

# Automation Service News

The Newsletter of Delta Automation Inc.

**Tech Tip!**

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I/O Hold-up  
Time

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or  
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**Important Info**

See the winner of the DVD Player  
Offered at  
The Richmond Industrial Show

**Delta Automation Contact Info**

Contact names, numbers and e-mail  
addresses

# Tech Tip!

## Redundancy System I/O Hold-up Time

The default setting for the remote I/O hold up time (HUT) on a Modicon PLC system, is 300 milliseconds. This determines the amount of time that the discrete outputs associated with a particular drop will remain in the “on” state once communication with the processor is lost. This loss can be due to a power loss at the drop or a cabling problem for example. With the default setting of 300, the discrete outputs will de-energize after 300 milliseconds (0.3 seconds). Analog modules behave differently. The analog modules options are: go to zero, hold last value, or go to a preset value. These options are all chosen in the traffic cop (I/O map) area of the configuration screen. This default time setting is usually adequate for most stand alone systems.

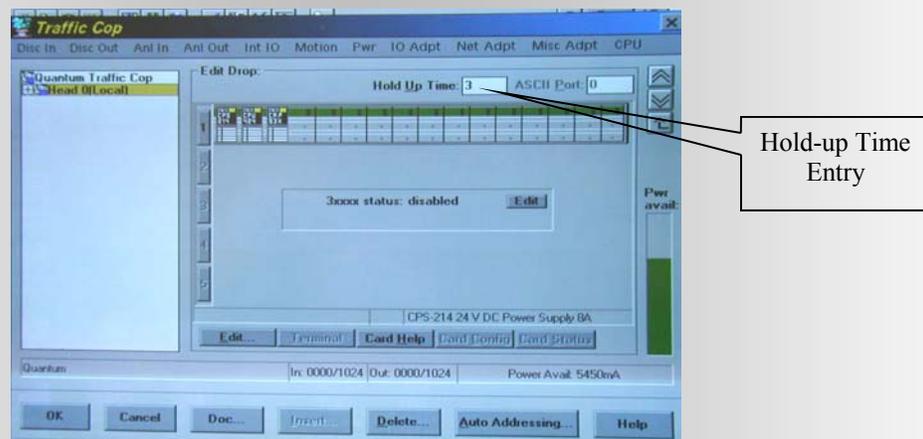
The purpose of a redundant PLC system is to allow the application or process to continue to operate in the event of a PLC processor type failure. This is accomplished by “moving” the I/O points from the control of one processor to another if a failure should occur. This switch-over takes a finite amount of time, during which the I/O is **not** communicating to the processor. Typically, on Modicon systems it can take several scans of the processor to complete the switch-over. On large applications, at .3 to 1.4 milliseconds per K of logic, this can be longer than the default setting of 300 milliseconds. If the switch-over time takes longer than the hold-up time, the I/O will have lost communications with the “failed” processor and began its’ timing sequence and will ultimately drop out or de-energize. This would cause an application or process to stop.

In these types of systems Delta Automation, Inc. suggests that the time be set to 1500 milliseconds (1.5 seconds). This setting is accessed on the traffic cop or I/O map screen associated with each drop. There are several items to be very careful of when changing this value. First, the value that you enter is already in hundreds of milliseconds, for example 300 milliseconds is entered as just “3”, and 1500 milliseconds is just “15”. Secondly, the PLC software will allow you to enter an enormous value.

**This can be extremely dangerous as the I/O will remain on and active even with the processor turned off!  
With NO CONTROL!**

Delta Automation, Inc. advises that the time never be set greater than 15 (1500 milliseconds).

Also, in some versions of the PLC programming software, you cannot just highlight the “3” and replace it with a “15”. If you attempt to do this you will get an error message. A work-around is to enter a “5” after the “3”, then type over the “3” with a “1” to get a “15”.

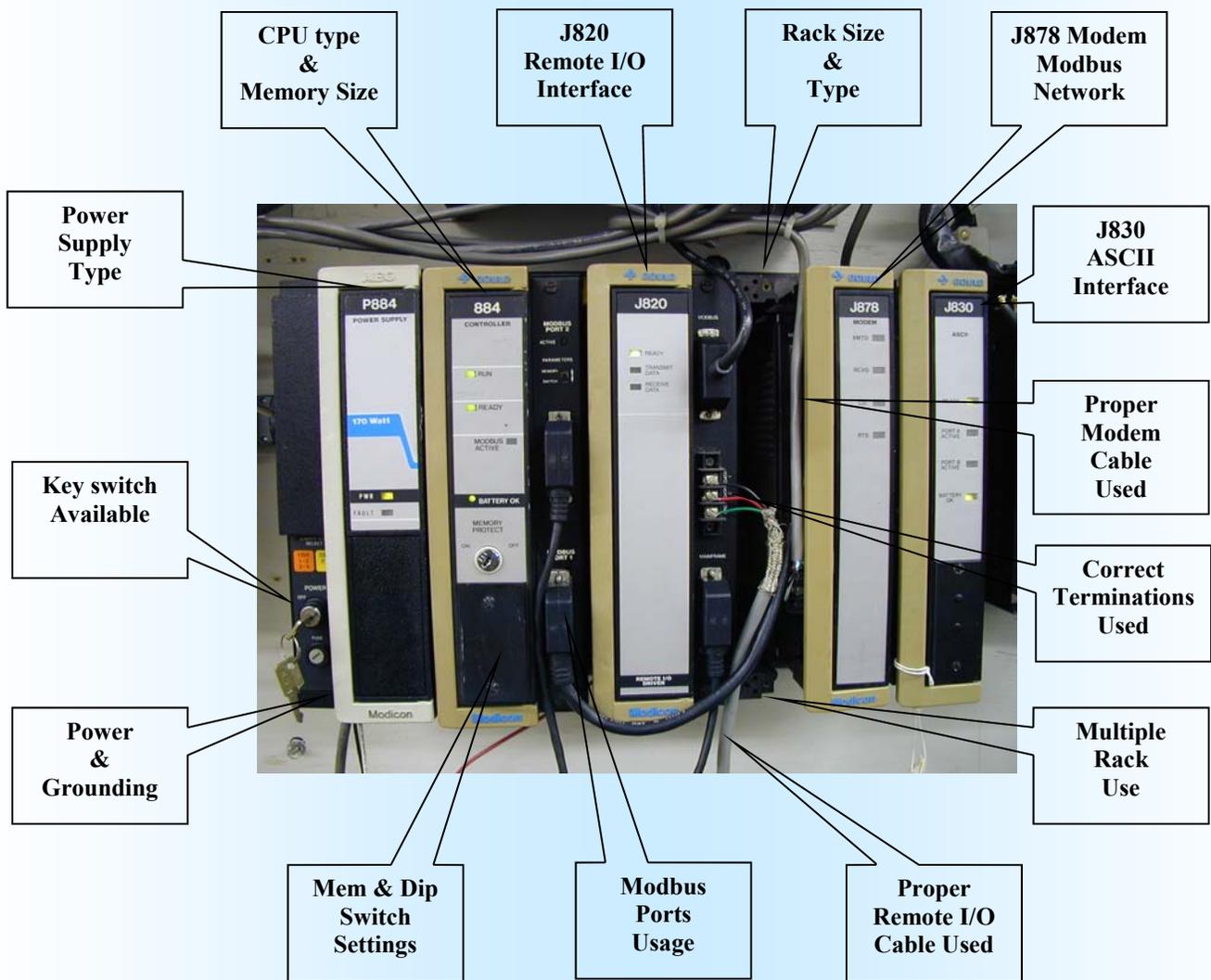


# Items to be Concerned with when Upgrading 884 Systems

The items pointed out here are just some of the important items to consider when contemplating an upgrade for an 884 system. Not all systems have this many options; however you must consider them if present. More importantly, there are not always direct replacements for them.

When this is the case, there are important hardware and software decisions to be made.

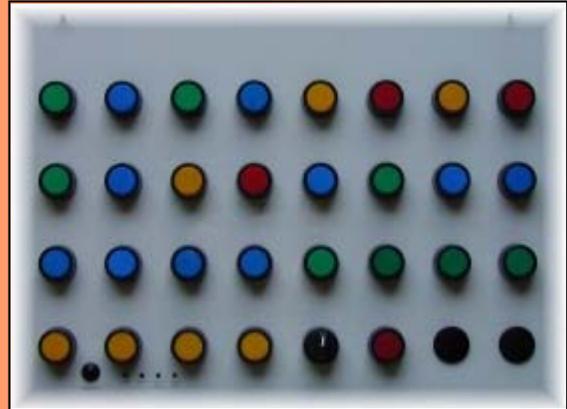
These are the types of issues that make Delta Automation Inc. a leader in performing system upgrades (PIP's). These same challenges and issues are described and discussed in our upgrade seminars, which are available to distributors.



Please consider Delta Automation, Inc. when providing an upgrade solution.

## *Complete Service for Push Button Panels*

Many customers have been plagued by the inability of many repair organizations to service and competently repair their Modicon Push Button Panels. This has been partially due to the lack of replacement parts and partially due to the lack of desire with some repair departments, wanting to assist their customers needs. Delta Automation Inc. has a huge supply of repair parts on hand and as our record clearly shows, we are willing to go to great lengths to satisfy all of our customers requirements. Don't be forced into upgrading or replacing your panel because you are told that it is unrepairable do to a lack of available parts! **Delta Automation Inc. has the parts, expertise, and desire to repair them!**



## **Emergency Drive Repair Saves Production**



Recently, an Emergency call was received at Delta Automation, Inc. at 4:00 A.M. on a Sunday morning. The call for help came in via our Emergency **Extension 55**. Several events immediately went into action. First, the on-call order entry person returned the customer's call for assistance to determine if parts or service was required. The customer had lost a 400 horsepower drive to a failure, and was losing production in his mining application. The request was for a service engineer to be on-site as soon as possible to assist in restarting production. Then, the on-call salesperson contacted the Delta Automation, Inc. Field Service Engineer responsible for drives service and he was dispatched to the site right away. He was on-site within hours and was servicing the drive and its' systems components. The faults were located and the system was returned to service.

Once again, Delta Automation, Inc. was able to reliably assist a customer at a time when professional, competent action was required.

# Important Info



The winner of the grand prize, a DVD player given away at the Richmond Industrial Show In April, was Sheri Johns of Applied Industrial Technologies, in Richmond. She is shown here with two of her colleagues, John Bannister and Scott Guy.

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### For after hours

### Emergency Service or Parts

Call our main number 888-723-3582

Extension 55

Leave a message and someone will respond within fifteen minutes to answer your call.

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

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