



Evaluation Unit

**Duo XPERT** LB 470 Level

Operating Manual  
56925BA2

Rev. No.: 04, 05/2020

Embedded software version as of vers. 1.4.0 (CU and MU)

# 1 About this Operating Manual

## 1.1 Applicable Documents

This manual contains the following document:

- Informations sur la sécurité, 56925BA59 (see appendix)
- Technical Information, 56925TI1L (see appendix)

## 1.2 Some Prior Remarks

The product is handed over to you by the manufacturer BERTHOLD TECHNOLOGIES GmbH & Co. KG (designated as Berthold in the following) in a complete and functionally reliable condition.

This operating manual illustrates how to:

- set up/install the product
- make electrical connections
- perform measurements
- apply software settings
- Install the extension module (optional)
- carry out maintenance on the product
- fix errors
- disassemble the product
- dispose of the product.

Read these instructions thoroughly and completely before working with the product. We have tried to compile all information for safe and proper operation for you.

However, should questions arise which are not answered in this operating manual, please refer to Berthold.

## 1.3 Storage Place

This operating manual as well as all product-related documentation relevant to the respective application must be accessible at all times near the device.

## 1.4 Target Group

This operating manual is directed at qualified specialist personnel who are familiar with handling electrical and electronic assemblies as well as with communication and measuring techniques.

Specialist personnel refers to those who can assess the work assigned to them and recognise possible dangers through their specialist training, knowledge and experience as well as knowledge of the relevant regulations.

## 1.5 Validity of the Operating Manual

The operating manual is valid from the delivery of the Berthold product to the user until its disposal. Version and release date of this operating manual can be found in the bottom of each page. Modification services are not performed by the manufacturer Berthold.

The manufacturer reserves the right to make changes to this operating manual at any time without stating reasons.

### NOTICE



The current revision of this operating manual replaces all previous versions.

## 1.6 Structure of the Operating Manual

This operating manual has been divided into chapters. The series of chapters should help you to familiarise yourself quickly and properly with the operation of the product.

## 1.7 Copyright

This operating manual contains copyright-protected information. None of the chapters may be copied or reproduced in any other form without prior authorisation from the manufacturer.

## 1.8 Representation

| Identifier       | Meaning                              | Example                           |
|------------------|--------------------------------------|-----------------------------------|
| Quotation mark   | Field in the software user interface | "Value"                           |
| Vertical line    | Path specification                   | Settings   Selection              |
| Pointed brackets | Keys and buttons                     | <Update>                          |
| Round brackets   | Image reference                      | Connect the plug (fig. 1, item 1) |

In the software description, the term "clicking" is used if a process is to be activated. This also refers to the pressing of a button or an area on the touch display if a mouse is not used for control.

## 1.9 Warning Notes

Warning notes are designed as follows:

### Signal Word



Source and consequence

Explanation, if required

► Prevention

In case of emergency

- **Warning symbols:** (warning triangle) draws attention to the hazard.
- **Signal word:** Indicates the severity of danger.
- **Source:** Specifies the type or source of danger.
- **Consequence:** Describes the consequences of non-compliance.
- **Prevention:** Specifies how the hazard can be avoided.
- **In case of emergency:** Specifies which actions are required in the event of the occurrence of risk.

### 1.9.1 Symbols used in the Operating Manual

In this manual, warning instructions before instructions for action refer to risks of injury or damage to property. The hazard-prevention measures described must be observed.

#### ⚠ DANGER



Indicates an **imminent**, major hazard, which will certainly result in serious injuries or even death if the hazard is not avoided.

#### ⚠ WARNING



Indicates a **potential** hazard, which can result in serious injuries or even death if the hazard is not avoided.

#### ⚠ CAUTION



Refers to a **potentially dangerous** situation, which can result in medium or minor physical injuries or damages to property, if it is not avoided.

#### NOTICE



If this information is not observed, deterioration in the operation and/or property damage may occur.

#### IMPORTANT



Sections marked with this symbol point out important information on the product or on handling the product.

#### Tip



Provides tips on application and other useful information.

## 1.9.2 Symbols used on the Device



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### Read the operating manual

Please observe the instructions in this operating manual.

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### Electrostatic discharge

Please note the handling instructions. Electrostatically endangered components. Please observe the instructions in this operating manual.

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### Protective earth connection

At this position, connect the protective earth conductor (PE).

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### Equipotential bonding connection

At this position, connect the equipotential bonding conductor.

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### Direct voltage

The device is operated with direct voltage and may only be connected with a direct voltage source.

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### Alternating voltage

The device is operated with alternating voltage and may only be connected with an alternating voltage source.

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### No domestic waste

The electric product must not be disposed of in domestic waste.

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