# nxtIDE reference manual

## XLC Team

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Float(motor)
Kill power for the motor.
     motor (int) motor we want to stop.
ClearScreen()
Clear the screen.
OnRev(motor, speed)
Set motor to reverse direction and turn it on.
     motor (int) motor we want to run.
     speed (int) speed we want to run the motor at from 0 to 100.
           Negative value reverses direction.
Sensor(sensor)
Read value from given sensor.
     sensor (int) sensor we want to read from
\mathbf{RectOut}(x, y, width, height)
Draw a rectangle from [x, y] with specified width and height.
     \mathbf{x} (int) X coordinate of the start point of the rectangle.
     \mathbf{y} (int) Y coordinate of the start point of the rectangle.
     width (int) The width of the rectangle.
     height (int) The height of the rectangle.
SetSensor(sensor, type)
\mathbf{TextOut}(x, y, text)
Print text on the screen.
     \mathbf{x} (int) X coordinate of the text
     \mathbf{y} (int) Y coordinate or the text
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\mathbf{text} (str) The text to print
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## SetSensorLowspeed(sensor)

#### ClearLine(line)

Clear one line on the screen.

line (int) line we want to clear.

#### SensorUS(sensor)

Read value from given low speed sensor (e.g. Ultrasonic). The input port has to be configured as a Low speed before using this function.

**sensor** (int) sensor we want to read from

## Wait(milisec)

Waits for given number of miliseconds.

milisec (int) number of miliseconds

#### Off(motor)

Turn the motor off (with break).

**motor** (*int*) motor we want to stop.

#### **PlayTone**(freq, duration)

Play a tone.

 $\mathbf{freq}$  (int) Frequency of the tone in Hz.

duration (int) For how long should the brick play this tone.

## NumOut(x, y, num)

Print number on the screen.

 $\mathbf{x}$  (int) X coordinate of the text

 $\mathbf{y}$  (int) Y coordinate or the text

**num** (int) The number to print

#### **LineOut**( $x\theta$ , $y\theta$ , x1, y1)

Draw a line from [x0, y0] to [x1, y1].

**x0** (int) X coordinate of the start point of the line

y0 (int) Y coordinate of the start point of the line

**x1** (int) X coordinate of the end point of the line

y1 (int) Y coordinate of the start point of the line

## $\mathbf{CircleOut}(x,\ y,\ radius)$

Draw a circle with center at [x, y] and specified radius.

- $\mathbf{x}$  (int) X coordinate of the center of the circle.
- $\mathbf{x}$  (int) Y coordinate of the center of the circle.

radius (int) The radius of the circle.

## ${\bf MotorTachoCount}(\mathit{motor})$

Get motor tachometer counter value.

**motor** (int) motor we want to get tachometer count from.

## $\mathbf{PointOut}(x, y)$

Draw a point on the screen at (x, y)

- $\mathbf{x}$  (int) The x coordinate of the point
- $\mathbf{y}$  (int) The y coordinate of the point

#### $\mathbf{Random}(n=0)$

Returns a random number

**n** (int) the maximal value this function should return

#### $\mathbf{OnFwd}(motor, speed)$

Set motor to forward direction and turn it on.

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motor (int) motor we want to run.
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**speed** (int) speed we want to run the motor at from 0 to 100. Negative value reverses direction.

## $\mathbf{ResetTachoCount}(motor)$

Reset tachometer counter.

**motor** (int) desired motor output.

## RotateMotor(motor, speed, angle)

Rotate motor in specified direction at specified speed for the specified number of degrees.

**motor** (int) motor we want to rotate

 ${f speed}$  (int) speed we want to run the motor at, from 0 to 100. Negative value reverses direction.

angle (int) number of degrees we want to rotate the motor. Negative value reverses direction.