

## MX420 SOFTWARE UPGRADE

Tools, cables and software needed:

1. Power/Download cable P/N 3508 102 70530, or
  - Use Figure 1 diagram when connecting directly to Cable A
  - Use Figure 2 when connecting to the MX420/8 Junction box
  - Use Figure 3 when connecting to the MX420/2 Junction box
2. DC power supply 12-24V.
3. PC with DOS or virtual DOS under Windows xx
4. Executable download programs **dlnx400.exe** and **Dos4gw.exe**
5. (filename).hex file – the program itself (i.e. 4281\_833.hex)

### **Procedure:**

1. Install the download program dlnx400.exe, dos4gw and the .hex file in the same directory (i.e. MX420).
2. Using a Power/Download cable, connect the power leads to the DC power supply. Black wire to ground and blue wire to +12-24V. If this is not available you can use the "Cable A" wire and follow the diagram in Figure 1 or you can connect the serial cable as shown in Figure 2/Figure 3.
3. Connect the DB9 connector to COMM1 (RS232) serial port on the PC.
4. Connect the 18-pin connector (or Cable A) to the MX420.
5. Turn the MX420 on to verify if power connection is correct. Turn it off again.
6. The download program runs much faster under DOS than under Windows. However, if a DOS-PC is not available, you can also use the DOS prompt under Windows 95, 98, NT, etc.
7. At the command prompt type dlnx400 (filename).hex. [where (filename).hex is the program file name]
8. The program will ask you to turn the navigator on. When unit is on, the programming process starts indicated by a turning short line in the computer screen.
9. The traffic lights will turn from red to yellow and then to green.
10. When the download is finished the computer will return to the DOS prompt. Turn the main power supply switch OFF and ON and verify the program version in the AUX 7 display. While in the AUX7 screen, press the left-most softkey 3 times to show the complete program build number (i.e. V1.5(833)).

### **Must Do:**

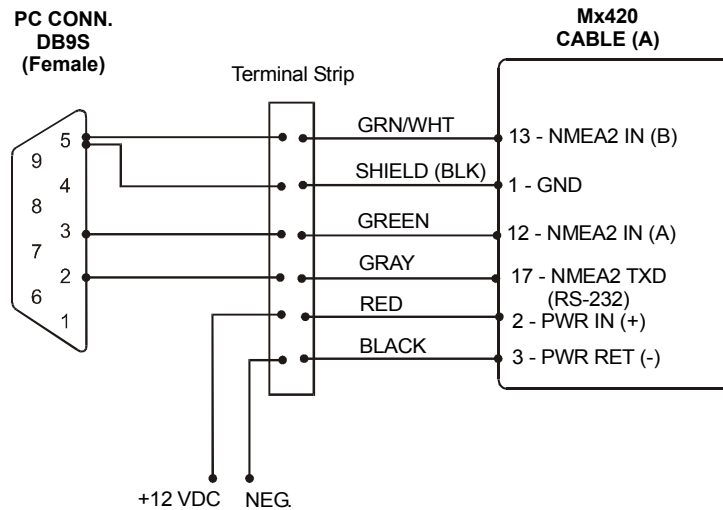
After reprogramming, the MX420 navigator must be cold-started (memory cleared).

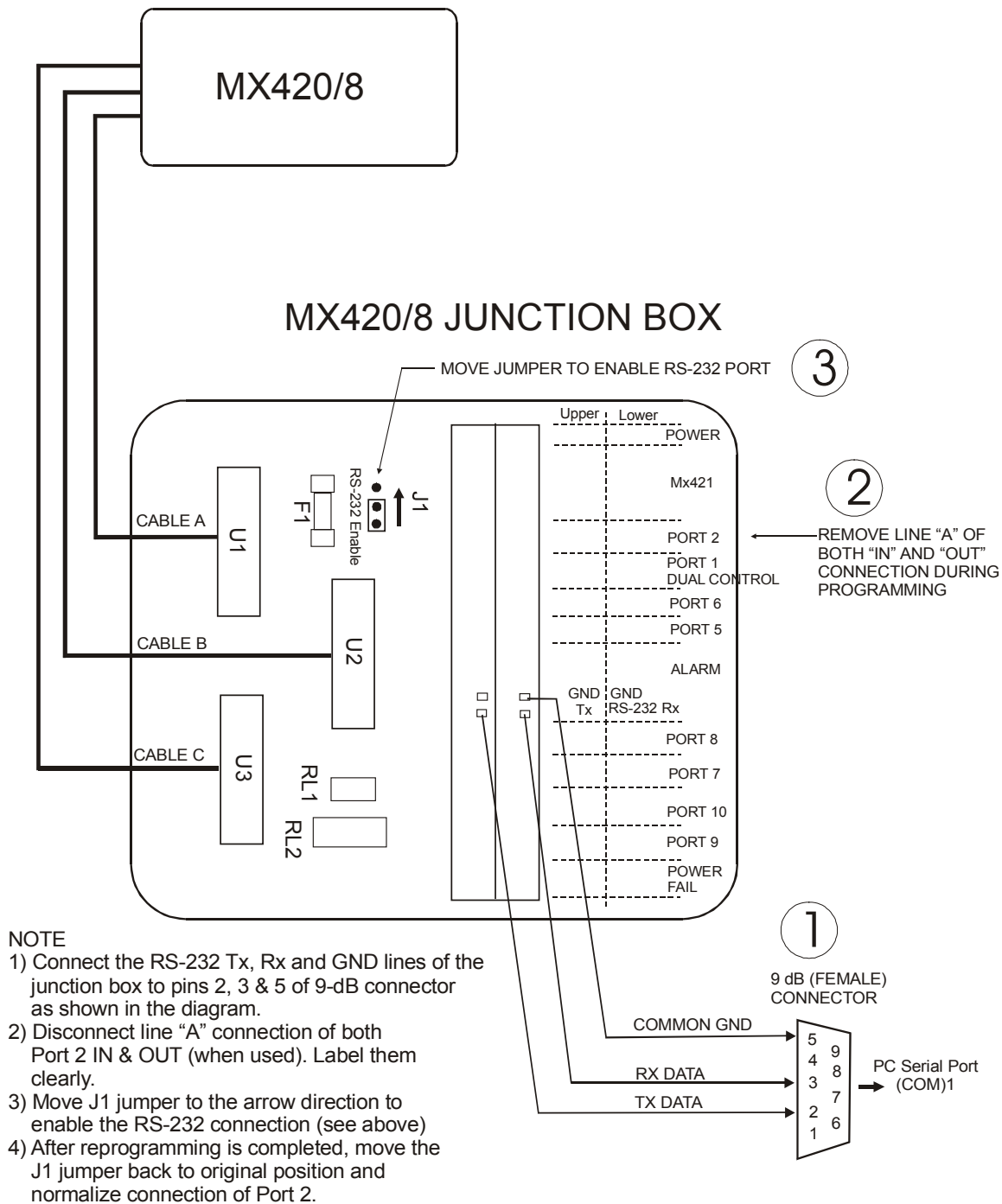
Please note that all configuration settings including waypoints and routes will be lost. Refer to memory clear procedure shown below.

### **Memory Clear Procedure:**

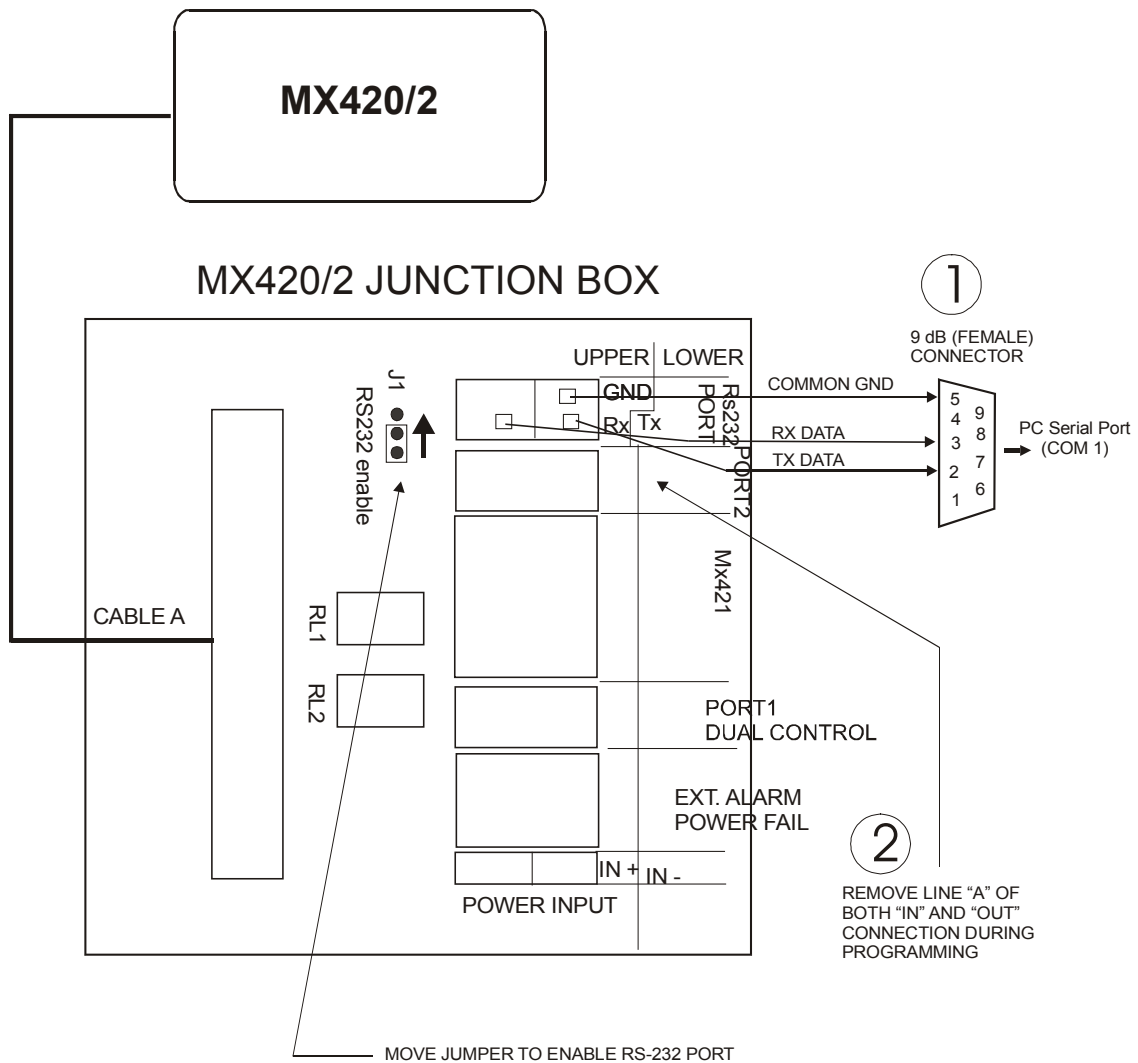
1. Turn the power OFF to the MX420 by turning off the 12-VDC circuit breaker (this may also be accomplished by removing the "Cable A" from the back of the unit).
2. Press and hold down the right-most softkey.
3. Apply power to the unit and wait for about 5 seconds. The MX420 will come on and display the MX-Marine logo.
4. Release the softkey.
5. The memory is now cleared.

**Figure 1. MX420-PC Interface Diagram to Cable A**





**Figure 2 - MX420/8 to PC Hook-up Through The MX420/8 Junction Box**



**NOTE**

- 1) Connect the RS-232 Tx, Rx and GND lines of the junction box to pins 2, 3 & 5 of 9-dB connector as shown in the diagram.
- 2) Disconnect line "A" connection of both Port 2 IN & OUT (when used). Label them clearly.
- 3) Move J1 jumper to the arrow direction to enable the RS-232 connection (see above)
- 4) After reprogramming is completed, move the J1 jumper back to original position and normalize connection of Port 2.

**Figure 3 - MX420/2 to PC Hook-up Through the MX420/2 Junction Box**