THANK YOU FOR CHOOSING ROBOTIQ

This step-by-step guide will allow you to **install** and **use** **your 2-Finger Gripper** on OMRON TM Series robots.

1.WHAT IS SUPPLIED?

Standard upon delivery of a OMRON TM Series kit:

2-Finger Adaptive Gripper (AGC-GRP-2F85 or -2F140)
Gripper Coupling ………………………….(GRP-CPL-062)
High-Flex Device Cable……… (CBL-COM-2065-10-HF)
RS232 to RS485 Adapter…… (ACC-ADT-RS232-RS485)
USB to RS485 Adapter………….(ACC-ADT-USB-RS485)
Necessary Hardware

2.TOOLS YOU NEED

2 mm Slotted Screwdriver

2 mm Hex Key

4 mm Hex Key

3.GET THE LATEST

Visit: **support.robotiq.com**

• Select Omron TM, 2F-85 and 2F-140 Grippers, Software, Gripper Software
• Download the TM Plug & Play Software Package.
• Decompress the package at the root of a USB storage device and rename the USB device "**TMROBOT**".

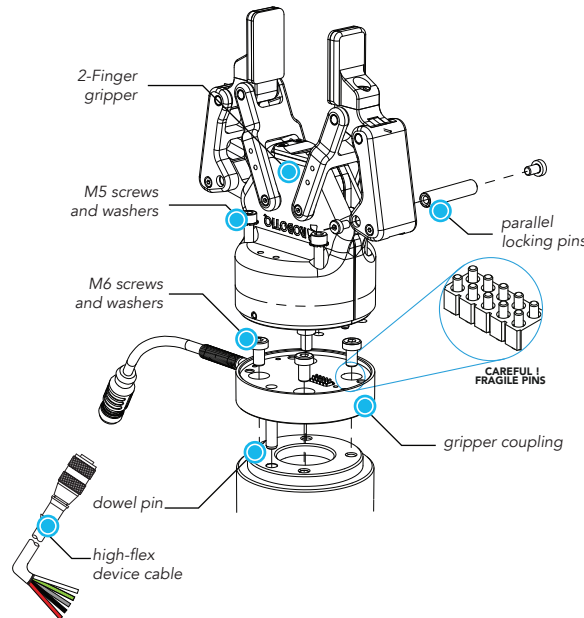⚠ **BEFORE OPERATING THE GRIPPER, PLEASE READ INSTRUCTION MANUAL.**

4.MOUNTING

• Mount the coupling on your robot arm. Align with the provided dowel pin.

• Secure using the provided M6 screws and tooth lock washers

• Mount the Gripper on the coupling. Align with the dowel pin.

• Secure using the provided M5 screws and tooth lock washers.

• Plug the device cable into the Gripper's pigtail and attach the cable along the robot arm using a cable routing system.

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

- 2-Finger gripper
- M5 screws and washers
- parallel locking pins
- M6 screws and washers
- CAREFUL ! FRAGILE PINS
- gripper coupling
- dowel pin
- high-flex device cable

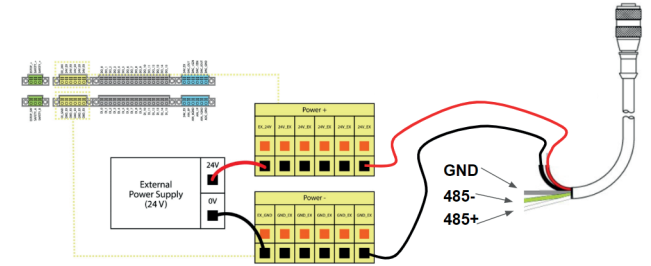⚠ **LEAVE ENOUGH EXCESS CABLE TO ALLOW FULL ROBOT MOVEMENT.**
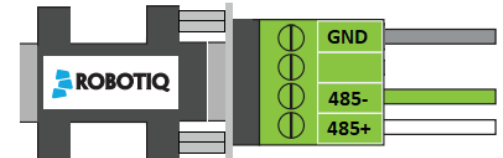
5.WIRING

ℹ The red (24V) and black (0V) wires of the device cable provide power to the gripper.

• Connect the red wire to a 24V slot.
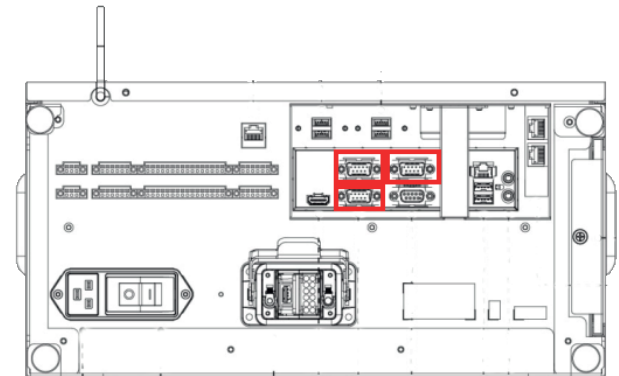• Connect the black wire to 0V slot.

• Connect the communication wires in the RS232 signal converter (ACC-ADT-RS232-RS485) as shown below.

Pin	Signal Name	CBL-COM-2065-10-HF High-Flex Device Cable
1	485 + (A)	WHITE
2	485 - (B)	GREEN
3	485 GND	SHIELD

• Connect the RS232 end of the signal converter to a COM port of the robot controller.

6. SOFTWARE INSTALLATION

- Turn on the robot and log in to TM Flow.
- Connect the USB device that contains the **Components** in the robot controller.
- Take control of the robot, tap the **triple bar icon** and select **System Settings**.
- Click on **Import/Export**.
- Click on the **Import** button, select **TMComponent** in the **Robot List** menu and click **OK**.
- Select the files to import in the list on the left and click on the **Send** button.

- Tap the **triple bar icon** and select **Robot Setting**.
- Enable the appropriate Components by clicking on the **radio buttons** and click on the **Save** button.
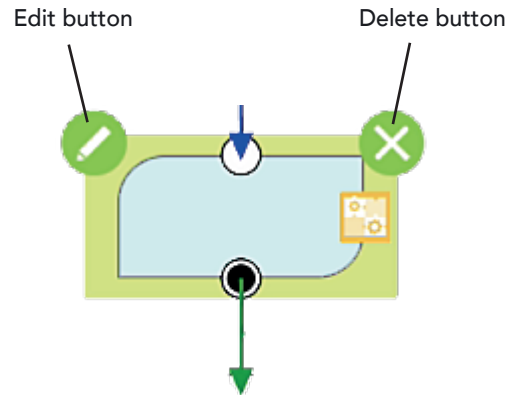
7. GRIPPER BUTTON CONFIGURATION

Follow the indications below to assign Gripper commands to the Gripper button found on the robot camera mounted on the robot wrist.

- In the TM Flow robot software, tap the **triple bar icon** and select the **Setting** icon.
- Click on **Gripper Button**.
- In the **Gripper Button** window, tick the **Using Customized Component** radio button.
- Select the Component you want to assign to either one of the Gripper actions.
- In the popup window, select or change the Component your wish to assign to the Gripper action/button.
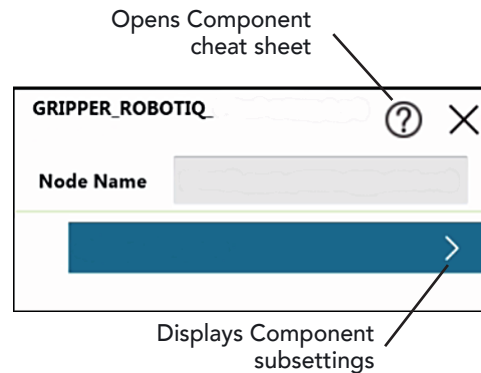- Click **OK**.

8. USE COMPONENTS TO PROGRAM WITH THE GRIPPER

- From the TM Flow homepage, tap the **triple bar icon** and select the **Project** icon.
- Locate the Gripper Components in the navigation pane on the left side of the screen.
- Click on the program Component after which you wish to insert a Gripper Component.
- Drag and drop the desired Gripper Component under the highlighted Component.

Edit button   Delete button

- For advanced parameters, click on the Edit button (pencil icon) in the upper left corner of the Component; the Components menu will pop up.

Opens Component cheat sheet

GRIPPER_ROBOTIQ_

Node Name

Displays Component subsettings

ROBOTIQ

2F-85 & 2F-140 ADAPTIVE GRIPPERS

QUICK START GUIDE

For installation on OMRON TM Series collaborative robots

X-990040-B