B-BCE Vertical Barcode Stand-alone Unit

H10124
Instruction Manual

Version 002

The information in this manual may be altered without notice.

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Introduction 1

General 1.1

The Bruker Barcode Stand-alone Unit (B-BCE) allows sample barcodes to be read during a manual preparation using SampleTRACK.

The B-BCE unit is connected to the keyboard of a personal computer where SampleTRACK Client or SampleTRACK Easy Dialog is installed. The B-BCE unit reads the sample barcode label and copies the Tube ID into the Manual Preparation, Tube ID field of SampleTRACK. This eliminates the need to type the information in manually.

Figure 1.1. The B-BCE Unit

Introduction

Installation 2

General 2.1

The following parts are required to install the B-BCE unit:

- The B-BCE unit
- The B-BCE power cable
- The adapter cable between the B-BCE unit, the PC keyboard connector and the keyboard (three connectors)
- An extension cable for the connection between the B-BCE and the PC keyboard socket (this cable is a standard keyboard extension cable, and is needed only if the normal adapter cable is too short).
- A PS/2 adapter (DIN/5pin male to PS/2 female). This is only needed when a PS/2 keyboard is used.
- A PS/2 adapter (PS/2 male to DIN/5pin female). This is only needed when you have a PS/2 socket on your computer.

Operating Voltage 2.2

The B-BCE unit operates with a 230-volt, 50/60 hertz, nominal line voltage source.

Before installation 2.3

IMPORTANT: Before starting the installation procedure, switch off the computer and other devices, otherwise they may be damaged during installation.

Installation Overview 2.4

The following steps should be followed in order to correctly install the B-BCE:

1. Disconnect the keyboard from the personal computer (***Figure 2.1.***).
2. Connect the keyboard plug (round, five pin) to the adapter cable (***Figure 2.1.***). (If you have a PS/2 keyboard you will need to first place the PS/2 adapter that is supplied onto the end of the keyboard cable, P/N: 84472).
3. Connect the plug (round, five pin) of the adapter cable to the keyboard connector of the personal computer (***Figure 2.1.***). Optionally you can use the extension cable (P/N: 84435). (If you have only a PS/2 socket on your computer, you will need to use the second PS/2 adapter that is supplied for this purpose, P/N: O00304).
4. Connect the large 40-pin connector plug of the adapter cable to the 40-pin socket on the B-BCE (***Figure 2.1.***).
5. Connect the B-BCE power cable to the mains supply (***Figure 2.1.***, ***Figure 2.2.***).

Figure 2.1. B-BCE Cable Connections

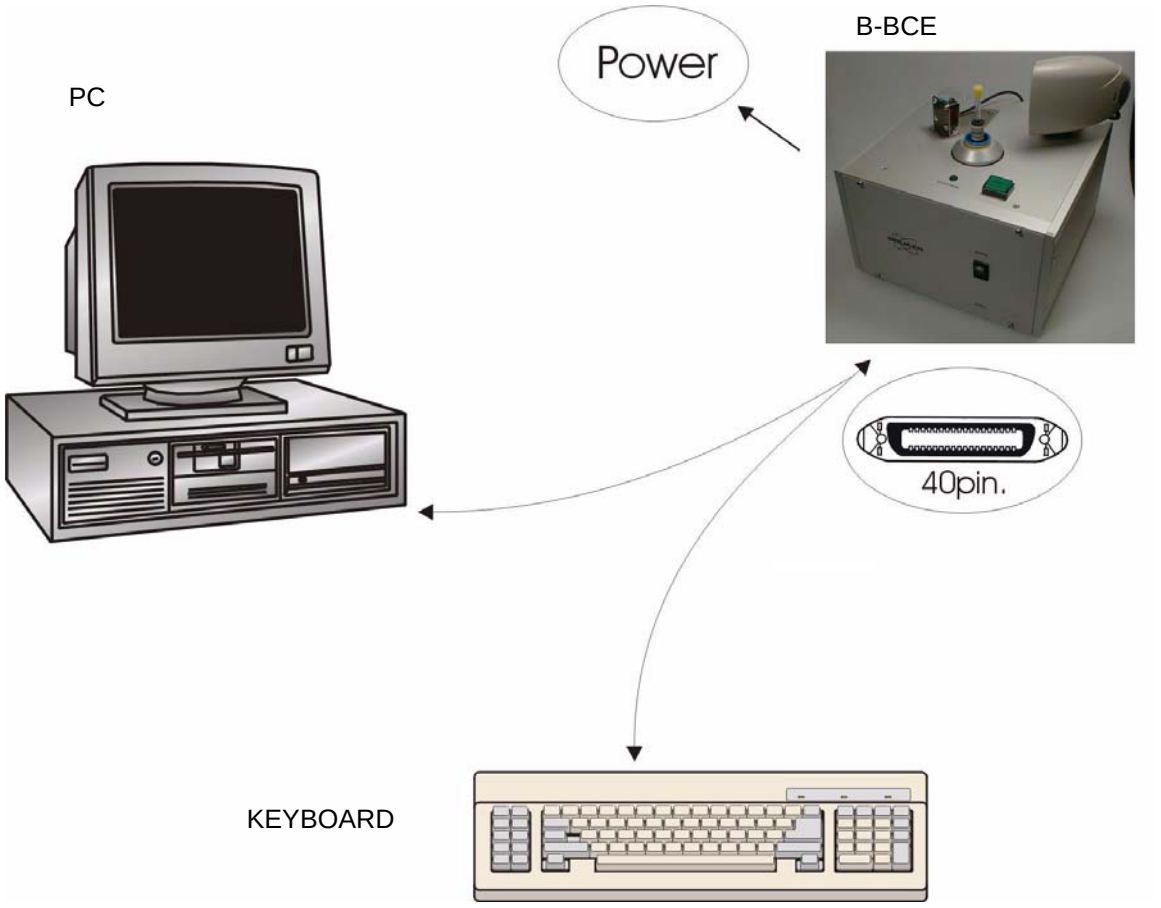
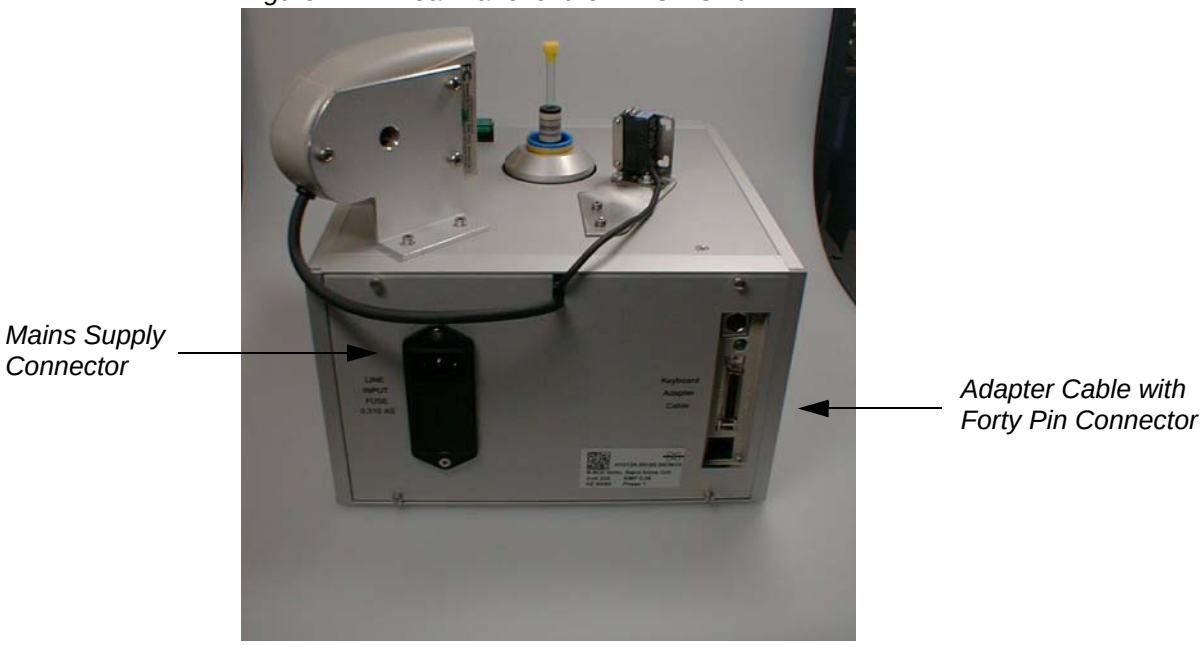


Figure 2.2. Rear Panel of the B-BCE Unit



Adjusting the Depth of the NMR Tube *2.5*

The B-BCE allows you to read the barcode and to adjust the depth of the NMR tube in the spinner without using a special spinner adjustment device. Before working with the B-BCE you should adjust the NMR tube depth as follows:

Adjust a sample tube and spinner using the Sample Tube Depth Adjustment Device (P/N: Z3914 - „Samplepositiongauge SB“). Place the sample into the B-BCE tube holder, and turn the screw on the bottom panel of the B-BCE (see figure 2.3) until the spinner rests on top of the sample holder and the tube is resting lightly against the adjustment screw.

DO NOT DISTURB THE ADJUSTMENT OF THE SAMPLE DURING THIS STEP!

Figure 2.3.Bottom Panel of the B-BCE

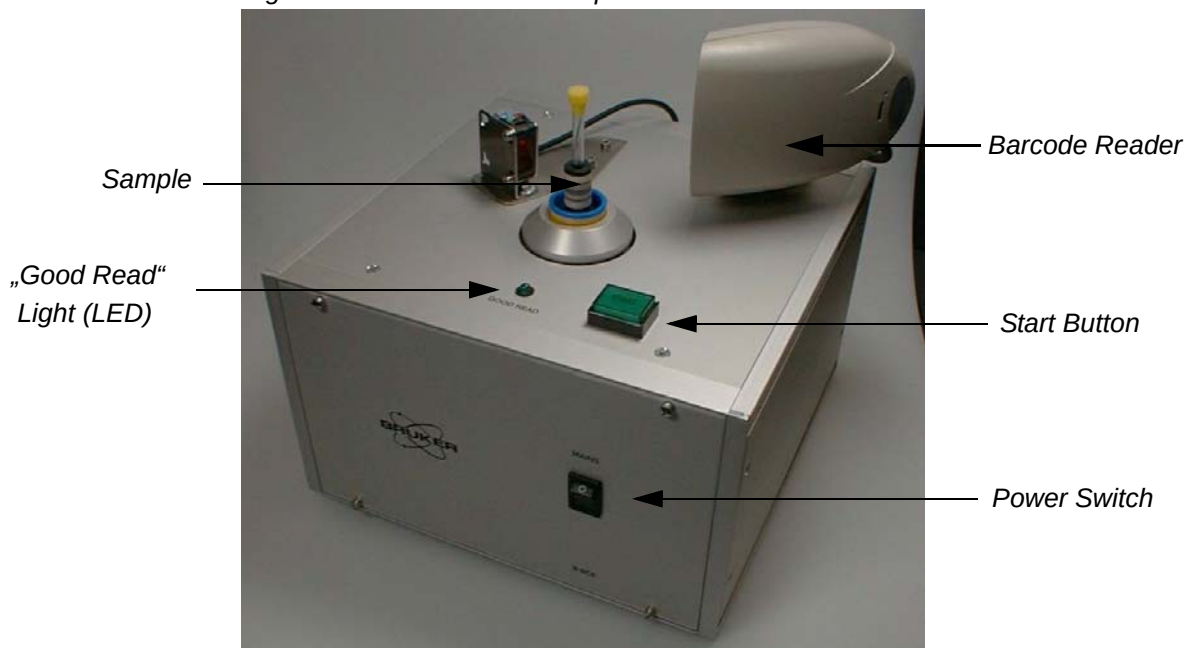
This procedure completes the installation, and the computer and the B-BCE can now be switched on.

Operation 3

General 3.1

The B-BCE unit is very simple to place into operation, you must only switch the B-BCE on, and the unit is ready to use. The main components of the B-BCE consist of the Barcode Reader, the Power Switch, the Start Button, the „Good Read“ light (LED) and the sample itself.

Figure 3.1. B-BCE Unit Components



Using the B-BCE 3.2

There are just a few simple steps to follow in order to scan a sample barcode with the B-BCE:

Step 1

Insert the sample into the B-BCE unit as illustrated in ***Figure 3.2.***. The start light will light up, ***do not*** press the start button at this point.

Figure 3.2. Inserting a Sample in to the B-BCE

Step 2

Adjust the depth of the tube in the spinner by *carefully* pushing downwards on the tube until it comes in contact with the bottom of the sample holder. If you attempt to do this using too much force you may break the sample tube.(***Figure 3.3.***).

Following this adjustment, the spinner should be at the proper height to be used with your spectrometer.

Important: Before performing this step, make sure that the NMR tube depth has been adjusted, as described in ***"Adjusting the Depth of the NMR Tube in the Spinner" on page 13***“).

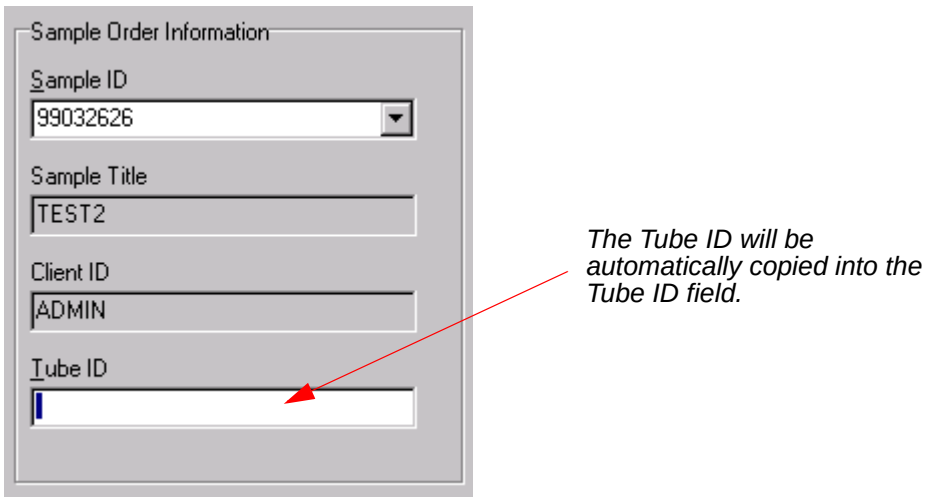
Figure 3.3. Adjusting the Depth of the NMR Tube in the Spinner

Step 3

Open the Manual Preparation window.

In Manual Preparation mode you will see the following dialog:

Figure 3.4. Sample Order Information Dialog in Manual Preparaton Mode



The B-BCE unit is now ready to read a sample barcode. Press the **Start** button to start the scanning procedure (***Figure 3.5.***).

Step 4

Press the start button

Figure 3.5. Starting the Scan Procedure

The B-BCE unit will now try to read the barcode, if the reading is successful the „*Good Read*“ light will light up. The motor of the B-BCE will then stop and the Tube ID will be copied into the Tube ID field of the Manual Preparation window of SampleTRACK.

If the B-BCE is not able to read the barcode within four seconds the motor stops and the Tube ID will not be copied to SampleTRACK. To restart the scanning you must first remove the sample from the sample holder, then reinsert it. This will activate a new scanning cycle.

It is possible to interrupt a scanning procedure at any time by removing the sample. In this case the B-BCE immediately stops.

If you wish to read additional sample barcodes, you must only remove the sample that has been read and repeat the steps described above.

Safety Instructions 4

Position the device in order to provide easy access to the mains connector plug.

Usage of the B-BCE for other then it's intended purpose, as described in the manufacturer specifications, may result in hazardous conditions.

Cleaning 4.1

To clean the unit:

1. Switch off the unit and disconnect line cord.
2. Wipe the casing with a dry or damp cloth.

Only use water or neutral cleaning fluids. Usage of volatile cleaners like thinner or benzine may damage the surface of the unit.

Please wait until the unit is completely dry before you reconnect the line plug.

Operational Environment 5

Operating Conditions 5.1

Operating Temperature:	5-40°C
Operating Altitude:	Maximum 2000m above sea level.
Relative Humidity:	80% for 5 to 31°C, linear decreasing to 50% relative humidity at 40°C'.
Storage Conditions:	5-40°C, relative humidity 80% for 5 to 31°C linear decreasing to 50% at 40°C

Electrical Conditions 5.2

Line Voltage:	230V AC; Fluctation less than 10% of nominal voltage
Input Frequency:	50/60 Hz
Fuses:	2x 0.315AT, 250V
Electrical Power Consumption:	0.1A

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