




NXT Direct Commands

 Non-Visible component

Category	Requires	Version
LEGO® MINDSTORMS® > NXT	API 19, Android 4.4 - 4.4.4 KitKat	1

Overview

A component that provides a low-level interface to a LEGO MINDSTORMS NXT robot, with functions to send NXT Direct Commands.

 **Permissions** 

- `android.permission.INTERNET`
- `android.permission.READ_EXTERNAL_STORAGE`
- `android.permission.WRITE_EXTERNAL_STORAGE`

Methods

Delete File

Delete a file on the robot.

Params	
file Name	Text

Download File

Download a file to the robot.

Params	
source	Text
destination	Text

Get Battery Level

Returns: *Number*

Get the battery level for the robot. Returns the voltage in millivolts.

Get Brick Name

Returns: *Text*

Get the brick name of the robot.

Get Current Program Name

Returns: *Text*

Get the name of currently running program on the robot.

Get Firmware Version

Returns: *List*

Get the firmware and protocol version numbers for the robot as a list where the first element is the firmware version number and the second element is the protocol version number.

Get Input Values

Returns: *List*

Reads the values of an input sensor on the robot. Assumes sensor type has been configured via SetInputMode.

Params	
sensor Port Letter	Text

Get Output State

Returns: *List*

Reads the output state of a motor on the robot.

Params	
motor Port Letter	Text

Keep Alive

Returns: *Number*

Keep Alive. Returns the current sleep time limit in milliseconds.

List Files

Returns: *List*

Returns a list containing the names of matching files found on the robot.

Params	
wildcard	Text

Ls Get Status

Returns: *Number*

Returns the count of available bytes to read.

Params	
sensor Port Letter	<i>Text</i>

Ls Read

Returns: *List*

Reads unsigned low speed data from an input sensor on the robot. Assumes sensor type has been configured via SetInputMode.

Params	
sensor Port Letter	<i>Text</i>

Ls Write

Writes low speed data to an input sensor on the robot. Assumes sensor type has been configured via SetInputMode.

Params	
sensor Port Letter	<i>Text</i>
list	<i>List</i>
rx Data Length	<i>Number</i>

Message Read

Returns: *Text*

Read a message from a mailbox (1-10) on the robot.

Params	
mailbox	Number

Message Write

Write a message to a mailbox (1-10) on the robot.

Params	
mailbox	Number
message	Text

Play Sound File

Play a sound file on the robot.

Params	
file Name	Text

Play Tone

Make the robot play a tone.

Params	
frequency Hz	Number
duration Ms	Number

Reset Input Scaled Value

Reset the scaled value of an input sensor on the robot.

Params	
sensor Port Letter	Text

Reset Motor Position

Reset motor position.

Params	
motor Port Letter	Text
relative	Boolean

Set Brick Name

Set the brick name of the robot.

Params	
name	Text

Set Input Mode

Configure an input sensor on the robot.

Params	
sensor Port Letter	<div>Text</div>
sensor Type	<div>Number</div>
sensor Mode	<div>Number</div>

Set Output State

Sets the output state of a motor on the robot.

Params	
motor Port Letter	<div>Text</div>
power	<div>Number</div>
mode	<div>Number</div>
regulation Mode	<div>Number</div>
turn Ratio	<div>Number</div>
run State	<div>Number</div>
tacho Limit	<div>Number</div>

Start Program

Start execution of a previously downloaded program on the robot.

Params	
program Name	Text

Stop Program

Stop execution of the currently running program on the robot.

Stop Sound Playback

Stop sound playback.

Properties

Bluetooth Client

Component — Write - Designer

The BluetoothClient component that should be used for communication.

Last update: January 26, 2020