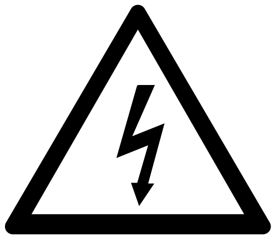
UOLS-01
USER MANUAL
2024

VER.1/22.02.2023

CONTENTS

SECURITY MEASURES

1-) A product suitable for a healthy and safe working environment should be selected and the device should be used in accordance with the instructions.



2-) The necessary checks, maintenance and cleaning of the device should be done before production. However, electrical repairs should not be made under voltage.

3-) No electrical device should be touched with wet hands and no repairs should be attempted.

4-) The operator should be informed about the operation of the device and only those who are responsible for the device should handle it

SECURITY MEASURES

5-) Attention should be paid to the lighting of the environment depending on the location of the device.

6-) Employees must be required to comply with safety precautions and signs in the environment.

7-) Electrical devices and machines must have a type of protection suitable for the environment in which they are operated. They must be isolated against factors such as moisture, steam, oil, dust, and heat.

8-) Gün sonunda cihazın, kullanım sonrasında kapatılması ve güvenli hale getirilmesi gerekmektedir.

SAFE USE WARNINGS

- Before performing any operation on the device, disconnect all supply voltages.
- Do not disassemble the device while it is energized.
- Do not clean the device with solvents or similar substances. Use only a dry cloth to clean the device.
- Before operating the device, check that the connections are correct. Keep signal cables away from contactors, inductive loads, electrical noise emitting devices and energy-carrying lines.
- In order to prevent the device from being affected by adverse environmental conditions such as humidity, vibration, pollution and high/low temperature, install it away from contactors, electrical noise emitting devices and energy-carrying lines.
- To be minimally affected by electrical noise; Use shielded cables and ground the shield.
- In case of any problem with your device, contact your authorized dealer.
- The manufacturer cannot be held responsible in any way for any undesirable situations that may arise as a result of not implementing the above precautions.

OVERVIEW

UOLS is used in the packaging industry for labels of different textures, sizes and formats that are attached to products and packages via labeling mechanisms. Since the location of the labels where they will be attached is very important and this process is carried out at high speeds, the importance of UOLS is also increasing. UOLS emerges at points where high accuracy, speed and precise adjustments are required. UOLS combines the receiver and transmitter in a single device and is compact and minimal, easy installation, easy assembly and fast response time provide many advantages to the user. These features, which we can list together with high accuracy, provide reliability for the user.

GENERAL AND TECHNICAL SPECIFICATIONS

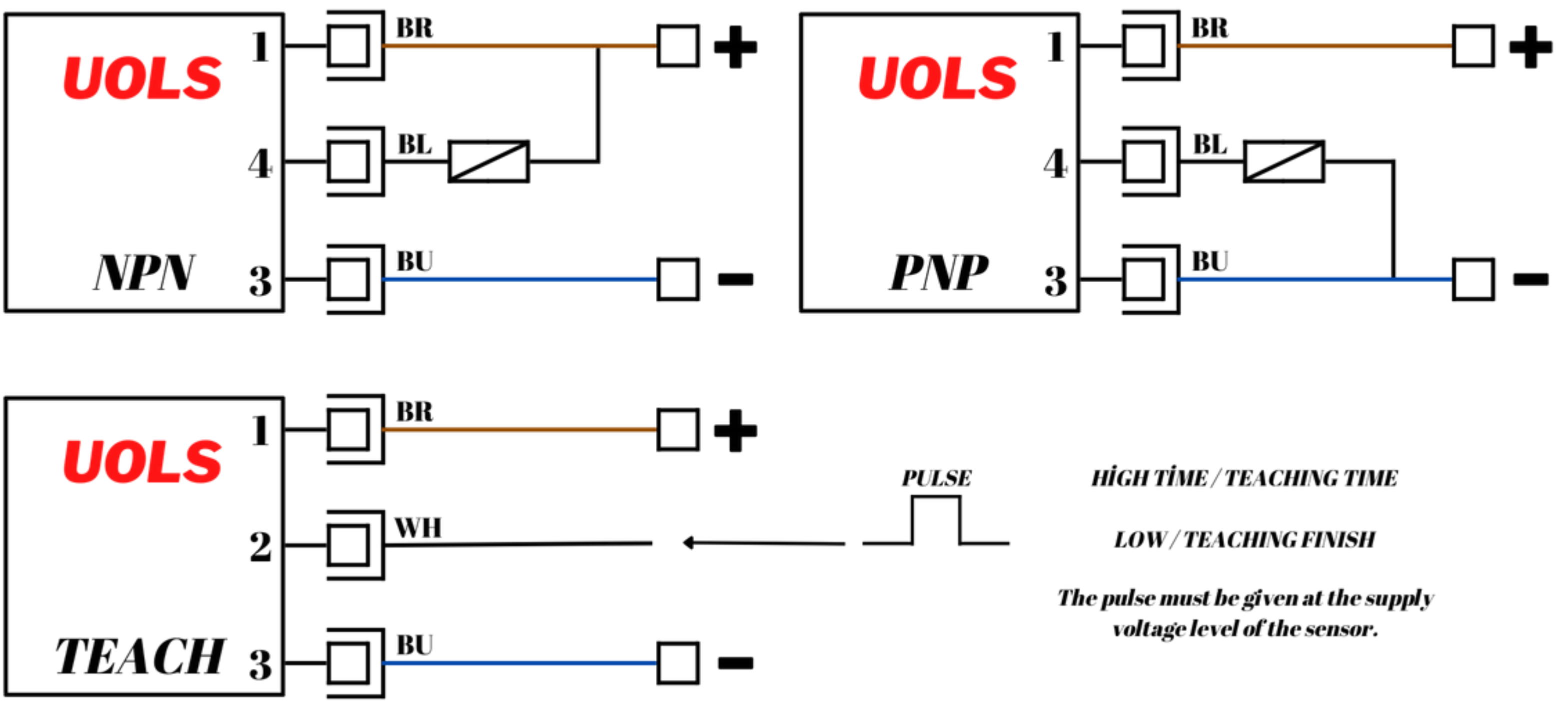
FORK WIDTH	3 MM
FORK DEPTH	42 MM
FUNCTION	INFRARED CONTROL PRINCIPLE
SUPPLY VOLTAGE	10 VDC - 30 VDC
CURRENT CONSUMPTION	25 mA
SWITCHING FREQUENCY	15 kHz
RESPONSE TIME	50 µs
SWITCHING OUTPUT	NPN / PNP
OUTPUT CURRENT	< 100 mA
PROTECTION	" Reverse connection, over current and short circuit protection "
DIMENSIONS	16 mm x 35 mm x 69 mm
ADJUSTMENT	"Teaching button, remote teaching with cable"
MINIMUM LABEL	Label 2 mm / Label Gap 2 mm
CONNECTION TYPE	M8 4 Pin Connector
OPERATING TEMPERATURE	-20° ...... +70°

WHERE ARE THEY USED?

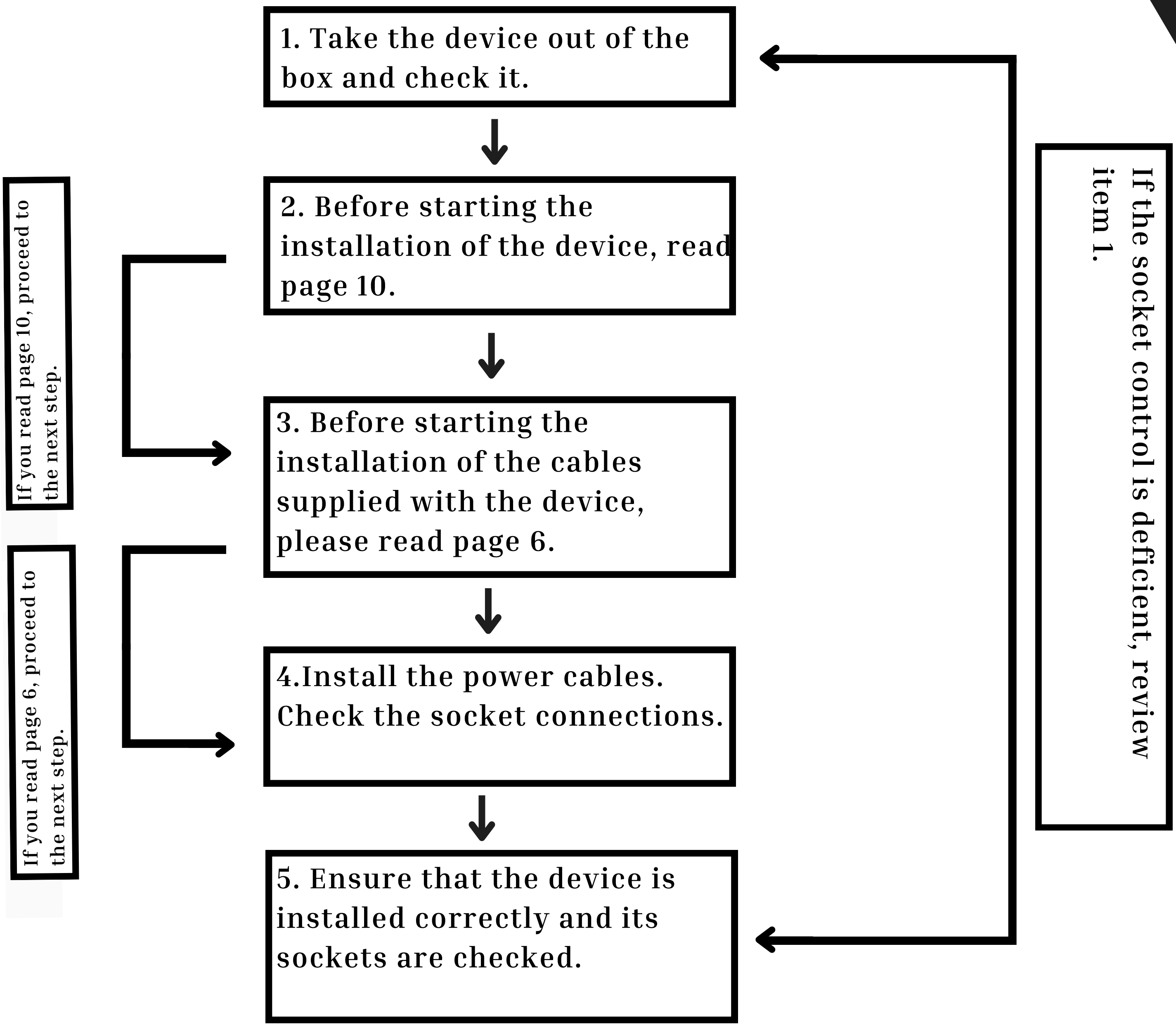
Optical sensors,

- Where the number of labels needs to be counted at high speeds.
- Where labels need to be positioned on the product at high speeds.
- Where labels with different textures need to be separated from each other.

CONNECTION DIAGRAM



FLOW DIAGRAM



WHY SHOULD WE CHOOSE?

Knowing the product to be detected helps determine which type of sensor should be used. They precisely detect the presence or absence of labels or changes in surface conditions via light beams.

- Variety of labels to be detected.
- Mounting space restrictions.
- Sensor mounting method.
- Sensitivity and fast response in sensing sensitivity.
- Electrical connections and wiring.
- No reconfiguration of the sensor is required when changing label rolls. Shorter installation times result in higher production volumes.
- Quick and easy installation of the sensor is achieved by simply teaching the label/carrier combination via the teach button. Only one mounting position is sufficient for all labels.
- A single output can be used as NPN/PNP.
- The optical sensor, which can switch at high speeds, exceeds the limits that the user can achieve. In this case, it shows that it can be used comfortably in high-speed machines.

CALİBRATİON

Calibration via sensor;

- After placing the label inside our sensor, we press and release the "TEACH" button. When the LED starts flashing, we move the label inside the sensor to recognize the label space and label sections. When the other LED starts to detect properly or whenever we want, we press and release the "TEACH" button again to end the calibration process.

Remote calibration;

- After placing the label inside our sensor, we send a pulse to the sensor setting pin at the sensor supply voltage. The sensor performs the setting process during the pulse. During this process, we move the label inside the sensor to recognize the label space and label sections. When the recognition process is completed, we cut the pulse or set it to zero.

OUR CONTACT INFORMATION

Adres:

Telefon: +90 212 549 30 56

GSM: +90 552 366 30 56
Mail: info@unitygrup.com
www.unitygrup.com

All data is subject to change without prior notice.