

Если кратко:

1- ставим ардуино IDE

1- добавляем возможность работы с МК STM 32 (он установлен в модуле от Jumper) - https://github.com/pascallanger/DIY-Multiprotocol-TX-Module/blob/master/docs/Arduino_IDE_Boards.md

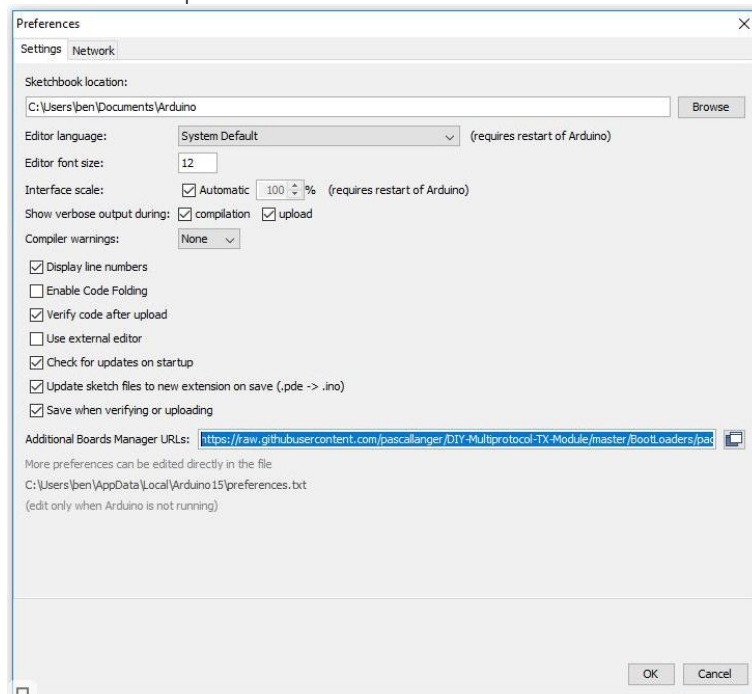
Installing

The board definitions are installed using the Arduino IDE Boards Manager.

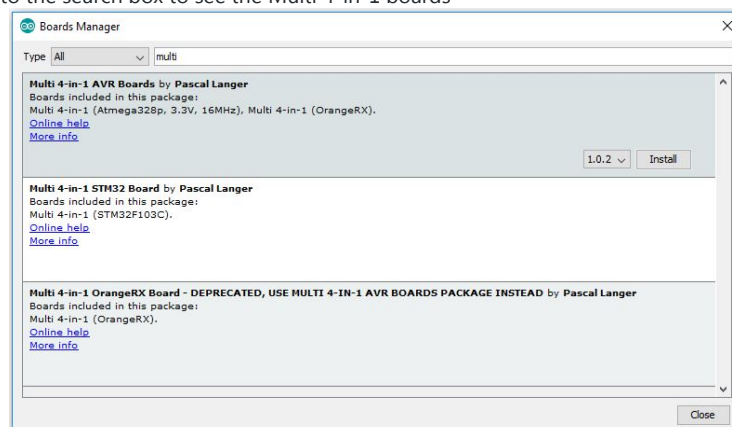
1. Open the Arduino IDE
2. Go to **File -> Preferences**, or press Ctrl+Comma
3. Locate the **Additional Boards Manager URLs** field and paste in this

URL: https://raw.githubusercontent.com/pascallanger/DIY-Multiprotocol-TX-Module-Boards/master/package_multi_4in1_board_index.json

Note: Multiple URLs are comma-separated.

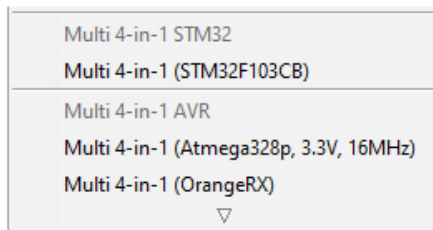


4. Click OK to save the change
5. Click Tools -> Board -> Boards Manager
6. Type multi into the search box to see the Multi 4-in-1 boards



7. Click on the board you require and click the **Install** button. Repeat for both boards, if required. If you are installing the STM32 board for the first time, and you have not installed any STM32 or SAMD boards before (such as Arduino Due or Zero) the dependency toolchain will also be downloaded and installed.

8. Click **Close** to close the Boards Manager
- Verify the boards are installed**
9. Click **Tools -> Board**
10. Scroll down the list to the Multi 4-in-1 board headings verify that the boards you installed are available:

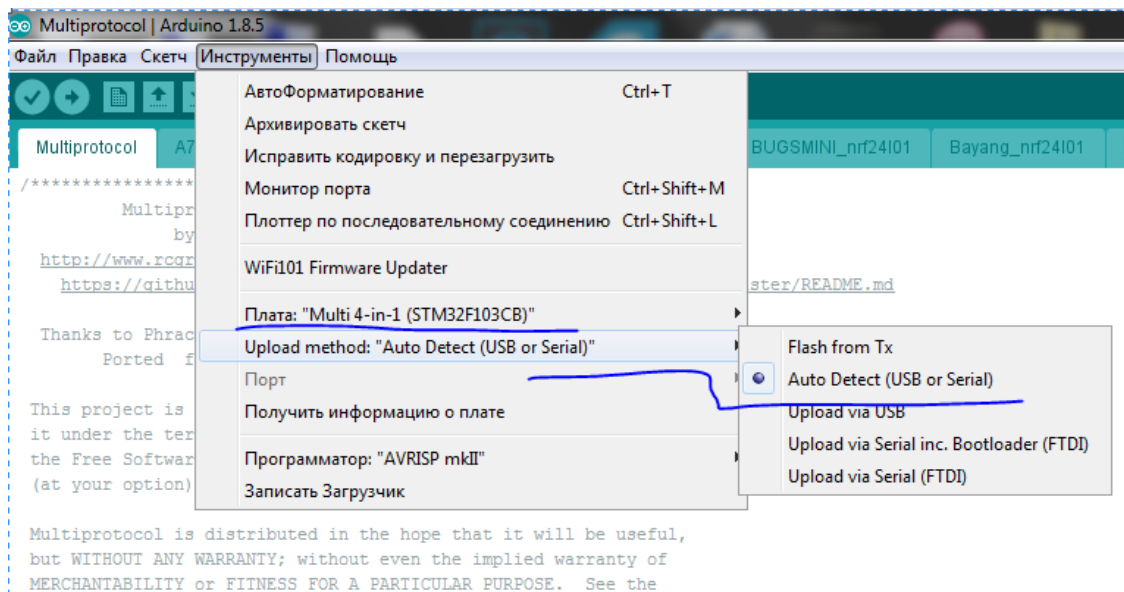


- Scroll down the list to the **Multi 4-in-1** board headings verify that the boards you installed are available:
- Multi 4-in-1 (STM32F103CB)** for the STM32 module
- Multi 4-in-1 (Atmega328p, 3.3V, 16MHz)** for the Atmega module
- Multi 4-in-1 (OrangeRX) for the OrangeRX module

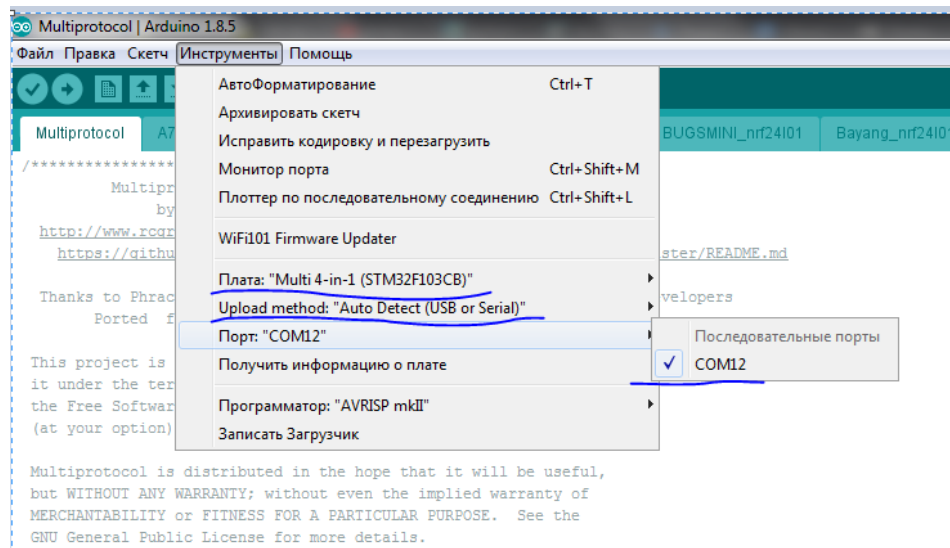
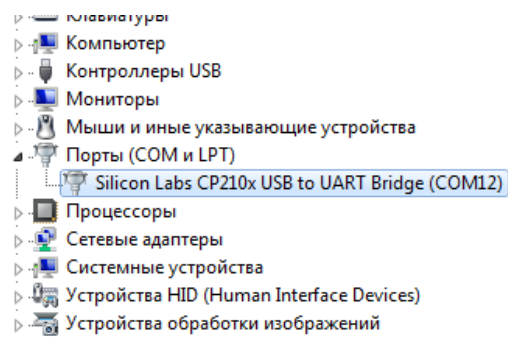
3- открываем полный скетч содержащий все стандарты реализованные в Мульти, т.к. у STM памяти хватает - \DIY-Multiprotocol-TX-Module-master\Multiprotocol\Multiprotocol.ino

- <https://github.com/pascallanger/DIY-Multiprotocol-TX-Module>

4- выбираем в IDE плату Multi 4IN1 и режим загрузки USB or Serial



5- подключаем модуль 4in1 (без включения аппаратуры) к ПК через Mini USB и убеждаемся, что он определился ОС как COM порт. Выбираем этот номер порта в IDE.



6- Нажимаем кнопку загрузить скетч и ожидаем завершения загрузки ... Complete