



# The Controller

## April



# LOGIC

Technologies, Inc.

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"Advanced technological solutions at an affordable cost."

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**Ideas for articles of interest?**

Please submit articles or requests to:  
lauren.s@logictechnologies.com

## THE ECON CLIENT SYSTEM

BY LAUREN SCHUSTER

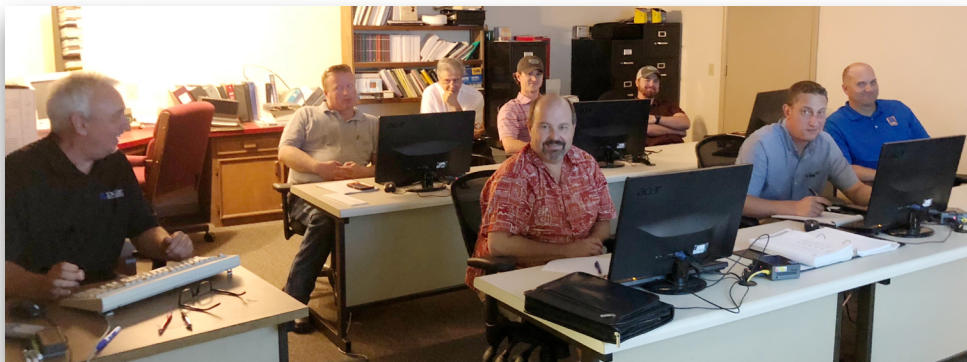
The ECON client system or 'Engineering Console' was originally developed to serve as a Microsoft Windows-based client for the LOGIC Technologies, Inc. Signal Server Technology System. Over time, through in-house innovations and customer requested enhancements, the application and associated tools have evolved into a full-blown graphic-based statistical analysis development suite for production systems.

Real-time statistical information related to a production system is basically meaningless to an operator until it is properly formatted. The ECON client system

provides all tools required to design, develop, implement, and utilize comprehensive operator interface screens. Users with the proper security clearance can quickly develop interface screens using the user-friendly graphic tools provided. Screens can be developed using a variety of sources as a graphic base.



## Training Information and Schedule



### Training Enrollment

LOGIC Technologies, Inc. conducts in-depth training sessions at our facility on a monthly basis. Two free sessions are included with each system purchased. Additional training sessions are available for a nominal fee. Operator training sessions are \$850 per person and advanced training sessions are \$950 per person. We provide lunch for each class day; however, all other travel expenses are your responsibility.

### Operator-Level Sessions

This class session provides overview coverage of the use of our system to maintain the daily operations of a refrigerated facility. The class is conducted by one of our senior engineers who have many years of experience designing refrigeration control systems. In effect, the classes are taught in layman's terms by someone who fully understands the issues faced by refrigeration operators.

April 14-16  
June 9-11  
July 14-16  
September 8-10  
October 13-15  
December 8-10

### Advanced SST Sessions

This class session provides in-depth coverage of the screen and report development tools. Also, briefly covering the script language used to develop control algorithms. These classes are conducted by senior members of our engineering staff. Prior technical and basic programming knowledge is a pre-requisite for this course.

May 12-14  
August 11-13  
November 10-12

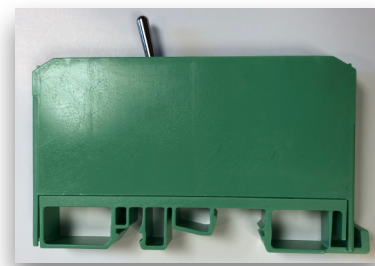
\*Seating is limited, make your reservations early by contacting:  
Kim Smith  
(770) 389-4964 ext. 6611  
ksmith@logictechnologies.com

- Standard Bitmap Images
- Digital Photographs
- AVI or MPG Video Stream
- Live Network Camera Video Stream

Tools are provided to allow a user to edit and/or create bitmap base images. Labels and their associated signal resources are selected and placed on the graphic base using simple drag and drop methods. The ECON client suite includes a built-in WEB server. The system automatically creates HTML/PNG representations of each graphic screen developed. Upon demand, the WEB server will update the representations with current system statistics and deliver them to the Internet or the customers intranet.

## HOA/MOA SWITCHES

BY LAUREN SCHUSTER



Features:

- 3 Position switch that operates in automatic mode or may be manually switched to force output power on or off.
- Replaceable fuse.
- Red LED for blown fuse indication.
- Phoenix Contact terminals and housing.
- Mounts on standard 35mm DIN rail.
- Saves labor and hardware cost of mounting front panel Hand-Off-Auto switch.
- Saves panel space by providing HOA operation and a field wire termination point.

## Terminal Block Ratings

Wire Solid	0.2–4 mm
Wire Stranded	0.2–2.5 mm
AWG	24–12
Nominal Current	28 A
Rated Voltage	250 V
Rated Surge Voltage	4 kV
Pitch	5/5.08 mm
Hole Diameter	1.3 mm
Strip Length	8 mm
Torque	0.5–0.6 Nm
Insulation	PA

## SENSOR CALIBRATION

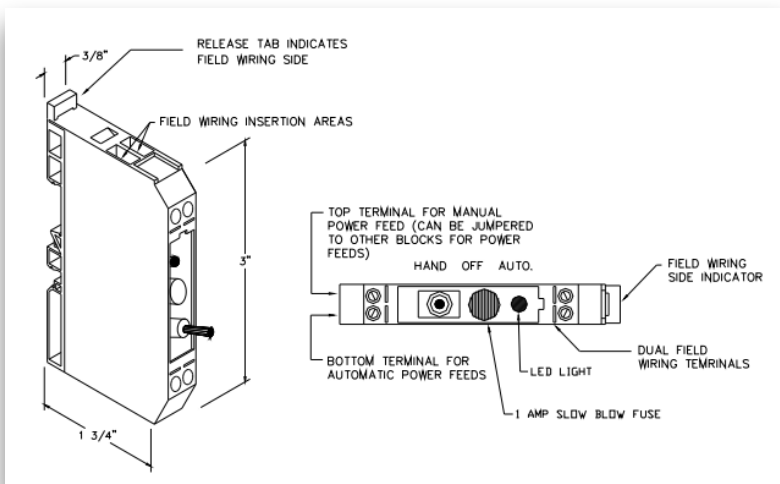
BY LAUREN SCHUSTER

To perform two-point calibration on an analog sensor such as temperature or pressure, the following procedure must be followed:

1 – Select the desired analog item from the listing screen and select “Calibrate”. This will open the calibration screen and allow you to enter the current conditions for the sensor.



3 – After the low and mid readings are entered, you must select the “Set Formula” button. This will again ask for the current measured reading for the sensor to calculate the zero intercept value



## HOA/MOA Ratings

Max Current	2 A
Rated Voltage	250 V
Fuse	0.1–2 A
UL Rated	



2 – Read two current values for the analog item with a known measuring instrument. After each read, select either the “Low” or “Mid” buttons on the screen to enter the values selected. Enter the data in correct order as read. (ie. if the first read is higher than the second, place the first read in the “Mid” selection). With each entry, the system will associate the new measured engineering value you enter, with the RAW rack value being returned by the sensor. The “High” is not used for general calibrations.



for the new formula. The two previous values are used to create a new slope formula for the required sensor. This will display a new formula on the screen. The internal procedure used when selecting “Set Formula” slope multiplier, is determined by calculating the difference between the two RAW values saved and dividing into the difference of the two engineering values entered. After the new multiplier is created, the reading obtained is adjusted to the correct value by calculating the zero intercept.

# STATISTICAL DATA COLLECTION

BY LAUREN SCHUSTER

Why do we need a statistical data system? Have you ever stopped to think about the amount of valuable information that's typically lost during plant floor operations? For instance, think about the daily processes associated with a perishable products distribution center. Products are stored in specific environmental conditions. Orders are processed through various automated procedures. Orders flow through the system to a shipping system. Loaders proceed to place the sorted orders on waiting delivery trucks. It's a relatively simple process that takes place everyday, right? What were the actual environmental conditions of the products stored? How long was the product stored? How long did it take to pick each

order? Are certain orders processed more efficiently than others? Why? How repetitive are the orders being processed? Is the shipping system being utilized efficiently? How much time is spent reconciling shipping containers with non-readable barcode labels? Is the overall use of equipment and manpower as efficient as it should be? Now, what if you could actually collect this information and make it available to managers from every department? What if the data was formatted in a manner that would allow these managers to quickly develop their own reports and distribute the information using any computer that provides Internet access? What if a company with years of experience in developing control

systems to support company specific processes also had the expertise to design, develop, and implement this system? Not only can we provide an impressive product at a competitive price, you can determine how much of the system you want developed by us.

We are prepared to offer design services through complete turnkey implementation of these systems. Systems of this nature should be purchased from a vendor who will be there to support you in the future. LOGIC Technologies, Inc. has been developing plant-floor automation systems for a variety of industries on an international scale since 1980. Whether you need us now or in the future, we'll be here for you.



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Address Correction Requested

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*If you wish to receive this newsletter via email in the future, send an email message to [lauren.s@logictechnologies.com](mailto:lauren.s@logictechnologies.com) with the subject set to "EMAIL request".*