

com._604robotics.utils

Class SpringableRelay

java.lang.Object
 edu.wpi.first.wpilibj.SensorBase
 edu.wpi.first.wpilibj.Relay
 com._604robotics.utils.SpringableRelay

All Implemented Interfaces:

IDevice, IDeviceController

```
public class SpringableRelay
extends Relay
```

Extender of a Relay providing an easier control flow. When an output is set for the Relay, it is considered "sprung". When the "reload" method is called, if the victor is sprung, it unsprings the Relay. If the Relay is not sprung, then the output is set to the default output. In this way, the Relay will only be moving when you tell it to. Use this in a loop or something, and call "reload" at the end. No more worries about code paths that don't update the Relays!

Author:

Michael Smith

Nested Class Summary

Nested classes/interfaces inherited from class edu.wpi.first.wpilibj.Relay

Relay.Direction, Relay.InvalidValueException, Relay.Value

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

SpringableRelay(int moduleNumber, int channel, Relay.Direction direction, Relay.Value defaultDirection)

Initializes a new SpringableRelay.

SpringableRelay(int moduleNumber, int channel, Relay.Value defaultDirection)

Initializes a new SpringableRelay.

SpringableRelay(int channel, Relay.Direction direction, Relay.Value defaultDirection)

Initializes a new SpringableRelay.

SpringableRelay(int channel, Relay.Value defaultDirection)

Initializes a new SpringableRelay.

Method Summary

Methods

Modifier and Type	Method and Description
boolean	<div>getSprung()</div> <div>Has the Relay been sprung?</div>
void	<div>reload()</div> <div>If the Relay has been sprung, unspring it; if not, set the output to the default output.</div>
void	<div>set(Relay.Value direction)</div> <div>Sets the direction of the Relay.</div>

void

`spring()`
Springs the Relay.

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

`free`, `setDirection`

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

SpringableRelay

```
public SpringableRelay(int moduleNumber,
                       int channel,
                       Relay.Direction direction,
                       Relay.Value defaultDirection)
```

Initializes a new SpringableRelay.

Parameters:

- `moduleNumber` - The module slot the Relay is on.
- `channel` - The channel the Relay is on.
- `direction` - The direction the Relay should control.
- `defaultDirection` - The default direction for reloading.

SpringableRelay

```
public SpringableRelay(int channel,
                       Relay.Direction direction,
                       Relay.Value defaultDirection)
```

Initializes a new SpringableRelay.

Parameters:

- `channel` - The channel the Relay is on.
- `direction` - The direction the Relay should control.
- `defaultDirection` - The default direction for reloading.

SpringableRelay

```
public SpringableRelay(int moduleNumber,
                       int channel,
                       Relay.Value defaultDirection)
```

Initializes a new SpringableRelay.

Parameters:

- `moduleNumber` - The module slot the Relay is on.
- `channel` - The channel the Relay is on.
- `defaultDirection` - The default direction for reloading.

SpringableRelay

```
public SpringableRelay(int channel,
                       Relay.Value defaultDirection)
```

Initializes a new SpringableRelay.

Parameters:

Parameters:

- `channel` - The channel the Relay is on.
- `defaultDirection` - The default direction for reloading.

Method Detail

getSprung

```
public boolean getSprung()
```

Has the Relay been sprung?

Returns:

Whether or not the Relay has been sprung.

spring

```
public void spring()
```

Springs the Relay.

set

```
public void set(Relay.Value direction)
```

Sets the direction of the Relay.

Overrides:

`set` in class `Relay`

Parameters:

`direction` - The direction to set.

reload

```
public void reload()
```

If the Relay has been sprung, unsprung it; if not, set the output to the default output.