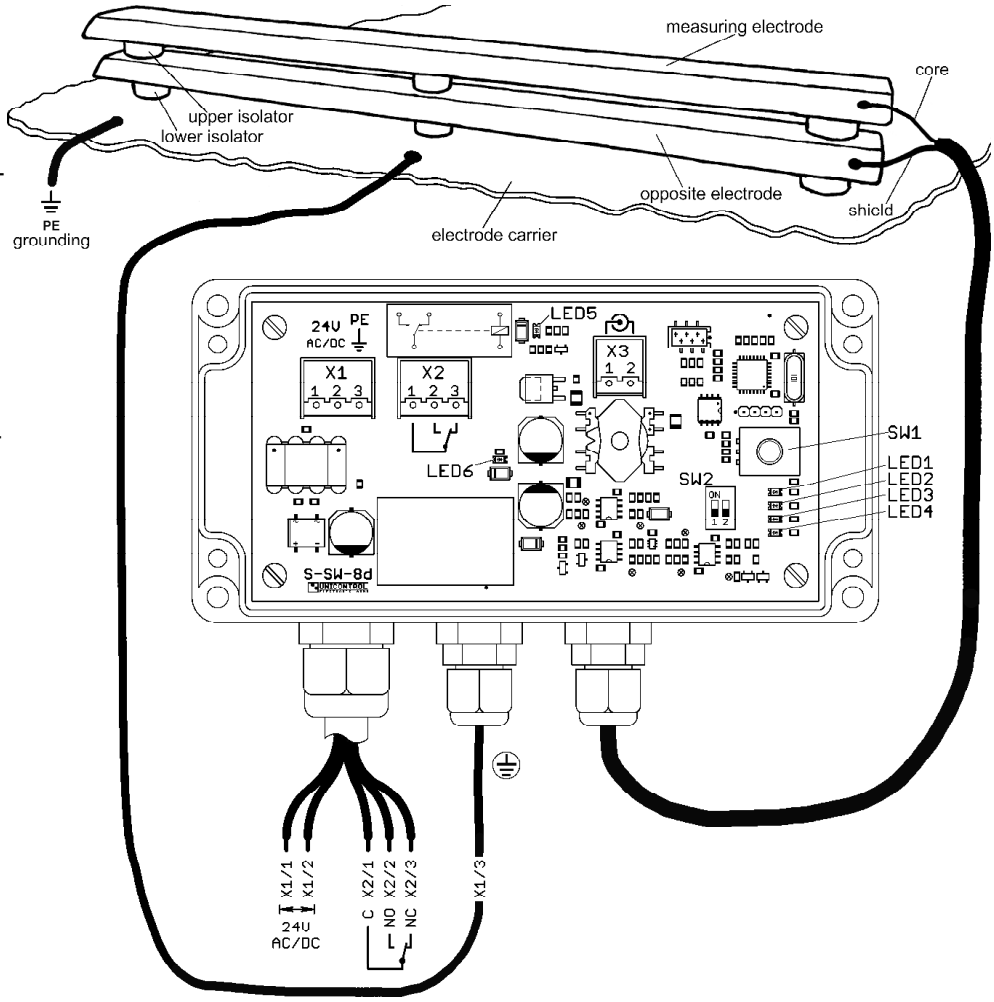
S-SW-8
Resumed Manual

- Primary use in the transport technology controls of roller transport lines.
- Capacitive sensor system with differential signal comparison.
- Detection of metallic and other conductor objects.
- Minimal function influence from the presence of impurities, metal dust or abrasives.
- Optional memory function: Power on with the last valid operational parameters without adjustments. Unmoved objects on previous power down keep on recognized.



Connections

Connector	Pin	Connection		
X1	1	$24V_{AC/DC}$	Supply Voltage	Switchable polarity
	2			
	3	PE	Electric reference potential for the evaluation unit.	! Connect to the sensor's mounting plate! The mounting plate must be connected to earth potential.
X2	1	C	Relay common contact	
	2	NO	Relay normally open contact	
	3	NC	Relay normally closed contact	
X3	1	Core	Connecting in the measuring electrode (up).	Use of coaxial cable.
	2	Shield	Connecting in the opposite electrode (down).	

UNICONTROL Electronic GmbH
Freinsheimer Straße 3
D-68219 Mannheim
www.unicontrol-gmbh.de
Tel.: +49 621 87982 0
Fax: +49 621 87982 35

4/4/2024

SW1: Sensibility and System Adjustment

- Clockwise rotating → **Increases the sensibility**
- Anticlockwise rotating → **Reduces the sensibility**

! Set just to the necessary sensibility

- 2s … 3s pushing → **Automatic setting of sensibility**
  Appropriated to detect the currently present target object.
  The LED 2 lights up after 2s pushing
- > 5s pushing → Triggers **system readjustment** process.
  No object should stay over the electrodes.

SW2: Configuration

Hysteresis SW2-1	
ON	20 %
OFF	10 % ♥

Memory-Function SW2-2	
ON	Active!
OFF	De-active ♥

♥ = Default Settings

! By active memory function, an object which is present at the sensor may not be moved or removed in power off time!

Information Elements

LED1 is active by measurements.
Its activity gives an idea about the level of the sensor detection signal.

- Slowly blinking (1/s) → no or small sensor signal level.
- Moderate blinking (2/s) → middle range sensor signal level.
- Fast blinking (4/s) → high sensor signal level.
  For safe detection of objects, it should be selected a greater range (SW2-3, SW2-4)!
- Permanently on (1) → the sensor signal level is very high and is near or is exceeding the measurement range limits.
  For safe detection of objects, it should be selected a greater range (SW2-3, SW2-4)!

LED2 informs about the push duration of the switch SW1.

- 0 s ... 2 s → LED2 off
- 2 s … 5s → LED2 on
- > 5 s → LED2 off

LED3 Lights when the sensor signal exceeds the measurement range limits.

LED4 – always ON if the system falls in error conditions. The evaluation unit stops working. To restart it is necessary to perform a readjustment procedure.
– slow blinking (1/s) while in adjustment [comparison] procedure.

LED5 lights when relay is on (busy sensor electrodes).

LED6 is the operation indicator. It lights when the evaluation unit is on.

Function Explanations

- If the memory function is active, the sensor status is reported as occupied after switching on, even though there is no object there.
  Possible cause: The object was removed from the sensor area while the detector unit was switched off.
  Correction: Touch the upper electrode of the sensor system directly with your hand (approx. 4…5s) until the relay switches off. Then take your hand off the electrode. The detector unit then automatically adjusts to the empty state.
  This function is only available once after switching on.
- After switching-ON the detection device, the presence of object on the detection area is not recognized.
  Possible cause: The detection device was switched-ON with deactivated memory function. Due to the power-ON automatic adjustment process, the object on the detection area is evaluated as environment.
  Correction: Remove the object from the detection area. The detector device will automatically set its parameters to the free state.