

RELAYplate Quick Reference Guide

Revision 1.0

RELAY Control Functions

relayON(addr,relay) - turns on (closes) the specified relay

relayOFF(addr,relay) - turns off (opens) the specified relay

relayTOGGLE(addr,relay) - "toggles" state of specified relay. If relay is on, this command will turn it off. If relay is off, this command will turn it on. Use this command to blink a lamp off and on.

relayALL(addr,value) - used to control the state of all relays with a single command. "value" is a 7 bit number with each bit corresponding to a relay. Bit 0 is relay 1, bit 1 is relay 2, and so on. To turn all the relays on at once, use the number 127 for the value.

relaySTATE(addr) - Returns a 7-bit number with the current state of each relay. Bit 0 is relay 1, bit 1 is relay 2, and so on. A "1" in a bit position means that the relay is on and zero means that it's off.

LED Control Functions

setLED(addr) - turn on the LED

clrLED(addr) - turn off the LED

toggleLED(addr) - if LED is on, turn off. If LED is off, turn on.

System Level Functions

getID(addr) - return Pi-Plate descriptor string

getFWrev(addr) - return FW revision in byte format

getHWrev(addr) - return HW revision in byte format

getPMrev() - returns revision of python module

getADDR(addr) - return address of pi-plate. Used for polling available boards at power up.

RESET(addr) - set RELAYplate to power-on state. Turns all relays off.

Definitions

addr: Address - RELAYplates have jumpers on the board that allow their address to be set to a value between 0 and 7.

relay: Each RELAYplate has seven individually addressable relays numbered 1 through 7.

value: some commands require or return a seven bit value that can range from 0 to 127

Complete details with examples can be found at Pi-Plates.com