



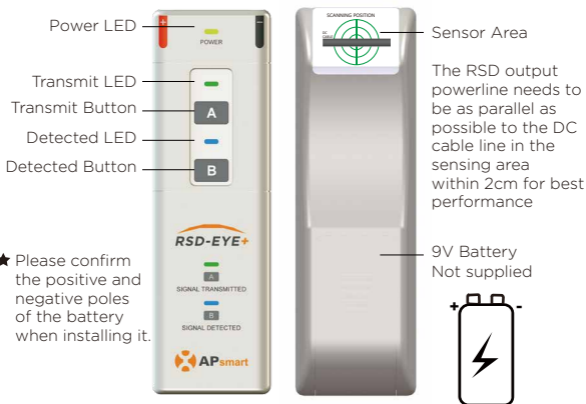
# Smart Signal Detector RSD-EYE+ Operation Manual



# Introduction

The RSD-EYE+ is a small and lightweight multifunctional handheld detection device for sensing pulse modulation from the power line communication (PLC) signal between transmitter and RSD, to ensure compliance to the SunSpec Alliance Rapid Shutdown protocol. In addition, the RSD-EYE+ can also be used as a handheld transmit device, by connecting an optional external DC cable to send an in-line keep-alive signal to the RSD.

## Product Structure



Red Cable Positive Connection

Black Cable Negative Connection



# Technical Data

Input operating Voltage: 9Vdc

Input operating Current: 0.1A

Operating Ambient Temperature

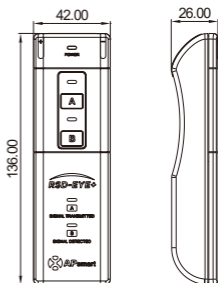
Rang: -40 °C -+60 °C

Enclosure Rating: IP20

Dimensions (W x H x D):

136mmx42mmx26mm

Weight: 240g



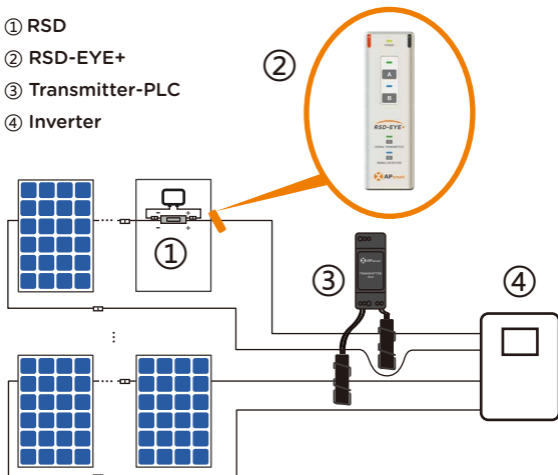
# System Diagram

① RSD

② RSD-EYE+

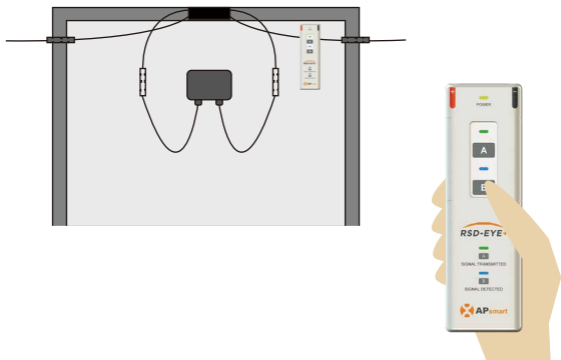
③ Transmitter-PLC

④ Inverter



## RSD-EYE+ Detect Mode

After all RSD units in the PV system have been installed and the RSS transmitter is connected and powered on, the RSD output powerline needs to be as parallel as possible to the DC cable line in the sensing area within 2cm for best performance. Testing each RSD with the RSD-EYE+ to confirm the presence of a keep-alive signal. During the detection, the Detect Mode button B should be held for more than 3 seconds. When the keep-alive signal is detected, the detect mode LED will be lit blue and an audible alert will sound to confirm. This will hold about 7 seconds even if RSD-EYE+ leaves the detecting area, so during a new test, wait for the indicator to disappear or press the key again.



# RSD-EYE+ Transmit Mode

Confirm the RSD input cables are connected to the PV module output cables, and its output cables are connected to the external cable from the RSD-EYE+ properly. During the detection process, the transmit mode button A should be pressed for at least 2 seconds. RSD-EYE+ indicates four detection states by transmit mode with LED (green light) and buzzer as follows:

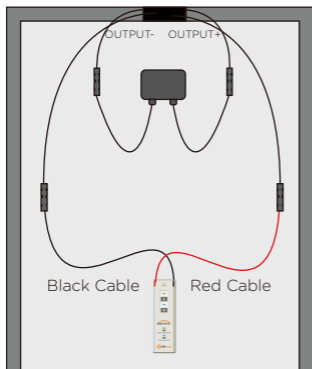
The green LED is on with continuous sound:**RSD works normally**

The green LED is off without sound:**RSD has not started properly**

The green LED is off with interval sound:**RSD rapid shutdown function abnormal**

The green LED is flashing with interval sound:**Input overvoltage alarm of RSD-EYE+**

**Warning: Please only connect one RSD for testing.**





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Product information is subject to change without notice.