Arduino RFTide Shield

Quick start Guide

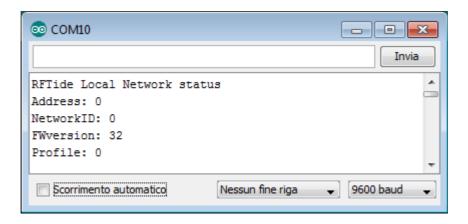
Ing. Mirco Segatello Agosto 2013 Ver. 0.0



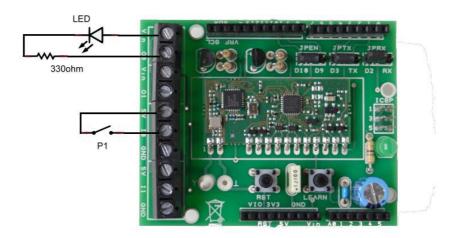
This guide explains how to use the shield RFtide with an Arduino board and how you can build a network with other shield RFTide and RFTide stad-alone modules.

Local use of the shield:

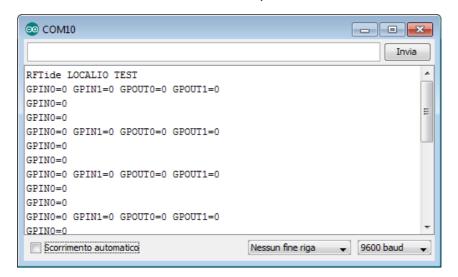
- 1) Insert the shield RFTide on an Arduino board .
- 2) Set the jumpers for serial communication on D2 and D3 and the jumper to Enable on D10.
- 3) Install the library RFTide . For details on how to install a library for Arduino see: http://arduino.cc/en/Guide/Libraries .
- 4) If the form RFTide shows the default configuration can be used directly otherwise (step 5), you must reset the device.
- 5) To reset the module RFTide and bring it back to factory settings is pressed (for about 2 seconds) the LEARN button present on the shield until the LED LD1 is lit steady. Within 15 seconds, press (about 2 seconds) of the LEARN button again until the LD1 starts flashing. After a reset, the LED LD1 turns off.
- 6) Open the sample LocalStatus and upload it to the Arduino . Open SerialMonitor setting a communication at 9600 Baud , it will show the current configuration of the local module , and you can verify that everything is working properly . By default, the module address is 0 and the NetworkID for a serialized form is not 0 .



7) Connect an LED in series with a 330ohm resistor between the Vin terminal (positive) and O0 (negative).

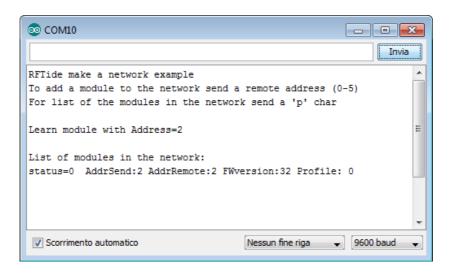


8) Open the sample LocalIO and upload it to the Arduino. The LED flashes GPOUT0 exit. The sketch also shows the status of inputs IN0 and IN1.

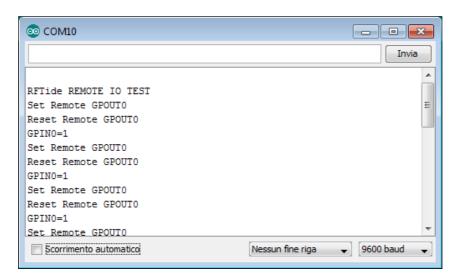


Creating a network modules RFTide:

- 1) Use a second form RFTide installed on a second Arduino board or in a breakout.
- 2) On Arduino with the local module to load the example Network. Start by setting a SerialMonitor communication at 9600 Baud.
- 3) On the remote module, press the LEARN button until the LED flashes.
- 4) Within 15 seconds using the send command to send SerialMonitor the address to assign to the module (eg 2), the LED will flash for a few seconds and then turns off. The address must be different from that of the local module detected by example LocalStatus.
- 5) Send the command to send the character 'p' to view the list of modules connected to the network. The locale module is not detected because it is not possible to transmit to itself.



6) Connect an LED with a resistor in series with the output O0 remote module. Load the example RemoteIO, and set the address of the remote module on the sketch (eg byte RemoteAddress = 2;), the LED on the remote module flashes. The sketch also shows the status of inputs IN0 and IN1.



7) Use the same procedure to configure additional modules. Each module must have a unique address.