

# Rainbow Clock

## User's manual

---

*Document Revision. A*

42



# Table of contents

---

<b>Table of contents .....</b>	<b>1</b>
<b>Glossary.....</b>	<b>2</b>
<b>Product overview.....</b>	<b>3</b>
1. Description .....	3
2. Capabilities .....	3
3. Quick specs.....	3
<b>Basic operation .....</b>	<b>4</b>
1. Reading the time of day.....	4
2. Changing the color scheme .....	4
3. Updating the time on the clock.....	4
<b>Advanced operation .....</b>	<b>5</b>
1. Synchronizing the clock using Bluetooth.....	5
<b>Technical details .....</b>	<b>6</b>
<b>Planned features .....</b>	<b>7</b>
<b>Contributions.....</b>	<b>8</b>
<b>Endnotes.....</b>	<b>9</b>

# Glossary

---

## 1. Microcontroller

---

*to-do ...*

## 2. Bluetooth

---

*to-do ...*

## 3. Refresh rate

---

*to-do ...*

# Product overview

---

## 1. Description

---

Rainbow Clock is an unusual timekeeping device with an exotic look and designed with electronics in mind.

## 2. Capabilities

---

- Display the current time of the day
- Synchronize itself via a Bluetooth connection
- Alter its color scheme depending on events

## 3. Quick specs

---

- Microcontroller: PIC32
- LEDs: 60, RGB type
- Refresh rate: ~10Hz
- Power: xWatt

# Basic operation

---

## 1. Reading the time of day

---

*to-do ...*

## 2. Changing the color scheme

---

*to-do ...*

## 3. Updating the time on the clock

---

*to-do ...*

# Advanced operation

---

## 1. Synchronizing the clock using Bluetooth

---

*to-do ...*

# Technical details

---

## 1. Block *diagram*

---

*to-do ...*

## 2. Components used

---

*to-do ...*



# Planned features

---

- *Display basic weather data and forecast using built-in sensors*
- 

Data gathering could reveal itself being a nice addition to the project.

# Contributions

---

In alphabetical order:

- **ltesson**            ltesson@student.42.fr
- **nahmed-h**        nahmed-h@student.42.fr
- **schiaad**           schiaad@student.42.fr
- **vchesnea**        vchesnea@student.42.fr

*Page layout by:* vchesnea

# Endnotes

---