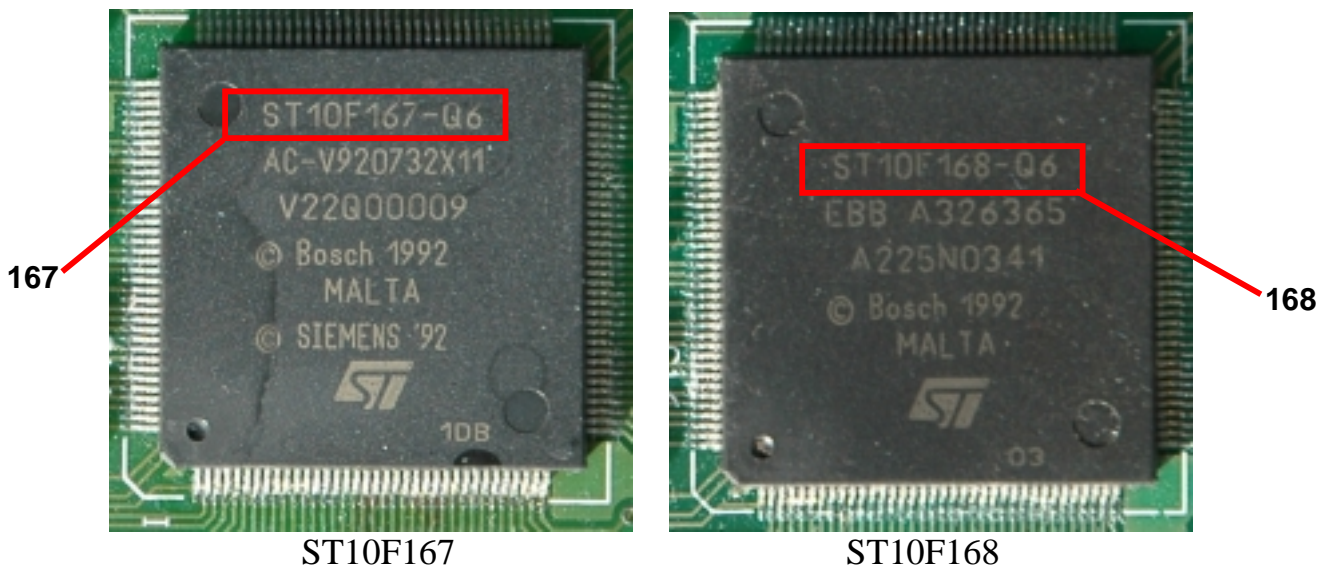


Technical Bulletin #10a IDS Firmware Upload Procedure for Control PCB

This procedure covers Windows based Dispensers only, for Dispensers running DOS, please refer to Vale-Tech Technical Support.

First identify which type of Controller Microprocessor is fitted to the Control Board as follows:

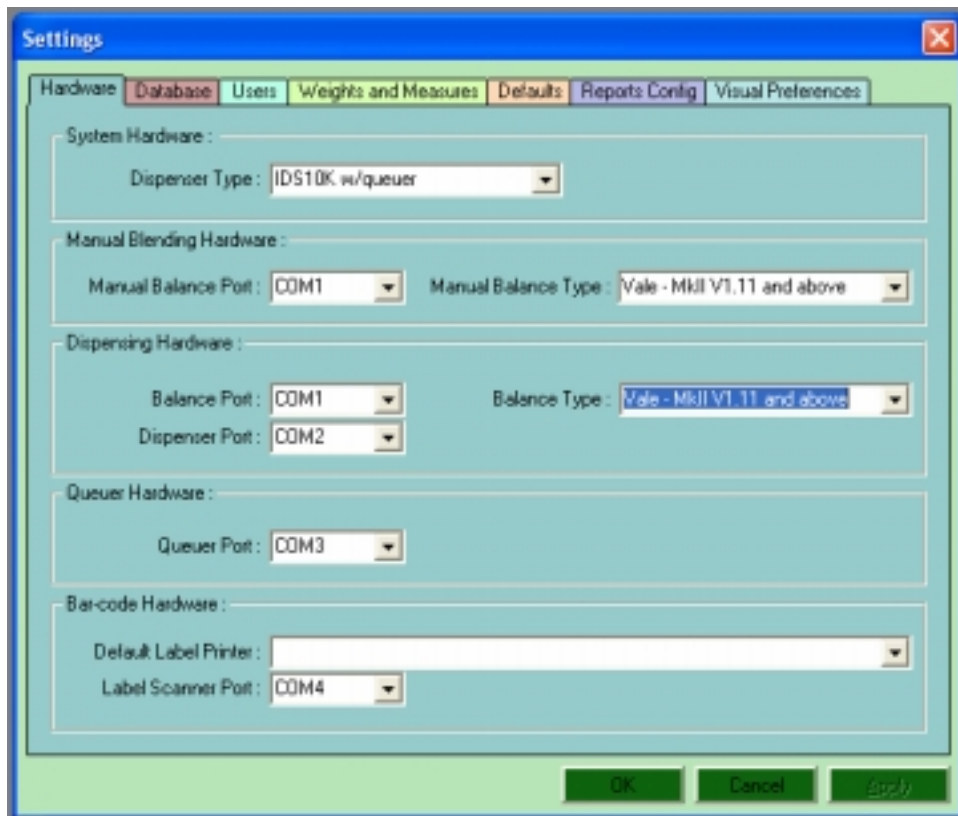


If the Controller Board is fitted with an ST10F167 Microcontroller Chip, use Procedure A.

If the Controller Board is fitted with an ST10F168 Microcontroller Chip, use Procedure B.

Procedure A.

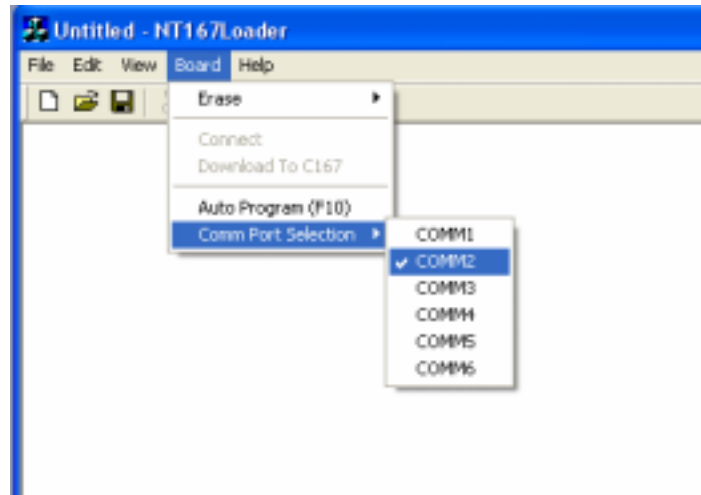
1. Identify which COM port the Controller be programmed is connected to. This can be done by checking the InkManager Hardware Screen. The example below shows the Dispenser Port is COM2, and the Queuer Port is COM3. To program the IDS (Dispenser) Main Controller Board, use COM2, to program the Queuer Controller Board, use COM3. Close InkManager before continuing.



- Using Windows Explorer, browse the **C:** drive for a Directory called **LOAD**

NOTE: The **LOAD** Directory will have been pre-loaded into the **IDS** PC, if not; contact Vale-Tech Technical Support for the Load files and copy them into a new directory called **Load**.

- Open the Directory **LOAD**.
- Browse the Directory **LOAD** for a File name called **NT167Loader.exe**.
- Run the program by double clicking on the **NT167Loader.exe** icon/filename.
- If any data is seen in the main window, select **VIEW** and then **CLEAR**.
- Select **BOARD** and then **COMM PORT SELECTION**
- In the InkManager Hardware Settings example shown above the Dispenser is on **COM2**, select **COM2** in the tick-box in the **NTLoader** software, as shown below:



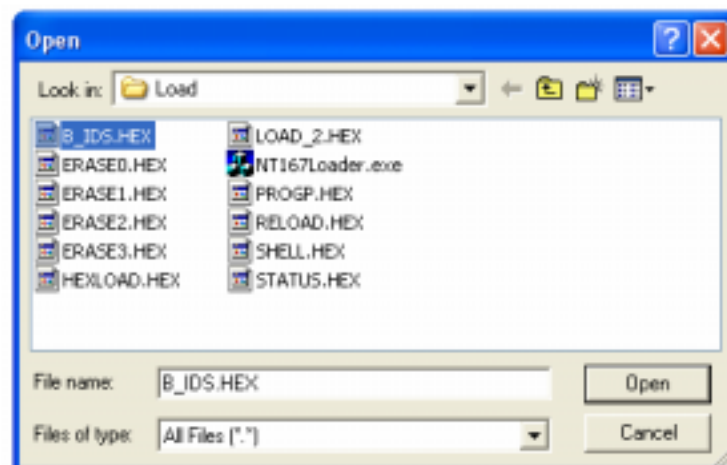
9. Select **FILE** and then **OPEN**

NOTE: Please ensure that you have the Vale-Tech **B_IDS.HEX** floppy disk before starting the next stage of the download procedure. If not, please try to obtain the version code from your original Controller Board. This can be done by resetting the Controller Board using SW1 and reading version code on the LCD display. The Queuer HEX file may be named differently, if in doubt, please contact Vale-Tech Technical Support with the Version Code.

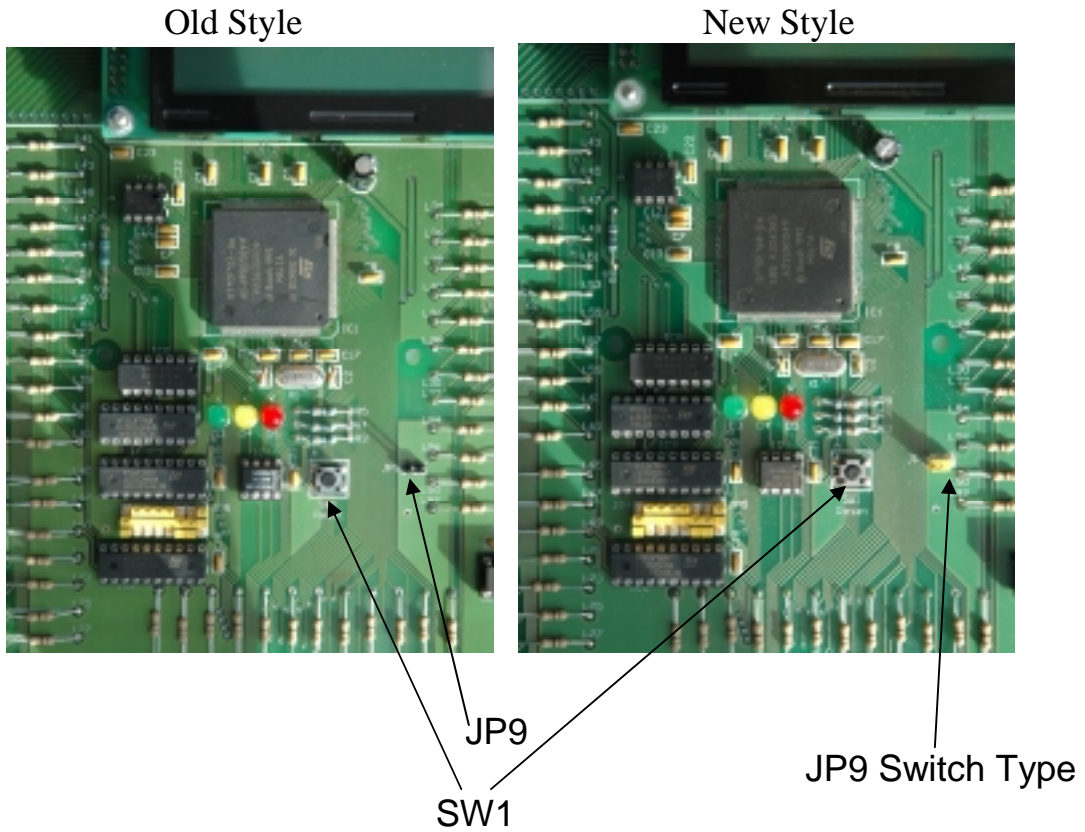
10. Browse **C:** Drive for a File name called **B_IDS.HEX** (or Queuer HEX file), or **A:** Drive if stored on a floppy diskette.

11. Copy the file into the Load directory if it is not already there.

12. Select the Filename **B_IDS.HEX** (or Queuer HEX file) and then select **OPEN**



13. IDS Main Control PCB is in the right hand side cabinet of the IDS.
 Below shows the IDS Control PCB and the location of SW1 and JP9

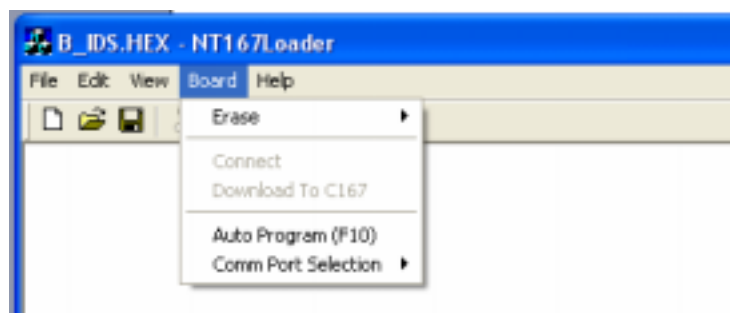


14. Set **JP9** to the **ON** position, or short the two pins with a Pin Header.

NOTE: JP9 on new style IDS Control PCB has a Yellow coloured switch (shown as Switch Type above), whereas the old style IDS Control PCB has two pins shorted with a pin header during programming only.

15. Press switch **SW1**

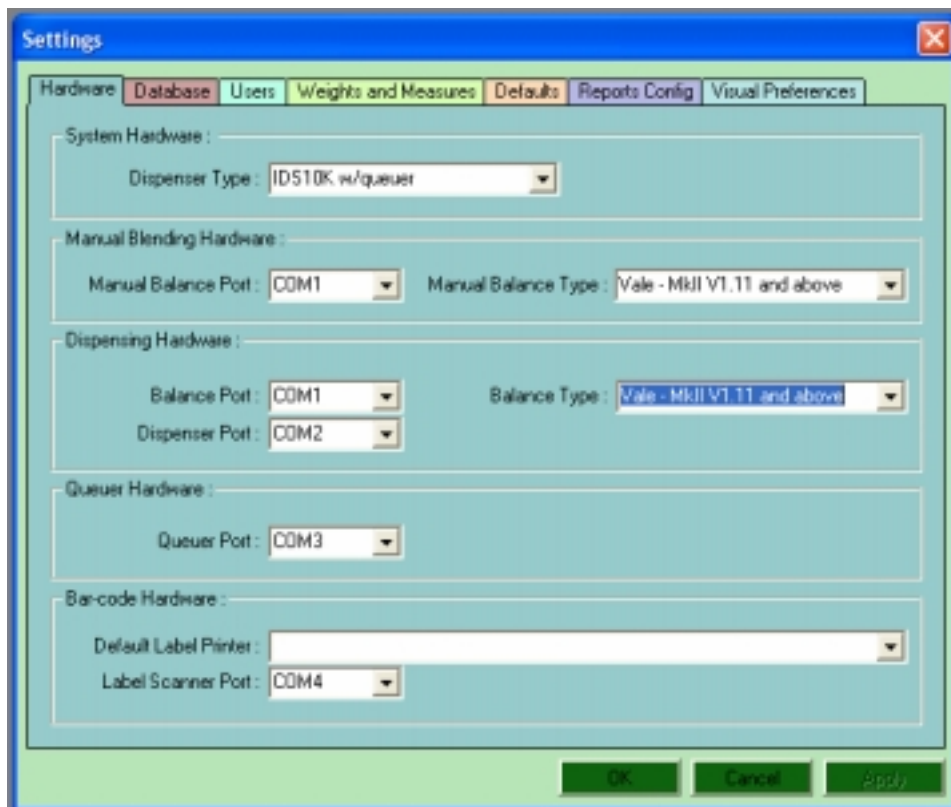
16. On the IDS PC select **BOARD** and then **AUTO PROGRAM**



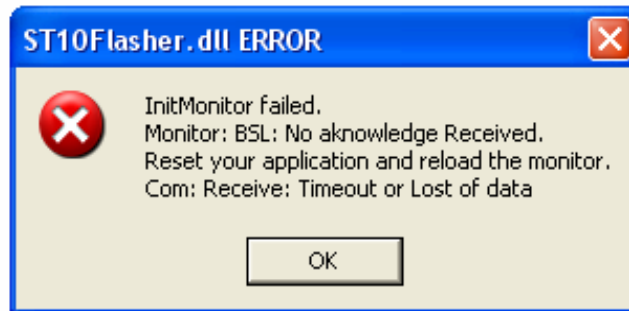
17. When IDS Control PCB has completed programming, the following message will appear, **“PROGRAMING SUCCESSFUL”**. Close NTLoader.exe.
18. On the IDS Control PCB Set **JP9** to **OFF** position or remove the Header Pin.
19. Press switch **SW1** to re-set the controller.
20. The IDS is now reprogrammed with the **B_IDS.HEX** File.

Procedure B.

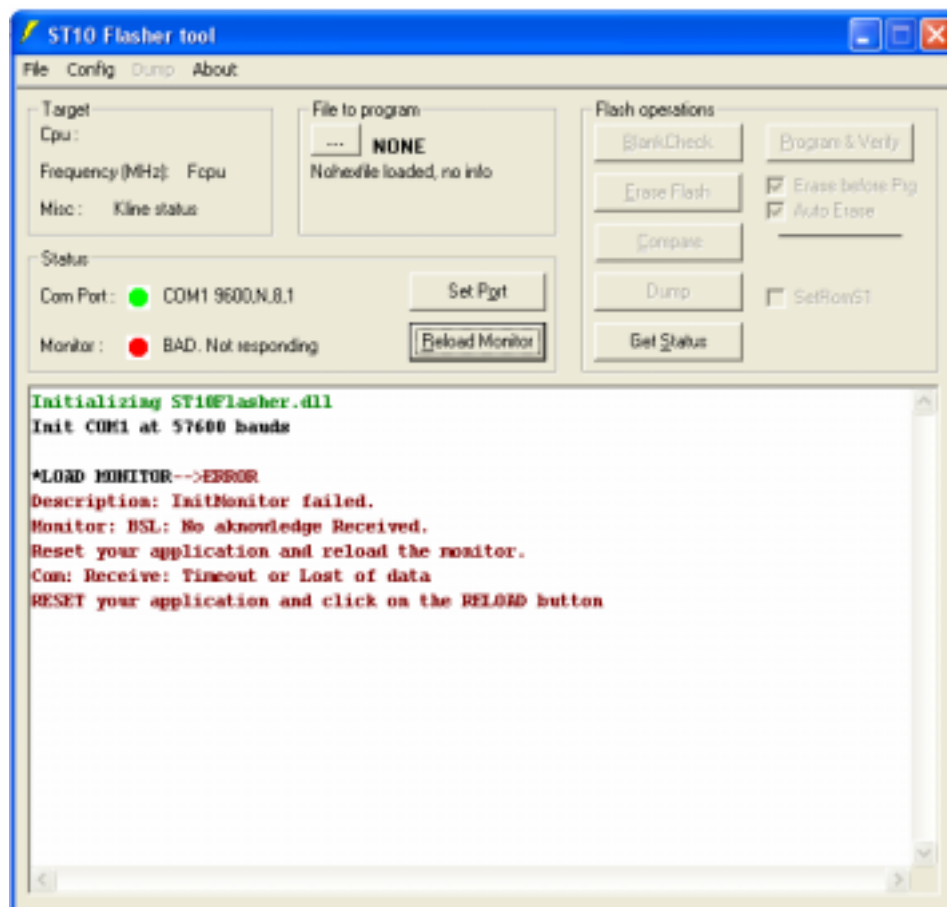
1. Identify which COM port the Controller be programmed is connected to. This can be done by checking the InkManager Hardware Screen. The example below shows the Dispenser Port is COM2, and the Queuer Port is COM3. To program the IDS (Dispenser) Main Controller Board, use COM2, to program the Queuer Controller Board, use COM3. Close InkManager before continuing.



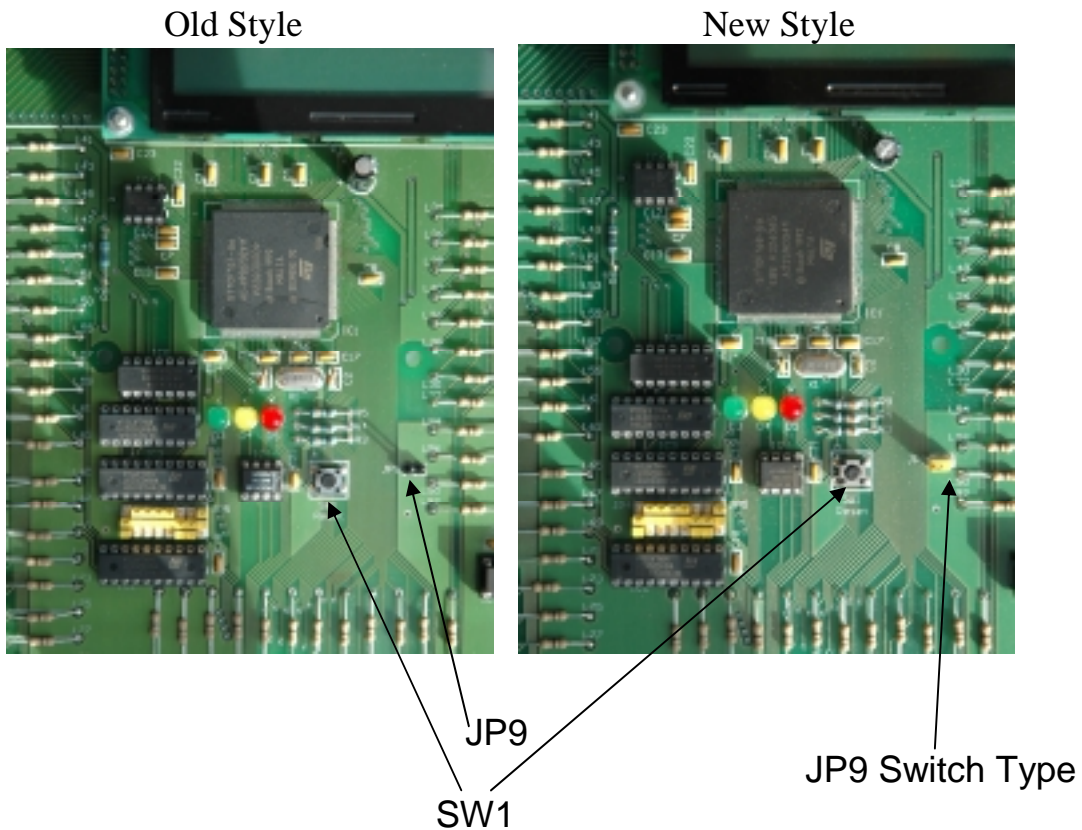
2. Launch ST 10 Flasher from the Start Bar All Programs Menu. If ST 10 Flasher is not there, install it, if you do not have the software, please contact Vale-Tech Technical Support for a copy.
3. If you see the following error message, it is not a problem, the software is not set to the correct COM yet.



4. Click OK and the following screen will be displayed:



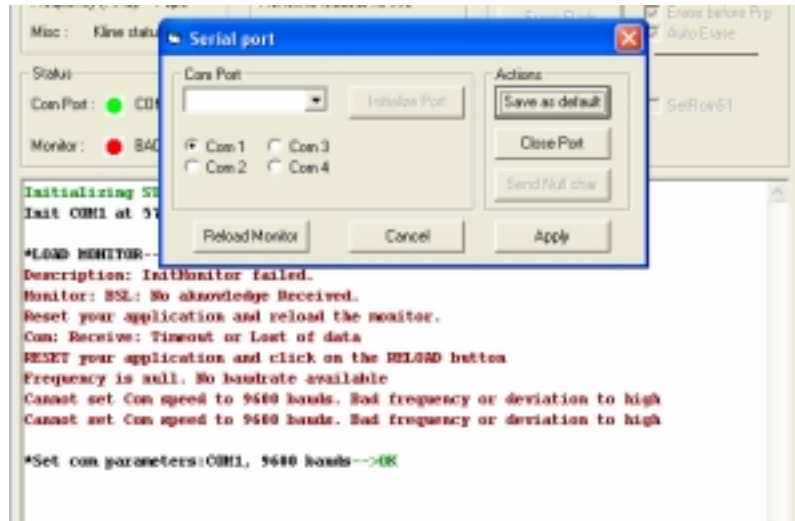
- 5. The IDS Main Controller is in the right hand side cabinet, SW1 and JP9 can be seen in the photos below:



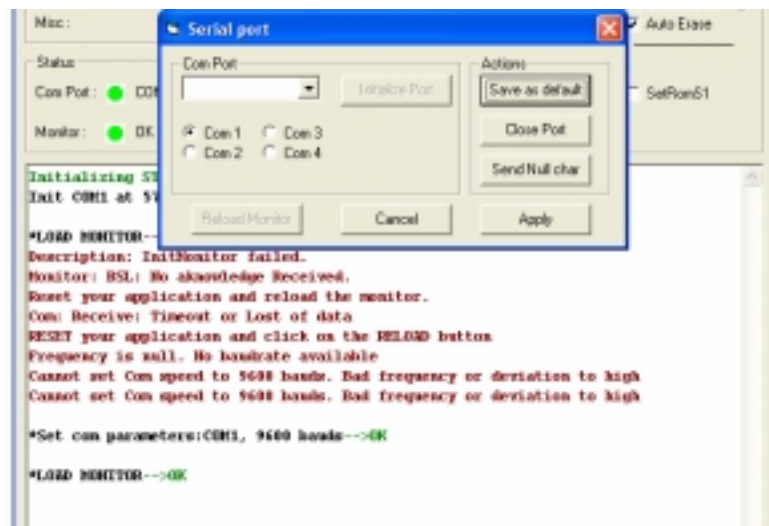
- 6. Set JP9 to the ON position, or short the two pins of the Pin Header.
- 7. Press the switch SW1.
- 8. Click on Set Port, set the COM port by clicking the radio button for the COM port for the Dispenser Port, in this example COM1, (this is not as shown in the Hardware screenshot above, but should be as seen in your configuration).



9. Click on the Initialise Port Button, the following response should be seen in the Message Window:



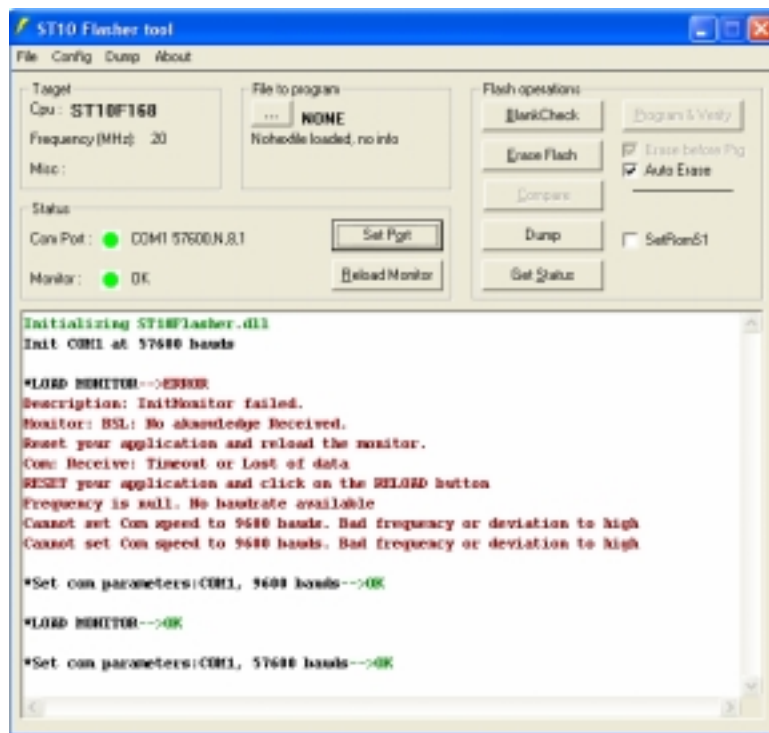
10. Click the Reload Monitor button and the following message will be displayed:



11. Click on the Com Port drop down menu and select 57600 as the baud rate, as shown below:

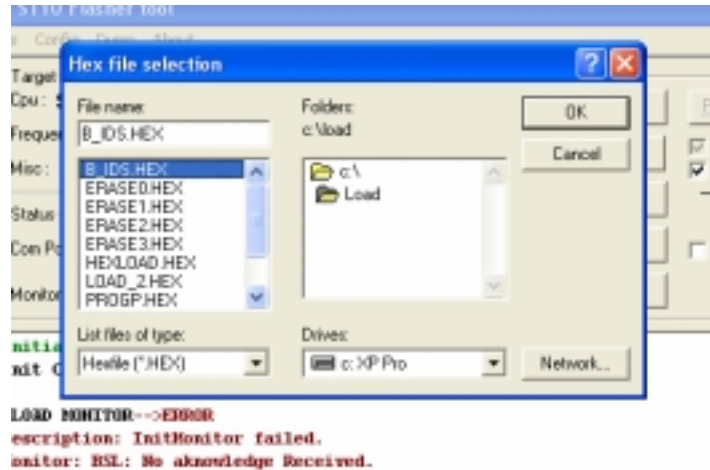


12. Click on Save as default, then click on Apply, the following message is displayed:



NOTE: Please ensure that you have the Vale-Tech **B_IDS.HEX** floppy disk before starting the next stage of the download procedure. If not, please try to obtain the version code from your original Controller Board. This can be done by resetting the Controller Board using SW1 and reading version code on the LCD display. The Queuer HEX file may be named differently, if in doubt, please contact Vale-Tech Technical Support with the Version Code.

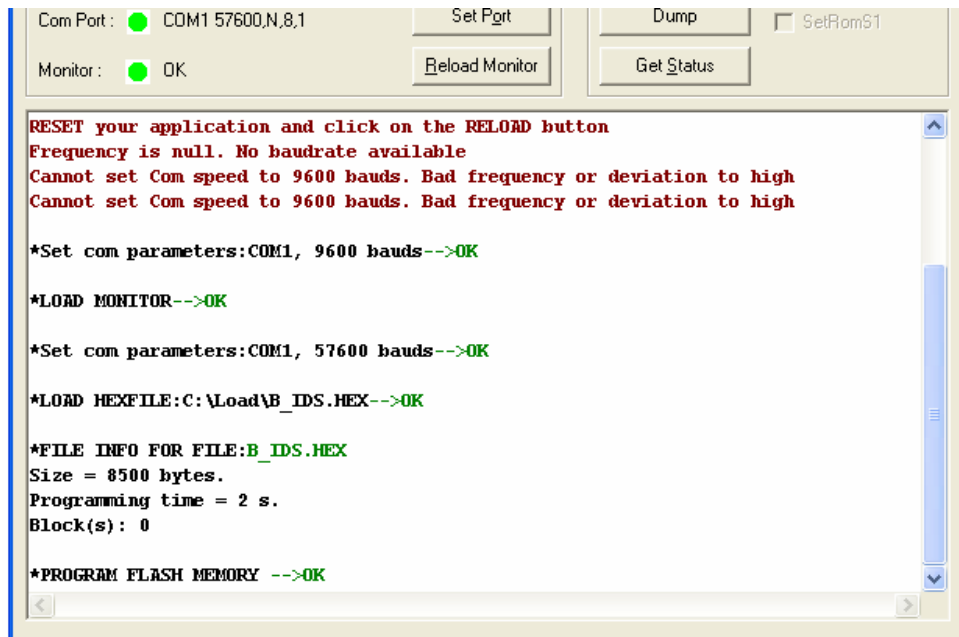
- Click File, then Open, locate the B_IDS.HEX file or a Queuer HEX file, this may be in the Load directory, on a Floppy disk or CD-ROM.



- Select the file and click OK, the following message will be shown:



15. Click on the Program & Verify button, the Message Window will be updated as shown below:



16. The Controller is now programmed, close ST 10 Flasher.
17. Set JP9 to the Off position, or remove the Pin Header and press SW1.

Perform a reset in InkManager each time InkManager is started up, and specifically after the controller is reprogrammed.

If you require further assistance, please contact Vale-Tech Ltd Technical Support by email on support@vale-tech.co.uk