DC Servo Gripper Installation Guide

for

Scorbot-ER 9 Pro

Scorbot-ER 14 Pro



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Installation for SCORBOT-ER 9 Pro

To install the DC servo gripper, follow the procedure below:

- 1. Turn on the computer and the USB-Pro controller.
- 2. Start Scorbase Pro or Robocell Pro as relevant.
- 3. Enter On-line mode by selecting **Options | On-line** from the menu bar.
- 4. Click the **Search Home** button and verify that the routine is successfully completed.

Note: The robot must be in the home position for the proper installation of the gripper.

Do not change the position of the robot after it has been homed.

- 5. Turn off the controller.
- 6. Attach the gripper to the gripper mounting flange at the end of the robot arm using four M4x10 socket screws and a 3mm Allen key (hex wrench), as shown in the inset in Figure 1.



Figure 1: Attaching Gripper to SCORBOT-ER 9Pro

- 7. Connect the gripper cable to the electrical connector on the robot arm.
- 8. Ensure that the connector is oriented as shown in Figure 1 and that the gripper cable is positioned as shown in Figure 2.



Figure 2: Connecting Gripper Cable to SCORBOT-ER 9Pro

- 9. Turn on the controller.
- 10. Enter On-line mode.
- 11. Select **Options | Hardware setup** from the menu bar.
- 12. Select **Servo** from the *Gripper Type* drop-down menu.
- 13. Click **OK**.
- 14. Refer to the Controller USB-Pro User Manual and the Scorbase for ER 9Pro/ER 14Pro User Manual for details on installation and setup.
- 15. Click the **Search Home** button.
 - *Note:* If the gripper cable becomes entangled or excessively stretched while homing, abort the procedure immediately.
- 16. Select File | New Project from the menu bar.
- 17. Click on the **Open Gripper** and **Close Gripper** buttons in the *Manual Movement* dialog box to open and close the gripper to verify that it functions properly.
 - *Note:* The Teach Pendant can also be used to open and close the gripper by keying in *Open/Close* several times.

Installation for SCORBOT-ER 14 Pro

To install the DC servo gripper, follow the procedure below:

- 1. Turn on the computer and the USB-Pro controller.
- 2. Start Scorbase Pro or Robocell Pro as relevant.
- 3. Enter On-line mode by selecting **Options | On-line** from the menu bar.
- 4. Click the **Search Home** button and verify that the routine is completed successfully.

Note: The robot must be in the home position for the proper installation of the gripper.

Do not change the position of the robot after it has been homed.

- 5. Turn off the controller.
- Attach the gripper to the gripper mounting flange at the end of the robot arm, using four M4x10 socket screws and a 3mm Allen key (hex wrench), as shown in the inset in Figure 3.



Figure 3: Attaching Gripper to SCORBOT-ER 14Pro

7. Connect the gripper cable to the electrical connector on the robot arm.



Figure 4: Connecting Gripper Cable to SCORBOT-ER 14 Pro

- 8. Fit the two cable clamps onto the two gripper cables.
- 9. Place the clamps on the flange.
- 10. Fit the spacer on the cable clamp screw, and tighten the screw onto the flange.
- 11. Turn on the controller
- 12. Enter On-line mode.
- 13. Select **Options | Hardware setup** from the menu bar.
- 14. Select **Servo** from the *Gripper Type* drop-down menu.
- 15. Click **OK**.
- 16. Refer to the Controller USB-Pro User Manual and the Scorbase for ER 9Pro/ER 14Pro User Manual for details on installation and setup.
- 17. Click the **Search Home** button.
 - *Note:* If the gripper cable becomes entangled or excessively stretched while homing, abort the procedure immediately.
- 18. Select File | New Project from the menu .
- 19. Click on the **Open Gripper** and **Close Gripper** buttons in the *Manual Movement* dialog box to open and close the gripper to verify that it functions properly.
 - **Note:** The Teach Pendant can also be used to open and close the gripper by keying in Open/Close several times.

The gripper has a rotation of $\pm 270^{\circ}$. Do not attempt to move the gripper beyond this limit.