

RSD-EYE+ Operation Manual

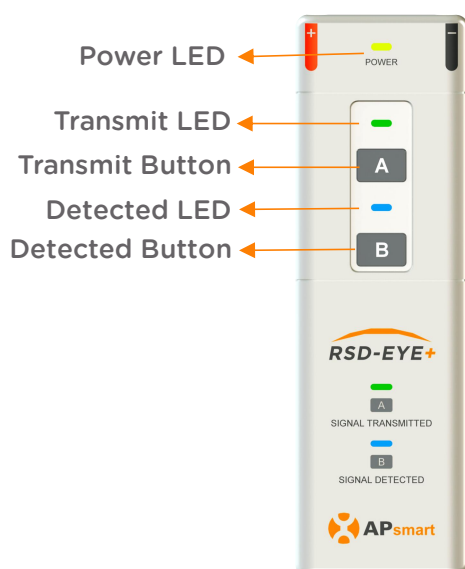
◆ Introduction



Smart Signal Detector RSD-EYE+

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-S-PLC, 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-S-PLC.

◆ Product Structure



Sensor Area

The RSD-S-PLC output powerline needs to be as parallel as possible to the DC cable line in the sensing area within 2cm for best performance

9V Battery

Not supplied

Red Cable
Positive
Connection

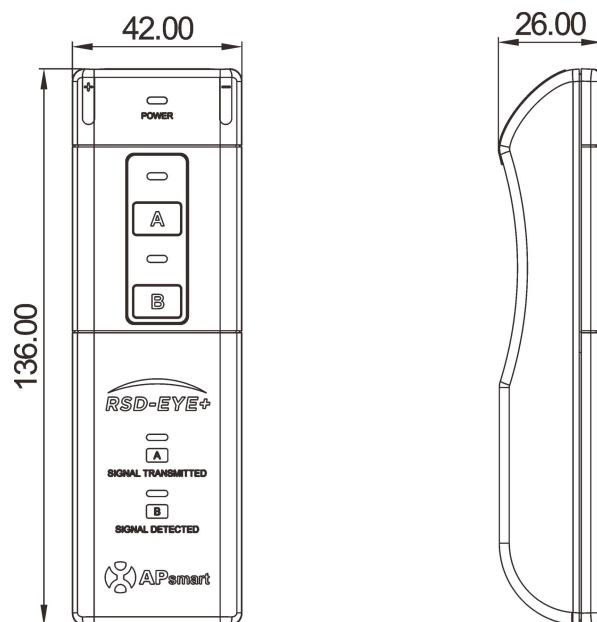


Black Cable
Negative
Connection



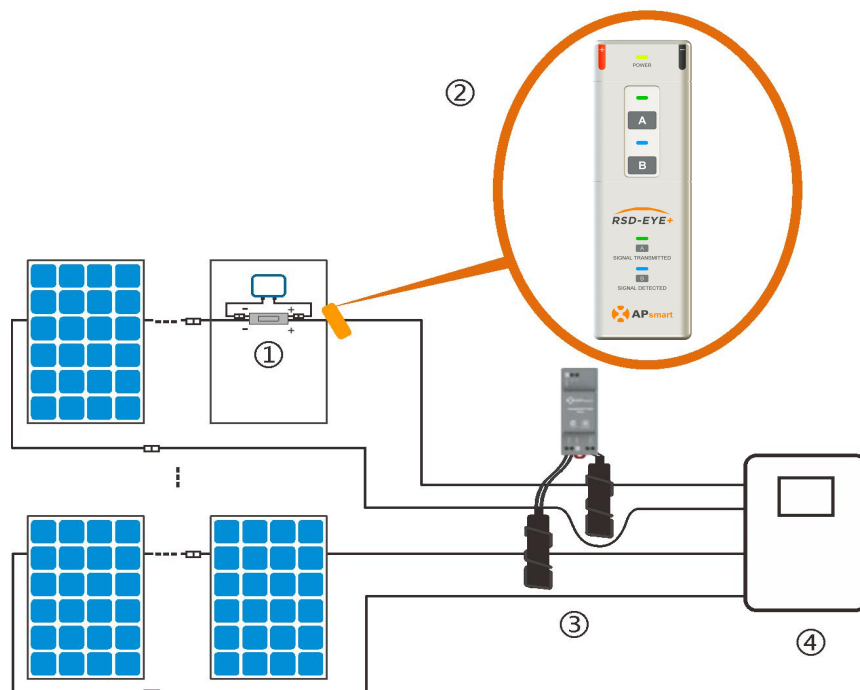
Please confirm the positive and negative poles of the battery when installing it

◆ Dimension



◆ System Diagram

- ① RSD-S-PLC
- ② RSD-EYE+
- ③ Transmitter-PLC
- ④ Inverter



◆ **RSD-EYE+ Detect Mode**

After all RSD-S-PLC units in the PV system have been installed and the transmitter is connected and powered on, the RSD-S-PLC 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-S-PLC 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**

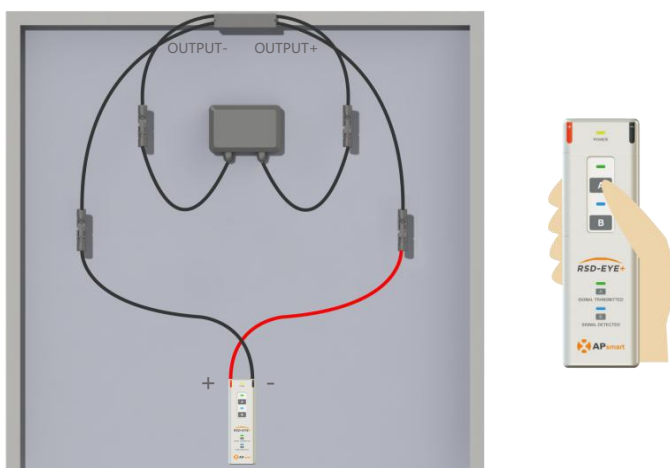
Confirm the RSD-S-PLC input cables are connected to the PV module output cables, and its output cables are connected to the external cable from the RSD-EYE+ properly. During the detection process, the transmit mode button A should be pressed for at least 2 seconds. The RSD-EYE+ indicates four detection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

The green LED is on with continuous sound:
RSD-S-PLC works normally

The green LED is off without sound:
RSD-S-PLC has not started properly

The green LED is off with interval sound:
RSD-S-PLC 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.