# stephane / libmodbus

Code Issues 90 Pull requests 74 Actions Projects 1 Wiki Security Ins

# Libmodbus on Raspberry pi

Jump to bottom

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Raspberry Pi has gained popularity in recent days and a lot of enthusiasts / hobbyist would like to implement libmodbus on RPi to host a modbus master / slave. Here is "how to install libmodbus" guide on RPi (Raspbian).

# 1) Installing dependancies.

sudo apt-get install -y autoconf libtool

# 2) Clone libmodbus master branch by,

git clone https://github.com/stephane/libmodbus/

# 3) Enter the directory.

cd libmodbus

- 4) ./autogen.sh && ./configure --prefix=/usr && make && sudo make install
- 5) To test the libmodbus, try examples under tests folder.

To compile code, use gcc filename.c -o filename \$(pkg-config --libs --cflags libmodbus)

#### Additional notes:

If you're using linux distros (other than debian based), such as Arch Linux or PiDora, you must use relevant package manger options in step #1. (like pacman or yum)

In order to use native RPi serial port for RTU mode, you MUST disable serial console by using sudo raspi-config as it conflicts with modes RTU communication.

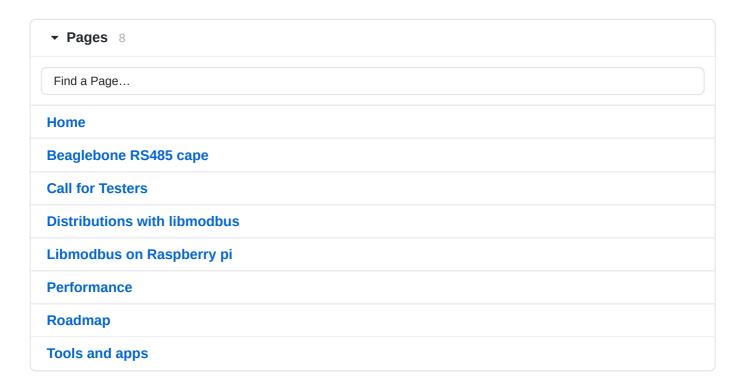
Native serial port is listed as ttyAMA0 under /dev/ directory.

If you're using UART to RS485 chip like 75176 or anything similar, you would like to check the libmodbus raspberry pi fork which makes use of a GPIO to enable rx-tx. (Link: https://github.com/dhruvvyas90/libmodbus)

### Known issue(s):

1. While using RPi native UART ( /dev/ttyAMA0 ), RPi sometimes tends to append a null byte once port has been opened and it may result into invalid reply. (As per this issue link : https://github.com/stephane/libmodbus/issues/302).

You may want to use <code>modbus\_flush(ctx)</code> after <code>modbus\_connect</code> call just to ensure that byte is flushed. If problem persists, you may try OP's mothod of modifying <code>modbus-rtu.c</code> and recompile to make it effective.



### Clone this wiki locally

https://github.com/stephane/libmodbus.wiki.git