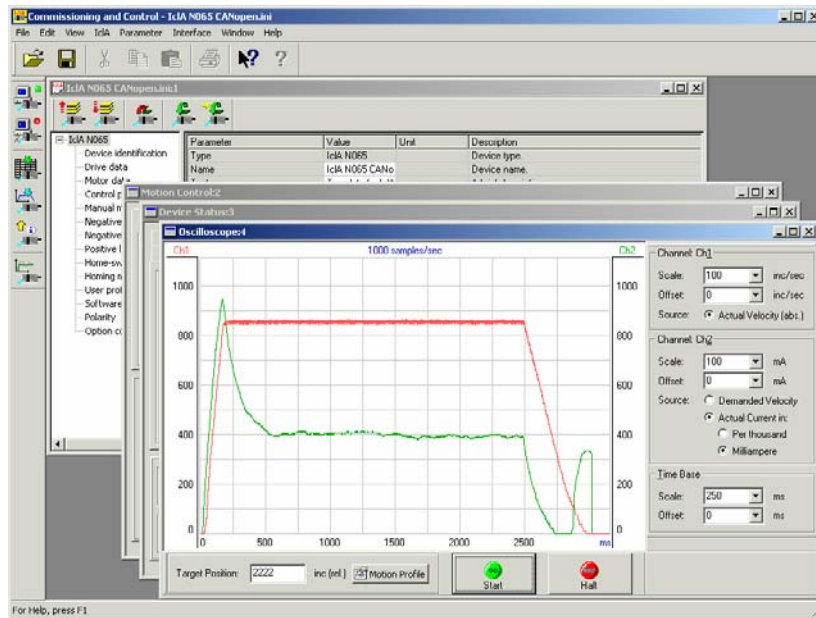


Getting started



Commissioning and Control Tool

IclA CCT

Program version: 1.002

Order no.: 0xxxxx xxxx xxx

Edition uvs120, 07.06

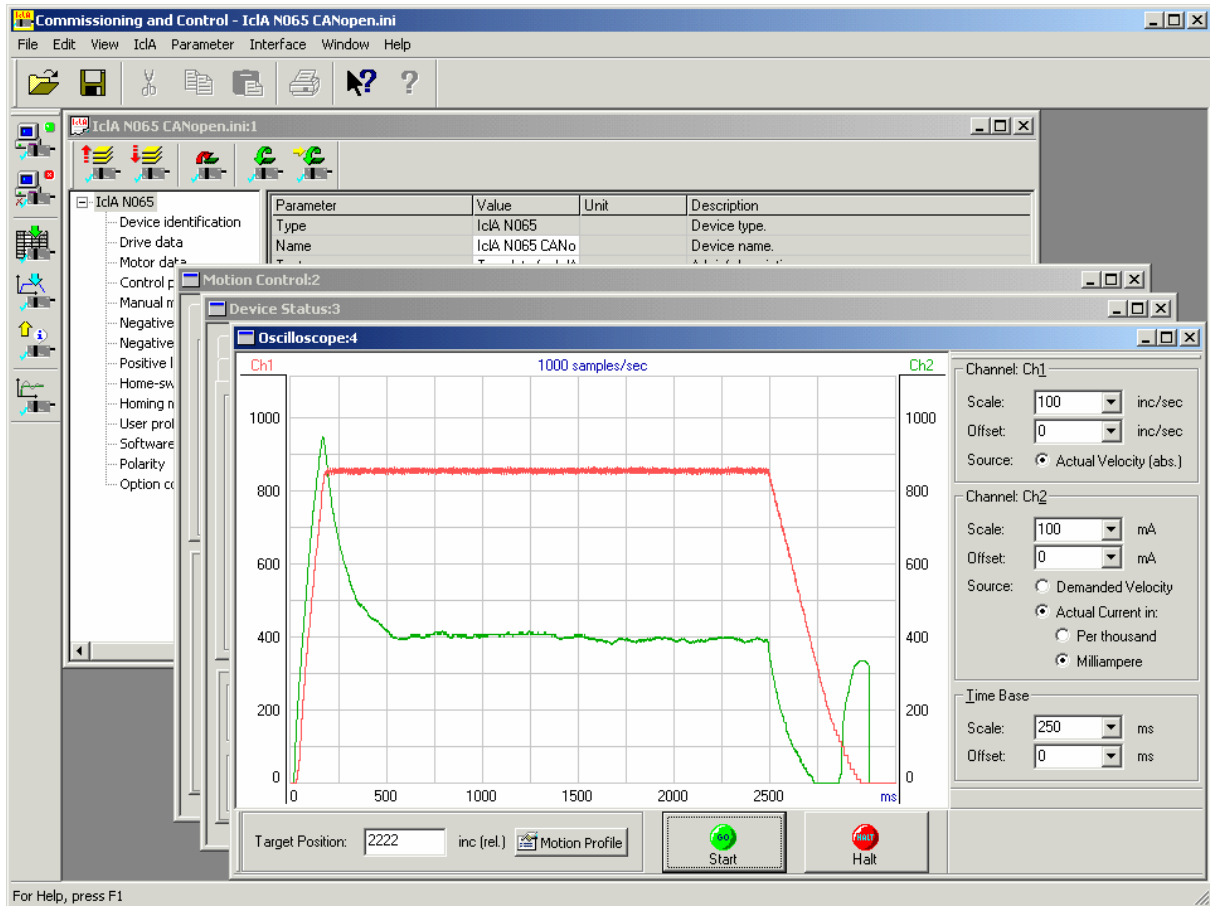
IclA®

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Commissioning and Control Tool

The *Commissioning and Control Tool* is designed to support the users of the IcIA[®] compact drive from Berger Lahr with the application set-up of a single drive.



The Commissioning and Control Tool supports the new *IcIA N065* compact drive as well as the older product version *IcIA D065*.



Do not connect the program to a real application with a running CANopen Master (e.g. on a PLC). This can damage your application.

1 Installation

1.1 Program installation

Insert the Installation CD into your CD-ROM drive. The installation program will start automatically, otherwise browse to the main directory of the CD and start the program Setup.exe.

Make sure that you have administrator rights and follow the instructions of the installation program.

1.2 System requirements

The Commissioning and Control Tool runs with a Personal Computer or a Notebook using the Microsoft Windows® 2000 or Windows® XP operating systems.

To communicate with the compact drive you need a CAN-interface board and a CANopen Master library.

1.3 CANopen Master interface

To run the program you need a CAN-interface board from either IXXAT Automation or PEAK-System Technik, a hardware driver for Windows® and also a licence for the CANopen Master API.

The CANopen Master API is included in this package; the hardware is not, of course.

1.3.1 Hardware installation

For installation of the CAN-interface board used, please refer to the manuals included with the hardware.

1.3.2 Software installation

The required DLL for the CANopen Master API will be installed during program installation.

1.3.3 Supported CAN-interface boards

The following CAN-interface boards are supported:

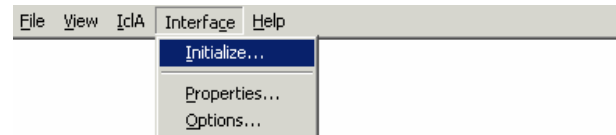
CAN Interface	Slot	Vendor	Website
iPC-I 320 / PCI	PCI	IXXAT Automation	http://www.ixxat.com/
USB-to-CAN Compact	USB	IXXAT Automation	http://www.ixxat.com/
PCAN-USB	USB	PEAK-System Technik	http://www.peak-system.com/

For the PEAK interface boards the appropriated PCAN-Light library (PCAN_USB.dll) must reside in the system directory or in the program search path.

2 Getting started

2.1 Initialize the CAN-interface

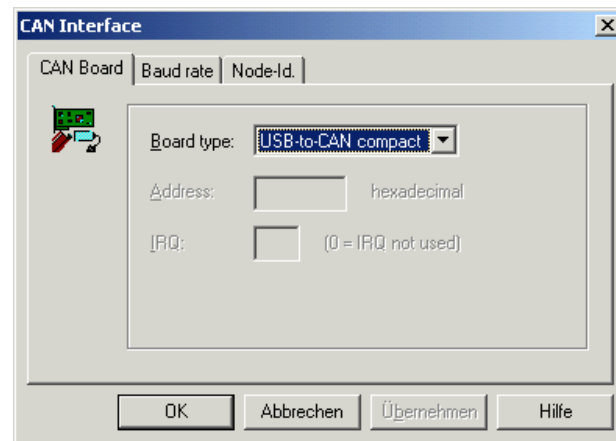
First of all you have to initialise your CAN-interface hardware.



Choose command *Initialize* from menu *Interface*. A dialog box will be displayed to enter general CAN-interface settings.

2.1.1 Select your CAN-board

Select your CAN-interface board from the *Board type* list. The greyed input fields will not be used by the current version of the CANopen Master API.



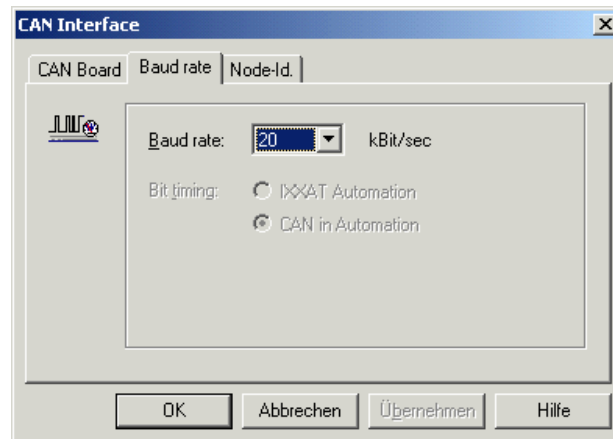
You only have to select the CAN-board the first time you run the program. Afterwards the CAN-interface will be initialised automatically when you start the program.

If you have more than one IXXAT hardware installed on your system you can select the entry *IXXAT Applet* in the Board type list. When you start the program a *Hardware-selection* dialog will be displayed to select one of the installed CAN-boards.

Now select the register tab *Baud rate*.

2.1.2 Set the initial baud rate

Here you have to select the initial baud rate of the CAN-interface board from the *Baud rate* list. This is only a default value which will be displayed in the Connect-device dialog. Usually the IcIA compact drive will be delivered with a baud rate of 20 kBit/sec.

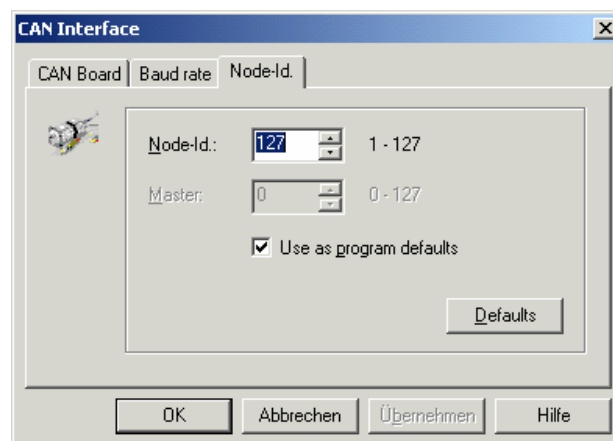


The Bit timing parameter will not be used by the current version of the CANopen Master API.

Now select the register tab *Node-Id.*

2.1.3 Set the default node-id.

In this register tab you can define a default *Node-Id.* which will be displayed in the *Connect-device* dialog. Usually the IcIA compact drive will be delivered with node-id. 127.



The master node-id. will not be supported by the current program version.

Set the check-mark beside the option *Use as program defaults* if you want to use your settings as program defaults every time you start the program. The settings are stored in the Windows registry.

Now press *OK* to initialise the CAN-interface hardware.

2.2 Connect the IcIA compact drive

To communicate with the IcIA compact drive you have to connect the drive.

Please note There can only be one device connected to the program at a time.

2.2.1 Connect your IcIA compact drive

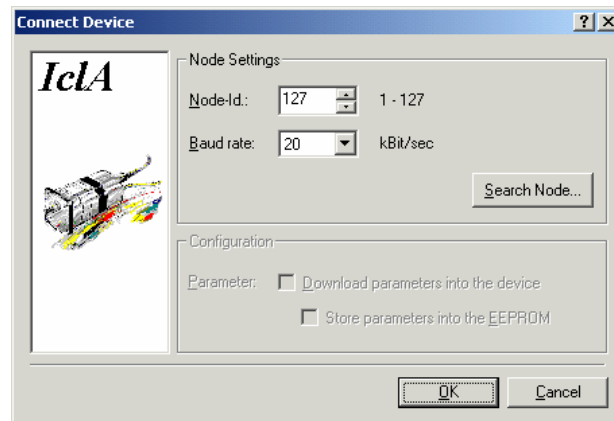
Make sure that the CAN-cable is connected to your CAN-board and power is supplied to the IcIA. See the IcIA device manual for details.



Choose command *Connect* from menu *IcIA*. A dialog box will be displayed to enter the node settings of the device.

2.2.2 Set the node-id. and the baud rate

In the Connect-device dialog enter the *Node-Id.* and the *Baud rate* of the compact drive IcIA N065 or IcIA D065 to be connected.



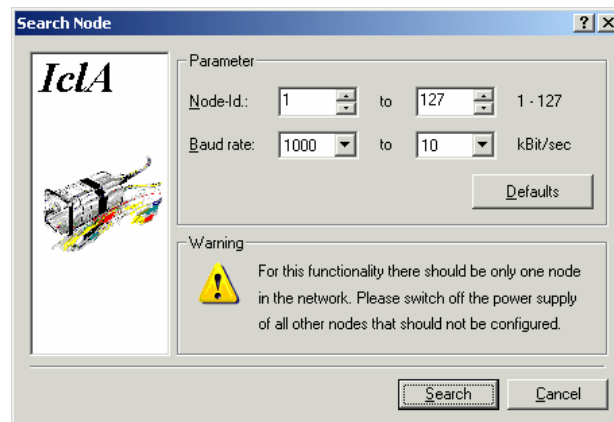
The Configuration-options are greyed when the dialog was called by the command *IcIA.Connect*. See topic *Using a configuration file* for an other method to connect a device.

If you do not know either the node-id. or the baud rate of your drive then you can use the button *Search Node* to let the program search the node for you.

Press *OK* to connect your IcIA.

2.2.3 Using the Search Node-dialog

If you do not know either the node-id. or the baud rate of your drive then you can let the program search the node for you.



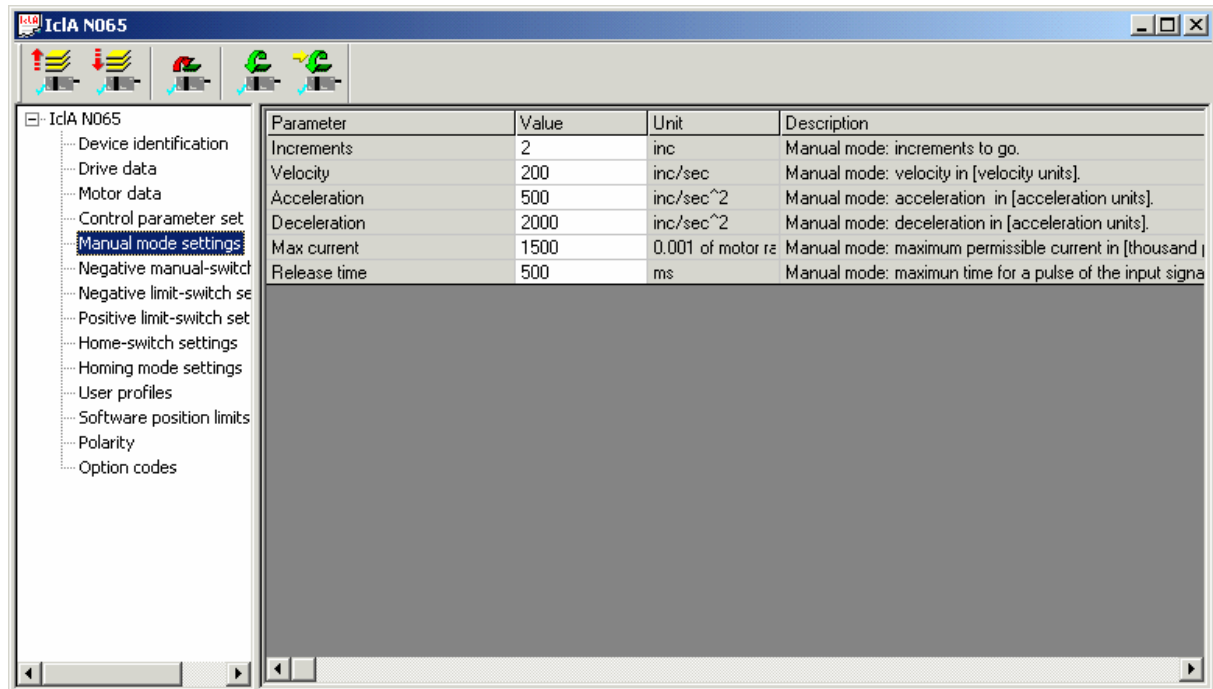
Enter the range of *Node-Id.s* and *Baud rates* to try in the dialog box.

It is also possible to perform a reverse search, e.g. enter 127 to 1 in the Node-Id. fields. Or to use only one baud rate, e.g. enter 20 to 20 kBit/sec in the Baud rate fields.

Press button *Search* to search your IcIA.

2.3 Configure the IcIA compact drive

After the connection to a compact drive is established the Parameter-window will be displayed. The program automatically identifies the type of the device - IcIA N065 or IcIA D065 - and uploads all parameters from the device.



On the left side of the Parameter-window the parameter sections are listed in a *Section-tree*. You can navigate through the *Section-tree* either with the cursor-up/-down keys or with the mouse.

On the right side all parameters of the high-lighted section are listed in a *Parameter-table*. In the *Value-column* of the *Parameter-table* the actual parameter values of the device are shown. If a value field has a white background the parameter value can be changed. If the background is grey the parameter is read-only and can not be changed.

All parameters of the parameter sections correspond to device parameters in the CANopen object-dictionary of the device; see IcIA CANopen manual for details. Except for the parameters listed in the root section; they have a special meaning (see below).

2.3.1 Change parameters

There are two kinds of parameter types which are handled by the program:

- Numerical types
- Enumeration types

Changing a numerical value

Double-click the value field of the parameter you want to change and enter a new value.

Parameter	Value	Unit	Description
Speed during search for switch	200	inc/sec	Homing mode: velocity during search for switch in [velocity units].
Speed during search for zero	200	inc/sec	Homing mode: velocity during search for zero in [velocity units].
Homing acceleration	2500	inc/sec ²	Homing mode: acceleration in [acceleration units].

To confirm the new value press the *Enter*-key. The input focus disappears and the changed value will be shown on a pale yellow background. To leave the parameter value unchanged press the *Esc*-key.

Changing an enumeration parameter

Double-click the value field of the parameter you want to change and select a new value from the drop-down list.

Parameter	Value	Unit	Description
Polarity	0 - Default shaft direction		Direction of the output shaft.

0 - Default shaft direction
192 - Inverted shaft direction

Changing the node-id. and/or the baud rate

The node-id. and/or the baud rate of the connected device can be changed in the root section of the Section-tree. The *Node-Id.* parameter is a numerical value in the range of 1 to 127 and the *Baud rate* value can be chosen from a drop-down list.

Parameter	Value	Unit	Description
Type	IcIA N065		Device type.
Name	IcIA N065 CANopen		Device name.
Text	Template for IcIA N065 CANo		A brief description.
Date	31.01.2005, vogtu, Berger La		Last update of the file.
Node-Id.	1		Node-Id. of the device.
Baudrate	20	kBit/sec	Baudrate of the device.

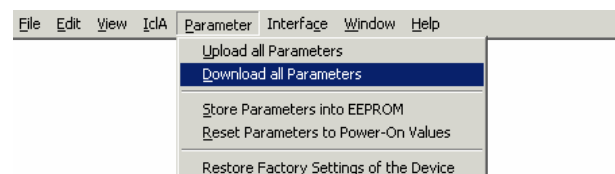
1000
800
500
250
125

All baud rates from 10 kBit/sec to 1 MBit/sec according to the CiA bit-timing specification are supported by the program.

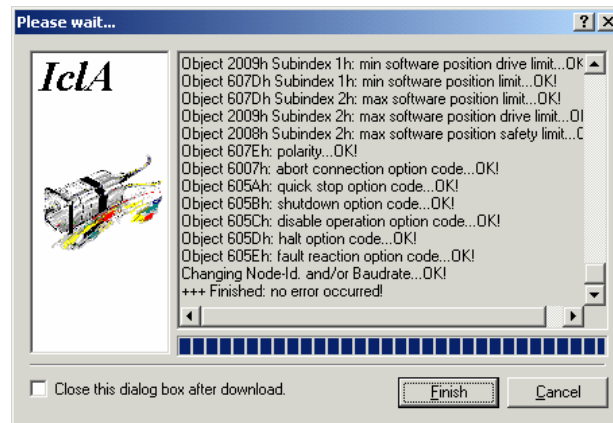
The parameters *Name*, *Text* and *Date* are only of interest if you are dealing with configuration files; see topic *Save parameters into a file*.

2.3.2 Download parameters

After setting parameters to your application requirements download the changed parameters into the connected compact drive.



Choose command *Download all Parameters* from menu *Parameter*. A dialog box will be displayed to show the download progress.

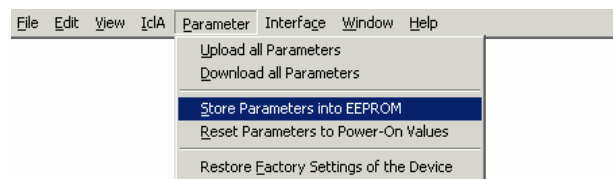


It takes approximately 5 seconds to download all parameters at a baud rate of 20 kBis/sec. If a parameter value in the Parameter-table is unchanged the value is compared with the actual value of the device.

Press button *Finish* to close the dialog box.

2.3.3 Store parameters into the EEPROM

After downloading changed parameters into the connected compact drive you may store your work in the non-volatile memory of the device.



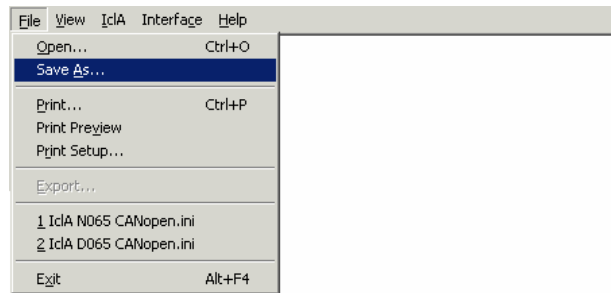
With the command *Store Parameters into EEPROM* from menu *Parameter* the actual parameters of the device are made persistent and will be loaded to the object-dictionary of the device each time the power will be switched on. After the device has stored the parameters into the EEPROM the program uploads all parameters again.

If the actual values of the device do not fit to your requirements you can use the command *Reset Parameters to Power-On Values* to load the last stored values from the EEPROM. After the device has executed the NMT-command *Reset_node* the program uploads all parameters again.

If also the values from the EEPROM do not fit to your requirements you can use the command *Restore Factory Settings of the Device* to load the original manufacturer values of the parameters. After the device has executed the command sequence of restoring factory settings the program uploads all parameters again.

2.3.4 Save parameters into a file

After configuring the connected compact drive you can write all parameters from the program memory to a file. This configuration file can be used for documentation or for configuring other devices that should use the same parameter values.



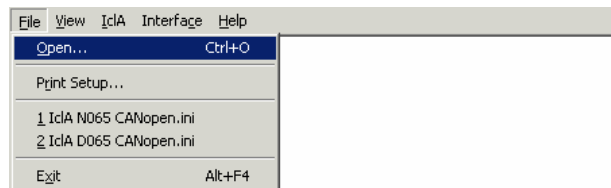
Choose command *Save As* from menu *File* to save all parameters in a configuration file.

See the appendix for...

2.3.5 Using a configuration file

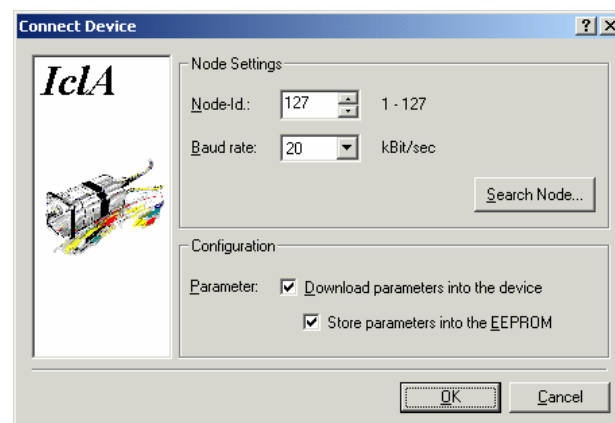
A configuration file is a text file which is organised like a Windows INI-file and can be changed with any text editor. In the configuration file all parameter sections with their parameter entries and values are stored.

You can change the parameter values in the configuration file; delete parameter entries or even whole parameter sections. Only the section [Commissioning] and the keyword `Type=<device type>` are necessary; see topic Sample of a configuration file.



Choose command *Open* from menu *File* to read all parameters from a configuration file to the program memory. The file name will be displayed in the title bar of the Parameter-window if the file was read successfully.

You can open a configuration file if a device is already connected to the program; the Parameter-window is displayed. Or as an alternative way to connect and configure an IcIA compact drive at once. In this case first select an INI-file from the File-open dialog or from the most recent file-list and then connect the device:



Set the check-mark beside the option *Download parameters into the device* if you want the program to download the parameters of the configuration file into the device. And set the check-mark beside the option *Store parameters into EEPROM* if the device should store the parameters in the non-volatile memory after the parameters are downloaded.














































All you have to do afterwards is to disconnect the connected IcIA and to repeat the procedure with another IcIA compact drive you want to configure.




































3 Getting help

3.1 Online help

For a detailed description of using the *Commissioning and Control Tool* see the Online-help delivered with the program.

Commissioning and Control –Application Help

-  General information
 -  Summary
 -  Warning
 -  Installation
 -  System requirements
 -  CANopen Master Interface
 -  Hardware installation
 -  Software installation
 -  Supported CAN-boards
-  Getting started
 -  Initialise the CAN-interface
 -  Initialise interface
 -  Select a CAN-board
 -  Set the baud rate
 -  Set the default node-id.
 -  Using the Hardware-selection dialog
 -  Dialog: CAN-Hardware
 -  Connect the IcIA compact drive
 -  Connect IcIA
 -  Set the node-id. and the baud rate
 -  Using the Search-node dialog
 -  Dialog: Search Node
 -  Configure the IcIA compact drive
 -  Change parameters
 -  Download all parameters
 -  Store parameters into EEPROM
 -  Save parameters into a file
 -  Using a configuration file
 -  Open a configuration file
-  Advanced topics
 -  GUI
 -  Menus
 -  File menu
 -  Edit menu
 -  View menu
 -  IcIA menu
 -  Parameter menu
 -  Interface menu
 -  Window menu
 -  Help menu
 -  Toolbars
 -  File toolbar
 -  Device toolbar
 -  Parameter toolbar
 -  Windows

-  Parameter window
 -  Motion Control window
 -  Device Status window
 -  Oscilloscope window
-  Device configuration
 -  Parameter window
 -  Configuration files
 -  INI-file
-  Motion control
 -  Motion Control window
 -  Modes of operation
 -  Profile position mode
 -  Profile velocity mode
 -  Homing mode
 -  Manual mode
-  Device status
 -  Device Status window
 -  Status information
 -  Status word
 -  Status register
 -  Digital inputs
 -  Drive logbook
-  Oscilloscope
 -  Oscilloscope window
-  Firmware update
 -  Program download
-  Error messages
 -  List of error messages
-  XML
 -  XML-file
 -  XML-parameter map
 -  Parameter map for IcIA N065
 -  Parameter map for IcIA D065
-  Getting help
 -  Service hotline

3.2 Service hotline

To get support call your local Berger Lahr Positec Machine technology Center (MTC).

Or visit the Berger Lahr website at <http://www.berger-lahr.com/> for latest news and updates.

Appendix

A Parameter list for IcIA N065

[Section]					
Keyword=	Index	Sub-index	Parameter	Data type	Access
[Commissioning]					
Type=	-	-	Type	"IcIA N065"	RO
Name=	-	-	Name	Visible String	RW
Text=	-	-	Text	Visible String	RW
Date=	-	-	Date	Visible String	RW
[NodeSettings]					
NodeId=	-	-	Node-Id.	Unsigned8	RW
Baudrate=	-	-	Baudrate	Unsigned8	RW
[Identification]					
DeviceName=	2100h	01h	Device name	Visible String	RO
DeviceIdentNo=	2100h	02h	Device ident.-no.	Visible String	RO
MotorIdentNo=	2100h	03h	Motor ident.-no.	Visible String	RO
MotorManufacturer=	2100h	04h	Motor manufacturer	Visible String	RO
ElectronicIdentNo=	2100h	05h	Electronic ident.-no.	Visible String	RO
ElectronicManufacturer=	2100h	06h	Electronic manufacturer	Visible String	RO
LSS_VendorId=	2100h	07h	LSS vendor-id.	Unsigned32	RO
LSS_ProductCode=	2100h	08h	LSS product code	Unsigned32	RO
LSS_RevisionNumber=	2100h	09h	LSS revision number	Unsigned32	RO
LSS_SerialNumber=	2100h	0Ah	LSS serial number	Unsigned32	RO
LMT_ManufacturerName=	2100h	0Bh	LMT manufacturer name	Visible String	RO
LMT_ProductName=	2100h	0Ch	LMT product name	Visible String	RO
SoftwareVersion=	2100h	0Dh	Software version	Visible String	RO
DateOfProduction=	2100h	0Eh	Date of production	Time Of Day	RO
[DriveData]					
MaxDriveCurrent=	6510h	01h	Max drive current	Unsigned16	RO
ExcessTemperature=	6510h	02h	Excess temperature	Unsigned8	RO
TemperatureThreshold=	6510h	03h	Temperature threshold	Unsigned8	RO
MinRampAcceleration=	6510h	04h	Min ramp acceleration	Unsigned16	RO
MinRampDeceleration=	6510h	05h	Min ramp deceleration	Unsigned16	RO
HallSensors=	6510h	06h	Hall sensors	Unsigned8	RO
InterfaceOptionType=	6510h	0Ah	Interface option type	Integer8	RO
[MotorData]					
MaxSpeed=	6410h	01h	Max speed	Unsigned16	RO
NominalSpeed=	6410h	02h	Nominal speed	Unsigned16	RO
NominalMotorCurrent=	6410h	03h	Nominal motor current	Unsigned16	RO
MotorTorqueConstant=	6410h	04h	Motor torque constant	Unsigned16	RO
GearShaftRevolutions=	6410h	05h	Gear shaft revolutions	Unsigned32	RO
GearMotorRevolutions=	6410h	06h	Gear motor revolutions	Unsigned32	RO
GearStages=	6410h	07h	Gear stages	Unsigned16	RO
GearEfficiency=	6410h	08h	Gear efficiency	Unsigned16	RO
NominalGearTorque=	6410h	09h	Nominal gear torque	Unsigned16	RO
GearDetentTorque=	6410h	0Ah	Gear detent torque	Unsigned16	RO
PolePairs=	6410h	0Bh	Pole pairs	Unsigned8	RO
EncoderResolution=	6410h	0Ch	Encoder resolution	Unsigned16	RO
ContinuousMotorCurrent=	6410h	0Dh	Continuous motor current	Unsigned16	RO
MaxMotorCurrent=	6410h	0Eh	Max motor current	Unsigned16	RO
MaxOverloadTime=	6410h	0Fh	Max overload time	Unsigned16	RO

RotorInertia=	6410h	10h	Rotor inertia	Unsigned16	RO
TerminalResistance=	6410h	11h	Terminal resistance	Unsigned16	RO
TerminalInductivity=	6410h	12h	Terminal inductivity	Unsigned16	RO
GeneratorVoltageConstant=	6410h	13h	Generator voltage constant	Unsigned16	RO
GV5thHarmonicContent=	6410h	14h	GV 5th harmonic content	Integer16	RO
GV7thHarmonicContent=	6410h	15h	GV 7th harmonic content	Integer16	RO
[ControlParameterSet]					
PositionWindow=	6067h	00h	Position window	Unsigned32	RW
VelocityWindow=	606Dh	00h	Velocity window	Unsigned16	RW
VelocityWindowTime=	606Eh	00h	Velocity window time	Unsigned16	RW
Gain=	60F9h	01h	V: gain	Unsigned16	RW
IntegrationTimeConstant=	60F9h	02h	Ti: integration time constant	Unsigned16	RW
StartUpTimeout=	60F9h	03h	Start-up timeout	Unsigned16	RW
ConstantDriveDelay=	60F9h	04h	Constant drive delay	Unsigned8	RW
AccelerationCurrentFactor=	60F9h	05h	Acceleration current factor	Unsigned8	RW
MaxCurrentEvents=	60F9h	06h	Max current events	Unsigned16	RW
BlockDeceleration=	60F9h	07h	Block deceleration	Unsigned16	RW
LP1_TimeConstant=	60F9h	08h	LP1 Time constant	Unsigned16	RW
KP_Cmd=	60F9h	09h	KP Cmd	Unsigned16	RW
HoldingTorqueTime=	60FBh	01h	Holding torque time	Unsigned16	RW
HoldingTorqueCurrent=	60FBh	02h	Holding torque current	Unsigned16	RW
[ManualModeSettings]					
Increments=	2011h	01h	Increments	Integer32	RW
Velocity=	2011h	02h	Velocity	Unsigned32	RW
Acceleration=	2011h	03h	Acceleration	Unsigned32	RW
Deceleration=	2011h	04h	Deceleration	Unsigned32	RW
MaxCurrent=	2011h	05h	Max current	Unsigned16	RW
ReleaseTime=	2011h	06h	Release time	Unsigned16	RW
[NegativeManualSwitchSettings]					
Increments=	2012h	01h	Increments	Integer32	RW
Velocity=	2012h	02h	Velocity	Unsigned32	RW
Acceleration=	2012h	03h	Acceleration	Unsigned32	RW
Deceleration=	2012h	04h	Deceleration	Unsigned32	RW
MaxCurrent=	2012h	05h	Max current	Unsigned16	RW
Enabled=	2012h	06h	Enabled	Unsigned16	RW
[NegativeManualSwitchSettings]					
SwitchEnabled=	2013h	01h	Switch enabled	Integer8	RW
SwitchTriggerPolarity=	2013h	02h	Switch trigger polarity	Integer8	RW
SwitchOverrunOptionCode=	2013h	03h	Switch overrun option code	Integer16	RW
[PositiveLimitSwitchSettings]					
SwitchEnabled=	2014h	01h	Switch enabled	Integer8	RW
SwitchTriggerPolarity=	2014h	02h	Switch trigger polarity	Integer8	RW
SwitchOverrunOptionCode=	2014h	03h	Switch overrun option code	Integer16	RW
[HomeSwitchSettings]					
SwitchEnabled=	2015h	01h	Switch enabled	Integer8	RW
SwitchTriggerPolarity=	2015h	02h	Switch trigger polarity	Integer8	RW
SwitchOverrunOptionCode=	2015h	03h	Switch overrun option code	Integer16	RW
[HomingModeSettings]					
SpeedDuringSearchForSwitch=	6099h	01h	Speed during search for switch	Unsigned32	RW
SpeedDuringSearchForZero=	6099h	02h	Speed during search for zero	Unsigned32	RW
HomingAcceleration=	609Ah	00h	Homing acceleration	Unsigned32	RW
[UserProfiles]					
UserProfileVelocity1=	2004h	01h	User profile velocity 1	Unsigned32	RO

UserProfileAcceleration1=	2005h	01h	User profile acceleration 1	Unsigned32	RO
UserProfileDeceleration1=	2006h	01h	User profile deceleration 1	Unsigned32	RO
UserProfileMaxCurrent1=	200Ah	01h	User profile max current 1	Unsigned16	RO
UserProfileVelocity2=	2004h	02h	User profile velocity 2	Unsigned32	RW
UserProfileAcceleration2=	2005h	02h	User profile acceleration 2	Unsigned32	RW
UserProfileDeceleration2=	2006h	02h	User profile deceleration 2	Unsigned32	RW
UserProfileMaxCurrent2=	200Ah	02h	User profile max current 2	Unsigned16	RW
UserProfileVelocity3=	2004h	03h	User profile velocity 3	Unsigned32	RW
UserProfileAcceleration3=	2005h	03h	User profile acceleration 3	Unsigned32	RW
UserProfileDeceleration3=	2006h	03h	User profile deceleration 3	Unsigned32	RW
UserProfileMaxCurrent3=	200Ah	03h	User profile max current 3	Unsigned16	RW
UserProfileVelocity4=	2004h	04h	User profile velocity 4	Unsigned32	RW
UserProfileAcceleration4=	2005h	04h	User profile acceleration 4	Unsigned32	RW
UserProfileDeceleration4=	2006h	04h	User profile deceleration 4	Unsigned32	RW
UserProfileMaxCurrent4=	200Ah	04h	User profile max current 4	Unsigned16	RW
UserProfileVelocity5=	2004h	05h	User profile velocity 5	Unsigned32	RW
UserProfileAcceleration5=	2005h	05h	User profile acceleration 5	Unsigned32	RW
UserProfileDeceleration5=	2006h	05h	User profile deceleration 5	Unsigned32	RW
UserProfileMaxCurrent5=	200Ah	05h	User profile max current 5	Unsigned16	RW
UserProfileVelocity6=	2004h	06h	User profile velocity 6	Unsigned32	RW
UserProfileAcceleration6=	2005h	06h	User profile acceleration 6	Unsigned32	RW
UserProfileDeceleration6=	2006h	06h	User profile deceleration 6	Unsigned32	RW
UserProfileMaxCurrent6=	200Ah	06h	User profile max current 6	Unsigned16	RW
UserProfileVelocity7=	2004h	07h	User profile velocity 7	Unsigned32	RW
UserProfileAcceleration7=	2005h	07h	User profile acceleration 7	Unsigned32	RW
UserProfileDeceleration7=	2006h	07h	User profile deceleration 7	Unsigned32	RW
UserProfileMaxCurrent7=	200Ah	07h	User profile max current 7	Unsigned16	RW
UserProfileVelocity8=	2004h	08h	User profile velocity 8	Unsigned32	RW
UserProfileAcceleration8=	2005h	08h	User profile acceleration 8	Unsigned32	RW
UserProfileDeceleration8=	2006h	08h	User profile deceleration 8	Unsigned32	RW
UserProfileMaxCurrent8=	200Ah	08h	User profile max current 8	Unsigned16	RW
UserProfileVelocity9=	2004h	09h	User profile velocity 9	Unsigned32	RW
UserProfileAcceleration9=	2005h	09h	User profile acceleration 9	Unsigned32	RW
UserProfileDeceleration9=	2006h	09h	User profile deceleration 9	Unsigned32	RW
UserProfileMaxCurrent9=	200Ah	09h	User profile max current 9	Unsigned16	RW
UserProfileVelocity10=	2004h	0Ah	User profile velocity 10	Unsigned32	RW
UserProfileAcceleration10=	2005h	0Ah	User profile acceleration 10	Unsigned32	RW
UserProfileDeceleration10=	2006h	0Ah	User profile deceleration 10	Unsigned32	RW
UserProfileMaxCurrent10=	200Ah	0Ah	User profile max current 10	Unsigned16	RW
[SoftwarePositionLimits]					
MinPositionSafetyLimit=	2008h	01h	Min software position safety limit	Integer32	RW
MinPositionDriveLimit=	2009h	01h	Min software position drive limit	Integer32	RW
MinPositionLimit=	607Dh	01h	Min software position limit	Integer32	RW
MaxPositionLimit=	607Dh	02h	Max software position limit	Integer32	RW
MaxPositionDriveLimit=	2009h	02h	Max software position drive limit	Integer32	RW
MaxPositionSafetyLimit=	2008h	02h	Max software position safety limit	Integer32	RW
[Polarity]					
Polarity=	607Eh	00h	Polarity	Unsigned8	RW
[OptionCodes]					
AbortConnectionOptionCode=	6007h	00h	Abort connection option code	Integer16	RW
QuickStopOptionCode=	605Ah	00h	Quick stop option code	Integer16	RW
ShutdownOptionCode=	605Bh	00h	Shutdown option code	Integer16	RW
DisableOperationOptionCode=	605Ch	00h	Disable operation option code	Integer16	RW

HaltOptionCode=	605Dh	00h	Halt option code	Integer16	RW
FaultReactionOptionCode=	605Eh	00h	Fault reaction option code	Integer16	RW

B Parameter list for IcIA D065

[Section]					
Keyword=	Index	Sub-index	Parameter	Data type	Access
[Commissioning]					
Type=	-	-	Type	IcIA D065	RO
Name=	-	-	Name	Visible String	RW
Text=	-	-	Text	Visible String	RW
Date=	-	-	Date	Visible String	RW
[NodeSettings]					
NodeId=	-	-	Node-Id.	Unsigned8	RW
Baudrate=	-	-	Baudrate	Unsigned8	RW
[DriveData]					
DeviceName=	1008h	00h	Device name	Visible String	RO
DeviceIdentNo=	2001h	00h	Device ident.-no.	Visible String	RO
MotorIdentNo=	2001h	00h	Motor ident.-no.	Visible String	RO
MotorManufacturer=	6404h	00h	Motor manufacturer	Visible String	RO
ElectronicIdentNo=	2000h	00h	Electronic ident.-no.	Visible String	RO
ElectronicManufacturer=	6504h	00h	Electronic manufacturer	Visible String	RO
LSS_VendorId=	1018h	01h	LSS vendor-id.	Unsigned32	RO
LSS_ProductCode=	1018h	02h	LSS product code	Unsigned32	RO
LSS_RevisionNumber=	1018h	03h	LSS revision number	Unsigned32	RO
LSS_SerialNumber=	1018h	04h	LSS serial number	Unsigned32	RO
SoftwareVersion=	2003h	00h	Software version	Visible String	RO
DateOfProduction=	6406h	00h	Date of production	Date	RO
[DriveData]					
MaxDriveCurrent=	6510h	01h	Max drive current	Unsigned16	RO
ExcessTemperature=	6510h	02h	Excess temperature	Unsigned8	RO
TemperatureThreshold=	6510h	03h	Temperature threshold	Unsigned8	RO
MinRampAcceleration=	6510h	04h	Min ramp acceleration	Unsigned16	RO
MinRampDeceleration=	6510h	05h	Min ramp deceleration	Unsigned16	RO
HallSensors=	6510h	06h	Hall sensors	Unsigned8	RO
ConfigBits=	6510h	07h	Configuration register	Unsigned8	RO
EnforcedCommut=	6510h	08h	Min drive speed	Unsigned16	RO
MaxDriveSpeed=	6510h	09h	Max drive speed	Unsigned16	RO
[MotorData]					
MaxSpeed=	6410h	01h	Max speed	Unsigned16	RO
NominalSpeed=	6410h	02h	Nominal speed	Unsigned16	RO
NominalMotorCurrent=	6410h	03h	Nominal motor current	Unsigned16	RO
MotorTorqueConstant=	6410h	04h	Motor torque constant	Unsigned16	RO
GearShaftRevolutions=	6410h	05h	Gear shaft revolutions	Unsigned32	RO
GearMotorRevolutions=	6410h	06h	Gear motor revolutions	Unsigned32	RO
GearStages=	6410h	07h	Gear stages	Unsigned16	RO
GearEfficiency=	6410h	08h	Gear efficiency	Unsigned16	RO
NominalGearTorque=	6410h	09h	Nominal gear torque	Unsigned16	RO
GearDetentTorque=	6410h	0Ah	Gear detent torque	Unsigned16	RO
PolePairs=	6410h	0Bh	Pole pairs	Unsigned8	RO
[ControlParameterSet]					
KP_Pos=	2010h	01h	KP Pos	Unsigned16	RW

KP_Rpm=	2010h	02h	KP Rpm	Unsigned16	RW
KP_Cmd=	2010h	03h	KP Cmd	Unsigned16	RW
RI_Lag=	2010h	04h	RI Lag	Unsigned16	RW
PositionWindow=	2010h	05h	Position window	Unsigned32	RW
RpmWindow=	2010h	06h	Rpm window	Unsigned16	RW
RpmDeviationEvents=	2010h	07h	Rpm deviation events	Unsigned16	RW
RpmStartTimeout=	2010h	08h	Rpm start timeout	Unsigned16	RW
RpmStop=	2010h	09h	Rpm stop	Unsigned16	RW
LP1_TimeConst=	2010h	0Ah	LP1 Time const	Unsigned8	RW
HoldingTorqueTime=	2010h	0Bh	Holding torque time	Unsigned8	RW
MaxSteadyCurrent=	2010h	0Ch	Max steady current	Unsigned16	RW
StartingCurrentFactor=	2010h	0Dh	Starting current factor	Unsigned8	RW
DeviationDelay=	2010h	0Eh	Deviation delay	Unsigned8	RW
CurrentDeviationEvents=	2010h	0Fh	Current deviation events	Unsigned16	RW
CurrentWindow=	2010h	10h	Current window	Unsigned16	RW
BlockDeceleration=	2010h	11h	Block deceleration	Unsigned16	RW
[ManualModeSettings]					
Increments=	2011h	01h	Increments	Integer32	RW
Velocity=	2011h	02h	Velocity	Unsigned32	RW
Acceleration=	2011h	03h	Acceleration	Unsigned32	RW
Deceleration=	2011h	04h	Deceleration	Unsigned32	RW
MaxCurrent=	2011h	05h	Max current	Unsigned16	RW
ReleaseTime=	2011h	06h	Release time	Unsigned16	RW
[UserProfiles]					
UserProfileVelocity1=	2004h	01h	User profile velocity 1	Unsigned32	RO
UserProfileAcceleration1=	2005h	01h	User profile acceleration 1	Unsigned32	RO
UserProfileDeceleration1=	2006h	01h	User profile deceleration 1	Unsigned32	RO
UserProfileVelocity2=	2004h	02h	User profile velocity 2	Unsigned32	RW
UserProfileAcceleration2=	2005h	02h	User profile acceleration 2	Unsigned32	RW
UserProfileDeceleration2=	2006h	02h	User profile deceleration 2	Unsigned32	RW
UserProfileVelocity3=	2004h	03h	User profile velocity 3	Unsigned32	RW
UserProfileAcceleration3=	2005h	03h	User profile acceleration 3	Unsigned32	RW
UserProfileDeceleration3=	2006h	03h	User profile deceleration 3	Unsigned32	RW
UserProfileVelocity4=	2004h	04h	User profile velocity 4	Unsigned32	RW
UserProfileAcceleration4=	2005h	04h	User profile acceleration 4	Unsigned32	RW
UserProfileDeceleration4=	2006h	04h	User profile deceleration 4	Unsigned32	RW
UserProfileVelocity5=	2004h	05h	User profile velocity 5	Unsigned32	RW
UserProfileAcceleration5=	2005h	05h	User profile acceleration 5	Unsigned32	RW
UserProfileDeceleration5=	2006h	05h	User profile deceleration 5	Unsigned32	RW
UserProfileVelocity6=	2004h	06h	User profile velocity 6	Unsigned32	RW
UserProfileAcceleration6=	2005h	06h	User profile acceleration 6	Unsigned32	RW
UserProfileDeceleration6=	2006h	06h	User profile deceleration 6	Unsigned32	RW
UserProfileVelocity7=	2004h	07h	User profile velocity 7	Unsigned32	RW
UserProfileAcceleration7=	2005h	07h	User profile acceleration 7	Unsigned32	RW
UserProfileDeceleration7=	2006h	07h	User profile deceleration 7	Unsigned32	RW
UserProfileVelocity8=	2004h	08h	User profile velocity 8	Unsigned32	RW
UserProfileAcceleration8=	2005h	08h	User profile acceleration 8	Unsigned32	RW
UserProfileDeceleration8=	2006h	08h	User profile deceleration 8	Unsigned32	RW
UserProfileVelocity9=	2004h	09h	User profile velocity 9	Unsigned32	RW
UserProfileAcceleration9=	2005h	09h	User profile acceleration 9	Unsigned32	RW
UserProfileDeceleration9=	2006h	09h	User profile deceleration 9	Unsigned32	RW
UserProfileVelocity10=	2004h	0Ah	User profile velocity 10	Unsigned32	RW
UserProfileAcceleration10=	2005h	0Ah	User profile acceleration 10	Unsigned32	RW

UserProfileDeceleration10=	2006h	0Ah	User profile deceleration 10	Unsigned32	RW
[SoftwarePositionLimits]					
MinPositionSafetyLimit=	2008h	01h	Min software position safety limit	Integer32	RW
MinPositionDriveLimit=	2009h	01h	Min software position drive limit	Integer32	RW
MinPositionLimit=	607Dh	01h	Min software position limit	Integer32	RW
MaxPositionLimit=	607Dh	02h	Max software position limit	Integer32	RW
MaxPositionDriveLimit=	2009h	02h	Max software position drive limit	Integer32	RW
MaxPositionSafetyLimit=	2008h	02h	Max software position safety limit	Integer32	RW
[Polarity]					
Polarity=	607Eh	00h	Polarity	Unsigned8	RW