Trixbrix Control and Automation
USER MANUAL

Controller operation

- After connecting the power supply to the controller, all peripherals are in the default state
- After pressing the left red button, all peripherals will switch to the opposite state
- Pressing the right red button changes the state of all peripherals again
- LEDs flash during state change
- The controller has 2 modes: for boom barriers and for switches

Switch mode

- The controller starts in the switch mode
- In switch mode the switches have priority over boom barriers and switch first
- Both detector inputs behave in the same way and initiate the state change immediately upon train detection

Boom barrier mode

- To enter boom barrier mode press and hold both red buttons for 2 seconds. The mode change will be confirmed by blinking status light on the controller
- In this mode the boom barriers have the priority over switches
- The detectors work in tandem and the boom barrier change happens when one of the detectors sees a train and afterwards, when the other detector stops seeing the train
- When the barriers are closed the LEDs blink alternately

If during play you notice a malfunction of the controller or its peripherals, disconnect the controller from the power supply immediately!

NOTE:

**Disconnect power when making changes to the system!**

The set contains:

- Boom Barrier LEDs (1)
- Train Detector (2)
- Train Signal Mast with LEDs (3)
- Cable Guide (4)
- Extencion cable 90cm (5)
- Extencion cable 60cm (6)
- USB cable (7)

- All-In-One Controller (8)
- Boom Barrier (9)
- Power supply (10)
- Left Switch Servo Motor (11)
- Right Switch Servo Motor (12)
- Servo Motor for Original Lego Switches (13)
- Power transfer cable (14)
- Splitter cable (15)

| 1 | 2 | 3 | 4 | 5 | 6 |

| 7 | 8 | 9 |

| 10 | 11 | 12 | 13 | 14 | 15 |
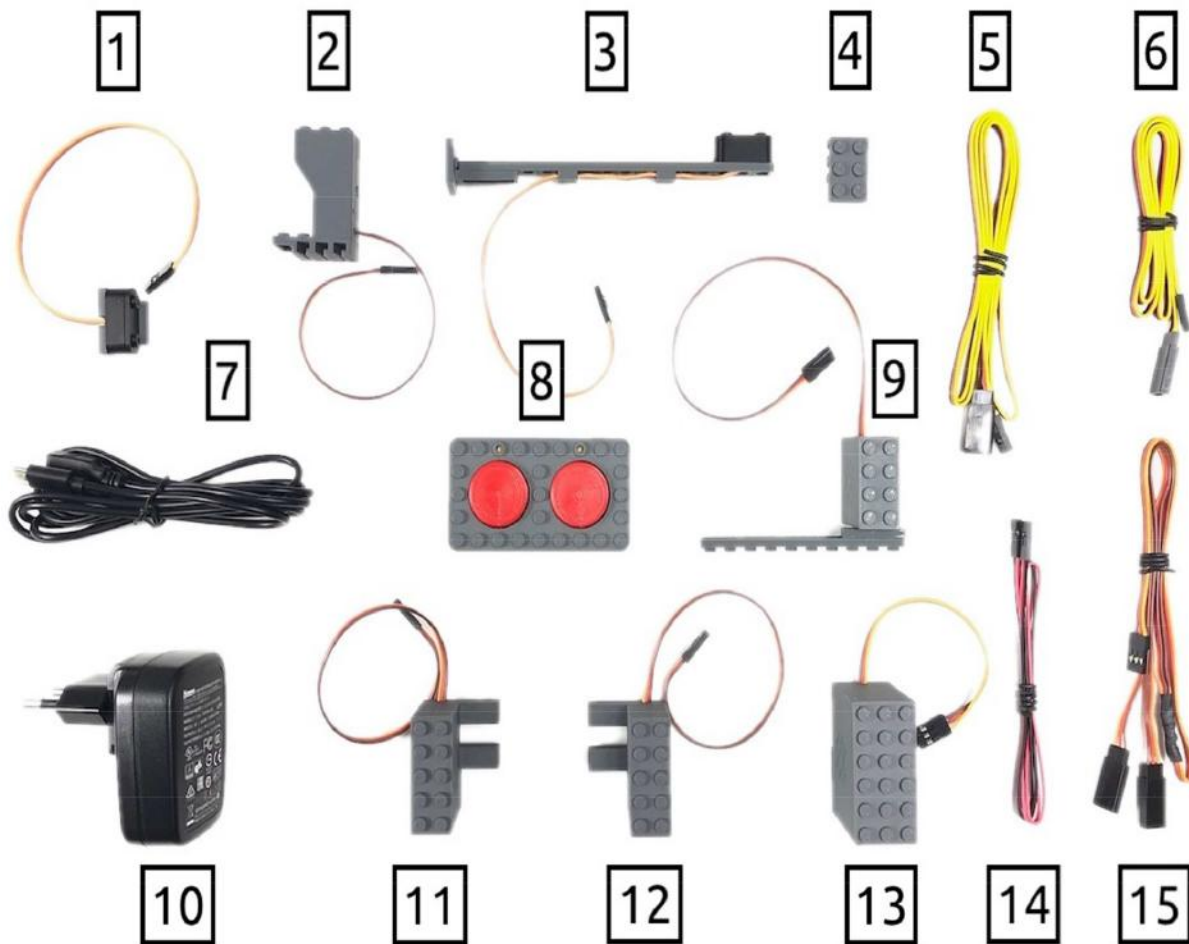
The controller has 9 ports:

On the front:

- **LED** - LED traffic lights
- **TD1** - Train Detector 1
- **TD2** - Train Detector 2
- **BBG** - Boom Barrier Gate
- **SW1** - Switch Right Motor
- **SW2** - Switch Left Motor
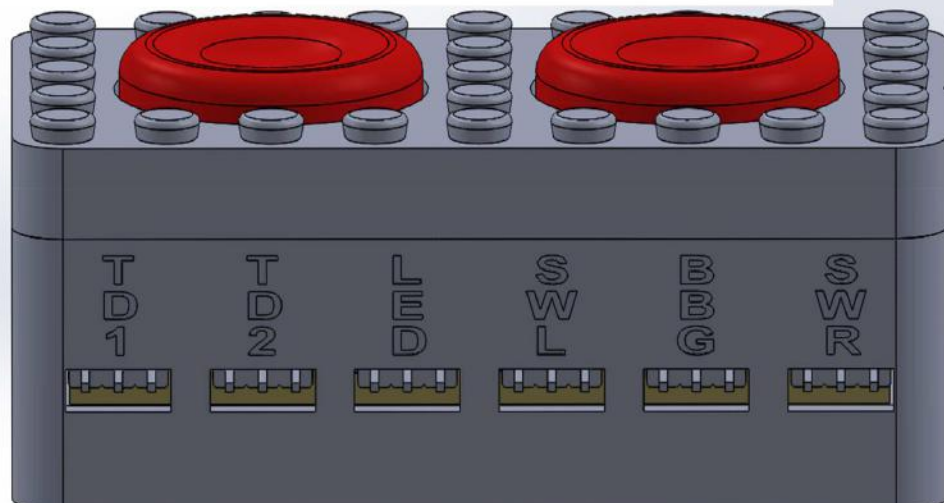
FRONT SIDE OF THE CONTROLLER

On the back:

- OUT - Power output to the next controller (when connecting 2 or more controllers)
- USB - Power Supply
- IN - Power input from the previous controller (when connecting 2 or more controllers)
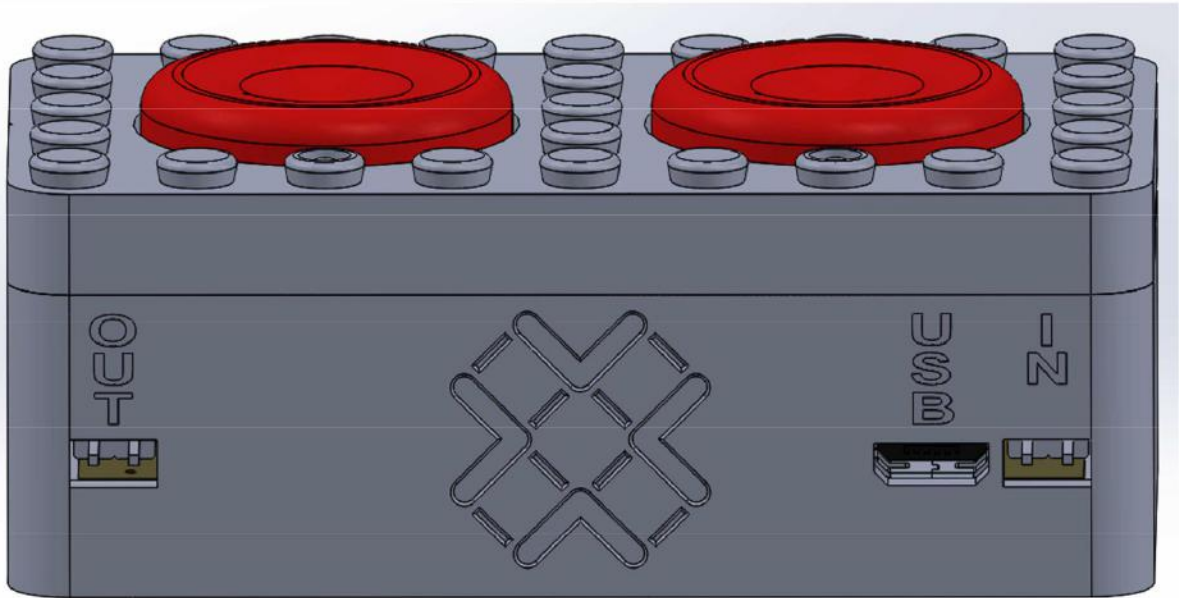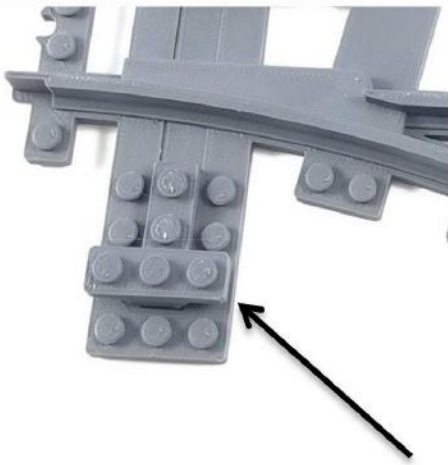

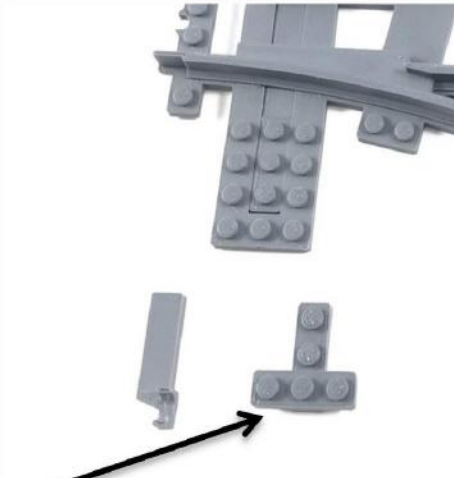*BACK SIDE OF THE CONTROLLER*

this way UP

EXAMPLE OF THE CORRECT WIRING

Instructions for connecting the switch:
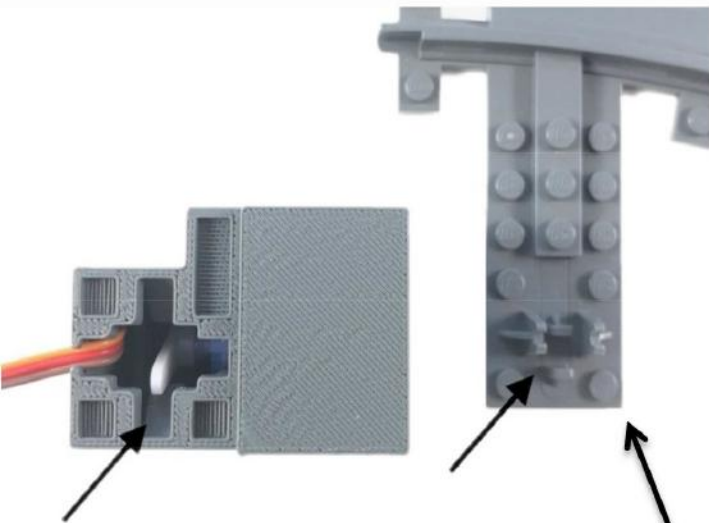
- *Trixbrix switch only:*
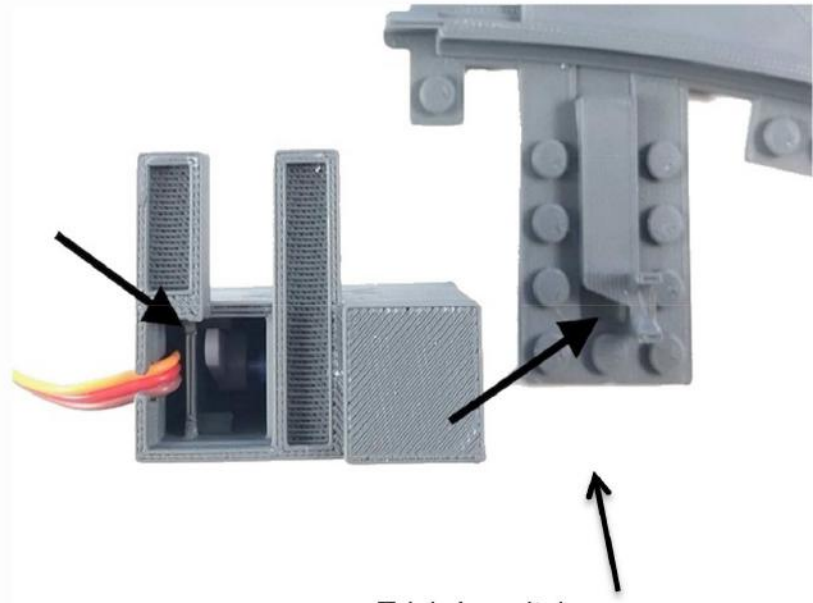
1. Remove the original part

2. Mount a dedicated part

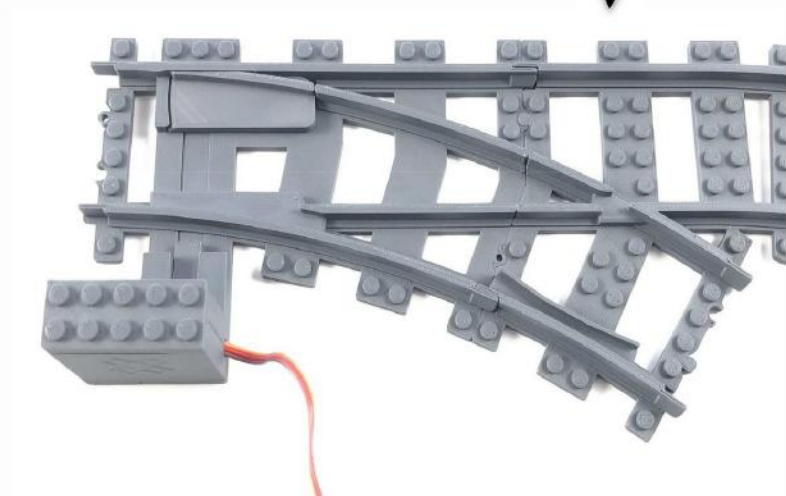- Check in which position the switch is located. If necessary, change the position of the switch to the appropriate one
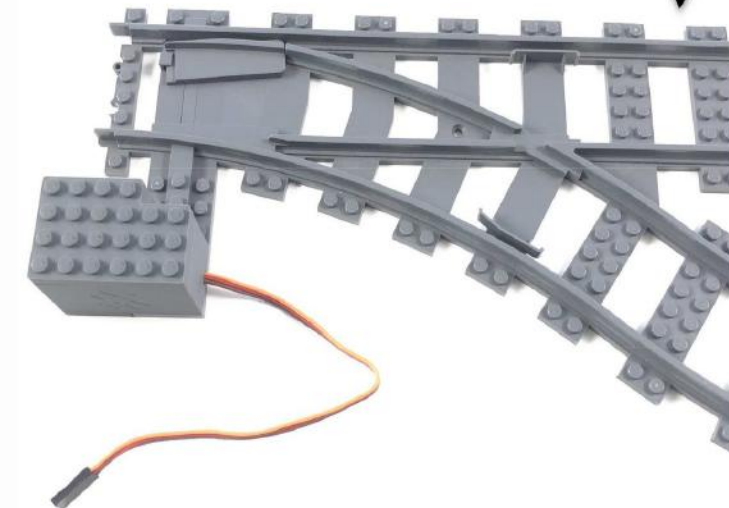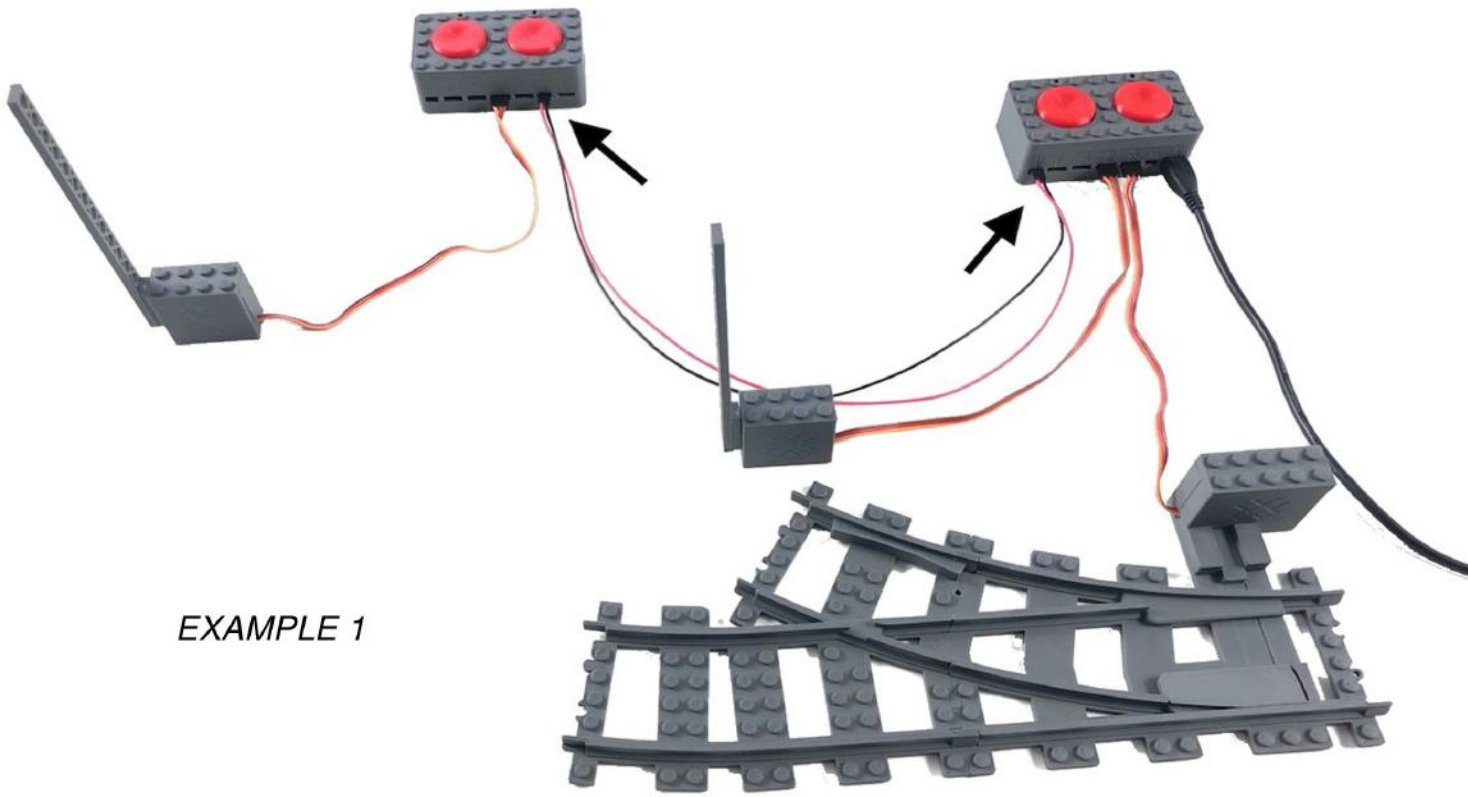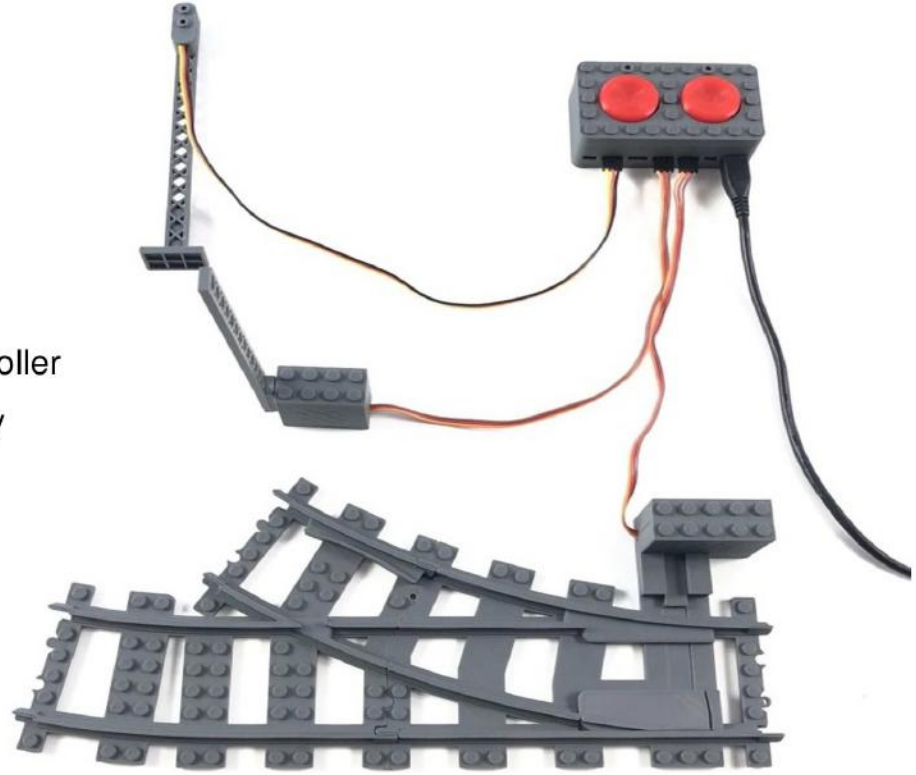
Lego® switch

Trixbrix switch

- Carefully mount the switch (4)

Operating instructions:

- Plug all devices to the controller
- Plug controller to the power supply
- After finishing, disconnect the controller
  from the power supply

EXAMPLE 1

EXAMPLE 2