

AnalogPAK™ Sun Tracker  
Actuator Driver with Optical Positioning System

Introduction

This quick start guide introduces new users to the AnalogPAK Sun Tracker. The document describes the main functionality of the device.

**Note:** Do not rotate the Sun Tracker manually as this may cause the device to malfunction.

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## 1. Device Power Source

The device is powered by a Li-Ion built-in battery, which can be charged by the USB type C cable or by the solar panels installed in front of the moving part of the Sun Tracker.



Figure 1. Device Power Source

## 2. PCB Front Side Functionality

To rotate the Sun Tracker, direct a source of light to four sensors located in the center of the PCB (see green rectangle in [Figure 2](#)).

To adjust the sensitivity, use the toggle to select the direction of the sensitivity tune and the button to set the sensitivity step-by-step (see purple rectangle in [Figure 2](#)).

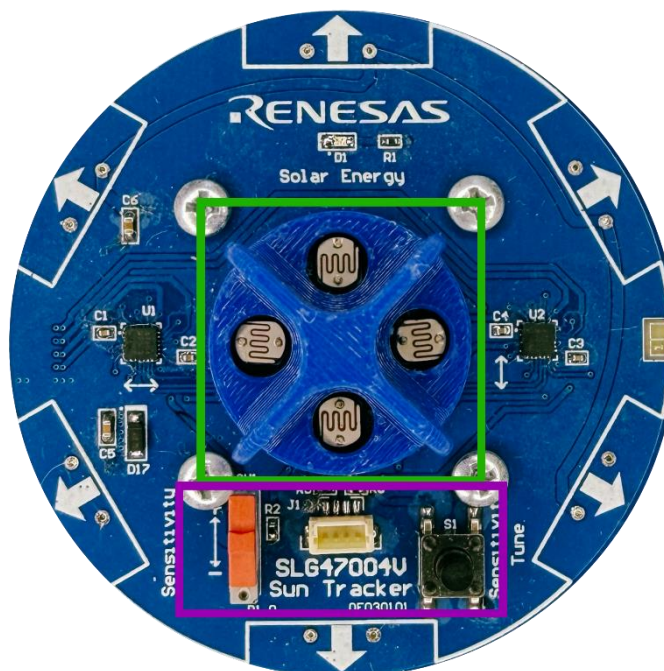


Figure 2. Front Side of the PCB

### 3. Optical Light Filter

The optical mask (a white plastic thin-walled cup) allows the amount of light provided to the sensors to be used both indoor and outdoor (see green rectangle in [Figure 3](#)).

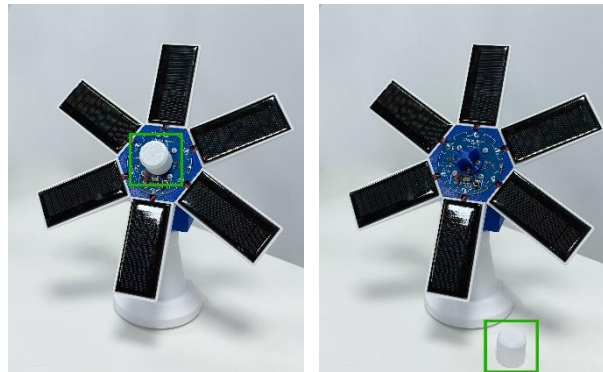


Figure 3. Optical Light Filter

### 4. Sun Tracker Power Panel

The main elements of the Sun Tracker Power Panel are as follows:

1. USB type C input. Allows to charge the battery built inside of the Sun Tracker (see green rectangle in [Figure 4](#)).
2. USB type A input. Allows to charge an external device (see purple rectangle in [Figure 4](#)).
3. Button (see orange rectangle in [Figure 4](#)):
  - a. To check the battery charge press it once.
  - b. To start the device hold it for 3 s.
4. LEDs above the start-up button. Indicates three levels of the battery charge.



Figure 4. Sun Tracker Power Panel

## 5. Multi-Time Programmable Memory

The SLG47004 is a device with multi-time programmable (MTP) memory, so it can be reprogrammed by users. The input shown in [Figure 5](#) allows users to connect the GreenPAK™ Serial Debugger to the SLG47004 and reprogram the device as required (up to 1000 times).



Figure 5. MTP Input

## 6. Revision History

| Revision | Date         | Description     |
|----------|--------------|-----------------|
| 1.00     | Dec 23, 2025 | Initial release |