# THANK YOU FOR CHOOSING ROBOTIQ

This step-by-step guide will allow you to **install** and **use your AirPick Vacuum Gripper** on e-Series Universal Robots.

## 1.WHAT IS SUPPLIED?

**Standard upon delivery of VAC-ES-UR-AIRPICK-KITX**

• **Vacuum generator**.......................(VAC-GRP-AIRPICK)
• **Gripper coupling**.........................(GRP-ES-CPL-062)
• **Suction Cup Option**
   **KIT1**..................................................(**1** suction cup)
   **KIT2**................................................(**2** suction cups)
   **KIT4**................................................(**4** suction cups)
• **Required hardware**

## 2.TOOLS YOU NEED

**2mm slotted screwdriver (not included)**

**4 mm Hex Key**

## 3.GET THE LATEST

Visit: **support.robotiq.com**

**Downloading the URCAP**
1. **Select brand > Universal Robots > Vacuum Grippers > Software > Gripper Software.**
2. Select **DOWNLOAD ZIP**.
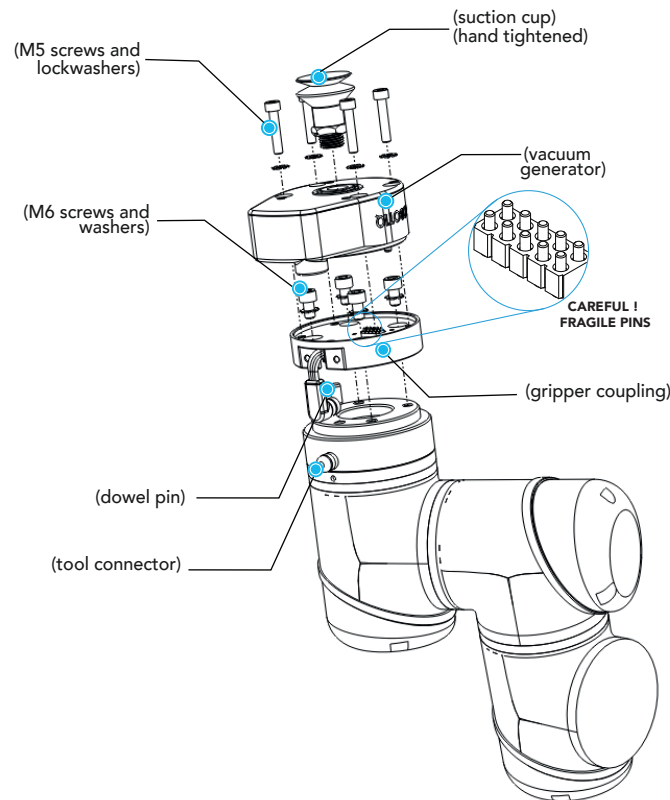3. Save the ZIP file **UCG-X.X.X** to a USB stick.

⚠️ **BEFORE OPERATING THE GRIPPER, PLEASE READ THE INSTRUCTION MANUAL.**

## 4.MOUNTING

1. Mount the coupling on your robot arm. Align with the provided dowel pin.
2. Secure by inserting the M6 screws and tooth lock washers.
3. Mount the Vacuum Gripper on the coupling. Align with the dowel pin.
4. Secure by inserting the M5 screws and tooth lock washers.
5. Plug the coupling cable into the robot tool connector.
6. To install the 2 or 4 suction cups kits for gripper, please refer to the **Connector Assembly Guide**. You can find in this guide details on assembling the Suction Cup System.

(M5 screws and lockwashers)
(suction cup) (hand tightened)
(vacuum generator)
(M6 screws and washers)
CAREFUL ! FRAGILE PINS
(gripper coupling)
(dowel pin)
(tool connector)

⚠️ **LEAVE ENOUGH EXCESS CABLE TO ALLOW FULL ROBOT MOVEMENT.**

## Connecting the Air Supply

1. Insert the 8 mm flexible tube in the air supply port.
2. Once the tube inserted, make sure the safety clip is present to secure the tube.
3. Route the air tube along the robot arm using a cable routing system.

⚠️
• Recommended air pressure = 7 bar [101.5 psi] Maximum = 7 bar [101.5 psi]
• Dry and filtered air only; Follow ISO 8573-1, class 3.4.3 Standard.
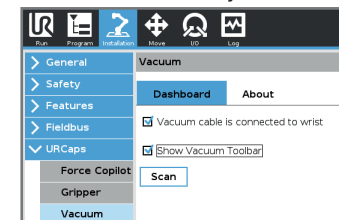• Use of a local pressure regulator with a filter and air dryer is recommended.

## 5.SOFTWARE INSTALLATION

1. Have a USB stick that contains the **.urcap** file (step **3**) and insert it in the robot's teach pendant.
2. Tap the triple bar icon ☰ in the upper right corner and select **Settings**.
3. Tap **System** in the left navigation pane.
4. Tap URCaps in the pane, then tap the ⊞ button.
5. Open the file **UCG-X.X.X.urcap.**
6. Tap the **Restart** button, in the bottom right corner of the screen, to activate the URCap.
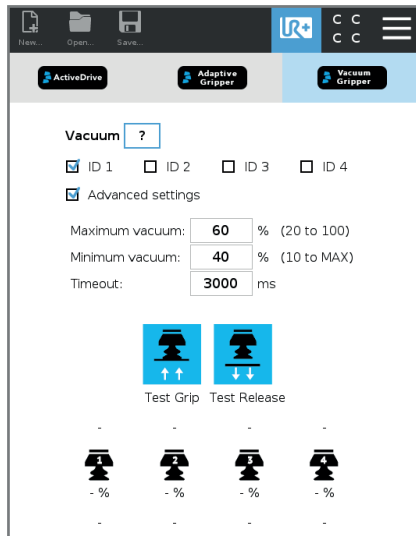
## 6. DETECTING THE GRIPPER

1. Initialize the robot.
2. Tap the **Installation** tab in the Header.
3. Tap the **URCaps** tab in the navigation pane on the left.
4. Select **Vacuum** in the URCaps dropdown list.
5. Ensure the **Vacuum cable is connected to wrist** check box is selected.
6. Tap the **Scan** button to locate any connected gripper.

7. Tap the **UR+** tab to expand the Vacuum Toolbar.
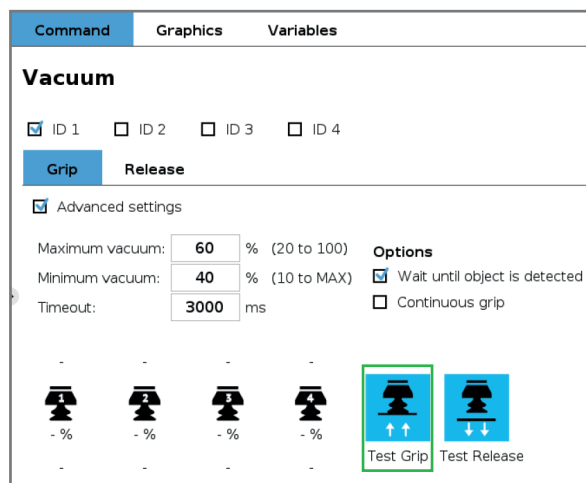8. The Vacuum Toolbar allows you to test the vacuum gripper.

*Vacuum Gripper Toolbar*

## 7. PROGRAMMING THE GRIPPER

### Vacuum Node

1. Tap the **Program** tab at the top of the screen.
2. Tap the **URCaps** tab in the left navigation pane.
3. Tap **Vacuum** in the URCaps dropdown list.
4. Tap the **Command** tab to edit the action of your gripper.
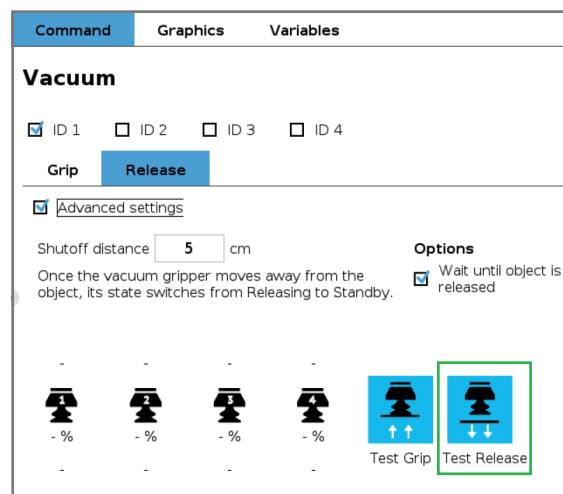


*Vacuum command - TEST GRIP*

### To grip a part

1. In the **Command** tab, select the **Grip** tab.
2. You can specify a range for the maximum and minimum vacuum levels (%), and specify a timeout (ms) by checking the **Advanced settings** box.
3. To establish nominal values for your application, tap the **Test Grip** button.

### To release a part

1. In the **Command** tab, select the **Release** tab.
2. If the **Advanced settings** box is checked, enter a **Shut off distance** (cm).
3. To establish nominal values for your application, tap the **Test Release** button.



*Vacuum command - TEST RELEASE*



**ROBOTIQ eLearning**

elearning.robotiq.com

**support.robotiq.com**

support@robotiq.com
T: 1.418.380.2788 ext. 3

July 2021
X-990065-B



**ROBOTIQ**

**Vacuum Gripper**

**AIR PICK**

**QUICK START GUIDE**

**For installation on e-Series Universal Robots**



X-990065-B