

Overcoming Flashing Troubles

Sometimes it seems the calculator just does not want to be flashed. You may have tried the procedure described in [Appendix A](#) repeatedly, but the display stubbornly stays blank. Do not despair⁹⁴ – the following procedure will help:

1. If there is still a cable linking calculator and computer, remove it from both devices a.s.a.p.

2. Check the batteries.

- a. Open the battery door and remove both batteries.

- b. Carefully bend the three legs of both center battery contacts approx. 1mm upwards.⁹³

- c. Check the voltage. Both batteries shall produce 2.8 ... 3.2 V. If it is less, replace both of them with fresh coin cells type CR 2032.

- d. Insert the batteries properly – with their positive poles up – like pictured here. Now your calculator is well prepared. Leave the battery door open.



3. Check your computer interface and connecting cable.

- a. You have either (i) a programming cable or (ii) a micro USB cable. The latter requires a custom board installed in your calculator – if this installation was done and verified according to [Appendix H](#) you can be confident it is ok.

- b. Check both sides of your cable: are there any bent or dirty pins? If not and the cable also shows no signs of being cut or torn, it should be ok. If dubious, use another cable of same kind.

- c. Connect your chosen cable to your computer. For case (i), use a suitable converter if required (see p. 165). Using such a converter with a PC, you shall see it listed in <System Control> <Device Manager> as a “USB Serial Converter” (remember its port) – else this converter must be replaced.

- d. Check the contacts at your calculator being dirt-free. Connect the cable to your calculator. For case (ii) and using a PC, you shall see it listed in <System Control> <Device Manager> as a “FT230X USB Half UART” (remember its port) – else there is a problem with the cable or the custom board (see p. 220).

4. Now all the hardware is well prepared. Start *MySamBa* on your computer and enter the port (as determined in 3.c or 3.d, without a colon!) and the file information (see p. 165). Do not start sending yet, just leave the window open!

⁹⁴ No such calculator ended as a paperweight just by flashing yet – but many batteries were drained for sure by programming cables staying connected for too long and / or by calculators quietly running at full speed for an extended time period.

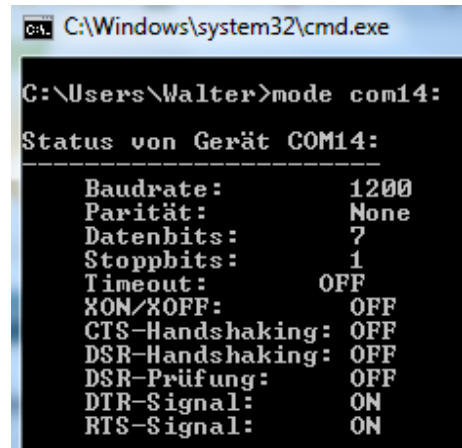
5. Focus on your calculator again – it is connected to your computer now. Press **ON** firmly for two seconds.

Does the calculator display react now? Fine – continue with [step 4](#) on ...

- p. 167 for first flashing, case (i), or on p. 168 for case (ii), or on
- p. 171 for updating your *WP 34S*.

If the display stays blank, however, press RESET and continue here.

6. Restart your computer. Verify the chosen port is known to your operating system. On a PC, open the start window and enter CMD – this will open the good old *DOS* command window; therein type `MODE COMx:` with *x* being the port number as determined in 3.c or 3.d. The *DOS* command `MODE` should return data like shown at right or the equivalent in your language. Do not care for particular values since those parameters will be controlled by *MySamBa* anyway.



```
C:\Windows\system32\cmd.exe
C:\Users\Walter>mode com14:
Status von Gerät COM14:
-----
Baudrate:          1200
Parität:           None
Datenbits:         7
Stoppsbits:        1
Timeout:           OFF
XON/XOFF:          OFF
CTS-Handshaking:  OFF
DSR-Handshaking:  OFF
DSR-Prüfung:      OFF
DTR-Signal:        ON
RTS-Signal:        ON
```

If you get a similar message, continue with [step 3](#) on ...

- p. 167 for first flashing, case (i), or on p. 168 for case (ii), or on
- p. 171 for updating your *WP 34S*.

If the port is unknown to your operating system, however, return to [step 3.c](#) above and try another port.

Two of our early *HP-20b*-based calculators (without *Harald's* USB boards built in) developed broken serial input lines in service. These lines cannot be repaired easily. Those are the only two cases we know so far where a *WP 34S* showing a blank display became unusable (since it cannot be flashed anymore).