

RSD-EYE+ Operation Manual

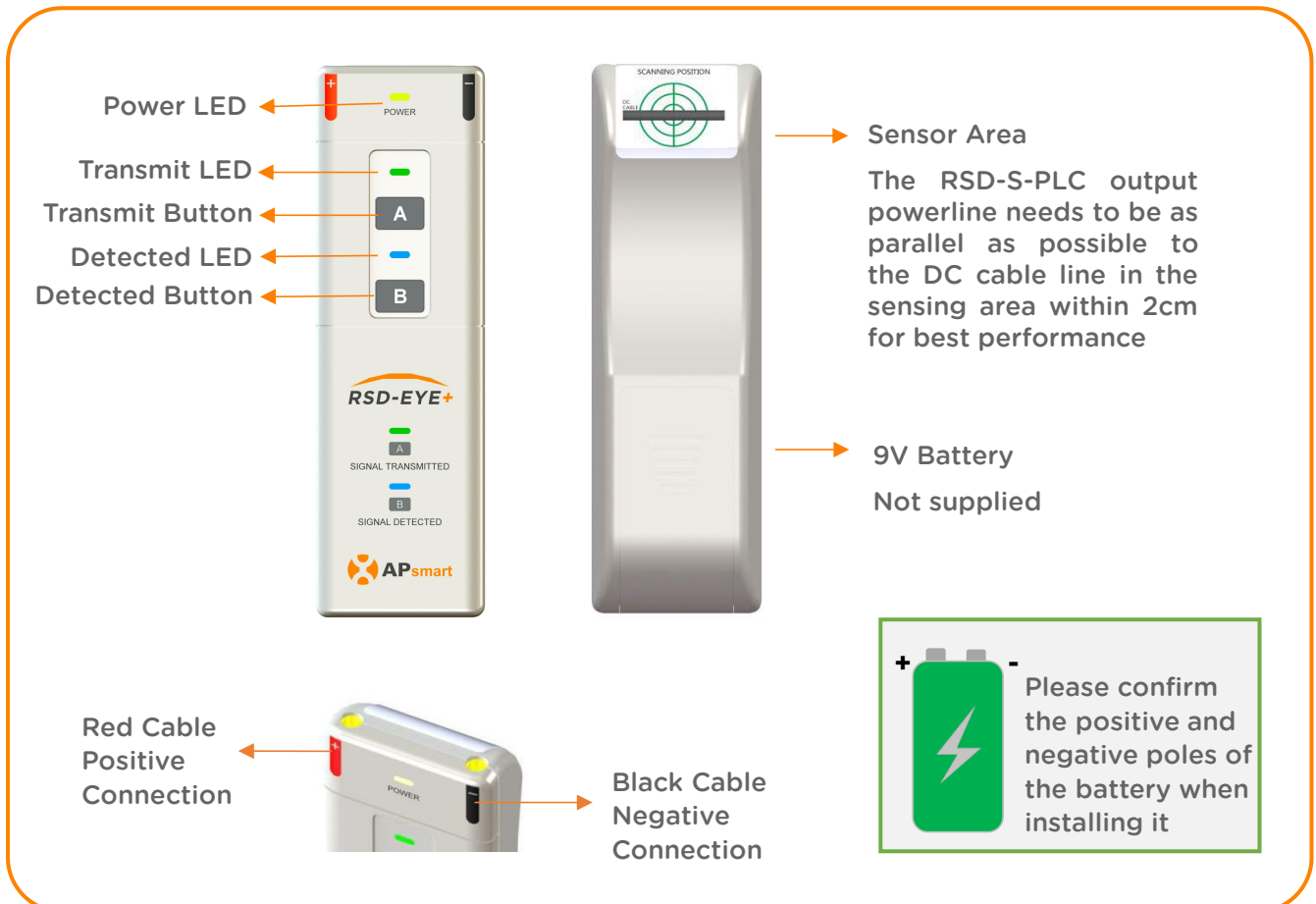
◆ Introduction



Smart Signal Detector RSD-EYE+

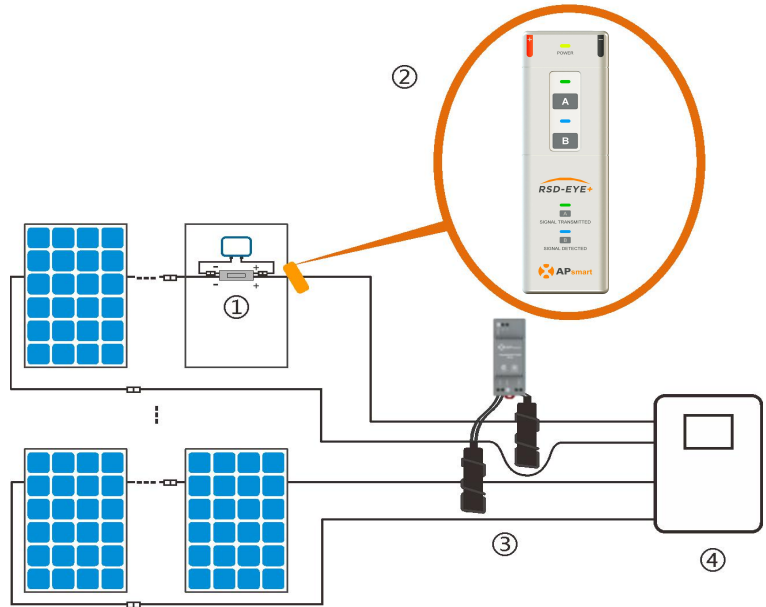
The RSD-EYE+ is a small and lightweight multifunctional handheld detection device for sensing pulse modulation from the power line communication (PLC) signal between transmitter and RSD-S-PLC, to ensure compliance to the SunSpec Alliance Rapid Shutdown protocol. In addition, the RSD-EYE+ can also be 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



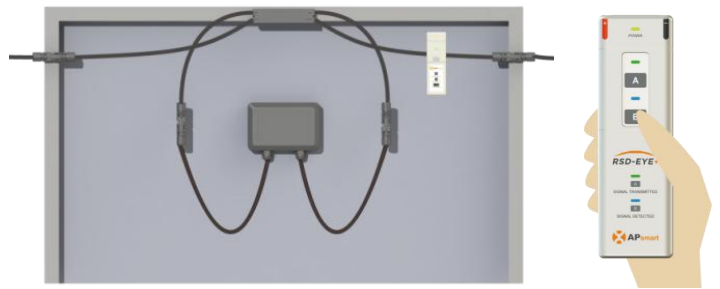
◆ System Diagram

- 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

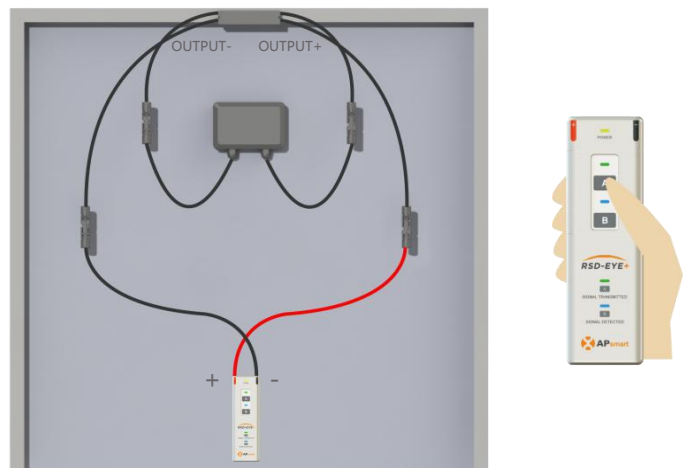
Confirm the RSD-S-PLC input cables are connected to the PV module output cables, and its output cables are connected to the external cable from the RSD-EYE+ properly. During the detection process, the transmit mode button A should be pressed for at least 2 seconds. The RSD-EYE+ indicates four detection 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.