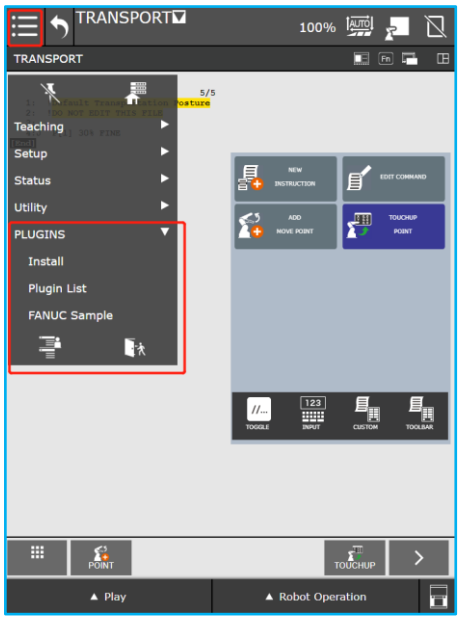
DH-Robotics/Fanuc CRX Robots

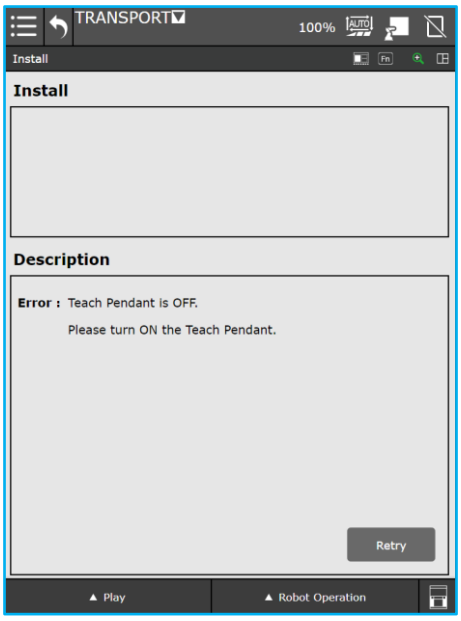
V1.4.16

目录

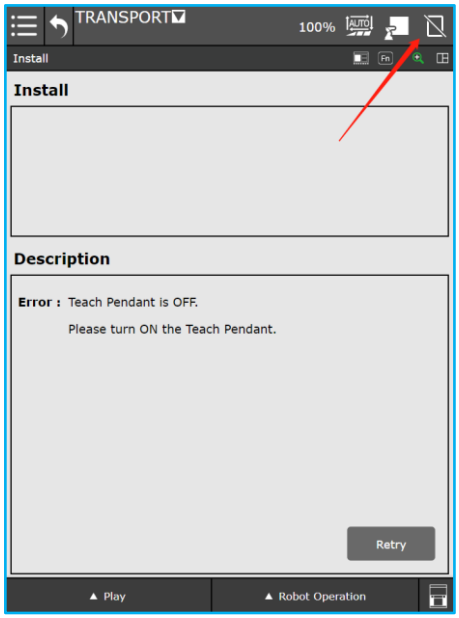
1. Software Installation

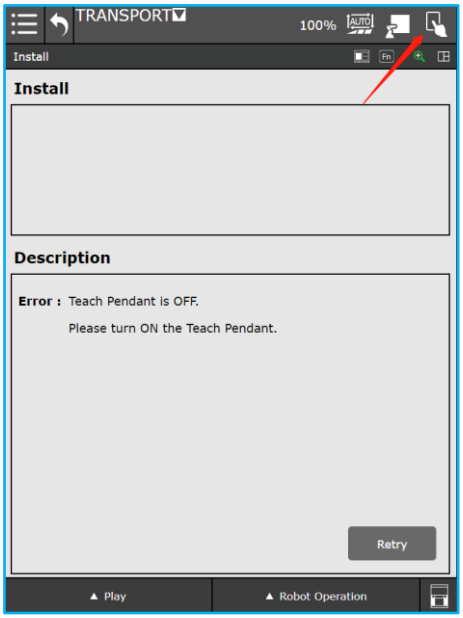
1. Copy the plugin file to the disk and plug the disk into the robot control cabinet.
2. Open the teach pendant. Open the teach pendant menu and find “PLIGINS”.
3. Press “Install”, maybe will find a wrong. E.g.Teach Pendant is OFF.



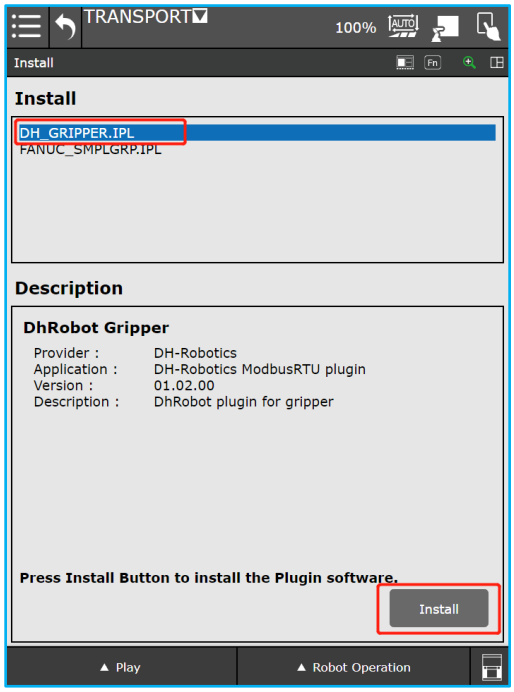


4. Press the switch in the upper right corner. Turn ON the Teach Pendant.

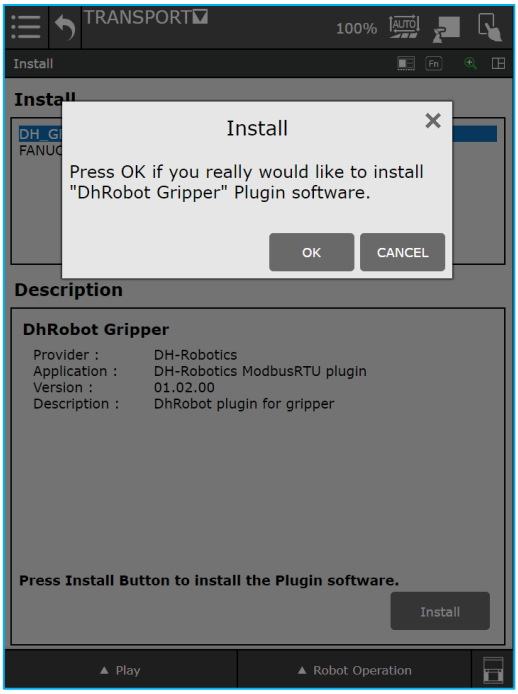


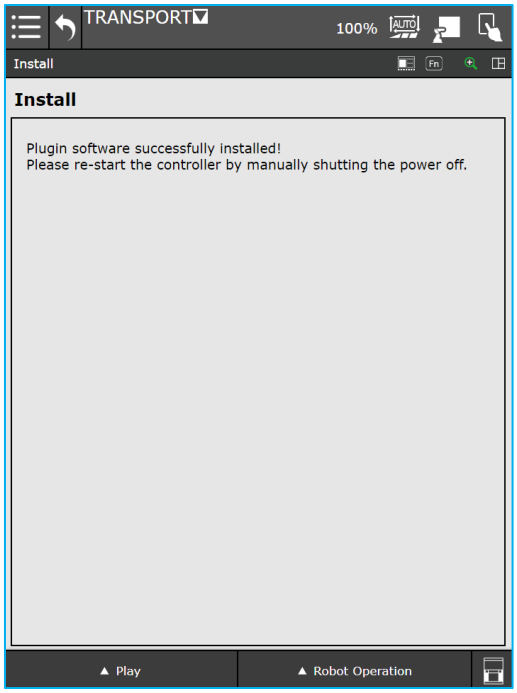


5. Turn ON the teach pendant, press the Retry to update the page.
6. Choose the plugin and press the Install, installation the plugin.

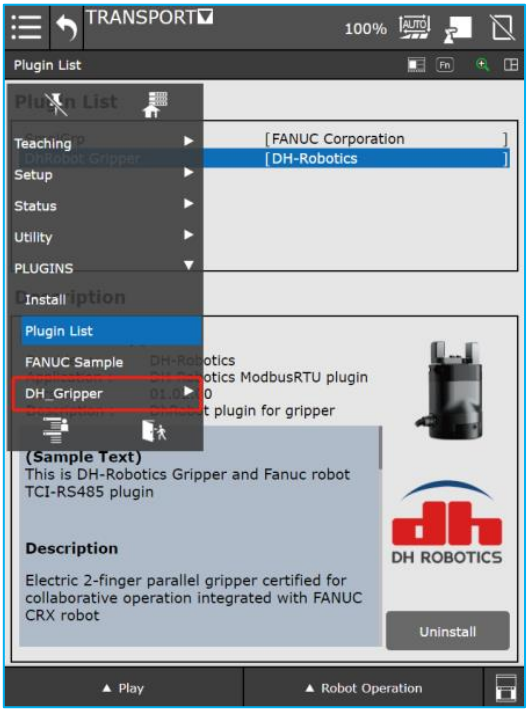


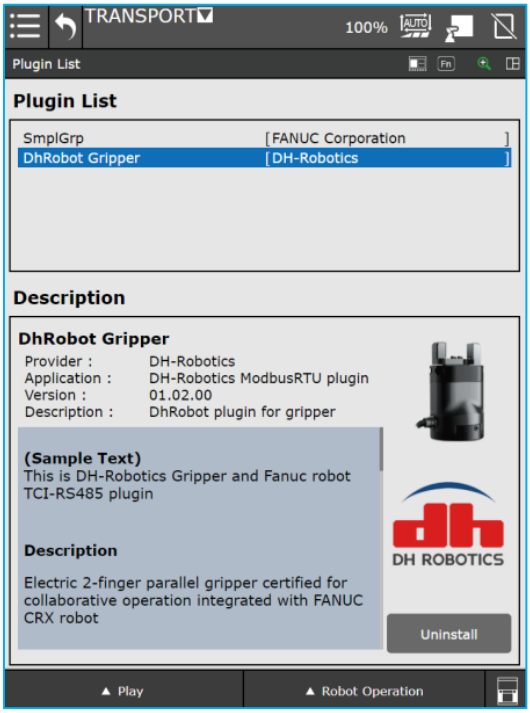
7. Press OK and re-start the teach pendant.





8. If plugin install success, will find the plugin in the PLUGINS list.
9. You can find the plugin description and uninstall plugin in the Plugin List.

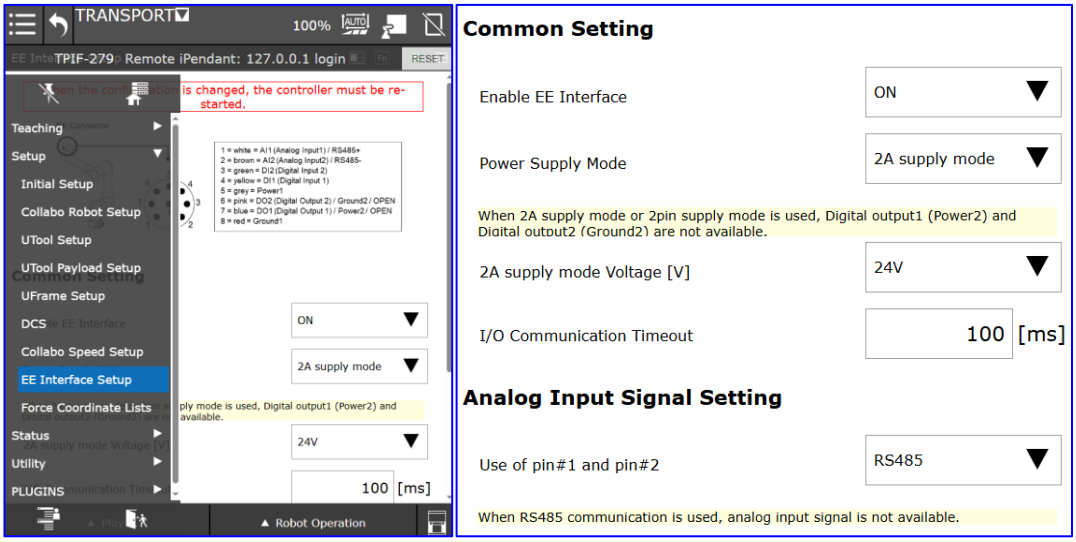




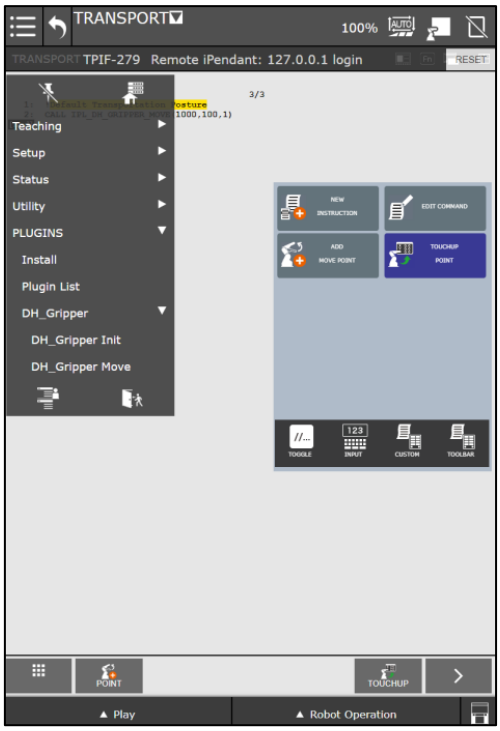
2. Software Configuration

2.1. Initialize the gripper

1. Confirm connect mode.

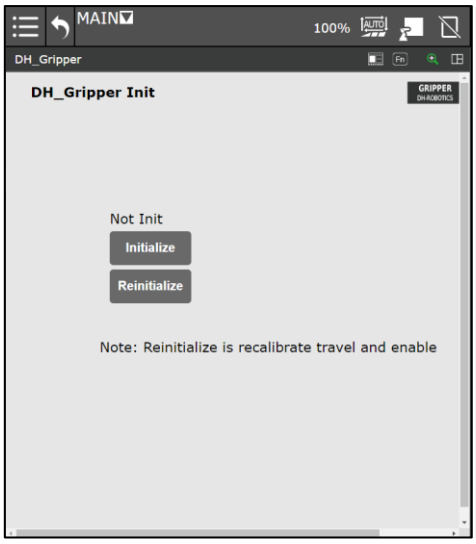


2. Select “Gripper Init” in the list of the plugin.



3. When display "Init error" or "Not Init", click the 'Initialize' or 'Reinitialize' button, initialize the gripper.

4. Note: Reinitialize is recalibrate travel and enable.



2.3.3.1 Initialization

This register is used to initialize the gripper.
Write: If write 1 (0x01 hex) to this register, the gripper will be initialized (fingers move to the minimal or maximum position. The initialization direction depends on the value of initialization direction register). If write 165 (0xA5 hex) to this register will fully initialize the gripper(find the minimal and maximum position).
Read: if gripper need to be initialized or have initialized, this register value is 0; and if gripper is in initializing process, this register value is 1.
The register address is 0x0100. The description of this register is shown in Table 2.4.

Table 2.4 Initialization

Function	Address	Description	Write	Read
Initialization	0x0100	Initialize the gripper	0x01：initialize； 0xA5: Fully initialize	Current setting

The gripper needs to be initialized before control.
The sample command is as follows:
Initialize (write):
Send: 01 06 01 00 01 49 F6
Receive: 01 06 01 00 01 49 F6 Enable

Reinitialize(write):
Send:01 06 01 00 00 A5 48 4D
Receive: 01 06 01 00 00 A5 48 4D Reinitialize

5. If the gripper finish activate, will display “Initialized”

2.3.4.5 Initialization State

This register is used to store current initialization state of gripper, you can get the initialization state by reading this register.
The address is 0x0200. The description of this register is shown in Table 2.8.

Table 2.8 Initialization State

Function	Address	Description	Write	Read
Initialization State	0x0200	Initialization state of the gripper	Read Only	0：Not initialized； 1：Initialized

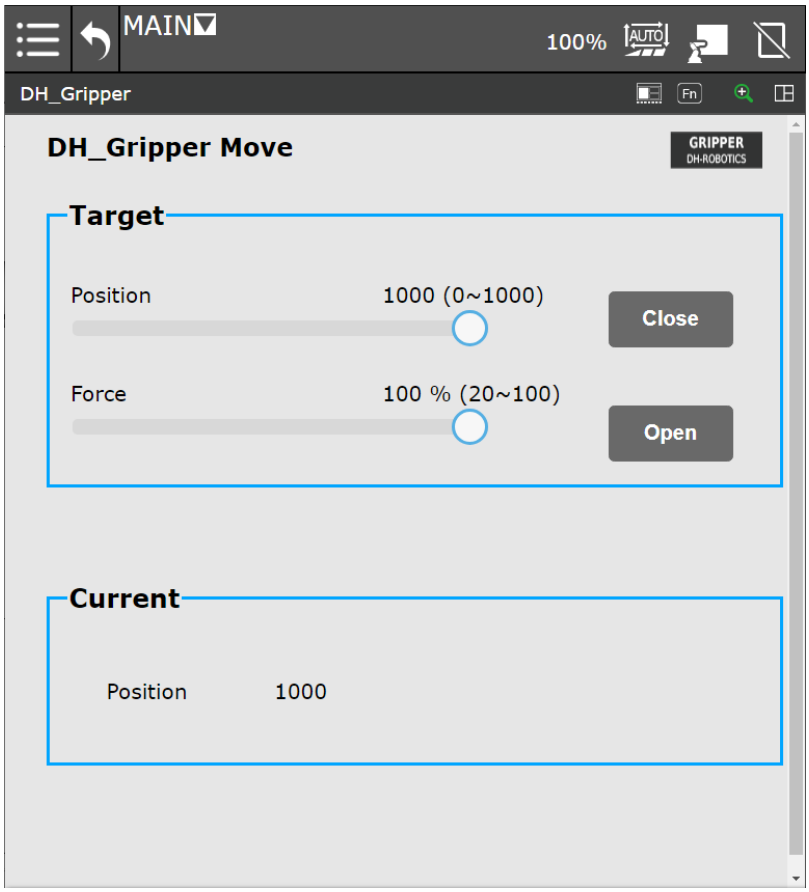
Example:
Read initialization state (read):
Send: 01 03 02 00 00 01 85 B2
Return: 01 03 02 00 00 B8 44

2.2. Gripper Move

1. Target is move target parameter, set the position and force value. If the target values changes, the gripper will run to the target position with target force.

2. Also have “Hot key” is close and open.

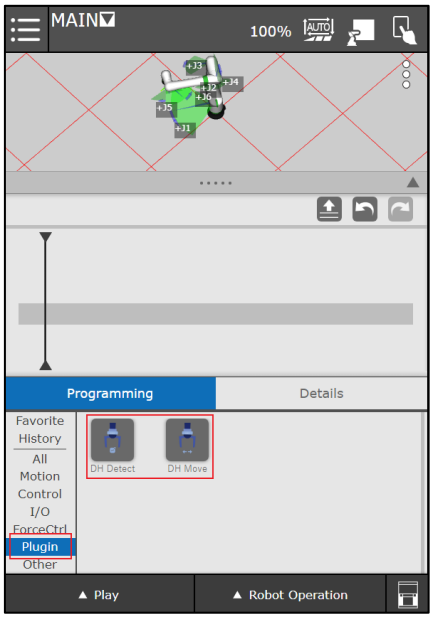
3. Current is the gripper feedback parameter, the current position of the gripper.



3. Program Configuration

3.1. Increase Node

The plugin “DH Move” node and “DH Detect” to edit program.



3.2. Move Node

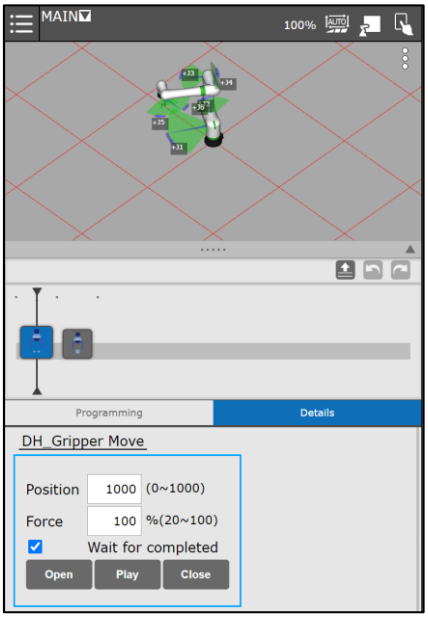
Position and Force: Set gripper parameter

Wait for completed: The program wait the gripper complete move to run next node.

Open: Test the gripper open.

Close: Test the gripper close.

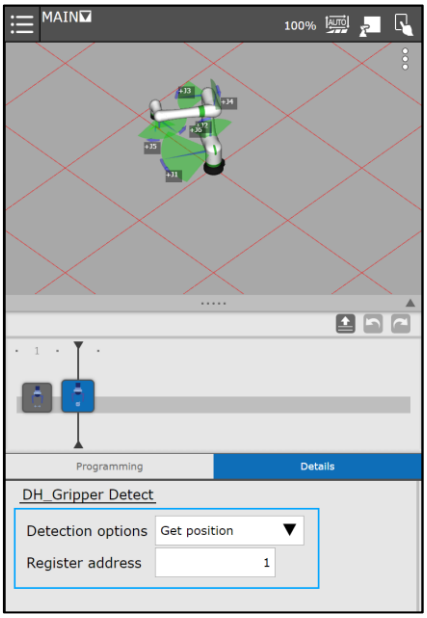
Play: Test the gripper parameter.



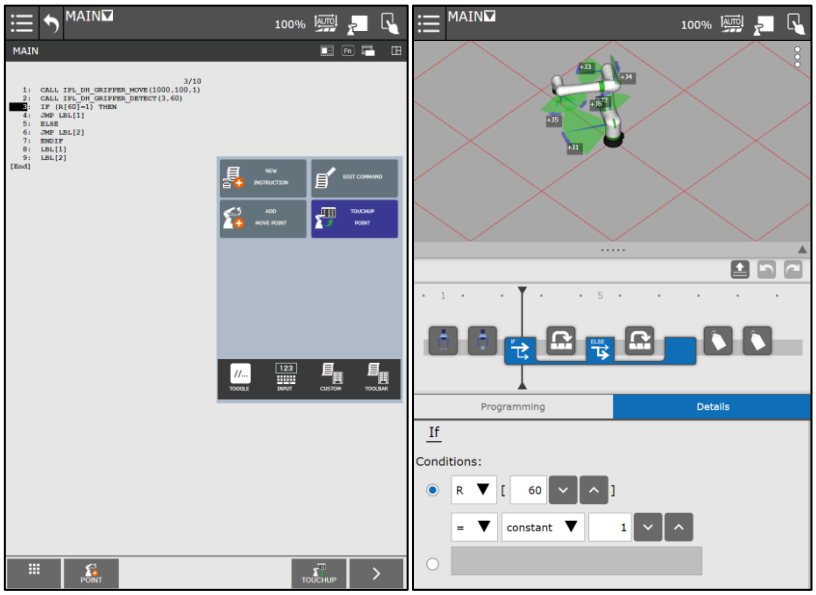
3.3. Detect Node

Detection options: To select “Get position”, “Is arrived” and “Is gripped”.

Register address: The register index that stores the returned results.



3.4. Program demo



Script：

```
CALL IPL_DH_GRIPPER_MOVE(1000,100,1)
CALL IPL_DH_GRIPPER_DETECT(3,60)
IF (R[60]=1) THEN
JMP LBL[1]
ELSE
JMP LBL[2]
```

ENDIF

LBL[1]

LBL[2]

Note：

CALL IPL_DH_GRIPPER_DETECT(3,60)

	Parameter 1	Parameter 2
Demo	3: Select “Is gripped”	60: R[60] register address
Details	1: Select “Get position” 3: Select “Is arrived” 3: Select “Is gripped”	Register address

4. Note

4.1. System configure

Select “System” -> “Config”.

Find “Multi program select”, choose “True”.