

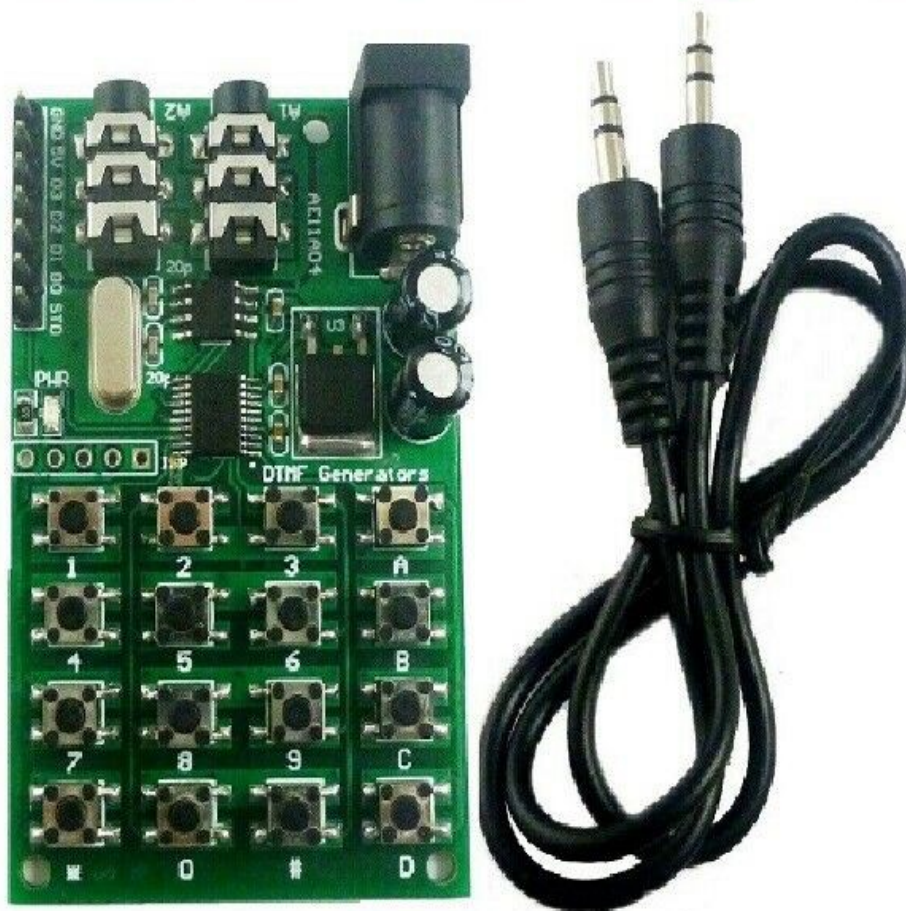
Keypad DTMF Generator Module Audio Encoder Transmitter Board for Arduino UNO Pro

Packing list:

1 PCS AE11A04 DTMF Generators Module;

1 PCS 50cm Male to Male audio cable (3.5mm Cable);

AE11A04



Description:

Operating Voltage : 5-24VDC

Working current : 6-8MA

Power interface : 2.1mm x 5.5mm Female Male DC Power Plug

Audio interface : 2x 3.5mm audio jack socket

MCU input interface : 7x 2.54MM pin header,GND 5V D3 D2 D1 D0 STD

Size : 63*40*13mm

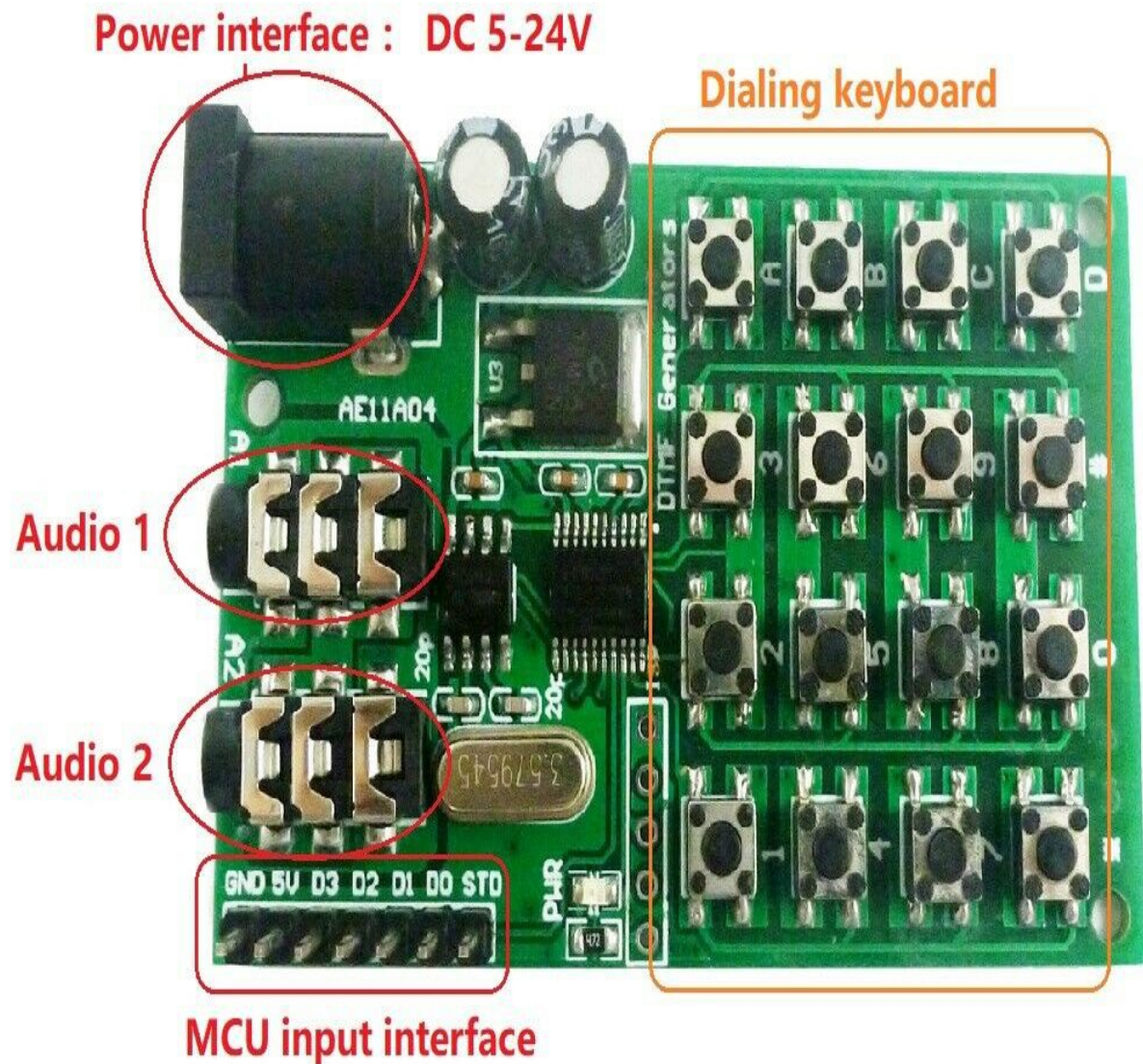
Weight : 16g

The AE11A04 DTMF tone generators are designed

for Dialing keyboard AND MCU interfaces. They can be instructed by a MCU(OR Dialing keyboard) to generate 16 dual tones from the Audio 1/2 . 16 dual tones is "1234567890#*ABCD"

Audio 1: This is a universal interface that connects most audio devices. For example: mobile audio interface, PC audio interface, DTMF decoder

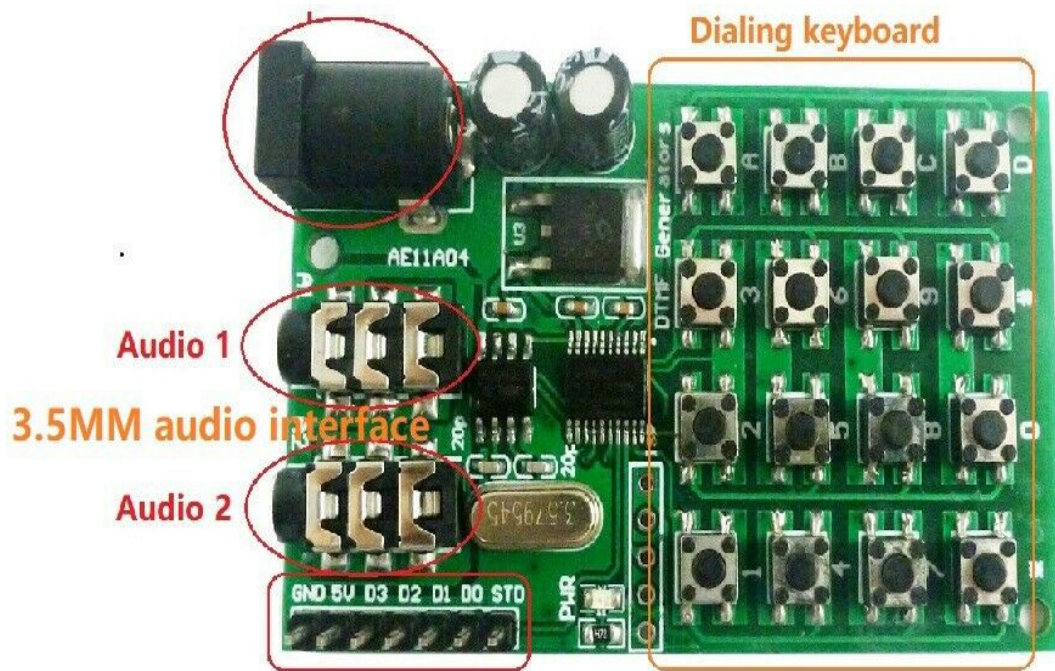
Audio 2: This is a specific audio interface. Support the following products of our company: CE004 CE005 CE023 AD22B04 AD22A08



Audio 1: This is a universal interface that connects most audio devices. For example: mobile audio interface, PC audio interface, DTMF decoder

Audio 2: This is a specific audio interface. Support the following products of our company:

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Audio 1 supports most audio devices, including the following:



Audio 2: This is a specific audio interface. Support the following :



CE004



CE005



CE023



AD22B04



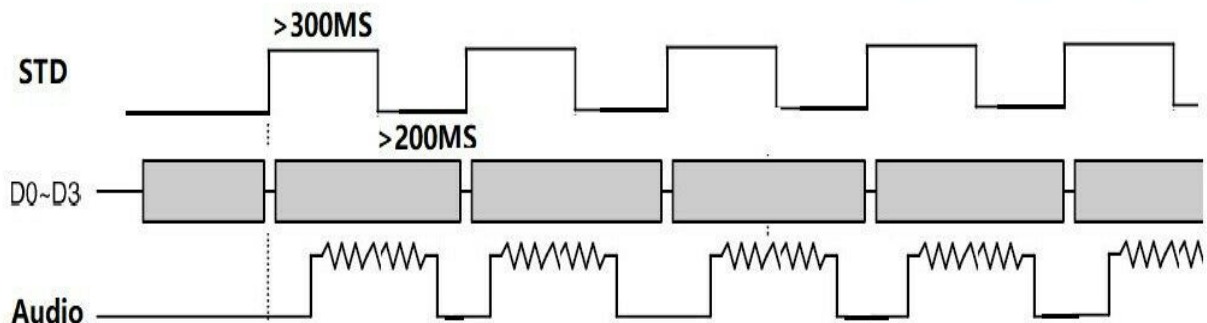
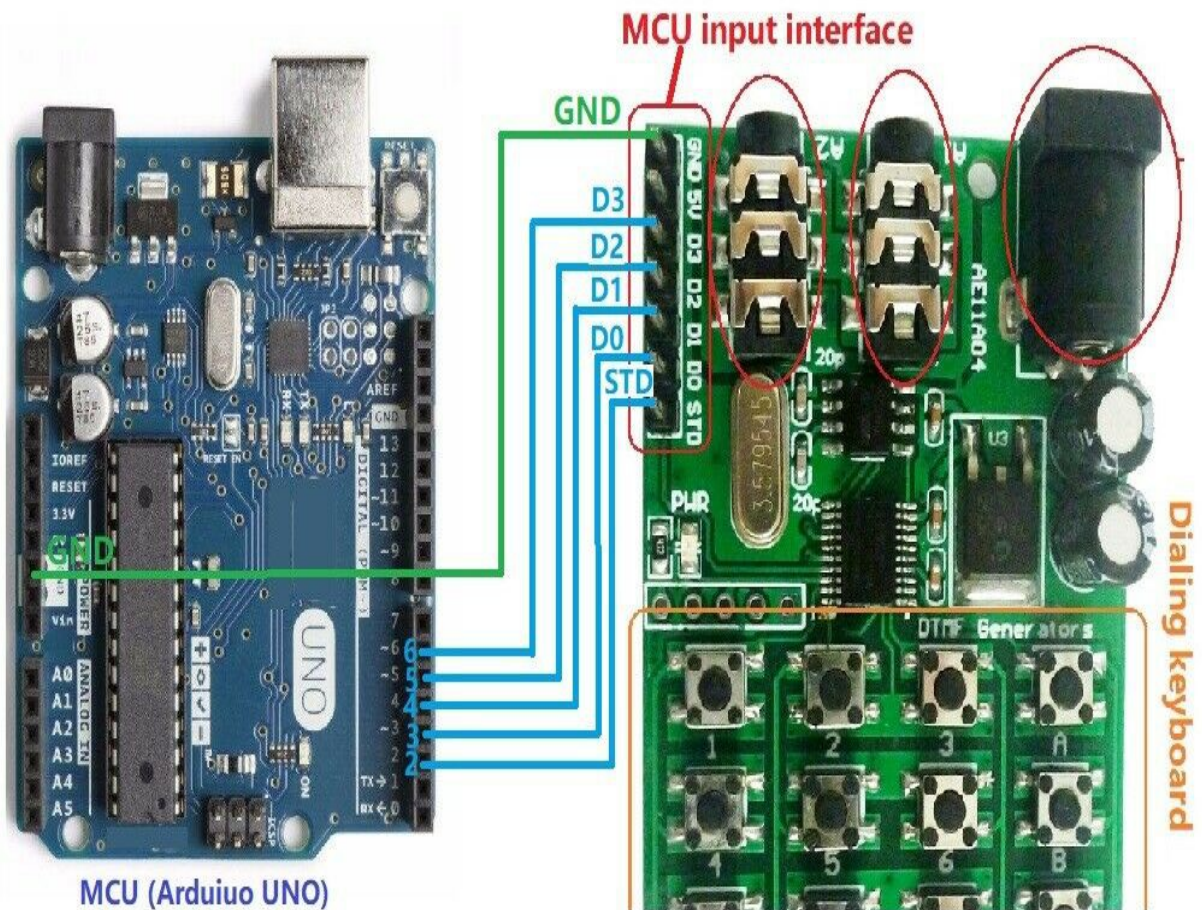
AD22A08

How to use:

- 1 Output DTMF tone through Dialing keyboard
- 2 Output DTMF tone through MCU control

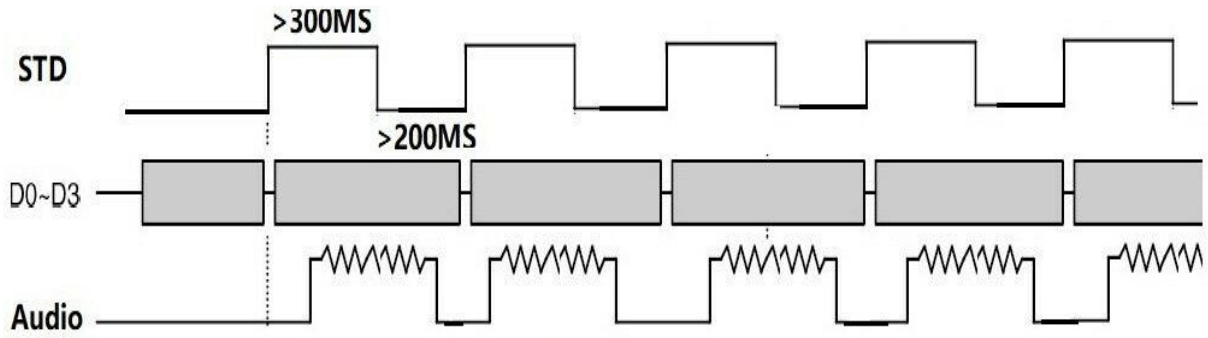
How to use:

- 1 Output DTMF code through Dialing keyboard
- 2 Output DTMF encoding through MCU control



MCU control timing : Load D0-D3 data when STD is high

STD high-level and D0-D3 hold time : $>300\text{MS}$; STD low-level hold time : $>200\text{MS}$



MCU control timing : Load D0-D3 data when STD is high

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Digits vs. input data vs. tone output frequency

Digit	STD	D3	D2	D1	D0	Audio Frequency(HZ)
1	↑	0	0	0	1	697+1209
2	↑	0	0	1	0	697+1336
3	↑	0	0	1	1	697+1477
4	↑	0	1	0	0	770+1209
5	↑	0	1	0	1	770+1336
6	↑	0	1	1	0	770+1477
7	↑	0	1	1	1	852+1209
8	↑	1	0	0	0	852+1336
9	↑	1	0	0	1	852+1477
0	↑	1	0	1	0	941+1336
*	↑	1	0	1	1	941+1209
#	↑	1	1	0	0	941+1477
A	↑	1	1	0	1	697+1633
B	↑	1	1	1	0	770+1633
C	↑	1	1	1	1	852+1633
D	↑	0	0	0	0	941+1633