



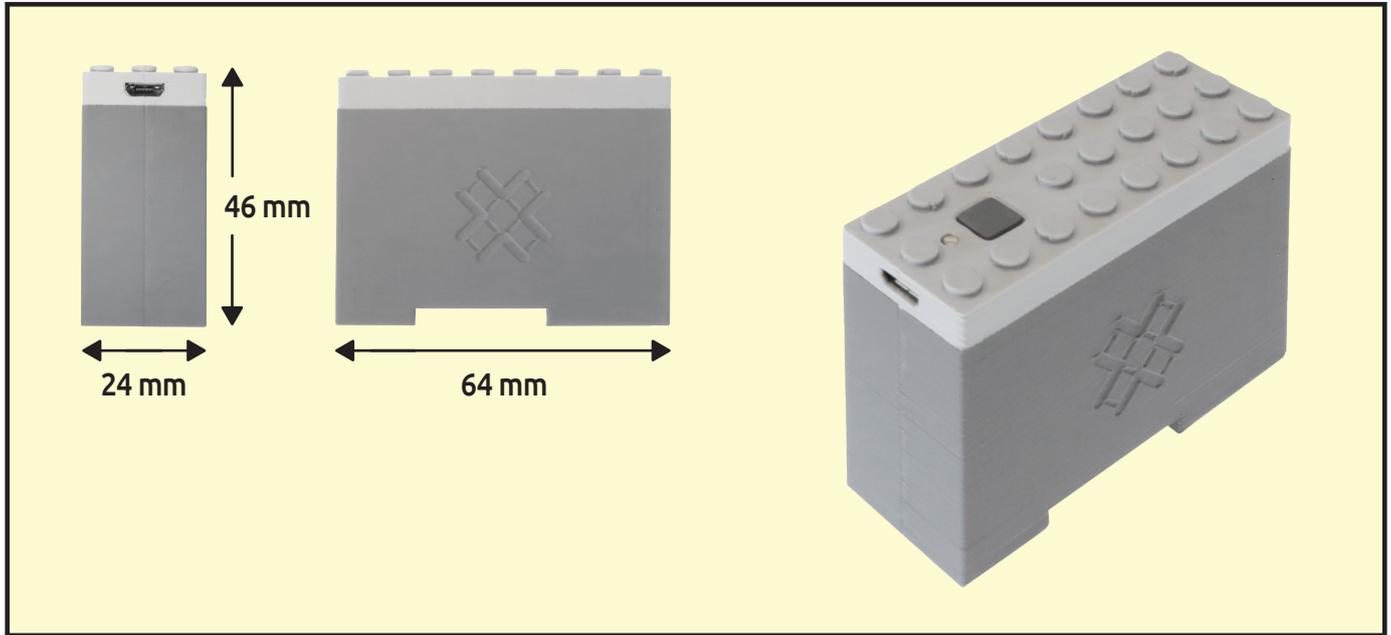
TRIXBRIX

Switch Controller

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Switch Controller



The Switch Controller is a universal device that allows you to control original switches using the same remote that is used to operate the trains.

The device can also be connected to the Powered Up mobile app. The Switch Controller fully integrates with the Powered Up system and simulates the operation of other devices that are part of this series.

Connecting the Switch Controller with the Train and Remote Control

To control the device remotely, make sure that the train and the remote are turned on and paired with each other (the lights on both the train and the remote should be the same color). Then, turn on the Switch Controller by pressing the main button. When the indicator light starts blinking white, press and hold the main button on the Switch Controller and on any other device (e.g. the remote). Keep holding both buttons until the connection is established. The lights will glow in the same color on all devices, which indicates a successful connection.

The device can now be controlled using the remote. To control the train and the Switch Controller independently, you can place both devices on separate channels. Pressing the power button on the device changes the light color, which corresponds to switching to a different channel. The power button on the remote control allows you to select one of the available channels and control each device separately.

WATCH THE VIDEO →



Changing the Button Assignment on the Switch Controller

On every new Switch Controller, the built-in servo mechanism can be controlled using the buttons on the left side of the remote control, labeled "A". It is possible to change this behavior and assign the servo mechanism to the buttons on the right side of the remote ("B"). To do this, after turning on the device and pairing it with the remote, hold down the power button for one second. Then, after releasing it, press it again quickly 3 times. This combination – hold and then 3 quick presses – will be indicated by three rapid flashes of the light, followed by one or two additional flashes as confirmation. In other words, 3+1 flashes means the servo is controlled with the "A" buttons on the remote, while 3+2 flashes means it is controlled with the "B" buttons.

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Increasing the Number of Devices Controlled by the Remote and Advanced Functions

A single remote control normally allows you to operate only four other devices.

However, by having an additional remote control, you can also create a new, separate network. To do this, all devices that will be part of the new network, including the remote, must be reset. This can be done by powering on each device while holding down its button. After a few seconds, when the button is still held, the indicator light will start flashing purple. This indicates that the previous network identifier has been forgotten and the device has been reset. The button can then be released. Having a TrixBrix wireless device makes it possible to control up to eight devices with just one remote. To achieve this, the key is to pay attention to the order in which devices are powered on. The first device that connects to the remote becomes the "central unit" and manages the other devices added to the network.

Therefore, after turning on the remote control, you should first power on one TrixBrix wireless device. It will then act as the "central unit" and enable control of a larger number of devices. If the remote is first connected to an original Hub, then after pairing four devices it will no longer be possible to add more.

Thanks to this extended capability, a single remote can, for example, control four trains and four separate switch controllers simultaneously, or two trains and six switch controllers.

Controlling an even larger number of devices is possible thanks to the functionality of independent "networks". All devices connected together remember their network identifier. Therefore, when they are turned on again, in any order, there is no need to repeat the pairing process.

Once all devices have been reset, you can begin pairing the remote with any device in the usual way. After the connection is established, the devices will create a new independent network with a new identifier.

It is important to note that different networks are fully independent. This means that a remote connected to one network cannot control devices in another network, even if they are set to the same channel (indicator light color).

Charging the Built-in Battery

Inside the device's casing, there is a 400mAh battery. When its charge level becomes low, the Switch Controller will signal this by flashing the indicator light in red. If this state is ignored, the device may automatically shut down after a short time.

The battery can be charged via the built-in micro-USB charging port (use the included cable). When the device is turned off, the indicator light flashes slowly while charging. Once charging is complete, the light will turn off automatically.

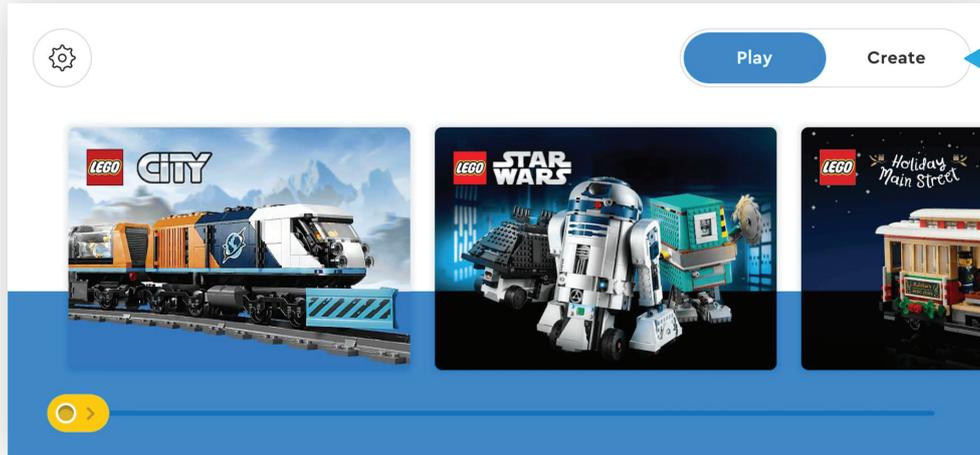
For maximum charging speed, a 5V USB charger capable of delivering at least 1A is required. A full charge should take approximately two hours.

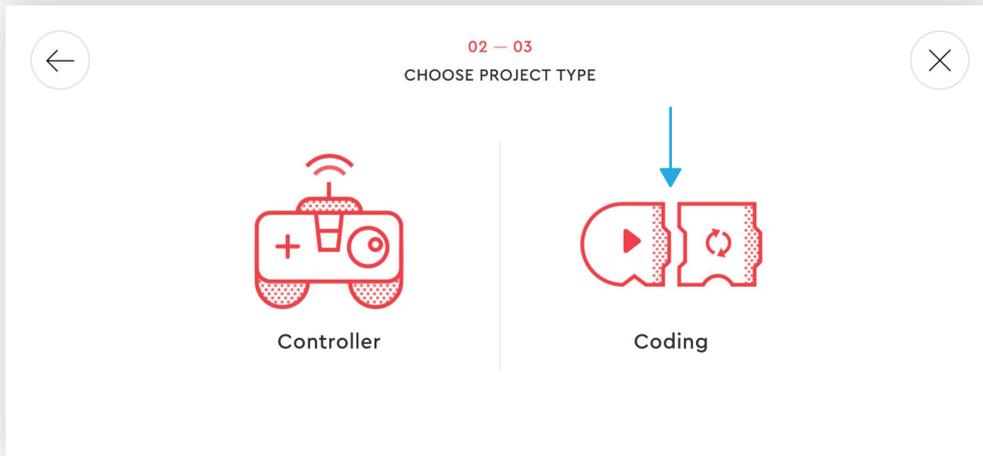
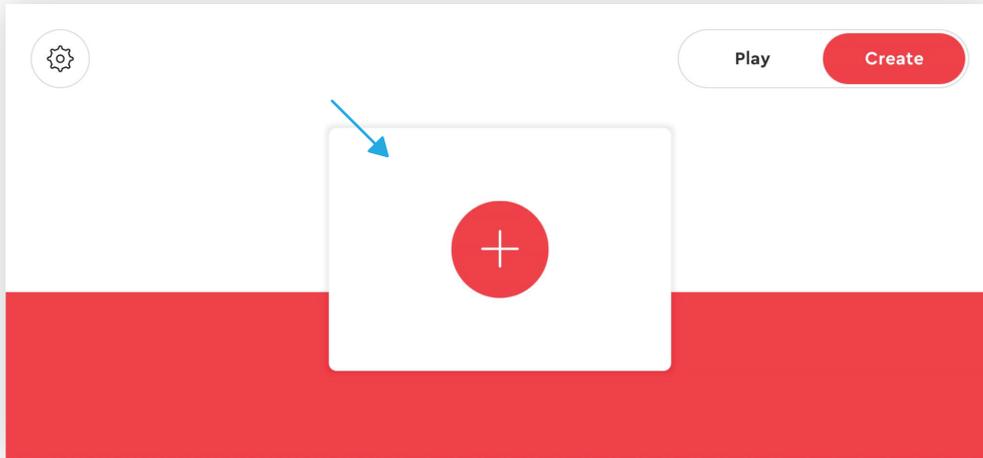
Powered Up Mobile App



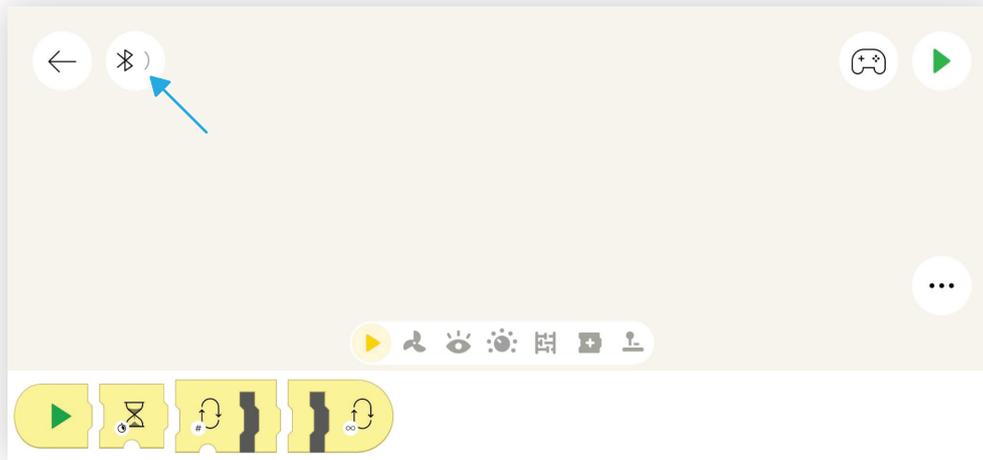
Connecting with the Powered Up Mobile App

After downloading the app to your mobile device and opening it, start by selecting the "Create" option. Create a new project and give it a name. Then, choose the "Programming" option.

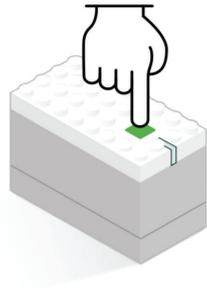




The connection can be established by opening the Bluetooth tab located in the upper left corner. The app will instruct you to turn on the wireless device by pressing the main power button on the Switch Controller. The pairing process takes several seconds but is carried out fully automatically. When paired successfully, the light turns blue.



Connect

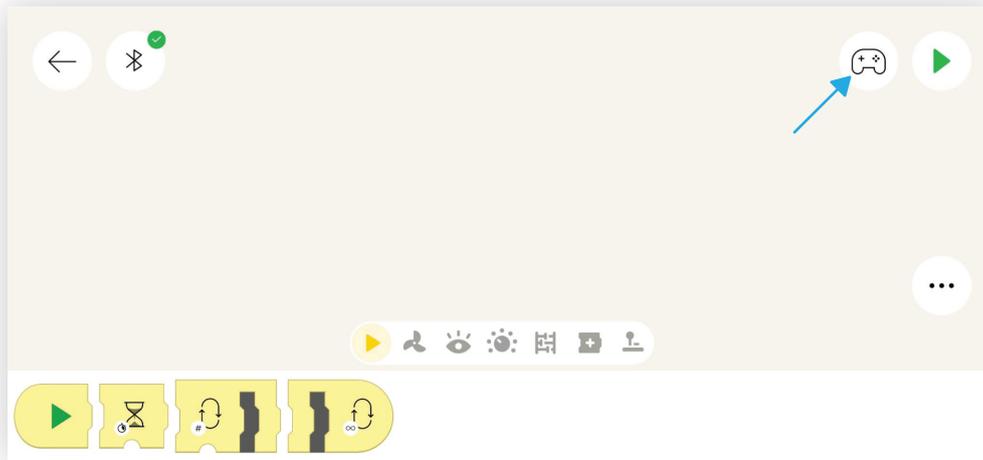


Connect

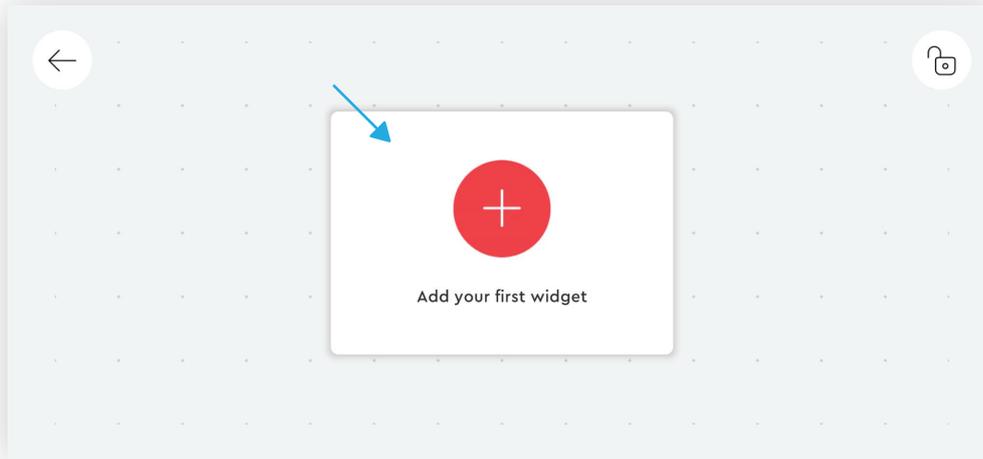


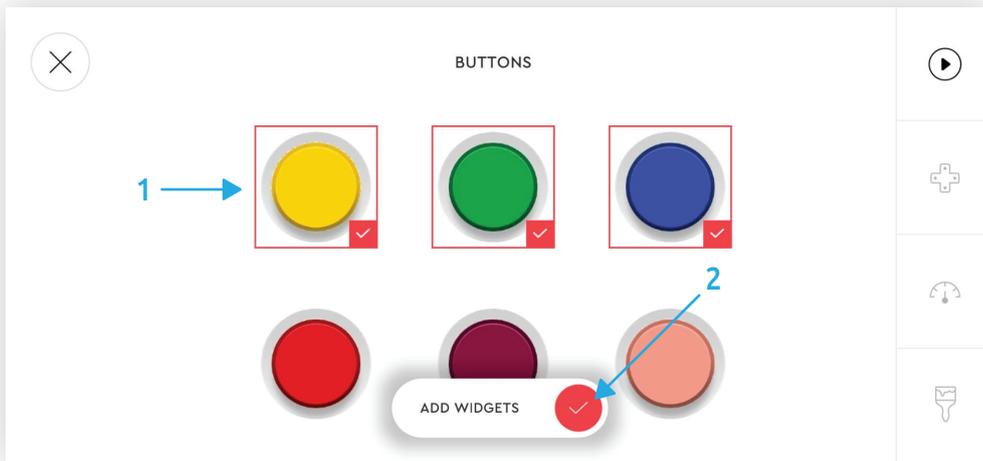
 TrixBrixSwitch  

Creating a control layout in the app is a two-step process consisting of programming the functionality and building the interface. When a new project is opened, the Programming tab is active by default. To open the interface editor, press the remote-control icon in the top-right corner.

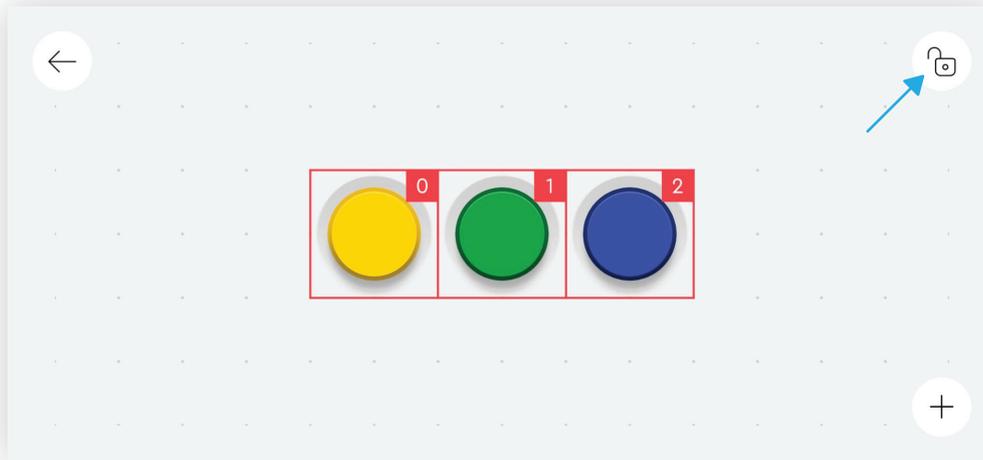


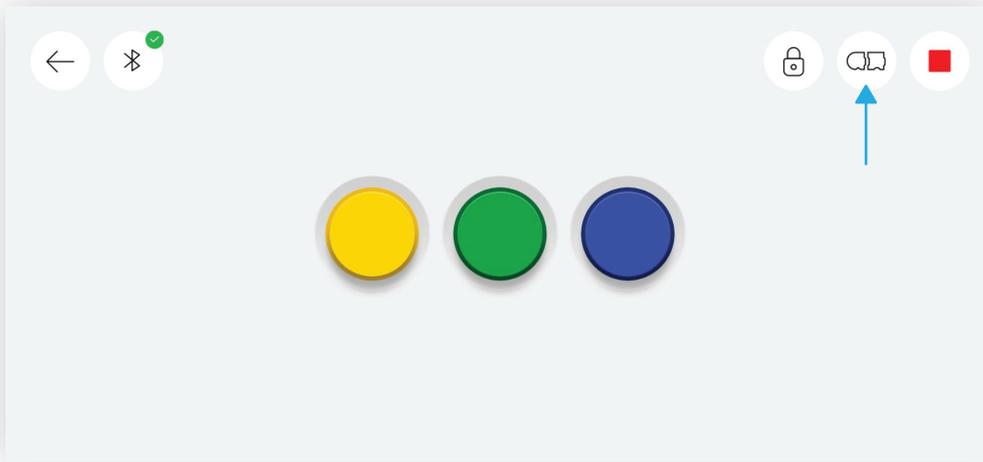
The "ADD WIDGET" button allows you to place buttons on the screen. Each button is assigned a number (which can be seen in the app). These numbers will be important in the next step, so make sure to remember them. After placing a button on the screen, you can press it to change its color and add an identifying symbol (e.g. a number, arrow, +, -, etc.).





To continue the process and assign functions to the selected buttons, you need to lock the interface by pressing the padlock icon and then switch to the Programming tab (the icon with two interlocking bricks in the upper right corner).

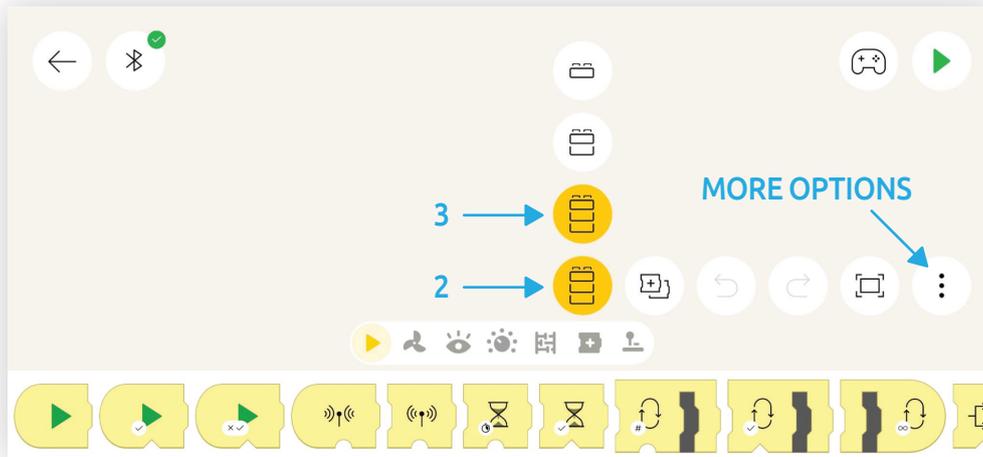




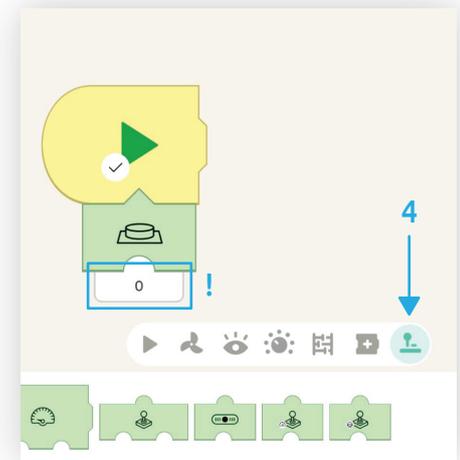
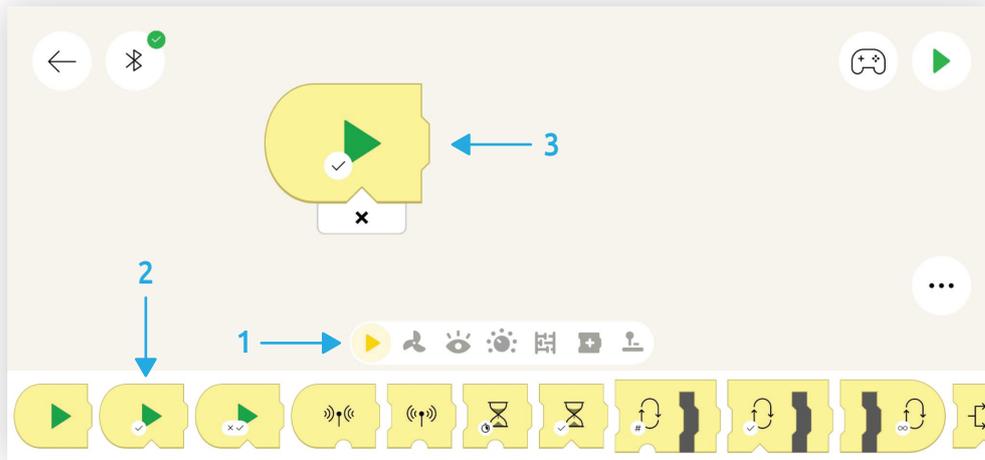
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Custom train tracks

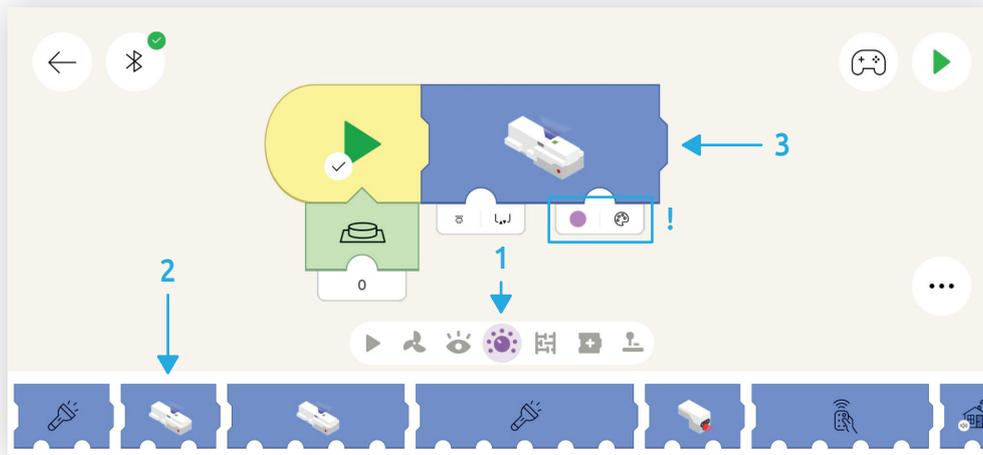
We recommend starting the program creation process by enabling Advanced Mode. To do this, press the "MORE OPTIONS" icon (three dots) and select the first option marked with a single brick, then change it to three bricks.



We recommend starting by assigning a function to a button by selecting a conditional start block (a block that starts the action when the button is pressed) and connecting the button widget to its input. The key step is to select the button number (remembered from the previous stage), which will be responsible for activating the given function.



Next, you can add an action block to the program. The first supported function is the ability to change the color of the indicator light. By using the color change block, you can choose one of the nine available options.



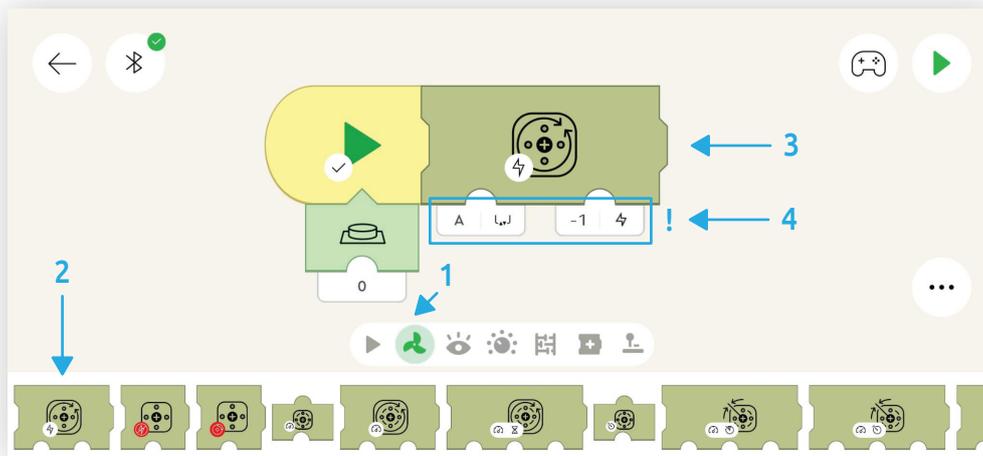
It is also possible to control the built-in servo mechanism by using the first available motor speed control block, the servo can be triggered.

After selecting the appropriate output ("A" or "B"), you need to choose the desired movement by entering a positive or negative value in the speed field, marked with a lightning bolt icon.

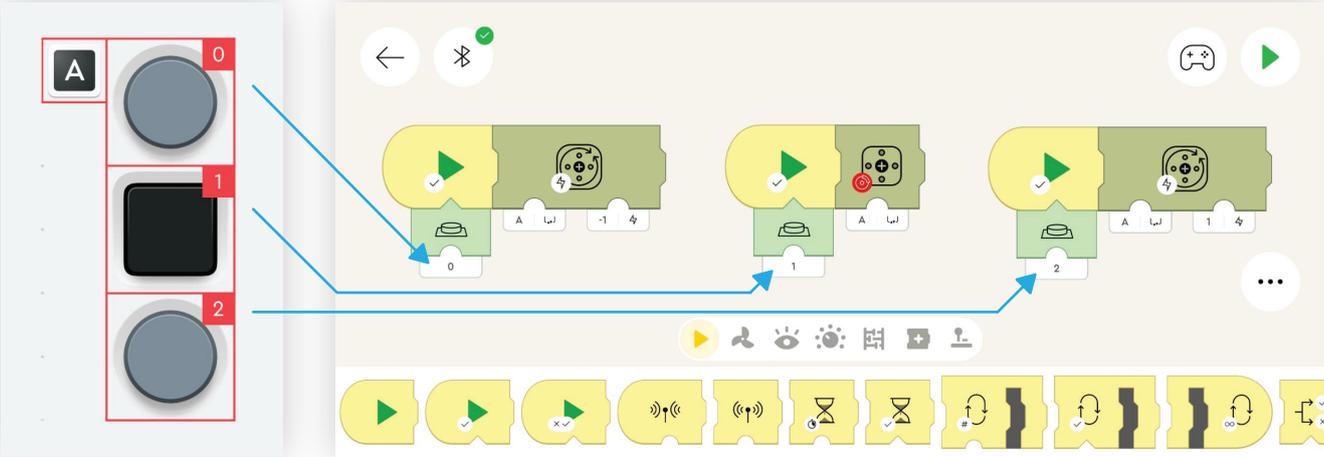
This works the same way as pressing the "+" and "-" buttons on the remote control.

For example, sending a positive value (e.g. 1) through the app will move the output to the first position, while sending a negative value (e.g. -1) will move it to the second position.

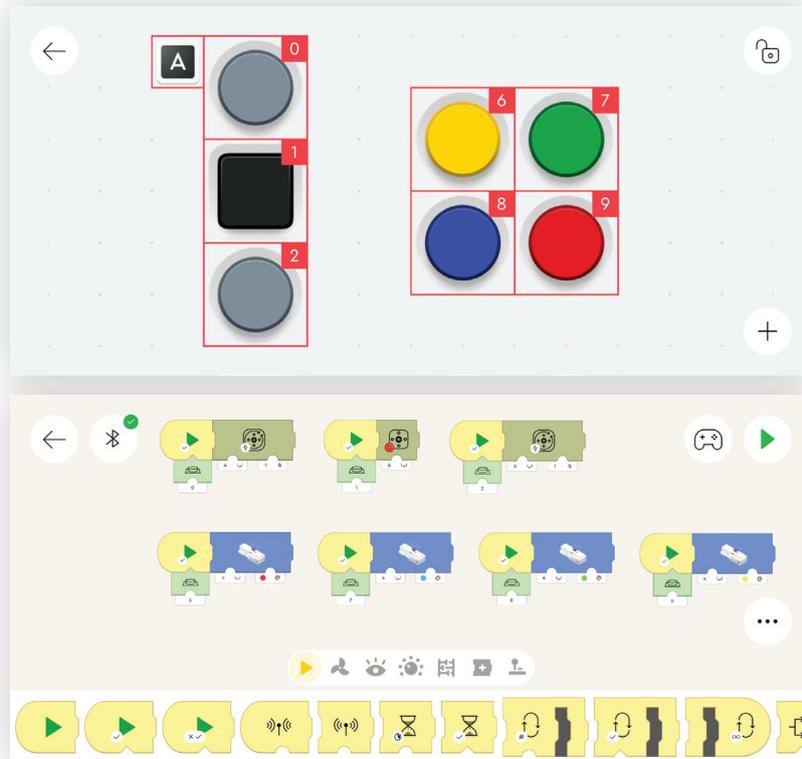
You can also make it switch automatically between positions by using the "stop" block (brake icon). This will trigger an automatic movement from the first position to the second, or from the second back to the first.



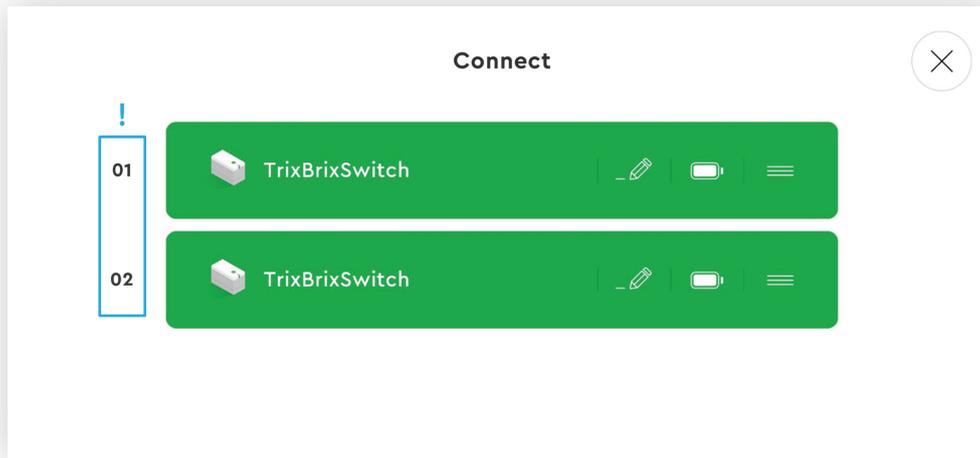
Continue building the program and assigning functions to multiple buttons in the same way. Please remember once again that the button number in the control panel should correspond to the element responsible for triggering the desired function.

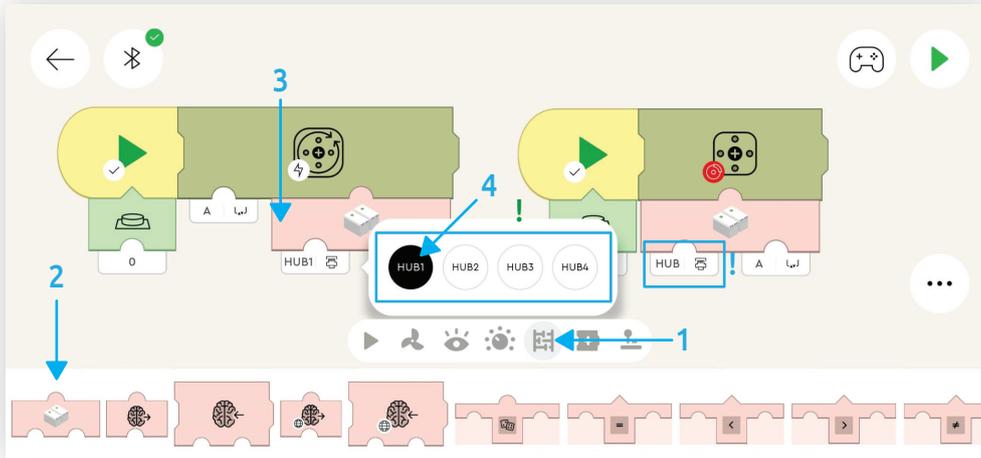


Here's an example of a program that controls all of the device's outputs and changes the indicator light colors:



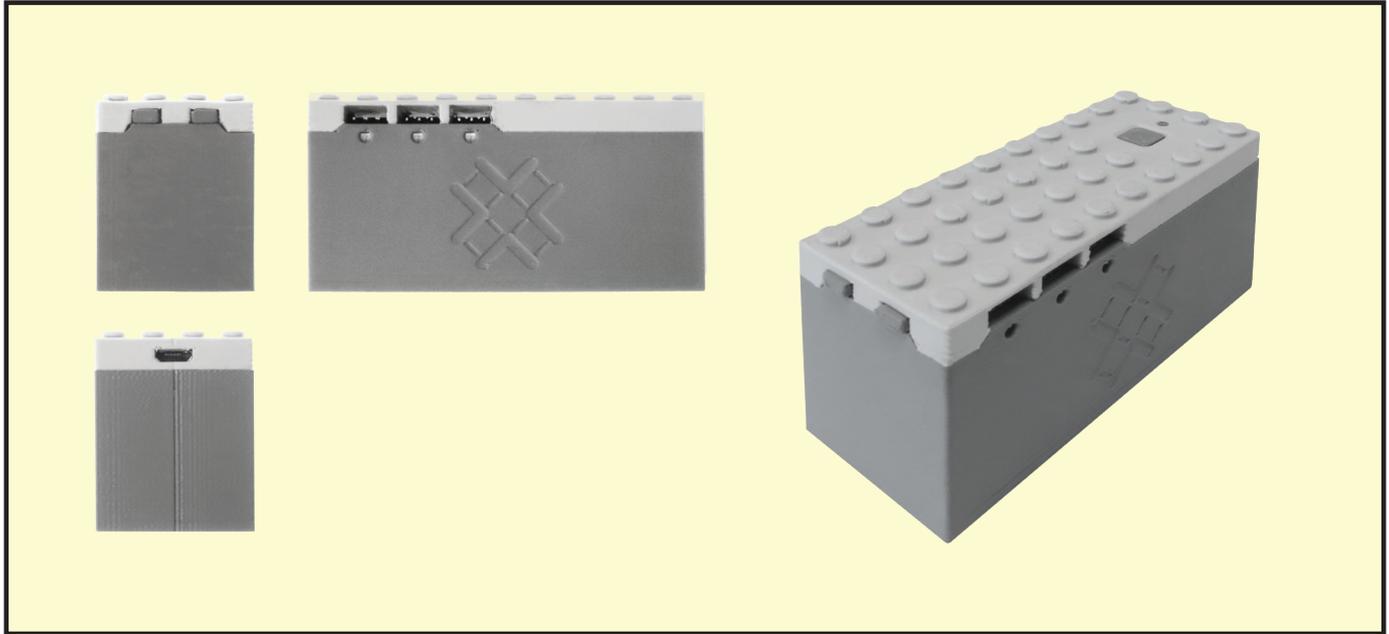
When controlling a larger number of wireless devices, it is necessary to specify in each action which device the command should be sent to. This can be done by replacing the output selection block ("A" or "B") with the device selection block (which lets you choose which device the command is sent to). Each device number corresponds to its position in the Active Connections list.





The Switch Controller also supports, within the app, the ability to rename the device in the Active Connections list, low battery indication, and highlighting the device in the list when the button is pressed.

We also offer the **All-In-One Controller 2.0** – a separate product designed for integrated automation setups.



Learn more at www.trixbrix.eu





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