TECHNICAL BULLETIN

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Installation Instructions: U.S. Robotics 56K Modem for Use With REFLECS and HALCOMM Control Products

Overview

Due to the previously used model of external modem going obsolete, CPC has changed vendors for external modems used with REFLECS and HALCOMM products. For remote communications with REFLECS sites, CPC now specs a U.S. Robotics external 56k modem (P/N 370-9600). The modem is identical in most respects to the modems CPC used to supply, but require a change to the default modem string in REFLECS and HALCOMM to allow them to communicate properly.



COMPUTER PROCESS CONTROLS

Hardware Setup

REFLECS

A modem may be used to connect the REFLECS to an outside phone line via the three-wire COM C network cable (P/ N 525-1015 or 525-2015). *Figure 1* shows how to properly connect the modem.

If a CPC bus amplifier is used in the network, the 535-1015 or 525-2015 cable shown in *Figure 1* is not used (refer to the RS232 Bus Amplifier section of the CPC Peripherals Manual, *P/N 026-1701*).



Figure 1 - Modem to REFLECS wiring

HALCOMM

If the modem is to be plugged into a HALCOMM unit for use in dial-outs to CPC monitoring, use a DB25 to DB9 serial cable to connect the modem to the HALCOMM's "MODEM" port.

Modem Dip Switch Settings

The rear side of the modem has a set of eight dip switches that control some aspects of modem communication. By default, most of these switches are set to their correct positions, but to communicate properly with REFLECS and CPC remote communications:

- Set dip switch 4 to the DOWN position, and
- Set dip switch 5 to the UP position.

Double-check the default positions of all switches and make sure they are set as they appear in *Figure 2*.



Figure 2 - Modem Dip Switches

Changing the Modem Initialization String

The modem string recommended by CPC for use with the U.S. Robotics modem is:

AT&FE0S0=1&C1&D2&B1&W

This string is different from the string used with our previous modem vendors, and it is not a selectable option in the REFLECS or HALCOMM system software. The modem string will have to be manually entered.

Setting the Modem Init String for a REFLECS Site with no HALCOMM Present

- 1. Locate the REFLECS unit that is set up as unit #1. This is the unit the string must be changed in.
- 2. Log on to controller #1 as a Level 4 user.
- 3. Press 7 to access the Configuration Menu.
- 4. Select the Remote Communication menu option (press 4 for most REFLECS software versions; on some, it is option 5). The Communications Setup screen should be visible.
- 5. Press the DOWN ARROW key to access the Modem Initialization screen.
- 6. Press the RIGHT ARROW key until the cursor is highlighting the current modem string.
- 7. Press CLEAR to erase the string. Type the new string into this field EXACTLY as shown above. Note that since there are no '&' and '=' characters on the REFLECS keypad, '&' may be entered by typing a '%' (BLUE key followed by the MINUS key) and '=' may be entered by typing a '(' (RED key followed by the CLR key).
- 8. Press the UP ARROW key to enter and save the modem initialization string. Press the UP ARROW again to return to the Communications Setup screen.
- 9. The string you entered should be visible in the Initialization String field. Double-check that this string is entered correctly. If not, repeat steps 4-6. If entered correctly, go to step 10.
- 10. Press the RIGHT ARROW key several times to highlight the Send Now field. Press Y to send the modem initialization string to the modem. After a few seconds, an "OK" message should appear below the modem string in the "Response" field. If this field says "No Response," attempt it again. If the second attempt doesn't work, check all wiring and connections, and reverify the string.

Setting the Modem Init String for a REFLECS Site with HALCOMM Present

If a HALCOMM is present at this site, the modem init string must be changed by ERS Monitoring. **CALL ERS MONITORING at 770-425-7430** and tell them that a U.S. Robotics 56k modem has been installed, and that the modem initialization string must be changed. ERS Monitoring will dial in, change the string, and verify that the site is set up and communicating correctly.