THE HOLY MOTION UNIT STADARD

May 9, 2021

Angle, Angular Velocity, Angular Acceleration

Positive Direction: counter clockwise ↺
Units: Rad, $\frac{Rad}{Sec}$, $\frac{Rad}{Sec^2}$
Zero angle direction in relation to the robot: Forward, ↑

Usage of Degrees

The name of a function getting/returning an angle in degrees must end with "Degrees". For example, getAngularVelocityDegrees()
Degrees will be used **only** for making data more intuitive for humans and **not for calculations!!**
Therefore, non-local variable's unit must never be degrees.

Distance, Linear Velocity, Linear Acceleation

Positive Direction: Robot's Forward, ↑
Units: m, $\frac{m}{Sec}$, $\frac{m}{Sec^2}$

Time

Units: Sec
Type: double

Usage of MilliSeconds

There will be none.
getTime() Function in Time class in GBLib will provide the time in seconds

Coordinate system

X-axis: →
Y-axis: ↑
Direction of robot's forward when enabled: ↑