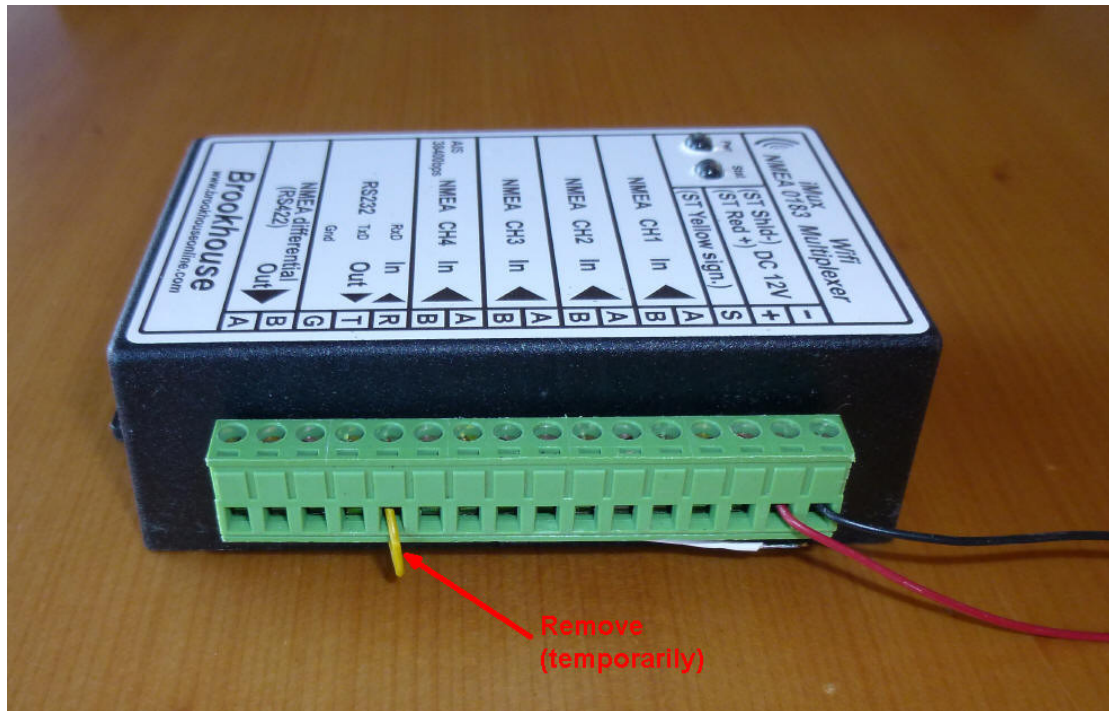


iMux/iMux-ST setup with a Windows PC and terminal program Teraterm

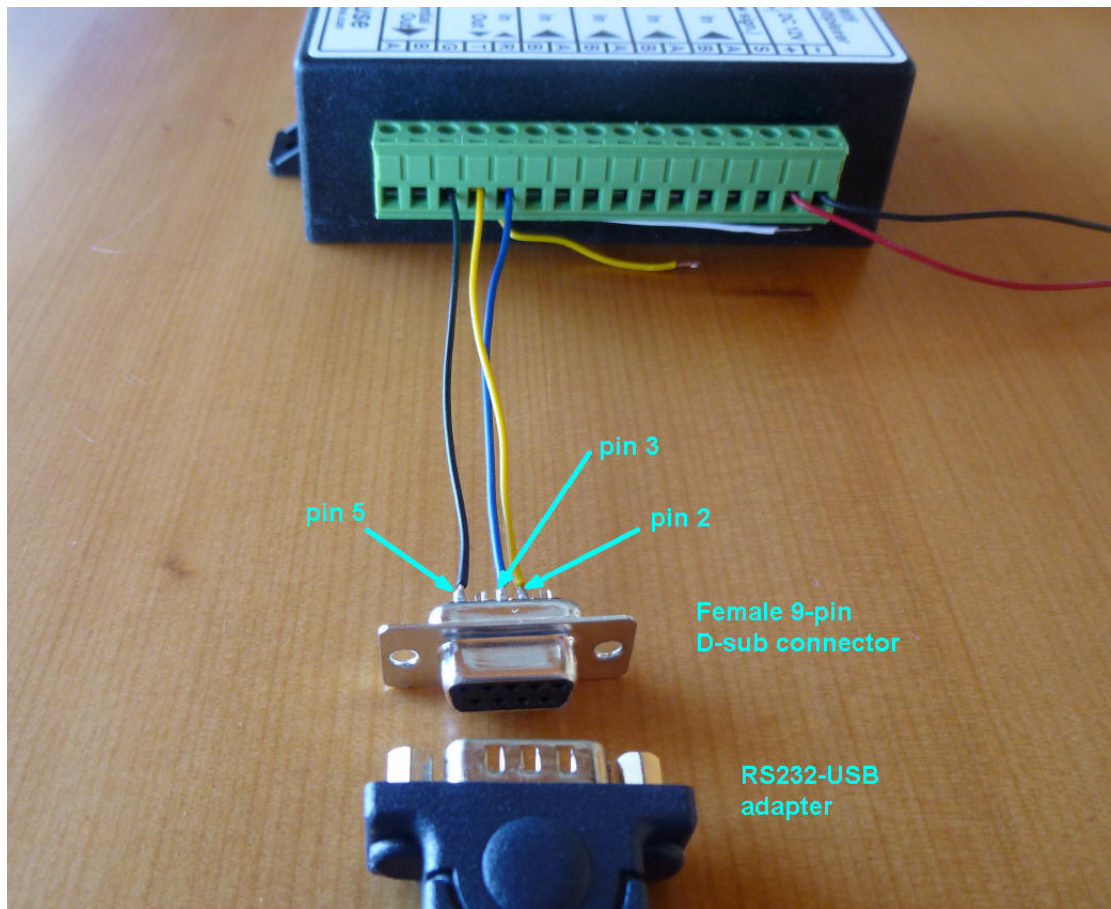
1. Download terminal emulation program "Teraterm" from one of the various websites where the program is available.
2. Connect a 12V DC power source. Do not switch on yet. Temporarily remove the short yellow wire from the RS232 RxD terminal.



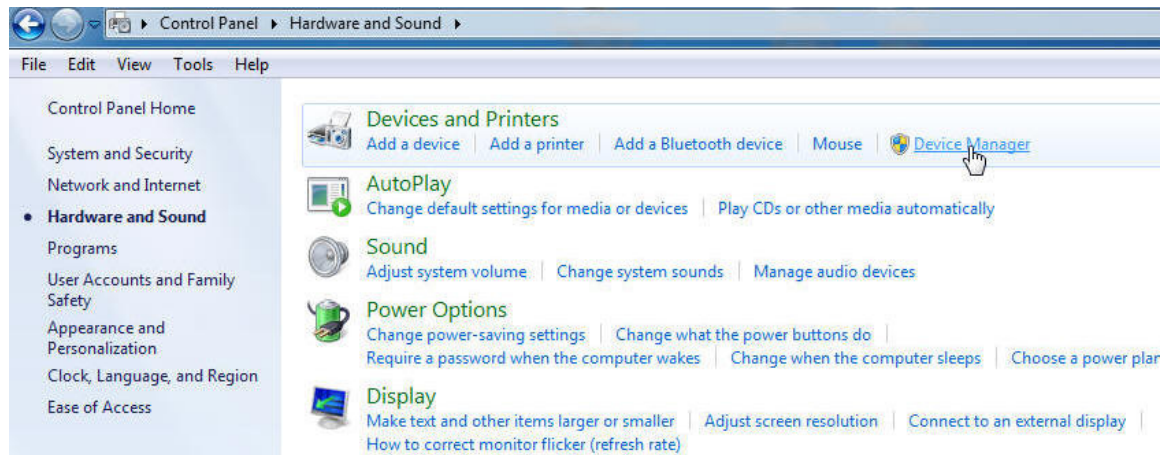
3. Connect iMux RS232 RxD, TxD and Gnd to a female 9-pin Dsub connector as shown in the picture. A connector without shell is shown for illustration purposes. A standard RS232 cable can be used. instead. Cut off one connector, remove insulation and by using a multi-meter, determine which wires correspond to pins 2, 3 and 5. Connect to the iMux as follows:

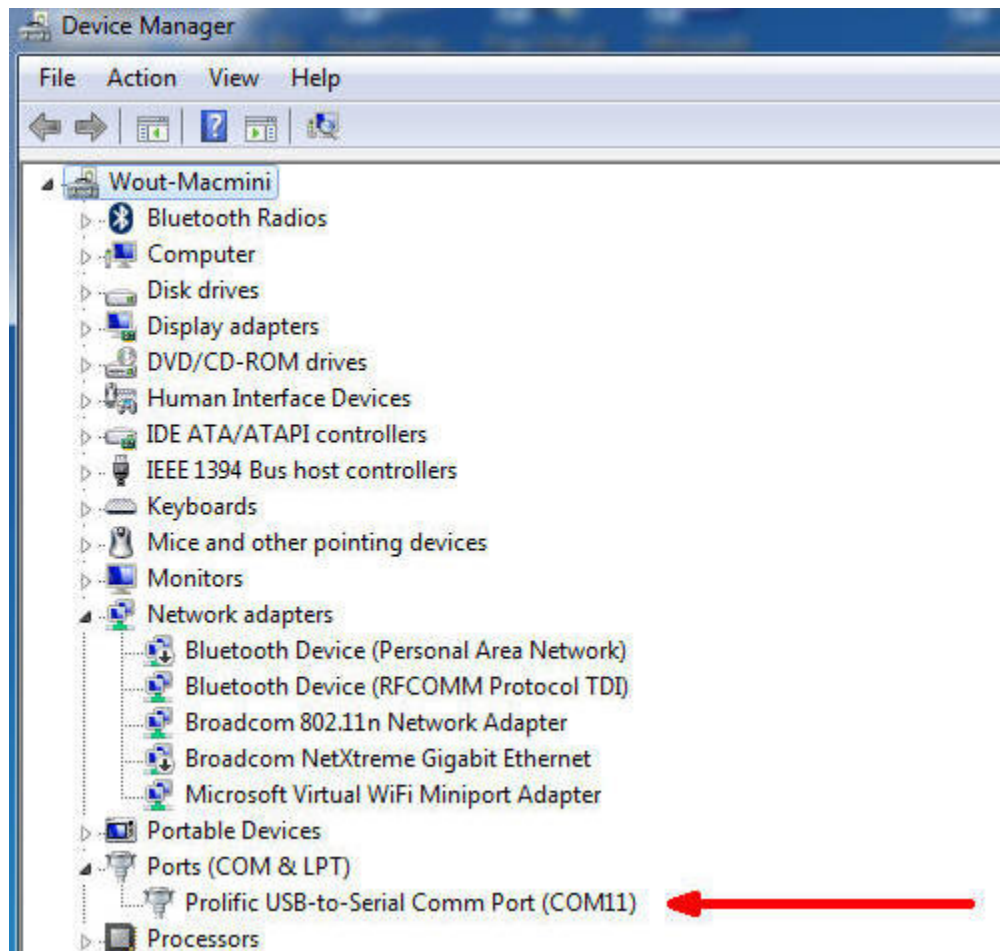
pin 2 -- iMux RS232 TxD
pin 3 -- iMux RS232 RxD
pin 5 -- iMux RS232 Gnd

The female connector can be plugged directly into the male connector if a PC with serial port is available, or a RS232-USB adapter can be used to connect to a USB port.

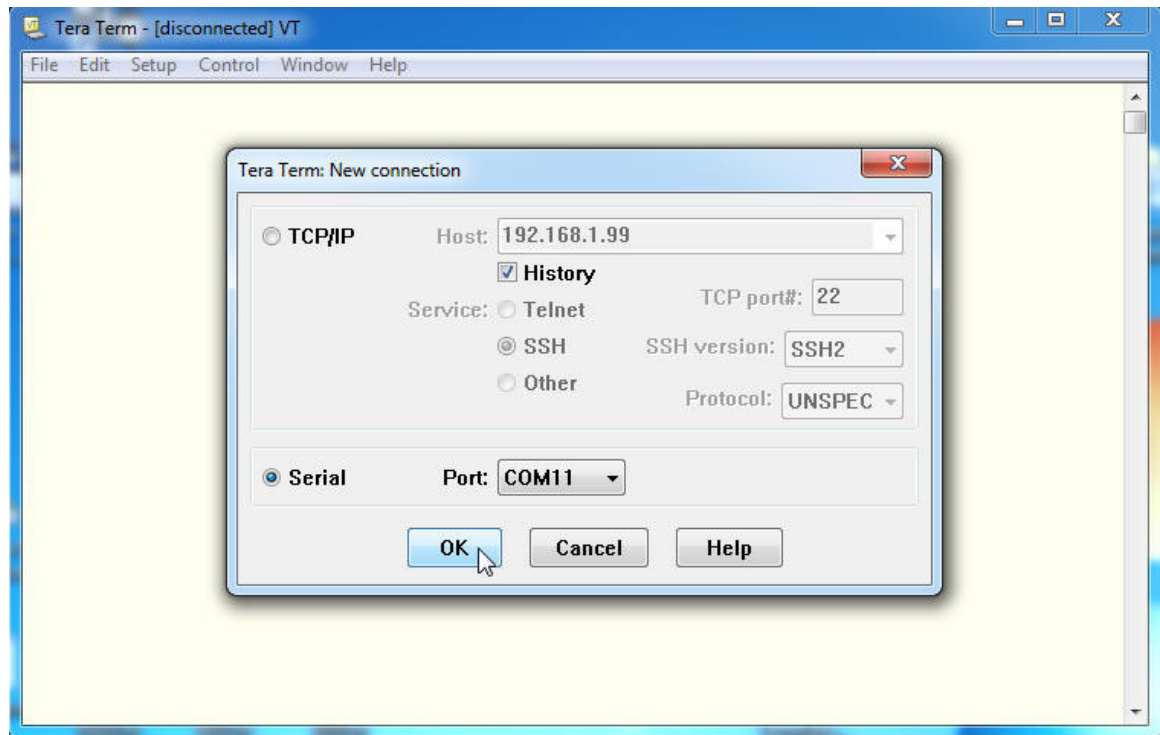


4. Determine the COM port number by navigating to Windows Device manager as shown in the next 3 pictures.

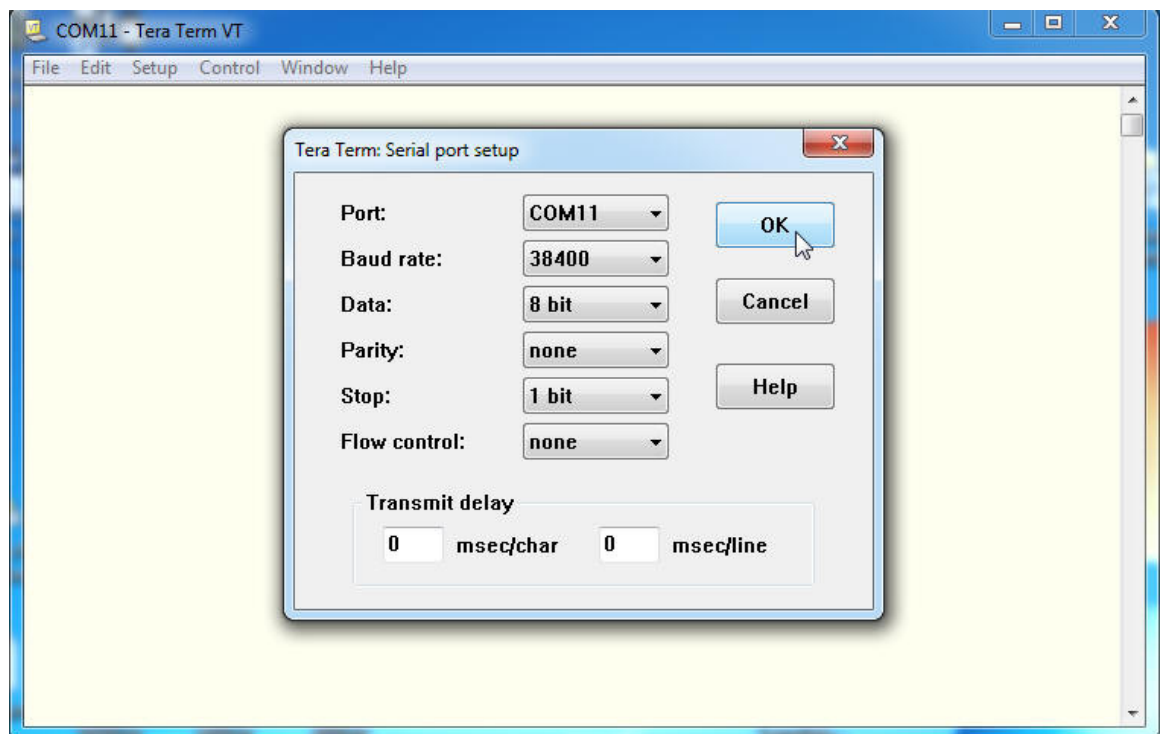
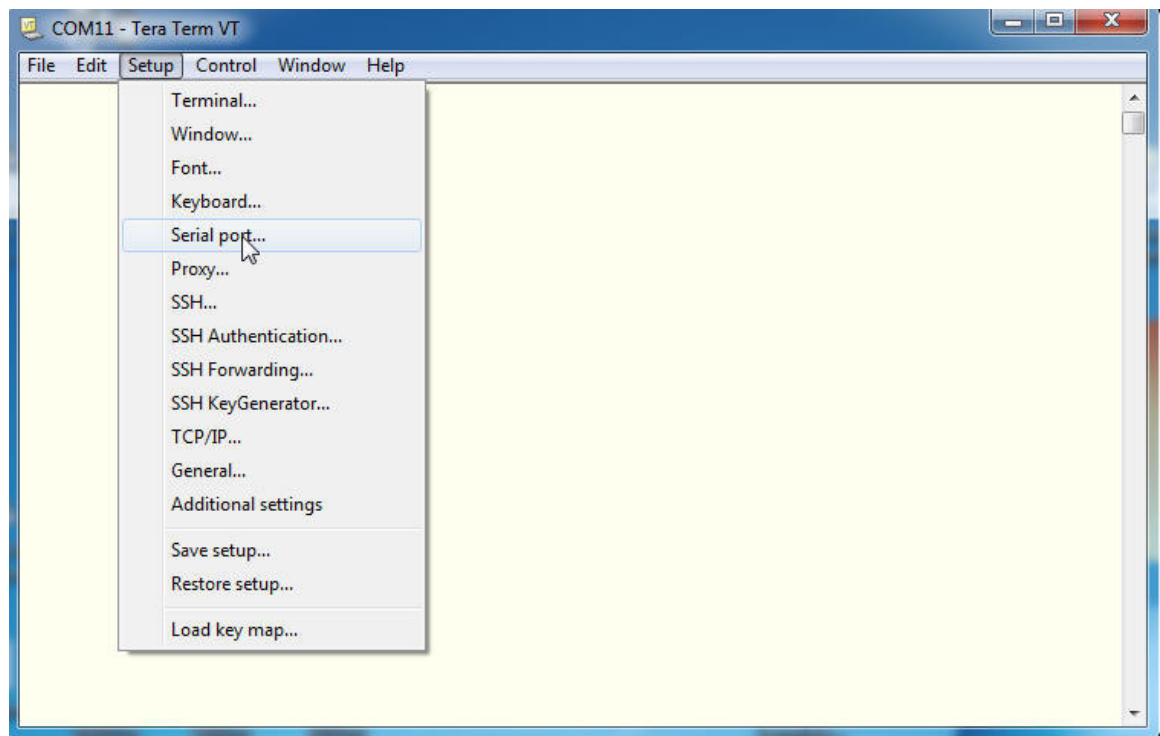




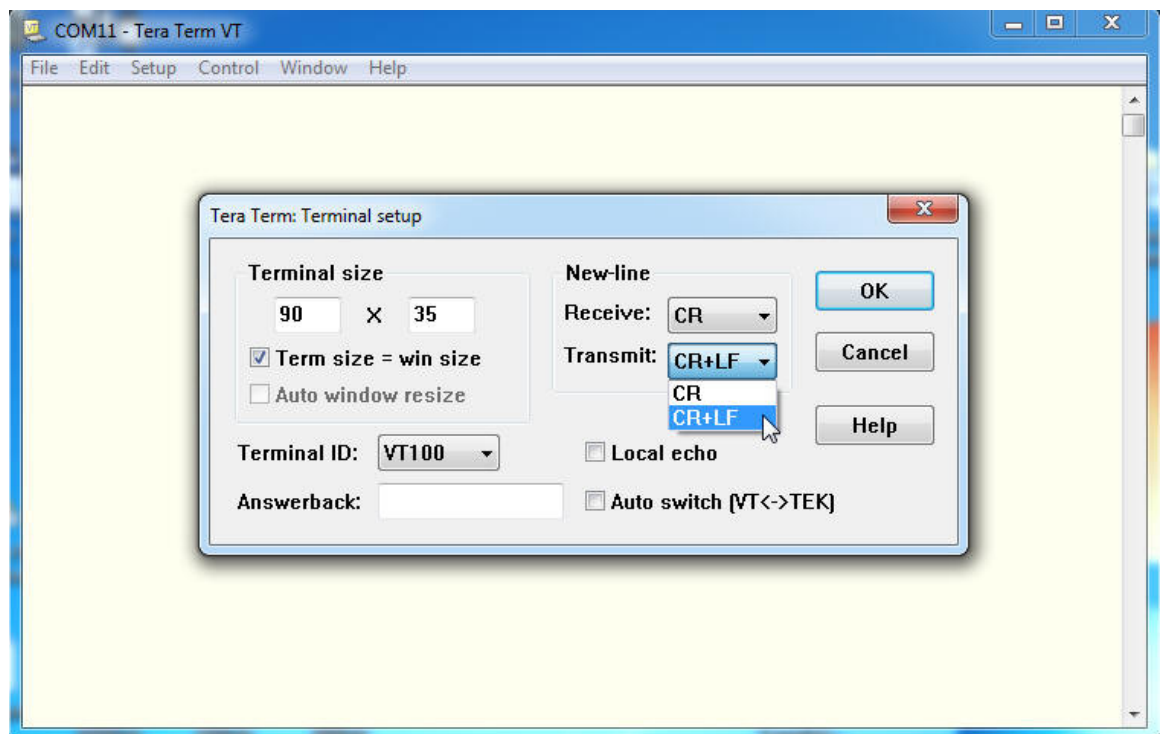
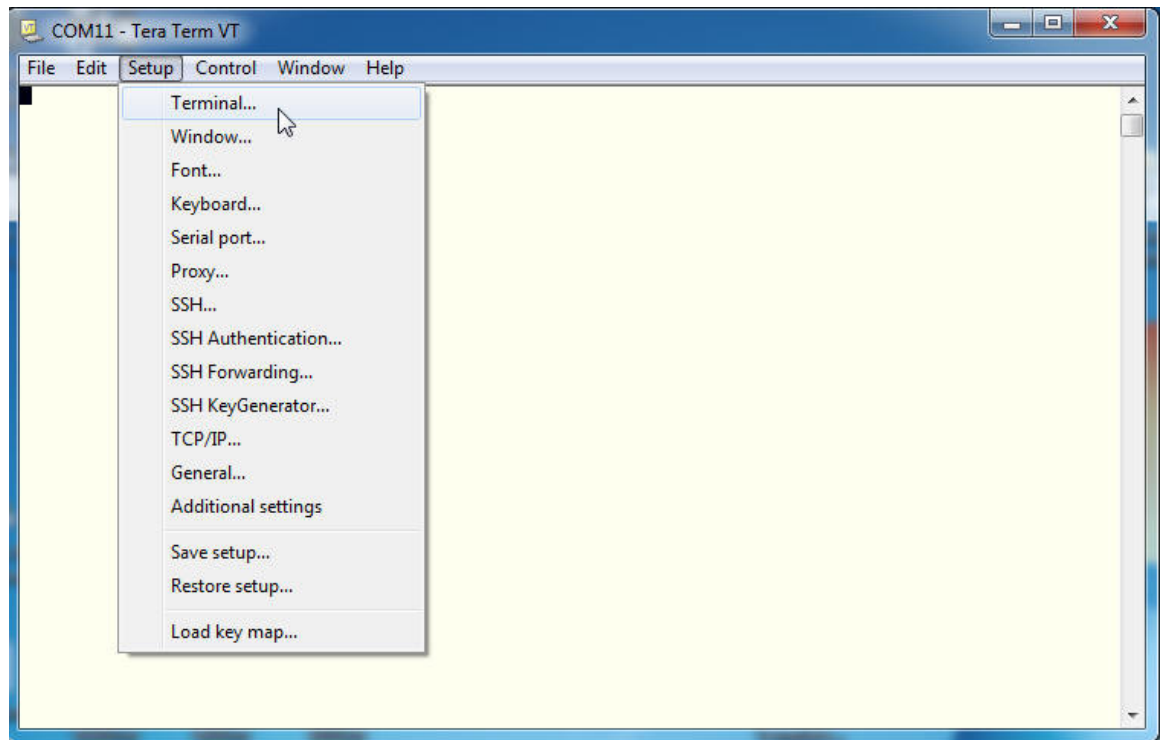
5. Start program TeraTerm, select "Serial", select the COM port number for the iMux connection found in Device Manager.

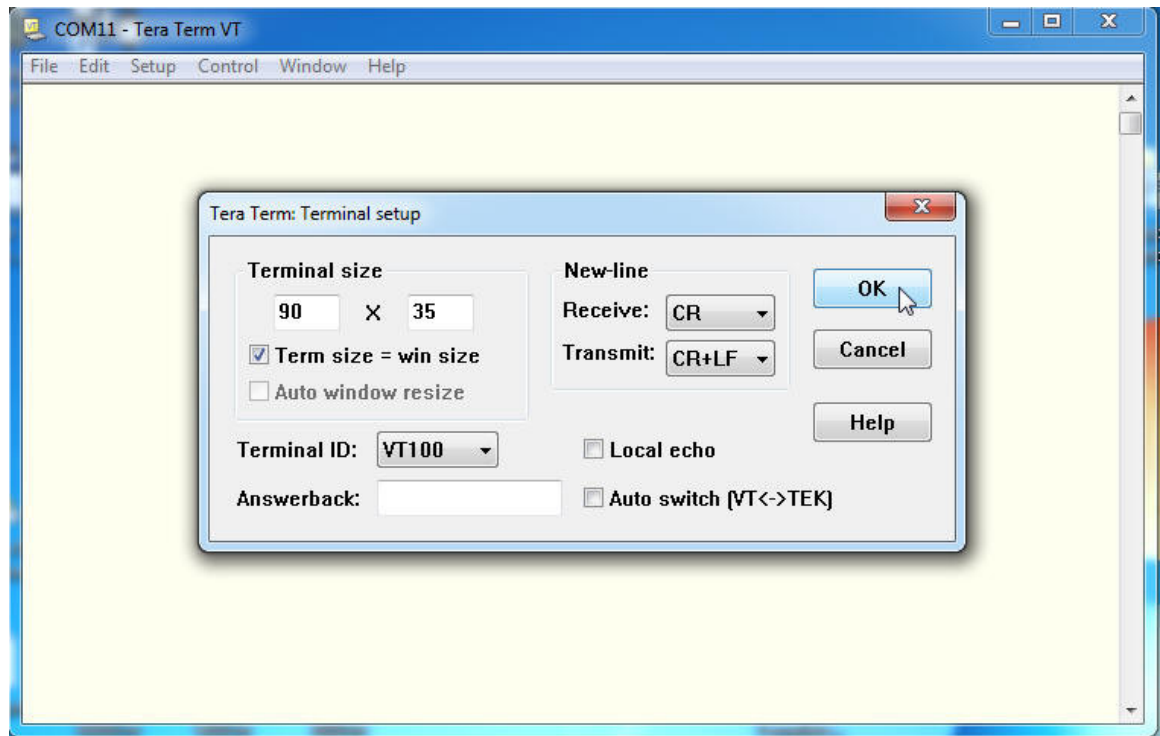


6. In the setup menu, click serial port and set up as shown in the next 2 pictures.

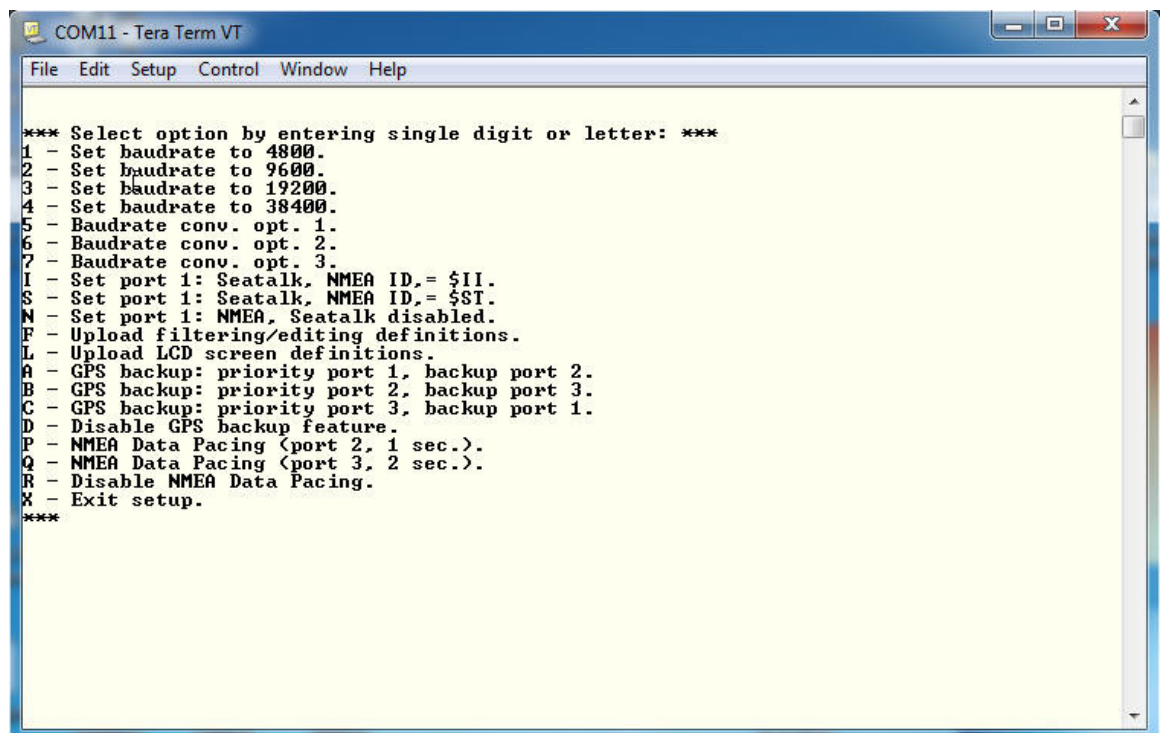


7. In the setup menu, click Terminal and select settings as shown in the next 3 pictures.





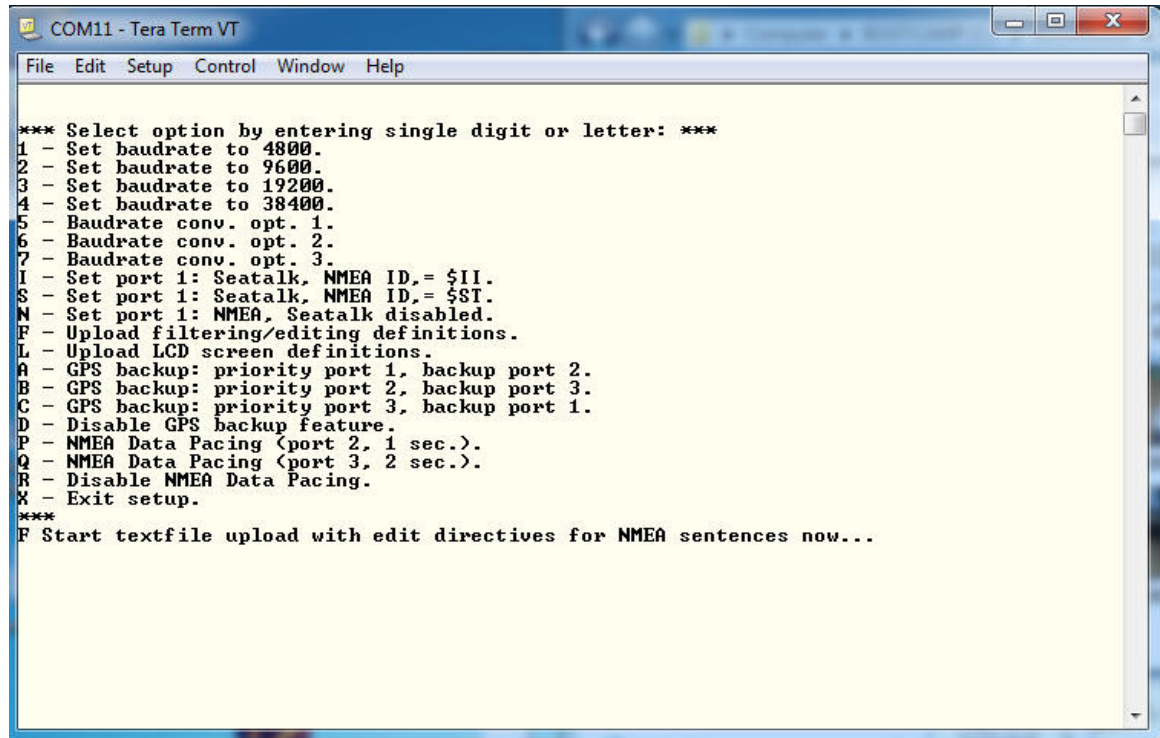
8. Power on the iMux, while holding the ESC or / key.
The following menu should appear.



The menu shows options for the various models Brookhouse multiplexers. We recommend only options 5, 6, 7, N, F are used for the iMux, if necessary.

In this example we want to upload a script-file, so only option F will be used.

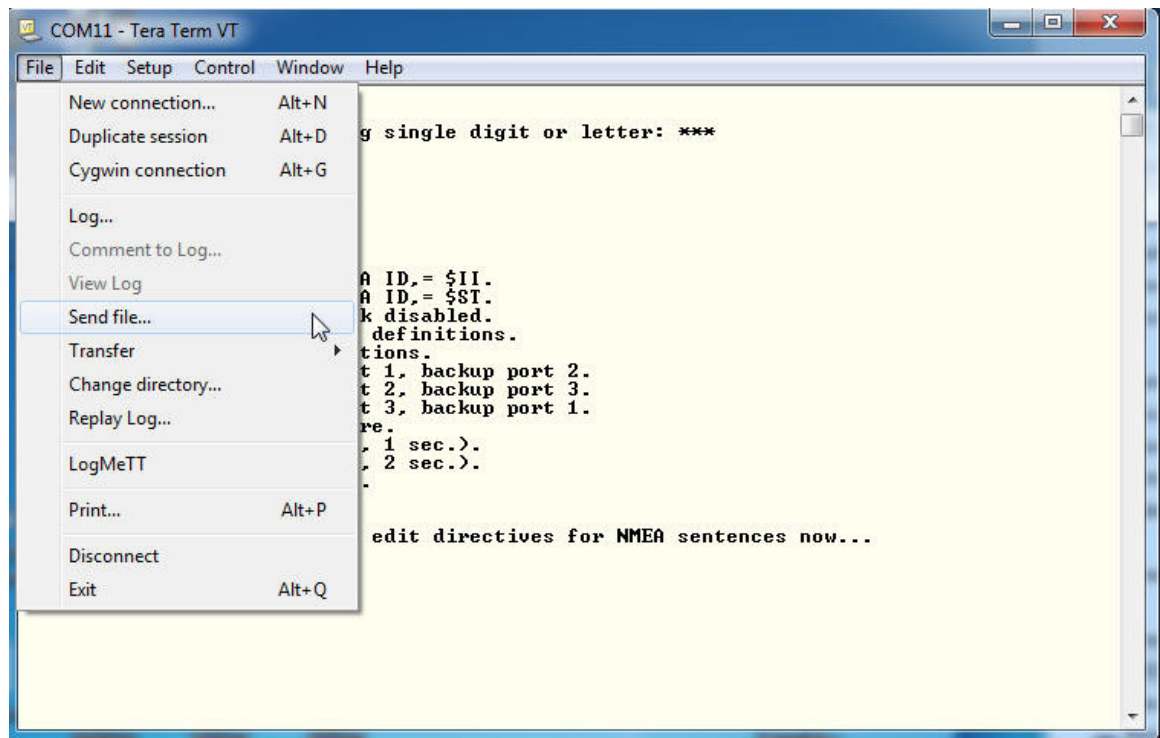
9. Make sure you know the location (folder) of the script file to be uploaded. Press upper case F. The iMux responds with the request to send the script-file.



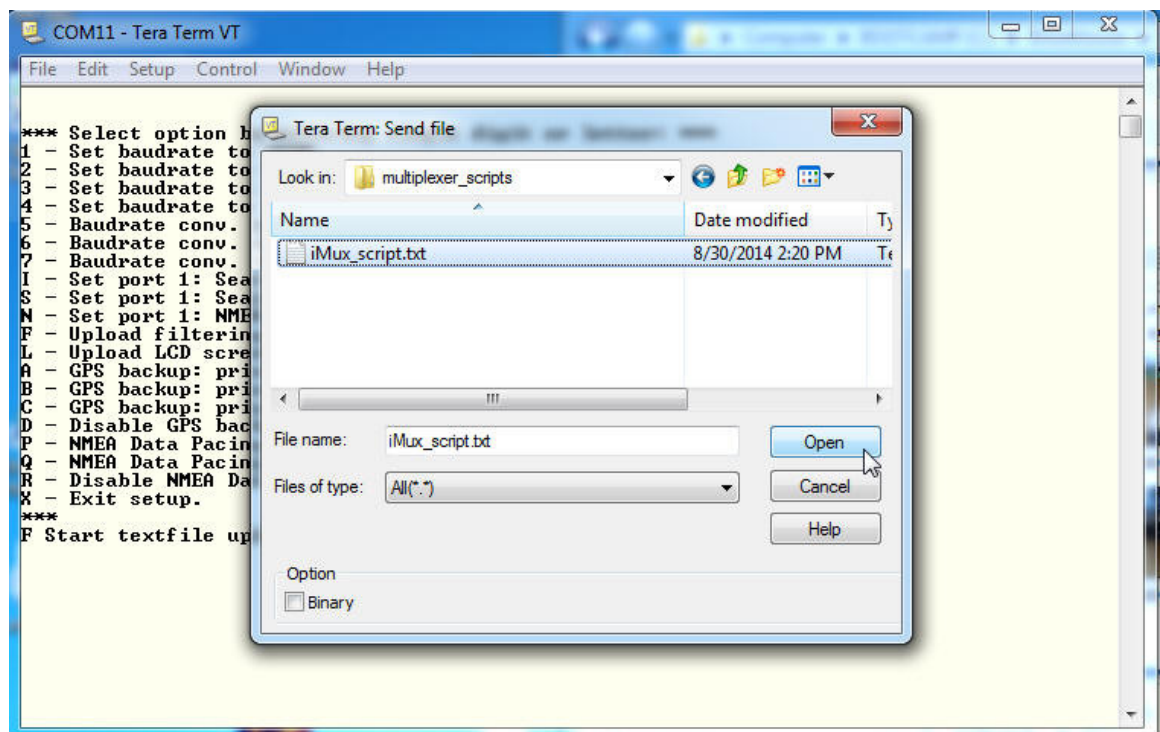
```
COM11 - Tera Term VT
File Edit Setup Control Window Help

*** Select option by entering single digit or letter: ***
1 - Set baudrate to 4800.
2 - Set baudrate to 9600.
3 - Set baudrate to 19200.
4 - Set baudrate to 38400.
5 - Baudrate conv. opt. 1.
6 - Baudrate conv. opt. 2.
7 - Baudrate conv. opt. 3.
I - Set port 1: Seataalk, NMEA ID,= $II.
S - Set port 1: Seataalk, NMEA ID,= $SI.
N - Set port 1: NMEA, Seataalk disabled.
F - Upload filtering/editing definitions.
L - Upload LCD screen definitions.
A - GPS backup: priority port 1, backup port 2.
B - GPS backup: priority port 2, backup port 3.
C - GPS backup: priority port 3, backup port 1.
D - Disable GPS backup feature.
P - NMEA Data Pacing (port 2, 1 sec.).
Q - NMEA Data Pacing (port 3, 2 sec.).
R - Disable NMEA Data Pacing.
X - Exit setup.
***
F Start textfile upload with edit directives for NMEA sentences now...
```

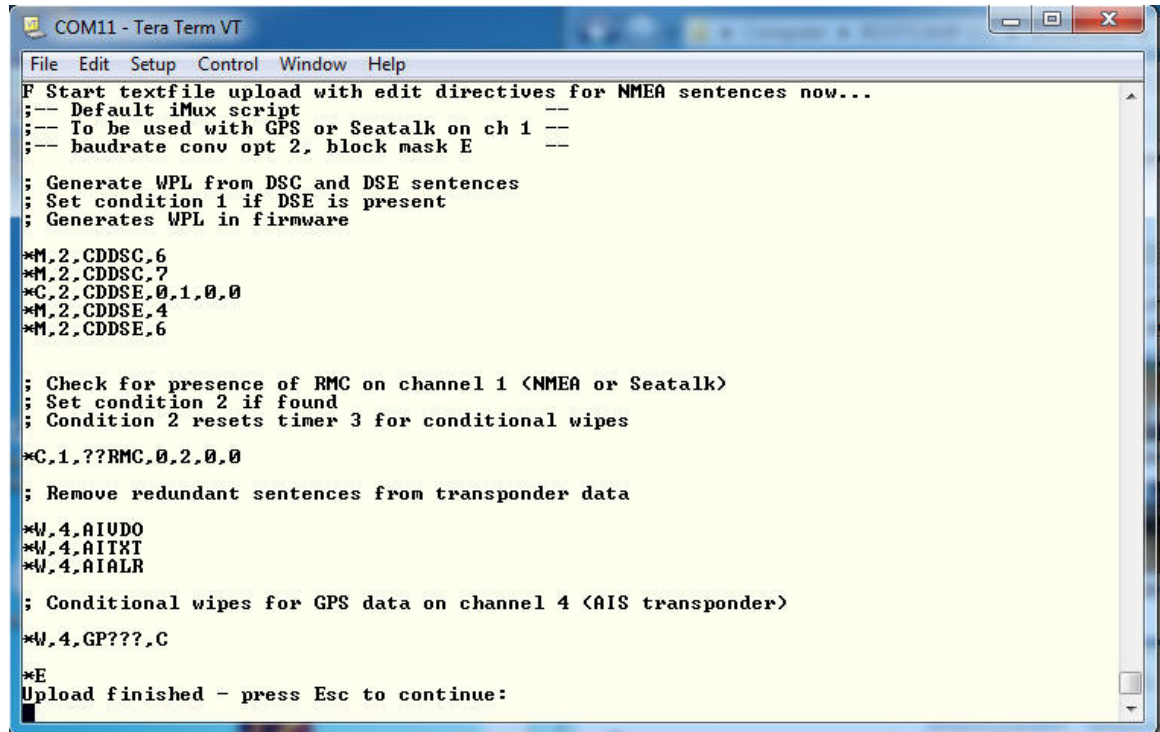
10. Click on File in the upper left corner to display the File menu and select "Send File"



11. Navigate to the location of the script file. In this case it is in folder **multiplexer scripts** and the file name is **iMux_script.txt**. Click "Open".



12. While being transmitted (uploaded) to the iMux, the contents of the script file is displayed in Teraterm.



```
COM11 - Tera Term VT
File Edit Setup Control Window Help
F Start textfile upload with edit directives for NMEA sentences now...
;-- Default iMux script --
;-- To be used with GPS or Seatalk on ch 1 --
;-- baudrate conv opt 2, block mask E --

; Generate WPL from DSC and DSE sentences
; Set condition 1 if DSE is present
; Generates WPL in firmware

*M,2,CDDSC,6
*M,2,CDDSC,7
*C,2,CDDSE,0,1,0,0
*M,2,CDDSE,4
*M,2,CDDSE,6

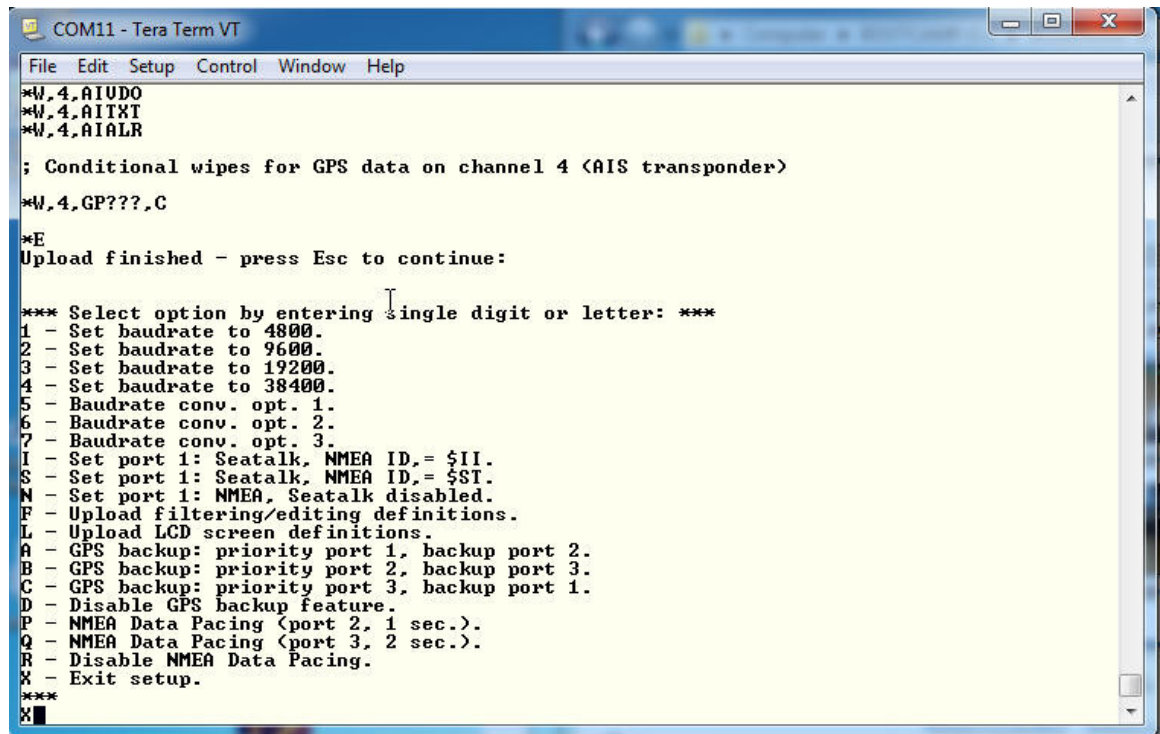
; Check for presence of RMC on channel 1 (NMEA or Seatalk)
; Set condition 2 if found
; Condition 2 resets timer 3 for conditional wipes
*C,1,??RMC,0,2,0,0

; Remove redundant sentences from transponder data
*W,4,AIUDO
*W,4,AITXT
*W,4,AIALR

; Conditional wipes for GPS data on channel 4 (AIS transponder)
*W,4,GP???,C

*E
Upload finished - press Esc to continue:
```

13. When the message " Upload Finished, press ESC to continue:" appears, press ESC. The setup menu appears again. X can now be entered to exit setup mode and enter normal operation mode or the power can be switched off.

A screenshot of a Tera Term VT window titled "COM11 - Tera Term VT". The window has a menu bar with "File", "Edit", "Setup", "Control", "Window", and "Help". The main text area displays the following content:

```
*W,4,AIUDO
*W,4,AITXT
*W,4,AIALR

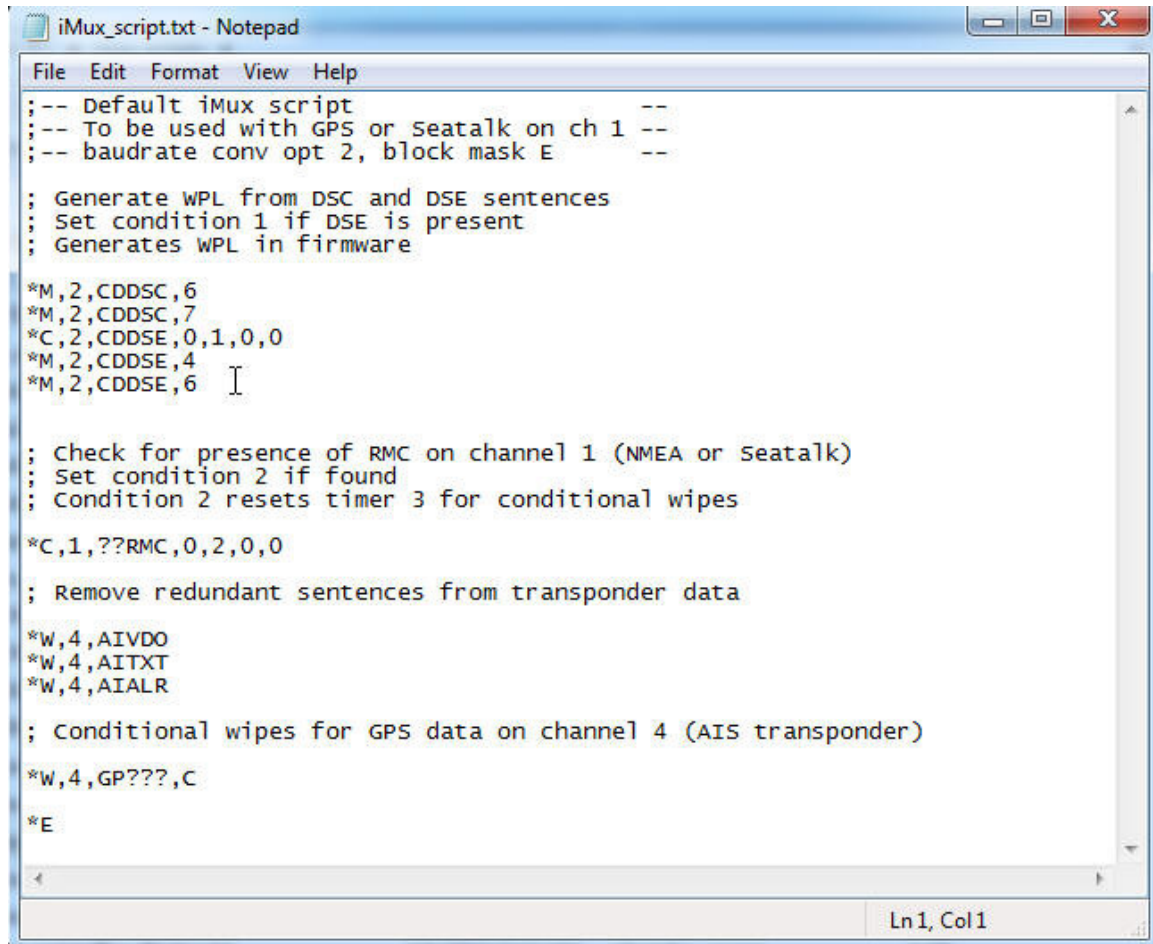
; Conditional wipes for GPS data on channel 4 <AIS transponder>

*W,4,GP???,C

*E
Upload finished - press Esc to continue:

*** Select option by entering single digit or letter: ***
1 - Set baudrate to 4800.
2 - Set baudrate to 9600.
3 - Set baudrate to 19200.
4 - Set baudrate to 38400.
5 - Baudrate conv. opt. 1.
6 - Baudrate conv. opt. 2.
7 - Baudrate conv. opt. 3.
I - Set port 1: Seataalk, NMEA ID,= $II.
S - Set port 1: Seataalk, NMEA ID,= $ST.
N - Set port 1: NMEA, Seataalk disabled.
F - Upload filtering/editing definitions.
L - Upload LCD screen definitions.
A - GPS backup: priority port 1, backup port 2.
B - GPS backup: priority port 2, backup port 3.
C - GPS backup: priority port 3, backup port 1.
D - Disable GPS backup feature.
P - NMEA Data Pacing <port 2, 1 sec.>.
Q - NMEA Data Pacing <port 3, 2 sec.>.
R - Disable NMEA Data Pacing.
X - Exit setup.
***
X
```

The following picture shows the contents of the standard script text-file which is normally uploaded to each iMux before shipping. This can be used as a basis for additional script instructions.



```
iMux_script.txt - Notepad
File Edit Format View Help
;-- Default iMux script --
;-- To be used with GPS or Seataalk on ch 1 --
;-- baudrate conv opt 2, block mask E --

; Generate WPL from DSC and DSE sentences
; Set condition 1 if DSE is present
; Generates WPL in firmware

*M,2,CDDSC,6
*M,2,CDDSC,7
*C,2,CDDSE,0,1,0,0
*M,2,CDDSE,4
*M,2,CDDSE,6

; Check for presence of RMC on channel 1 (NMEA or Seataalk)
; Set condition 2 if found
; Condition 2 resets timer 3 for conditional wipes
*C,1,??RMC,0,2,0,0

; Remove redundant sentences from transponder data
*W,4,AIVDO
*W,4,AITXT
*W,4,AIALR

; Conditional wipes for GPS data on channel 4 (AIS transponder)
*W,4,GP???,C

*E

Ln 1, Col 1
```