

Appendix C: What's New in Version 3

Users familiar with the features in previous versions of the HCS/SS software don't need to spend a lot of time rereading the entire manual. The following list of new features covers the highlights of what is new in this version. Details for each of the new features may be found elsewhere in this manual (generally in Chapters 6 and 7). Also be sure to review the new HOST features in Chapter 4 and the new modem support in Chapter 5.

XPRESS programs written for Version 2 of the software may be used as is with Version 3 with one exception. Defining the hardware using the CONFIG command has been changed to be more flexible. See the description of CONFIG in Chapter 7 for more details. No other aspect of the existing language has been changed.

- 4 New HCS/PC interface
 - Query and override any system input, output, or parameter from the PC
- 4 Revamped HOST program
 - Use a mouse (or the keyboard) to resize, move, open, and close all HOST windows
 - Netbits and analog outputs are now also displayed on the HOST screen
 - Send messages from XPRESS to a HOST window for debugging
 - Set or clear system inputs, outputs, or X-10 modules and try out speech strings from HOST
- 4 Modem support
 - Call your HCS/SS from a remote location and check its status, load a new XPRESS program, or retrieve logged data
- 4 Caller ID
 - Access Caller ID data from XPRESS to announce or log who's calling
- 4 Support for more digital I/O expansion boards
- 4 Read and write eight netbits at a time with the Netbyte command
- 4 Send commands to network modules directly from HOST and XPRESS
- 4 Detect loss of AC power from within XPRESS
- 4 Send commands to receive-only network modules from XPRESS without having to define the modules at the top of your XPRESS program
- 4 Check the amount of data currently logged from HOST and XPRESS

- 4 LEDs on the HCS-DTMF board and the SpectraSense are now assigned output numbers so they can be controlled from XPRESS
- 4 MCIR-Link digital outputs are now assigned netbit numbers so they can be controlled from XPRESS
- 4 The compiler version number is embedded in the compiled binary code and is compared against the firmware version on a program load to ensure a match

Except for the modem features, no additional hardware is required.

Upgrade Instructions

Upgrading a previous-version HCS/SS is as easy as replacing the EPROM on the Supervisory Controller and switching to the new COMPILE and HOST programs on the PC. Recompile your XPRESS program, reload it into the SC using HOST, and your system is back on-line.

The following steps should be taken to install the Version 3 upgrade:

- ⌘ Turn off power to the Supervisory Controller. Changing EPROMs with power still on may damage the board and the EPROM.
- ⌘ Carefully remove the previous-version EPROM from socket U9 on the SC (or socket U10 on an IND180 or socket U13 on a SpectraSense). It is often easiest to insert a small screwdriver on one end between the socket and the chip (*not* between the socket and the board!) and gently rock the chip out of the socket.
- ⌘ Install the new EPROM in the same socket. Be sure pin 1 of the EPROM is closest to the edge of the board. The chip should be oriented in the same way as the chip you just removed. Take special care not to bend any pins on the chip while inserting it into the socket. (On the SpectraSense, make absolutely sure the EPROM is bottom justified in the socket. In other words, there should be four empty pins in the socket at the same end as the notch. When in doubt, the EPROM should be oriented in its socket in exactly the same way as the RAM chip in socket U15.)
- ⌘ Reapply power to the Supervisory Controller board. Your old XPRESS program is automatically cleared, so the system shouldn't be doing much right now.
- ⌘ Check to be sure you are connecting your PC to the SC with a serial cable that passes all the signals. That is, if your cable only passes pins 2, 3, and 7, you must modify it to add at least pins 4, 5, 6, and 20. If that is a problem, connect pins 4 and 5 and

pins 6 and 20 together at the PC end instead. The new HOST program is much more picky about the state of the serial port handshaking lines on the PC side.

- Â Locate the new distribution disk. Replace your old COMPILE and HOST programs with the new versions found on the disk. The old PC software may *not* be used with the new SC EPROM.
- Â Change the SC definition at the top of your XPRESS program to reflect the processor board you're using. If you currently set the SC type in the CONFIG statement to SC1, change it to HCS180. If you have some other hardware, refer to the CONFIG command in Chapter 7 for more details. No other changes should be necessary. Recompile your program with the new COMPILE.
- Â Run the new HOST. Press "F" to select the file menu and "L" to load your recompiled XPRESS program into the SC. The system should start running the same way it did before the upgrade. If you get timeout errors, recheck your serial connections as described a few steps back.
- Â Start experimenting with the new features and have some fun.

