# REL485-4CH-12V

**Baud rate:** 9600,8,1,none

**Set device address:**

| | |
|---|---|
| Set device address to 0x01 | 00 10 00 00 00 01 02 00 01 6A 00 |
| Set device address to 0x02 | 00 10 00 00 00 01 02 00 02 2A 01 |
| Set device address to 0x03 | 00 10 00 00 00 01 02 00 03 EB C1 |

**Command format:**

| | |
|---|---|
| Example (Relay 0 ON) | 01 05 00 00 FF 00 8C 3A |
| Byte1 (0x01) | Device address |
| Byte2 (0x05) | Function code |
| Byte 3,4 (0x00 0x00) | Register address |
| Byte 5,6 (0xFF 0x00) | Register data |
| Byte 7,8 (0x8C 0x3A) | CRC check |

**Turn ON/OFF relays:**

| | |
|---|---|
| Turn ON Relay 0 | 01 05 00 00 FF 00 8C 3A |
| Turn OFF Relay 0 | 01 05 00 00 00 00 CD CA |
| | |
| Turn ON Relay 1 | 01 05 00 00 FF 00 DD FA |
| Turn OFF Relay 1 | 01 05 00 00 00 00 9C 0A |
| | |
| Turn ON Relay 2 | 01 05 00 00 FF 00 2D FA |
| Turn OFF Relay 2 | 01 05 00 00 00 00 6C 0A |
| | |
| Turn ON Relay 3 | 01 05 00 00 FF 00 7C 3A |
| Turn OFF Relay 3 | 01 05 00 00 00 00 3D CA |

**Read relays status:**

| | |
|---|---|
| Read all relay status | 01 01 00 00 00 08 3D CC |

**Toggle Relay:**

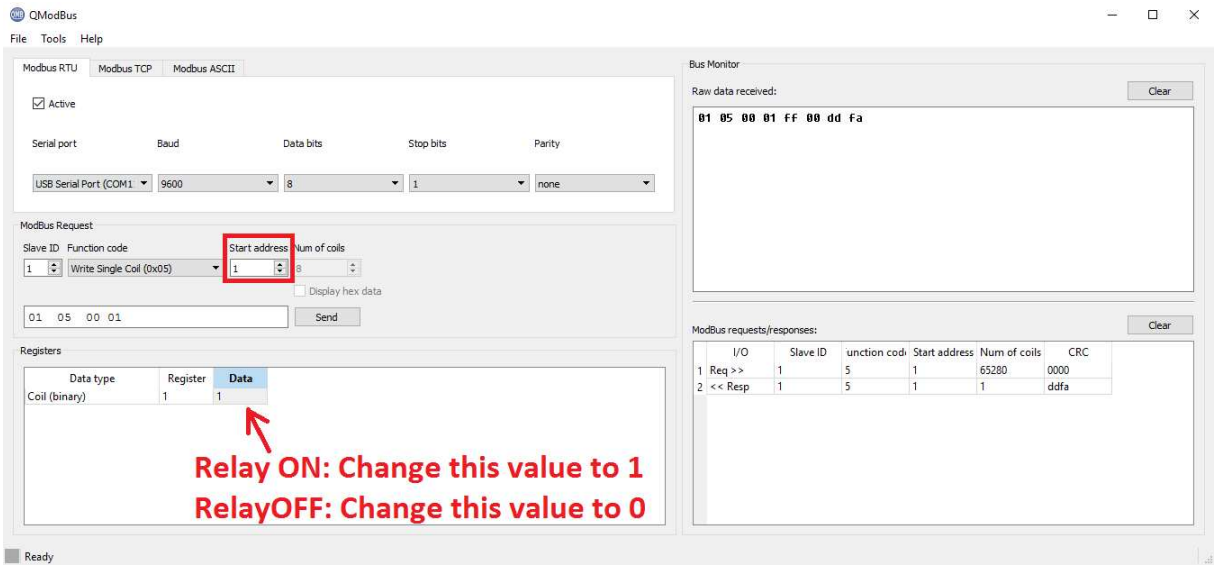
| | |
|---|---|
| Toggle Relay 0 | 01 05 00 00 55 00 F2 9A |
| Toggle Relay 1 | 01 05 00 01 55 00 A3 5A |
| Toggle Relay 2 | 01 05 00 02 55 00 53 5A |
| Toggle Relay 3 | 01 05 00 03 55 00 02 9A |
| Toggle All | 01 05 00 00 5A 00 F7 6A |

**Read Inputs:**

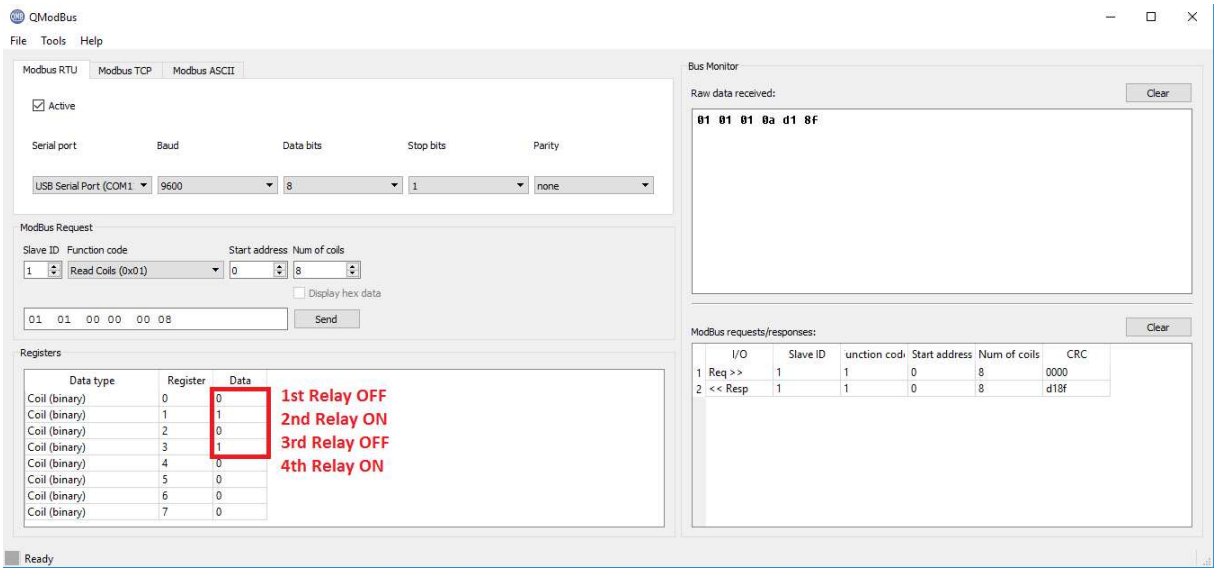
| | |
|---|---|
| Read inputs | 01 02 00 00 00 08 79 CC |

# Examples:

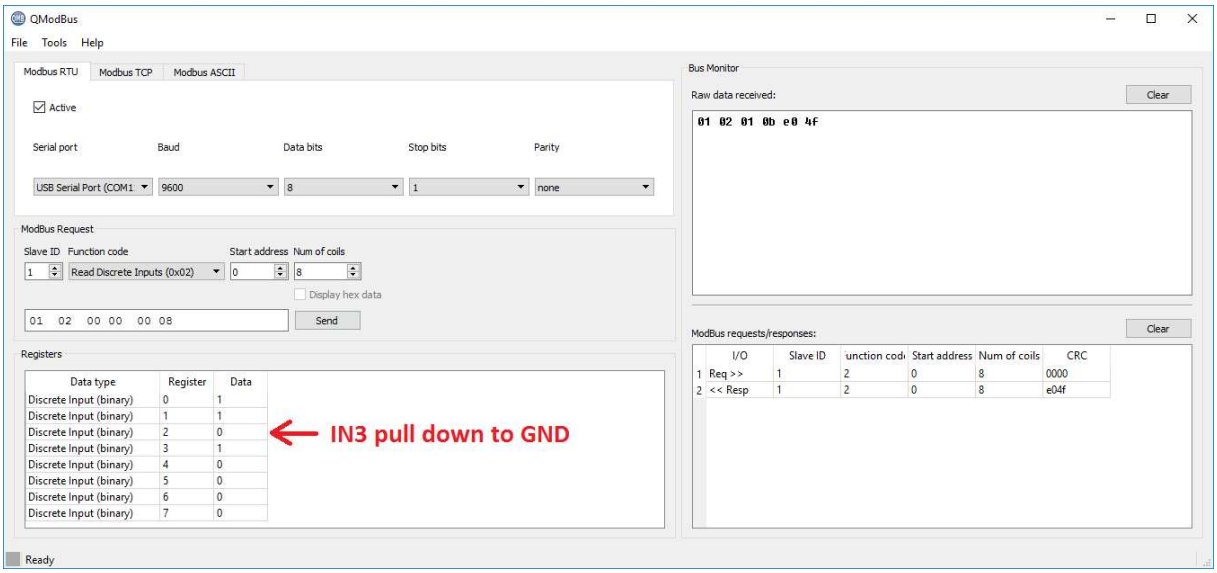
## Set the 2nd relay ON (1st relay start address is 0x00 and the 2nd relay is 0x01!):



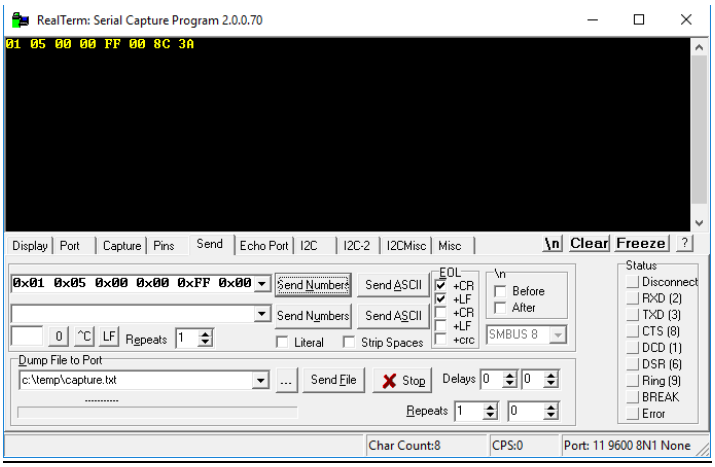

## Read relay status:




## Read Inputs states (for activation it must be pulled to GND, in the default state it is pulled up to 3.3V):



## Turn ON the 1st relay in Realterm:




**Copyable formats:**

**Set device address:**

| | |
|---|---|
| Set device address to 0x01 | 0x00 0x10 0x00 0x00 0x00 0x01 0x02 0x00 0x01 0x6A 0x00 |
| Set device address to 0x02 | 0x00 0x10 0x00 0x00 0x00 0x01 0x02 0x00 0x02 0x2A 0x01 |
| Set device address to 0x03 | 0x00 0x10 0x00 0x00 0x00 0x01 0x02 0x00 0x03 0xEB 0xC1 |

**Command format:**

| | |
|---|---|
| Example (Relay 0 ON) | 0x01 0x05 0x00 0x00 0xFF 0x00 0x8C 0x3A |
| Byte1 (0x01) | Device address |
| Byte2 (0x05) | Function code |
| Byte 3,4 (0x00 0x00) | Register address |
| Byte 5,6 (0xFF 0x00) | Register data |
| Byte 7,8 (0x8C 0x3A) | CRC check |

**Turn ON/OFF relays:**

| | |
|---|---|
| Turn ON Relay 0 | 0x01 0x05 0x00 0x00 0xFF 0x00 0x8C 0x3A |
| Turn OFF Relay 0 | 0x01 0x05 0x00 0x00 0x00 0x00 0xCD 0xCA |
| | |
| Turn ON Relay 1 | 0x01 0x05 0x00 0x00 0xFF 0x00 0xDD 0xFA |
| Turn OFF Relay 1 | 0x01 0x05 0x00 0x00 0x00 0x00 0x9C 0x0A |
| | |
| Turn ON Relay 2 | 0x01 0x05 0x00 0x00 0xFF 0x00 0x2D 0xFA |
| Turn OFF Relay 2 | 0x01 0x05 0x00 0x00 0x00 0x00 0x6C 0x0A |
| | |
| Turn ON Relay 3 | 0x01 0x05 0x00 0x00 0xFF 0x00 0x7C 0x3A |
| Turn OFF Relay 3 | 0x01 0x05 0x00 0x00 0x00 0x00 0x3D 0xCA |

**Read relays status:**

| | |
|---|---|
| Read all relay status | 0x01 0x01 0x00 0x00 0x00 0x08 0x3D 0xCC |

**Toggle Relay:**

| | |
|---|---|
| Toggle Relay 0 | 0x01 0x05 0x00 0x00 0x55 0x00 0xF2 0x9A |
| Toggle Relay 1 | 0x01 0x05 0x00 0x01 0x55 0x00 0xA3 0x5A |
| Toggle Relay 2 | 0x01 0x05 0x00 0x02 0x55 0x00 0x53 0x5A |
| Toggle Relay 3 | 0x01 0x05 0x00 0x03 0x55 0x00 0x02 0x9A |
| Toggle All | 0x01 0x05 0x00 0x00 0x5A 0x00 0xF7 0x6A |

**Read Inputs:**

| | |
|---|---|
| Read inputs | 0x01 0x02 0x00 0x00 0x00 0x08 0x79 0xCC |