

## 4 Channel 315Mhz RF Remote Transmitter-Arduino Compatible

This is a 4 channel RF Transmitter unit that consists of an Atmega328 microcontroller, 4 x tactile switches with pull-down resistors, programming port, and 315Mhz RF transmitter module. It is Arduino compatible open-source project that can be used for many RF transmitter applications. It is advisable to use a 30cm hook-up wire as an antenna to enjoy a maximum range of the transmitter.

**Arduino Pins:** D3, D4, D5, D6 Tactile Switch and D12 data out for AM transmitter module

**Note1:** The board will work with 2 types of RF modules, 3-Pins or 4-Pins ones. Use a suitable connector as per module.

**Note2:** This project is compatible with our 1 channel RF relay board. Users may use up to 4 different receivers. Arduino code is available as a download for transmitter and receiver.

### Features

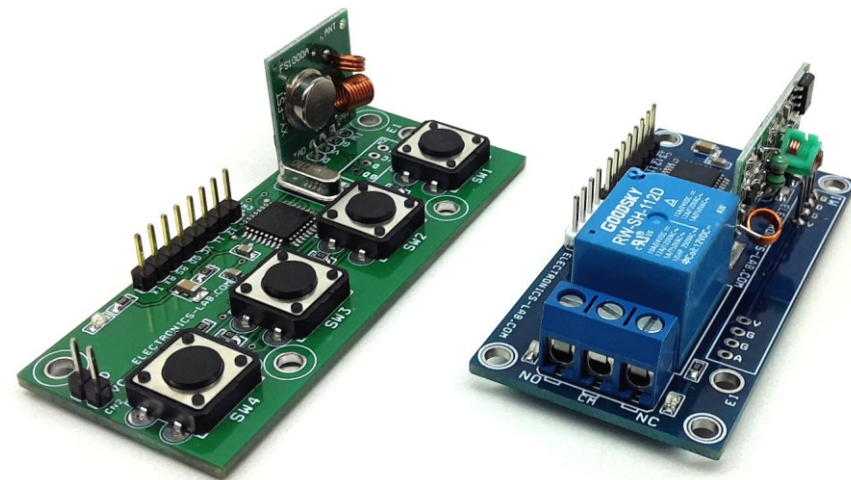
- Supply 5V DC @ 20mA
- 4 Tactile Switches with Pulldown Resistors
- PCB DIMENSIONS 75.09MM X 30.80MM

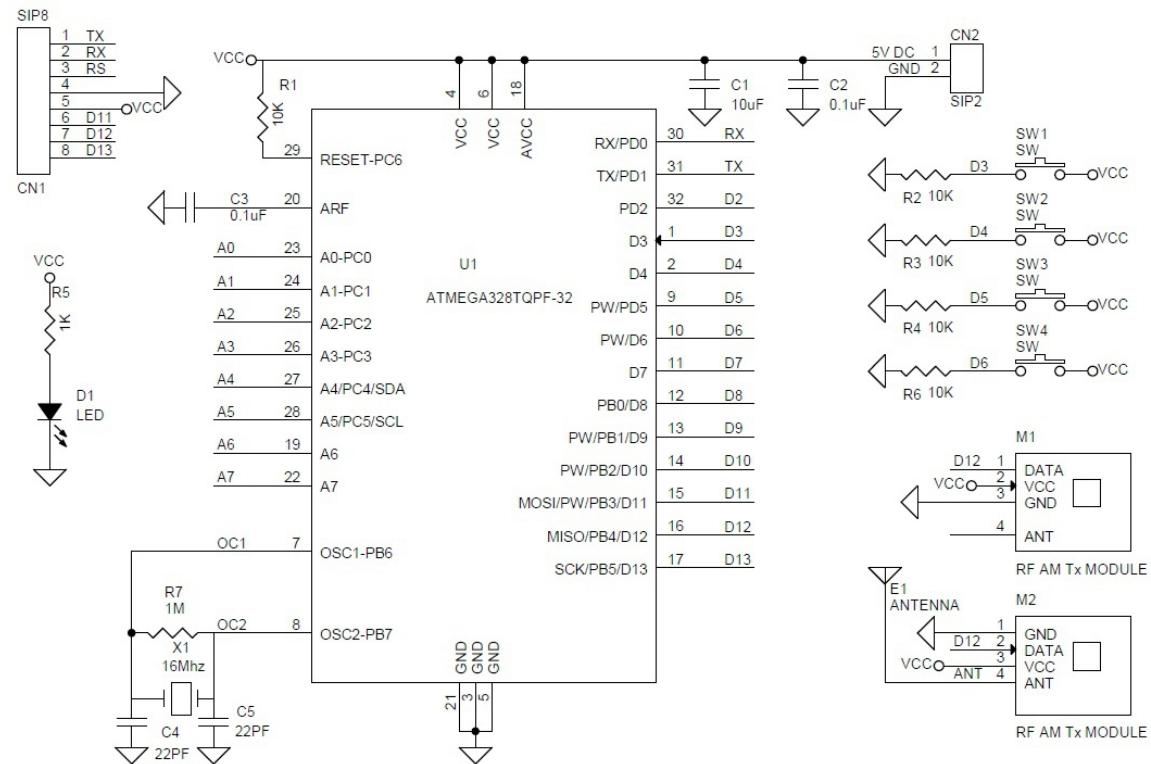
### Applications

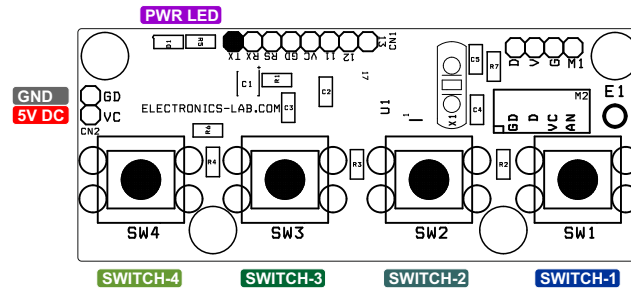
RF Remote ON/OFF AC or DC loads like Fans, Lights, Home Appliances, Door control

Arduino Code is available as a download. The code works with a single SW1, it toggles the Receiver Relay when the switch is pressed. A new Atmega328 chip requires a Bootloader and Arduino firmware, check the link below to learn more about programming the new Atmega328. Transmitter PCB has an onboard programming port.

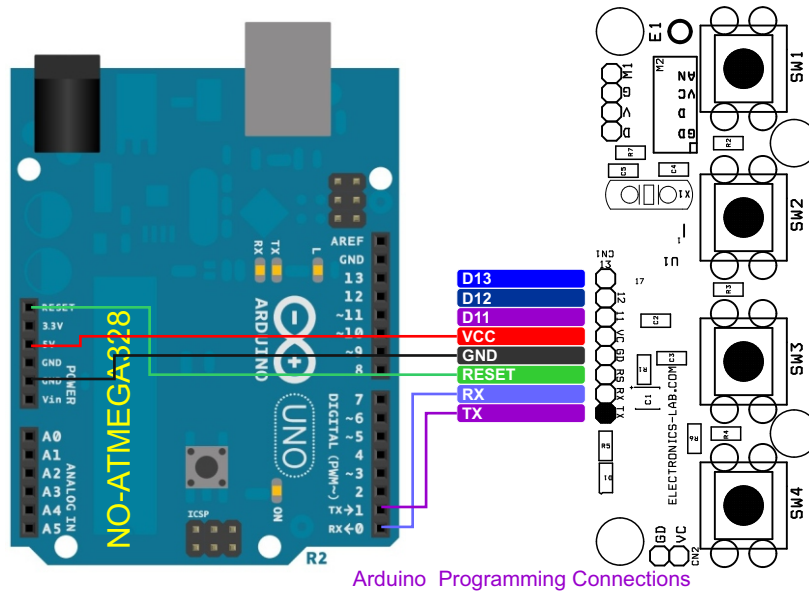
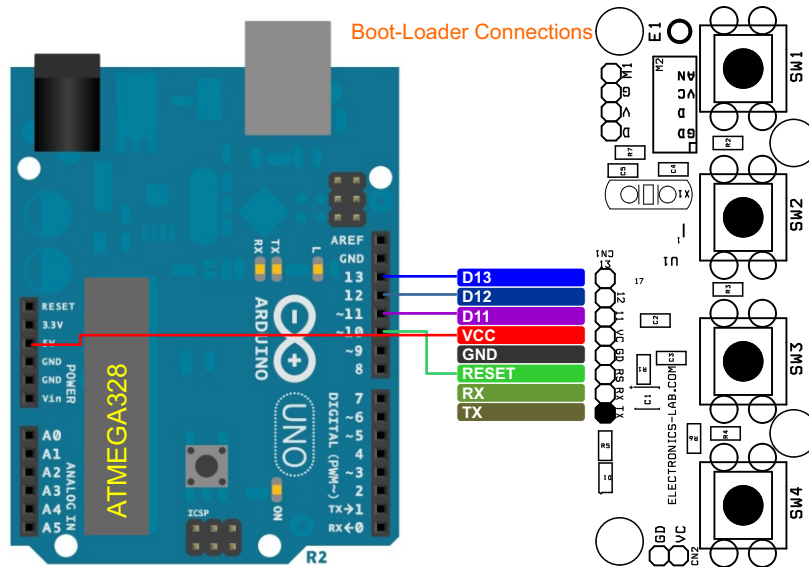
<https://www.arduino.cc/en/Tutorial/BuiltInExamples/ArduinoToBreadboard>

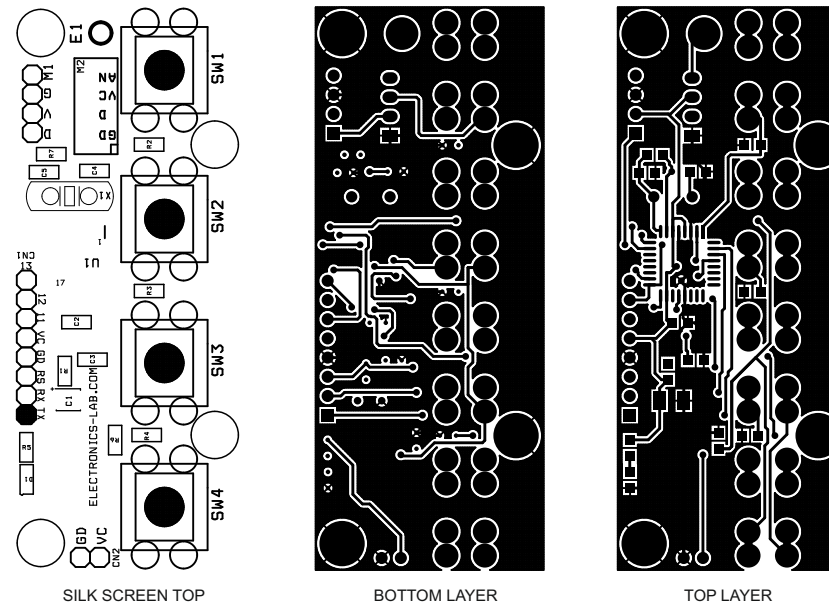






BOM						
NO	QNTY.	REF.	DESC.	MANUFACTURER	SUPPLIER	SUPPLIER PART NO
1	1	CN1	8 PIN MALE HEADER PITCH 2.54MM	WURTH	DIGIKEY	732-5321-ND
2	1	CN2	2 PIN MALE HEADER PITCH 2.54MM	WURTH	DIGIKEY	732-5315-ND
3	1	C1	10uF/16V SMD SIZE 1206 OR 1210	MUARATA/YAGEO	DIGIKEY	
4	2	C2,C3	0.1uF/50V SMD SIZE 0805	MUARATA/YAGEO	DIGIKEY	
5	2	C4,C5	22PF/50V SMD SIZE 0805	MUARATA/YAGEO	DIGIKEY	
6	1	D1	LED RED SMD SIZE 0805	OSRAM	DIGIKEY	475-1278-1-ND
7	1	E1	ANTENNA			30CM HOOK-UP WIRE
8	2	M1,M2	RF AM Tx MODULE 315MHZ	CHINA		ALIEXPRESS
9	5	R1,R2,R3,R4,R6	10K 5% SMD SIZE 0805	MUARATA/YAGEO	DIGIKEY	
10	1	R5	1K 5% SMD SIZE 0805	MUARATA/YAGEO	DIGIKEY	
11	1	R7	1M 5% SMD SIZE 0805	MUARATA/YAGEO	DIGIKEY	
12	4	SW1,SW2,SW3,SW4	TACTILE SWITCH	C&K	DIGIKEY	CKN9085CT-ND
13	1	U1	ATMEGA328TQPF-32	MICROCHIP	DIGIKEY	ATMEGA328PB-AURCT-ND
14	1	X1	16Mhz	ECS INC	DIGIKEY	X1103-ND





**PCB DIMENSIONS 75.09MM X 30.80MM**