

EZRackPLC™ Built-in Simulator

The built-in simulator creates a virtual PLC so you can test your ladder logic without any PLC hardware present.

- Visually see on the virtual PLC, LED indicators light up discrete inputs & outputs based on your ladder logic simulation.
- See register values within simulator to test out proper ladder logic instructions.
- View LED Indicators and Ladder Logic rungs simultaneously in Simulation mode.
- Simulates discrete and analog I/O with access to timers, counters, control bits, etc.
- Force discrete I/O "On" or "Off" to troubleshoot ladder logic
- Break-point debugging while in simulation mode to test certain portions of the ladder program
- Our Windows application uses the same code as the EZRack PLC CPU firmware for the most accurate simulation.

Virtually see how your EZ-Rack PLC ladder program performs for FREE before buying any hardware

The screenshot displays the EzLogix Designer Pro interface. At the top, the title bar reads "EzLogix Designer Pro - Test1.elc - Main Logic - Std PLC". The main window is divided into several sections:

- Left Panel:** A tree view showing the project structure for "Test1.elc", including Main Logic, Interrupt Logic, Subroutine Logic, Hardware Setup, I/O Table Layout, I/O Graphical Layout, Communication Setup, COM Configuration, Ethernet Setup, Database, Tag Database, Tag Cross Reference, Message Database, PID Tuning, PID Setup, PID Monitor, CPU Control, Start PLC, Stop PLC, Transfer to EZLogix, Create USB Loader File, Monitor, Go Offline, Simulate, Switch to Monitor Mod, Debug, Stop Debug, Run Debug, Single Step, and Disable Outputs.
- Center Panel:** "Test1.elc - IO Graphical Layout" showing a virtual PLC rack with three modules: "EZLogix", "EZLogix IO-16DCI", and "EZLogix IO-16DCOP". It displays various ports like DC INPUTS, DC SOURCE OUTPUTS, and VOLTAGE ANALOG I/O.
- Bottom Panel:** "Test1.elc - Main Logic - Std PLC" showing a ladder logic diagram for "Rung 1". It includes instructions like "COMPARE VALUES", "TIMER", and "FLASHER".
- Right Panel:** "Debug/Monitor" window showing a table of tag values.

Address	Data Type	Current Value
I1	DISCRETE	OFF
I2	DISCRETE	OFF
I3	DISCRETE	OFF
I4	DISCRETE	OFF
I5	DISCRETE	FORCED OFF
I6	DISCRETE	OFF
I7	DISCRETE	OFF
I8	DISCRETE	FORCED OFF
I9	DISCRETE	ON
I10	DISCRETE	OFF
I11	DISCRETE	OFF
I12	DISCRETE	OFF
I13	DISCRETE	ON
I14	DISCRETE	OFF
I15	DISCRETE	OFF
I16	DISCRETE	OFF
OR1	UNSIGNED_INT_16	2048
OR2	UNSIGNED_INT_16	950
OR3	UNSIGNED_INT_16	0
OR4	UNSIGNED_INT_16	10
IR1	UNSIGNED_INT_16	2048
IR2	UNSIGNED_INT_16	950
IR3	UNSIGNED_INT_16	0
IR4	UNSIGNED_INT_16	10
IR5	UNSIGNED_INT_16	0
IR6	UNSIGNED_INT_16	0
IR7	UNSIGNED_INT_16	0
IR8	UNSIGNED_INT_16	0
O1	DISCRETE	OFF
O2	DISCRETE	OFF
O3	DISCRETE	ON
O4	DISCRETE	OFF

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