

eeTerminal

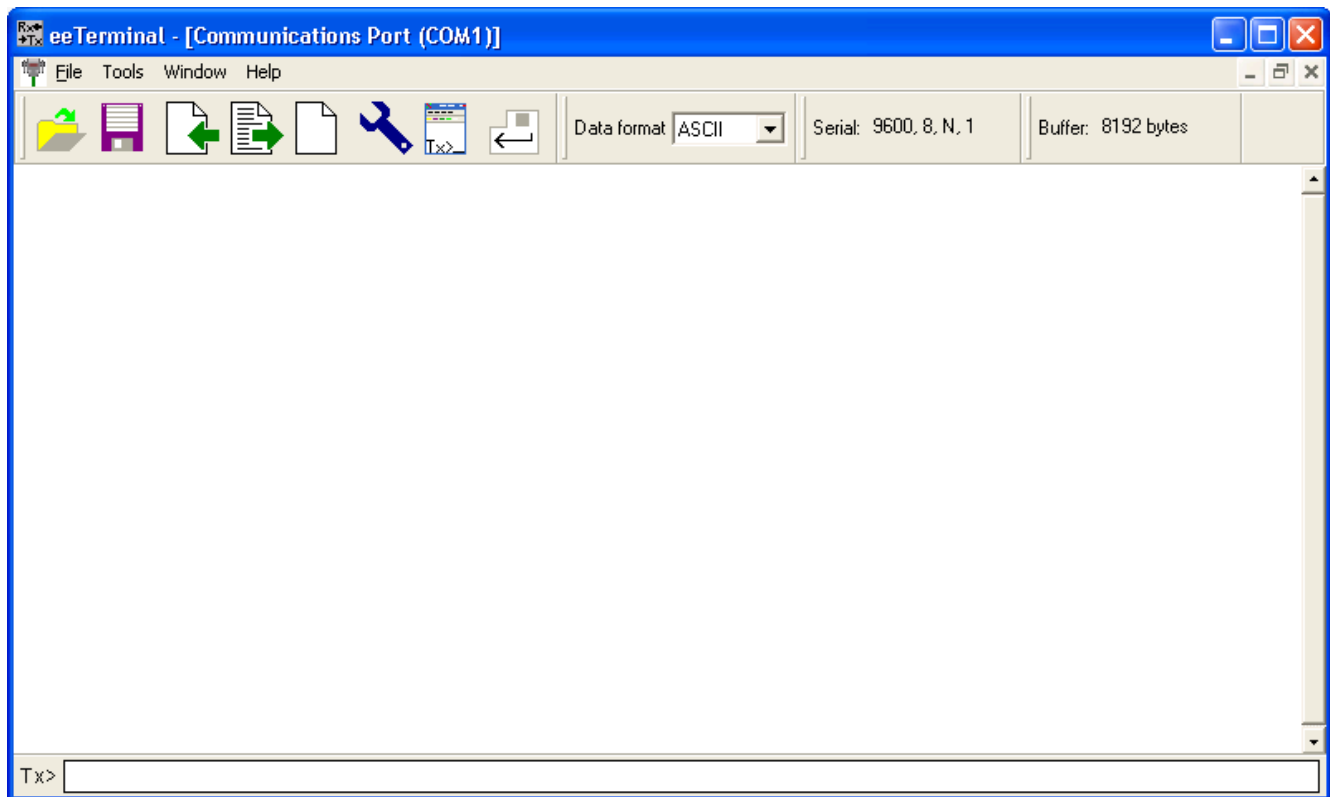
eeTerminal is a Microsoft Windows software application. It provides a tool to communicate with digital devices using PC's USB ports, serial ports, virtual COM ports, and Bluetooth.

Features


- Receive Data in ASCII, HEX, and Decimal Formats.
- Send Data in ASCII, HEX, and Decimal Formats.
- View Files in ASCII, HEX, and Decimal Formats.
- Send File.
- Receive File.
- Configure COM Port.
- Configure Bluetooth Adapters.
- Save Receive Buffer to File
- Bluetooth Downlink Flow Control.
- Adjustable Receive Buffer Size.
- Support Carriage Return-Line Feed Sequence.
- Support Multiple Connections.
- Support RS232, Virtual COM Ports, Bluetooth (SPP).

Applications


- Test Virtual COM Port Adapters.
- Test Bluetooth Adapters.
- Test GPS Devices.
- Debug Serial Interfaces.
- Log Data.
- View Log in HEX Format.
- Send AT Commands.
- Update device firmware.
- Access flash memory



Use the Software:
















Start eeTerminal application by double clicking eeTerminal icon .

1. **Open Device.** To open a device, select **File** from menu bar, and select **Open Device**. The software lists all compatible devices

in a pop-up window. Select a device from the list and click the **Open** button. To open another device, click  on the toolbar or use **Open Device** from menu bar. Each device has its own window within eeTerminal. Window arrangement tools are under **Window** menu. The device windows can be placed side by side horizontally or vertically within eeTerminal.

2. **Close Device.** Select **File** from menu bar and select **Close**, or click on the windows Close button.


DEVICE FUNCTIONS


- 3. Send File.** Sends a file over the attached communication link. Click  on the toolbar to start **Send File**. The software provides an interface to select a file and display the sending process in a pop-up window. Click the **Ok** button to exit **Send File**. Click the **Cancel** button to stop **Send File** and exit.
- 4. Receive File.** Receives a file over the attached communication link. Click  on the toolbar to start **Receive File**. The software provides an interface to select a file name for the received data and display the receiving process in a pop-up window. Click the **Save** button to save the file and exit **Receive File**. Click the **Cancel** button to stop **Receive File** and exit.
- 5. Save Receive Buffer to File.** Saves data in **eeTerminal**'s receive buffer to a file. Click  on the toolbar to start **Save to File**. The software provides an interface to select a file name.
- 6. Configure Device.** Set serial COM port settings, configure Bluetooth adapters, or set Bluetooth downlink data rate. Method 1, configure a device before open it in **eeTerminal**. Click **File** from menu bar, and select **Open Device**. Select a device and click the **Configure** button. **eeTerminal** can only configure our Bluetooth adapters using method 1. Method 2, configure a device after open it in **eeTerminal**. Click  on the toolbar, or click **Tools** from menu bar and select **Configure Serial Settings**. The software provides an interface to select new settings.
- 7. Set Buffer Size.** Sets **eeTerminal**'s receive buffer size. The default buffer size is 8192 bytes. The new setting must be bigger than 8192 bytes. The upper limit is 4GB. Click **Tools** from menu bar, and select **Set Terminal Buffer Size**. The software provides an interface to set a new buffer size.
- 8. Receive Data in ASCII, HEX, or Decimal Formats.** Inside **eeTerminal** data received from device interface is represented as a sequence of bytes. It can be displayed in ASCII, Hexadecimal, or Decimal symbols. In ASCII format, each data byte is displayed as an ASCII character. The button  is carriage return-line feed control button. Click this button. It changes to  and new lines are displayed. Click , the carriage return-line feed is disabled and the button changes to . In HEX format, each data byte is displayed in two hexadecimal digits, and data bytes are separated by spaces. In Decimal format, each data byte is displayed in three decimal digits and data bytes are separated by spaces. In HEX and Decimal formats  has no effect. Click the **Data format** dropdown list on the toolbar to set the display format to ASCII, HEX, or Decimal.
- 9. Send Data in ASCII, HEX, or Decimal Formats.** Inside **eeTerminal**, data to be sent is represented as a sequence of bytes. It can be input in ASCII, Hexadecimal, or Decimal symbols. The input window Tx> is at the bottom of **eeTerminal** window. In ASCII mode, input each data byte as an ASCII character and press Enter to send the data, for example, "test string". To send carriage return-line feed with data, click  on the toolbar and this button will be displayed as  and carriage return-line feed will be added to data sequence when the ENTER key is pressed. Click  to disable this feature. In HEX mode, input each data byte as one hexadecimal digit (0 to 15) or two hexadecimal digits (16 to 255) and separate two data bytes by a space, for example, 5 F 1E. Press Enter to send the data. In Decimal mode, input each data bytes as one decimal digit (0 to 9) or two decimal digits (10 to 99) or three decimal digits (100 to 255), for example, 2 12 124. Press Enter to send the data. In HEX mode and Decimal mode, data can also be input as an ASCII string or an ASCII character. The ASCII string must be included in " " and an ASCII character must be included in ' ', for examples, "This is a software setting", 'S'. In HEX mode and Decimal mode,  has no effect and carriage return-line feed sequence will not be sent. The carriage return-line feed must be coded in data sequence if needed. Click the **Data format** dropdown list from toolbar to set the data format to ASCII, HEX, or Decimal.
- 10. Viewing Files in ASCII, HEX, or Decimal Formats.** Click  on the toolbar to open a file, or select **File** from menu bar and select **Open File**. Select **Display Format** from menu bar and set the display symbol to ASCII, HEX, or Decimal.
- 11. Clear Receive Buffer.** Click  on the toolbar to flush receive buffer and clear display window, or select **Tools** from menu bar and select **Clear**.

DEVICE FUNCTIONS

Log Large Amount of Data:

There are two methods to log data. One method is using receive buffer. First, connect **eeTerminal** with data source using **Open Device**

function and set receive buffer to the required amount. Clear receive buffer using  . The **eeTerminal** is ready to log data. After

finishing logging data, save the data to a file using  .

The other method is using **Receive File** function  . Just start the **Receive File** process and **eeTerminal** is ready to log data. The number of bytes logged is displayed. After finishing logging, click the **Save** button to save the data.

Use eeTerminal with Flash Memory

Refer to our flash memory data sheet for support on using eeTerminal with flash memory.

Use eeTerminal with Bluetooth Devices:

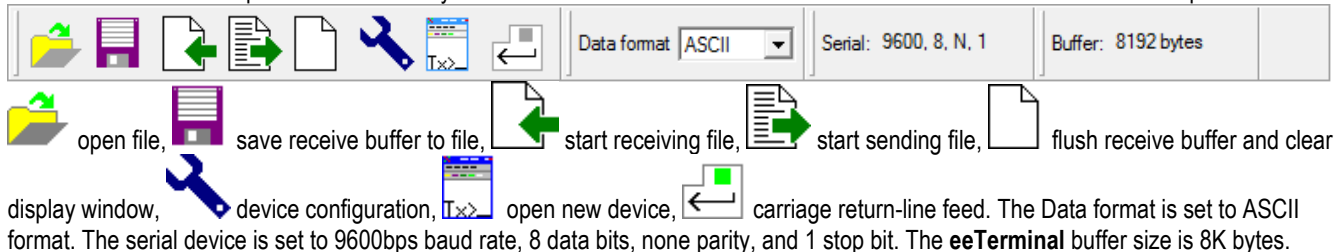
Run **Open Device** function from toolbar or menu. When **eeTerminal** displays a device list, select the Bluetooth device and click the **Open** button. You may need to repeat this process multiple times until your Bluetooth device is found.

eeTerminal is designed for Bluetooth devices that support RS232 or similar interfaces. The data rate over Bluetooth link must match the data rate at the serial port like RS232. **eeTerminal** requires no flow control for data transmission from remote Bluetooth device to PC (Uplink). The data transmission from PC to remote Bluetooth device (Downlink) is limited by remote Bluetooth device's serial port setting. **eeTerminal** provides a flow control parameter (FC) to limit its data sending rate.

eeTerminal provides default FC values for data rates(bps) 300, 600, 1200, 2400, 4800, 9600, 14400, 19200, 28800, 38400, 57600, 115200, and Maximum. The FC value for "Maximum" data rate is zero. To set a FC value, run **Configure Serial Settings** function from **Tools** menu. Experimenting the default FC values with your Bluetooth devices is strongly recommended. A big FC value maybe required if there are data lost. To set a FC value other than the default values, run **Configure Serial Settings** function from **Tools** menu, select **Other** from data rate list, set a new FC value in FC box, click the **OK** button to save the setting.

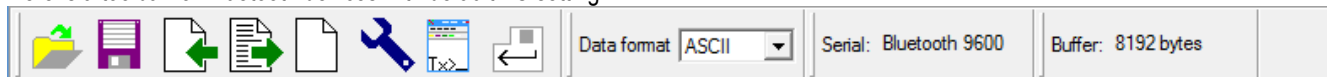
Use the Toolbar:

The **eeTerminal** toolbar provides a direct way to access some of **eeTerminal**'s functions. Here is a toolbar for serial COM port.



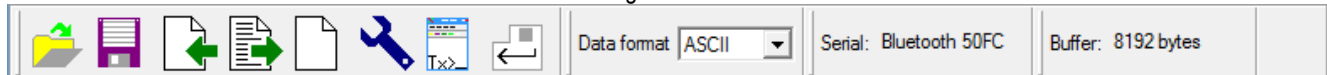
open file, save receive buffer to file, start receiving file, start sending file, flush receive buffer and clear display window, device configuration, open new device, carriage return-line feed. The Data format is set to ASCII format. The serial device is set to 9600bps baud rate, 8 data bits, none parity, and 1 stop bit. The **eeTerminal** buffer size is 8K bytes.

Here is a toolbar for Bluetooth devices with default FC setting



The "Serial: Bluetooth 9600" on this toolbar indicates that Bluetooth downlink data rate is set to 9600bps.

Here is a toolbar for Bluetooth devices with a downlink FC setting of 50.



The "Serial: Bluetooth 50FC" on this toolbar indicates that Bluetooth downlink flow control parameter FC is set to 50.

Support:

Check updated information at www.devicefunctions.com

For questions regarding the software, email us at info@devicefunctions.com