

## RPI serial communication setup instruction (Raspbian)

### 1) Configure GPIO

#### a. Comment line at the */etc/inittab*

```
T0:23:respawn:/sbin/getty -L ttyAMA0 115200 vt100
```

#### b. Remove part of the line at */boot/cmdline.txt*.

```
console=ttyAMA0,115200 kgdboc=ttyAMA0,115200
```

### 2) Reboot RPI

### 3) Take arduino, upload sketch that writes to serial port (can be found at IDE examples or just develop)

### 4) Connect RPI's TX to Arduino's RX and RPI's RX to Arduino's TX.

RPI pinout is (RPI 1 model B):

3.3V	1	2	5V
I2C0 SDA	3	4	DNC
I2C0 SCL	5	6	GROUND
GPIO4	7	8	UART TXD
DNC	9	10	UART RXD
GPIO 17	11	12	GPIO 18
GPIO 21	13	14	DNC
GPIO 22	15	16	GPIO 23
DNC	17	18	GPIO 24
SP10 MOSI	19	20	DNC
SP10 MISO	21	22	GPIO 25
SP10 SCLK	23	24	SP10 CE0 N
DNC	25	26	SP10 CE1 N

### 5) Power up Arduino (do not use 5v pins on raspberry.)

### 6) Now you can read data from com. Install minicom (sudo apt-get install minicom)

### 7) Run the minicom

```
minicom -b 115200 -o -D /dev/ttyAMA0
```

### 8) You should see data coming to port.