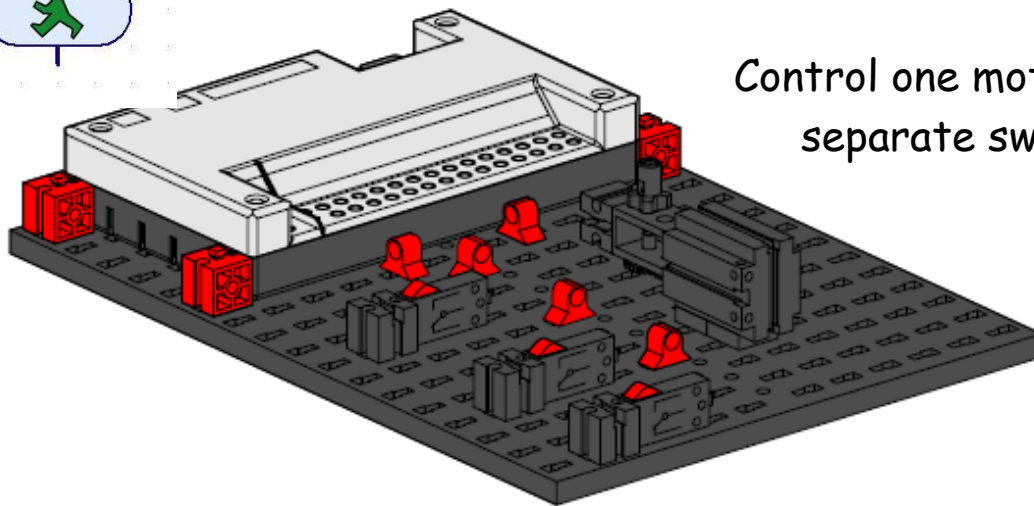


Robotics

Science 8



Model 1: The Motor Control



Control one motor with 3 separate switches

Assemble the model:

Step 1: Build the Motor Control model as shown in these assembly instructions.

Step 2: Wire the pushbutton switches as "normally off" or "closer" (see Quick Guide). and connect them to the **digital inputs I1 - I8** on the computer interface.

Step 3: Wire the motor to the **outputs M1 - M4** on the computer interface.

Programming Tasks:

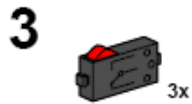
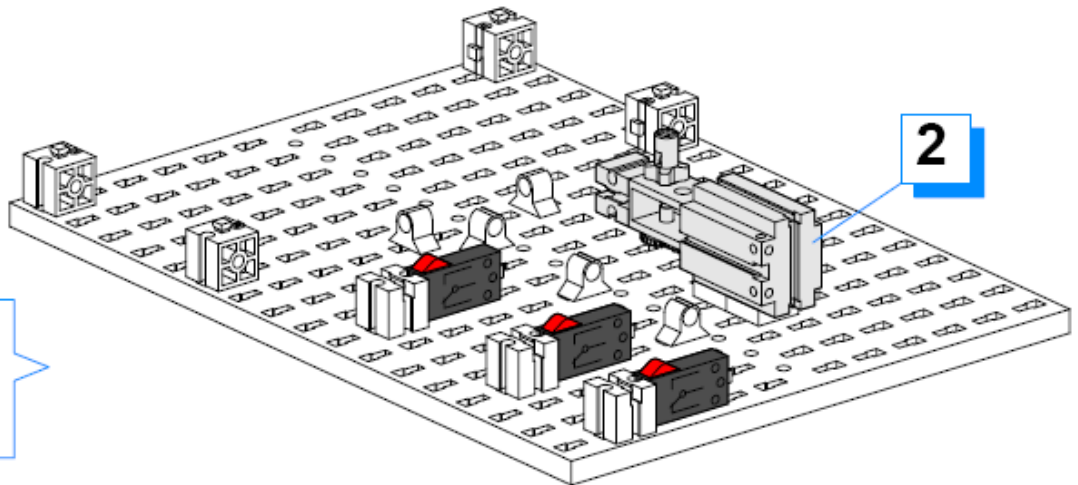
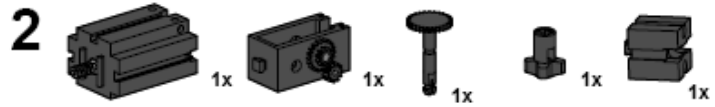
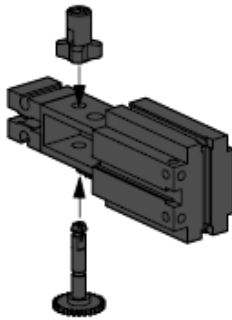
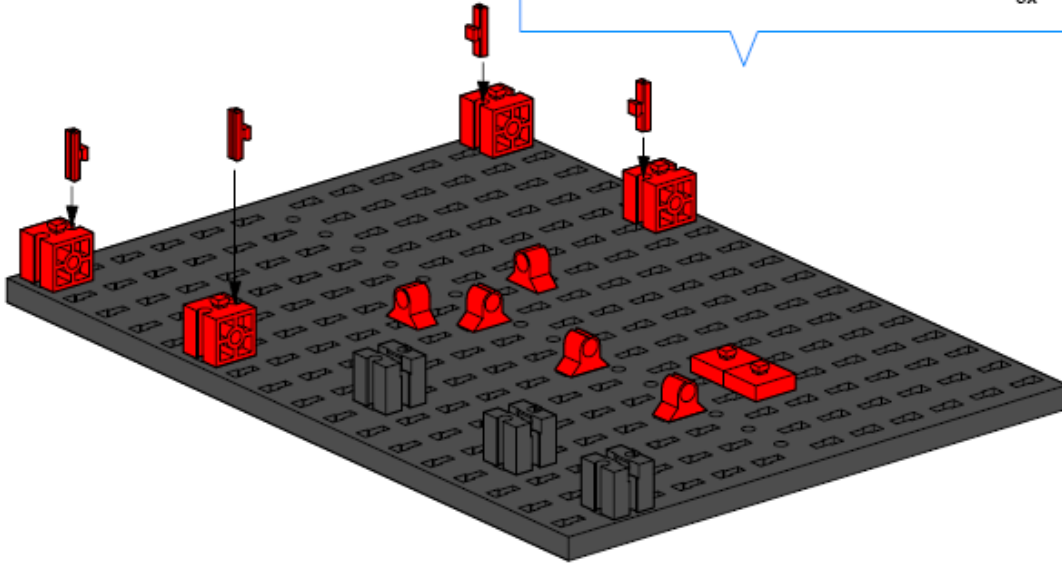
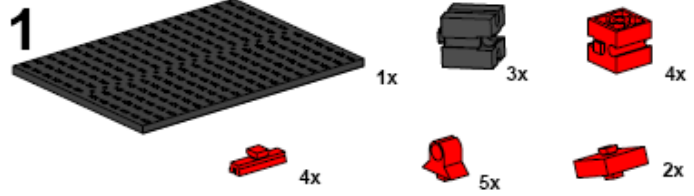
Task 1: When switch # 1 is pressed and released, the motor will turn counterclockwise until switch # 2 is pressed; then the motor will stop and the program ends.

Task 2: When switch #1 is pressed and released, the motor will turn counterclockwise until switch #2 is pressed; then the motor will stop for 10 seconds and turn on clockwise until switch #3 is pressed. The motor stops and the program ends.

Task 3: Press switch #1 to start the motor counterclockwise.
Press switch #2 to reverse the motor direction (clockwise).
Press switch #3 to stop the motor.
Loop the program (do not use an END element) so these switches work anytime they are pressed.

Model 1 - The Motor Control

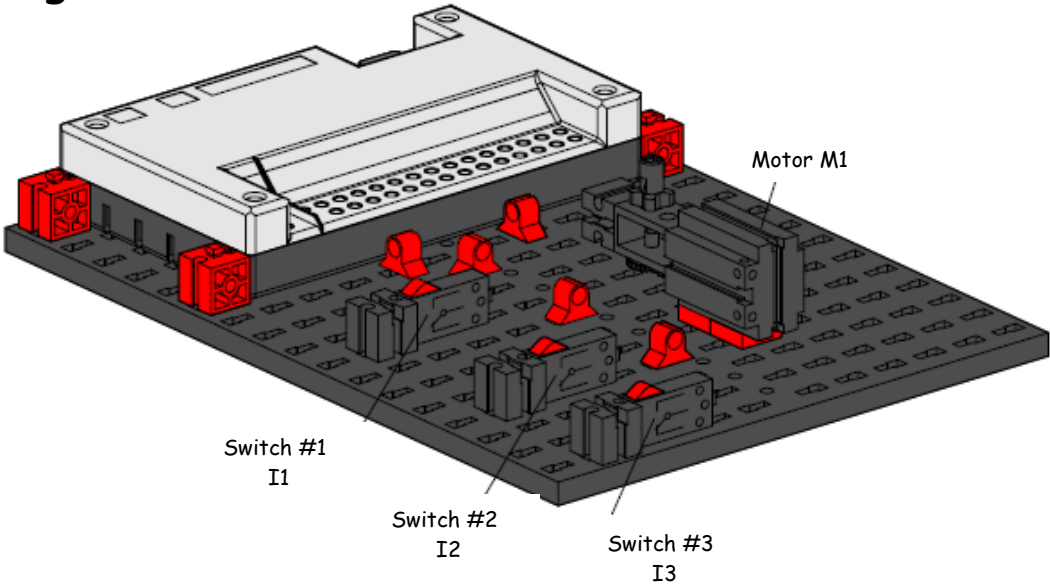
Assembly Instructions Page 1



Model 1 - The Motor Control

Assembly Instructions

Page 2



Wiring Diagram
Note: our interface looks a little different from this picture.

