

## Short Reference Guide

### Sirius L

See also the following chapters in the User's Manual.

- Safety Instructions and Precautions (in Chapter 1)
- Getting Started (Chapter 2)
- Working with PC Software (Chapter 4)



#### Unpack and set up the luminometer

- ❑ Unpack the luminometer carefully and place it in a dry, fairly dust-free room, protected from direct sunlight and significant temperature fluctuations. Every side of the instrument must be at least 10 cm away from the wall or other devices. If the instrument is delivered with injectors, additional space for the bottle holder is necessary. In front of the sample drawer additional 20 cm of space is required to open the door. **Please pay attention to the safety instructions in the user's manual.**
- ❑ The smaller cardboard box contains all necessary **accessories** (e.g. cables, manual, CD). Do not use others than the provided cables.
- ❑ The sample holder for 12mm tubes is standard and preinstalled in the factory. Open the sample drawer and **check the sample holder** to be still ready installed. A sample holder for microfuge tubes can be ordered as an accessory.

#### Installation of "FB12/Sirius Software"

Sirius L is PC operated by FB12/ Sirius software V2.0. Install the software from the Sirius L product CD. Prerequisite is Windows 2000 or higher.

- ❑ Close all Windows applications and insert the Sirius L product CD in the CD drive. CD navigator is supposed to automatically start your internet browser.
- ❑ Select "software" in the navigator bar, then "FB12/ Sirius software Installation". Double-click the **Setup.exe** file to start the setup program. An automatic program guides you through the installation. Usually the default settings may be taken over. **Administrator rights are necessary for installation.** For detailed information please refer to the user's manual chapter 4.
- ❑ The FB12/Sirius software icon will be available on your desktop after installation.

#### Connect luminometer to PC

- ❑ **Connect the luminometer to PC** via USB.
- ❑ Connect luminometer to power using the desktop power supply and the power cord supplied. **Turn on the power switch** at the luminometer's rear panel.
- ❑ The PC will register that there is a new device and ask for a driver. The USB driver is part of the FB12/Sirius software package and stored in the directory C:\.....\Berthold Detection Systems\FB12 Software V2\Driver\SiriusL\USB. Follow the installation wizard and insert this path to install the driver. Please refer to the Technical Note 2010/02 for installation of the USB driver and to the user's manual chapter 4.1 and 4.2, too.

#### Configuration of the FB12/Sirius Software

- ❑ After installation of software and driver double-click the FB12/ Sirius software V2.0 icon on your desktop.
- ❑ The protocol manager will appear. Click **<Options>** and **<Find luminometer>** to select the right COM port automatically. Return to the protocol manager.
- ❑ The protocol manager provides 6 protocol types:
  - **Quick Measurement** (simple measurement without any calculation)
  - **Single Assay** (measures any number of samples and replicates, display of average values and standard deviation).

- **Dual Assay** (measures a sample twice directly one measurement after the other).
- **Cut Off Assay** (Cut-off measurements for qualitative classification of patient samples).
- **Single Kinetics** (shows the course of light emission over a specific period of time).
- **Multiple Kinetics** (several samples are measured in parallel over a defined period of time and for a defined number of times).

- ☐ Select your protocol type and confirm with **<create>**.
- ☐ Enter delay- and measurement times, decide how you want to start the measurement and if the first sample shall be background or not, enter number of samples and replicates and set injector parameters, if necessary.
- ☐ Name the protocol and save it.

### **Injectors**

- ☐ Depending on your order the instrument is delivered with one or two injectors. A priming menu for washing and priming of the injectors is part of the software. Click the **<Priming>** button in your protocol manager. Please wash the injectors with 5 ml of water before use, empty the lines and prime carefully with your reagent afterwards.. For further information please refer to the user's manual chapter 4.4.
- ☐ If a microfuge tube sample holder is used: The capacity of suitable microfuge tubes for the microfuge tube sample holder is limited to 1.5 or 2ml. Therefore the priming, washing and injection volume must be limited, too. Please refer to the user's manual chapter 4.4.and 4.5 to avoid overflow during priming or injection.

### **Run a measurement**

- ☐ Choose your protocol in the lower window of the protocol manager and press **<Run>**. The measurement window will open.
- ☐ Insert your first sample and start the measurement according to the settings in your protocol with "door close" or via "start button".
- ☐ For further information see the user's manual chapter 4-10.

### **Cleaning the Injector System**

- ☐ To clean the pumps and tubes proceed in the same manner as described above.
- ☐ Rinse the system with distilled water. Set the total volume in accordance to the sample format used.
- ☐ The selection of the cleaning solution depends on the used reagents. Please refer to the instructions of your reagent suppliers.
- ☐ A basic cleaning of the injectors has to be done before and after long breaks. Follow the instructions in the user's manual chapter 11.5..
- ☐ If the instrument is not used for a longer period of time, it is recommended to empty the lines. Perform the described cleaning procedures and remove the tubing from liquid afterwards. "Prime with air" to empty the lines.
- ☐ Always take care that the tubes used for priming have enough space for the escaping liquid.

For further information see chapter 11.5 of the user's manual.