



# LEGO

### **Medium Engine Usage**

The assembly of the medium motor on the robot is done by following the steps in the program.



The assembled medium motor is controlled using a code block.



A cube assembly is created with the materials from the Lego set, and the necessary program code blocks for transporting it with the medium motor are implemented.







Various tasks are assigned to the robot. It will move 30 cm from a specific point, pick up the cube with the medium motor arm, and transport it back to the starting point. The use of code blocks is reinforced through these tasks.

### **Using the Sound Block**

The robot can produce two types of sounds: a simple tone like a "beep" sound and pre-recorded sounds such as animal noises or human voices.

The robot becomes more interactive and realistic by using the Sound block. The Sound block has four modes.

- Play File: Plays pre-recorded sounds from the sound library.
- Play Tone: Plays a tone at a certain frequency for a certain period of time.
- Play Note: Plays a note from the piano at a specified time.
- Stop: Stops all currently playing sounds.Seçilen moda göre farklı seçenekler gelir.

Volume, Sesin seviyesini ayarlar.

"Volume," adjusts the level of the sound.

"Play Type" is a setting for the type of playback with three options. It is preferred to use "Wait for Completion (0)" to pause the program until the sound stops, "Play Once (1)" to continue running the next block while the sound is playing, and "Repeat (2)" for the sound to repeat while the remaining blocks of the program are running.





In the application, a sequence of 4 notes is played.



The application plays selected tones, waits for 1 second, and repeats this process 3 times.









# Ekran

## Bloğunun Kullanımı

Display" block is the block that allows us to control the screen of the smart brick on the robot. The screen has dimensions of 178x128. Images, text, or shapes can be displayed on the screen.



In the application, "MINDSTORMS" is displayed on the screen for 3 seconds.



Images from the image library can be displayed on the screen in the application.















Additionally, in the application, a 'big smile' image is displayed inside a circle for 10 seconds.



### **Brick Status Block**

The LED on the brick is used in applications by turning on green, yellow and red.













