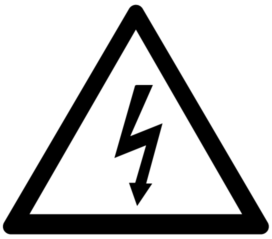
UEC02 KENAR
USER MANUAL
2024

VER.3.20/11.07.2023

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 according to the location of the device.

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

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

8-) At the end of the day, the device should be turned off and made safe after use.

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 protect the device from 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

UNITY UEC02, due to incorrect wrapping of the rolled material or mechanical problems, right-left wandering problems occur during product processing. This leads to loss or deterioration in the quality of the material. The edge control system is activated to prevent such problems. The edge control system ensures that the product is unwound or wound in the same plane by following the edge. The panel type structure is used for mounting. The device's box dimensions are 177 x 113 x 125. The device operates with 24 VDC supply voltage. Ultrasonic fork sensor, optical sensor or color sensor can be used depending on the type of material. There are a total of 7 inputs, including the Right and Left limit switches, center and middle sensors, manual Right and Left inputs for Edge control, automatic manual inputs and 2 analog inputs for the stepper motor. There is 1 relay output related to limit errors for Edge Control and Sensor Travel and 2 stepper motor outputs.

GENERAL AND TECHNICAL SPECIFICATIONS

WORKING VOLTAGE	24 VDC
WORKING TEMPERATURE	0-50°
PROTECTION CLASS	IP 20
RESPONSE TIME	1 MS
CONNECTION TYPE	PLUG-IN TERMINAL GROUPS
DEVICE WEIGHT	<750gr
MOUNTING TYPE	PANO TİPİ
DIMENSIONS	177 x 113 x 125 (G*Y*D)
DISPLAY	4 X 20 LCD SCREEN
INPUTS	2 X ANALOG İNPUT, 7 X DİGİTAL İNPUT
OUTPUTS	2 X STEP MOTOR OUTPUT, 1 X RÖLE OUT

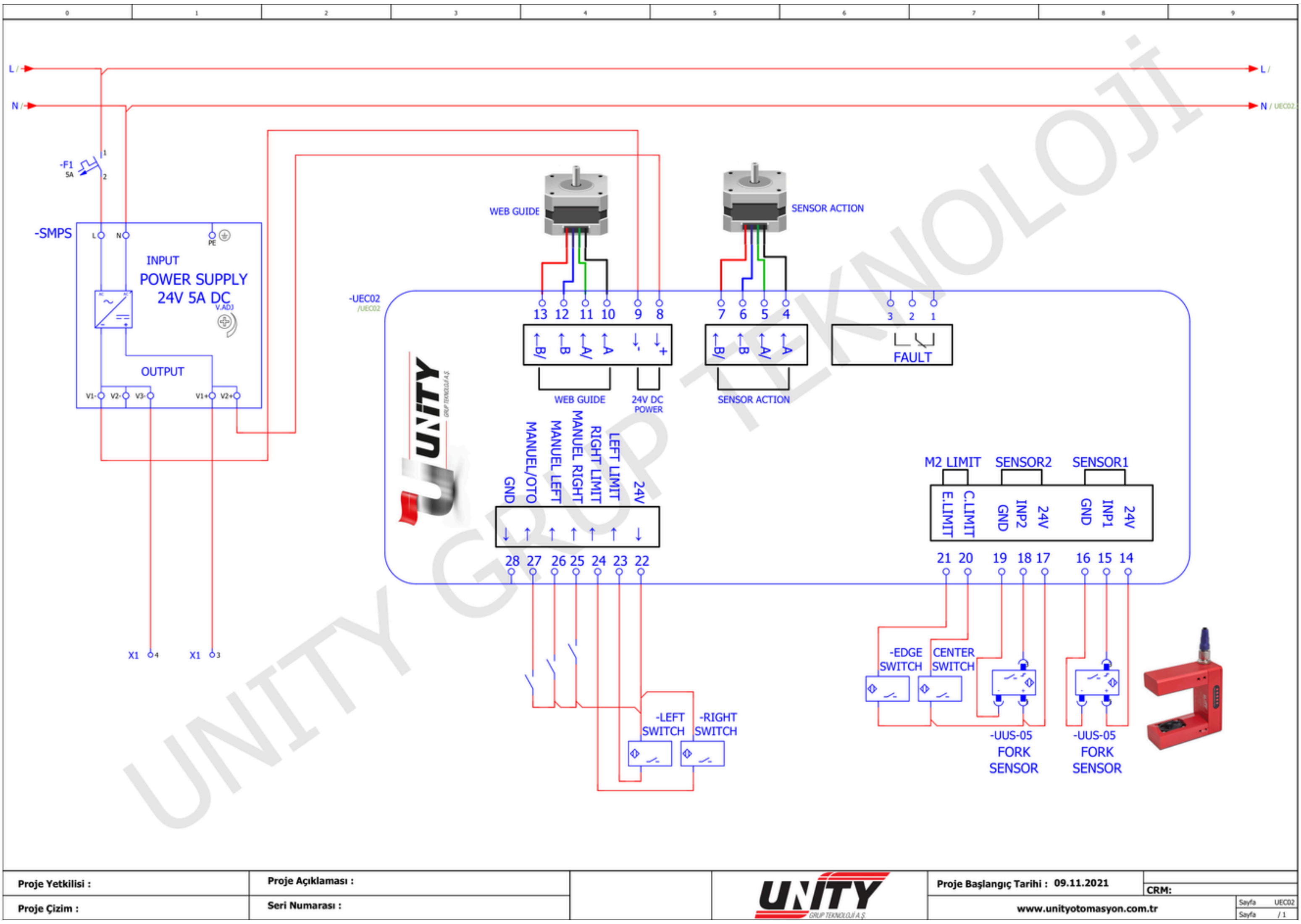
WHERE IS IT USED?

- Unwinder Applications: Ensures that unwrapped rolls suitable for production come out of the unwinder properly.
- Rotogravure Applications: Controls the centered product flow on the line.
- Orientation Edge Control Applications: Ensures that the product is sent to the desired center within the production line.
- Winder Applications: Ensures that the product that comes out after the process is wrapped with micron precision.

AREAS OF USAGE

- Slitting machines.
- Flexo printing machines.
- Rotogravure printing machines.
- Lamination machines.
- Profile coating machines.
- Paper machines.
- Textile machines.
- Plastic machines.

CONNECTION DIAGRAM



FLOW DIAGRAM

1. Take the device out of the box and check it.

2. Before starting the installation of the device, read page 13.

If you read page 13, proceed to the next step.

3. Before starting the installation of the cables supplied with the device, please read page 6.

If you read page 6, proceed to the next step.

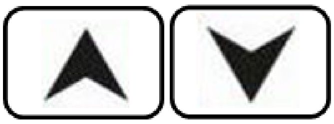
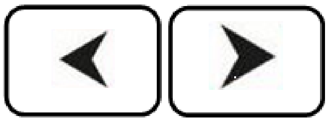
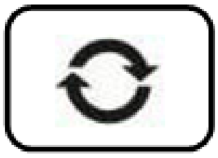
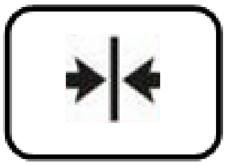
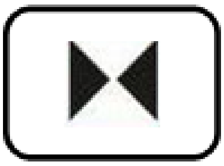
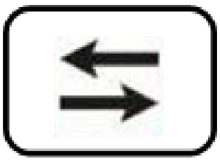
4.Install and check the power cables.

5. Make sure the device is installed correctly. Check the socket connections.

If the socket control is deficient, review item 1.

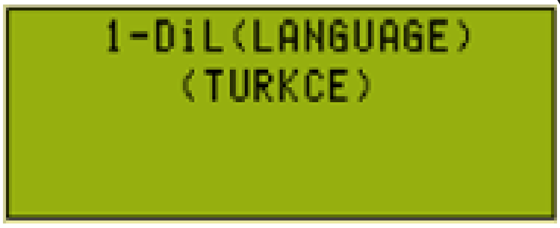
6. Before starting the parameter settings and operation of the device, read page 9

KEY USER GUIDE

	UP AND DOWN	Provides control of up and down parameters within the program.
	RIGHT AND LEFT	Allows navigation left and right to proceed within the program.
	AUTOMATIC MANUEL	It takes the device from manual mode to automatic mode or from automatic mode to manual mode.
	CENTER	When this button is pressed once, it centers the edge control system. When it is pressed for 5 seconds, it enters the sensor setting process. It allows the mechanism to come to the center.
	PGM	It is used to enter/exit the menu in the program and to confirm the operations performed.
	SET	It is used to set the sensor connected to the device.
	SENSOR STATUS	Determines the position of the sensor relative to the right or left engine. Used for sensor direction selection.

DEVICE PARAMETERS

1-) Enter the menu by holding down the PGM button for 5 seconds. The bottom tab of the screen will start flashing. Select the language option using the right and left arrow keys. Save your action by pressing the PGM button again.



2-) Press the PGM button once. The bottom tab of the screen will start flashing. Use the Right-Left arrow keys to select YES and press the PGM button again to save your action. The factory reset process of the device will be completed

3-) Press the PGM button once. The bottom tab of the screen will start flashing. Make your selection as FROM THE PANEL or FROM THE TERMINAL by using the Right-Left arrow keys.

4-) Press the PGM button once. The bottom tab of the screen will start flashing. Use the Right-Left arrow keys to select COLOR SENSOR, FORK SENSOR or 2 FORK SENSOR

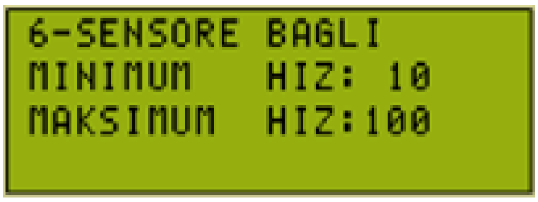
DEVICE PARAMETERS

<u>FORK SENSOR: This is the selection that shows that the sensor analog value is set, it cannot be changed.</u>
<u>2 FORK SENSOR: This is the selection used to center the product from both sides. It is performed with 2 fork sensors placed on the right and left sides of the material.</u>
<u>COLOR SENSOR: When Color Sensor is selected, the analog value of the sensor is set according to the material.</u>

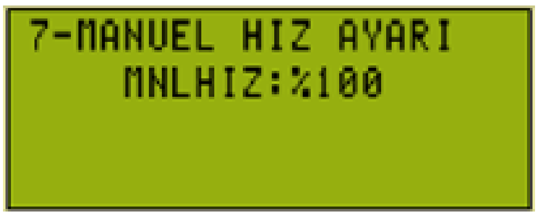
5-) Press the PGM button once. The bottom tab of the screen will start flashing. Use the right and left arrow keys to select DEPENDING ON THE SENSOR, LINE SPEED or FIXED SPEED. Press the PGM button again to save your action.

<u>DEPENDENT ON SENSOR: Adjusts the speed of the edge control motor according to the voltage information received from the sensor.</u>
<u>CONSTANT SPEED: The constant speed of the edge control motor is adjusted according to the value set in parameter 6.</u>
<u>LINE SPEED: The speed of the system is adjusted according to the analog information received from outside.</u>

6-) If the speed connected to the sensor is selected in the parameter, determine the minimum speed and maximum speed. At the minimum speed, the sensor cannot fall below the specified value. At the maximum speed, it cannot exceed the specified value.



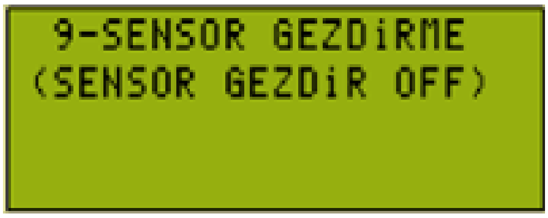
7-) Press the PGM button once. The bottom tab of the screen will start flashing. Using the Right-Left arrow keys, determine the manual speed value of the edge control motor `MNNLHIZ:%100`.



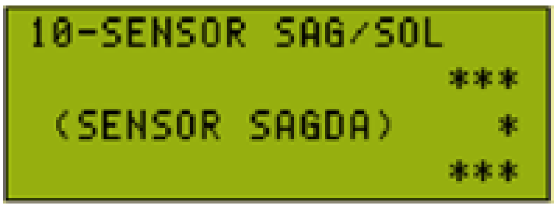
DEVICE PARAMETERS

8-) Press the PGM button once. The bottom tab of the screen will start flashing. Using the Right-Left arrow keys, determine the output time of the `ALARM TIME`. When the Edge Control motor reaches its limit positions, you can get an output from the relay contact at the end of the specified time at the relay output.

9-) Press the PGM button once. The bottom tab of the screen will start flashing. Select the `SENSOR PANTING ON` and `SENSOR PANTING OFF` parameters using the Right-Left arrow keys. When the ON position is activated, the wait and open to outside options will appear. In the WAIT option, when the system switches from automatic mode to manual, the sensors are kept in their current position. In the OPEN TO OUT option, the sensor panning motor is activated until it reaches the limit sensors.

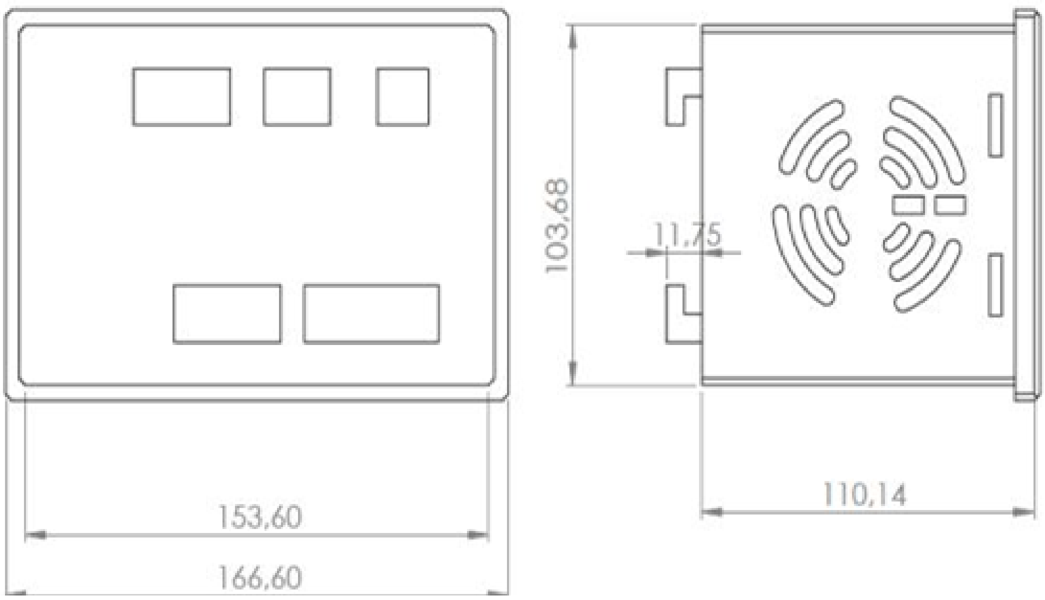


10-) Press the PGM button once. It allows the position of the sensor connected to the motor to be determined as right and left within the parameter. Thus, you reverse the direction of the motor and determine the position of the sensor.



11-) Press the PGM button once to enter the parameter. Here, the material to be set is introduced. After the material is introduced, the roller or the gap is set by pressing the set button. If the process is successful, the sensor setting process is completed. If it is not successful, an error message is received.

TECHNICAL DRAWING



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