

THANK YOU FOR CHOOSING ROBOTIQ

This step-by-step guide will allow you to **install and use** your **2-Finger Adaptive Gripper** on Universal Robots **CB-Series** robots fitted with a **Robotiq I/O Coupling**.



1.WHAT IS SUPPLIED?

Standard upon delivery of **AGC-UR-KIT-85-W** or **AGC-UR-KIT-140-W**

2F-85 Basic gripper unit.....(GRIPPER-2F85)

or 2F-140 Basic gripper unit.....(GRIPPER-2F140)

I/O Coupling Kit(IO-CPL-UR-CB-KIT)

- Screws kit
- Micro-USB to USB cable
- 16 GB USB stick

Required hardware



2.TOOLS YOU NEED



4mm
hex key



3.GET THE LATEST

Visit: support.robotiq.com

DOWNLOADING THE URCAP

1. Go to **Select brand > Universal Robots > 2F-85 and 2F-140 Grippers > Software > I/O Coupling Software.**
2. Select **DOWNLOAD ZIP**.
3. Save the ZIP file **UCH-X.X.X** to a USB stick.

DOWNLOADING THE INSTRUCTION MANUAL

Go to **Select brand > Universal Robots > 2F-85 and 2F-140 Grippers > Documents > Gripper Instruction Manual CB-Series Universal Robots> View online or Download PDF.**



BEFORE OPERATING THE GRIPPER, PLEASE READ YOUR INSTRUCTION MANUAL.



4.MOUNTING

- i** For easier mounting, move the robot tool flange to make it point upwards.

MOUNTING THE I/O COUPLING

1. Insert the provided dowel pin into the tool flange. It should fit tightly on the flange, and loosely on the coupling.
2. Mount the I/O Coupling on the tool flange of the robot. Align with the provided dowel pin.
3. Secure the I/O Coupling on the tool flange with four M6 screws and toothlock washers, using a 4mm hex key.

MOUNTING THE 2-FINGER GRIPPER ON THE I/O COUPLING

1. Align the 2F gripper on the coupling, using the alignment pin on the 2F gripper.
2. Secure the 2F gripper to the coupling with four M5 screws and toothlock washers, using a 4mm hex key.
3. Plug coupling connector into tool connector.

⚠ WHEN CONNECTING THE I/O COUPLING TO THE TOOL FLANGE, THE GRIPPER MIGHT GRIP/RELEASE.

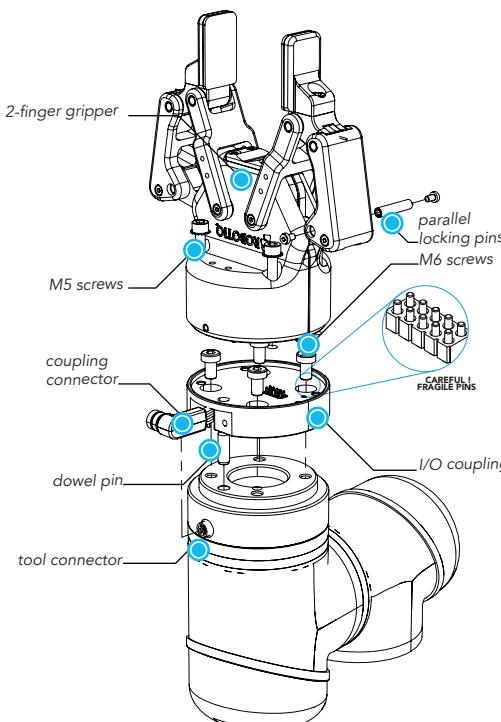


Figure 1. 2-Finger wrist connection kit exploded view, on robot arm.



Parallel locking pins can be installed to perform parallel grasps only. For more details, see the instruction manual.



5. CONFIGURING

On the teach pendant, select the **I/O** tab. Tool output must be set to **24 volts** (see figure 2).

- i** For more details on configuring coupling presets, see section 7, "Configuring Presets".

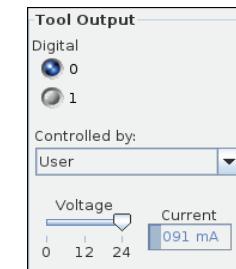


Figure 2. Set tool output to 24 volts.



6. INSTALLING SOFTWARE

1. Have a USB stick that contains the **.urcap** file (see section 3, "Get the latest").
2. Insert the USB stick in the robot teach pendant.
3. Tap **Setup Robot > URCaps Setup**.
4. Tap **[+]**.
5. Open **UCH-X.X.X.urcap**.
6. Tap **Restart** to activate the URCap.
7. The **Wrist Connection** toolbar will display shortly after completing the installation.



Figure 3. The Wrist Connection toolbar.



7. CONFIGURING PRESETS

I/O COUPLING DEFAULT PRESETS

	PRESET 1	PRESET 2	PRESET 3	PRESET 4
POSITION	100%	0%	100%	0%
SPEED	100%	100%	0%	0%
FORCE	100%	100%	1%*	1%*

- i** Force is not reduced to 0%. This would deactivate the Continuous Grip feature.

LINKING WITH THE I/O COUPLING

- i** The I/O Coupling must be mounted on the tool flange before proceeding.
1. Connect the micro-USB cable (type B) into the I/O coupling micro-USB port.
 2. Connect the cable to a computer USB port.
 3. Configure using the Robotiq User Interface.

CONFIGURING VIA THE ROBOTIQ USER INTERFACE

1. Visit support.robotiq.com
2. Go to **Select brand > Universal Robots > 2F-85 and 2F-140 Grippers > Software > Robotiq User Interface**.
3. Select **Installer > Download ZIP**.
4. Run the Robotiq User Interface.
5. Select **IO Coupling > Auto Connect**.
6. From the dropdown list, select **Adaptive Gripper**.
7. If required, modify default presets, then click **Save presets configuration to I/O Coupling**.

For more details, refer to the 2-Finger Instruction Manual.



8. WRIST CONNECTION TOOLBAR

1. Using the teach pendant, tap the **Wrist Connection** button to expand the **Wrist Connection** toolbar.
2. Tap any preset button to test its behavior.

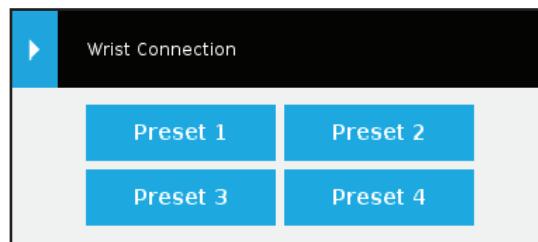


Figure 4. The Wrist Connection toolbar contains four presets.



9. PROGRAMMING WITH THE NODE

NODE: WRIST CONNECTION

1. From your robot program, go to **Structure > URCaps**, and insert a **Wrist Connection** node.
2. Go to **Command**, and select the applicable preset.



2F-85
2F-140

QUICK START GUIDE

Wrist Connection Kit for CB-Series Universal Robots



This product is under a 1-year warranty.
Refer to your product instruction manual for details.

support.robotiq.com

support@robotiq.com
T: 1.418.380.2788 ext. 3

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