

Daylight Savings Upgrade

Affects: Etherlink/2, ASIC/2-7540,-8540, SINC/3-3000

Date: 8 May 2006



Note No. TE-033

Starting in the year 2007 the dates for the beginning and end of daylight savings in the United States have changed: Spring Forward on the 2nd Sunday in March 2:00 AM and Fall Back on the First Sunday in November 2:00 AM.

There are three methods to meet to the new requirements:

- Use an Etherlink/2 with Daylight Savings as the master timekeeper for the ASI network.
- Use a SINC/3 with firmware upgraded to FW300b3.0 as the master timekeeper for the ASI network.
- Use an ASIC/2-7540 or ASIC/2-8540 (FW7/854a1.5) as the master time keeper for the network.

Daylight Savings Firmware Upgrade

Starting in the year 2007 the dates for the beginning and end of daylight savings in the United States have changed: Spring Forward on the 2nd Sunday March 2:00 AM and Fall Back on the First Sunday November 2:00 AM.

We have updated the following products to allow for these new dates: ASIC/2-7540 FW754a1.5; ASIC/2-8540 FW854a15; and SINC/3-3000 FW300b3.0.

We have also added the ability to select custom start and end dates. For instance, in the European Union daylight savings starts the Last Sunday March 2:00 AM and ends the Last Sunday October 2:00 AM In the Southern Hemisphere the seasons are reversed so, for example, daylight savings can start the Last Sunday October 2:00 AM and can end the Last Sunday March 2:00 AM

To accommodate these changes we have added new attributes to the Clock Object. Consequently it is necessary to save the configuration before, and reload the configuration after upgrading the controller firmware.

Default Date

If DLS Date Enable is No, then the controller functions as it always has, using the new start and end dates after 2006. If the controller is in Daylight Savings when you set it up, you must set both Daylight Savings Enable and Daylight Savings Status to Yes.



Note: Make sure that DLS Date Enable is "No" after upgrading the firmware to FW7/854a1.5 or later, unless you plan to use the Custom Date feature.

Custom Date

If DLS Date Enable is Yes, then the controller uses the configured start and end dates to determine when the controller is in Daylight Savings. The user indicates Start/End Week 1st, 2nd, 3rd, 4th, or Last; the Day of the Week, Monday, ..., Sunday; a Month 1= January, through 12 = December; and an Adjustment Time of 1 or 2 hours.



The daylight savings adjustment is always done at 2:00 AM (02:00 hrs) on the indicated day. The updated time will be broadcast on the system bus at the next regular broadcast interval.

Etherlink/2 Upgrade

Network Time Configuration

A new feature of the EtherLink/2 is the use of Simple Network Time Protocol (SNTP) to obtain the current time from the internet, and broadcast the ASIC/1 and ASIC/2 times periodically on the network. It also can correct for Time Zone and Daylight Savings.

SNTP time servers are ideally stand alone systems used by computers to receive time from a time source. The SNTP server then sets and synchronizes the time on a computer IT system or enterprise. Time can be passed from one time source to another, typically starting from a reference clock (Stratum 0) connected to a Stratum 1 SNTP server. A time servers synchronized to a Stratum 1 server will be Stratum 2. The further away a network is from a primary source, the greater the chance of signal degradations due to variations in communications lines, and so forth.

The Primary and Secondary SNTP Server IP are obtained from the internet. For example from the NIST Internet Time Service. http://tf.nist.gov/service/its.htm .

The Time Zone refers to off set from Greenwich Mean Time:

Eastern Standard Time is GMT-5:00

Pacific Standard Time is GMT-8:00

The EtherLink/2 can synchronize an ASI Network at hourly intervals. The ASIC/1 Synchronize Address is typically the global address 23125, 0x5A55. The ASIC/2 Synchronize Address is typically the global address 23152, 0x5A70.

The EtherLink/2 automatically corrects for Daylight Savings Time.

The DST Adjustment is usually +01:00 HH:MM.



Technical support.

Please contact ASI Controls to obtain the latest Flash upgrade files, or updated EPROM Chips. If you have any further questions please contact: ASI Controls Technical Support support@asicontrols.com, or call 925-866-8808