

i.CanDrawIt®

Graphical Programming for BACnet, Modbus, LonWorks, and SNMP I/O Devices

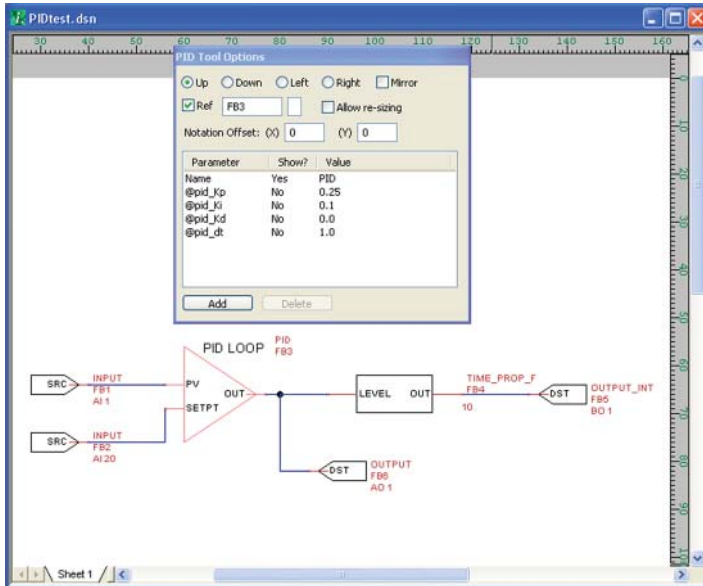
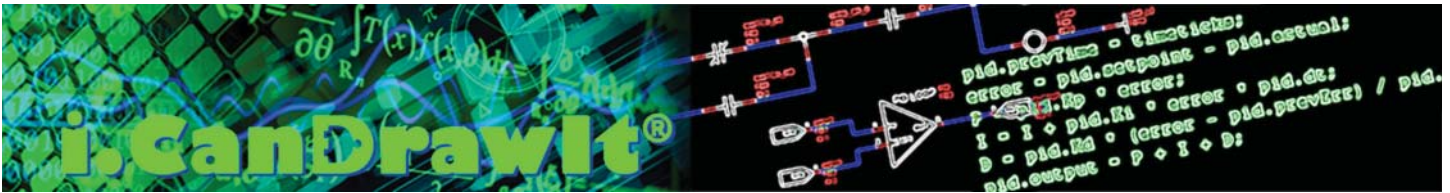
- Draw control programs
- Electrical CAD look and feel
- Compile code from drawings
- Simulate functions block by block
- Run to break point
- Run until paused
- Inspect or change variables
- Inspect or change registers
- Draw new function blocks
- Library source code included

i.CanDrawIt® works just like an electrical schematic CAD program, except you draw control programs that look like circuits. The resulting software will function like the circuit you draw. i.CanDrawIt® includes visual program simulation as well as visual live debugging where supported by the target device. Set breakpoints or step through the program one visual function block at a time. Update variables and I/O objects in simulation or live.

i.CanDrawIt® is included at no additional cost with every ValuPoint® controller, every i.CanDoIt® server, and every AddMe® network I/O node from Control Solutions Minnesota.

- No supporting software to buy
- No license fees
- No run-time licenses
- Includes no-fee online support
- No time limits
- No functional limits or disabled features
- Make as many copies as you need

Use free form logic style, ladder logic style, or hybrid mix of styles. Fully customizable and expandable function block library with source code is included.



Simulation and Live Testing

i.CanDrawIt® is more than just a drawing tool. Our graphical programming tool is also a complete simulation and live debugging tool. You can single-step through your drawing in simulation or live debug mode. The tool will stop after executing each function block, and highlight that block. You can click on the block to see the values of any variables it produced. You can optionally change the values of variables before continuing.

Any I/O objects referenced in the course of executing your control drawing will automatically appear in the watch list that shows in debug mode. You may also manually add any desired I/O objects to the watch list. You may change the values of I/O objects by clicking on them and editing “on the fly”.

When single stepping may be too slow, you can set a breakpoint on any function block by clicking on that block and checking the breakpoint check box. When execution reaches this block, it will pause. You may resume, or single step from that point.

You are not restricted to using the predefined library objects. You can modify existing blocks, or add completely new function blocks. If you need to do line code testing for new complex function blocks you are creating, we also offer a code development tool that is line based and includes line by line simulation and debugging. Once the line code is working as desired, you then import it into your library block for easy addition to any control drawing.

How i.CanDrawIt® Works

You begin your control drawing by dragging function blocks from the library and dropping them onto the drawing canvas. Select a function block, or “part” from the list on the left. The diagram of that block appears above the list. Click that block, drag it onto the drawing, and click the mouse once per copy you wish to add to the drawing.

Next, you select the line tool and draw lines from outputs of one block to inputs of the next. By drawing lines between logic gates and other blocks, you begin to create the control program.

When you are ready to associate the abstract blocks with real world inputs and outputs, you do this by adding designators and optional parameters. To add this information, you simply click on the block to be updated, assign a function block number, and add optional parameters as applicable.

The most commonly applied parameter will be I/O point designation. The “Object” parameter will have a text string such as “REG 22” to designate a Modbus holding register, “AI 14” to designate a BACnet Analog Input, “AO 2” to designate a BACnet Analog Output, and so on. When the PID block is updated, you will add tuning parameters such as the proportional band, integral, and derivative terms.

When your drawing is complete, you run the error checker to catch obvious problems, then run the source code generator, and finally the compiler, each with just a click of the mouse.

i.CanDrawIt®

Visit our web site for

- Full details
- Software Download

www.grapical-programming.com



CONTROL SOLUTIONS, INC.
 980 E. BERWOOD AVE., SUITE 100 • PO BOX 10789
 ST. PAUL, MN 55110-0789
 VOICE (651) 426-4410 • FAX (651) 426-4418
 TOLL FREE 1-800-872-8613