



First steps

Controlling elero Centro Transmitter Stick (Order number: 221250001)

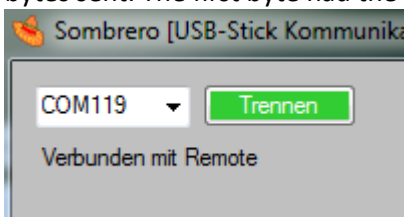
1. Learn the stick to the motor:
 - Switch on motor power
 - Select channel
 - Press „P“ for min. 1 second
 - Press ▲ immediately the motors starts to move up
 - Press ▼ immediately the motor starts to move down
 - Refer to the sticks and the motors manual



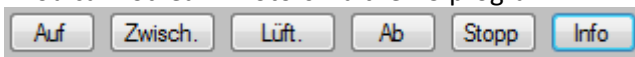
2. Install the FTDI-driver “CDM20600.exe” on your Windows PC.
 CDM20600.exe
3. Plug the stick in the PC, a COM-Port will be installed. Remember the COM-Port number.
4. Open the program “Sombrero.exe”. This program requires .NET-Lib.

 Sombrero.exe

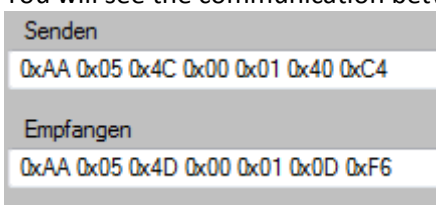
5. Select the COM-Port in the program. Then click “Verbinden”.
 - The program will send the Command “0xAA 0x02 0x4A 0x0A”
 - The stick will answer with the information for each channel learned or not
 - You can see the communication in the boxes on the bottom
 - The communication is byte orientated. “0xAA 0x02 0x4A 0x0A” means, that there are four bytes sent. The first byte had the hexadecimal value AA, the second 02 and so on.



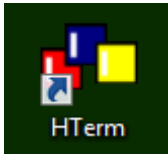
6. Try to control the learned motor by clicking the buttons “Auf” and “Ab”.
 - You cannot control motors, which are not learned.
 - You cannot learn motors via the PC-program.



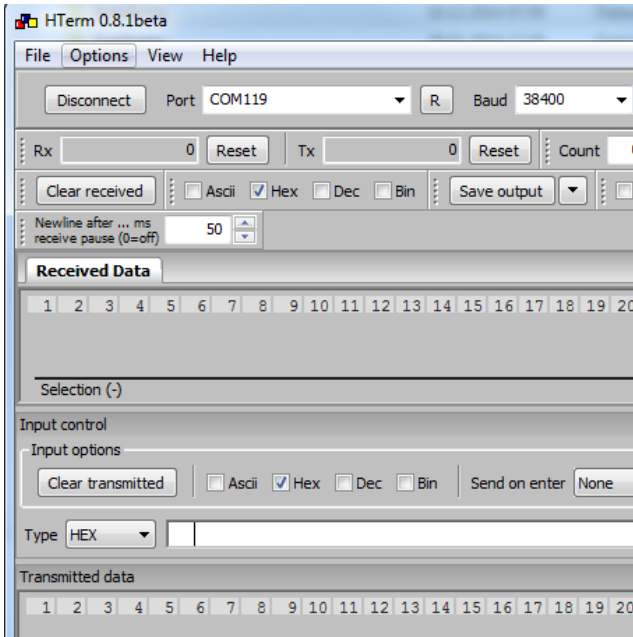
7. Watch the “Senden” and “Empfangen” box at the bottom, as long as you click the buttons. You will see the communication between the stick and the program.



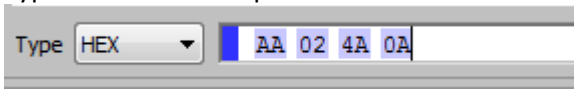
8. Install the terminal program HTERM to your PC. (<http://www.der-hammer.info/terminal/>)



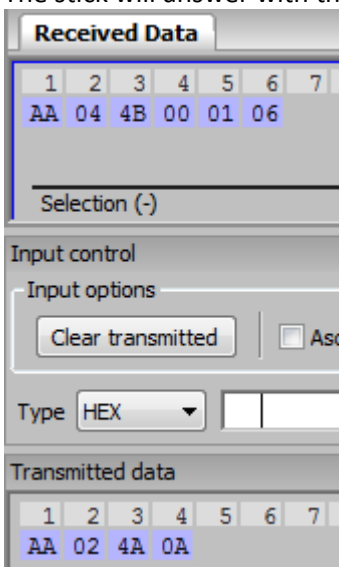
9. Open the program and select the COM-Port of the stick.
- Select 38400 Baud
 - Select "Hex" for output and input
 - Select Type "HEX" for sending
 - Select "Newline after ... ms" 50



10. Type AA024A0A and press ENTER.



11. The stick will answer with the information which channels are learned.



12. Try some commands you saw in the program „Sombbrero“ to control the motor.
- Every command starts with 0xAA followed by the command length and an OP-Code
 - Every command ends with the checksum (parity, the sum of all byte have to be zero)