (see also Chapter 9.1, from page 28)

Appears when changing from offline mode to online mode and no device file was found for the connected device. This could be caused by:

- the file was moved out of or deleted from the file system
- the file was not supplied with the program

Please request the appropriate device file (see program message)

7.4.1.2 Parameter messages [B]

Parameter-list not actualised!

Appears when parameters are sent to the device in online mode and when a communication fault occurs during data transfer. Depending on the type of fault, this circumstance may also be displayed as an error message. The parameter transmission must be repeated

✓ Parameter-list ok

Appears when parameters are sent to the device or are received by the device in online mode and the data transfer could be completed without fault (no parameter difference PC <--> device).

Parameter changed!

Appears when parameters have been changed in online mode in the user interface but have not yet been transferred to the device. In offline mode, this indicates that the parameters have not yet been saved in the parameter file.

No option-file loaded (see also Chapter 9.1, from page 28)

Appears if no option file was loaded for the device file. This could be caused by:

so far, no option file has been created for the device

the original location of the created option file has been moved or deleted from the file system

The message is overwritten by subsequent actions, such as changing parameters.

7.4.1.3 Offline / Online Status [C]

Offline! 🧶

Appears when the program is running in offline mode.

Online! 🧕

Appears when the program is running in online mode. After a successful connection, the online time spent is also indicated.



8 Firmware update

In some cases it is necessary to update a device firmware on site, for example when new device functionalities are to be used.

Firmware updates may only be performed in consultation with TR-Electronic. For this purpose, the following data must be provided:

Device: Firmware version: Firmware-date:

see also Information "The online field ..." at the bottom part on page 22.

```
Use the menu Help-->Program Info to note
the program version and
Driver version
```

TR-Electronic creates a new device file (*.tr) and the associated binary file (*.bin) that matches the above data. TRWinProg must compy these two files into the subdirectory "... **\Devices**".

The firmware update symbol " \square " is added when the new device file is loaded. Using the icon \square , the firmware update can now be performed in online mode.

Enter the (case sensitive!) password agreed with TR-Electronic in the next window:

🎲 Password	
Please Enter Password	
	ок

Click the *Start* button to start the firmware update.



9 Global error / warning messages

9.1 Causes and remedies

9.1.1 Status bar

Program message Communication interrupted Cause The online connection to the device was interrupted for longer than about 2 seconds.

Remedy

- Ensure, when using an IrDA adapter:
 - that the transmission path (transmitter <--> receiver) was not interrupted by objects, external influences (e.g. strong exterior light sources) etc.,
 - that the IrDA adapter is aligned with the device,
 - that the distance IrDA adapter <--> device is within the specified limits
 - Check COM port socket for correct seating.
 - Check the power supply of the device to be programmed.
- Make sure that no other software uses the selected COM port.
- Check whether a power management function of your PC has reduced or shut down the power supply of the COM ports.

9.1.2 8 Error messages





Program message
😣 Wrong device-ID!!
Cause
An incorrect option file (*.prm) was loaded for a device file (device type) in offline mode. The device ID defines the device type and thus ensures that only appropriate parameters are loaded for a device type via option files.
Remedy
 Select an appropriate option file for a device file (<i>File> Open</i>) and load it. Modify the parameters of the loaded device file as required and save it as an option file (*.prm) (<i>File> Save</i>) if no suitable option file exists and then load it into the program.
Program message
😣 No option-file!!
Cause
The option file (*.prm) recently created for the device file could not be found when loading a device file in offline mode or when establishing a connection in online mode. Provided "TRWinProg" was used as the working directory, the file location of the option file is the directory path " x:\TRWinProg\Data*.prm ", whereby x is replaced by an appropriate drive letter.
Remedy
• Verify that the folder or the option file was not removed, deleted or renamed from or on the file system.
 The option file must be re-created in the program if data were lost.
Program message
8 Wrong option-file!!
Cause
A modification of the option file was detected when it was opened in offline mode.
Remedy
• A new option file must be created with the desired settings if the modification cannot be undone by editing it in a text editor.

Program message
S Fail parameter-check!
Cause
A global parameter write error has occurred when sending parameters to the device.
Remedy
 Repeat the procedure if communication faults can be excluded. Please contact TR-Electronic if no parameters are transmitted to the device despite repeated attempts.
Program message
Opnamic Link Library TRWPDLL does not exist! Online functions are blocked!
Cause
The program library " TRWPDLL.dll " was not found when starting the program. Provided "TRWinProg" was used as the working directory, the file location of the program library is the directory path " x:\TRWinProg\DLLs\TRWPDLL.dll ", whereby x is replaced by an appropriate drive letter.
Remedy
 Verify that the folder or the program library was not removed, deleted or renamed from or on the file system.
 In case of data loss, restore the file using the TR Program CD or request it from TR-Electronic.
Program message
Device file does not exist! Please order the following file from TR-Electronic: *.tr
Cause
No device file was found for the connected device when attempting to change into the online mode. Provided "TRWinProg" was used as the working directory, the file location of the device file is the directory path " x:\TRWinProg\Devices*.tr ", whereby x is replaced by an appropriate drive letter.

Remedy

- Verify that the folder or the device file was not removed, deleted or renamed from or on the file system.
- In case of data loss, restore the file using the TR Program CD or request it from TR-Electronic.



Program message
😢 No device-type-files found!
Cause
Not a single device file was found in the directory for device files when starting the program. Provided "TRWinProg" was used as the working directory, the file location of the device file is the directory path "x:\TRWinProg\Devices*.tr", whereby x is replaced by an appropriate drive letter.
Remedy
• Verify that the folder or the files were not removed, deleted or renamed from or on the file system.
 In case of data loss, restore the files using the TR Program CD or request it from TR-Electronic.
Program message
😢 Directory with device-type-files doesn't exist!
Cause
The directory for device files was not found when starting the program. Provided "TRWinProg" was used as the working directory, the file location of the device file is the directory path " x:\TRWinProg\Devices ", whereby x is replaced by an appropriate drive letter.
 Verify that the folder was not removed, deleted or renamed from or on the file system.
 In case of data loss, restore the file using the TR Program CD or request it from TR-Electronic.
Program message
😢 Device-file not valid!
Cause
The device file was found to be outdated when loading a device file in offline mode or when establishing a connection in online mode.
Remedy

• Request a new device file from TR-Electronic.

Program message
Over the second
Cause
The connected device couldn't be identified based on the device ID / parameter list when attempting to switch to the online mode.
Remedy
• Repeat the procedure if communication faults can be excluded. Please contact TR-Electronic if the connected device cannot be identified despite repeated attempts.
Program message
Error-No: x Unknown !
Cause
An operation has caused an unknown error in the program.
Remedy
Repeat the procedure if communication faults can be excluded. Please contact TR-Electronic if the error occurs despite repeated attempts.

9.1.3 **Warning messages**

Program message
No HTML browser found! The help function is not enabled!
Cause
No installed web browser was found at program start or a version was detected that does not interact with the program. Therefore, the help files cannot be displayed.
Remedy
Install MS Internet Explorer Version 4 so you can use the Help function.

•••



Program message
ᡗ Language not available at present!
Cause
The language selected by the program <i>Tools</i> > <i>Global</i> > <i>Language</i> is currently not supported.
Remedy
 Select another language or ask TR-Electronic when the desired language will be available.
Program message
Device data changed! Restart communication !!
Cause
Cause During the attempt to switch to the online mode, a data difference was found when data were transfered from the device to the PC.
Cause During the attempt to switch to the online mode, a data difference was found when data were transfered from the device to the PC. Remedy