

# **User Manual**

# **BRB10**

# **Large Button for Stopwatch Control**





Scan the QR code or enter following URL to get the latest version: https://docs.mobatime.cloud/BRB10

### **Important Notes**

- 1. Please read and follow the safety information in this document before operating the product. We cannot guarantee that no accidents or damage will occur to improper use of this product. Please use this product with care and operate at your own risk.
- 2. We are not liable for any direct or indirect damage caused by the use of this document or the said product.
- 3. This product must be connected and installed by qualified electrician who is familiar with the relevant regulations (e.g. VDE).
- 4. The information in this document is subject to change without notice. The latest version of this document is available for download at https://docs.mobatime.cloud/BRB10/user-manual/pdf .
- 5. This User Manual has been composed with the utmost care to explain all the details to ensure a safe and stable operation of this product. Nevertheless, if question arise or error appear, feel free to contact support.
- 6. Images shown are for illustrative purposes and may differ from the final product.
- 7. No part of this document or the said product may be reproduced in any form or by any means or used to make any derivative such as translation, transformation, or adaption without permission from ELEKON, s.r.o., Brněnská 364/17, Vyškov 682 01 / CZECH REPUBLIC.
- 8. Copyright © 2025 ELEKON, s.r.o., Brněnská 364/17, Vyškov 682 01 / CZECH REPUBLIC. All rights reserved.

# **Table of Contents**

1. Sa	fety		5
1.1.	Instru	ıctions and Symbols	5
1.2.	Gene	ral	
1.3.	Instal	llation	6
1.4.	Opera	ation	6
1.5.	Maint	tenance and Cleaning	7
1.6.	Dispo	osing	7
1.7.	Warra	anty	7
2. In	rodu	ction	8
3. <b>Te</b>	chnic	cal Data	g
3.1.	Diagra	am	
4. Cc	nnec	tion to Digital Clock	11
4.1.	Gene	ration 4 Digital Clocks	11
4	.1.1.	Standard Connectors	11
4	1.2.	ECO-DC Connectors	11
4	1.3.	ECO-M-DC (Screw) Connectors	
4	1.4.	Outdoor Models (Screw) Connectors	
4.2.	Gene	ration 3 Digital Clocks	
4	.2.1.	Standard Connectors	
4	.2.2.	ECO-M-DC (Screw) Connectors	14
5. M	odes	of Operation	15
5.1.	Stand	dard Display Mode	
5.2.	Stand	dard Stopwatch Control Mode	

### 1 Safety



Read the safety instructions carefully and follow all the instructions. This ensures safe and reliable operation of this device.

#### 1.1. Instructions and Symbols

Symbols used throughout this document and their meaning are as follows:



A note or important information.



Answer to a possible question. Contact information.



Keep away from children and people with limited physical, sensory, or mental capacities.



Action needs to be taken.



Connect device to earth ground.



More information included in the manual.



Disconnect mains power before doing anything.



An example or a hint.



Additional references or information.



Attention of electrical shocks.



Surface may be hot.



Item is flammable.



A warning, be cautious.



Recyclable materials.



Do not put in trash.

#### 1.2. General



For safety and licensing reasons, unauthorized modifications and/or changes to the product is prohibited. Maintenance, adjustments or repairs may only be carried out by the factory (copyright holder).



This product is not a toy; it does not belong in the hands of children. Mount or place the product so that it cannot be reached by children. Children may try to insert objects into the product. The product will not only be damaged, but there is also a risk of injury, as well as danger to life through electric shock.

BE-801424.4-BRB10 | 2025 5



Never open the housing of this product, for it poses mortal danger from electric shock or may even cause a fire.

Keep packaging such as plastic films away from children. There is the risk of suffocation of misused.



Use caution with the product, knocks, blows, or even falls from a low height can damage it.



In industrial facilities, the accident prevention regulations of the trade associations for electrical systems and equipment must be observed.

Do not use the product if it is damaged. It can be assumed that safe operation is no longer possible, if:

- · The product has visible damage.
- The product is not working properly (thick smoke or a burning smell, audible crackling noise, discoloration of the product or surrounding areas).
- · The product was stored under adverse conditions.
- · Tough conditions during transport.



Improper handling of this product operated on the mains voltage can cause mortal danger from electric shock!



Interconnection or combining equipment bearing a CE label does not inevitably result in a system that conforms with the safety regulations. Integrators will have to reassess the new product's compliance according to the locally valid directives. See section Conformity for more information on certifications of this product.

#### 1.3. Installation

This product must be connected and installed by a qualified electrician who is familiar with the relevant regulations (e.g. VDE).



Never plug the product into voltage / power supply immediately after it has been moved from cold into warm environment (e.g. during / after transport / unboxing). The resultant condensed water may damage the product or may cause electric shock.



Allow the product reach the ambient temperature. Wait until the condensation has evaporated, this can take a few hours. Only then can the product be connected to the voltage / current supply and put into operation.



This product may have screw terminals with open electrical contacts. It is essential to ensure that the connection is made only when no voltage / current is applied. Secure the power supply to prevent accidental reconnection. Verify the absence of voltage using an appropriate meter.

### 1.4. Operation

Use the product in the specified environment. Use outside of the specifications can damage the product and/or stop any operation. The product may not be exposed to extreme temperatures, direct sunlight or strong vibrations. Protect the product from moisture, dust and dirt.



6

Operation in environments with excessive dust, flammable gases, vapours or solvents is not permitted. It may cause explosion or fire.

- · Do not overload the product. Note the input / output voltage and currents as well as output powers indicated on the product.
- Depending on the input currents and input voltages, suitable connecting cables with appropriate cable diameter must be used. Only
  use the plugs and connectors supplied in the original packaging with the product.

### 1.5. Maintenance and Cleaning

- If the product and/or the connecting cable is damaged, do not touch it: there is mortal danger from electric shock! First, turn off the power supply to all poles of the product. Verify the absence of voltage using an appropriate meter.
- For the end consumer, the product is maintenance-free. Leavy any maintenance to an expert. Repairs may only be done by the factory itself (copyright holder).
- · For external cleaning one can use a clean, soft, dry cloth. Dust can be easily removed with a clean, soft brush and a vacuum cleaner.

#### 1.6. Disposing



At the end of its lifecycle, do not dispose of this device in the regular household rubbish. Return it to the supplier who will dispose of it correctly.



The user is lawfully obligated to return unusable batteries. **Disposal of used batteries through household waste is prohibited!** Batteries which contain dangerous substances are labelled with a picture of crossed out trash bin. The symbol means that this product may not be disposed through household waste.

Unusable batteries can be returned free of charge at appropriate collection points of your waste disposal company or at shops that sell batteries. By doing so, you fulfil your legal responsibilities and help protect the environment.



This product was packed and stuffed with proper materials to protect it during transportation. Packaging materials can be recycled and should be disposed environmentally friendly.

### 1.7. Warranty

The device is intended for a normal operational environment according to the corresponding norm.

The following circumstances are excluded from the warranty:

- · Inappropriate handling or interventions.
- Chemical influences.
- Mechanical defects.
- External environmental influences (natural catastrophes, etc.)



Repairs during and after warranty period are assured by the manufacturer.

BE-801424.4-BRB10 | 2025 7

## 2 Introduction

One large button for stopwatch control is particularly suitable for use in industry, schools, laboratories and other special applications.

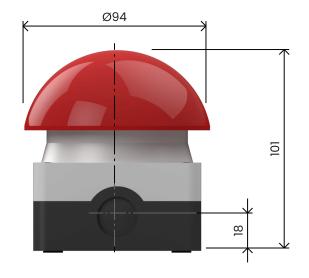
All stopwatch operations, such as stopwatch initialization, start, stop and reset, can be done via this robust BRB10 button, which can be operated even while wearing gloves.

# 3 Technical Data

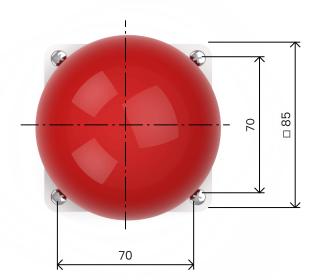
Parameter	
Mechanical Resistance	10 <sup>6</sup> operations
Controlling Power	20-40 N
Protection Degree	IP 67
Operating Temperature	-25 to +40 °C
Mounting Position	Any
Control	Manual / Foot control
Dimensions – Base	85 x 85 mm
Dimensions – Controller	ø94 mm
Dimensions – Button Height	101 mm

BE-801424.4-BRB10 | 2025 9

### 3.1. Diagram







### 4 Connection



Only instructed or skilled persons may carry out the following operations.

The NO terminal block (green) is used to connect the button.

The button connects to the TEMP terminal (or CTRL terminal for outdoor clock models) on the clock control board.



The button connects input TEMP1 / S1 to -.

The wire color coding is used for documentation consistency and does not affect functionality.



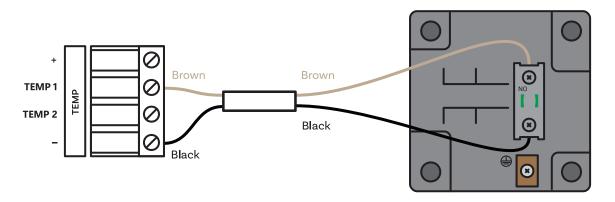
For indoor digital clock, if the external keyboard is connected, the TP3/30m and TPHP temperature sensors **cannot be connected** .

### 4.1. Generation 4 Digital Clocks

#### 4.1.1. Standard Connectors

Wire Color	Connector
Brown ■	TEMP1
Black ■	-

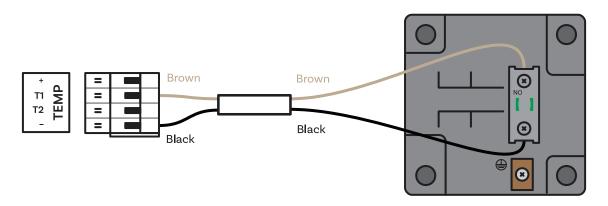
BRB10 button body after disassembly of the top part



#### 4.1.2. ECO-DC Connectors

Wire Color	Connector
Brown ■	TEMP1
Black ■	-

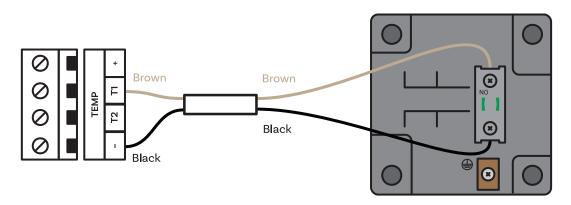
BRB10 button body after disassembly of the top part



### 4.1.3. ECO-M-DC (Screw) Connectors

Wire Color	Connector
Brown ■	TEMP1
Black ■	-

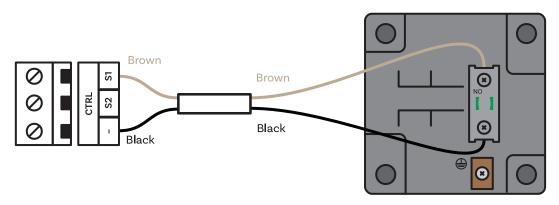
BRB10 button body after disassembly of the top part



### 4.1.4. Outdoor Models (Screw) Connectors

Wire Color	Connector
Brown ■	TEMP1
Black ■	-

BRB10 button body after disassembly of the top part

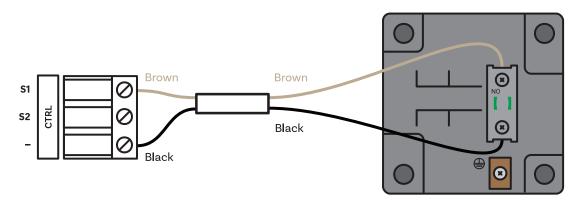


### 4.2. Generation 3 Digital Clocks

#### 4.2.1. Standard Connectors

Wire Color	Connector
Brown ■	S1
Black ■	-

BRB10 button body after disassembly of the top part



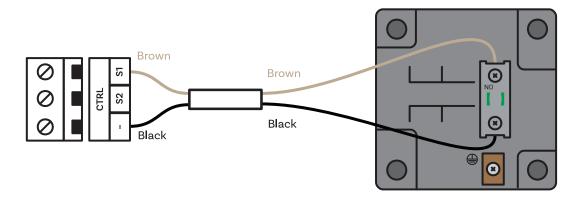
### 4.2.2. ECO-M-DC (Screw) Connectors



This connection apply only for generation 3 ECO-M-DC series digital clock with option  ${\bf E}$  .

Wire Color	Connector
Brown ■	S1
Black ■	-

BRB10 button body after disassembly of the top part



## **5** Modes of Operation



Every menu setting is applicable only for generation 4 digital clock.

Modes of operation are applicable for both generation 3 and generation 4 digital clocks.



Before you can use this button to operate the stopwatch, please first set value | within item | 6 (External keyboard connection) in digital clock's | 5 | 0 | P | menu.

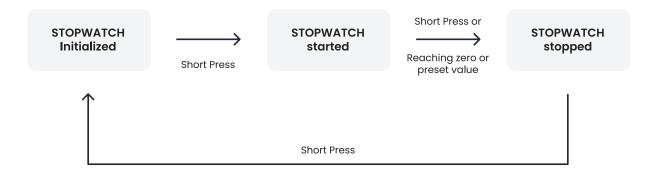
### 5.1. Standard Display Mode

Mode	Description
OFF	Display is OFF  This mode can be set in digital clocks d ! 5 P menu item d 3 set to value 4.
CLOCKS	The display shows time, date or temperature  This mode can be set in digital clocks d   5 P menu item d 3 set either to value [],   1, 2, 3, 5, 6 or [].
STOPWATCH	Stopwatch with counting downwards from a preset value to zero or Stopwatch with counting upwards from zero, or preset value, or to maximum value
SETTINGS	Set counting upwards / downwards value using the IR remote controller button or clocks Push-Buttons

### 5.2. Standard Stopwatch Control Mode

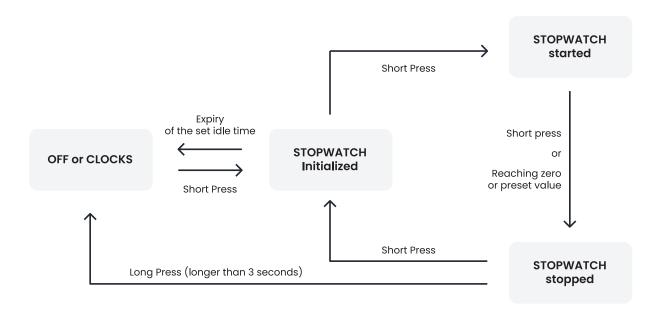
#### **Standard Control Mode**

This control mode can be set within the digital clock's  $5 \stackrel{\iota}{\iota} _{\circ} P$  menu, specifically under item  $\stackrel{\iota}{\iota} \stackrel{?}{\iota}$ , by setting the value to  $\stackrel{5}{\iota}$ .



#### **Control Mode with Switch to Default Display**

This control mode can be set within the digital clock's 5  $\lfloor \cdot \cdot \mid P \rfloor$  menu, specifically under item  $\lfloor \cdot \mid \cdot \mid P \rfloor$ , by setting the value to  $\lfloor \cdot \mid \cdot \mid P \rfloor$ .



The Timeout to switch to default display can be set within the digital clock's  $5 \not\models 
opin 
otag$  menu in item h 
otag 
ota



Headquarters/Production Sales Worldwide	Tel. +41 34 432 46 46   Fax +41 34 432 46 99 moserbaer@mobatime.com   www.mobatime.com
Sales Switzerland	MOBATIME AG   Stettbachstrasse 5   CH-8600 Dübendorf Tel. +41 44 802 75 75   Fax +41 44 802 75 65 info-d@mobatime.ch   www.mobatime.ch
	MOBATIME SA   En Budron H 20   CH-1052 Le Mont-sur-Lausanne Tél. +41 21 654 33 50   Fax +41 21 654 33 69 info-f@mobatime.ch   www.mobatime.ch
Sales Germany/Austria	BÜRK MOBATIME GmbH Postfach 3760   D-78026 VS-Schwenningen Steinkirchring 46   D-78056 VS-Schwenningen Tel. +49 7720 / 85 35 - 0   Fax +49 7720 / 85 35 - 11 buerk@buerk-mobatime.de   www.buerk-mobatime.de