

# CLICK Programming Software

## FREE Software!

CLICK programming software can be downloaded at no charge.

The CLICK programming software is designed to be a user-friendly application, and the tools, layout, and software interaction provide ease-of-use and quick learning.

The simple operation of this software allows users to quickly develop a ladder logic program. The online help file provides information that will help you get acquainted with the software quickly.

## PC Requirements

CLICK PLC Windows-based programming software works with Windows® 2000 Service Pack 4, XP Home or Professional, Vista (32 bit only) or Windows 7 (32 bit only). These are the minimum system requirements:

- Personal Computer with a 333 MHz or higher processor (CPU) clock speed recommended; Intel Pentium/Celeron family or AMD K6/Athlon/Duron family, or compatible processor recommended
- SVGA 800x600 pixels resolution. (1024x768 pixels resolution recommended)
- 150MB free hard-disk space
- 128MB free Ram (512MB recommended)
- CD-ROM or DVD drive for installing software from the CD
- 9-pin serial port or USB port for project transfer to PLC (USB port communications also requires USB-to-serial converter)

## C0-PGMSW FREE

### CLICK PLC Programming Software

Free download available from the Web includes the manual in pdf format. Cable sold separately.

Windows2000/XP(Home/Pro)/Vista/Windows 7 required.

The CLICK Programming Software can be downloaded free at the [AutomationDirect](http://www.automationdirect.com) Web site:

[www.support.automationdirect.com/downloads.html](http://www.support.automationdirect.com/downloads.html)



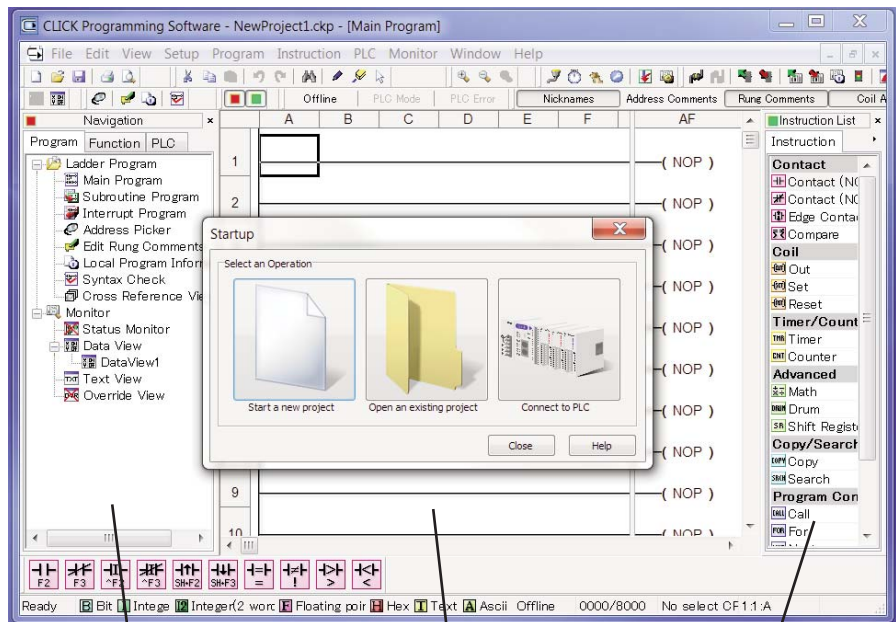
**NOTE:** CLICK PLCs cannot be programmed using *DirectSOFT5* programming software, which is used to program our *DirectLOGIC* PLCs; you must use the CLICK programming software, C0-PGMSW.



**NOTE:** When using Standard CPUs, you must use CLICK programming software version V1.20 or later.  
When using Analog CPUs, you must use CLICK programming software version V1.12 or later.

## Main window

The Main Window is displayed when the program opens. It is divided into Menus, Toolbars, and Windows that work together to make project development as simple as possible.



Navigation Window

Ladder Edit Window

Instruction List Window

# CLICK Programming Software

## Instructions

The easy-to-use instructions are described in the CLICK programming software online help file.

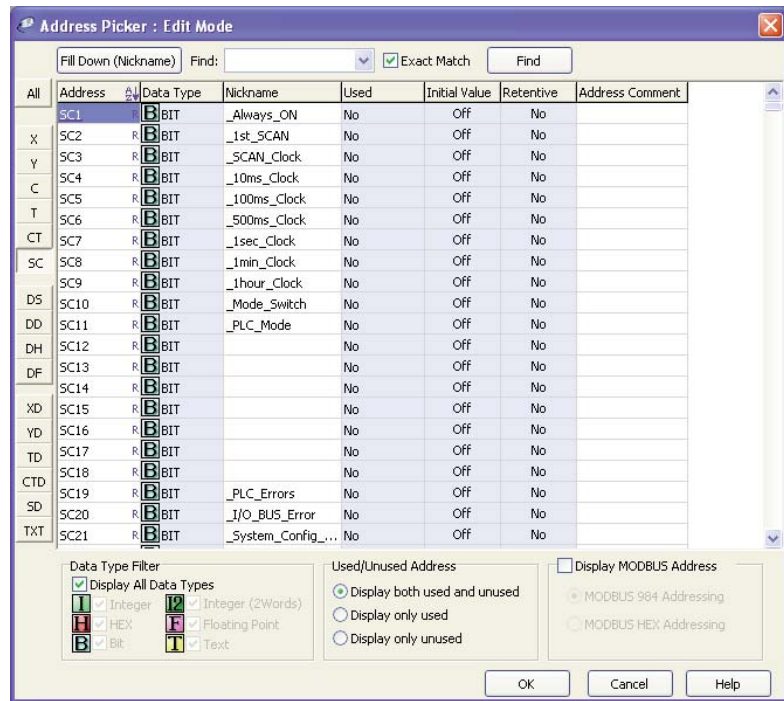
## Powerful Features!

CLICK programming software has amazingly powerful features for a free software product, such as

- Address picker
- Separate subroutine programs
- Separate interrupt programs
- Color rung comment feature
- Project loader
- Documentation is stored within the PLC memory

## Address Picker

The Address Picker is a powerful multi-function memory table which can be used to assign nicknames, create address comments, and establish initial values for specific memory locations. It can assign specific memory locations to be retentive during power outages. The Address Picker also has powerful tools for sorting the memory table and making it easier to use.

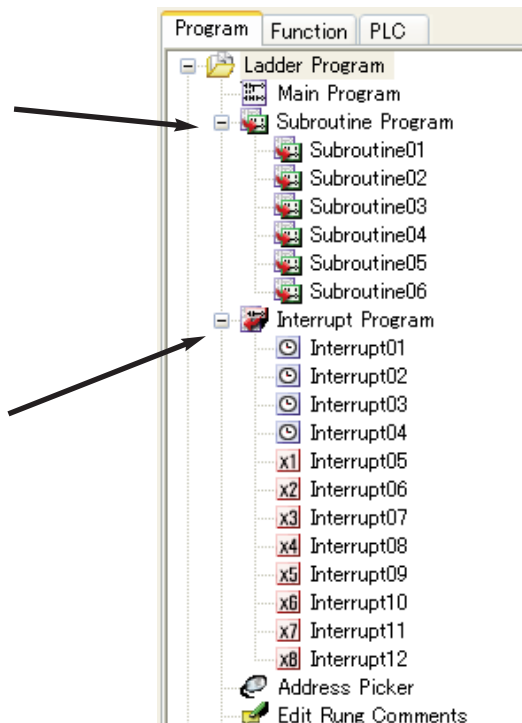


## Subroutine Programs

Subroutine programs can be created and named to isolate a body of program code that is run selectively. You can run up to 986 subroutine programs.

## Interrupt Programs

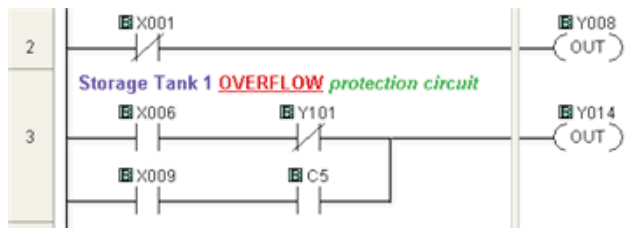
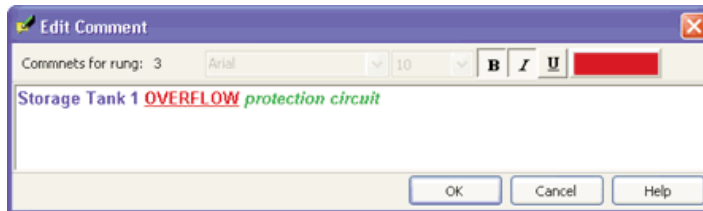
Interrupt programs are created and named. The Basic and Standard CPU modules support up to 12 interrupt programs. The Analog CPU modules support up to 8 interrupt programs.



# CLICK Programming Software

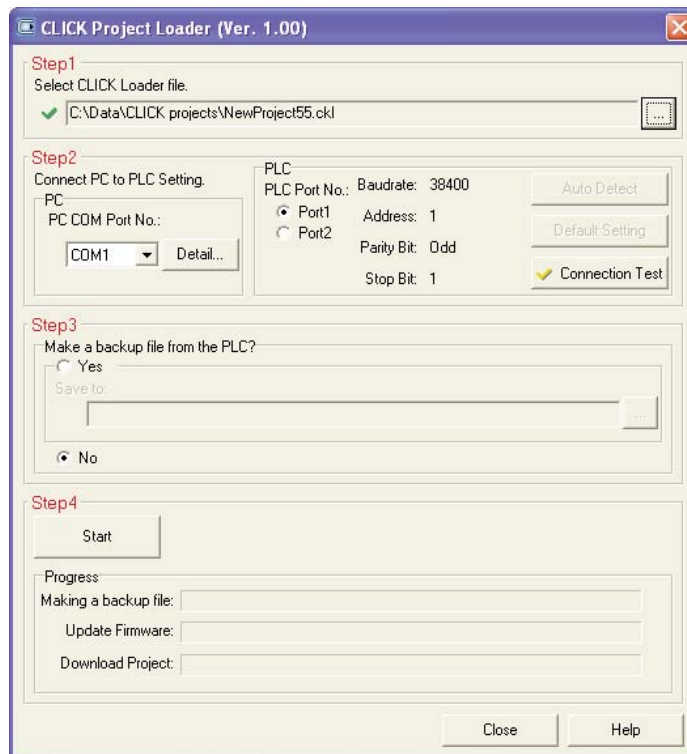
## Color Rung Comment

Easily create and edit rung comments with colors and three text styles. Comments are stored in the PLC memory for future reference.



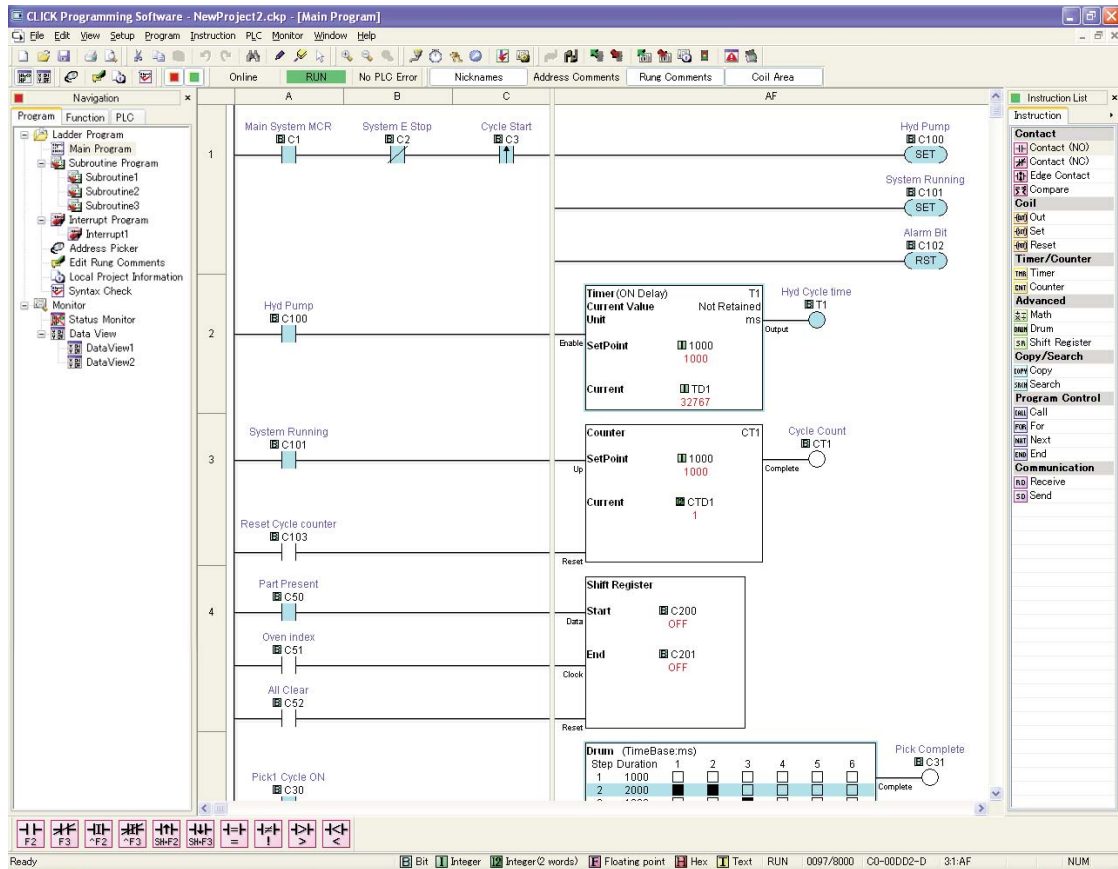
## Project Loader

The CLICK programming software can export the CLICK project in an encrypted format. The exported file can be sent to the end user. Then the end user can download the file into the CLICK PLC with the tool called Project Loader.



**NOTE: PROJECT LOADER IS A SEPARATE PROGRAM FROM THE CLICK PROGRAMMING SOFTWARE, BUT IT IS INSTALLED ON THE PC WHEN THE CLICK PROGRAMMING SOFTWARE IS INSTALLED.**

# CLICK to get FREE Programming Software!



## Simple to learn ...

The CLICK PLC programming tool was designed with the user in mind. We have simplified the programming process to make it easier to learn, faster to program, and capable of completing most of your discrete application needs with only 21 instructions!

This combination of RLL (Relay Ladder Logic) and Function block programming offers you a comprehensive programming environment with easy navigation and a familiar Windows look and feel.

## ... Easy to use

We listened to our customers and tried to address what they felt were the inhibitors to a simplistic programming environment. This includes more intuitive instructions that are not only easier to use but also offer more functionality at the same time. We worked to create one of the best help files of any software in the industry. We offer you enough options to easily address the majority of your needs during all phases of programming (learning, coding, commissioning, troubleshooting), while keeping it structured enough to make the basic operations obvious.

## Action-packed

The CLICK PLC Programming tool allows each individual to set up their programming environment to suit their needs. Beginners may choose to program almost exclusively via the mouse by clicking on icons, instructions, drop-down menus, and selecting PLC addresses from the "Address Picker". As programmers become more experienced, the time-saving keyboard shortcuts can greatly enhance productivity, and speed development/debug times. Many of the instruction entry shortcuts are even the same as those used in our *DirectLOGIC* PLC software.

Either way, you can select the option that suits your style of programming.

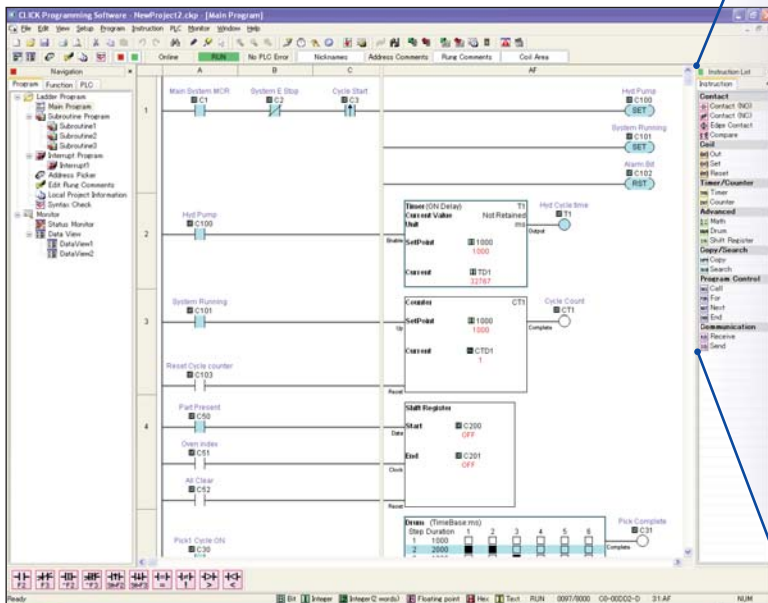
Simply download your free software at:

[www.clickplcs.com](http://www.clickplcs.com)

# Simplified instruction set reduces your programming time

## Instruction List

The CLICK PLC programming software offers 21 extremely powerful instructions! This instruction set offers the same flexible control you might expect from over 150 instructions in a traditional controller. Simply drag and drop these instructions onto the ladder view (the center section of the screen), and a helpful dialog box will guide you through each instruction's configuration.



## What's included?

The 21 CLICK PLC instructions include everything you would typically expect:

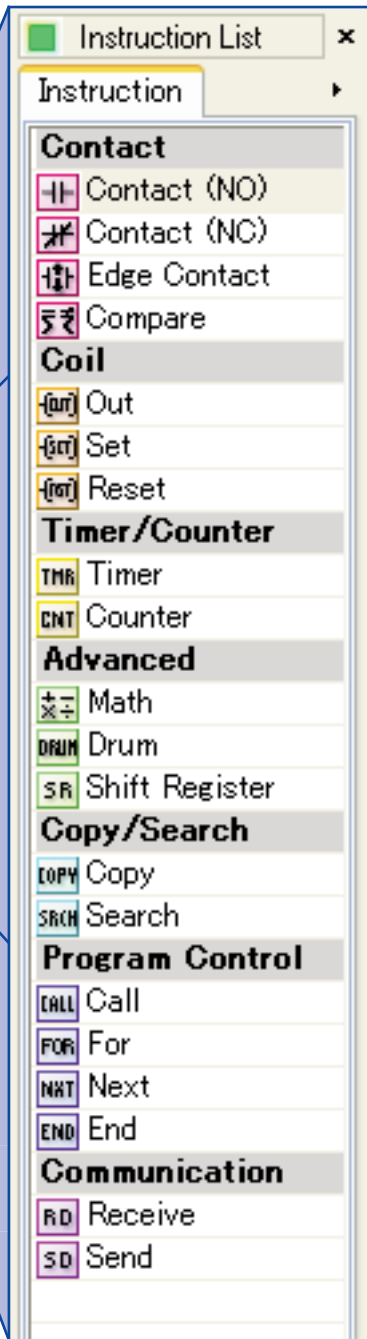
- Contacts\*
- Coils
- Compare
- Set/Reset
- Timer
- Counter
- Math\*\*
- For/Next

Then there are some advanced instructions you might not expect:

- DRUM
- Send/Receive
- Copy
- Shift Register
- Call/Return(Subroutine)
- Search

\* Contacts include Normally Open, Normally Closed, Edge-triggered and Compare

\*\* Math includes Decimal, Floating Point and HEX math. Supports free-form formula entry.

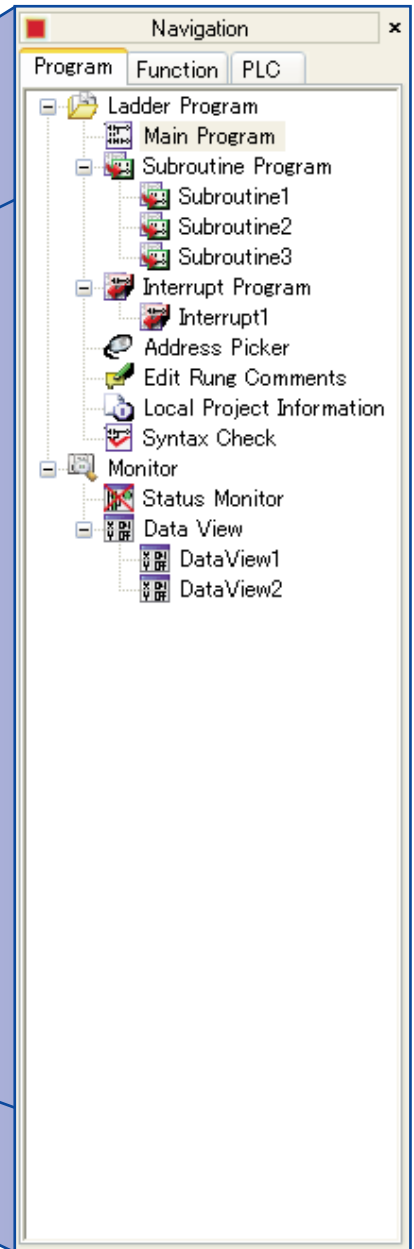
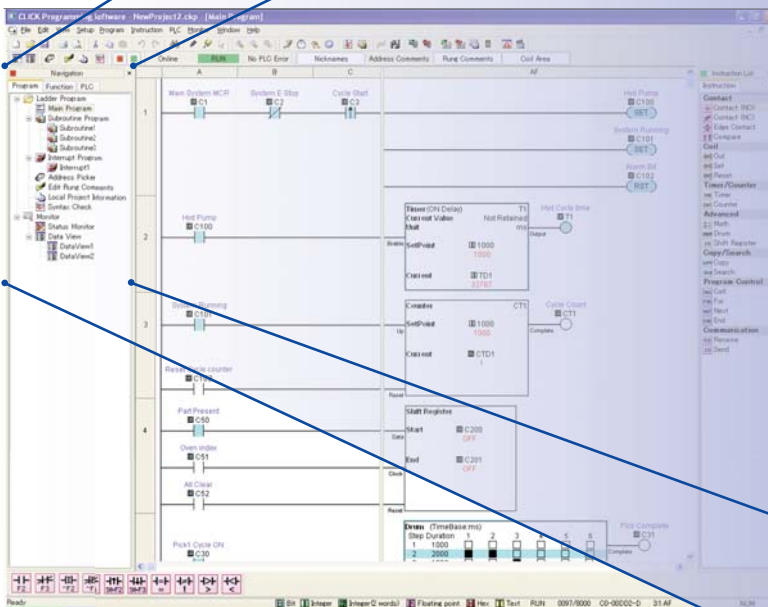


Note: The RETURN instruction is not included in this list because it is used in the Subroutine and Interrupt programs only.

# CLICK offers intuitive navigation

## Navigation Pane

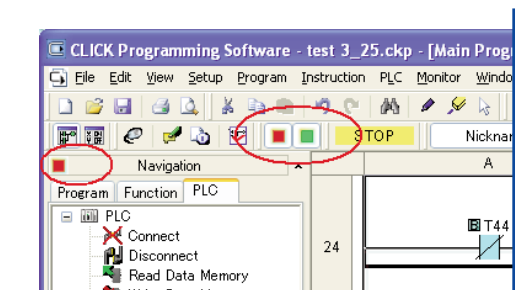
The CLICK PLC programming software offers an easy-to-view Navigation Pane which places program controls at your fingertips. Quickly toggle between your main program, Subroutines, Interrupts, Data Views, Rung Comments Editor and more.



## At your fingertips

The Navigation Pane puts many practical and frequently used functions within one CLICK of your mouse during configuration, commissioning and troubleshooting. Quickly move between your Main Ladder Program and Subroutines and Interrupt routines within your project. Access frequently used system functions such as System Setup, Password utility, Comm Port Configuration, PLC Connection, Data and Project Transfer, Firmware Update and many more. Many of these functions are also available via drop-down menus. It's your choice!

Use the color-coded Window Control Toolbar to quickly and easily hide the navigation (and/or instruction) pane to maximize your ladder programming work space.



# Monitor your program with a **CLICK**

## Data View Window

The Data View allows you to monitor real time values in your process directly from the PLC while monitoring the system with the programming software. You can view up-to-date data, write new variable data, and even force overrides in the processor from this one window.

The Data View window displays a table of PLC variables with the following columns: No., Address, Nickname, Current Value, New Value, Write, and Viewing Format. The table contains 24 rows of data, including bit variables (e.g., SC3, SC4), integer variables (e.g., CTD2, TD44), and real variables (e.g., DF114, DF59).

No.	Address	Nickname	Current Value	New Value	Write	Viewing Format
001	SC3	SCAN ClcOn				Bit
002	SC4	10ms ClcOff				Bit
003	SC5	100ms ClcOn				Bit
004	SC6	500ms ClcOff				Bit
005	SC7	1sec. ClcOff				Bit
006	CTD2		0			Integer
007	TD44		29			Integer
008	DF114		123.40000153	123.40000153		Real
009	DF59		100.00000000			Real
010	DD319		345	345		Integer
011	Y501	Off		On Off		Bit
012	Y502	On		On Off		Bit
013	Y503	On		On Off		Bit
014	Y504	Off		On Off		Bit
015	Y505	On		On Off		Bit
016	Y506	On		On Off		Bit
017	Y507	Off		On Off		Bit
018	Y508	On		On Off		Bit
019						
020						
021						
022						
023						
024						

The window also includes an 'Export' button and 'Close' and 'Help' buttons. The status bar at the bottom shows data types: Bit, Integer, Integer (2 words), Floating point, Hex, Text, and system information: Offline, 0000/8000, No select CPU, 1:1:A.

## What is included?

The Data View allows you to monitor data as you would expect ... but what else can you do?

- Auto Fill Down feature allows you to quickly populate your addresses
- View data types as either Integer, Real (floating point), Exponential or Hex.
- Force values with the Override feature.
- Import/Export your data View to exchange the setup.
- Save and create multiple Data View files for separate process applications.
- Data types are easily identified by the Data Type icons on the Status Bar.

# CLICK on a practical instruction

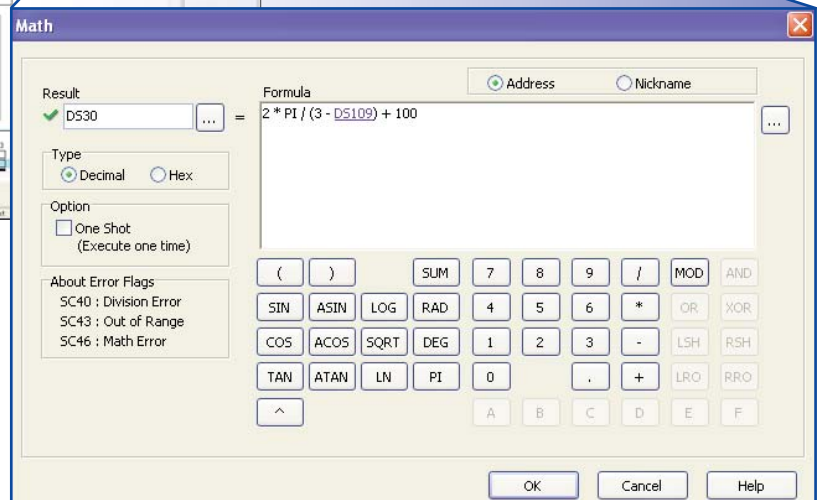
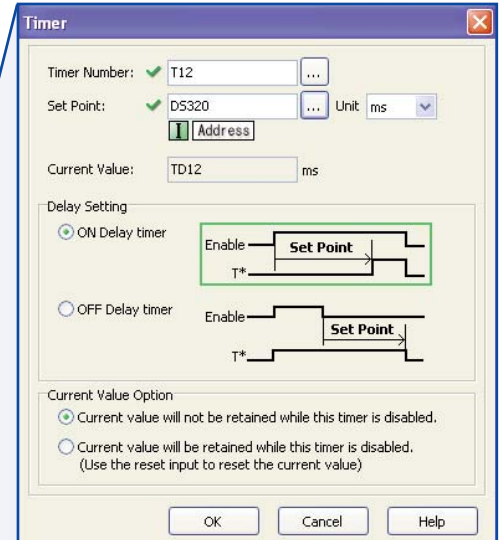
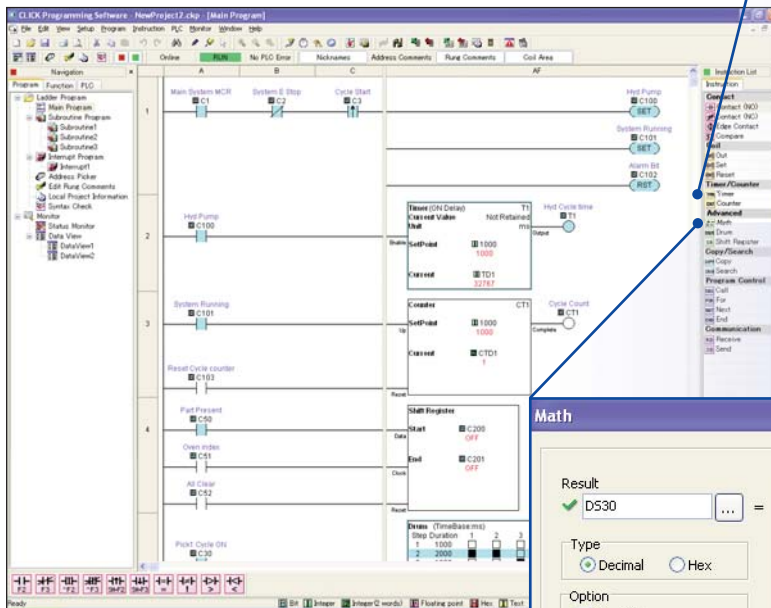
For example ...

## Timer Instruction

The Timer Instructions are typically some of the more basic instructions in a control environment, so how could we possibly make them any better? We listened to you ...

Instead of having multiple timer instructions with different functions and features, we created a single timer instruction with simple selections to allow programming of the precise timer function needed for your application. Select from On-delay or Off-delay timing and retentive or non-retentive current values.

Just CLICK ... It's that easy.



## Math Instruction

Performing mathematical calculations in a PLC typically requires a complicated set of instructions and programming gymnastics. From mixing process variable data with constants in multiple formats, to calculating complex logarithmic formulas, math computations in ladder logic can be complex, so how could we possibly make it any better? We listened to you...

Instead of having a full set of various math instructions you string together to perform complex mathematical equations, we created a single instruction that allows you to enter formulas directly or select from the familiar calculator style layout to create your formula.

Just CLICK ... It's that easy.

# CLICK for great help!

## Detailed Help Files

We wanted your programming experience to be the easiest and most productive of any PLC you have ever programmed. So we spent a lot of time creating the content for the help file that gives you clear and concise definitions of the features and functionality for each instruction and the operation of the software.

Just CLICK Help ... It's that easy.

**Math (Decimal)**

**Description** The **Math** instruction solves a user-defined formula during the execution of the **Ladder Program**. The formula is developed on the **Math** dialog using the on-screen keypad, the computer keyboard, and **Address Picker**. Two sets of mathematical operators are available. One set is appropriate for use with decimal values, and the other is for use with hexadecimal values. Also see **Math (Hex)**. Parenthetical expressions can be nested up to eight levels deep. If the **Floating Point Data Type** is used in any operation, then all operations will be based on **Floating Point** math. The solution will be stored in the data format selected for the **Result**.

**Decimal Setup**

**Math** dialog box details:

- Result:** DF1 1
- Type:** Decimal 2
- Option:** One Shot 3 (Execute one time)
- About Error Flags:** 4 (SC30: Division Error, SC33: Data convert Error, SC36: Math Error)
- Formula:** (PI\*D52 ^ 2)+(D53\*SQRT(D55))+ ( SMOD D58)
- Keypad:** 7

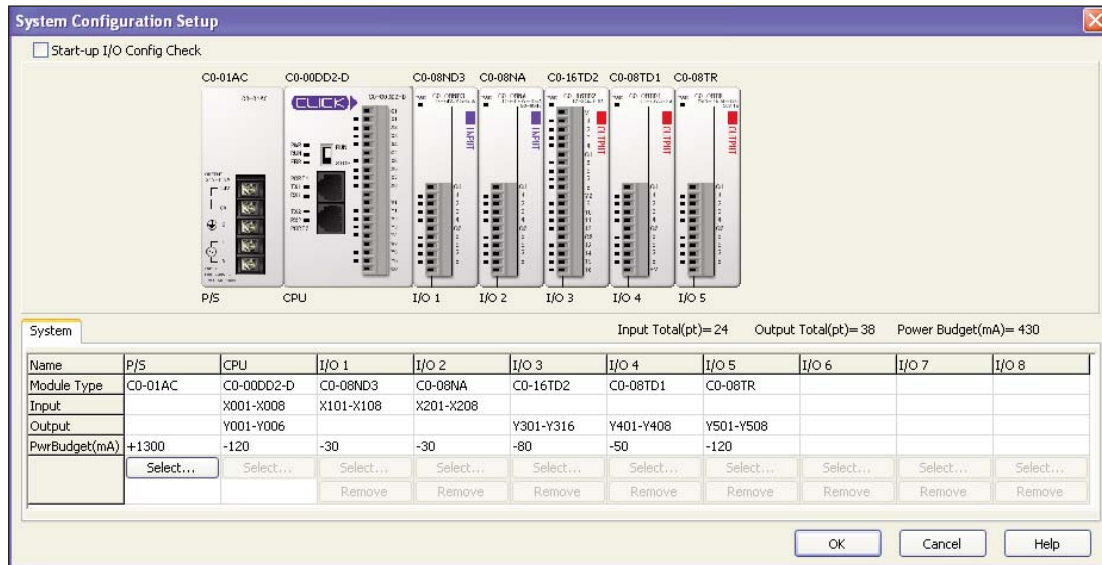
Entry required or invalid entry (red heart)    Valid entry (green heart)

- 1 Result:** Assign a **Memory Address** where the **Result** will be stored. The **Result** value will be adjusted to the data type of the **Memory Address**. Click the **Browse Button** (...) to open **Address Picker**.
- 2 Type:** Selecting **Decimal** or **Hex** determines the mathematical operations that are available on the **Math** instruction dialog. Most of the operators are unique to either **Decimal** or **Hex** math.  
**Note:** Changing this selection after beginning to develop the **Formula** will **erase** the **Formula**.
- 3 One Shot:** Select **One Shot** to solve the formula only once after each **OFF-to-ON** transition of the enabling rung.
- 4 Error Flags:** These **System Bits** turn **ON** when the specified condition has occurred.
- 5 Address or Nickname:** **Data Registers** can be identified in the **Formula** by the **Memory Address** or the **Nickname**.

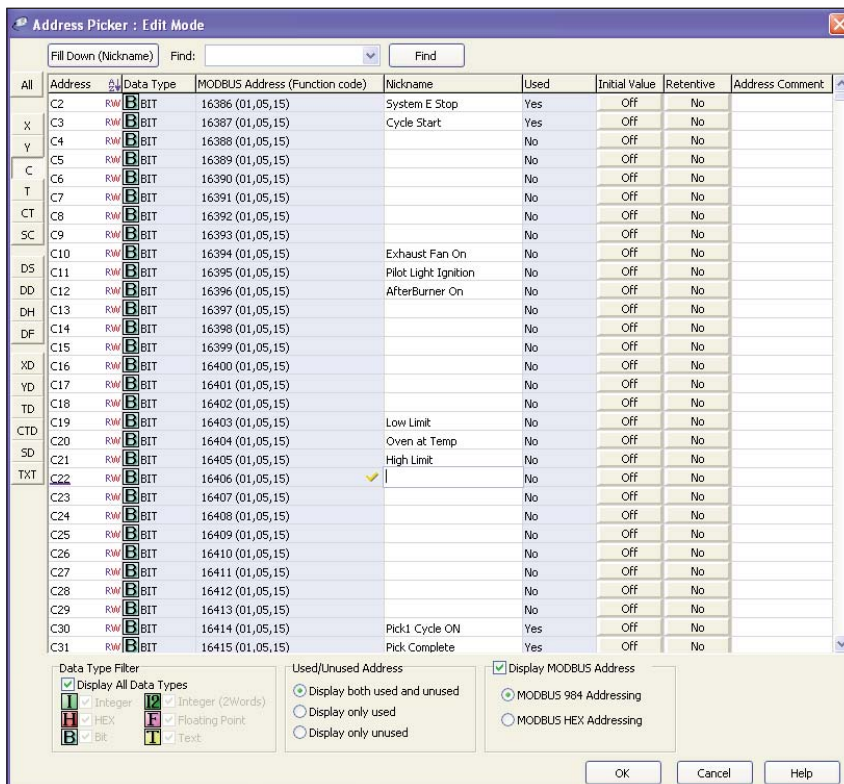
# CLICK to configure the hardware

## System Configuration

The CLICK software includes a configuration tool that helps you configure a CLICK PLC quickly and easily. Select the CPU, power supply, and modules you need - the software calculates your I/O count, address list, and Power Budget automatically.



# CLICK to configure the PLC tags



## Address Picker

- Assign nicknames (use autofill for sequential names)
- Create address comments
- Powerful search, sort, filter, and categorize options
- Modbus addresses (HEX or 984 style)
- Establish initial values for specific memory locations
- Make memory locations retentive (during power outages)

# CLICK has practical accessories



The ZIPLink wiring system eliminates the normally tedious process of wiring PLC I/O to terminal blocks. Simply plug one end of a ZIPLink pre-wired terminal block cable into your I/O module and the other end into a ZIPLink connector module. It's that easy. ZIPLinks use half the space, at a fraction of the total cost of terminal blocks.

One ZIPLink connector module works with all CLICK I/O modules.

Three cable lengths are available : 0.5m (1.6ft.), 1.0m (3.3ft.), and 2.0m (6.6ft.).

Module



ZIPLink



Cable



<b>Step 1</b>	Locate the CLICK CPU module or I/O module part number.
<b>Step 2</b>	Locate compatible connector module type.
<b>Step 3</b>	Select the cable length by replacing the # symbol with: Blank = 0.5m, -1 = 1.0m, -2 = 2.0m

ZipLink Wiring System Compatibility Matrix for CLICK PLCs						
	Step 1: Select a Module		Step 2: Select a ZIPLink Module	Step 3: Select a Cable and Specify Length		
	Part Number	Terminals				
CPU Module	CO-00DD1-D	20	ZL-RTB20 (Feedthrough Module)	ZL-C0-CBL20#		
	CO-00DD2-D					
	CO-00DR-D					
	CO-00AR-D					
I/O Module	CO-16ND3	11			ZL-RTB20 (Feedthrough Module)	ZL-C0-CBL11#
	CO-16TD1					
	CO-16TD2					
	CO-04TRS*					
	CO-08ND3					
	CO-08NA					
	CO-08TD1					
	CO-08TD2					
	CO-08TR					
CO-08TA						

*\*Note: The CO-04TRS relay output module is derated to 2A per point maximum when used with the ZipLink wiring system*

## CLICK Programming Cables



EA-MG-PGM-CBL  
\$39



D2-DSCBL  
\$10