com._604robotics.utils

Class Gyro360

java.lang.Object
  edu.wpi.first.wpilibj.SensorBase
    edu.wpi.first.wpilibj.Gyro
      com._604robotics.utils.Gyro360

All Implemented Interfaces:

IDevice, ISensor, PIDSource

```
public class Gyro360
extends Gyro
implements PIDSource
```

Extender class to constrain the output of a Gyro to 360 degrees, looping.

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Field Summary

Fields inherited from class edu.wpi.first.wpilibj.SensorBase

kAnalogChannels, kAnalogModules, kDigitalChannels, kPwmChannels, kRelayChannels, kSolenoidChannels, kSolenoidModules, kSystemClockTicksPerMicrosecond

Constructor Summary

Constructors

Constructor and Description
Gyro360(**AnalogChannel** channel) Initializes a new Gyro360 on the specified AnalogChannel.
Gyro360(int port) Initializes a new Gyro360 on the specified PWM port.
Gyro360(int slot, int port) Initializes a new Gyro360 on the specified PWM port on the specified module port.

Method Summary

Methods

Modifier and Type	Method and Description
double	**getAngle**() Gets the angle of the gyro, constrained to 360 degrees.
double	**pidGet**() Implements the pidGet() function in the type PIDSource, allowing this class to be used as such.

Methods inherited from class edu.wpi.first.wpilibj.Gyro

free, reset, setSensitivity

Methods inherited from class edu.wpi.first.wpilibj.SensorBase

checkAnalogChannel, checkAnalogModule, checkDigitalChannel, checkDigitalModule, checkPWMChannel, checkPWMModule, checkRelayChannel, checkRelayModule, checkSolenoidChannel, checkSolenoidModule, getDefaultAnalogModule, getDefaultDigitalModule, getDefaultSolenoidModule, setDefaultAnalogModule, setDefaultDigitalModule, setDefaultSolenoidModule

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructor Detail

Gyro360

```
public Gyro360(int port)
```

Initializes a new Gyro360 on the specified PWM port. Note that port must be 1 or 2!

Parameters:

`port` - The PWM port the gyro is plugged into. Must be 1 or 2!

Gyro360

```
public Gyro360(int slot,
       int port)
```

Initializes a new Gyro360 on the specified PWM port on the specified module port. Note that port must be 1 or 2!

Parameters:

`slot` - The module slot the gyro is plugged into.

`port` - The PWM port the gyro is plugged into. Must be 1 or 2!

Gyro360

```
public Gyro360(AnalogChannel channel)
```

Initializes a new Gyro360 on the specified AnalogChannel. Note that port must be 1 or 2!

Parameters:

`channel` - The AnalogChannel the gyro is plugged into.

Method Detail

getAngle

```
public double getAngle()
```

Gets the angle of the gyro, constrained to 360 degrees.

Overrides:

`getAngle` in class `Gyro`

Returns:

The angle of the gyro, constrained to 360 degrees.

pidGet

```
public double pidGet()
```

Implements the pidGet() function in the type PIDSource, allowing this class to be used as such.

Specified by:

`pidGet` in interface `PIDSource`

Overrides:

`pidGet` in class `Gyro`

Returns:

The angle of the gyro, constrained to 360 degrees.