Important notes on DIGSI 4 – Remote
under Windows 2000 and Windows XP

Since the Windows XP operating system has been introduced, problems with remote communication with DIGSI 4.40/ 4.50 via dial-up modems without auto baud detecting have increasingly occurred. Detailed investigations have shown the following dependencies from the operating system:

1. The full scope of functionalities for remote communication in DIGSI 4 described in the manuals and application instructions (www.siprotec.com / Applications / Remote control) is guaranteed only under Windows 98 SE, Windows ME and Windows NT4 SP6a.

2. Full functionality under Windows 2000 and Windows XP Professional is guaranteed only on strict observation of the following rules.

How it works under Windows 98 SE, Windows ME and Windows NT4 SP6a

All of the modems created in DIGSI 4 for a certain type of modem refer to a modem driver installed under Windows. In DIGSI 4, various settings for these created office or substation modems can be stored under this modem type. These settings are then sent once with the dial-up string to the office modem via the Windows driver or for initialisation to the substation modem.

Limited functions under Windows 2000 and Windows XP

Under Windows 2000 and Windows XP, the settings (e.g. baud rate and data format) of all modems of a certain type (modem driver) created in DIGSI 4 are overwritten by the modem last created. As a result, the settings, e.g. after initialisation of the last substation modem, are also applied to the office modem and the dial-up string is sent with an incorrect baud rate or data format.
Moreover, the dial-up string is sent twice: first with the settings of the modem last created in DIGSI 4 and then with the settings of the Windows driver at the installation in the control panel of the system.

For modems without auto baud detecting, the second dial-up string with the telephone number is therefore not recognised. Dial-up is terminated after several attempts and an error message appears in the report window. For modems with auto baud detecting, this may result in a connection with a lower baud rate than possible or necessary.

… and this is how it works nonetheless

The office modem created in DIGSI 4 outputs the dial-up string with the corresponding baud rate and data format during dialling. The function of the substation modems created in DIGSI 4 is to once initialise the substation modem and – in the modem connection – to allocate the telephone numbers to be dialled to the substation modem. It is recommended to proceed as follows in order to avoid the interdependency of the office and substation modems in DIGSI 4:

1. Under Windows, install the modem driver suitable for the office modem and set the baud rate (e.g. 19200 or 57000) and the data format (8N1) under Properties. These settings are applied when connection with the modem is later established.

2. Install the same driver again under Windows for the substation modems. Windows marks this second driver with the addition "…#2". The presettings of the driver need not be changed.
The settings for initialisation of the substation modem can be made in DIGSI 4 and do not affect the office modem driver.

3. After the two modem drivers have been installed, you **must** restart the computer, because otherwise DIGSI 4 will not detect the newly installed modems.

18.05.2004

4. As in the application examples, create the **office modem** in DIGSI 4 with "name", "modem initialisation", the **first "modem driver"** of Windows and "assigned address".

   The "Properties" button of the modem driver must not be pressed.
   If you press the button inadvertently or for checking the parameters, always leave the window with "Cancel". Otherwise, the settings of the Windows modem driver will be corrupted and the modem driver <u>must</u> be installed again.
   Should it be necessary to initialise the office modem with different settings during dialling, a separate modem driver for each setting must be installed under Windows. The settings must not be adapted in DIGSI 4.

5. As in the application examples, create the **substation modem** in DIGSI 4 with "name", "modem initialisation", the **second "modem driver"** (… #2) of Windows and "assigned address". The relevant settings as described in the application examples can be entered under "Properties".
   The substation modem can then be initialised with these settings.

   To establish a dial-up connection from the office to various substations, a separate substation modem with the telephone number must be created in DIGSI 4 for each substation. These modems are then assigned to the substation in a "modem connection".
   If the various settings for the various substation modems have to be stored for initialisation, a separate modem driver (… #n) must be installed under Windows for each substation modem. Re-start the computer after the installation. Alternatively, the substation modems can be initialised with the "Hyper Terminal" Windows programme.

We regret these limitations to the functions arising in connection with Windows 2000 and Windows XP and are making every effort to restore the previous scope of functions for all operating systems. As this requires extensive adjustments in "DIGSI 4 Remote", however, no short-term solution is in sight.

We apologise for any inconvenience.

Additional hints:

- **Please do not change any working applications.**

- For new applications or the extension of existing applications under Windows 2000 / XP please strictly observe the above notes on the application instructions.

- Install only <u>one</u> office modem with a dedicated modem driver under Windows on the office PC and create only one office modem in DIGSI 4.

- Install separate modem drivers under Windows for substation modems.

- If possible, set the <u>office modem</u> to auto baud detect (no fixed baud rate).

If problems still persist, please contact our Support at

       Telephone   +49 (0)180 524 7000
       E-mail   **support@ptd.siemens.de**
       Internet **www.siprotec.com** / Applications / Remote control