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**———— Guide to Configuring a CETAC  
Autosampler Using HyperTerminal**

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

### Steps for configuring HyperTerminal

1. Using a serial cable, connect the CETAC autosampler with the computer. Plug each end of the serial cable into the COM1 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 (Figure 1). Enter **COM 1** in the name box. Press the OK button.
4. In the Connect To window (Figure 2), in the field Connect using, select COM1. Press the OK button.

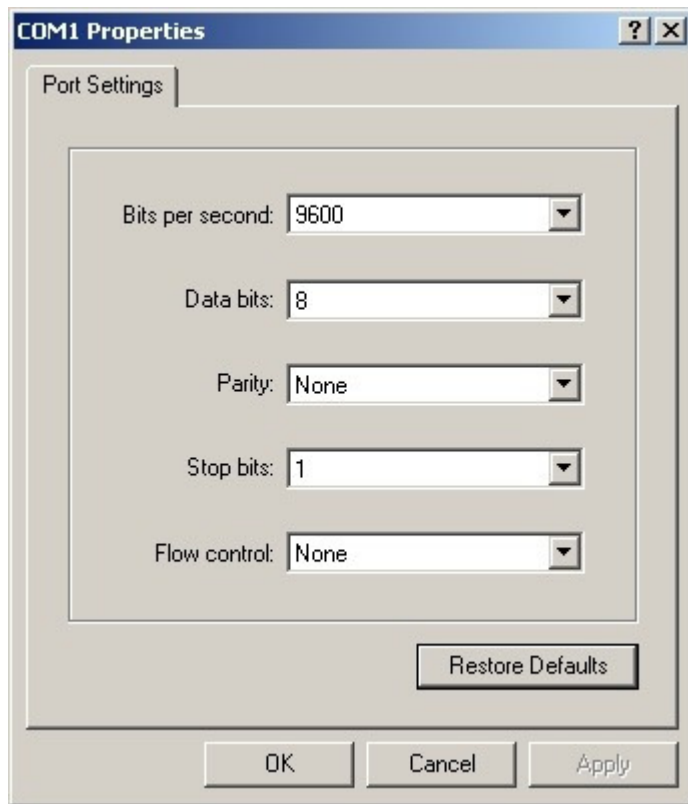


**Figure 1.** Filename window



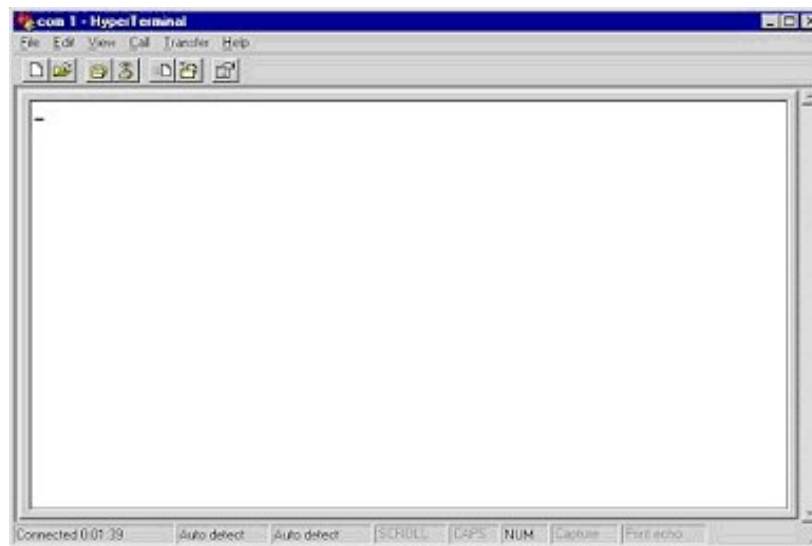
**Figure 2.** Connection window

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



**Figure 3.** Com Port Properties Window

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



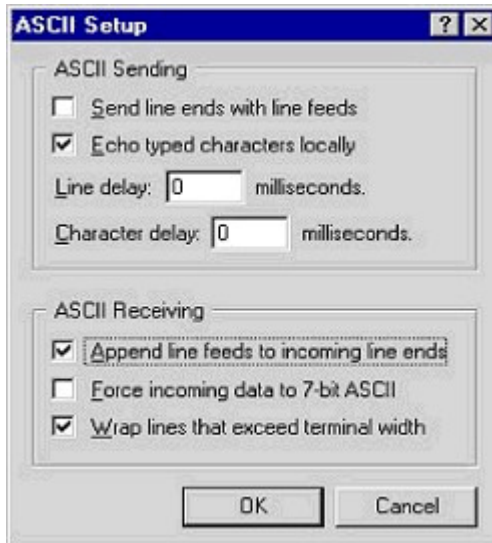
**Figure 4.** HyperTerminal Main Window

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



**Figure 5.** Com Port Settings

10. Turn on the autosampler. The HyperTerminal window (Figure 4) should display an **OK**.



**Figure 6.** ASCII Setup Window

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-column-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 position.)

With the commands listed in Step 11 it can be determined if the autosampler is communicating and functioning properly.

## Setting Configurations

The autosampler firmware contains multiple configurations (Table 1) in a single firmware version. There is a command that can be issued using HyperTerminal that sets the firmware configuration.

The command is

SETTYPE=nnn

where nnn is the configuration number, e.g., SETTYPE=0.

**Note:**

OI uses RS-485 protocol. When in the OI configuration, commands sent to the autosampler must be prefixed with "^1". E.g., ^1SETTYPE=0.

To reset the firmware to the ASX-520 Standard configuration, two "~" characters in succession should be sent. The system will respond with an "OK:".

**Note:**

The Thermo/SMS Emulations do not support the SETTYPE command or any other command from HyperTerminal because of the different command structure. To change configuration reset the firmware using the "~" characters as described above.

**Table 1.** Firmware Configurations

<b>Number</b>	<b>Configuration</b>
0	ASX-520 Standard
1	ASX-520 OI (GPC)
2	Thermo/SMS AS300 Emulation
3	Thermo/SMS AS150 Emulation (Buck Scientific)
4	ASX-520 PE
5	ASX-520 HP/Agilent
6	ASX-520 Lachat
7	ASX-130 Lachat
8	ASX-260 Standard
9	ASX-130 Standard
10	ASX-130 OI
11	ASX-520 OI (TOC)
14	ASX-520HS Standard
15	ASX-520HS HP/Agilent
16	ASX-520HS PE
17	ASX-520 MicroMass (GV Instruments)
18	ASX-520 Thermo AA
19	ASX-520 Nicolet
20	ASX-520HS Thermo AA
21	Thermo AS300 Emulation, High Speed
22	ASX-520 Finnigan Mat
23	EXR-8 CETAC Standard
24	EXR-8 CETAC Standard, High Speed
25	EXR-8 PE
26	EXR-8 PE High Speed
27	ASX-520 Anatel
28	ASX-520, OI-FIA
29	ASX-260, Standard, Septum Piercing
30	ASX-520, Standard, Septum Piercing

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<b>Number</b>	<b>Configuration</b>
31	ASX-260, Foss
32	ASX-260, Micromass (GV)
33	ASX-260, Speedy PE