

315Mhz RF Remote Transmitter -Arduino Compatible

This is a two-channel RF Transmitter unit that consists of, Atmega328 microcontroller, 2 Tactile switches with pull-down resistors, a programming port, and a 315Mhz RF transmitter module. It is an Arduino compatible open-source project that can be used for many RF transmitter applications. It is advisable to use 1 Foot hook-up wire as Antenna to enjoy a maximum range of the transmitter.

Arduino Pins: D3, D4 Tactile Switch and D12 data out for AM transmitter

Note1: The PCB is compatible with 2 types of RF modules, 3-Pins or 4-Pins. Use a suitable connector as per module.

Note2: This project is compatible with our 1 channel RF relay board. The Arduino code is available as a download for the transmitter.

Features

- Supply 5V DC @ 20mA
- 2 Tactile Switches with Pulldown Resistors
- PCB Dimensions 52.71 x 28.26mm

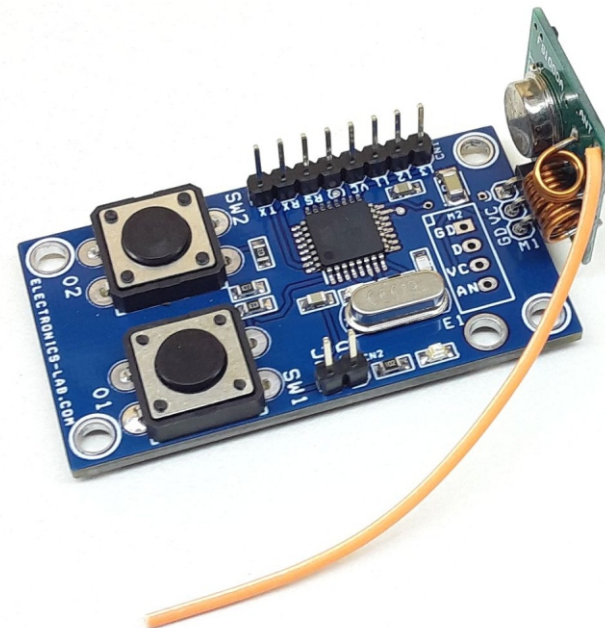
Applications

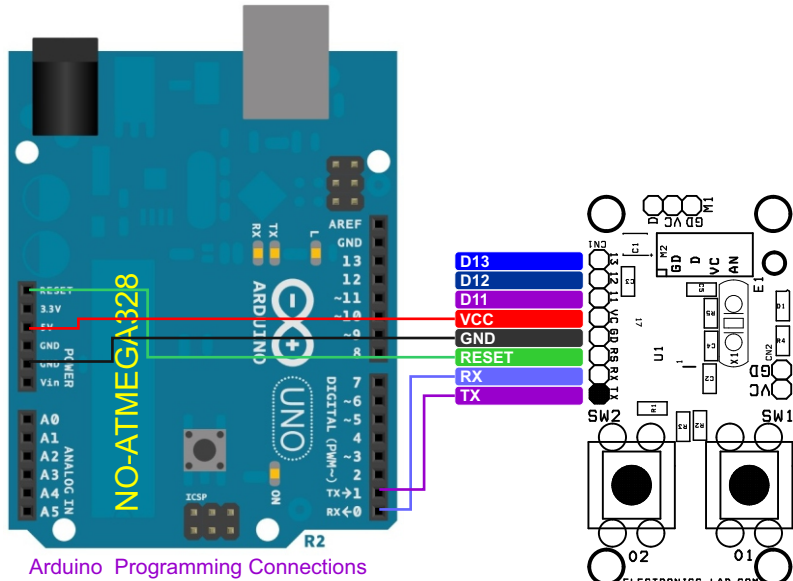
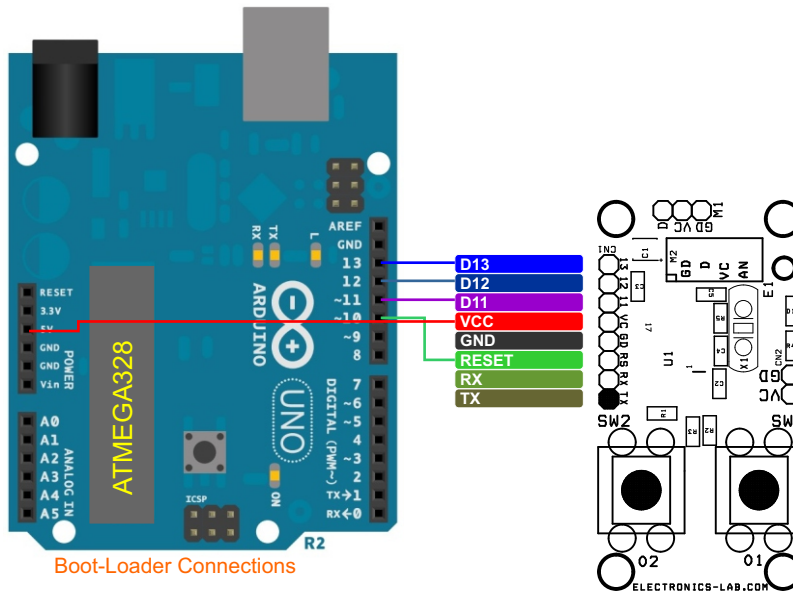
RF Remote ON/OFF AC or DC loads like, Fans, Lights, Home Appliances, Door control

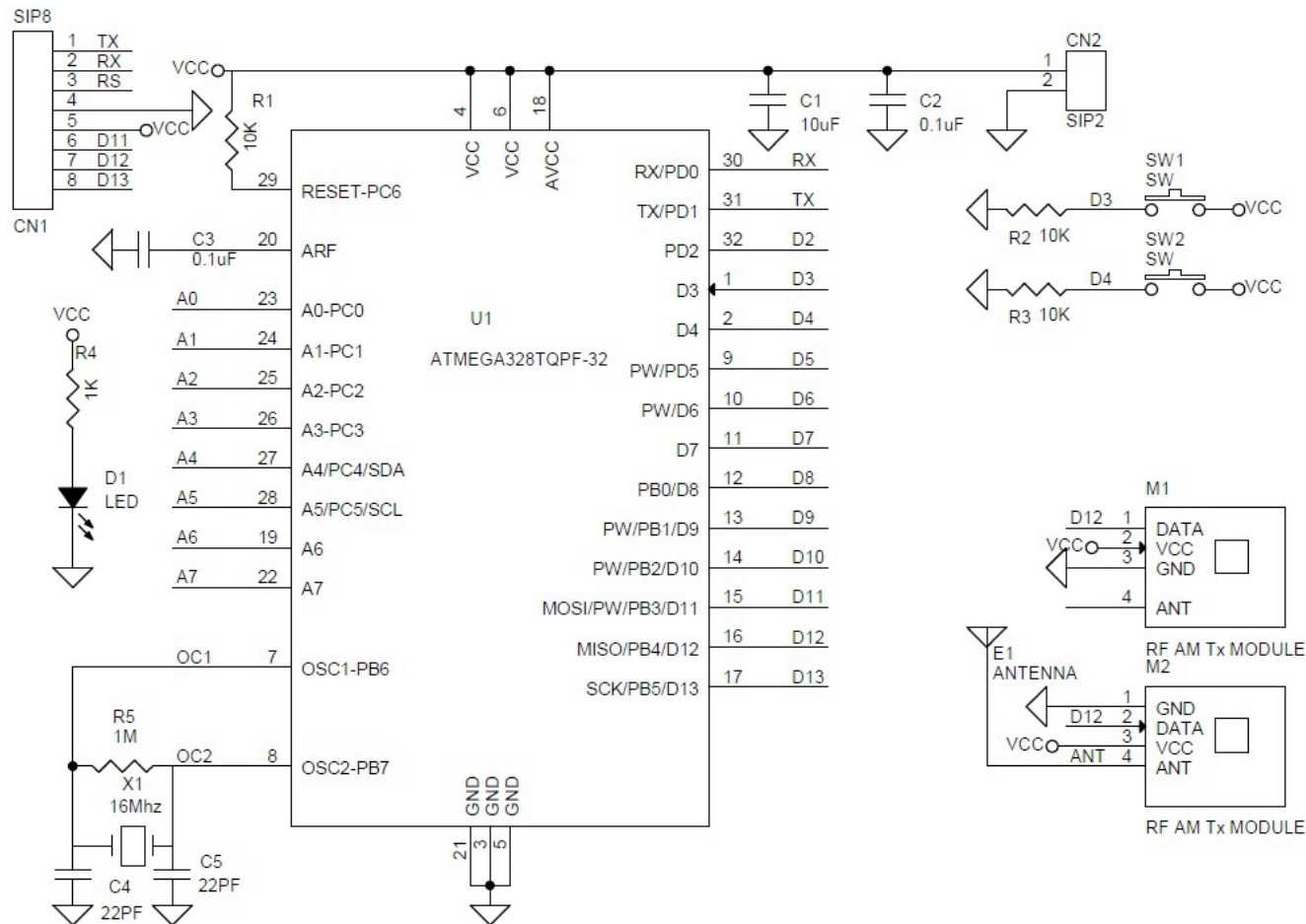
AArduino Code is provided as a download The code works with single Sw1, it toggles the Receiver Relay when the switch is pressed. A new Atmega328 chip requires Bootloader and Arduino firmware programming.

Please, 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>



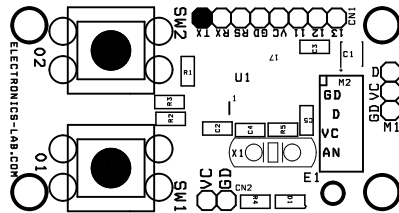




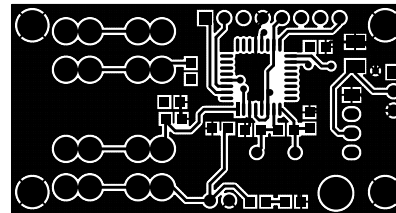


BOM						
NO.	QNTY.	REF.	DESC.	MANUFACTURER	SUPPLIER	SUPPLIER PART NO
1	1	CN1	8 PIN MALE HEADER PITCH 2.54MM	WURTH	DIGIKEY	732-5321-ND
2	1	CN2	2 PIN MALE HEADER PITCH 2.54MM	WURTH	DIGIKEY	732-5315-ND
3	1	C1	10uF/16V SMD 1206 OR 1210	MURATA/YAGEO	DIGIKEY	
4	2	C2,C3	0.1uF/50V SMD SIZE 0805	MURATA/YAGEO	DIGIKEY	
5	2	C4,C5	22PF/50V SMD SIZE 0805	MURATA/YAGEO	DIGIKEY	
6	1	D1	LED SMD SIZE 0805	OSRAM	DIGIKEY	475-1278-1-ND
7	1	E1	ANTENNA			1 FEET HOOKUP WIRE
8	2	M1,M2	RF AM Tx MODULE	ALIEXPRESS	ALIEXPRESS	
9	3	R1,R2,R3	10K 5% SMD SIZE 0805	MURATA/YAGEO	DIGIKEY	
10	1	R4	1K 5% SMD SIZE 0805	MURATA/YAGEO	DIGIKEY	
11	1	R5	1M 5% SMD SIZE 0805	MURATA/YAGEO	DIGIKEY	
12	2	SW1,SW2	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

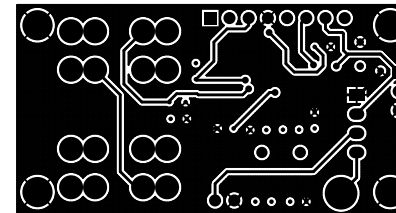




SILK SCREEN TOP



TOP LAYER



BOTTOM LAYER

PCB DIMENSIONS 52.71MM X 28.26MM

