

# TopControl V4 Release Notes

Date	Purpose of Revision	Author
14.01.2013	Creation of document, up and to including V4.02.09	MBi
13.02.2013	div. corrections, write out abbreviations	MBi, MM
01.03.2012	Add V4.02.10	MBi
23.05.2013	Add V4.02.12	MBi
05.06.2013	Add V4.02.15	HR
25.06.2013	Add V4.02.16, adjust table width	MBi
10.09.2013	Add V4.02.17	HR
17.09.2013	Add V4.02.18	HR
15.10.2013	Add V4.02.19	HR
06.06.2014	Add V4.02.21	HR
26.06.2014	Add V4.02.22	HR
11.08.2014	Adjust document to standard template	MBi
14.10.2014	Add V4.02.23	MBi
07.01.2015	Add V4.02.24	MBi
04.08.2015	Add V4.02.25	MBi
25.11.2015	Add V4.03.00	MLu
30.11.2015	General Information changed (required Windows versions and interfaces deleted), added requirements for Windows versions to V4.03.00	MLu
30.06.2016	Add V4.04.00	MLu
20.04.2017	Add V4.05.00	MLu
01.03.2018	Add V4.06.00	MLu
02.07.2018	Add V4.07.00	MLu
24.06.2019	Add V4.08.00	MLu
28.04.2020	Add V4.09.00	TTr
04.09.2020	Add V4.10.00	TTr
20.08.2021	Add V4.11.00	TTr

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## General Information

This document lists TopControl release change information for customers.

Partly there are gaps between the version numbers because they are internal releases.

## Details of Fault Categories

The corrected faults are classified into the following categories:

Fault Category	Remark
minor	Faults within this category have <ul style="list-style-type: none"><li data-bbox="464 450 715 517">• negligible impact (e.g. typo)</li></ul>
moderate	Faults within this category can <ul style="list-style-type: none"><li data-bbox="464 607 839 640">• limit part of the functionality</li></ul>
Serious	Faults within this category can <ul style="list-style-type: none"><li data-bbox="464 730 802 763">• lead to inconsistent data</li><li data-bbox="464 763 1145 797">• affect operation heavily or make operation impossible</li></ul>

## V4.xx.xx

### V4.11.00

Release date: 20.08.2021

Reason for Change	Remark
Fault (minor)	Fixed some typos
Upgrade	More information are added in support file: <ul style="list-style-type: none"> <li>Extended memory</li> <li>Number of detected modules</li> <li>Number of detected modules in-line</li> <li>Number of detected parallel lines</li> <li>Number of detected subsystems</li> <li>Internal CAN baudrate</li> </ul>
Upgrade	New option "CAN baud rate" on system configuration dialog to set the internal CAN baud rate to either 1Mb/s or 500Kb/s.
Upgrade	"VLS Settings" Dialog: The "OK/Alarm relay" can be selected if "Standard OK" and "VoltageOn" are allowed in the VLS settings.
Upgrade	Tab CONFIG: Mode "High dynamics" is not available by: <ul style="list-style-type: none"> <li>wide range single device</li> <li>all devices in system are wide range devices</li> <li>look-up table is not compatible on all devices in system</li> </ul>
Upgrade	New standard scope signals for V4.22.60 and higher
Upgrade	Tab CANMP: new option "Edit message"
Upgrade	Tab CONFIG 2: new option "Mixed remote control input..." for selecting various remote inputs.

### V4.10.00

Release date: 08.09.2020

Reason for Change	Remark
Fault (serious)	FuncGen: Fix user defined curve
Fault (minor)	Fixed some typos
Upgrade	Advanced method of gain adjustment for module voltage, sense voltage, module current and output current Q4
Upgrade	Tab CONFIG 2: support for restoring default settings of device instead of restoring factory settings of device
Upgrade	External RPP can be activated.

### V4.09.00

Release date: 28.04.2020

Starting with this release the minimum requirement for Windows 10 is Windows 10 V1803.

Reason for Change	Remark
Fault (moderate)	FuncGen: Fix limitations of negative value.
Fault (moderate)	Remove USB devices only possible with "run as admin" on Windows 10
Upgrade	New tcio.dll V3.88.00, release date: 28.04.2020
Upgrade	Improved system configurations RPP and Output Capacitance

Upgrade	Tab CONFIG 2: new function for restoring the factory settings of device
Upgrade	Advanced FuncGen feature: new trigger modes
Upgrade	New signals for CANmp (CANmp interface version 4): <ul style="list-style-type: none"><li>• Set register's address for writing a new value into this address</li><li>• Set a new value for writing into predefined register's address</li><li>• Set register's address for reading value at this address</li><li>• Get value from predefined register's address</li><li>• Get the serial number of the connected device</li><li>• Set command to give up the system control</li></ul>
Upgrade	New method of gain adjustment for module voltage, sense voltage, module current and output current Q4

## V4.08.00

Release date: 24.06.2019

Starting with this release the minimum requirement for Windows 10 is Windows 10 V1703.

Reason for Change	Remark
Fault (minor)	Tab CONTROL: On a slave or subsystem master device the Q4 limits were displayed the system values instead the module or subsystem values. Corrected
Fault (minor)	Fixed some typos
Fault (moderate)	Tab CONFIG 2: If the option remote system configuration (RSC) was activated, some system configurations could not set (e.g. RPP, Output Capacitance, enable TC.LIN, ...). Corrected
Upgrade	The tab CONFIG has been split into the tabs CONFIG 1 and CONFIG 2.
Upgrade	Tab CONFIG 1: <ul style="list-style-type: none"> <li>• New function short circuit detection</li> <li>• The settings for the function load rejection will be deactivated if the function is deactivated on the device or system.</li> </ul>
Upgrade	Renew error and warn messages

## V4.07.00

Release date: 29.06.2018

Starting with this release Windows Vista and Windows 8 are not supported anymore. The minimum requirement for Windows 10 is Windows 10 V1607.

Reason for Change	Remark
Upgrade	New option "Slave only": Set and clear this option on a device.

## V4.06.00

Release date: 02.03.2018

Reason for Change	Remark
Fault (minor)	DBC file: Various minor bugfixes.
Fault (moderate)	DBC file: If a CANmp message is deleted with a signal that was also configured in another CANmp message, it might be that the comment for the signal in the other message has also been deleted. Corrected.
Upgrade	Renew error and warn messages.
Upgrade	New signals for CANmp (CANmp interface version 3): <ul style="list-style-type: none"> <li>• Get charged and discharged energy</li> <li>• Get charge and discharge counter</li> <li>• Get state of digital inputs and outputs</li> <li>• Get CANmp interface version</li> <li>• Set digital outputs</li> </ul>
Upgrade	Tab CANMP: CANmp interface version will be shown in information area.



## V4.05.00

Release date: 20.04.2017

Starting with this release Windows 10 is supported.

Reason for Change	Remark
Fault (minor)	Dialog TCEthernert / TCLXI discovery: <ul style="list-style-type: none"> <li>The search for devices was never ended. Corrected, now it is ending after 5s.</li> <li>Info message during searching and if no devices were found.</li> </ul>
Fault (moderate)	Tab CANMP (dialog add new message): <ul style="list-style-type: none"> <li>Instead of 50 CANmp messages, only 49 could be configured. Corrected</li> <li>The starbit for the 3rd and 4th signal in a CANmp message could be calculated incorrectly if the previous signal was also configured with Motorola byte order. Corrected</li> </ul>
Fault (moderate)	Factory Tools (USB Tool): <ul style="list-style-type: none"> <li>If several devices were connected to a PC via TC.USB, it was not ensured that the found TC.USB belongs to the device connected with TopControl. Corrected</li> </ul>
Upgrade	Renew error and warn messages.
Upgrade	Firmware update / downgrade: <ul style="list-style-type: none"> <li>Firmware update is possible without an update gridfile if the actual firmware version <math>\geq</math> V4.20.89 and the target firmware version <math>\geq</math> V4.21.70.</li> <li>Firmware downgrade is possible without a downgrade gridfile if the actual firmware version <math>\geq</math> V4.21.70 and the target firmware version <math>\geq</math> V4.20.89.</li> <li>To make the update / downgrade more secure the file name of the firmware file and the update gridfile will be checked.</li> </ul>
Upgrade	The error list is now a separate document. It can be opened via the menu "Help -> Error list EN / GE".
Upgrade	Tab CANMP: <ul style="list-style-type: none"> <li>Save a CANmp configuration to a DBC file.</li> <li>Load a CANmp configuration from a DBC file.</li> <li>Get a template for a CANmp configuration to create it in an external editor.</li> </ul>
Upgrade	Tab SCOPE: <ul style="list-style-type: none"> <li>Scope signals for ReGen systems are now available.</li> <li>New standard scope signals to record the PWM output, the state of module controller and the actual value of the primary current and the module inductor current.</li> </ul>
Upgrade	Text filter (dialogs insert var, select signal, error history, tab PARAMETERS): <ul style="list-style-type: none"> <li>If text parts are separated with a space, the result contains all text parts.</li> </ul>
Upgrade	The value of voltage limit Q4 cannot set greater than the value of voltage preset. The value of voltage preset cannot set less than the value of voltage limit Q4.

## V4.04.00

Release date: 30.06.2016

Reason for Change	Remark
Fault (minor)	The display of the state of the NT controller is different to the display of the other options. Corrected.
Fault (moderate)	The start of the VLS dialog ends in a communication error while connected to a CTR 4.0 device. Corrected.
Fault (serious)	A reset of the connected device is possible while it is in the Voltage-On state. Corrected.
Fault (serious)	Under certain conditions TopControl does not run anymore after connecting to TC.LIN. Corrected.
Fault (serious)	TopControl not successfully installed on Windows with other languages than german or english. Corrected.
Fault (serious)	TopControl not successfully installed on Windows Vista. Corrected.
Upgrade	New tab to configure the CANmp interface. It is available for the user level advanced or higher.
Upgrade	Renew error and warn messages
Upgrade	Change to unicode character set for the correct display of 16 bit character sets (e.g. Windows with chinese language)
Upgrade	VLS Dialog supports relative and absolute limits.
Upgrade	Display the sense values of the selected slave or subsystem on the STATUS tab.

## V4.03.00

Release date: 25.11.2015

Starting with this release Windows 2000 is not supported anymore and for Windows XP the minimum requirement is SP3.

Reason for Change	Remark
Fault (minor)	Multiple runs of the progress bar during a firmware update corrected
Fault (minor)	Not editable buttons and fields in a slave or a sub system deactivated
Fault (minor)	TC.P.LIN: Visibility of Bottom voltage reference value, controller parameters and S3R mode corrected
Fault (minor)	Visibility of Q1 and Q4 controller parameters when changing the quadrant mode corrected
Fault (minor)	TC.LIN: Physical references for standard scope signals corrected
Fault (moderate)	Incomplete reconnect after system configuration corrected
Fault (moderate)	On certain conditions the controller settings were visible for a TC.LIN or a virtual TC.LIN, but one of it was not enabled. Corrected.
Fault (moderate)	TC.LIN: Limiting of the scale factor when loading a scope configuration file corrected
Fault (moderate)	Changing of a unknown datatype when loading or saving a scope configuration file corrected
Upgrade	New tcio.dll V3.84.00, release date: 25.11.2015
Upgrade	Renew error and warn messages
Upgrade	New offline devices 65V and 130V
Upgrade	New TopControl icon
Upgrade	New splash screen
Upgrade	Renamed "High Capacity" in "Output Capacitance"
Upgrade	Possibility to delete a flash parameter set
Upgrade	Display the currently used flash parameter set
Upgrade	Info if voltage on not allowed when clicking on it
Upgrade	New input field for voltage limit Q4
Upgrade	Display the inductor current if it is supported
Upgrade	Display the DC discharge unit and transformer temperature if the corresponding option is enabled
Upgrade	Support for setting and displaying the AC grid
Upgrade	Adaptive controller parameters are not available for devices with active rectifier
Upgrade	Display the version of the TC.LXI interface

## V4.02.xx

### V4.02.25

Release date: 04.08.2015

Reason for Change	Remark
Upgrade	New tcio.dll V3.83.00
Upgrade	Support options CapSim and CANmp
Fault (minor)	Fix Gridfile verify with float values
Fault (minor)	Fix scope trigger type BIN
Upgrade	Renew error warn messages

### V4.02.24

Release date: 07.01.2015

Reason for Change	Remark
Upgrade	New tcio.dll V3.82.00
Upgrade	The TC.LIN module controller settings are replaced with the system controller settings. Now it is easier for an equal configuration setting.
Upgrade	The TC.LIN system controller settings add to sub menu parameter store/restore to/from file
Fault (minor)	In case of more channels, the delay time in scope changes accordingly
Upgrade	Protection values under voltage and max power Q1, Q4 add to sub menu parameter store/restore to/from file
Upgrade	The scope channel version is check only onetime and no more in loop mode
Upgrade	The firmware update file checks the file conformity to avoid mix up the files

## V4.02.23

Release date: 14.10.2014

Reason for Change	Remark
Upgrade	System configuration "Matrix connection type" explained with pictures and displayed on DeviceInfo tab
Upgrade	Various parameters added in scope parameter info and support info file
Upgrade	Option RPP dis/enable on system configuration dialog and display state on tab Status
Upgrade	Enhanced relay state display on Status tab
Upgrade	Various parameters added in parameters store to file / restore from file
Upgrade	New scope signals file for TC.LIN C V0.39.00 (special scope version)
Fault (minor)	Rename in update dialog "Select remote ID" to HMI ident number
Fault (minor)	Load load scope file with configuration PerDivScale > 50000 fixed
Upgrade	Scope combo box perDivScale all values visible without scrolling
Upgrade	Warn message when an extended FuncGen is loaded (e.g. with SASControl) and user connects with TopControl
Upgrade	New sections on Protect tab: Under voltage, Max power Q1, Max power Q4
Upgrade	New standard scope signals for V4.20.75 and higher
Fault (minor)	Scope allow early trigger behaviour fixed
Upgrade	Insert variable dialog new layout
Upgrade	Parameter/Gridfile with greater note space
Fault (minor)	Parameter doublets search fixed
Upgrade	Changed to multibyte character set for proper display physical units
Upgrade	IBC I/O visible for Advanced users
Upgrade	Config tab: Carrier frequency adjustable in 1kHz steps, and synchronous mode
Upgrade	ErrorHistory dialog: new layout and name filter
Upgrade	Option HighCAP dis/enable on system configuration dialog and display state on tab Status

## V4.02.22

Release date: 26.06.2014

Reason for Change	Remark
Fault (moderate)	Scope: Fix offline use.
Fault (minor)	Tab Device Info: Fix TC.LIN power information.

## V4.02.21

Release date: 06.06.2014

Reason for Change	Remark
Upgrade	New tcio.dll V3.79.00
Fault (minor)	FuncGen: Fix limitations of negative currents at GSS devices.
Fault (moderate)	System Configuration: Fix occasional faults during automatic reconnect.
Upgrade	Advanced Scope features: early trigger flag and trigger on both edges.
Upgrade	Expanded default search range: COM port 1 to COM port 255.
Upgrade	New menu item "Reconnect" tries to re-establish a connection on the same COM port.
Upgrade	Improved resolution for Scope data export.
Upgrade	Improved resolution for resistor values on "Control" page.
Upgrade	New menu item to show the manual as PDF.

## V4.02.19

Release date: 15.10.2013

Reason for Change	Remark
Upgrade	New tcio.dll V3.77.00, release date: 15.10.2013
Fault (minor)	Fix i^2t observation for devices with asymmetric limits.
Upgrade	Add ReGen subtype.
Upgrade	User level for Flash Parameter Set access changed from Power User to Advanced User.
Upgrade	Add enable button for CTR4x - Lookup Table (Firmware V4.99.27)
Upgrade	Extended error list.

## V4.02.18

Release date: 17.09.2013

Reason for Change	Remark
Fault (minor)	Fix manual scaling for time based functions.
Upgrade	Set default time base for scope files for CTR420 without time base from TopControl V4.01.66.
Fault (serious)	Fix Load Standard Init.
Fault (minor)	Rename support file.

## V4.02.17

Release date: 10.09.2013

Reason for Change	Remark
Upgrade	New tcio.dll V3.76.00, release date: 10.09.2013
Upgrade	Add Support Button.
Upgrade	Extend Scope Parameter Info.
Upgrade	Add DSS and DXX Subtypes.
Upgrade	Flash Parameter Sets: Load/Store.
Upgrade	I/O Page: Extension DC Link Thyristor / Contactor on / off.
Upgrade	Add Error Flags / CAN Error Flags.
Upgrade	Changed checkbox "Highdynamics" into a combobox "Controller Mode": "Standard" or "High Dynamics".
Fault (minor)	Renamed "U bottom" into "Voltage bottom".
Fault (moderate)	Device Info Page: Replaced system values by module values when Multiload.
Upgrade	Extend snapshot values with matrix connection type.
Fault (minor)	Tab Control: Fix refresh for Q4 current and Q4 power limits.
Upgrade	New Feature: Varfile reload.
Upgrade	New Feature: Scopefile reload.
Upgrade	Page Status: Show relay modes.
Fault (moderate)	Scope: Fix load of Standard Scope Signals; fix zoom; fix CTR4x with ReGen.
Fault (moderate)	Fix TC.P.LIN FuncGen limits.
Upgrade	Page IBC Status: Show filtered values.
Fault (moderate)	FuncGen: fix manual scaling.
Upgrade	Firmware Update: file size limit increased.

## V4.02.16

Release date: 26.06.2013

Reason for Change	Remark
Upgrade	New tcio.dll V3.75.00, release date: 25.06.2013
Upgrade	Scope files are listed separately per device type
Fault (moderate)	Fixed NT-Controller status label behaviour, while voltage on state is changed
Upgrade	Extend snapshot values for TC.MAC with Q4 controller
Upgrade	Extend snapshot values for NT-Controller
Fault (moderate)	Set Q4 limit visible for ReGen Firmware
Fault (moderate)	Fix values refresh in combo box Target on configuration- dialog
Upgrade	Adjustable manual read/write communication timeouts on preference dialog
Upgrade	New message box to ask for change remote control form HMI to RS232 before change Quadrant mode limit
Upgrade	New message box to ask for change remote control form HMI to RS232 before restore snapshot

## V4.02.15

Release date: 07.06.2013

Reason for Change	Remark
Upgrade	New tcio.dll V3.73.0.2, release date: 04.06.2013
Upgrade	Improve auto refresh.
Upgrade	Add status and enable checkbox for NT controller "High dynamic".
Upgrade	Set offline device standard to CTR4.20.
Upgrade	Add checkbox "Sink mode available" to the offline device selection dialog for CTR4.20.
Fault (minor)	Fix offline mode (show/hide buttons, etc.).
Upgrade	Improve offline scope.
Upgrade	Load standard scope Gridfile independent from last connected device, when device type has changed.
Fault (moderate)	Fix remote IBC update
Upgrade	Dynamic load of IXXAT VCI DLLs (therefore independent of the installed VCI driver version).
Fault (moderate)	Fix for ctr3.x compatibility.
Fault (minor)	Fix configuration Q4 values refresh with TC.MAC.
Fault (moderate)	Fix Q4 TC.MAC control enable.
Upgrade	Add multi module symmetry parameter to scope parameter info.
Upgrade	New Gridfile feature: Gridfile reload
Fault (minor)	Show Q4 values only for GSS on page status.
Upgrade	Change float notation in Gridfiles from scientific to engineering notation.
Fault (moderate)	Fix CTR4 query of the number of parallel devices.
Fault (moderate)	Fix enabling of IBC and WR on test dialog.
Fault (minor)	Remove faulty FuncGen zoom function.
Upgrade	Change color of Scope Channel 6 to improve visibility.
Upgrade	Inhibit connections to unknown devices (e.g. PPS or ACSO).
Upgrade	Dynamic observation of the number of multi module matrix configuration.
Upgrade	Show nominal instead of max values in ScopeParameterInfoDlg, because of GXX devices.
Fault (minor)	Remove unused ScopeSignals files.
Fault (minor)	Fix titles and other texts.
Fault (minor)	Show WR Current as not available.
Fault (minor)	Refine error message at scope channel address update failed.

## V4.02.12

Release date: 21.05.2013

Reason for Change	Remark
Upgrade	New tcio.dll V3.72.00, release date: 21.05.2013
Upgrade	Add support for GSX or GXS devices, adjust device string
Fault (minor)	Round float values on Q4 reference limits
Upgrade	Add system info
Upgrade	Enable remote HMI update via master and via TC.MAC to subsystem
Upgrade	Enable FuelCellSim option
Upgrade	New error and warning resources
Fault (minor)	Refine tab pages "Adjust Q4" enabling
Upgrade	Add TC.P.LIN functionality (TC230VAC, S3R, HiCap)
Fault (moderate)	Scaling factors of sense actual voltage fixed
Upgrade	Add TC.LXI device discovery function
Upgrade	Add support for TCLXI
Fault (minor)	Control page: avoid automatically switching on auto refresh after "Show Error Detail"
Upgrade	IO page: Inputs are visible from advanced-user upwards, but the advance user has just read-only access
Upgrade	Control page: Remote Control Input "RS-232/422" renamed
Upgrade	Insert firmware update for TC.OptoLink and TCLXI
Upgrade	Page DeviceInfo: Show Hardware ID
Upgrade	enable upload FuncGen base type functions 5 = ESA_AAP and 6 = RAM_AAP for TCLXI
Fault (minor)	Show/hide of button "System Configuration" corrected
Fault (minor)	Correct spelling errors
Fault (minor)	Menu "TC.Ethernet/TC.LXI..." visible, connected with all devices

## V4.02.10

Release date: 26.02.2013

Reason for Change	Remark
Upgrade	New tcio.dll V3.70.00, release date: 26.10.2012
Upgrade	New tab for TC.LIN devices: "CONFIG/DEVICE INFO"
Upgrade	Dialog „Subsystem Configuration“: virtual TC.LIN ID check box
Upgrade	New dialog for Device Info von TC.LIN und virtual TC.LIN via CTR auf Reiter „DEVICE INFO“ an CTR V4.0 und CTR V4.2
Upgrade	Parameter Snapshot for virtual TC.LIN
Upgrade	New error and warning strings
Upgrade	TC.RSC V2.0 ini file: new configuration bits
Upgrade	TC.MAC: Sense support on Subsystem
Upgrade	Multiple using of firmware file for multiple update.
Upgrade	Improved soft start on configuration changes
Fault (minor)	Various text changes
Fault (minor)	Fix Spin Control for „ADJUST Q4“



## V4.02.09

Release date: 26.10.2012

Reason for Change	Remark
Upgrade	New tcio.dll V3.67.00, release date: 26.10.2012
Upgrade	New functionality BATSim Option enabling
Upgrade	Support for TC.LIN CTR V2.x

## V4.02.08

Release date: 31.05.2012

Reason for Change	Remark
Upgrade	New tcio.dll V3.62.00, release date: 30.05.2012
Upgrade	New functions for TC.RSC and TC.MAC
Fault (minor)	Various text changes

## V4.02.05

Release date: 30.04.2012

Reason for Change	Remark
Upgrade	New tcio.dll V3.57.00, release date: 25.04.2012
Upgrade	Update TC.IBC Firmware thru Option boards (TC.CANopen, TC.GPIB, TC.Ethernet) possible, if in minimum the following firmware version are installed: TC.GPIB: V0.09 TC.CANopen/USB: V0.09 TC.Ethernet: V0.02
Fault (moderate)	TC.LIN Connect as "Standard user" bug fix
Fault (minor)	Installer Errors in Windows event view fixed

## V4.01.xx

### V4.01.94

Release date: 19.01.2012

Reason for Change	Remark
Upgrade	Firmware update baud rate on TC.IBC, TC.LIN, TC.HMI from 38400 to 19200 lowered

### V4.01.93

Release date: 19.01.2012

Reason for Change	Remark
Upgrade	New tcio.dll V3.42.00, release date: 19.01.2012
Upgrade	Update possibility for TC.IBC via TC.CTR4.20 interface added, in minimum the following firmware version are required: CTR4.20: V4.20.47 TC.IBC: V0.30

### V4.01.91

Release date: 22.12.2011

Reason for Change	Remark
Upgrade	New tcio.dll V3.40.00, release date: 22.12.2011
Upgrade	CTR4.20 Controller and Protect parameter snapshot added
Fault (moderate)	Windows 7 Error History: Save as '*.csv' file

### V4.01.90

Release date: 22.12.2011

Reason for Change	Remark
Fault (moderate)	Scope bit mask: rounding error
Fault (minor)	Adaptations text resources
Upgrade	„Remove USB Devices“ implemented
Upgrade	USB Connection: „Remove non present devices“ for windows 64 bit

### V4.01.81

Release date: 07.11.2011

Reason for Change	Remark
Upgrade	New tcio.dll V3.38.00, release date: 31.10.2011
Fault (minor)	Adaptations text resources
Fault (moderate)	Question for Save files on program exit fixed

## V4.01.80

Release date: 31.10.2011

Reason for Change	Remark
Upgrade	New tcio.dll V3.38.00, release date: 31.10.2011
Fault (minor)	Layout adaptations for Asian Windows-XP versions
Upgrade	CONFIG tab: „Quadrant Mode Limit“, dropdown list box also for ReGen Firmware.
Fault (moderate)	Refresh mode optimized (defused)

## V4.01.75

Release date: 28.09.2011

Reason for Change	Remark
Upgrade	New tcio.dll V3.33.00, release date: 18.07.2011
Upgrade	CTR4/4.20 Control tab: Q4 current and power limit adjustment possible for ReGen firmware version from V12.10.68
Upgrade	CTR4/4.20 Control tab: Q4 current and power limit adjustable also if FuncGen is running on current or power
Upgrade	CTR4.20 I/O tab: Flag for GSS to turn device off for test mode
Upgrade	Option-Enabling-Dialog shows now on CTR4.20 devices 16 digits instead of 8 digits hash value (for time limited evaluation options)
Upgrade	Scope parameter info on CTR4.20/GSS devices extended for Q4 controller parameter and displays IBC & PLD version instead of modulator and PDSP version
Fault (moderate)	“Insert Var...” dialog: wrong data type adoption if device is not a CTR4.20 or TC.IBC and data type is not Uint16/Sint16 fixed
Fault (moderate)	CTR4.20 Scope tab: Number of samples after disconnect and changing values on channels no longer set to 1. This causes problems after saving and reload
Fault (moderate)	CTR4.20 Scope tab: no more communication abortion if count of samples, auto correction to 1
Fault (moderate)	TC.IBC Scope tab: no more communication error after upload completed
Upgrade	Maximal possible size of Varfile increased from 512kB to 4096kB
Upgrade	On Varfile load: auto detection of data type extended: UCHAR16, SCHAR16, UINT16, SINT16, UINT32, SINT32, FLOAT32
Fault (minor)	CTR4.0 Status tab: error group named "Configuration 2" instead "Reserved"
Fault (minor)	Tab index order changed on tab: Control_CTR4/420, Config_CTR4/420, Protect_CTR4/420
Fault (minor)	CTR4.20 Status tab: notation standardization fixed

## V4.01.72

Release date: 23.08.2011

Reason for Change	Remark
Upgrade	New tcio.dll V3.33.00, release date: 18.07.2011
Fault (minor)	Renew support e-mail address correctly
Upgrade	Update path “C:\” valid for C28x
Fault (minor)	Scope CTR4.20 on reconnect show correct number of samples

## V4.01.71

Release date: 22.07.2011

Reason for Change	Remark
Upgrade	New tcio.dll V3.33.00, release date: 18.07.2011
Fault (minor)	Resources clean up
Upgrade	TC.Ethernet dialog from user level ‚Advanced User‘ accessible, no longer password enter on dialog show
Fault (minor)	Prevention of on multiple search entry in device discovery dialog
Upgrade	New path to CTR4.20 firmware
Upgrade	CTR4.20, TC.IBC: define Section clean up
Upgrade	Scope : Hex variable from Gridfile possible, Trigger address new
Upgrade	Config tab: DC-Link value transmission via CTR4.20 to TC.IBC
Upgrade	Error Group 24-32 prepared on GUI, still disabled
Upgrade	Error strings extended

## V4.01.70

Release date: 20.07.2011

Reason for Change	Remark
Upgrade	New tcio.dll V3.33.00,release date: 18.07.2011
Upgrade	From TC.IBC V0.22: adjustment of inverter sinus value measured by DC measurements, no longer RMS values
Fault (moderate)	Error history query
Fault (moderate)	IO-Page Manual PWM
Fault (moderate)	Parameter Gridfile change
Fault (minor)	Clean up Status tab Offline
Fault (minor)	Preferences tab
Fault (moderate)	Scope reference signal CTR4.x
Fault (moderate)	Load default on corrupted configuration file
Upgrade	Error strings extended
Upgrade	New menu entry: TC.Ethernet discovery ...

## V4.01.69

Release date: 01.07.2011

Reason for Change	Remark
Upgrade	new tcio.dll V3.32.00, release date: 23.06.2011
Upgrade	various new tabs for devices: CTR4.20, TC.IBC
Upgrade	Firmware update TC.IBC over internal RS232 possible
Upgrade	new 32Bit communication functionality
Upgrade	Scope for new devices

## V4.01.66

Release date: 23.08.2010

Reason for Change	Remark
Upgrade	new tcio.dll V3.26.00, release date: 05.08.2010
Fault (moderate)	TC.LIN-C system configuration possible on CTR4.x FW greater than V4.12.01

## V4.01.65

Release date: 11.08.2010

Reason for Change	Remark
Upgrade	new tcio.dll V3.26.00, release date: 05.08.2010
Fault (moderate)	Tab Status: show „Case Inside Temperature“ if supported

## V4.01.61

Release date: 16.06.2010

Reason for Change	Remark
Upgrade	new tcio.dll V3.24.00, release date: 23.06.2010
Upgrade	new function:” Multi Rack System Config” TC.MRC
Upgrade	new adjustments for TC.LIN-C
Upgrade	Snapshot Store/Restore function