
CETAC *ASXPRESS PLUS*
Rapid Sample Introduction System

Guide to Configuring Firmware Personalities

Manual Part Number **610095** rev 5

COPYRIGHT

© 2010 SD Acquisition, Inc., DBA CETAC Technologies

610095 rev 5 , September, 2010

CETAC Technologies
Customer Service & Support
14306 Industrial Road
Omaha, Nebraska 68144, USA
Phone (800) 369-2822 (USA only)
Phone (402) 733-2829
Fax (402) 733-1932
E-mail custserv@cetac.com

REVISIONS

CETAC Technologies strives to provide the scientific community with an unparalleled combination of effective technology and continuing value. Modular upgrades for

existing instruments will continue to be a prime consideration as designs progress.

CETAC Technologies reserves the right to revise this document and/or improve products described herein at any time without notice or obligation. Warranty registration entitles the named owner exclusively to manual change pages/new editions as they are published.

TRADEMARK ACKNOWLEDGEMENTS

Windows is a registered trademark of Microsoft Corporation in the United States and other countries.

All other marks are the property of their respective owners.

Overview

The *ASXPRESS PLUS* Rapid Sample Introduction System responds to autosampler commands which it intercepts. Since different autosamplers have different command languages, it is necessary to configure the *ASXPRESS PLUS* electronics module.

Several different configurations, or personalities, are built into the *ASXPRESS PLUS* Rapid Sample Introduction System.

Determining the Current Personality

- 1 Connect to the *ASXPRESS PLUS* Rapid Sample Introduction System.

The *ASXpress Plus* system, along with all CETAC autosamplers, can be controlled using a serial communications protocol. You can use any terminal emulation program, including:

- **C-Term.** (recommended) This program is installed with the Xpress Configuration Tool software, and runs on Windows 2000 and later. See “Using C-Term™” on page 5.
- **HyperTerminal.** This program was supplied with versions of the Windows operating system through Windows XP. See “Using HyperTerminal” on page 8.

- 2 Enter the command

@VER

- 3 The information returned will include the personality description.

Setting the Personality

- 1 Connect to the ASXPRESS PLUS Rapid Sample Introduction System.
- 2 Determine which personality to use:

Personality number	Description
0	CETAC 5x0 Std
1	CETAC ASX-1400 Middle Rinse
2	CETAC ASX-1400 Left Rinse
3	PerkinElmer ASX-5x0
4	PerkinElmer ASX-1400
5	Thermo ASX-1400
6	Varian SPS3
7	Spectro ASX-520
8	Spectro ASX-1400
9	PerkinElmer ASX-1600
10	PerkinElmer S10
11	PerkinElmer AS 93 Plus

Table 1 ASXPRESS PLUS Personalities

- 3 Enter the command
`@SET_PERS-n`
- 4 Cycle power on the electronics module.
- 5 Verify the personality with the @VER command.

Using C-Term™

C-Term is a simple terminal program developed to validate the installation and functionality of various CETAC devices. C-Term communicates through a serial (RS-232) port on the host computer. If the device is connected to a USB port, the device driver will create a virtual serial port.

C-Term is provided on the CETAC software CD and is automatically installed with the Xpress Configuration Tool software.

Starting C-Term

- 1 Check that the communication port connectors are properly attached between the host computer and the CETAC device.

If the communications interface between the CETAC device and the host computer is not established correctly, the device will not function.

- 2 On the Start Menu, click All Programs, then CETAC Xpress Config, then Support Tools, then C-Term.

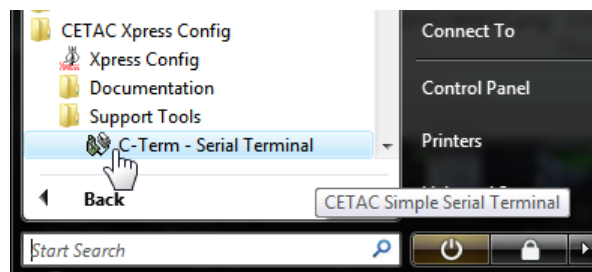


Figure 1 Starting C-Term

Overview of the C-Term Window

Once C-Term is loaded, the window shown in Figure 2 will open. The majority of C-Term's functions are available from this window.

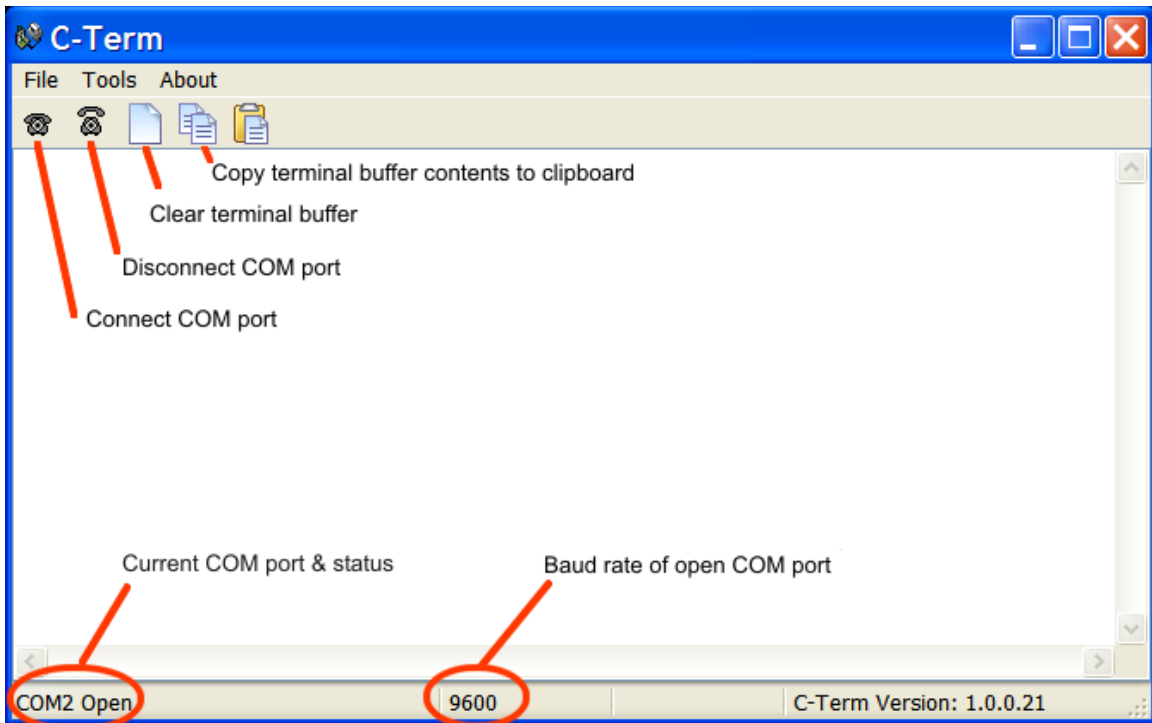


Figure 2 C-Term Window

By default, typed commands are sent to the CETAC device connected to the opened port. The typed commands will appear in light green in the terminal buffer. Responses from the device will appear in red. Non-printing characters such as carriage returns will appear as ASCII hexadecimal numbers surrounded by square brackets, for example, **[0D]** is the carriage return character.

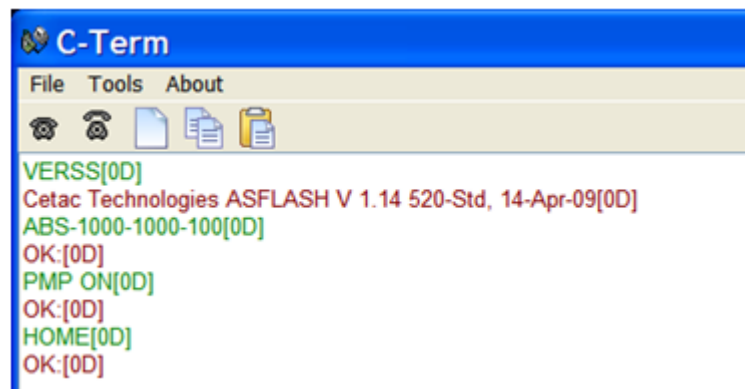


Figure 3 Outgoing commands shown in green and incoming responses shown in red

Configuring C-Term

By default, C-Term attempts to open COM1 the first time it is executed. If the COM port that the CETAC device is connected to is not the default (COM1), then it will be necessary to configure C-Term to use the desired port.

The default communications configuration is appropriate for use with the vast majority of CETAC devices. Exceptions are the ASX-8000 which requires a baud rate change and the AS300 emulator which uses non-printing characters are part of its command protocol. Modifying the default settings is described below.

NOTE

If COM1 (or the currently selected COM port) is in use by another program or is otherwise unavailable, a warning dialog box will pop up when C-Term starts stating that the COM port could not be opened.

- 1 On the Tools menu, click Setup Serial Port.

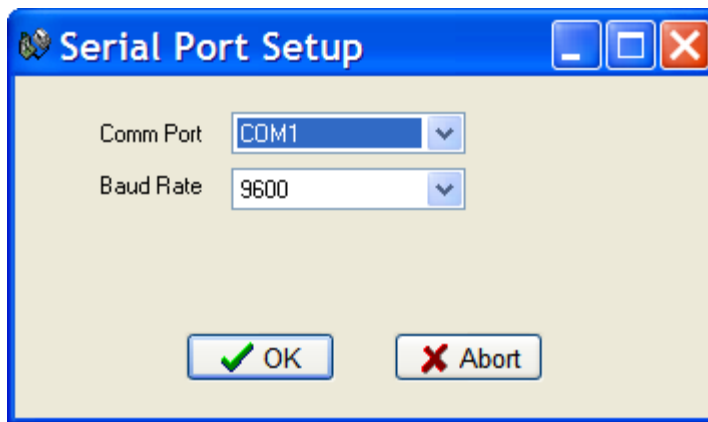


Figure 4 Serial Port Setup Window

- 2 Select the desired COM port and, if necessary, the Baud rate used by the connected device then click OK.

The window will close and the settings will be saved. These new settings will be applied immediately and used thereafter unless changed again.

NOTE

Except for the ASX-8x00, all CETAC devices communicate at 9600 baud (which is the default.)

NOTE

Only installed COM ports, including USB virtual COM ports, will appear in the **Comm Port** menu.

Setting Preferences

If desired, the size of the scrollbar buffer or the color of the outgoing and incoming texts can be changed (to work around color blindness, for example).

- 1 On the Tools menu, click Preferences.

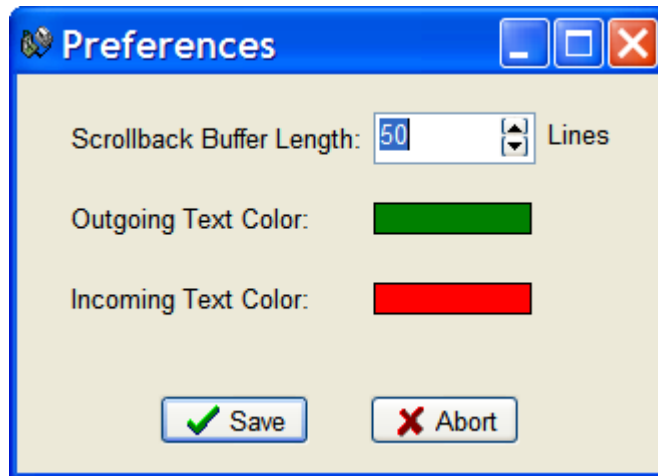


Figure 5 Preferences Window

To change the Scrollback Buffer Length, either type the new value in the field or use the arrows adjust the value up or down.

To change text color, click on the color bar and a color selection dialog box will appear. Select the new color and click **OK**.

- 2 Click Save to apply your settings and close the window.

Using HyperTerminal

- 1 Using a serial cable, connect the *ASXPRESS PLUS* Rapid Sample Introduction System with the computer. Plug each end of the serial cable into the OEM COM port of the electronics module and a COM port on the computer.
- 2 Turn on the computer and select the Accessories folder. Select the HyperTerminal folder and then the HyperTerminal program.
- 3 A window will appear as in Figure 6. Enter COM 1 in the name box. Press the OK button.



Figure 6 "Connection Description" Window

- 4 In the Connect To window, set Connect Using to COM 1, then click OK.



Figure 7 "Connect To" Window

- 5 In the Properties window, set Bits per second to 9600 and Flow control to None.

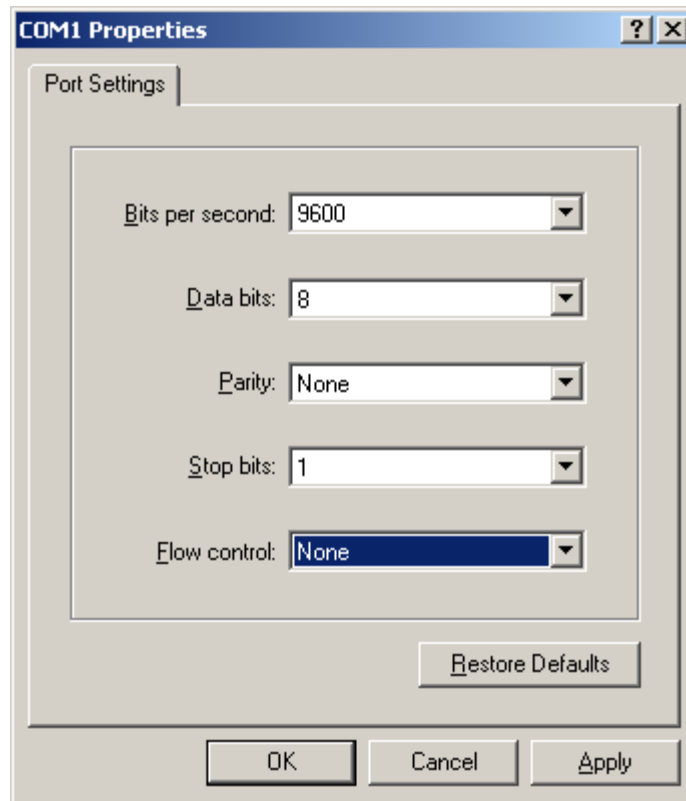


Figure 8 "COM1 Properties" Window

6 Click OK.

The HyperTerminal window will open.

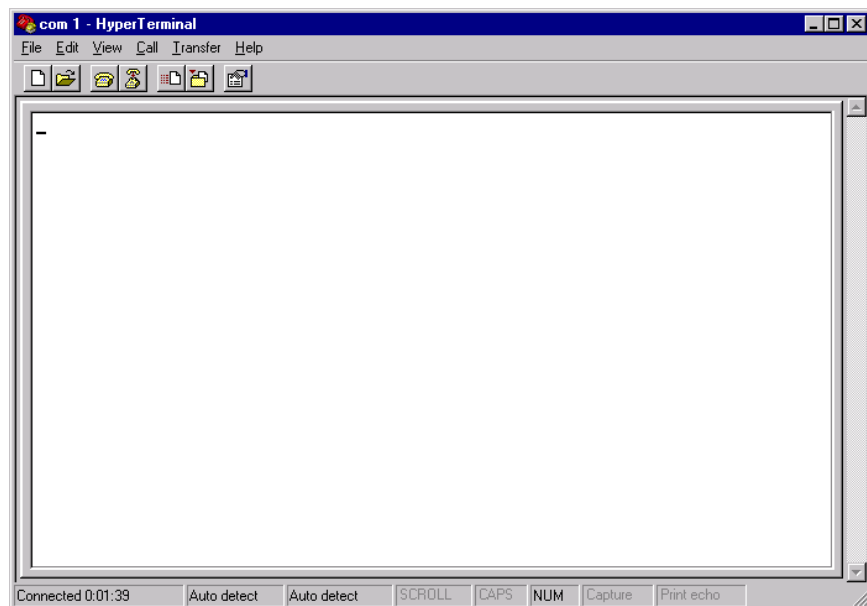


Figure 9 "Com 1 Hyperterminal" Window

7 On the File menu, click Properties.

- 8 On the Settings tab, click ASCII Setup

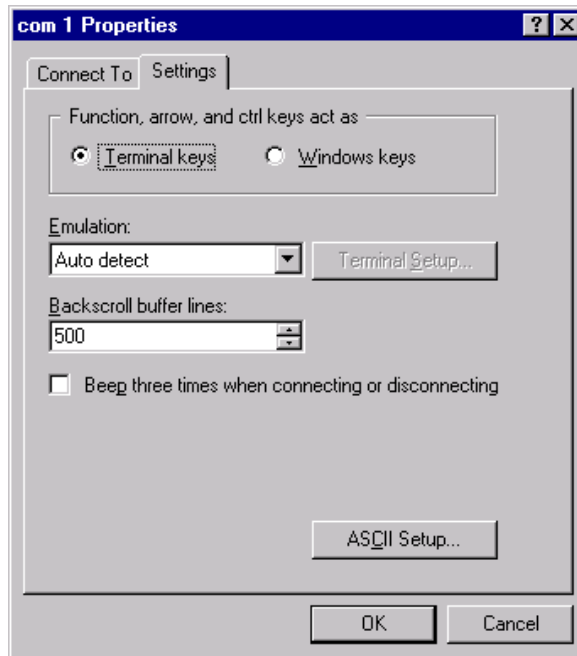


Figure 10 “Com 1 Properties” Window

- 9 Click ASCII Setup.
- 10 Enable “Echo typed characters locally” and “Append line feeds to incoming line ends,” then click OK.

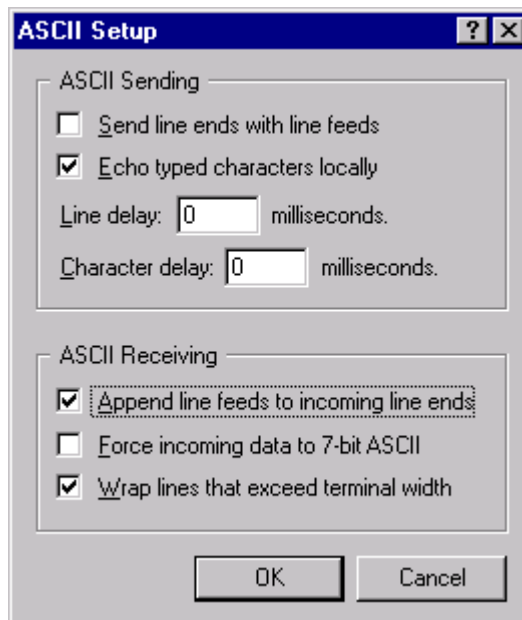


Figure 11 “ASCII Setup” Window

- 11 Turn on the ASXPRESS PLUS Rapid Sample Introduction System.
The HyperTerminal window should display an OK.