### THANK YOU FOR **CHOOSING ROBOTIO**

This Quick Start Guide will help you install and use your Finishing Kits with Universal Robots.



### 1. WHAT IS SUPPLIED?

| Surface Finishing Kit for UR e-Series (SURF-ES-UR-KIT)  |                  |
|---|------------------|
| Copilot software dongle license                         | W-A05            |
| Mounting Kit for Mirka                                  | SAND-APL-ROS-002 |
| Mounting Kit for Dynabrade                              | SAND-APL-ROS-001 |
| Air control accessories                                 | ACC-AIR-001      |
| Surface Finishing Kit for UR CB-Series (SURF-CB-UR-KIT) |                  |
| FT 300 Sensor kit for UR                                | FTS-300-UR-KIT   |
| Mounting Kit for Mirka                                  | SAND-APL-ROS-002 |
| Mounting Kit for Dynabrade                              | SAND-APL-ROS-001 |
| Air control accessories                                 | ACC-AIR-001      |
| Sanding Kit for UR e-Series (SAND-ES-UR-KIT)            |                  |
| Copilot software dongle license                         | W-A05            |
| Mounting kit for random orbital sander                  | SAND-ROS-001     |
| Air random orbital sander                               | SAND-DYNA        |
| Air control accessories                                 | ACC-AIR-001      |
| Sanding media Kit                                       | SAND-MEDIA-KIT   |
| Sanding Kit for UR CB-Series (SAND-CB-UR-KIT)           |                  |
| FT 300 Sensor kit for UR                                | FTS-300-UR-KIT   |
| Mounting kit for random orbital sander                  | SAND-ROS-001     |
| Air random orbital sander                               | SAND-DYNA        |
| Air control accessories                                 | ACC-AIR-001      |
| Sanding media Kit                                       | SAND-MEDIA-KIT   |



- 2.5 mm hex key for Mirka (included)
- 3 mm hex key for Dynabrade (included)
- 4 mm hex key (included)
- Torx T-20 key (for CB-Series installation only)
- •11/16 inch wrench (not included)



#### Visit: robotiq.com/support

DOWNLOADING THE URCAP

- 1. Browse by product > Select product > Surface Finishing Kit > Universal Robots > Software >
- Copilot software > URCap (UCS-X.X.X.)
- Select DOWNLOAD ZIP.
- 3. Decompress the zip file on a USB stick.



#### Mounting the Robotiq bracket

• For the CB-Series Kit, mount the FT 300 Force Torque Sensor on the robot according to its Quick Start Guide provided in the Kit.

1. Choose the bracket corresponding to your finishing tool brand and align the dowel pin on the robot tool flange.

2. Mount the Robotig bracket on the robot tool flange and secure it with the **M6 screws** and the **tooth lock washers**.

3. Continue the installation according to your finishing tool brand.

#### A) Mounting the Mirka finishing tool

1. Align the Mirka finishing tool on the bracket.

2. Position the small jaws correctly on the finishing tool and place the **Belleville washers** (with the convex side upward) and the **M4 screws** and fasten them loosely. Do not tighten them.

3. Position the large **jaw** on the finishing tool and fasten the Belleville washers (with the convex side upward) and the M4 screws tightly.

4. Fully tighten the small jaw's **M4 screws**.

- 5. Screw the NPT air fitting.
- **1** For **CB-Series** installation steps, please refer to the Instruction manual available on our support website.



#### **BEFORE OPERATING THE SURFACE FINISHING KIT, PLEASE READ THE INSTRUCTION MANUAL.**



Figure 1. Surface Finishing Kit with Mirka finishing tool on e-Series Universal Robots

#### B) Mounting the Dynabrade finishing tool

1. Align the Dynabrade finishing tool on the bracket.

2. Fasten the M3 screw.

3. Position the jaw correctly on the finishing tool and place the tooth lock washers and the M4 screws and fasten them.

4. Fasten the **set screw** until you feel some resistance, using a 3mm hex key. The screw allows turning on the finishing tool and adjusting the air flow.

5. Screw the NPT air fitting.



Figure 2. Surface Finishing Kit and Sanding Kit with Dynabrade finishing tool on e-Series Universal Robots

#### SUPPLYING AIR TO THE VALVE

• Refer to the figure 3 for the following steps.

1. Push the 3/8 inch air tube into the finishing tool air inlet fitting.

- **()** The ¼ inch NPT air fitting for Port #1 is not included. Insert your own air fitting based on your air line specifications.
- 2. Connect your air supply line to Port #1.
- 3. Secure the valve to the cabinet using the valve magnetic clip.



STRONG MAGNETS. HOLD VALVE BRACKET FIRMLY WHEN ATTACHING IT TO A SURFACE TO AVOID DAMAGING MAGNETS.



Figure 3. Supplying air to your valve.

# 5. WIRING

1. Turn off your robot controller.

2. Plug the **red wire** of the valve into a **Configurable Output**.

3.Plug the **black wire** of the valve into a **OV** connector of the robot controller.

# 6. SOFTWARE INSTALLATION

1. Insert your **Copilot license dongle** into a USB port of your robot controller.

- 2. Insert the USB stick in the robot teach pendant.
- 3. Tap Setup Robot.
- 4. Tap **URCaps.**
- 5. Tap the **+** sign.
- 6. Open the file Robotiq\_Copilot-X.X.X.urcap.

7. Tap the **Restart button** to restart PolyScope and activate the URCap.



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# **Finishing Kits**

# QUICK START GUIDE

### For installation on Universal Robots



• For CB-Series installation steps, please refer to the FT 300 Force Torque Sensor Quick Start Guide.

