

*USB to Serial: I am using the USB 2 Com-M and i seem to miss some bytes sometimes.*

*It looks like the serial to USB converter is the problem since everything works fine when i am using old fashioned RS232.*

Some reasons may apply.

#### 1. Incorrect software

Your software does not handle the received data the correct way. Sometimes programs assume the expected data are all received in one block, when in fact the driver may deliver these in two or more chunks.

Software recognizes the first part as incomplete, discards it, and does so with the following data also.

Use a Null-Modem Cable between the two ports of USB-2COM-M or between one port and Com1. Then use Hyper Terminal to transmit a large file via ZMODEM protocol. This protocol checks for errors and corrects them by repeating the block, there is a counter for such repeats. Typically this counter is at 1 or 2 right from the first bytes (synchronization).

You'll notice there is no more data loss later on in the transmission.

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#### 2. Delayed data

The transmission and reception of data is delayed by one or a little more milliseconds. This can confuse software.

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#### 3. Electrical problem 1

Com1 built-in a PC uses  $\pm 12V$  as the electrical level for signals.

RS232 specs require +5 to +15V as positive and -5 to -15V as negative level.

A receiver must operate correct if the levels just exceeds  $\pm 3V$ .

The USB-COM devices typically produce  $\pm 6.5V$ , which is well inside the required range. But some devices may have a problem with that.

#### 4. Electrical problem 2

You might have connected a signal output of USB-2COM (e.g. DTR) connected to an output of your device. This is an error in connection. If both have a different polarity (e.g. +7V to -8V), the driver in USB-COM will overload, and can not reliably convert between RS232 and TTL levels.

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*Author: Wilfried Kramer*

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