# PCE-USM RS-232 - USB Logger



The logger enables the user to save the transmission data of the RS-232 interface to one or more folders in txt format, along with the time and date. The logger can receive and retrieve data. This means that with the right configuration (consider pin assignment of the RS-232), the PCE-USM adaptor can be connected with any RS-232 interface to record the data.

With the scales PCE-LSM / PCE-LS / PCE-AB / PCE-ABZ / PCE-PM / PCE-TP / PCE-BDM / PCE-BT / PCE-TB and PCE-SD Series, the PCE-USM can be plugged directly onto the RS-232 interface.
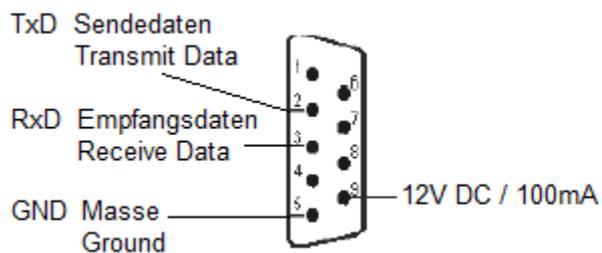


In case it is not possible to plug the adaptor directly onto the RS-232 interface, you have the possibility to use an extension cable. The standard edition comes with an external power supply. (12V / 100 mA mains adaptor in + / out -)
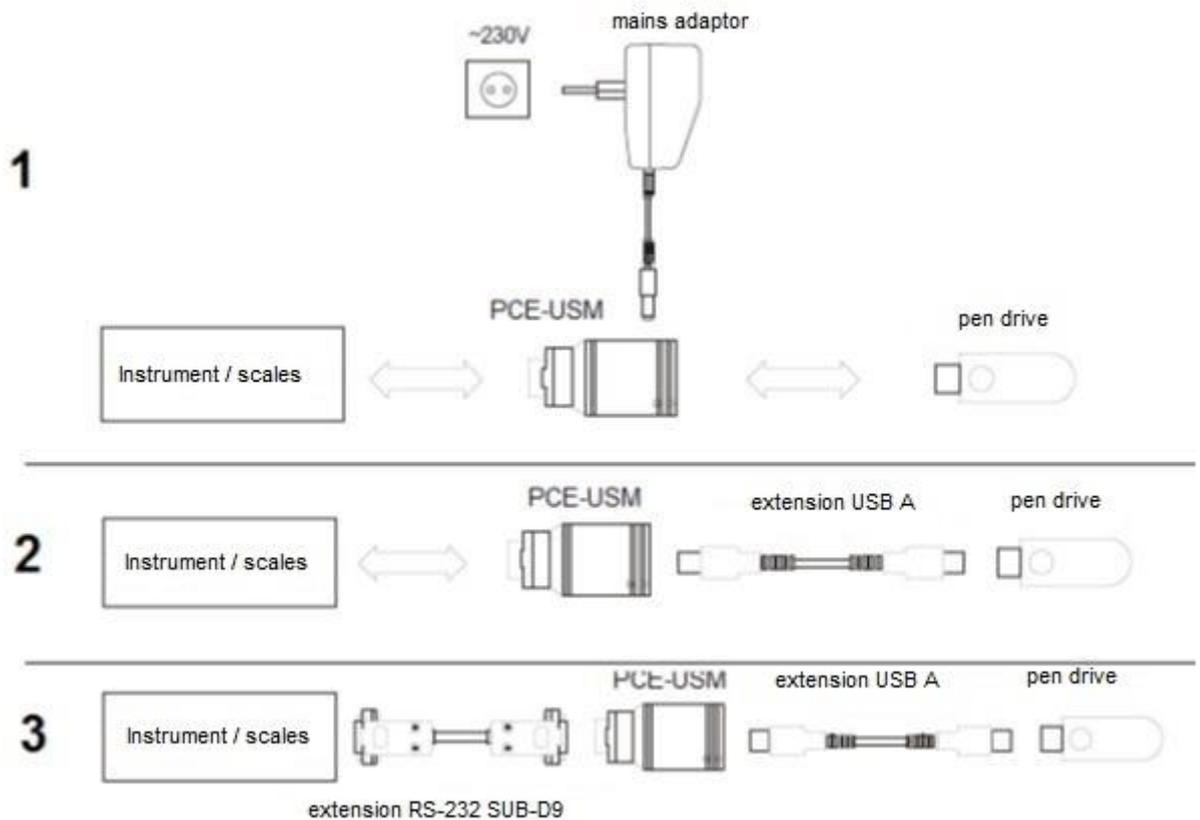
1. Connect the PCE-USM adaptor with the RS-232 interface. Then provide power supply and watch the diodes at the PCE-USM storage adaptor. Both diodes will light up briefly and the diode at the side of the RS-232 interface should be lit now. If it does not, this normally means that the PCE-USM is not connected to the power supply. Check the power supply. If the diode at the side of the RS-232 interface flashes, a data transfer to the PCE-USM storage adaptor takes place.

2. Now insert the USB pen drive into the PCE-USM USB storage adaptor and watch the diodes. The diode at the side of the RS-232 interface will flash briefly and then light up permanently. During the time the diode was flashing, a configuration file was saved to the pen drive (see below).If the diode at the side of the USB interface did not light up, this can mean that the USB pen drive was not recognised or that it is full. Check the USB pen drive's formatting and, if necessary, try using another pen drive. FAT12 / FAT16 and FAT32 formatting is possible. Now try to transmit a few data to the PCE-USM adaptor via the RS-232 interface and watch the diodes of the PCE-USM adaptor. If the data transmission was successful, the diode at the side of the RS-232 interface should flash first, followed by the diode at the side of the RS-232 interface. This flashing indicates: date received and transferred to USB.

In case the data transmission was successfully completed, there will be two files on the USB pen drive.
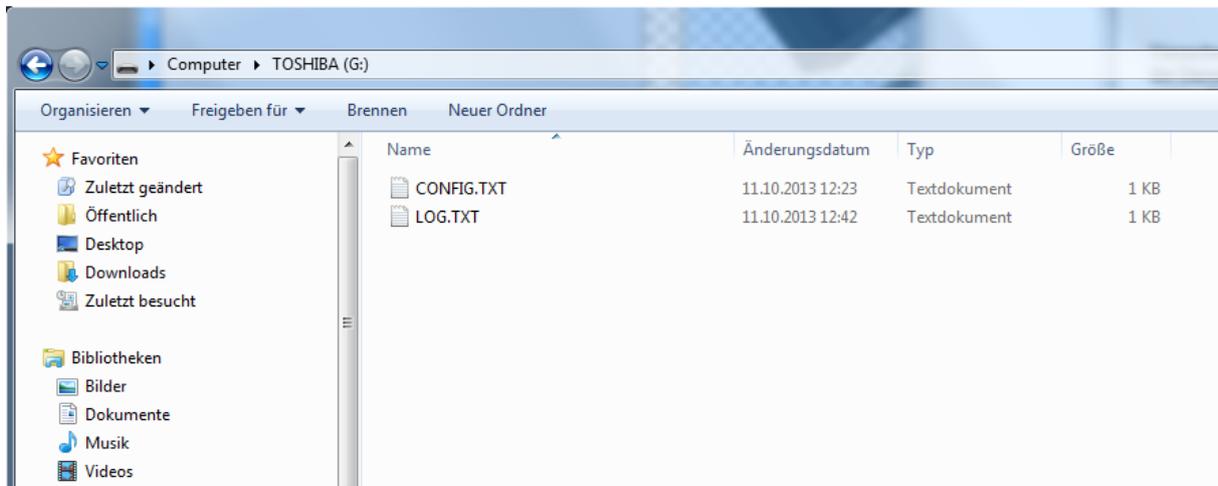


„CONFIG.TXT" This is the configuration file in which you can set individual parameters.

„LOG.TXT" This is the file which contains your saved values.

The configuration file "CONFIG.TXT" looks as follows:
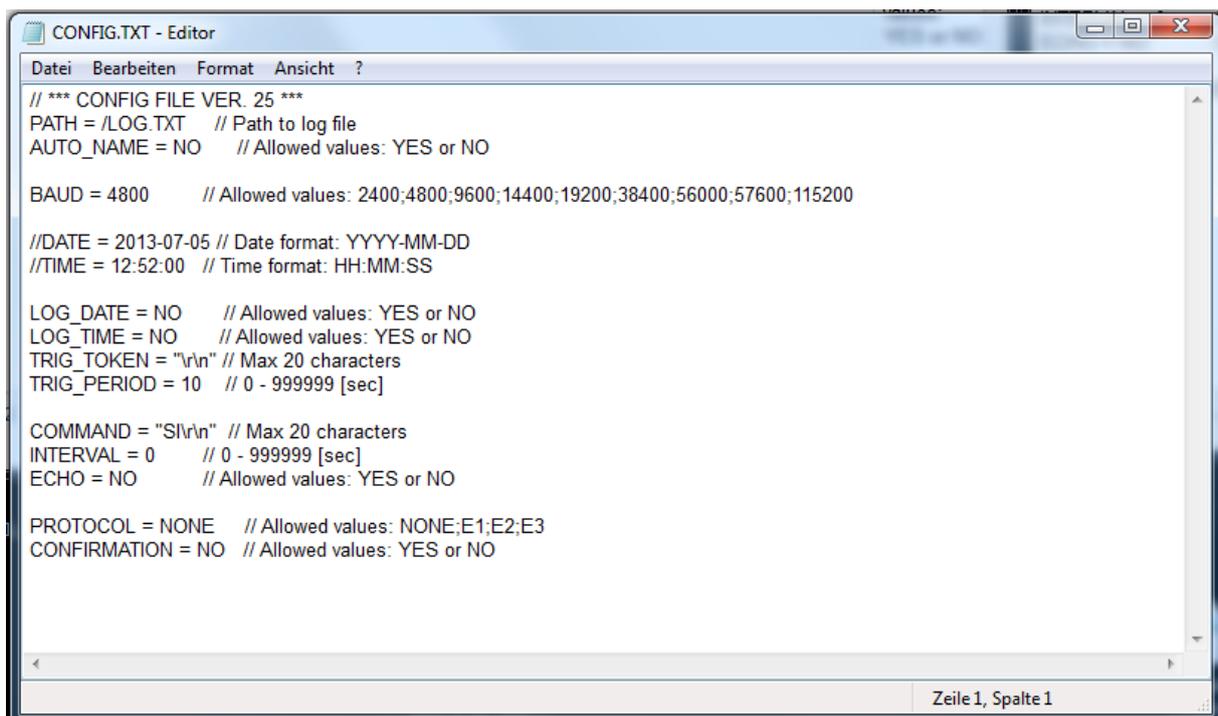


The values can easily be changed and thus adapted to your individual needs and different devices. The values behind the „=" can be changed. On the right behind „//", you can see the possibilities of what you can enter (allowed values).
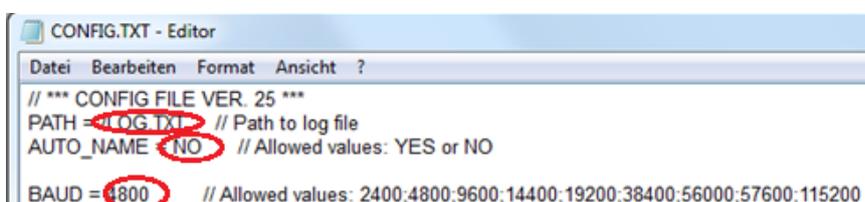
**Settings of the logger**

| Name: | **PATH** |
|---|---|
| Description: | Path indication to enable data to be saved (format 8.3). You can enter a file name of up to 8 digits. If not entered here, a "LOG" folder will be created automatically. In case such a folder already exists, the data will be added to the folder at the end. |
| Autom. setting: | /LOG.TXT |
| Example: | PATH=/FOLDER1/TEST1.TXT |

| Name: | **AUTO_NAME** |
|---|---|
| Description: | The setting can be "yes" or "no".<br><br>If "no" is set, this means that the data are always saved to the same folder when removing and reconnecting the logger.<br><br>If "yes" is set, the data are saved to different folders when removing and reconnecting the logger. The logger will then add consecutive numbers to the name "PATH" (as you have set before).<br><br>Example: LOG00001.TXT, LOG00002.TXT, LOG0003.TXT, etc. |
| Autom. setting: | NO |
| Example: | AUTO_NAME= YES |

| Name: | **BAUD** |
|---|---|
| Description: | Baud setting of the RS-232 interface. (Setup possibilities: 2400, 4800, 9600, 14400, 19200, 38400, 56000, 57600, 115200) |
| Autom. setting: | 4800 |
| Example: | BAUD=9600 |

| Name: | **DATE** |
|---|---|
| Description: | When using this setting, the data will be saved along with a date. Format: YYYY-MM-DD. |
| Autom. setting: | The date will not be changed. |
| Example: | DATE= 2010-04-11 |

| Name: | **TIME** |
|---|---|
| Description: | When using this setting, the data will be saved along with a time. Format: HH:MM:SS. |
| Autom. setting: | The time will not be changed. |
| Example: | TIME= 08:12:45 |

| Name: | **COMMAND** |
|---|---|
| Description: | With some scales, it is possible to retrieve the weight via the interface. With this function, up to 20 characters can be sent. When nothing is entered under "COMMAND", no queries are sent to the scales. |
| Autom. setting: | n. a. |
| Example: | COMMAND= SI |

| Name: | **INTERVAL** |
|---|---|
| Description: | Here, you can set the time intervals within which the logger sends the above-mentioned query to the scales. Indication in seconds. |
| Autom. setting: | 10 |
| Example: | INTERVAL= 20 |

| Name: | **ECHO** |
|---|---|
| Description: | Here, you can set whether the query which is sent to the scales is saved along with the other data. Setup possibilities: "YES" or "NO". |
| Autom. setting: | YES |
| Example: | ECHO= NO |

| Name: | **LOG_DATE** |
|---|---|
| Description: | Here, you can set whether the receiving date is saved to the folders. Setup possibilities: "YES" or "NO". |
| Autom. setting: | NO |
| Example: | LOG_DATE= NO |

| Name: | **LOG_TIME** |
|---|---|
| Description: | Here, you can set whether the receiving time is saved to the folders. Setup possibilities: "YES" or "NO". |
| Autom. setting: | YES |
| Example: | LOG_TIME = NO |

| Name: | **TRIG_TOKEN** |
|---|---|
| Description: | Here, you can set what characters are retrieved when time and date is saved. Max. 3 characters. |
| Autom. setting: | <CR><LF> |
| Example: | TRIG_TOKEN = abc |

| Name: | **TRIG_PERIOD** |
|---|---|
| Description: | Here, you can set the transmission pause for the next data transmission. Time indication in seconds. |
| Autom. setting: | 5 |
| Example: | TRIG_PERIOD = 10 |

**Example of a configuration file:**

// *** CONFIG FILE VER.07 ***
PATH = /LOG.TXT // Path to log file
AUTO_NAME = NO // Allowed values: YES or NO
BAUD = 4800 // Allowed values: 2400,4800…
//DATE = 2010-01-01 // Date format: YYYY-MM-DD
//TIME = 08:00:00 // Time format: HH:MM:SS
COMMAND = SI // Command to send (max 20 char)
INTERVAL = 20 // seconds
ECHO = YES // Allowed values: YES or NO
LOG_DATE = YES // Allowed values: YES or NO
LOG_TIME = YES // Allowed values: YES or NO
TRIG_TOKEN = abc // Max 3 char
TRIG_PERIOD = 10 // seconds

**Diodes**

**DIODE_RS232**

| Description | Diode RS232 |
|---|---|
| The RS-232 attachment has no power supply. | No light |
| Ready | Light |
| No data transmission via the RS-232 interface takes place. |  |

**DIODE_USB**
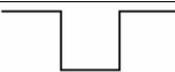
| Description | Diode USB |
|---|---|
| The pen drive is not correctly connected to the USB interface or is not recognised by the attachment. | No light |
| The pen drive is now ready. | Light |
| The pen drive contains a setup folder which has not been recognised and read by the attachment. |  |
| The pen drive does not contain a setup folder and the attachment will create one automatically. |  |
| The following pen drive errors are possible:<br> - The setup folder is too large and cannot be read<br> - The setup folder contains unknown parameters<br> - The parameters have the wrong setup formats |  |
| Data have been saved to the pen drive. |  |
| Data have been saved but the pen drive does not have enough free space. |  |