



PRODUCT	Xplus100
HARDWARE	KSU
SOFTWARE	Current
DESCRIPTION	<b>Upgrading the Xplus100 System Software</b>

### SET UP:

This procedure will give step by step directions on upgrading the Xplus100 system software. The system software is updated by “uploading” a file to a special “loading area”, which is used to store the new software, until the checksums are verified. The file name will consist of the checksum and the version number, and it will be used to verify that the software update was successful. This procedure eliminates the possibility of overwriting the system software, until a successful upload is confirmed. Whenever the system is upgraded, it must be initialized before placing it back into service. This procedure should take approximately 5 minutes and may require an internal RS232C com port. Upgrading this software using a USB to serial adaptor has not always been successful.

### **Tools needed:**

A computer (Desktop or laptop) with a serial connector (USB to Serial adaptors have not always been successful).

A terminal emulation software application such as HyperTerminal or ProComm Plus

A straight through cable:

<b>Xplus 100 Side</b>		<b>Computer Side</b>	
<b>Pin #</b>	<b>Signal Name</b>	<b>Signal Description</b>	<b>Pin #</b>
<b>1</b>	CD	Carrier Detect	<b>1</b>
<b>2</b>	RXD	Receive Data	<b>2</b>
<b>3</b>	TXD	Transmit Data	<b>3</b>
<b>4</b>	DTR	Data Terminal Ready	<b>4</b>
<b>5</b>	GND	Signal Ground / Common	<b>5</b>
<b>6</b>	DSR	Data Set Ready	<b>6</b>
<b>7</b>	RTS	Request To Send	<b>7</b>
<b>8</b>	CTS	Clear To Send	<b>8</b>
<b>9</b>	RI	Ring Indicator	<b>9</b>

Table1: Straight through cable

## Instructions:

### Step 1:

Connect the Straight through cable from the Computer to the RS232 on the Xplus100's RS232 labeled RMP.

On the computer, save the Xplus100 software on your computer hard drive in a location that is easy to find. Also, make a note of the file name because it contains the checksum, which is used, in step 4, to verify that the software uploaded correctly.

Then open the software application to be used to do the upload. Be sure to set the communications port to a "COM" port. In Figure 1, HyperTerminal is being used. Select the correct "COM" port, and then select "Configure"

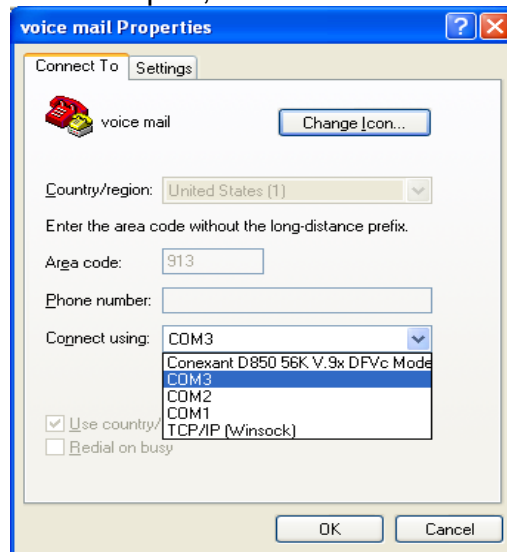


Figure 1

The COM port should be set with the following parameters; Baud Rate: 115200, 8 – Bit, 1 – Stop Bit, No Parity and the Flow Control should be set to "None".

Figure 2 shows an example of HyperTerminal.

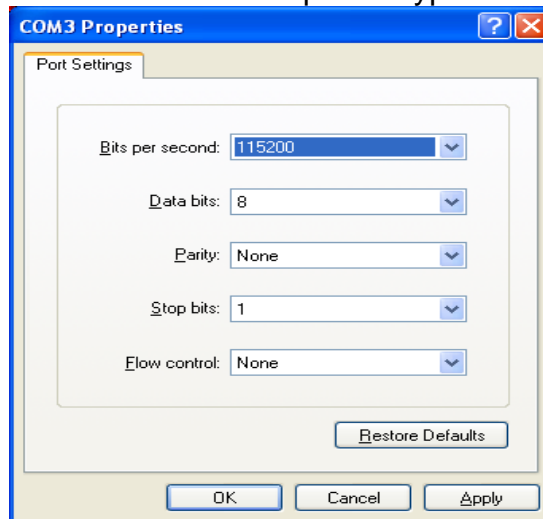


Figure 2

**Step 2:**

On the Xplus100 KSU – It is a good idea to make a note of the current version of software so that the upgrade can be verified. To get the current software version go into programming and enter 04-18, KSU Revision, to get the KSU REVISION. Make a note of this information because it will be needed in step 5.

There are two jumpers on the Common Control Board (CCB), which must be moved before the upload will function. With the KSU- powered down, pull jumper located at “JPD2” (found in the center of the board) and move the jumper from the “normal and common” pins and place it on the “Common and download” pins. Next, locate the jumper at “JPB2” (found near the front of the board next to the VAA connector) and remove that strap, leaving it open. (It is a good idea to place the jumper on one of the pins, so that it does not get lost).

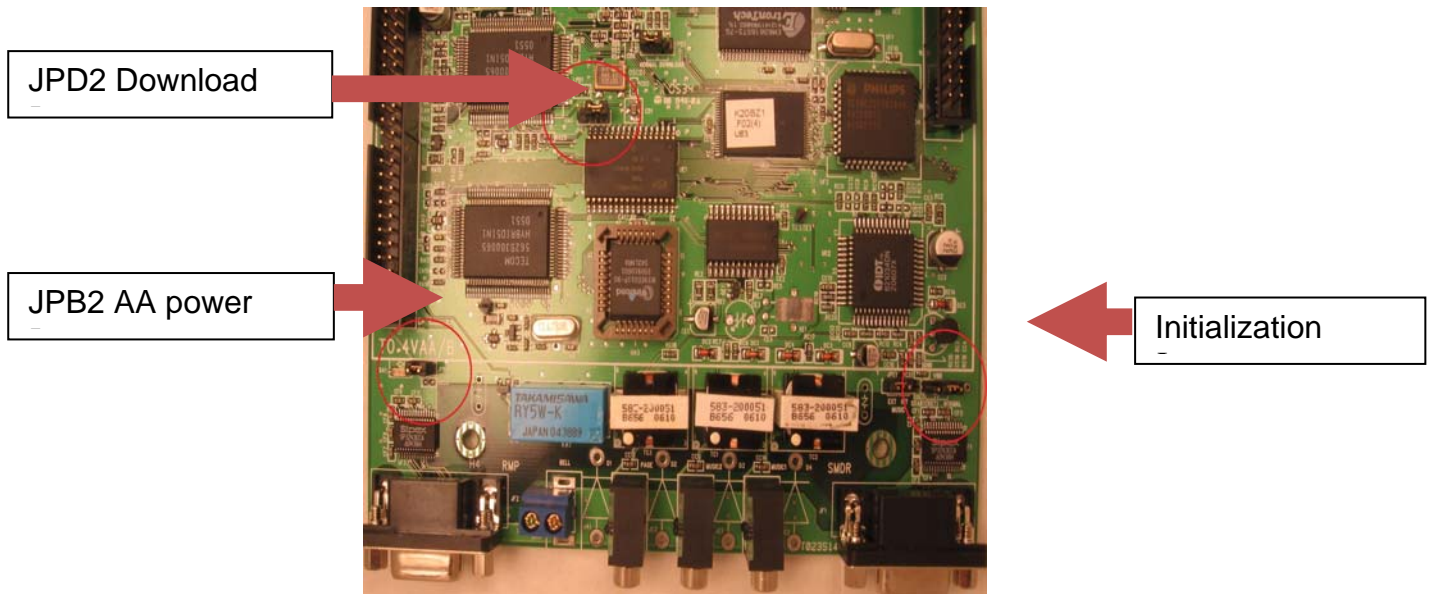


Figure 3

Power the system up.

**Step 3:**

The PC display will update with the main upload menu.

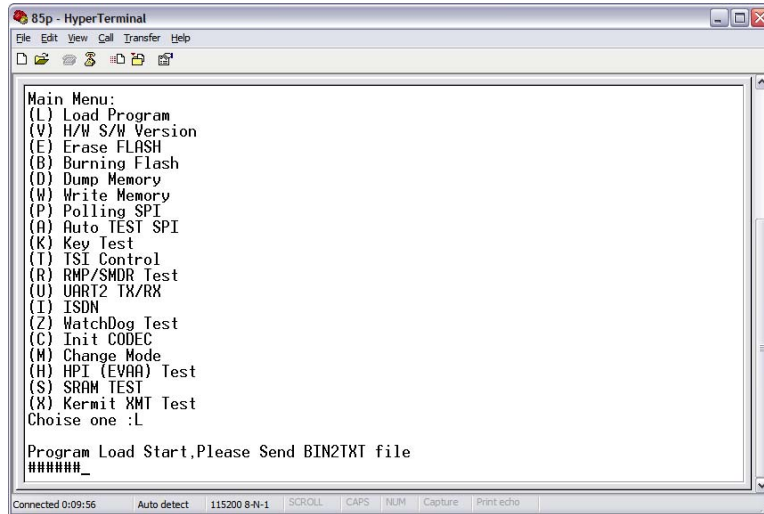
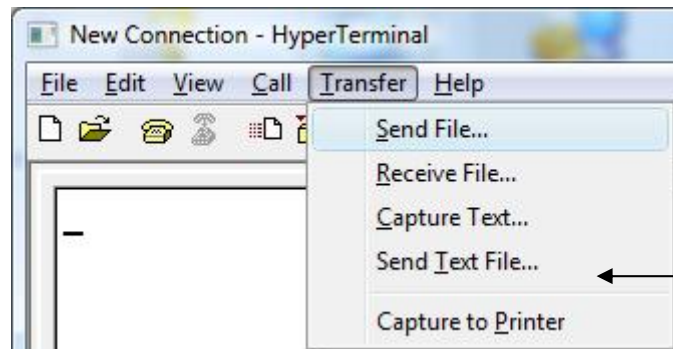


Figure 4

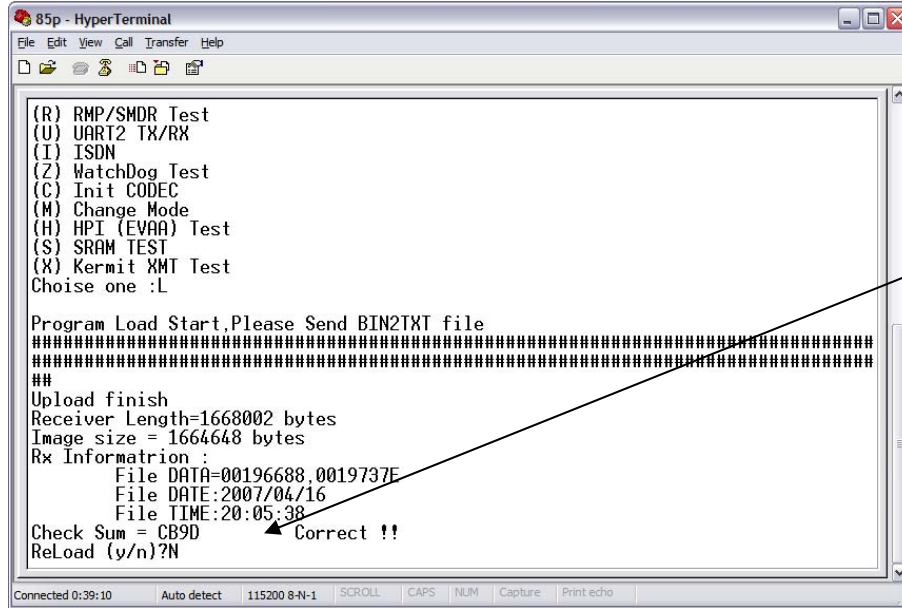
Select “L” to “Load” the file and then, if using HyperTerminal, select “send” and go to “Send TXT file”. Select the software that was saved to your hard drive and click on the “Open” button to begin.



Select “Send Text File...”

Figure 5

The display will update with “#” signs as the file is being sent.



Does it match the Checksum from step 2?

Figure 6

There will be approximately three rows. When the upload is complete the display will update and ask “ReLoad (y/n)”? The default is “N”, No you do not want to reload – which means to re-upload the software again. Confirm that the checksums are the same and press enter, if they are not the same press “Y” to re-upload the software (repeat Step 3). This process should not take more than 5 minutes to complete.

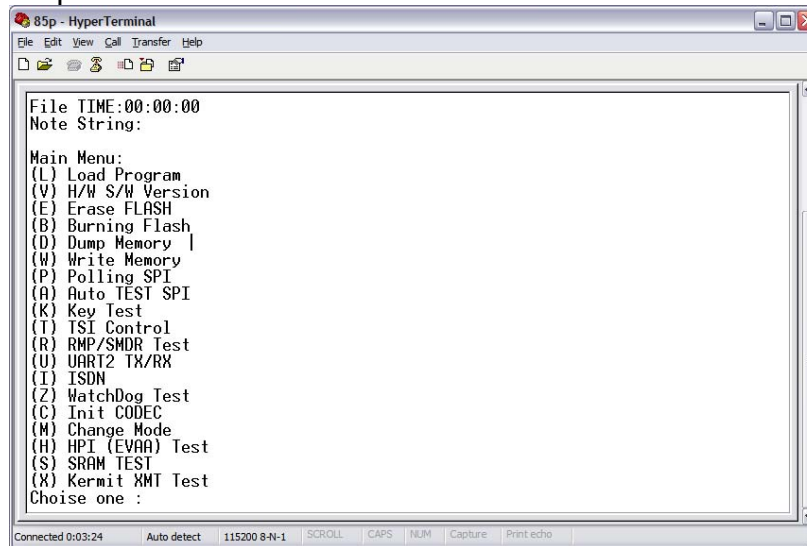


Figure 7

Now select “B” to actually burn the software image into the flash memory. The bottom of the window will show “Erase Chip... O.K., when the programming begins “Programming” will be displayed. Once the chips are reprogrammed the prompt “Press any key to continue...”. Press the enter key.

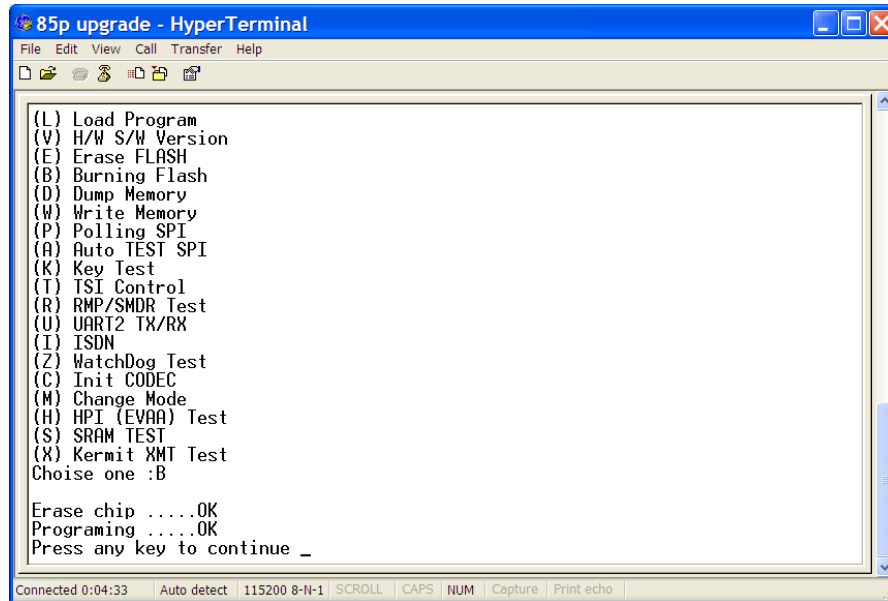


Figure 8

Power down the system

**Step 4:**

Once the system is powered down replace the jumper, located at “JPD2” and relocate the jumper from “Download” to “Normal”. Replace the strap at JPB2, which is removed in step 1. Now it is important to default the system by pulling the jumper located at JE1 from “Normal” to “Cold”. Wait 10 seconds, and then relocate the jumper from “Cold” to the “Normal” pins.

**Step 5:**

Power the system up.

The system will come up and it will be operational. However, it will be set back to factory default. It is a good idea to verify the upload worked by going to KSU REVISION (04-18).

[END]