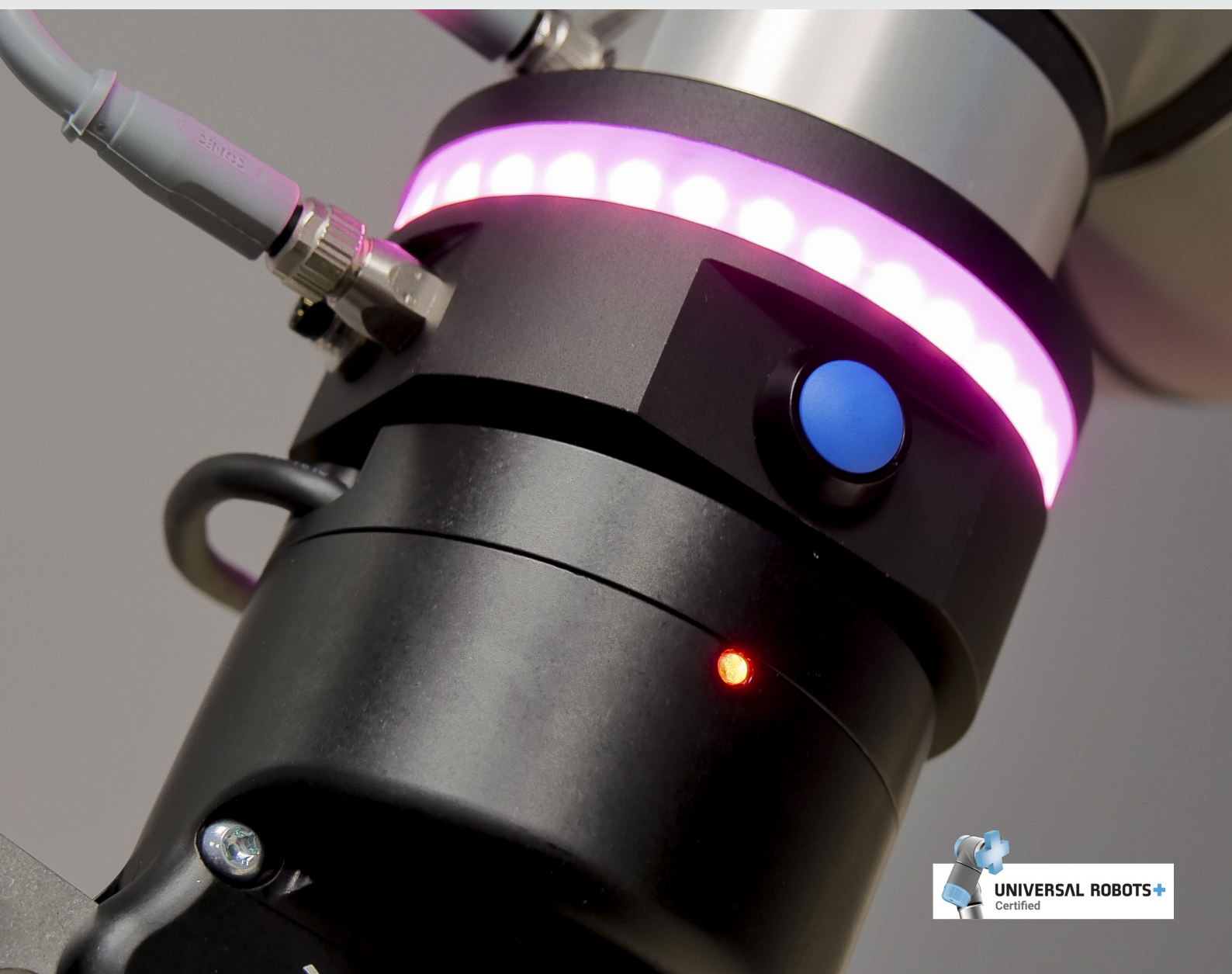


USER MANUAL

YOUring

Smart Light Tool



tools.alumotion.eu

Summary

What's in the box.....	3
Specifications.....	4
Description.....	5
Instructions	6
Configuration	10
YOUring program instructions.....	14
F.A.Q.	19

What's in the box



- Nr. **1** YOUring
- Nr. **1** Connecting tool cable
- Nr. **1** USB bluetooth key
- Nr. **1** USB Aluotion key (manual and software)
- Nr. **4** Screws (TCEIR M6 x 50mm)
- Nr. **8** Flat Washers



YOUring Set

Note:

Screws are suitable for Robotiq 2F185/140 grippers.

Flat washers, two for any screw, are just for testing YOUring in stand alone mode.

Specifications



Diameter / Height	82 mm / 40-46 mm
Weight	300 g
Peak current request	400 mA
[buzzer	100 mA]
[all white led on	300 mA]



YOUring view, with a tool mounted

Description

The YOUring is a tool for enhancing the efficiency and collaboration between the user and the robot, ensures safety and free of movement.

The robot with the YOUring can show the direction of the movement, by tracing the positions with the led.

The user can benefit of a new freedrive button, directly on the tool flange of the robot and setup specific colors in order to trace specific behaviors, during the execution of a program, or also to signal a particular safety mode of the robot.

With the installation of the YOUring, new Polyscope commands are available to the user:
YOUring instruction to setup lights and buzzer and Wait YOUring button instruction to wait when the user presses one or more of the YOUring buttons.

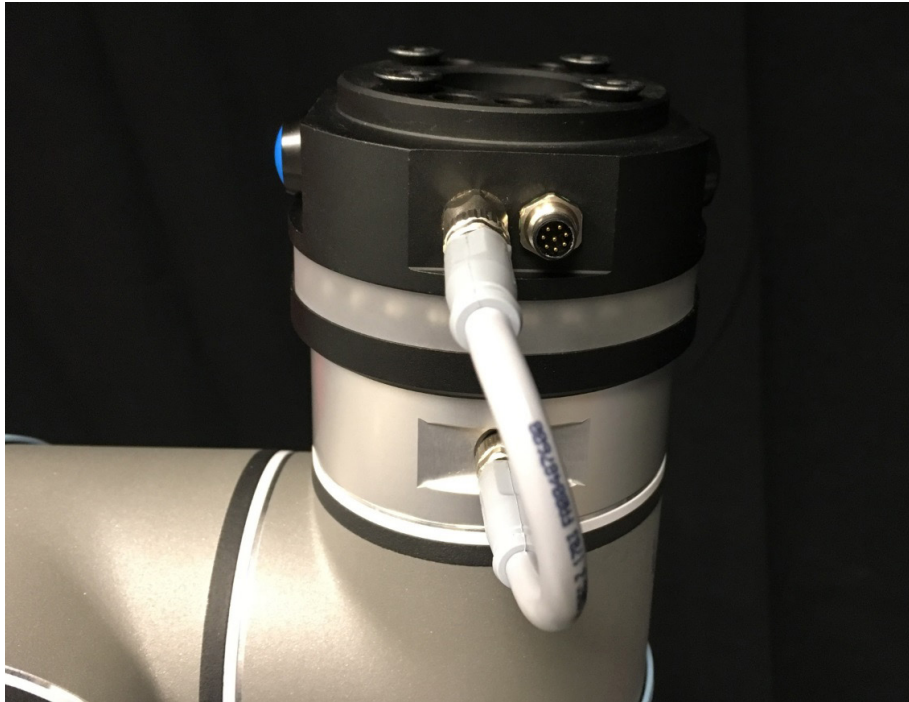
And the new YOUteach instruction to save the points in freedrive mode and record the points of the robot on the fly.

YOUring
Smart Light Tool

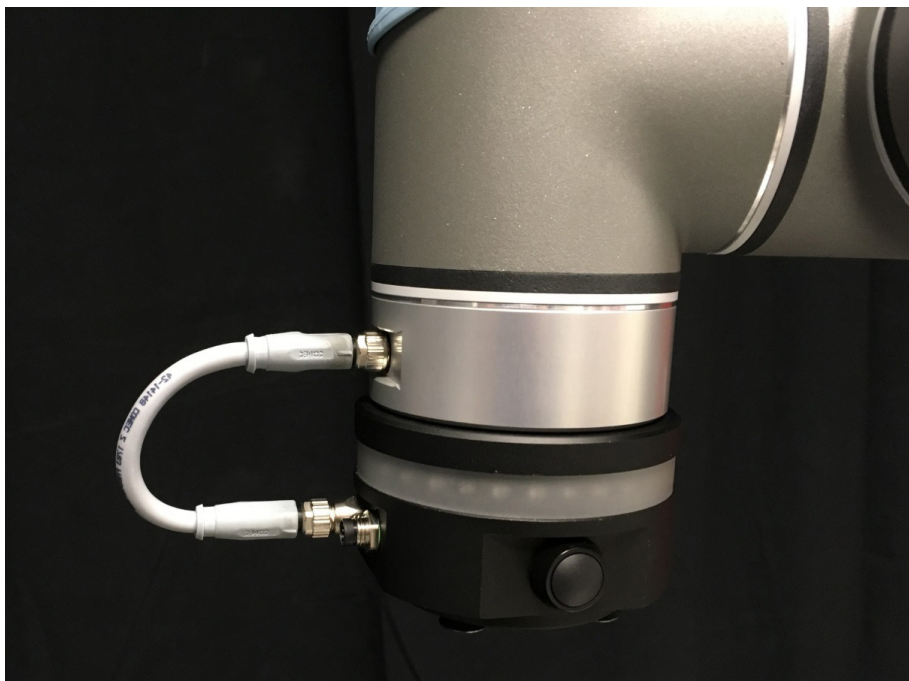


Instructions

1. Physical mounting of the YOuring on the tool flange



2. Connect the cable between the YOuring and the tool flange

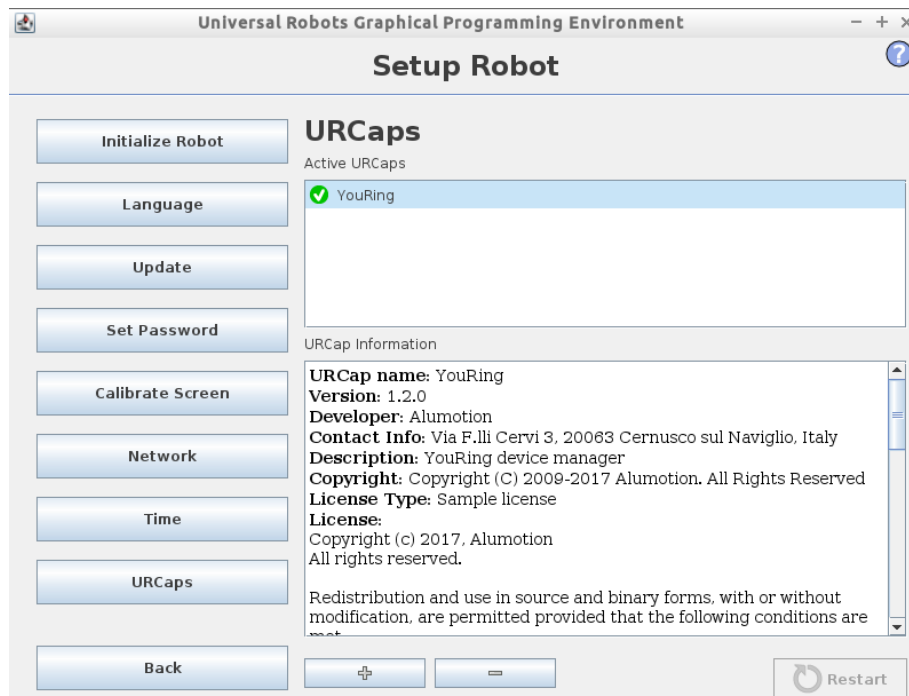


Note:

Be careful to the guide on the jack for a correct mounting.

Instructions

3. Installation of the URcap in the Setup of the robot
(software provided in the Alumotion USB key included in the box)



URcap installation

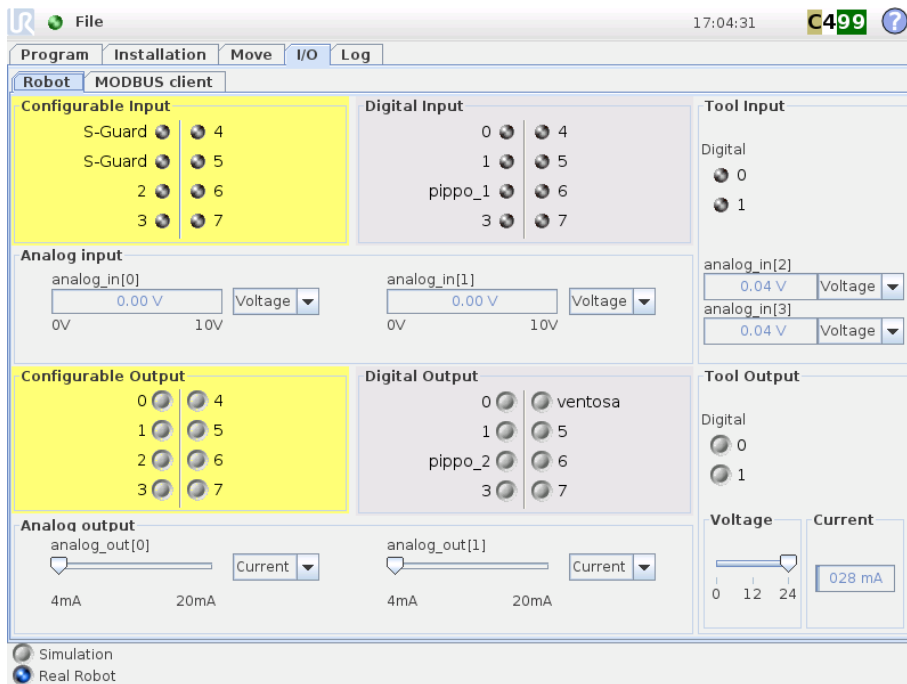
4. Insert the USB bluetooth key in the control box



USB Bluetooth Key connected

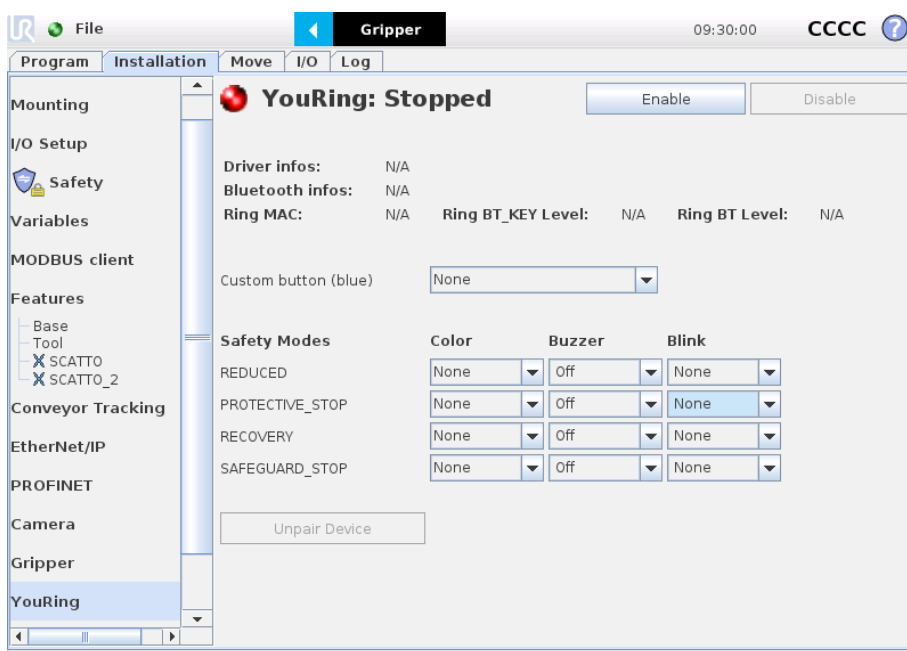
Instructions

5. Check the 24V on the tool voltage in the I/O tab and save the installation



I/O check (tool output)

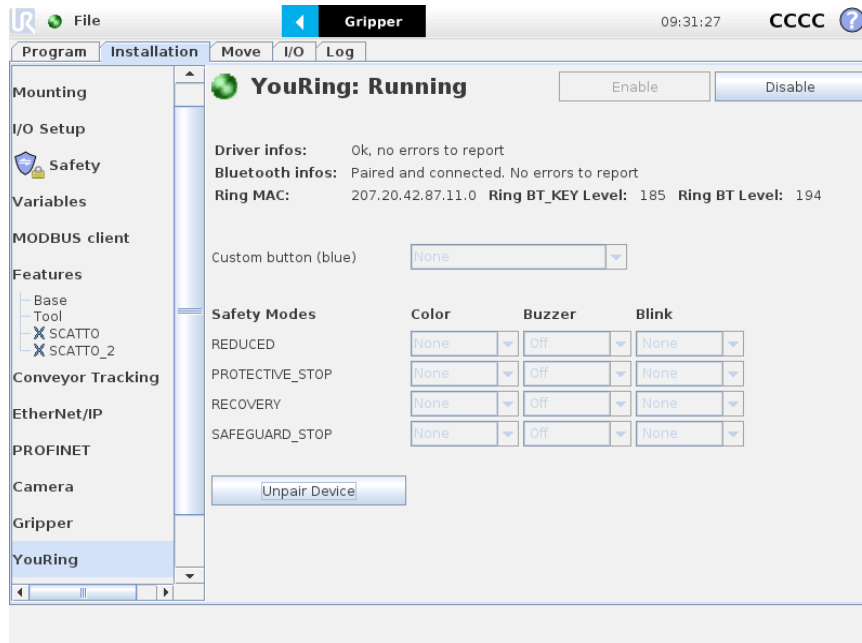
6. Click enable in the YOURing section



Activation of the YOURing

Instructions

7. Save the installation



YOUring up and running

Note:

Once the installation is complete and saved, when the user starts the robot, a 'bip' sound is earable and the YOUring is ready to work.

It's possible to:

1. Unpair the YOUring and the Bluetooth key by pressing the 'Unpair Device' button using the default password 'alumotion'.
2. You can pair the YOUring and the Bluetooth key by pressing the two buttons (blue and black) on the YOUring to start the automatic procedure of pairing

Configuration

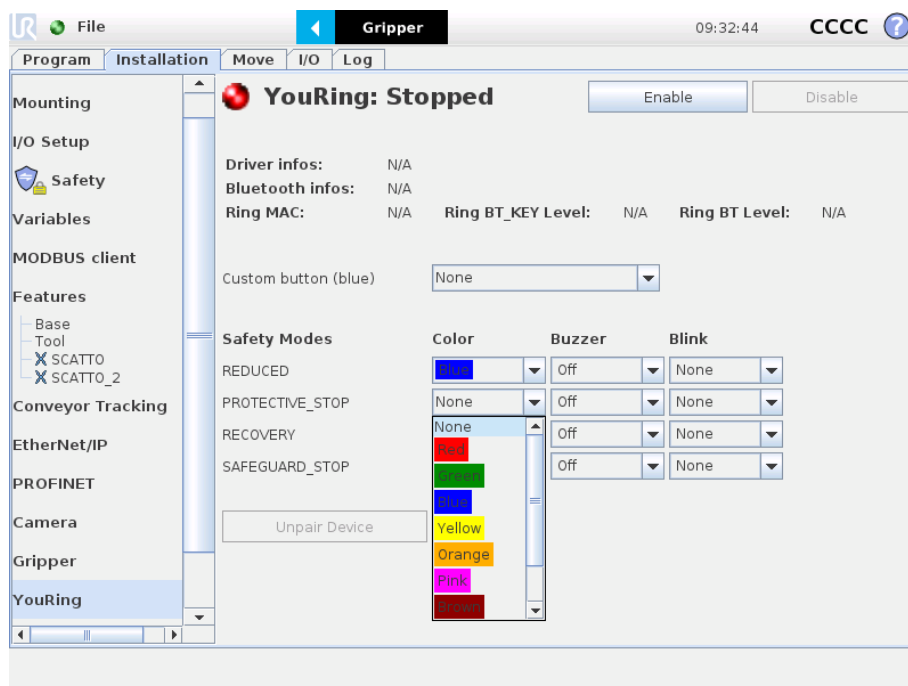
When the YOuring is not activated it's possible to:

1. Configure the blue button, wich corresponds to the custom button, in order to activate a script in the robot. Please remember to save the installation everytime a script is modified.

Once the YOuring has been activated, the pressing of the blue button will activate the script.

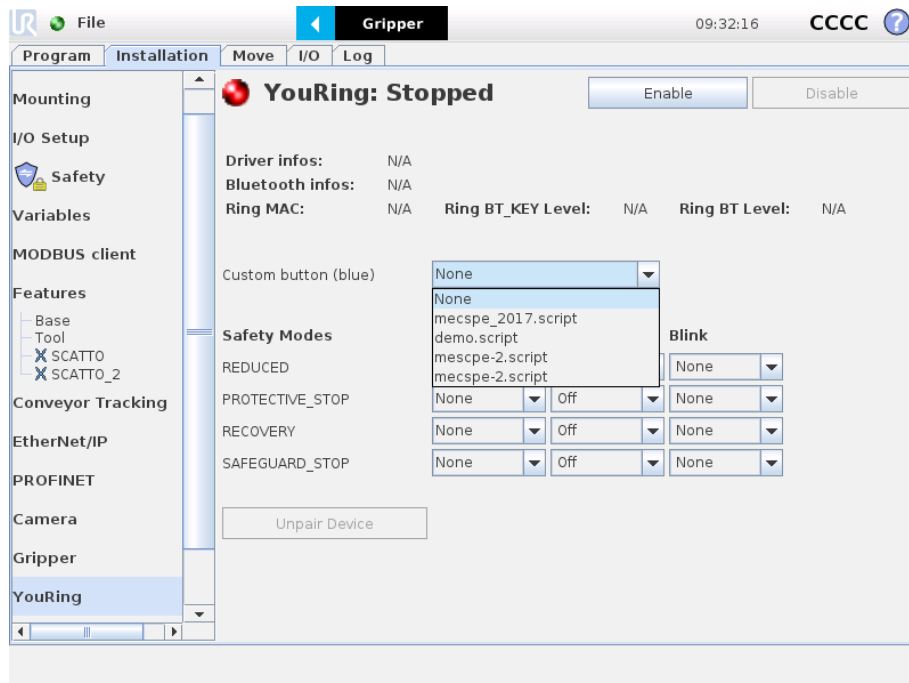
Attention: this functionality is available with the robot in stop program, not in running program.

2. Configure light, sound and blinking for the safety modes indicated in the figure. E.g. when the robot goes in protective stop mode, the YOuring starts blinking yellow.



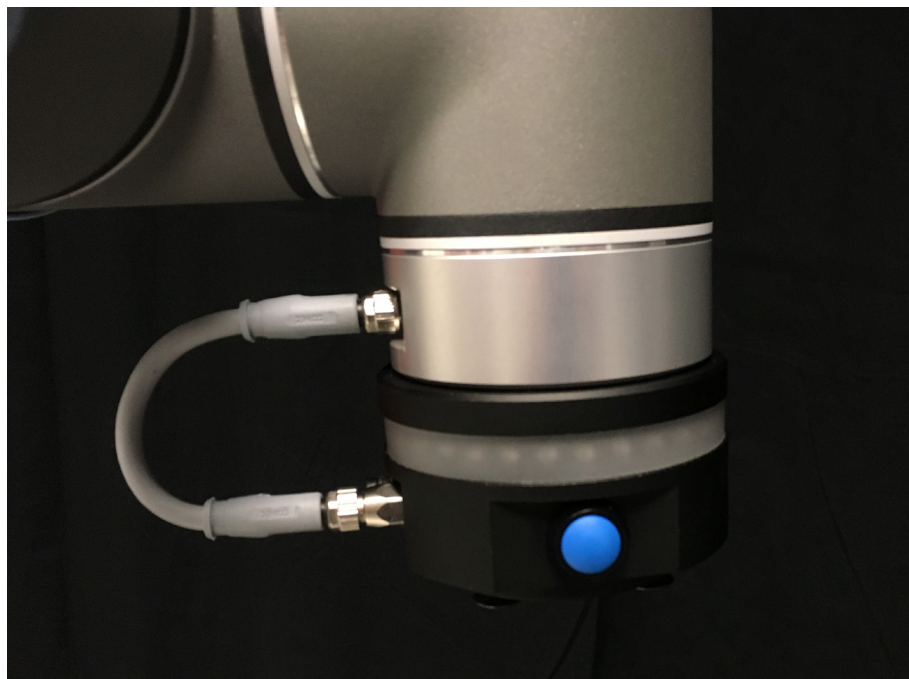
Configuration of the custom button and safety modes settings

Configuration



Setup of the user scripts for the custom button

Note: the script chosen works only when the program is not in execution



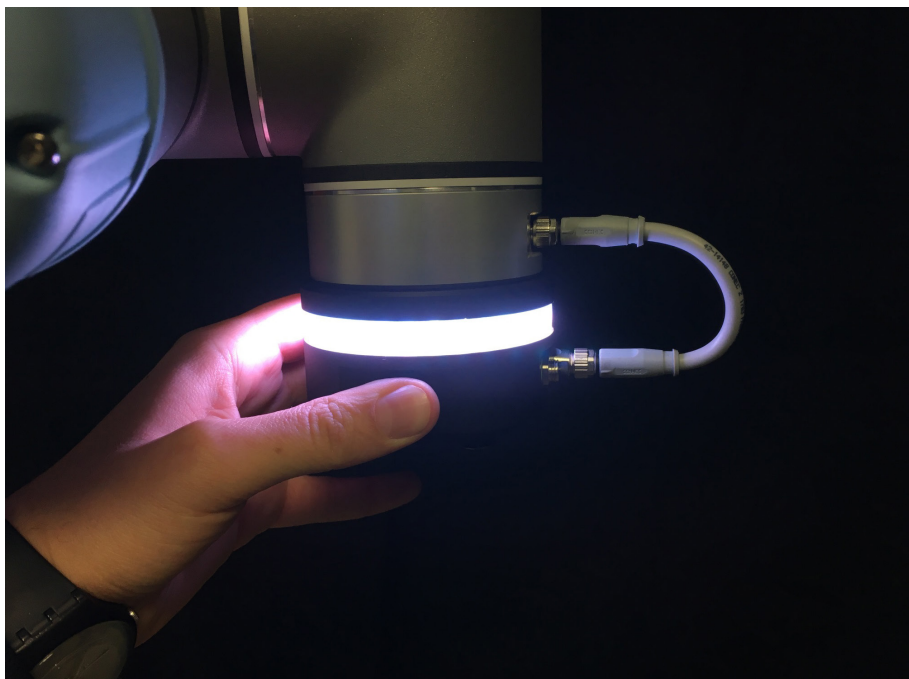
View of the custom button

Configuration

The black button corresponds to the YOUring freedrive



View of the freedrive button



Freedrive activated

Configuration

Troubles on connecting YOuring



About Pairing

When a YouRing device is **paired** to an USB key, each time you power up the device and you power up the USB key they automatically **connect**. A YouRing cannot connect to any USB key if they are not previously **paired**.

The pairing procedure is done once in a lifetime. The pairing procedure saves the ID of the YouRing inside of the USB key so that they are able to **connect**.

We do the pair procedure in our lab when testing each YouRing kit we deliver. The customer receives the kit ready to work.



Unpair

If strictly needed press unpair on URInstallation tab. You will see password request: please fill **aluminum**



If you need to pair new device

As described above normally is not necessary to unpair and pair a bluetooth dongle

For pairing a YouRing device with a new USB key you just need to power up the device and the USB key and then press the 2 buttons on the YouRing for less than a second (you will hear a short sound from the buzzer).

Driver Infos and Bluetooth infos in Installation TAB



Possible Driver Info

- **"Ok, no errors to report"**: YouRing daemon is up and running without errors and USB key is correctly connected and recognized.
- **"Usb is not connected or another device is trying to access to it"**
 - 1) USB not connected or not properly connected
 - 2) You have another URCaps that force the use of youring connection channel. Please try to remove that URCap and try again



Possible Bluetooth transmission Info

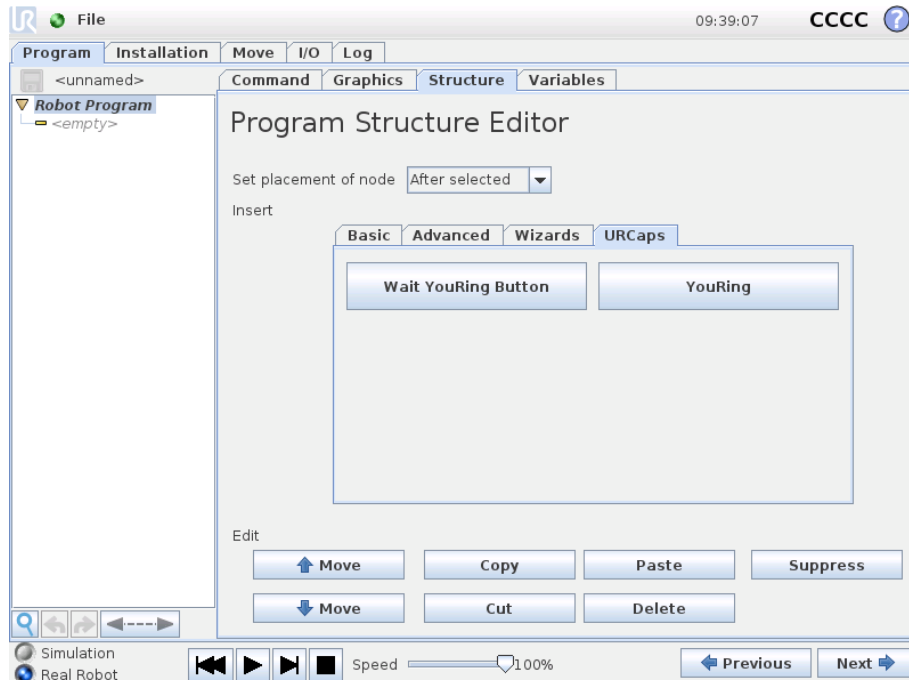
"Paired and connected. No errors to report": YouRing correctly paired and connected

"Paired and connected. Generic error reported": YouRing correctly paired and connected but unfortunately we have internal error on YOuring board

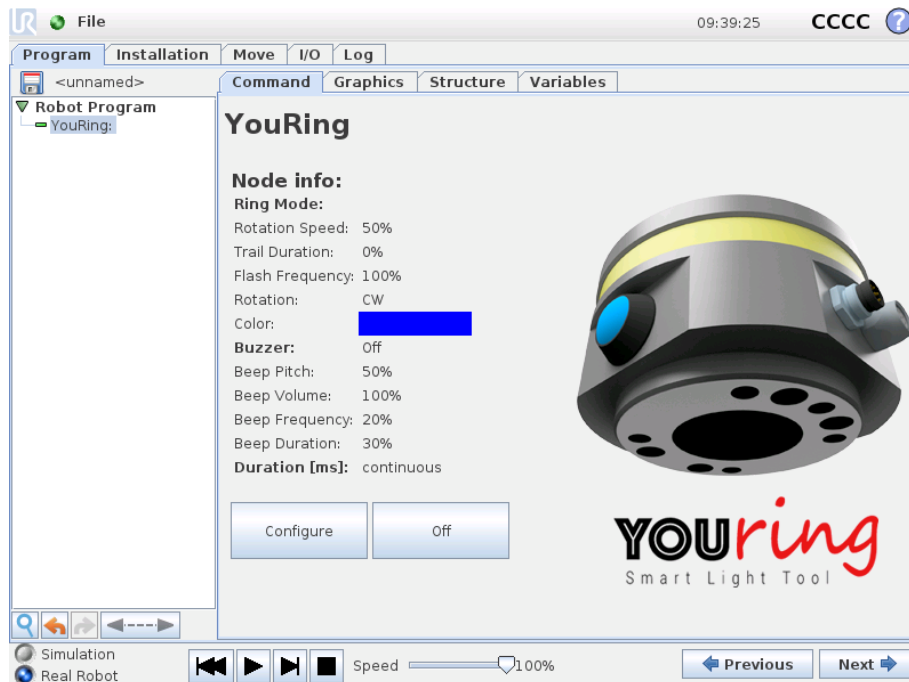
"Paired but not connected": YouRing correctly paired **but not connected**. Please try to fix with instruction in the other article

"Not paired": You need to pair YouRing for first time

YOuring Program Instructions



Urcaps section with the two new instructions



Command view of the YOuring button

YOUring Program Instructions

In the Led Setup the user can manage the leds on the tool, by selecting one of the options: a single or more led, a moving led, rainbow, or the motion tracker.

The motion tracker let the user see where the tool flange of the robot is moving, by showing leds in the direction of the movement, with the color and behavior chosen.

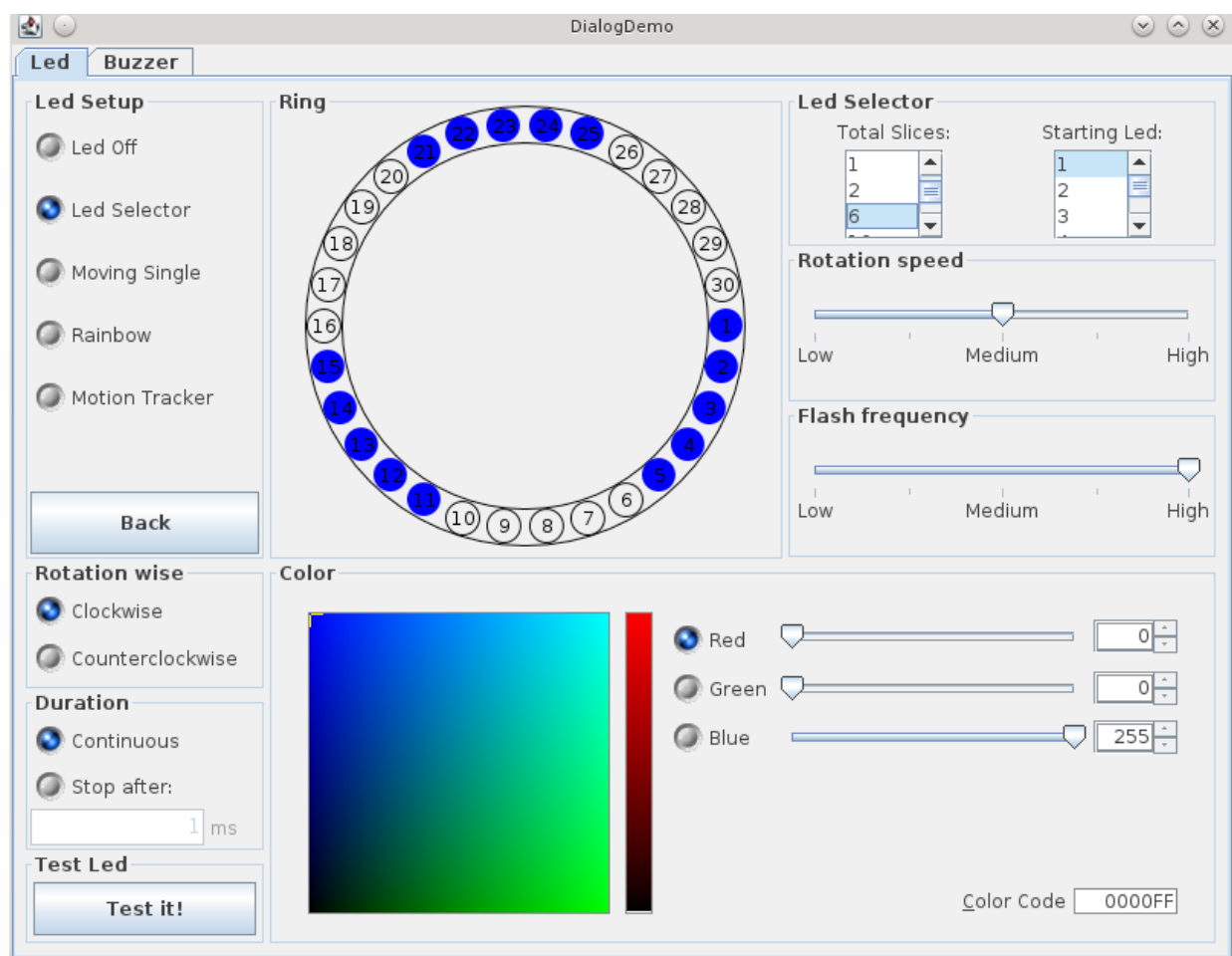
In the right part it's possible to choose the flash frequency, speed of the rotation and the trail duration of the leds.

In the ring section it's possible to choose manually which leds has to activate or not.

In the lower section there is the color choose palette.

Finally in the lower left section it's possible to change the rotation wise and the duration of the lights, which can be turned off after a defined time.

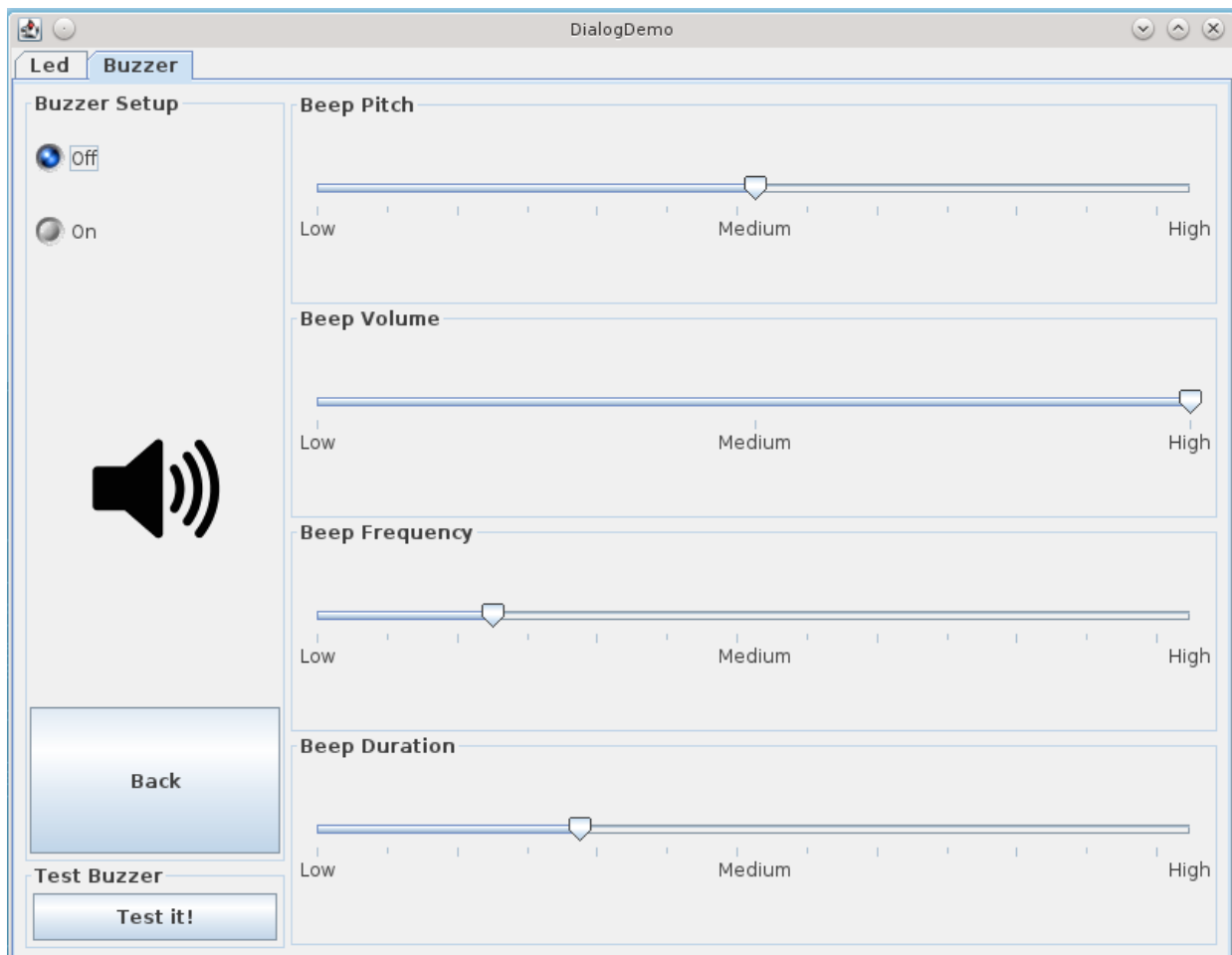
The user can test the settings before clicking "back" to return to the programming interface.



Led settings

YOUring Program Instructions

In the buzzer tab it's possible to activate a sound from the internal buzzer of the YOUring, by the selection of pitch, volume, frequency and duration.



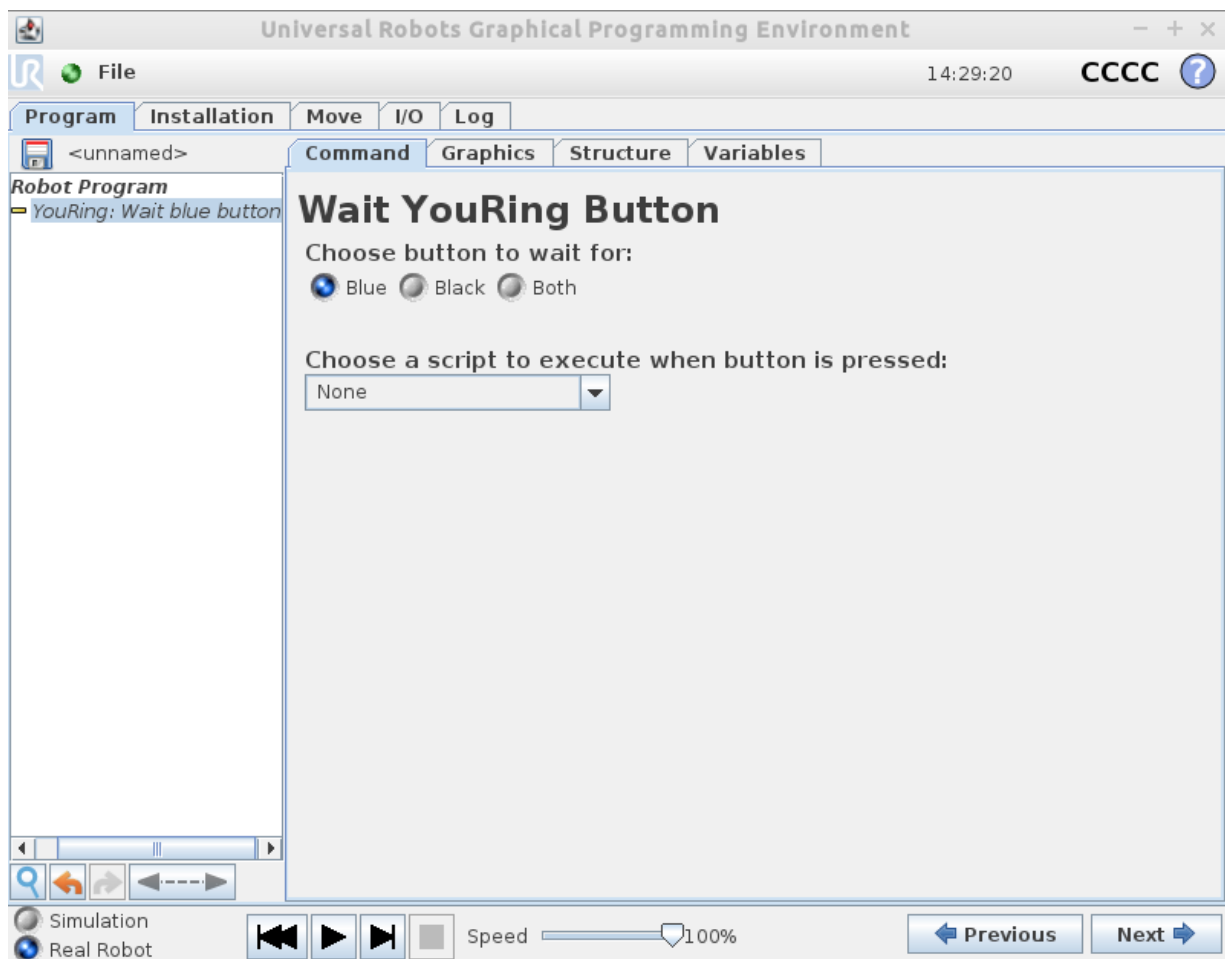
Buzzer settings

YOUring Program Instructions

Wait YOUring Button instruction

With the Wait YOUring button it's possible to pause the execution of the program until the user presses the blue, black or both the buttons on the YOUring.

In the select menu it's possible to choose a script to execute while the program is running and when one or both the buttons are pressed.

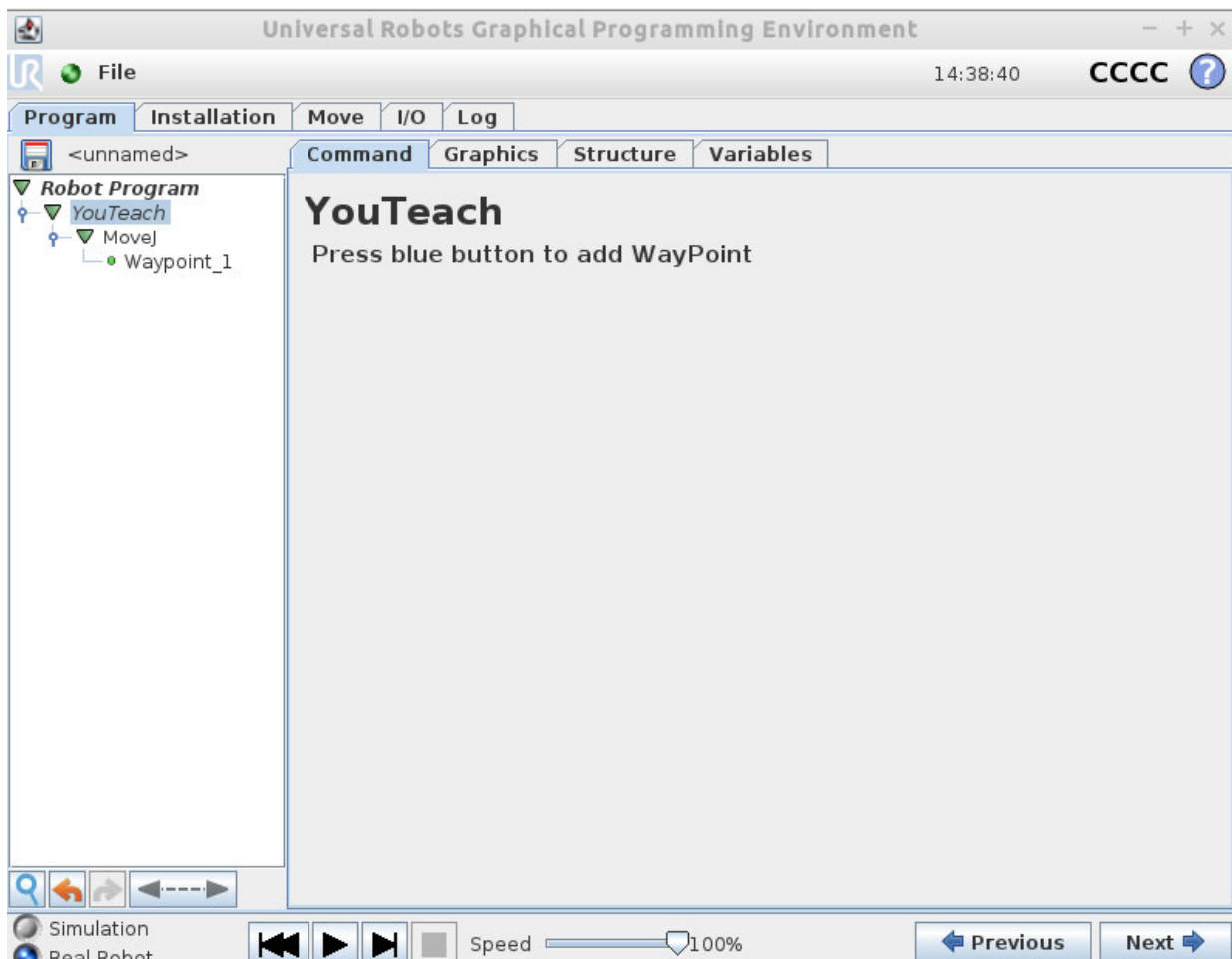


Command view of the Wait YOUring Button instruction

YOUring Program Instructions

YOUteach

The YOUteach feature allows the user to save with the blue button a point taken in freedrive mode (black button); it only needs a single press of the blue button to save the point: the device emits a beep and a single flash green light.



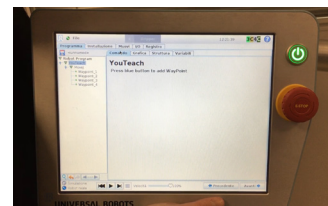
The YOUteach feature works only with the 'command' tab active and the YOUteach instruction selected in the program tree.



Enable the freedrive mode by clicking the black button



Save the current point by clicking the blue button



At every click the point is saved on the fly

F.A.Q.

- ✓ With two YOuring and two USB bluetooth keys, it's important to pair one YOuring at a time, in order to be sure to pair the correct device with its USB key (just in case of unpair-pair procedure).
- ✓ Once two couple of YOuring bluetooth USB key are paired separately, it's possible to use them independently: every key searches its YOuring.
- ✓ The second connector on the YOuring is a pass-through connector. It gives power depending on the actual power consumption of the YOuring; on the peak (see the specifications) are available 200 mA (600 mA of UR connector - 400 mA of the YOuring).
- ✓ The YOurteach feature requires at least a > 3.5 Polyscope software version.
- ✓ Trouble shooting about no connection situation
If a YouRing is correctly powered but is not connected it will show a rotating animation of **blue and green** light until it connects. This situation can happen if there is **weak signal** between a USB key and YouRing.
Possible causes that lead to a weak signal could be:
 - high distance: we suggest to maintain max 5m distance between YouRing and USB device
 - obstacles presence between the USB key and YouRing that can act as a "shield" for the signalIf you have similar situation please try to fix.
- ✓ Suggestion
 - Get an USB extension cable and put USB key out of UR control Box
 - Put USB key in teach pendant
- ✓ How to generate log YOuring log file
 - In installation TAB under youring yoil can see "update logs" buttons. Please press it.
 - In /home/program folder you will find a folder called *youringLogs*Please all files into this folder to an USB key and send it to youring-support@alumotion.eu
- ✓ For any further information, please contact: YOuring-support@alumotion.eu

WARNING

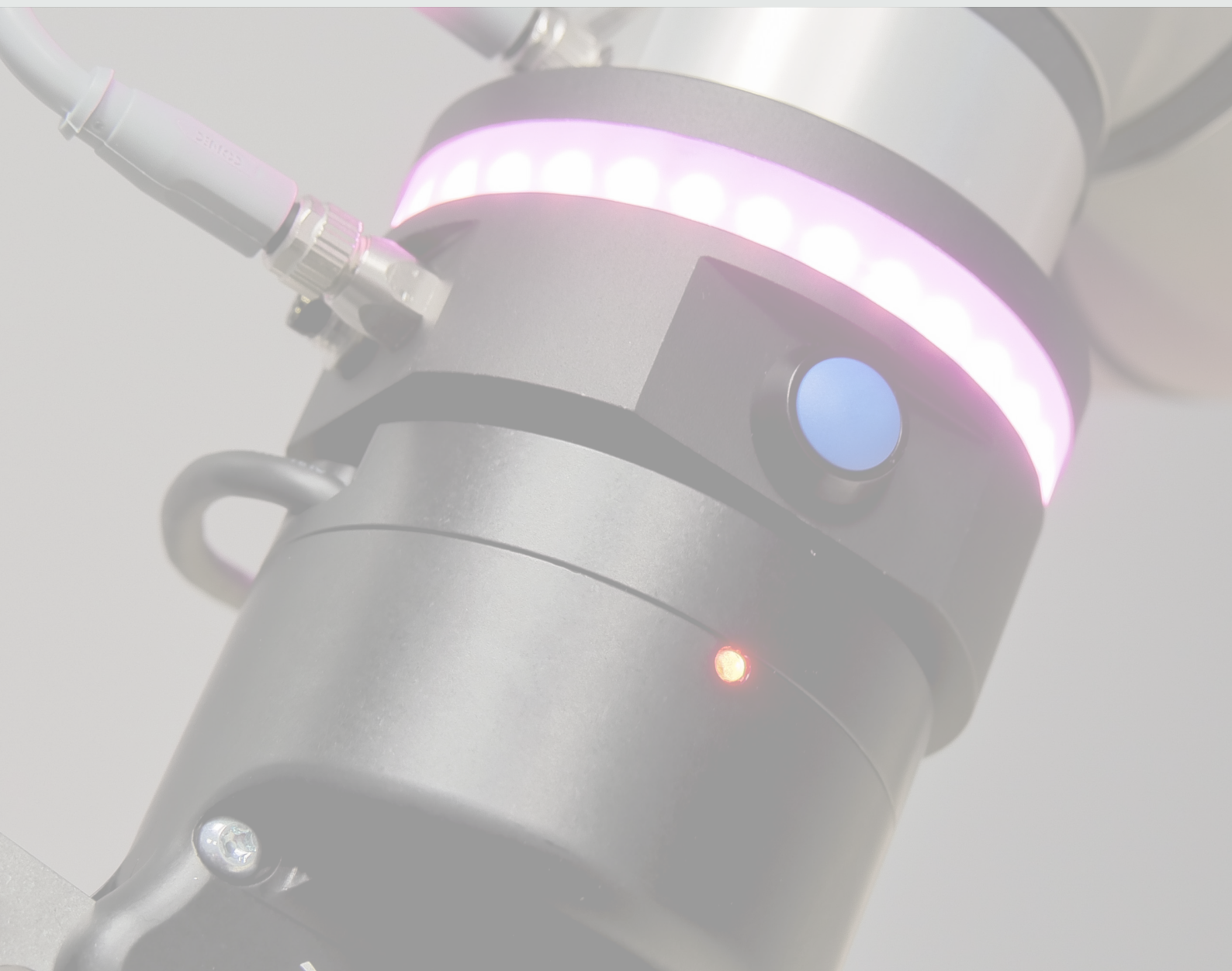
Do not open or deassemble the YOuring!

Please be aware that in case of opening or deassembling of the device, the YOuring will be out of warranty and Alumotion reserves to charge the entire cost of the YOuring.

USER MANUAL

YOUring

Smart Light Tool



alumotion



For any further information, please visit
tools.alumotion.eu