
**Guide to Operating a CETAC
Autosampler Using HyperTerminal**

All CETAC autosamplers can be controlled using a serial communications protocol. This guide explains how to operate any one of the CETAC autosamplers using the Windows HyperTerminal program.

Steps for operating the autosampler with HyperTerminal

1. Using a serial cable, connect the CETAC autosampler with the computer. Plug each end of the serial cable into the COM 1 port of the autosampler and the computer, respectively.
2. Turn on the computer (must have Windows operating system) and select the Accessories folder. Select the HyperTerminal folder and then the HyperTerminal program.
3. A window will appear as in Figure 1-1. Enter **COM 1** in the name box. Press the OK button.

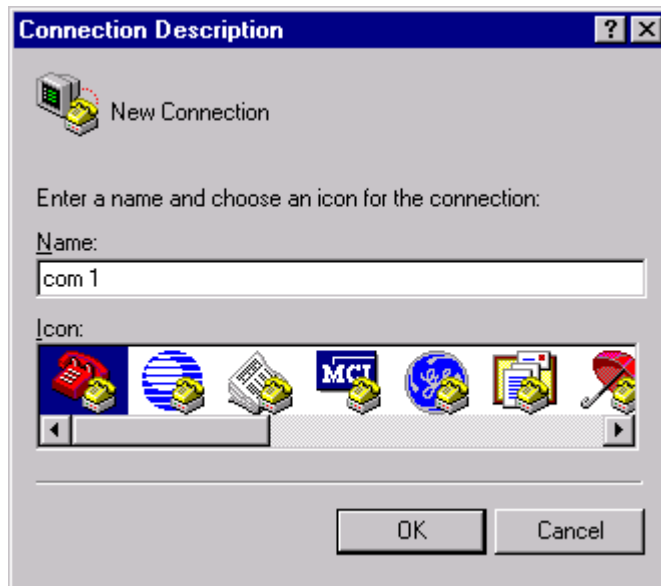


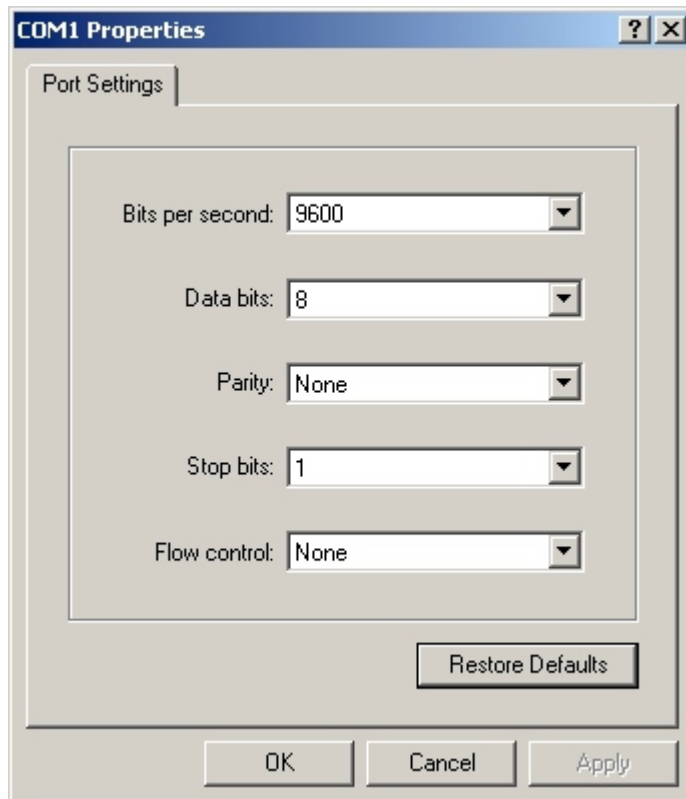
Figure 1-1

4. In the Connect To window (Figure 1-2), in the field Connect using, select COM1. Press the OK button.



Figure 1-2

5. The COM1 Properties window will appear (Figure 1-3). Set the fields as follows: Bits per second to 9600 and Flow control to None. Then press the OK button.



6. The HyperTerminal window will then open (Figure 1-4).

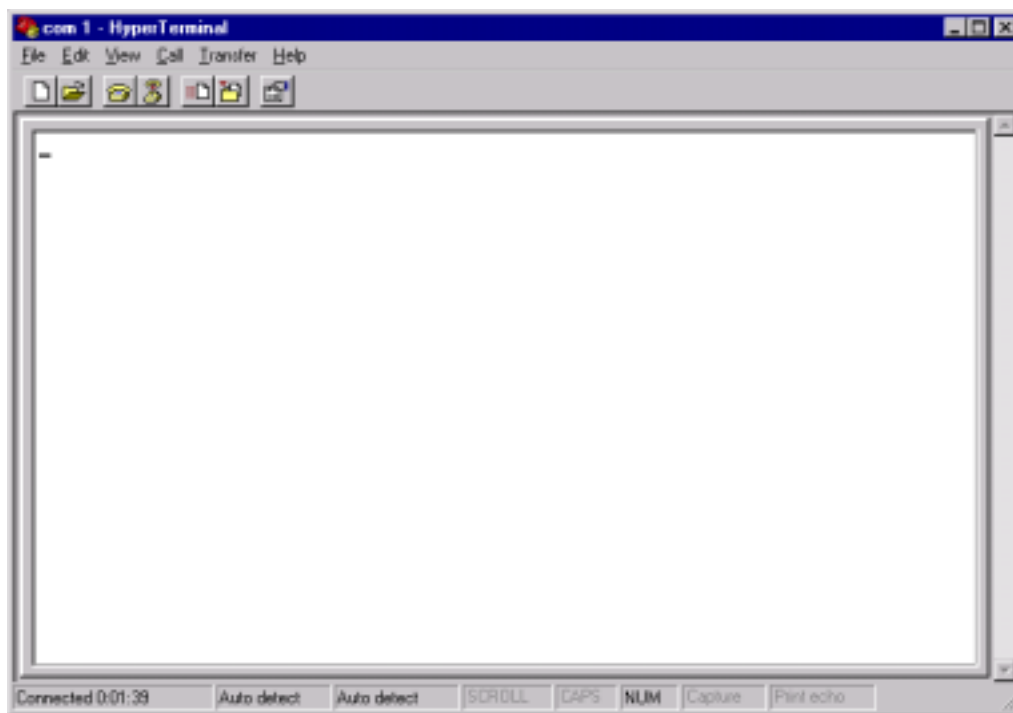


Figure 1-4

7. Select File. Then select Properties.
8. When Properties window appears (Figure 1-5), select the Settings tab.
9. Press the ASCII Setup... button. A window for ASCII Setup will appear (Figure 1-6). You will need to check Echo typed characters locally and Append line feeds to incoming line ends as shown in Figure 1-6. Press the OK button.

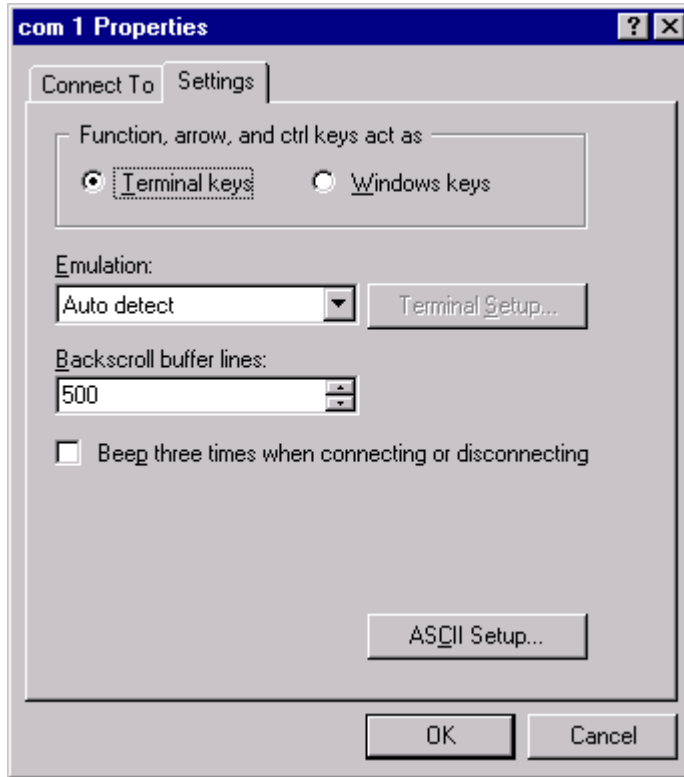


Figure 1-5

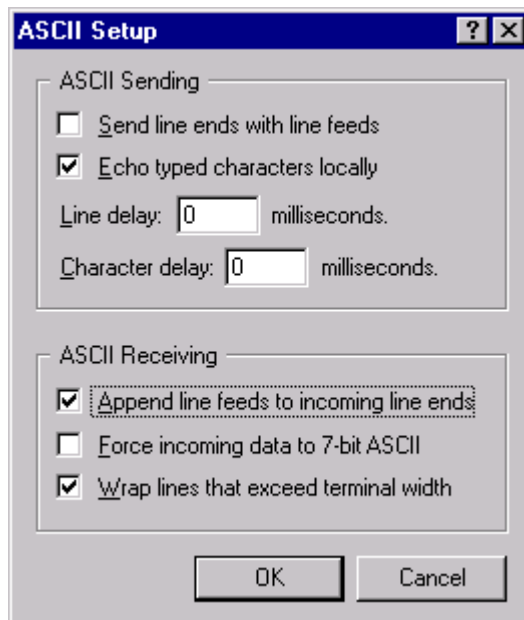


Figure 1-6

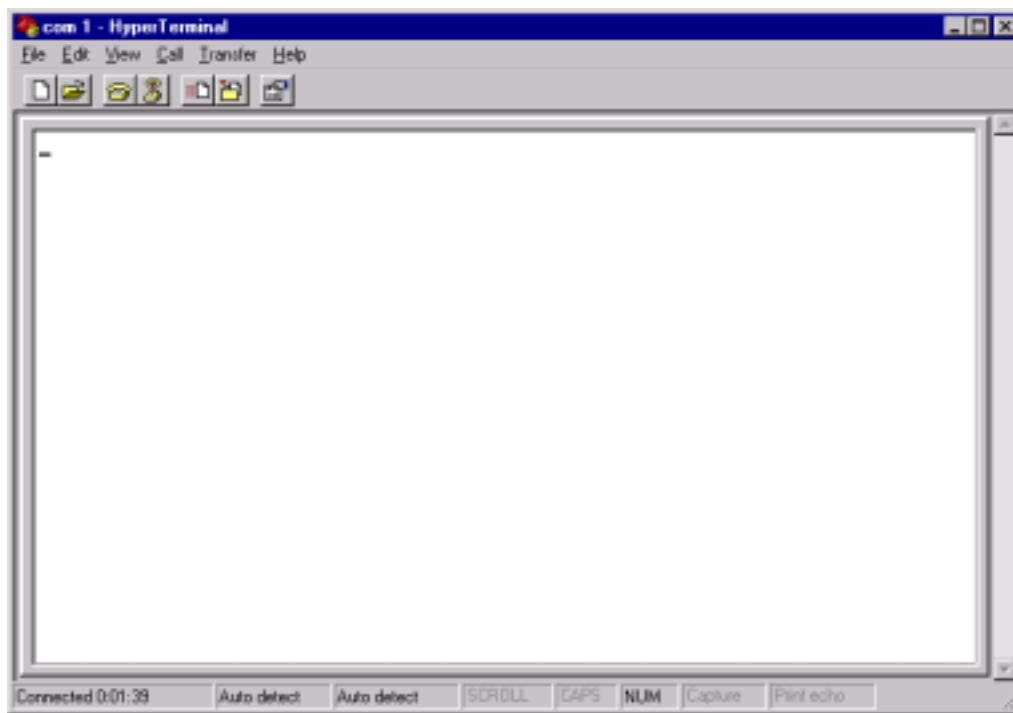


Figure 1-7

10. Turn on the autosampler and the HyperTerminal window (Figure 1-7) should display an **OK**.
11. The following commands will produce various responses of the autosampler.
 - a) **Ver** (returns firmware version)
 - b) **Home** (returns all axis to home position, same as power up)
 - c) **Tray=n** (defines tray size and **n**= #of positions)
 - d) **Tube=3-4-150** (tube=row-colimn-down as defined by tray command)
 - e) **Pmp on** (pump on if unit has a pump)
 - f) **Pmp off** (pump off if unit has a pump)
 - g) **Rinse** (moves sipper to the rinse position, extends and retracts the sipper 3 times and starts rinse pump. Stays in down position with pump running. **up,pmp off** stops the pump)
 - h) **Down=n** (moves the z-axis down by the parameter(**n**) in mm.(do not run down command if sipper is not all the way up on up position or damage may occur to sipper or z-axis)
 - i) **Up** (moves z-axis to upper most postion.)

With the commands listed in Step 11 it can be determined if the CETAC autosampler is communicating and functioning properly. If more assistance is needed, please contact customer service.