relay8

Arduino and chipKit library support for relay boards

Manual

PREFACE:

This library is just a quick and easy way to control relay boards. The library supports from 1 to 8 relays.

This library supports relays board with both active high and active low inputs. To set the correct parameter for your relay board you will have to edit **relay8.h**.
Set line 59 to **#define OUTPUT_ON_LEVEL HIGH** if your board requires a **HIGH** signal to switch a relay on. If your board requires a **LOW** signal to switch a relay on you can edit line 32 to be **#define OUTPUT_ON_LEVEL LOW**.

You can always find the latest version of the library at
http://electronics.henningkarlsen.com/

If you make any modifications or improvements to the code, I would appreciate that you share the code with me so that I might include it in the next release. I can be contacted through **http://electronics.henningkarlsen.com/contact.php**.

For version information, please refer to **version.txt**.

FUNCTIONS:

relay8(pin1 [,pin2 [,pin3 [,pin4 [,pin5 [,pin6 [,pin7 [,pin8]]]]]]]);

The main class constructor.

Parameters: pin1: I/O pin for relay #1
pin2: **<optional>** I/O pin for relay #2
pin3: **<optional>** I/O pin for relay #3
pin4: **<optional>** I/O pin for relay #4
pin5: **<optional>** I/O pin for relay #5
pin6: **<optional>** I/O pin for relay #6
pin7: **<optional>** I/O pin for relay #7
pin8: **<optional>** I/O pin for relay #8

Usage: `relay8 relay(2, 3, 4, 5); // Initialize the library for 4 relays on pins 2, 3, 4 and 5.`

numberOfRelays();

Get the number of relays currently controlled by the library.

Parameters: none
Returns: **<int>** Number of relays currently controlled by the library
Usage: `int relays = relay.numberOfRelays(); // Get the number of relays`

on(relay);

Switch on one relay.

Parameters: relay: Number of the relay to switch on [1-8]
Usage: `relay.on(3); // Switch on relay #3`

off(relay);

Switch off one relay.

Parameters: relay: Number of the relay to switch off [1-8]
Usage: `relay.off(3); // Switch off relay #3`

allOn();

Switch on all the relays.

Parameters: None
Usage: `relay.allOn(); // Switch on all the relays`

allOff();

Switch off all the relays.

Parameters: None
Usage: `relay.allOff(); // Switch off all the relays`

cycle([delay_time]);

Cycle through all relays from #1 to the last, then back down to #1 again.

Parameters:	`delay_time:` **`<optional>`** `Time in ms each relay will remain switched on. Default is 250ms.`
Usage:	`relay.cycle(); // Cycle through all relays`

cycleUp([delay_time]);

Cycle up through all relays from #1 to the last.

Parameters:	`delay_time:` **`<optional>`** `Time in ms each relay will remain switched on. Default is 250ms.`
Usage:	`relay.cycleUp(); // Cycle through all relays`

cycleDown([delay_time]);

Cycle down through all relays from the last down to #1.

Parameters:	`delay_time:` **`<optional>`** `Time in ms each relay will remain switched on. Default is 250ms.`
Usage:	`relay.cycleDown(); // Cycle through all relays`

chaseUpOn([delay_time]);

Switch on all relays in sequence from #1 to the last relay.

Parameters:	`delay_time:` **`<optional>`** `Time in ms to delay before switching on the next relay. Default is 250ms.`
Usage:	`relay.chaseUpOn(); // Switch on all relays in sequence from #1 to the last relay`

chaseUpOff([delay_time]);

Switch off all relays in sequence from #1 to the last relay.

Parameters:	`delay_time:` **`<optional>`** `Time in ms to delay before switching off the next relay. Default is 250ms.`
Usage:	`relay.chaseUpOff(); // Switch off all relays in sequence from #1 to the last relay`

chaseDownOn([delay_time]);

Switch on all relays in sequence from the last relay down to #1.

Parameters:	`delay_time:` **`<optional>`** `Time in ms to delay before switching on the next relay. Default is 250ms.`
Usage:	`relay.chaseDownOn(); // Switch on all relays in sequence from the last relay down to #1`

chaseDownOff([delay_time]);

Switch off all relays in sequence from the last relay down to #1.

Parameters:	`delay_time:` **`<optional>`** `Time in ms to delay before switching off the next relay. Default is 250ms.`
Usage:	`relay.chaseDownOff(); // Switch off all relays in sequence from the last relay down to #1`