

**ENGINEERING PUBLICATION**

MOTION CONTROL DIVISION

**PRODUCT: Y TERM**

**SUBJECT: UPGRADE TO Y TERM**

**CATEGORY: UPGRADE NOTE**

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**DISTRIBUTION: ALL**

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**Improvements to Yterm since the LEGEND-MC release  
(Aug 2001 – Aug 2002)  
Yterm v6.0**

**Release Date: September 3, 2002.  
What's new for version 6.0**

**Communication Driver:**

Version 6.0 has a completely new communication driver. The previous driver was a third-party add-in, and the new one is custom made by Yaskawa. It increases the reliability of communications over the serial port by incorporating robust error detection and retry methods. Not only has the serial communications been improved, Ethernet communications from YTerm to a Legend-MC controller is now possible. There are very few differences in functionality when using Yterm over Ethernet compared to a serial connection. The only difference is the ability to upgrade the controller firmware. (Only possible over serial port.) YTerm is a valuable monitoring tool, which can assist in debugging machines great distances away. The new driver will be available as an OCX control for use with customer applications written to communicate with Yaskawa SMC controllers.

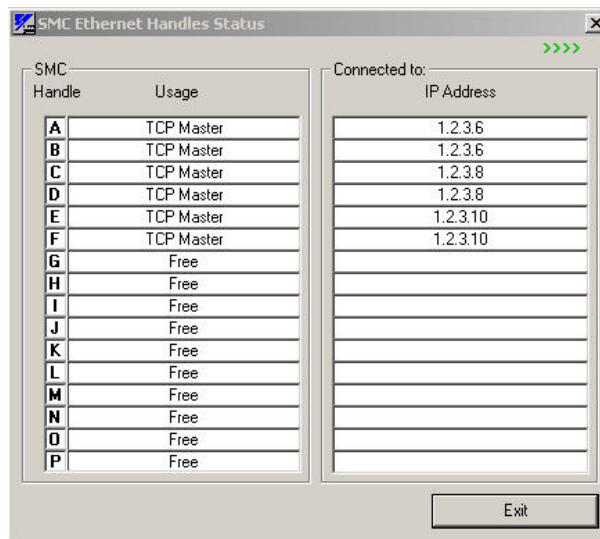
Another new feature is the ability to handle two-way communication traffic. This occurs when two devices (the PC and the SMC) decide to transmit a message at the same time. If YTerm is polling for information to update a monitoring screen, and the SMC program has debug messages in it, YTerm would get confused in the past due the unexpected characters in the echo buffer. The controller has a special command "CW," which sets the controller to turn on the eighth bit of each ASCII byte transmitted as an unsolicited message. Any character transmitted as part of an answer to a request from an external device (the PC) is transmitted normally. The new driver looks for this difference and makes two receive buffers.

### Firmware Upgrade:

The Legend-MC is firmware upgradeable via the serial port. YTerm provides a simple function to upgrade the firmware over the serial port by selecting a menu item after right clicking in the terminal window.

### Ethernet Status Window:

A new monitoring window has been provided to take advantage of the information set in the controller when performing Ethernet operations. Most of the information available on this window is available via the TH command.



**Communication Log:**

If the user double clicks on the status bar at the bottom of the Yterm screen, a communication log will appear, with timestamps of each communication event.

