Software

Configurator E7110

user manual

Configurator E7110 software is intended to read, edit and save operational parameters of E7110 series devices. Application requires PC with Windows OS (Windows 95 or more recent version), free hard drive space at least 10 Mb, RS232/RS485 or USB/RS485 adapter connected to PC and twisted pair cable.
The device is connected by 2-wire circuit, the overall connection length should not exceed 1200 m.

Operating procedure

Install the software using E7110_Setup.exe file. Open the application.
After start the application connects to the device. If connection is established, the main window opens. If connection is failed, the

"Connection to device" window opens.
The connection window shows current port parameters. Double-click on selected line for editing, enter your data or select a value from drop-down box and press Connect.
If the value of parameters is unknown, press Scan network to launch searching baudrate starting from 2400 bit/s up to 115200 bit/s. Other port parameters (parity, word length etc) do not change during the scanning. The scanning is stopped, when response from the device is received.
If the connection is failed,return your device to factory settings (see User Manual), press Use factory settings and try again to connect.

Working offline

To operate the application without connecting the device press Work offline and select the device from the list, then press OK. The main window will open.

Configurator main window

*NUM (in the botom-right area of the window) indicates that «NumLock» function is on.

Operate the program by choosing menu options, by buttons on the toolbar or by hotkeys.

Configurator menu, buttons and hotkeys functionality

Menu option	Toolbar button	Hotkey	Description
File: New		Ctrl+N	Create new file
File: Open		Ctrl+O	Open file
File: Save		Ctrl+S	Save file Configuration file extension is .m110
File: Save as			Save file with different name or location
File: Recent files			Quick list of 4 last opened files
File: Exit			Quit the application
Device: Read all		Alt+R	Read all parameters of the device
Device: Write all		Alt+W	Save all the parameters to the device memory
Device: Write changes		Alt+U	Save modified parameters to the device memory. Modified parameters are displayed in green, stored in the device memory — in black
Device: Compare		Alt+C	Compare the device parameters with the configuration file in use
Device: Command: Apply default settings			Return to factory settings (except network settings)
Device: Command: Apply New Settings (APLY)			Apply set parameters
Device: I/O status			Device inputs and/or output status
Device: Single parameter		Alt+S	Open selected parameter in new window for reading and editing see below for more information
Device: Check connection		Alt+N	Check connection to the device,
Device: Serial port settings			Open Connection to device window
Tree: Read selected branch		Alt+Ctrl+R	Read parameters in the selected branch
Tree: Write selected branch		Alt+Ctrl+W	Save all the parameters of the selected branch to the device memory
Tree: Write branch changes		Alt+Ctrl+U	Save modified parameters of the selected branch to the device memory
Tree: Compare in branch		Alt+Ctrl+C	Compare the device parameters with selected branch of the configuration file in use
Tree: Previous problem parameter		Alt+Up	Move from one incorrectly read or saved parameter to another up and down the list. Incorrect parameters are displayed in red.
Tree: Next problem parameter		Alt+Down	
Tools: Show indexes			Display indexes of the parameters. Necessary when creating new programs to operate the device.
Tools: Read automatically			Automatically read all the parameter value in opened branch. Turns on automatically when the application is launched. This mode allows to read parameters if they were not obtained earlier ("no data" selected in "value" dropbox) Note Turn off the automatic reading mode when working offline.
Tools: Instant recording			Automatically save modified parameters to the device memory
Tools: Do not send parameter attributes			No exchange of information of access attributes
Tools: Toolbar			Display toolbar
Tools: Status bar			Display status bar
Help: About			Show current version of the software

Editing parameters

To edit parameters with ‘read/write’ in Attribute column, double-click the line, enter the value or select it from dropbox and press Enter.
Modified parameters are displayed in green and are saved only in application memory. To save them into the device’s memory, use an appropriate writing option (Write all, Write changes etc). A single parameter may be also saved to the device by righ-clicking and selecting ‘Write parameter’ in the dropping menu or using Device: Single parameter function (see below).
Parameters saved to the device are displayed in black.
If an incorrect parameter is entered (e.g. beyond the range), an error message will appear.

Reading the device parameters

To read device configuration parameters use Device: Read all, Device: Single parameter, Tree: Read selected branch, Tools: Read automatically option (see the table above). The single parameter may also be read by right-clicking on it and choosing ‘Read parameter’ in dropping menu or using Device: Single parameter function (see below)..
Incorrectly read parameters are displayed in red. To move from one incorrect parameter to another, use Tree: Previous/Next problem parameter functions.

Device: Single parameter

The “Single parameter” window is presented below. Select the parameter from the dropbox, choose read or write function, select data to write and press Execute. Marking the ‘Indexed’ box you may select data or address index.

Inputs/Outputs status

The I/O status scanning window is presented below.

The application addresses inputs and outputs in sequential order. Received value is displayed in green.
Reset button returns counter to zero.

Inputs and outputs of the device are represented as numbered rectangles. Open inputs are displayed in ground-colour, closed — in ivory.
To set the output parameters (PWM duty cycle, DAC parameter) or to turn an output on or off, double-click on the corresponding line and enter your data. The output parameters value should be in the range 0...1 inclusive. If output parameter value is equal to zero, the output is displayed in ground-colour, if value is equal to one, the output is hatched, and green if the value is between 0 and 1.
The scanning period for selected parameter may be changed by editing the parameter via application main window. Default scanning period is 1000 ms.
For some devices the I/O status scanning is performed in the application main window. In this case the I/O status in the Device menu is inactive.

Applying new settings

To apply new network settings, use Device: Commands: Apply new settings (APLY) command.
To return the device to factory settings, select Device: Commands: Apply default settings.

Limitations

Current version of the soft does not support INIT command (application of the new parameters) and does not allow to adjust the device.
The new corrected version is expected to be released in May, 2016.