

## iScan HD/HD+ Software Download using the USB Port

The iScan HD/HD+ software can also be updated using a PC with a USB port. This document describes the procedures for setting up the USB port using the USB to Serial Adapter and for updating the iScan HD/HD+ software using the serial terminal program.

The update process is described below.

### 1) Required Hardware

- USB to Serial Adapter
- DB9 Male to Female extension (1:1) Serial Cable
- iScan HD/HD+ with Power Supply
- iScan HD/HD+ Remote Control (optional)

The USB RS-232 Serial Adapter must use the FTDI chipset. These adapters are available from several sources. ABT recommends the following on-line suppliers.

<u>Manufacturer</u>	<u>Part Number</u>	<u>Supplier's URL</u>
USBGear	USBG-232	<a href="http://www.usbgear.com/USB-Serial.html">http://www.usbgear.com/USB-Serial.html</a>
USBGear	USBG-232MM	<a href="http://www.usbgear.com/USB-Serial.html">http://www.usbgear.com/USB-Serial.html</a>
Saelig	US232B	<a href="http://www.saelig.com/ftdi.htm">http://www.saelig.com/ftdi.htm</a>
DLPDesign	US232 USB- RS232 Converter	<a href="http://www.dlpdesign.com/usb/us232cable.html">http://www.dlpdesign.com/usb/us232cable.html</a>

Other USB to Serial Adapters may also work but they must be based on the FTDI chipset.

### 2) Download USB Driver

The USB driver is on the CD that ships with the USB to Serial Adapters. The latest driver is also available directly from the FTDI website

<http://www.ftdichip.com/FTWinDriver.htm>

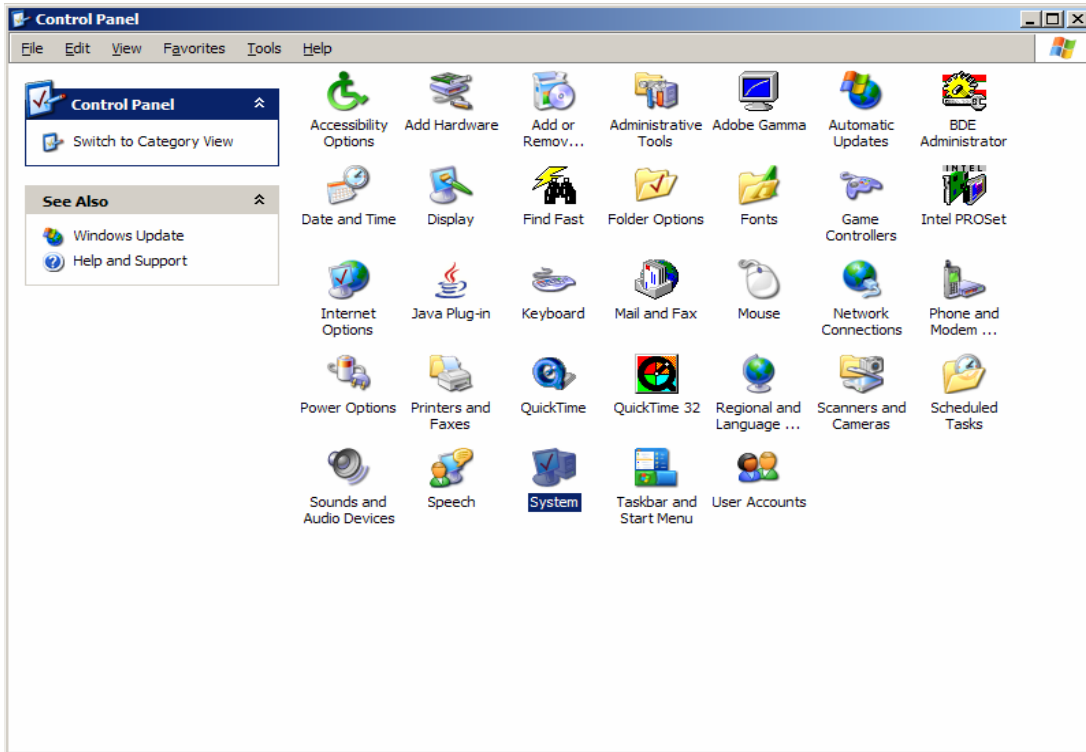
Download the driver and unzip the files.

### 3) Insert the USB to Serial Adapter into the PC's USB port.

- If the PC is running Windows XP (Home or Professional), Windows automatically detects the USB device and installs the driver. If a driver is not present, Windows will ask for it. Locate the driver files in Step 2.
- Some Windows XP versions may already have the latest driver.

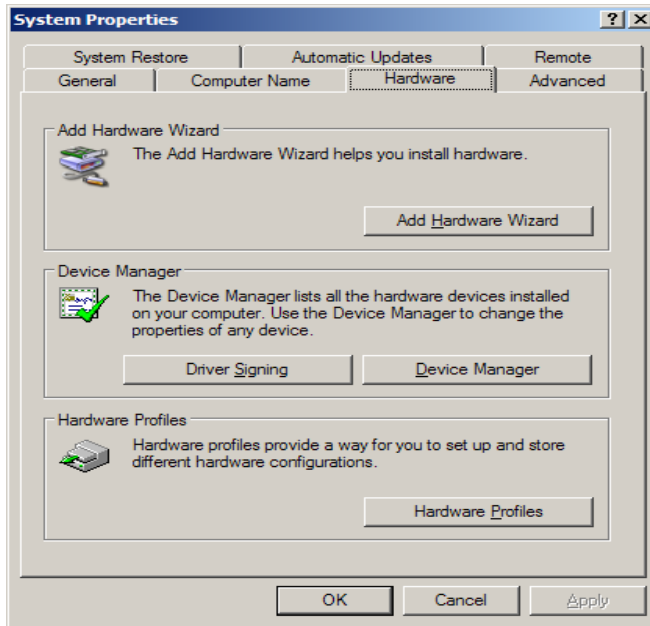
#### 4) Setup the COM Port

- Go to Control Panel – double-click on System as shown in Figure 1.



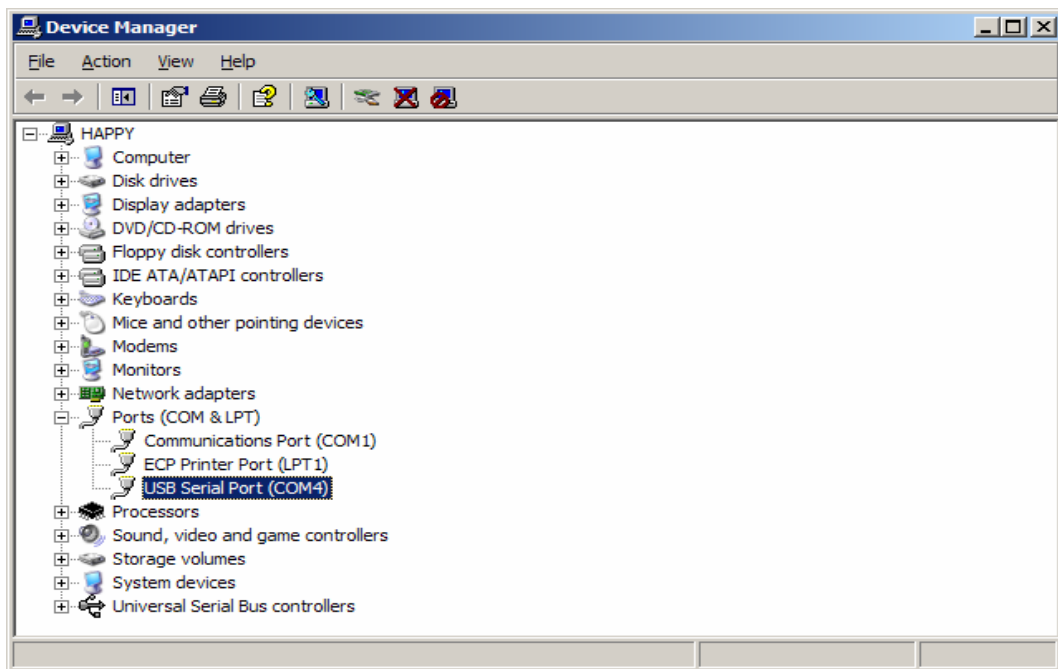
**FIGURE 1**

- Select the Hardware tab as shown in Figure 2.
- Select the Device Manager button.



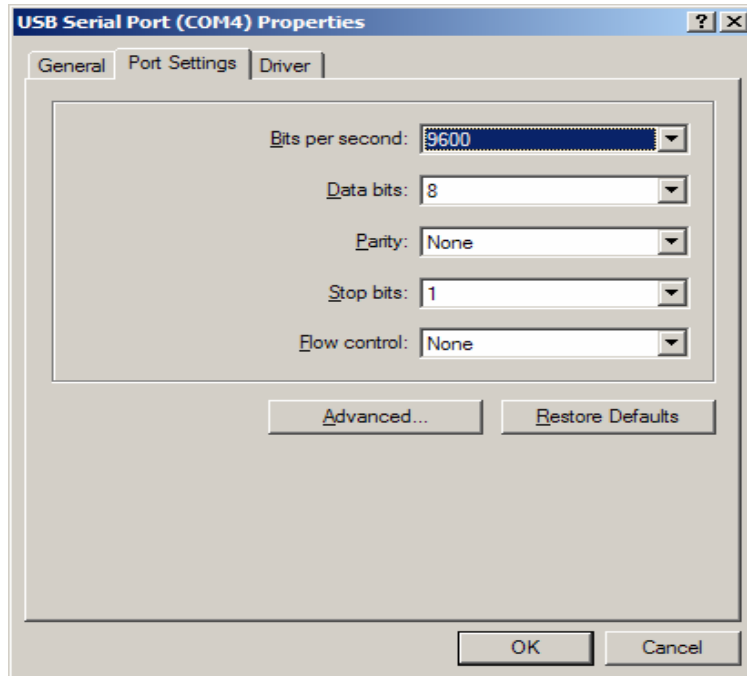
**FIGURE 2**

- Double-click the USB Serial Port as shown in Figure 3. The example shows COM4 but the PC may show other COM numbers.



**FIGURE 3**

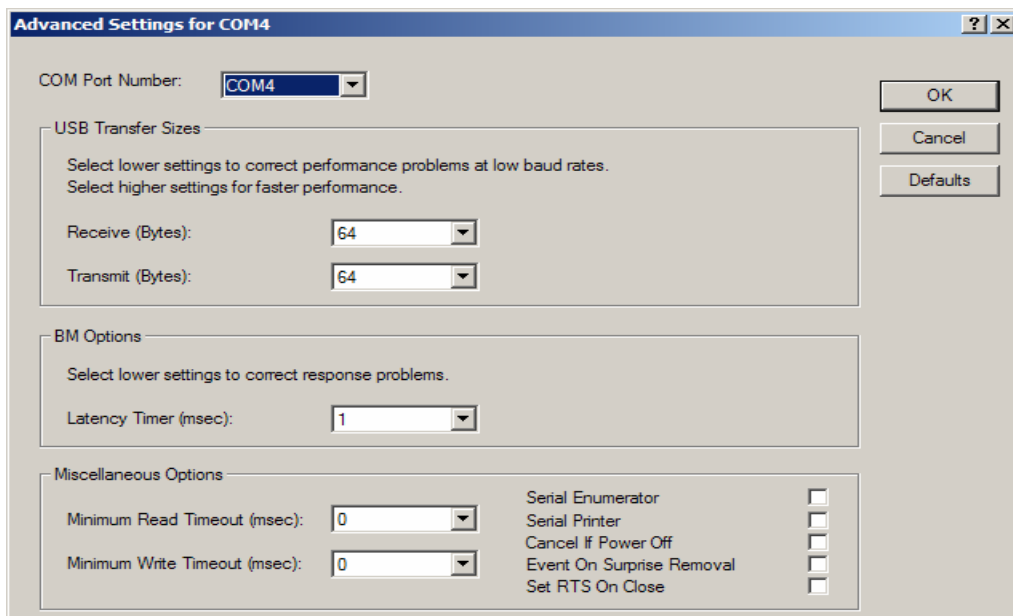
- Select the Port Settings tab.
- Select the Advanced button.



**FIGURE 4**

Note: The port settings above do not matter since the serial download software Tera Term Pro will override these setting.

- Select the available COM Port Number between COM1 and COM4 in Figure 5. Other COM numbers cannot be used since the Tera Term Pro software only supports COM1 through COM4. Set other settings exactly as shown below.

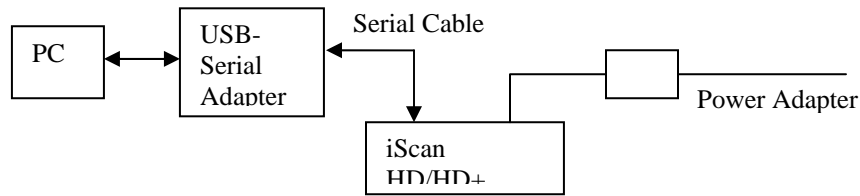


**FIGURE 5**

Note : The COM Port Number in the Tera Term software must match the selected COM Port Number.

## 5) Updating the iScan HD/HD+

5.1 Connect one end of the Serial Cable to serial port connector on the USB to Serial adapter. Connect the other end to the iScan HD/HD+.



**FIGURE 6**

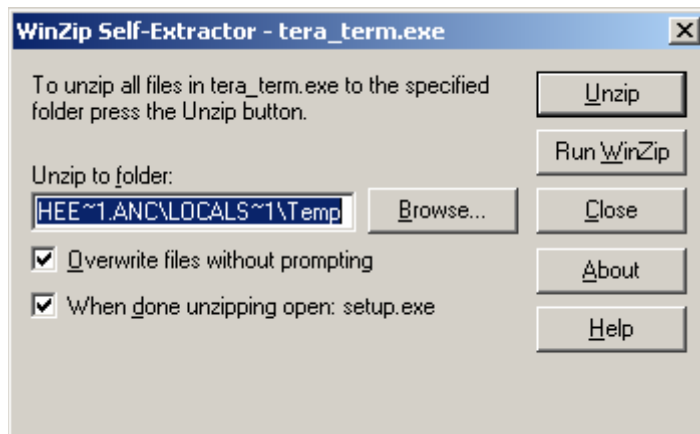
5.2. Apply power to the iScan HD/HD+.

5.3. Download needed software

- Go to [www.dvdo.com/update](http://www.dvdo.com/update)
- Download 'tera\_term.exe' terminal program to your computer.
- Download the iScan HD/HD+'s latest software release. (.abt file)

5.4. Install Tera Term Pro on the PC

- Open tera\_term.exe and Unzip the files.
- Follow instructions to install Tera Term Pro.

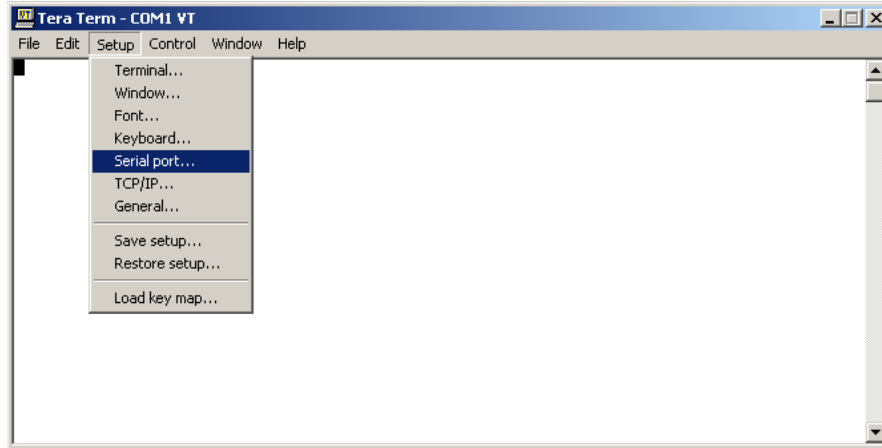


**FIGURE 7**

### 5.5. Setting up the PC

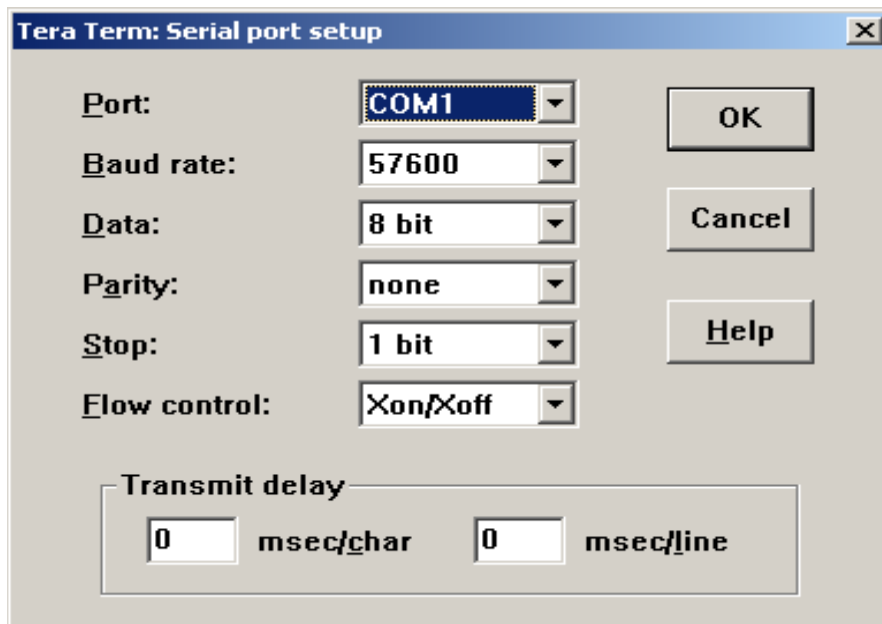
*Make sure no other program is using the serial port that is connected to the iScan HD/HD+.*

- Run Tera Term Pro from the Program menu.
- Select 'Serial Port' from the Setup menu.



**FIGURE 8**

- Set the Serial Port settings exactly as shown below except for Port. Select the same COM Port Number as the one selected in Figure 5.



**FIGURE 9**

- NOTE: If the PC is running Windows 2000, the Transmit Delay needs to be changed to 1 msec/line
- Tera Term Pro is now ready to send the latest software file (.abt) to the iScan HD/HD+.

### 5.6. Setting up the iScan HD/HD+

- There are two ways to perform software update: using the Front Panel buttons or using the remote control and On-Screen Display (OSD).

#### Using the Front Panel buttons

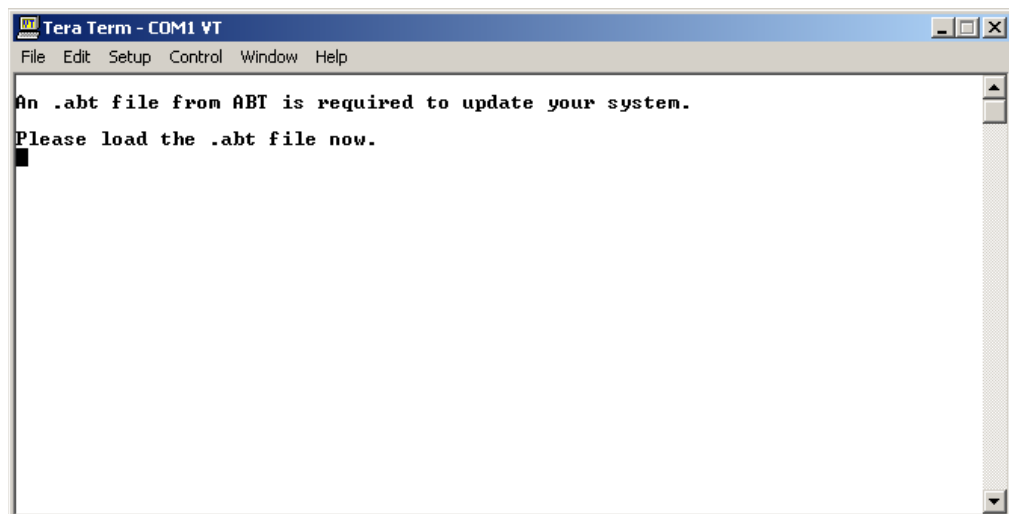
- Press the 'Configuration' button repeatedly until the display shows "SWUP" (SoftWare Update)
- Press the Up or Down arrow buttons until the display shows "YES".
- Press the Enter/Exit button to confirm the software update.
- The Front Panel will show 'LOAD'.

#### Using the On-Screen Display and Remote Control

- Press the 'Menu' button on the remote control.
- Select Configuration -> Software Update -> Yes.
- Confirm by pressing the 'Enter' button.
- The Front Panel will show 'LOAD'.

### 5.7. The Update Process

- On the Tera Term window, user will see the following message.

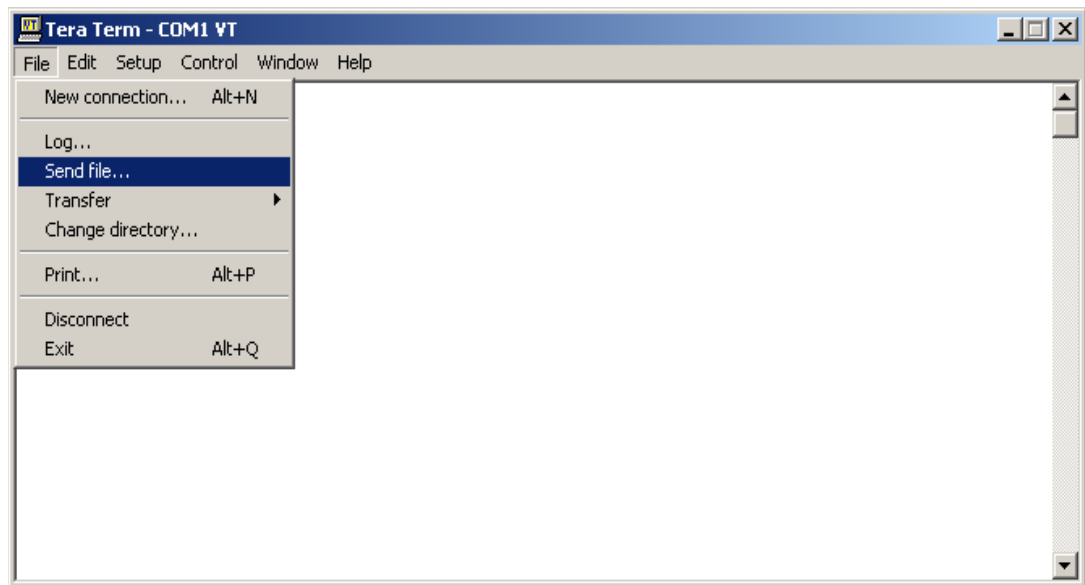


**FIGURE 10**

- Important Note:

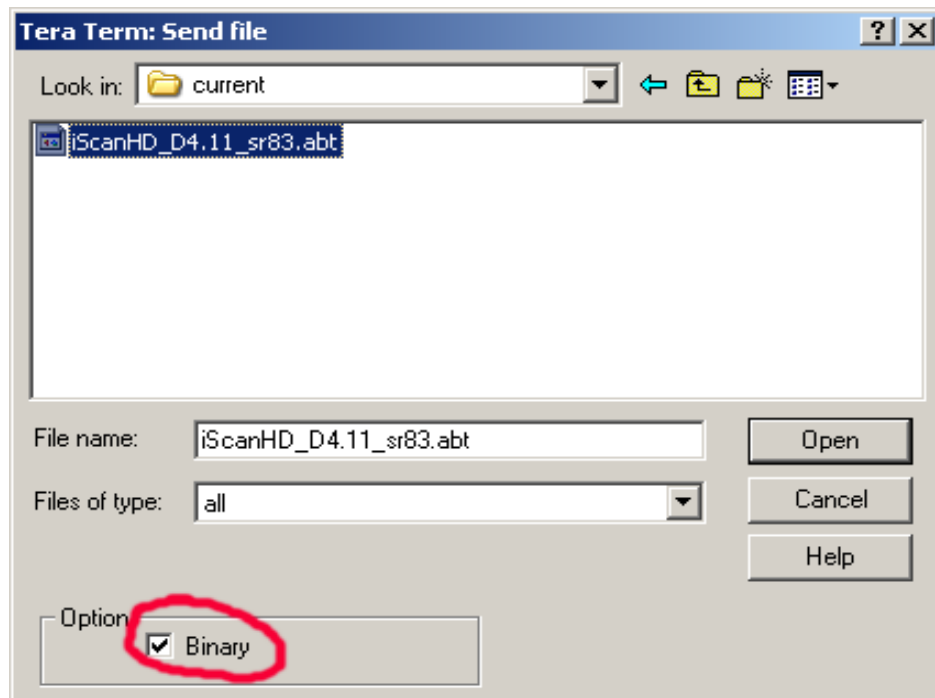
The download operation is still cancelable at this point. There are two ways to do this.

- A) Do nothing for about 5 minutes. After this time the iScan HD/HD+ will revert back to normal operations with the current software.
  - B) Unplug the power cord from the iScan HD/HD+ and then plug it back in. The iScan HD/HD+ will revert back to normal operations with the current software.
- To update the system software select 'Send File' from the file menu.



**FIGURE 11**

- Make sure Binary mode is selected.



**FIGURE 12**

- Locate the '.abt' file to download. Only a file with '.abt' extension should be selected. If any other file is loaded, an error will occur. If this happens see the troubleshooting section.

*Note the file shown in the picture above is only an example, not the actual file.*

Important: After this step it is not possible to go back to your current software version without reloading another '.abt' file.

- Select the 'Open' button to send the file.
- Data is now being transferred to the iScan HD/HD+. The word "BUSY" should be scrolling on the Front Panel and the download status will be visible on the PC as well.
- When the file transfer is complete 'VRFY' will be momentarily displayed on the Front Panel. This is the iScan HD/HD+ checking its software to be sure it is correct.

The update process is complete when the front panel light turns **green**.

- The download process may take up to 5 minutes to complete.

### 5.8. Trouble Shooting

- The front panel displays 'LOAD' even after cycling the system power by unplugging the iScan HD/HD+ power plug and plugging it in again.
- If this problem occurs you must load a '.abt' file into your iScan HD/HD+. Download a .abt file from [www.dvdo.com/update](http://www.dvdo.com/update) and try the update process again.
- The front panel displays an error code starting with "ERR". The error code description is given in the table below.

<b>Error Code</b>	<b>Description</b>
ERR1-2	File error. Make sure the correct file was chosen. Only a file with a .abt extension is valid for updating the iScan HD/HD+. Locate the correct file, reset the system by unplugging the power plug and plugging it in again. You can follow the software update procedure again to update the system with a valid .abt file. If after making a second attempt and the display still shows ERR2, the .abt file may be corrupted during download. Download the .abt file again.
ERR3	Device cannot be programmed. Either the file is corrupted or a hardware failure has occurred.
ERR4	Device 1 Programming Error. Either the file is corrupted or a hardware failure has occurred.
ERR5	Device 2 Programming Error. Either the file is corrupted or a hardware failure has occurred.
ERR6	Erase Timeout. Hardware Failure.
ERR7-8	The transmission of data to the iScan HD/HD+ has been interrupted. This could be caused by the terminal program being paused or canceled. Another cause of this error is that the serial port has become disconnected or has a faulty serial cable. If you have paused the terminal you can just restart it and the download will resume. Otherwise you must cycle the system power by unplugging the power cord, plugging it in again and repeat steps 5 and 6.