

## **Principle:**

The Opto-USB-0 is an interface which transfers measuring data from measuring devices with a OptoRS232C interface to a PC. During this process, it converts the measuring data into keyboard codes, so that it is able to function together with any software that works with keyboard entries, regardless of the operating system. The design - similar to a USB Stick - allows you to insert the Opto-USB-0 directly into a USB socket. This means that no additional driver needs to be installed, as each operating system supplies the required keyboard driver automatically.

## Instructions for use:

You should connect the measuring device with the fixed cable to the Opto-USB-0. You then need to insert the Optoi-USB-0 into a USB socket on your PC. Once you have started your PC software, you can transfer the measured value by pressing the data button on the measuring device. The system always enters the measured value at the cursor position, as it does when you enter data using the keyboard.

## Menu – if \*default settings need to be changed:

The Optoi-USB-0 has a menu from which various settings can be selected. The menu can be accessed by pressing and holding the (Menu)-button on the Opto-USB-0 is being insert into a USB socket on the PC. You need to start a word processing software beforehand, so that the Optoi-USB-0 can display the menu on your screen. The first menu option should appear. Various setting options can be displayed by briefly pressing the (Menu)-button repeatedly. If you wish to activate the displayed option, press the (Menu)-button until the next menu option appears. You can skip the setting option screen for each menu option by pressing and holding down the (Menu)-button when only the menu option is displayed and before any setting options are shown. The Opto-USB-0 firmware version is the last screen that appears. Normal functions can then be accessed again. The settings are permanent settings. The various functions are exemplified as follows:

# \*Default setting:

# Language: German; Decimal separator: Comma; Final character: Enter; Timer: off

# Language:

Different countries have different keyboard layouts, e.g. some keys on the PC keyboard have different characters in other countries. Since the Optoi-USB-0 only simulates keyboard entries, it needs to be adjusted for the appropriate keyboard layout. Select the language which corresponds to your keyboard layout.

## **Decimal separator:**

Different software require different decimal separators, so that the value can be displayed correctly.

## Final character:

The final character is transmitted following each measured value and causes the system to e.g. switch to the adjacent cell in a table. The system then enters the next measured value in this cell. Multiple measuring is a special feature and makes it easier to enter measured values in a table if e.g. several characteristics need to be measured on a test item.

Example: You wish to measure three characteristics on several test items. The measured values of the characteristics on the first test item should be entered in three adjacent cells in the same line. The three characteristics belonging to the next test item should be entered in the next line directly underneath etc. Therefore select *multiple measuring - right*, so that the cells are automatically entered line-by-line.

## Number of measurements:

If you have activated multiple measuring, you can select the number of measurements (e.g. characteristics) that should be entered per line or column, before the system switches to the next line or column. If you have selected *multiple measuring - right*, the values are entered line by line. If multiple *measuring - down* has been selected, the values are entered column by column.

## Timer:

The Opto-USB-0 has a timer function, so that measurements can be carried out automatically in set intervals. The interval can be set from 0 to 99 seconds. If you have activated the timer, you need to press the data button once to start the interval measurement. Automatic measuring can be stopped by pressing this button again. If the interval time is set to 0, the measurement is repeated as quickly as the connected measuring device allows.

### Seconds – units:

Here you can select units from the total number of seconds displayed for the interval, if the timer function has been activated.

### **Total seconds:**

Here you can select tens from the number of seconds shown. The system displays the total number of seconds calculated.

### Important

The menu settings that you have defined are not deleted when the Opto-USB-0 is disconnected and therefore do not need to be reset the next time the device is used.

### Troubleshooting

Finally, a few tips for correcting some potential errors.

- 1. The application software is not processing the measuring data correctly: Check the decimal separator! DOS software generally require a decimal point as the decimal separator, whereas WINDOWS software are dependent on the country settings in the control panel. WINDOWS software which have Germany as the country setting generally require a comma as the decimal separator.
- Graphic characters appear instead of figures, e.g.!")(/&%\$§:
  The SHIFT-LOCK function is on or the SHIFT key was pressed shortly before data transfer.