Dear Customer,

for using the Microsoft HyperTerminal with SIM-KNX you first have to make certain settings in HyperTerminal to communicate correctly with SIM-KNX. Please follow this step by step instruction. We use a German version of HyperTerminal for illustration purposes here.

1) Connect the SIM-KNX to the bus. Check if the module is powered and running by pressing on the program button. The LED should go on. By repeated press the LED should go off. This behavior is an important check if the SIM-KNX is running.

2) Connect the
   - RS232 connector with the provided RS232 serial connection cable 1:1 9pin D-sub plug / socket cable to a free com port. On PCs especially notebooks the RS232 Levels may be too low to power the galvanic isolated part of SIM-KNX. When you connect the RS232 connector to the PC the power LED on the side beside the additional power connector should go on For situations where the state lines do not provide enough or any power, an additional power supply is added to the Evaluation kit.

   - USB connector with the provided USB cable plug A / mini plug B to a free USB connector on your PC. If this is the first time to connect a SIM-KNX USB version, your PC will recognize a new device and ask for drivers. Please download from
   http://www.ftdichip.com/Drivers/VCP.htm
   the appropriate driver for your operating system and install these.

3) Start HyperTerminal

4) Enter the name SIMKNX as a name for this settings

5) Select the appropriate COM port where you have connected the SIM-KNX
   COM1 or COM2 for RS232 or COMx for USB. (x can be 3, 4, 5,...)

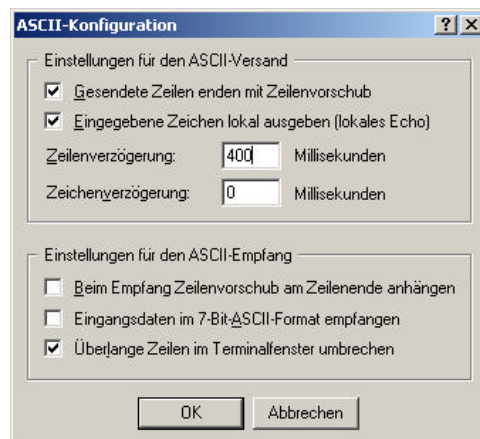6) Set 9600 bits per second, 8 data bits, no parity, 1 stop bit, no flow control
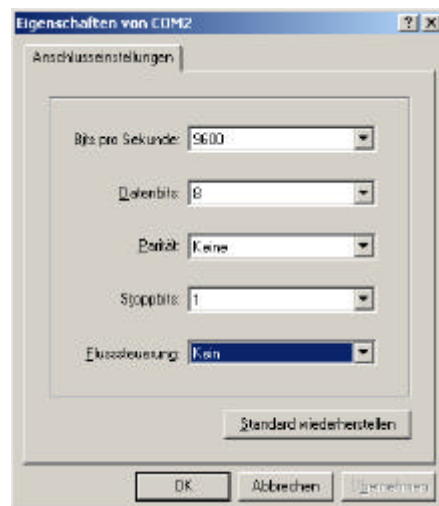
7) Open File – Properties (Datei – Eigenschaften) and select the tab settings (Einstellungen).
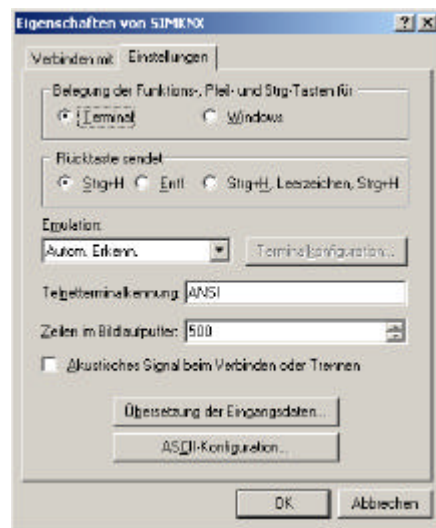
There please click on ASCII-Configuration... (ASCII-Konfiguration...)

8) Make following settings:

normally it is not necessary to introduce a delay between lines except when configuration data in flash is changed. There we have to give the SIM-KNX the opportunity to finish writing into flash memory. Since our examples change non volatile flash data this is a way to ensure nothing goes wrong.

9) Now we test the communication with the SIM-KNX.
Please type "**dvg¿**".
The answer should look like this:


```
dvg
$0001 $0101 $80
_
```
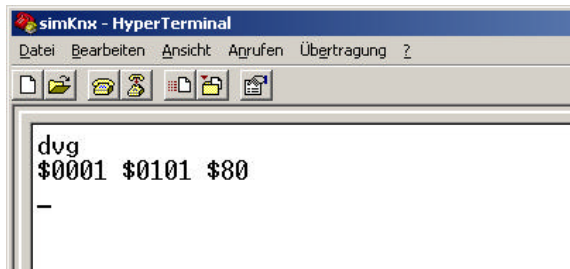
(see command dvg for details about the response)
If you see this or a similar response the communication between HyperTerminal and SIM-KNX is OK.

10) Now you may save the connection settings for later use by file – save (Datei – Speichern)

When you want to switch light on the KNX bus you have to introduce the group address of this light to the SIM-KNX.

1) find out what group address is used for this switching by having a look to the ETS project. Let us assume it is the address in hex $0901 or 1/1/1 (this is the same address only written in 3 level ETS notation 1/1/1. Use online converter http://www.tapko.de/tapko_main/en/tools/eib_converter.shtml to convert formats)

2)type on the HyperTerminal:
gci
oga(0) 1/1/1
ocs(0) 1 0 $17 $0000 $0802 0
Explanation of the lines above:
gci   erase all configuration data stored previously
oga(0) 1/1/1   add address 1/1/1 or written hex $0901 to address table and
                                                connect this to object number 0
ocs(0) 1 0 $17 $0000 $0802 0   configure object 0 for receiving

after this, when you send a switch on or switch off on the bus you will see
oui $00 $08 1 or
oui $00 $08 0
on terminal output.

An other way to send commands is to upload a text file where you have stored previously your configuration, your scene or similar sets of commands.

For demonstration, please upload the test.txt file under transfer-send text file.
This configures the SIM-KNX for 2 object sending and 2 objects receiving, sends 4 telegrams and asks the version of the firmware.