

## SPD-WL02-PRO

### Non-locating Water Leak Detection Controller

SPD-WL02-Pro the non-locating leak detection controller is a water leak detection device with simple operation and high cost performance. User can select different sensing sensitivities through the DIP switch on the panel to be used in different detection environments and grade requirements. It can be integrated with various monitoring systems to realize remote monitoring with a relay contact signal output.

#### Features

- Stable and reliable: Using industrial-grade electronic components, it can not only ensure high sensitivity during detection, but also reduce false alarms caused by various external factors. It adopts electromagnetic compatibility design, with anti-surge, anti-static, anti-EFT and other protection functions.
- Adjustable sensitivity: There is a 2-position 4-gear DIP switch on the controller panel, and the user can choose different sensitivity (the adjustment range is within 1cm-20cm of the cable length)
- Easy operation: The controller adopts standard industrial modules and DIN rail installation and on-site wiring can be easily completed through the wiring terminals. When leakage occurs, the relay will act and the leakage indicator will be on. After the risk is eliminated, the controller will automatically return to the normal state without manual on-site operation.
- Local sound and light alarm: When the the liquid leakage is detected, the panel LED leakage indicator on the panel will always be on to give an alarm, and the internal buzzer will sound an alarm.
- One key silence function: There is a buzzer off button on the controller panel, and the internal buzzer can be turned off by this button.

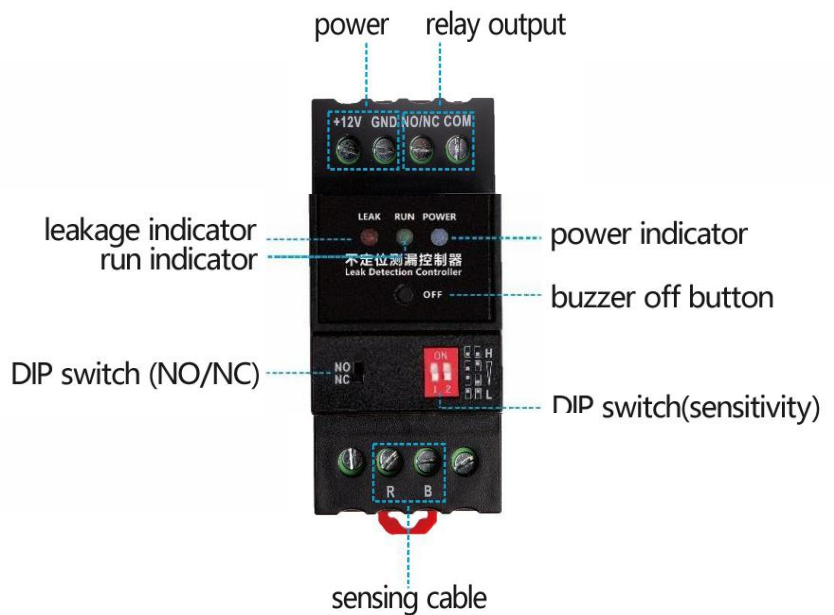
#### Technical Specification

<b>Model number</b>	SPD-WL02-Pro
<b>Response Time</b>	≤1S
<b>Detection Distance</b>	500m
<b>Operating temperature</b>	-20°C~70°C

<b>Operating humidity</b>	0%~95% RH ( no condensing )
<b>Power supply</b>	9V -30V DC
<b>Power Consumption</b>	≤0.5W
<b>Relay</b>	Dry contact, NO/NC Load: 120V AC/2A, 24V DC/2A
<b>Dimension</b>	84*38*56.5 mm
<b>Installation</b>	DIN rail

### Wiring

The non-locating water leak detection system is composed by controller, sensing cable, non sensing cable, and some accessories.



Item	Description
Lead cable	Connect the red and black core wires of the lead cable to the R and B of the controller panel respectively, and then connect the sensing cable with the other end of lead cable.
Relay output	The output normally open and normally closed contact signals can be connected to the monitoring system, and can also be used to control the alarm equipment to output the alarm signal. When it is necessary to control the high-current equipment, a relay (if necessary, a contactor should be added) to expand contact load capacity, otherwise it will burn out the controller.
Power	Connect the DC 9V~30V power supply according to the terminal mark. If the voltage is too low, it will not work normally, and if the voltage is too high, it will burn the controller.

## Installation

Please install the controller in a solid indoor collection box or cabinet that is easy to maintain and inspect. The installation position should avoid high temperature and high humidity, vibration, corrosive gas environment and other sources of electronic noise interference. The SPD-WL02-Pro controller is buckled on a standard 35mm DIN rail. Please make sure the power cut off before wiring.



## Notes

*This product is an electronic device, please follow the following precautions to avoid damage to electronic components*

- Do not modify or disassemble it;
- Please do not touch it with wet hands when power connected;
- Before installing the device, please check the rated voltage and power supply voltage;
- When using the relay output, please confirm the rated load of the device connected;
- Please avoid using organic solution during regular inspection and maintenance, and use dry cotton yarn to wipe;
- Avoid contact with metal filings, grease, pipe paint and other contaminants

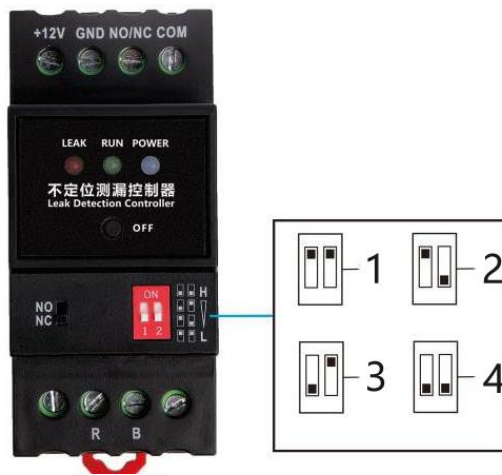
## Testing

After all the wiring are completed, debugging can be carried out according to the following instructions.

- **POWER** indicator is always on when it's powered. If the light does not turn on, power or the device is abnormal.
- Run indicator flashes periodically for one second, otherwise the controller is abnormal.
- Take a little tap water (non-purified water) and immerse the sensing cable in the water. After one second, the relay will act, and the **LEAK** indicator will light up in red, and the buzzer will sound. Press the **OFF** button to silence the sound. After drying the water on the sensing cable, the relay resets and the **LEAK** indicator goes out.
- The controller is equipped with a sensitivity DIP switch, which can adapt to different liquid

leakage detection environments. The detection sensitivity of gears 1 to 4 is increased successively and the factory default is the 4th gear. The controller sensitivity reflected by each gear is shown in the table below.

Test by tap water		
1st level	Water immersion alarm length>20cm	resistance 60KΩ for reference
2nd level	Water immersion alarm length>6cm	resistance 100KΩ for reference
3rd level	Water immersion alarm length>2cm	resistance 160KΩ for reference
4th level	Water immersion alarm length>1cm	resistance 300KΩ for reference



### Dimension

Unit (mm)

