eClock

USER MANUAL

Product name: eClock

Model: Basic

Version: 1.02

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Manufacturer: Emit AS

Address: Bedriftsveien 10, N-0950 Oslo, Norway

TABLE OF CONTENTS

1. Introduction 4

2. Included equipment 5

3. Device description 5

4. Using eClock 10

5. Operating modes 11

6. Maintenance and care 14

7. Technical data 15

8. Disposal 15

9. Update firmware 16

10. Upgrade to eClock+ 16

11. Contact 16

1. INTRODUCTION

Thank you for choosing the eClock. eClock is a compact digital start clock suitable for orienteering, cross-country skiing, biathlon, cycling, running, and other sports with interval start. The display has two lines in different sizes, capable of showing both numbers and letters. A clear beep signals the final five seconds before the start. eClock is programmed using the built-in keypad.

eClock is based on modern display technology with backlighting. The brightness is automatically adjusted by the built-in light sensor. In bright sunlight, eClock will automatically decrease the brightness, while in lower light conditions, the brightness is increased.

eClock has two built-in modes:

1. **Clock only** (displays running time)
2. **Interval** (start clock with interval start)

The plus version of eClock - eClock+, includes additional modes for displaying tag numbers and times, but these modes are not covered in this manual.

2. INCLUDED EQUIPMENT

eClock comes with the following equipment included:

- 1x emit eClock
- 1x Tripod stand with Manfrotto adapter
- 1x Charger with USB cable
- 1x Storage backpack
- 1x Rain cover
- 1x User manual

3. DEVICE DESCRIPTION

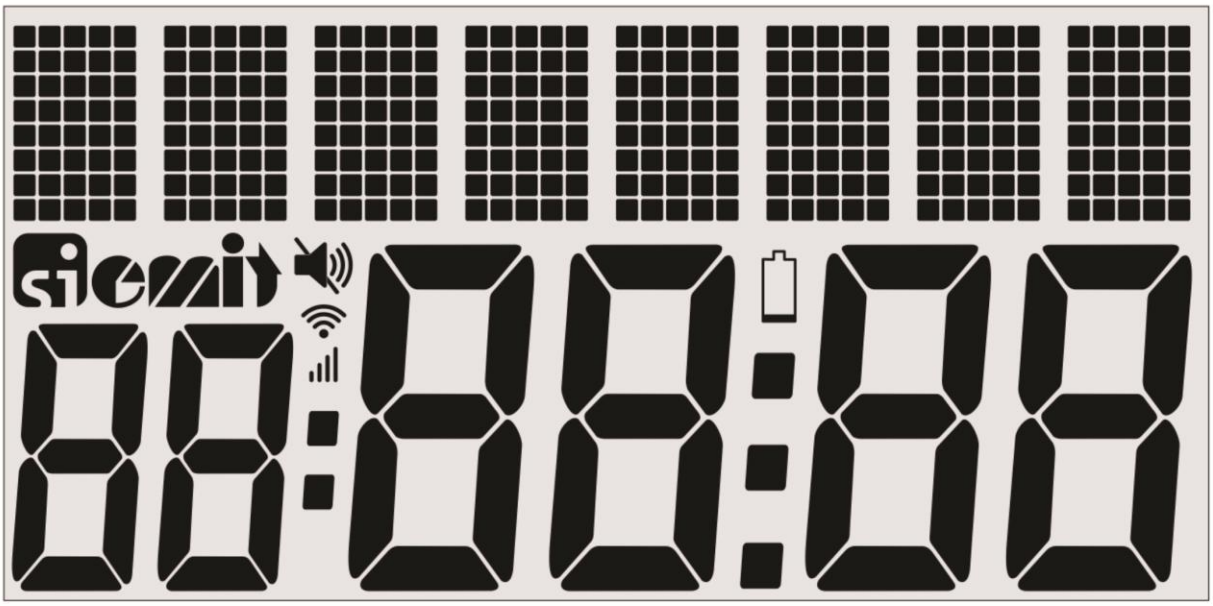
eClock consists of the following components:

- Display
- Keypad
- Several connections
- Tripod stand incl. holder

DISPLAY

The display has two lines for displaying time and/or text. The lower line consists of six digits and is the main line. The upper line consists of eight squares that can show text or digits.

In addition, the display has some special symbols.



The volume is on high

The volume is on low

The volume is muted

The battery level is on 10% (symbol is blinking)

eLine range is high

eLine range is standard/medium

eLine range is low

Connectivity (not in use in basic version)

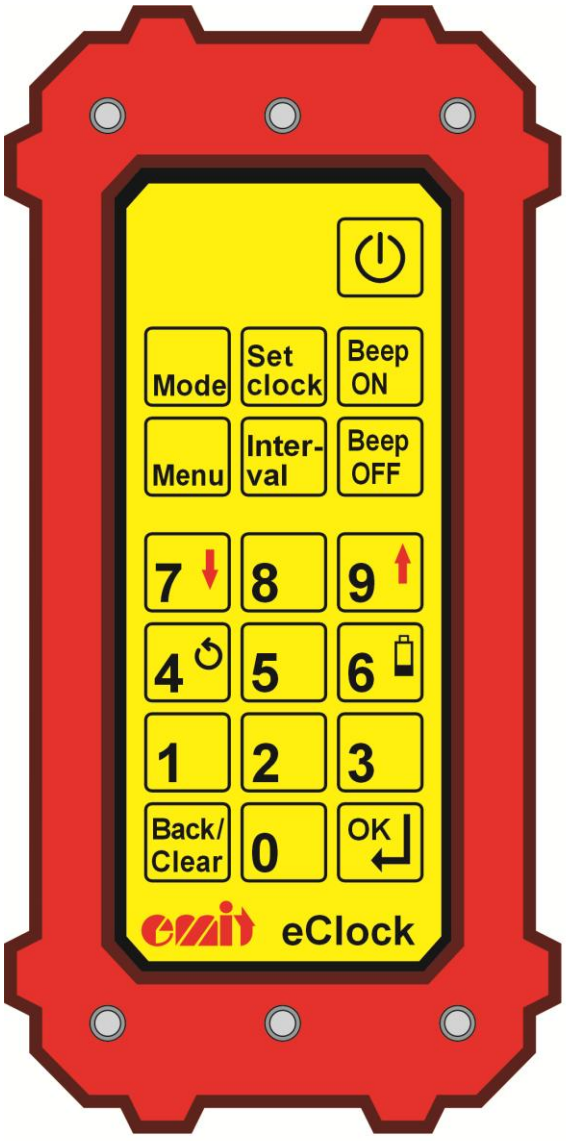
Company logo

Company logo

KEYPAD

The built-in keypad is used to program eClock. Only the keys that have a function in the current mode can be pressed. If a key without a function is pressed, eClock will beep. Some of the number keys have multiple functions depending on the mode.

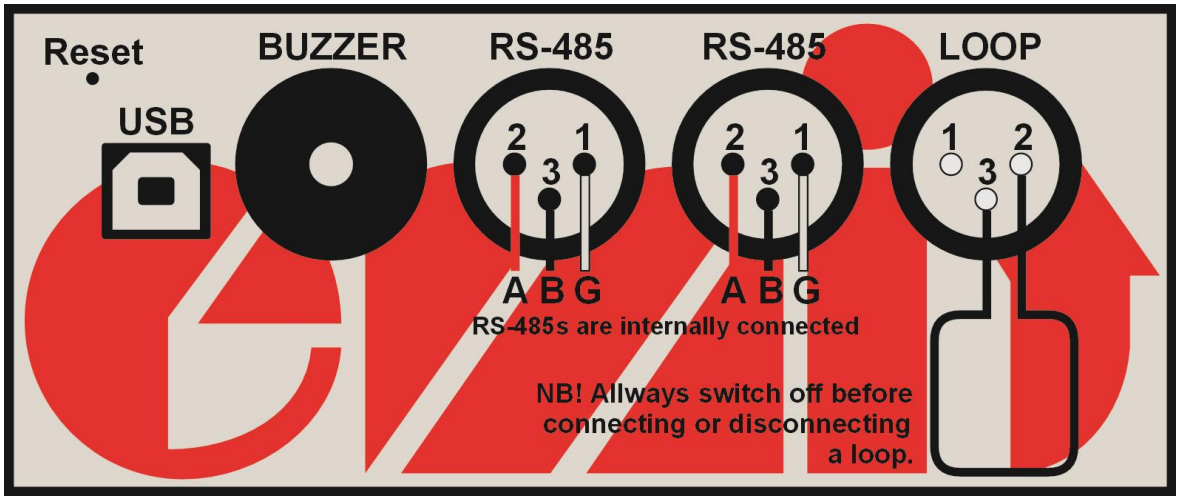
eClock has the following keys:



- Turn eClock On/Off
- **Mode** — Switch between operating modes
- **Set clock** — Set clock time (hh:mm:ss)
- **Beep ON** — Turn sound on and switch between high and low
- **Menu** — Select settings for the current mode
- **Inter-val** — Set start interval (15 sec, 30 sec or 1 min)
- **Beep OFF** — Turn sound off
- **7** — Number key and arrow down (used in some menus)
- **9** — Number key and arrow up (used in some menus)
- **4** — Number key recalibrate loop (only in use for eClock+)
- **6** — Number key and show battery percent
- **Back/ Clear** — Exits current menu
- **OK** — Enter - confirm the selected option

SEVERAL CONNECTIONS

eClock has several connection options for external equipment on the back of the unit. From left to right, the ports are:



USB: USB-B port for charging and connection to a PC

RS-485 : Input/output for data transfer via RS-485 *

RS-485: Input/output for data transfer via RS-485 *

Loop: Connection for external eLine loop *

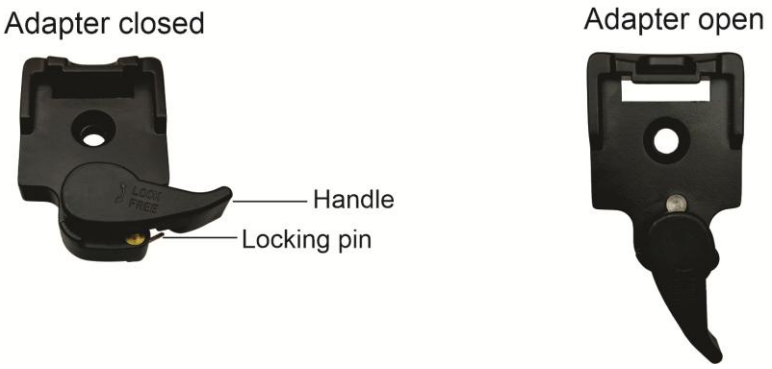
* Only used by eClock+

eClock also has a small reset button on the uppermost left that can be pressed using a paper clip or similar. eClock will restart if this button is pressed.

eClock is designed for outdoor use in "all kinds of weather," but it is not 100% waterproof. When used in rainy conditions, it should be protected using the included rain cover. The operating temperature range for the eClock is from +40 to –20 degrees Celsius, but battery capacity may be reduced in very cold conditions.

TRIPOD STAND WITH MANFROTTO ADAPTER

Manfrotto adapter



- Open the Manfrotto adapter by pulling the locking pin to the left and then pull the handle 90 degrees down.
- Insert eClock into the open adapter and the handle will lock automatically.

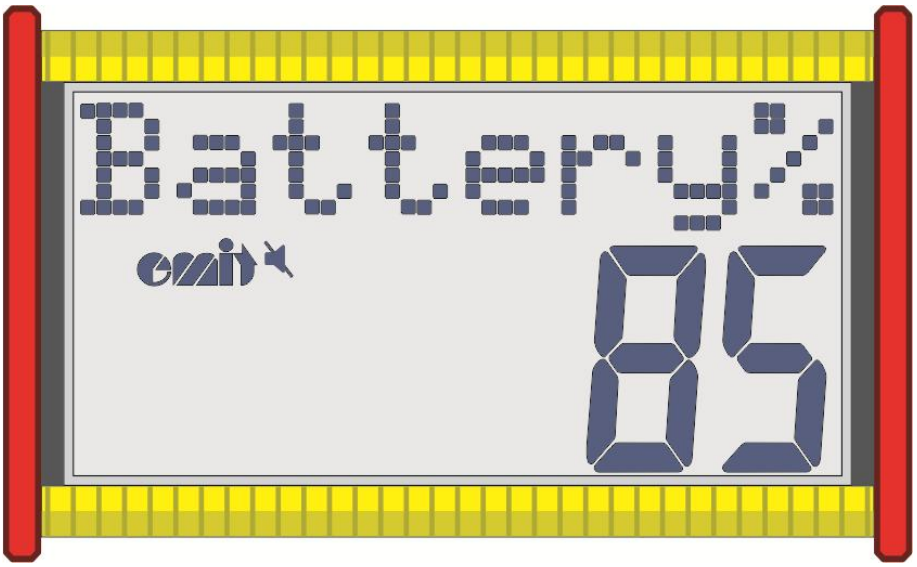
4. USING eCLOCK

You should fully charge the batteries before starting eClock for the first time. eClock contains two built-in rechargeable 1.2 V 4.5 Ah NiMH batteries. The batteries are charged by connecting the included USB cable to the leftmost port. When the USB cable is connected, a battery symbol appears on the display along with the current battery level in %.

If the battery is completely discharged, it may take up to 10 hours to fully charge the eClock. When fully charged, eClock should have a battery life of approximately 36 hours under normal use.

By pressing the <6> key, which has a battery symbol on it, the current battery level is displayed for a few seconds.

The battery symbol will start blinking when eClock has 10% battery capacity or lower. At 0% eClock will turn off.



Press the on/off button turn on the clock. When powered on, the display first shows “eClock” and the version number, then the battery percentage is displayed. eClock always starts in the last used operating mode.

5. OPERATING MODES

eClock has two operating modes. Pressing the <Mode> key switches between the different modes.

1. Clock only (time only):

The running time (hh:mm:ss) is shown on the bottom line.

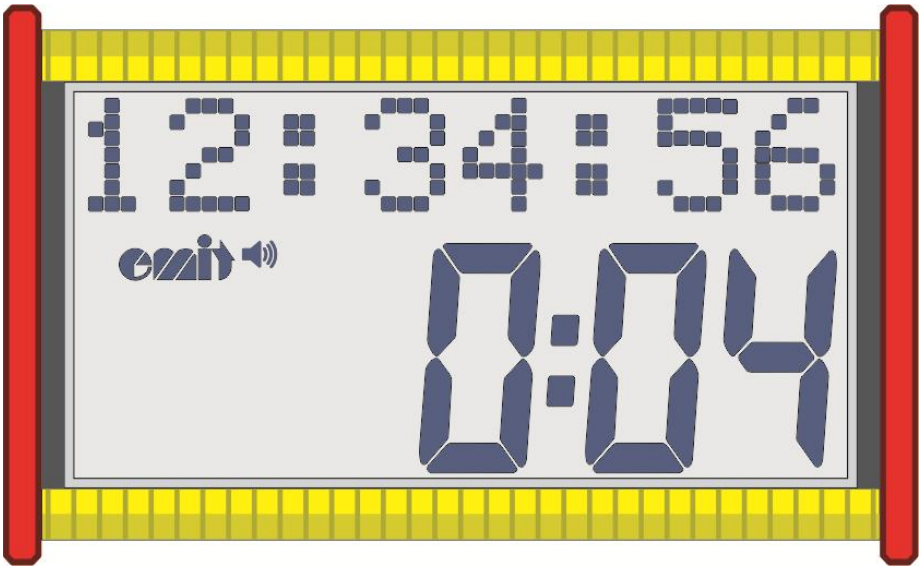
The beep signal is deactivated by default. In this mode, only the clock time can be adjusted.

To set the clock time:

- Press the <Menu> key. The display shows “SetClock” on the top line and the running time on the bottom line.
- Enter the correct time using the number keys and press the <Enter> key exactly on the correct second.
- Press the <Back/Clear> key to exit the menu without saving.
- You can also use the <Set clock> key to go directly to this menu.

2. Interval (interval start):

The running time (hh:mm:ss) is shown on the top line, and the countdown in seconds is shown on the bottom line. The first start time is used for the count-down to the first start, after which the start interval is used to calculate the following starts.



The beep signal is activated (at high volume) when the first start time is set, and it will beep during the last five seconds before each start. A long beep sounds at the start time.

To set the first start time:

- Press the <Menu> key. The display shows “Set First Starttime” on the top line and “00:00:00” on the bottom line.
- Enter the correct start time for the first start using the number keys and press the <Enter> key to confirm.
- Press the <Back/Clear> key to exit the menu without saving.

Note: *The first start time is only used for the countdown to the first start. After the clock passes this time, the first start time is reset.*

To set the correct start interval:

- Press the <Interval> key. The display shows “SetInter” on the top line and the current start interval on the bottom line.
- Use the arrow keys (7 or 9) to change the start interval. You can choose between 10 sec, 15 sec, 20 sec, 30 sec, 45 sec, 1 min, 1:30 min, or 2 min.
- Confirm your selection with the <Enter> key. eClock will respond with a double beep and return to operating mode.
- Press the <Back/Clear> key to exit the menu without saving.

Switching between countdown and clock time on the display

In interval mode, it is possible to switch between showing the countdown and the clock time. This can be useful, for example, if eClock is used for pre-start in orienteering. If you want the countdown on the top line and the clock time on the bottom line, press one of the arrow keys (7 or 9). Press one of the arrow keys again to switch back.

6. MAINTENANCE AND CARE

To ensure that your eClock continues to function reliably and has a long service life, we recommend regular maintenance and careful handling. Clean the clock periodically using a soft, slightly damp cloth.

Do not use aggressive cleaning agents, solvents or abrasive materials, as these may damage the surface or internal electronics. The clock is splash-proof but must not be immersed in water.

Pay particular attention to the cleanliness of the electrical contacts. They should be free of dirt and corrosion. Use a dry, lint-free cloth for cleaning. When transporting or storing the device, use the handy storage backpack provided.

Please do not carry out unauthorized repairs or modifications to the clock. If you experience technical issues, please contact Emit Customer Service, SPOR-Tident Customer Service or an authorized retailer. Additionally, ensure that the clock software or firmware is always up to date. Information about available updates can be found on our website.

7. TECHNICAL DATA

Size:	266 x 172 x 85 mm
Weight:	1250 grams
Keypad:	Numeric and function keys
Batteries:	2 x GP450LAH NiMH 1.2 Volt 4.5 Ah
	Total: 10.8 Wh
Battery life:	36 hours
Charging time:	10 hours
Charging type:	USB
Clock:	24-hour format
Accuracy:	5 PPM (0.5 seconds per day)
Temp. range:	-20 to +40 degrees Celsius
Connections:	USB, RS-485, and eLine loop
Buzzer:	75 or 100 dB, 2.9 kHz
Mounting:	Tripod stand with Manfrotto mount
Update:	Firmware update via USB

8. DISPOSAL

Electronic devices must not be disposed of with household waste. Please dispose of the device, including any batteries and electronic components, at an appropriate collection point for waste electrical and electronic equipment or

hand them over to an authorized waste disposal company. Please observe national and regional regulations regarding proper disposal.

9. UPDATE FIRMWARE

You should regularly check if there is an updated firmware version for eClock to ensure optimal performance. To update the firmware, you need to use the utility program ‘eUpgrade’, which can be downloaded from our support pages: https://emit.no/support-base/hjelpeprogrammer/

10. UPGRADE TO eCLOCK+

It is possible to upgrade your eClock to the full version called eClock+. This version enables communication with emiTags and can be used to display finish times and lap times, as well as starting the internal clock in emiTags if used at start. eClock+ is ideal for use at training and small events. Contact us for an offer and instructions on how to upgrade!

11. CONTACT

If you have any questions, please contact:

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