

<b>Model</b>	: Hand Proximity Sensor
<b>Product Code</b>	: X1021
<b>Operating Voltage</b>	: 12/24V DC – 12/24V AC
<b>Working Current</b>	: 120mA @12/24V DC
<b>Power (Max)</b>	: 2.9W
<b>Number of Transmitters /Receivers</b>	: 1 Transmitter / 1 Receiver
<b>Detection Distance</b>	: 10-60 Cm
<b>Number of Relays</b>	: 1
<b>Contact Type</b>	: Dry Contact NO / NC
<b>Max. Contact Power</b>	: 24V DC 1A
<b>Min. Contact Time</b>	: 500 ms
<b>Dimensions</b>	: 75 x 65 x 30 mm

### 01. Introduction

This sensor detects the presence of objects up to 60 cm away at a certain angle with the help of infrared rays. It is a contactless switch that can detect and trigger the operation of a terminal with the help of the relay inside.

### 02. Box Contents

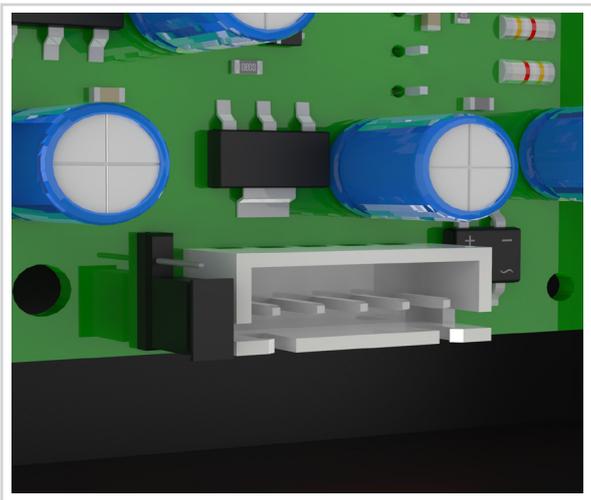
1 x Sensor 1 x Connection Cable 4 x Screw 4 X Anchor

### 03. Adjusting Operating Voltage

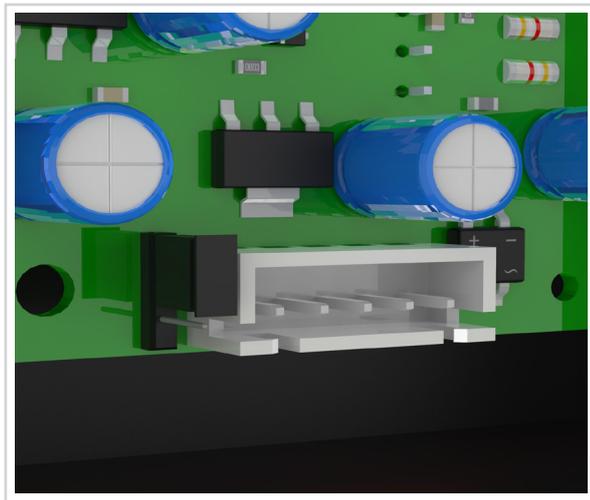
This sensor can work with 12 or 24 V Direct or Alternating Current according to the user's needs. The operating voltage can be adjusted with the help of the switch on the circuit board. To set the voltage:

- With the help of a screwdriver, remove the lid of the plastic box by separating it from any corner.
- When the switch is in its position in the image, the sensor should be supplied with 12V DC or 12V AC.
- When the switch is in its position in the image, the sensor must be supplied with 24V DC or 24V AC.

**Warning:** Make sure that the supply voltage and the adjusted voltage position match. Otherwise the sensor will be damaged.



For 12V Power Supply



For 24V Power Supply

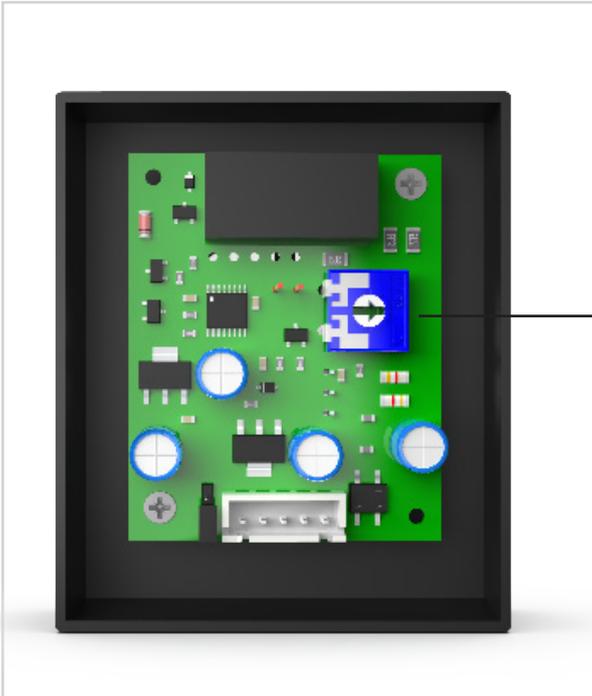


### 04. Fixing the Back Cover

Break the cable passage compartment on the cover of the plastic box by applying pressure on it.

Align the cable outlet hole in the place where the assembly will be made so that the cables can enter into the box.

Mounting can be done with the help of double-sided tape or 4 screws.



### 05. Wiring

Make the wiring with the help of the diagram below. In order to avoid the risk of short circuit or a possible fire, make sure that the cable terminals are properly insulated after the connection.

To adjust the detection distance, turn the marked potentiometer with help of a screwdriver. Turning it clockwise will shorten the detection distance, turning it counterclockwise will extend the detection distance.

Red : +12/24V  
 Black : GND  
 Blue : COM  
 Yellow : NC  
 White : NO



### 06. Connecting the Cables to the Socket

Connect the socket coming out of the plastic box to the circuit as shown .

When a 12/24V power supply is connected, the warning light on the sensor will turn solid orange.



### 07. Closing the Cover

Apply minimal pressure to secure the plastic box by placing it on the lid to align with the tabs on bottom and top.

**08. Setting the Operating Mode**

This sensor has 3 different operating modes.

1. Pulse mode (1 sec): When the sensor detects a hand, the relay switches from NO position to NC position for 1 second and returns to NO position after 1 second.
2. Pulse mode (2 sec): When the sensor detects a hand, the relay switches from NO position to NC position for 2 seconds and returns to NO position after 2 seconds.
3. Pulse mode (3 sec): When the sensor detects a hand, the relay switches from NO position to NC position for 3 seconds and returns to NO position after 3 seconds.
4. Pulse mode (4 sec): When the sensor detects a hand, the relay switches from NO to NC position for 4 seconds and returns to NO position after 4 seconds.
5. Pulse mode (5 sec): When the sensor detects a hand, the relay switches from NO to NC position for 5 seconds and returns to NO position after 5 seconds.
6. Toggle Mode: The sensor toggles between NC and NO positions each time it detects a hand and maintains the relay position until the next detection.
7. Continuous Mode: When the sensor detects a hand, the relay switches to the NO position at the NC position and remains in the NC position as long as the hand continues to be detected. When the hand is removed from the front of the sensor, it returns to the NC position.

All sensors operate in Pulse 1-second mode at factory settings. To switch between operating modes;

- I. Configuration mode can be activated within the first 7 seconds after the sensor is power supplied. When the power supply is connected, the orange led lighting will flash repeatedly within the first 7 seconds. During this period, keep your hand in front of the sensor for 3 seconds.
- II. After 3 seconds, the configuration mode will be activated and the sensor will initially switch to the 1st mode. The orange warning light will also show the number of the mode being switched in parallel and will flash 1 time.
- III. After this step, you will need to show your hand in front of the sensor to be able to switch between modes, and the mode number will incrementally increase each time you show your hand. For instance, when you show your hand 2 times, the mode number will increase by 2 and the 3rd mode will be activated.
- IV. After each mode number change, the orange warning light will flash as many times as the number of the activated mode. For instance, after switching to mode 5, the orange warning light will flash 5 times.
- V. To save the selected mode, wait 7 seconds without showing your hand to the sensor or show and keep your hand to the sensor for 3 seconds.
- VI. After this step, the sensor will turn off and on and it will start working in the saved mode.

**09. Manufacturer Information**

Manufacturer: Xenon Smart Teknoloji San. Ve Tic. Ltd. Şti.

İstanbul Office: Tatlısu Mah. Akdağ Cad. No: 3/5 Ümraniye/İstanbul

Production: Muallimköy Mah. Deniz Cad. No:143/5 Bilişim Vadisi Gebze/Kocaeli

+90 850 303 46 66  
info@xenonsmart.com