

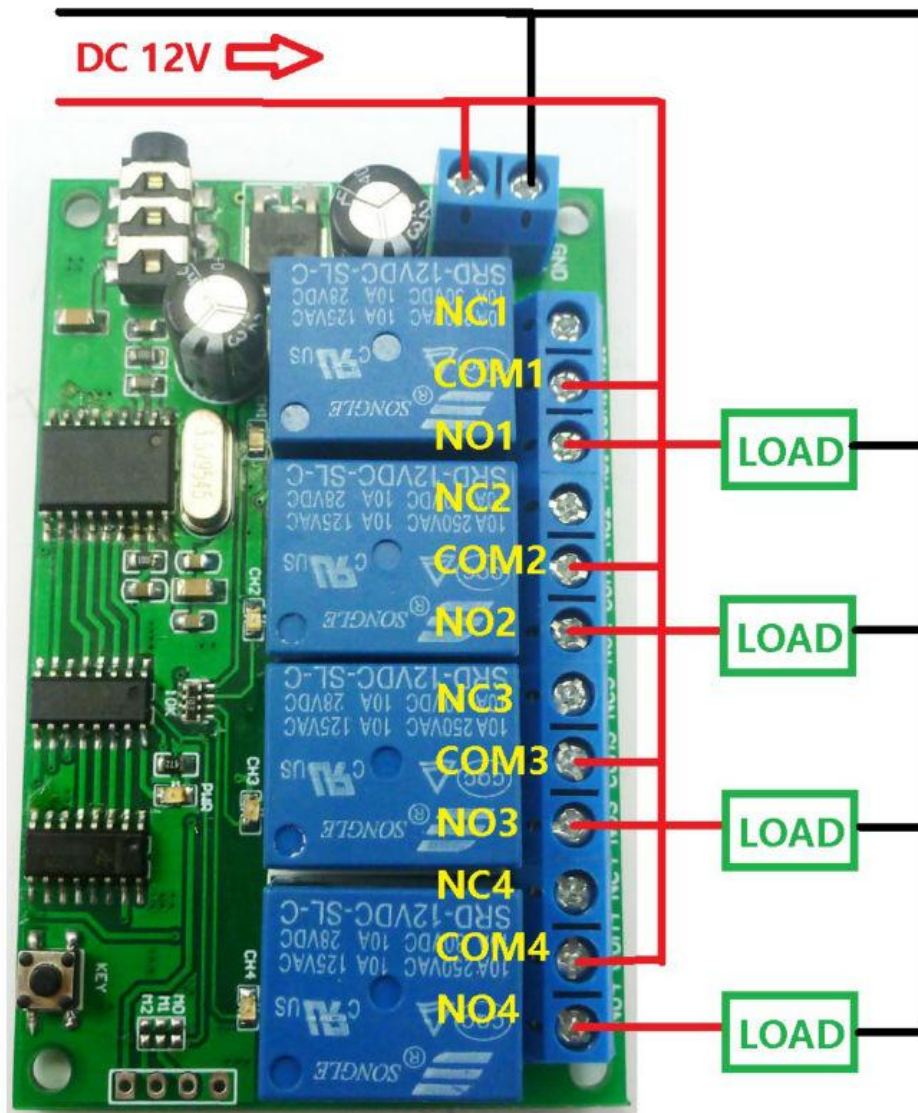
Product Name: DC 12V 4ch MT8870 DTMF Tone Signal Decoder Phone Voice Remote Control Relay Switch Module for LED Motor PLC Smart Home

Packing list :

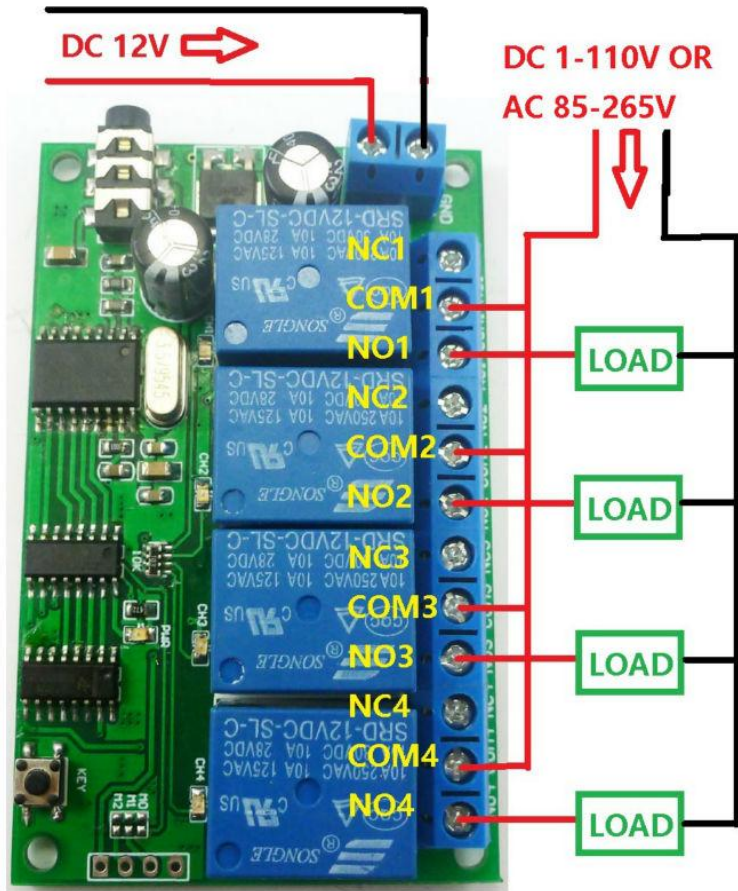
- 1 PCS DC 12V 4 Channel DTMF Decoder Relay Board ;
- 1 PCS Male to Male audio wire (3.5mm jack);

Typical applications:

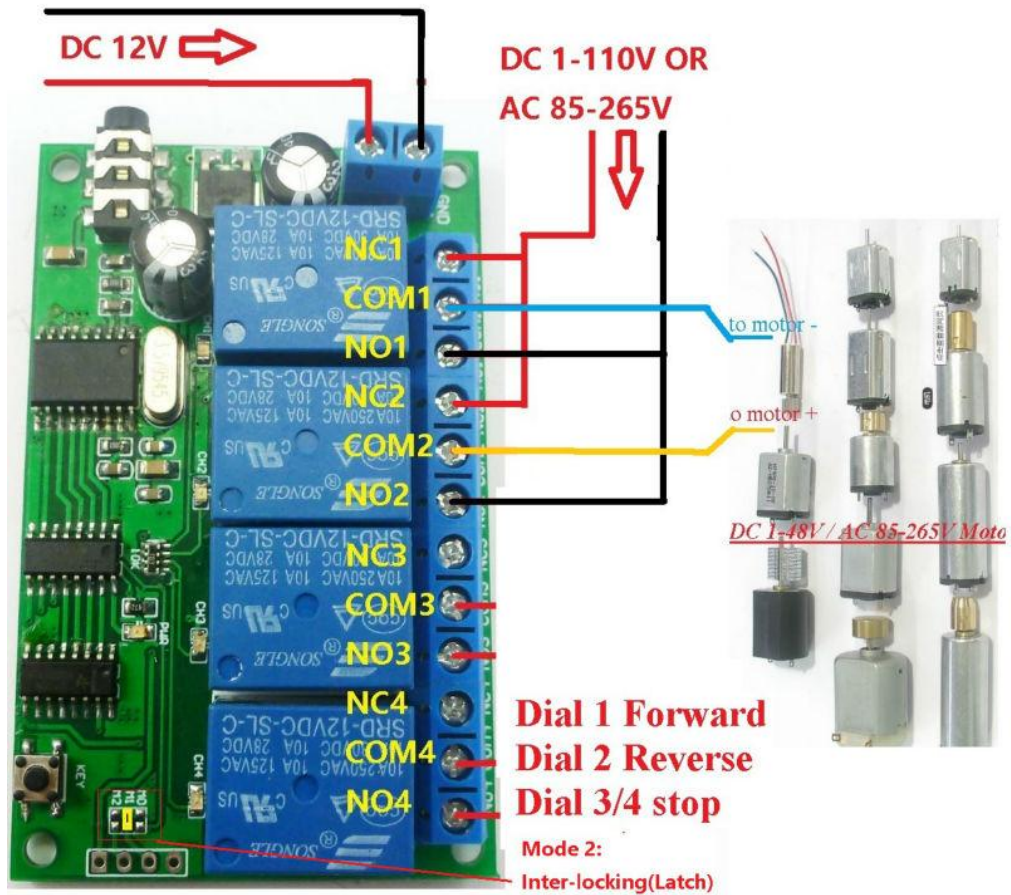
- Home lighting system
- DTMF Remote control switch
- Smart Home / Home Automation
- DC 12V LED lighting
- Fluorescent lamp
- 12V DC Motor
- Fluorescent lamp
- Automotive electronics
- Industrial automation and control
- Control 4 Channel DC 12V electrical equipment: LED / Automotive electronics



General electrical equipment control:DC 1-110V or AC 85-265V



All kinds of motor reversing control: DC 1-48V or AC 85-265V



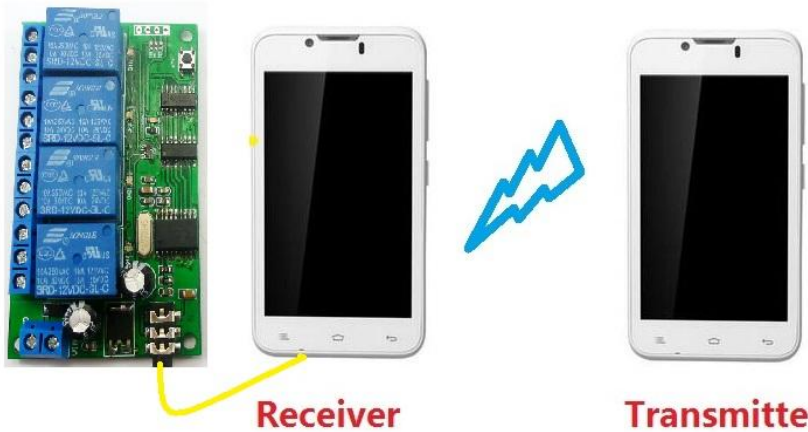
Functional characteristics:

- 1 Product model: AD22B04
- 2.working voltage DC 12V, with reverse polarity protection
- 3.Operating Current: Standby 11-13 MA, 1 relay "open" 44MA, 2 relays "Open" 77MA, 3 relays "Open" 110MA, 4 relays"open" 140MA
- 4 eight modes of operation:Non-locking (Momentary), self-locking (Toggle),inter-locking (Latch), 5/20/60/120/250-second delay
- 5 The default control command is 1/2/3/4.Example: Dial 1 to control relay 1, dial 2 to control relay 2, dial 3 to control relay 3, dial 4 to control relay 4; control commands can be changed any 1-4 bits. (For more details, refer to " 4 channel DTMF controller commands setting manual ").
- 6 Size: 50 * 80 * 19.5mm
- 7 Weight: 59 grams
- 8 Maximum load: 10A / 250VAC, 10A / 125VAC, 10A / 30VDC, 10A / 28VDC, 10A / 12VDC

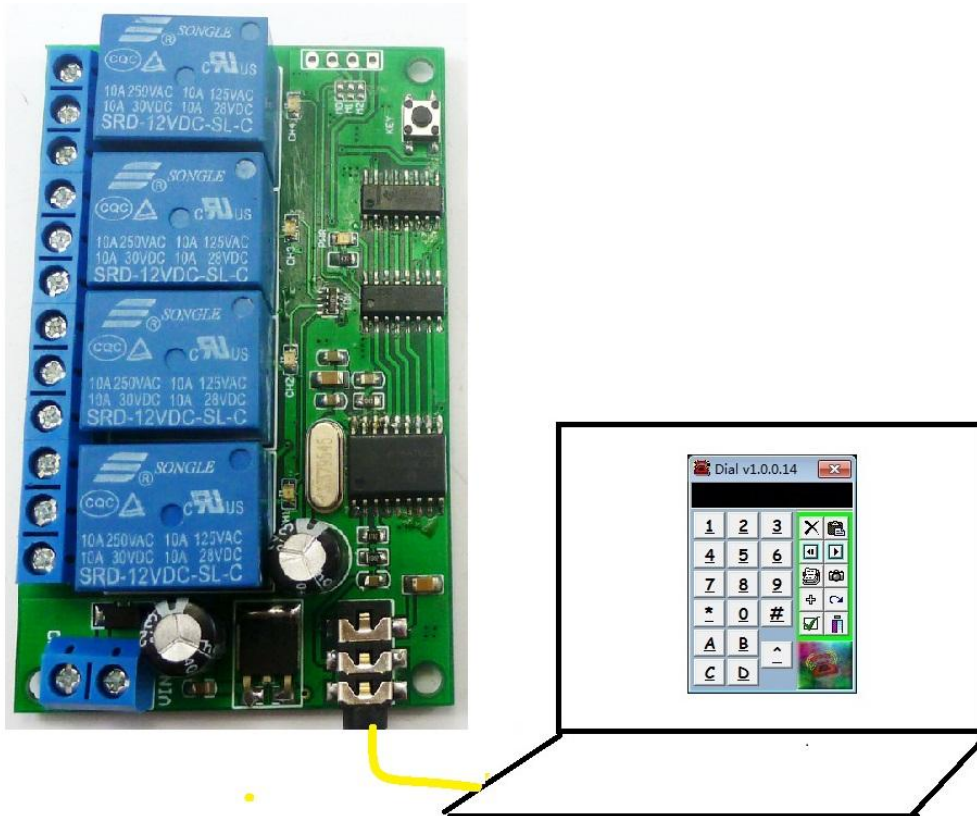
Use Method:

This is the DTMF audio controller with four channels, any phone or fixed telephone with DTMF key code remotely controls product relay "open" and "close".(the majority of smartphones and functions machine are DTMF code). Our software "DTMF Dial" (installed in a computer) can be also provided to control relays

As shown above, by phone



remote control relay. You need two phones, one as a receiver (phone_1), the other one as a transmitter (phone_2); mobile phone_1 connected by DTMF audio cable 3.5MM audio controller (the controller to be powered), and then using phone_2 (may be a fixed telephone) call the phone_1, phone_1 answered, so that two phone call each other; then dial 1/2/3/4 by phone_2 keypad to control four relays .



Typical application for DTMF Dial Software

As shown above, you can install one of our "DTMF Dial" software in your computer, through the software control DTMF audio controller. At first, use 3.5MM audio cable to the computer video port and audio port controller, then click on the software to control relays 1/2/3/4.

Caution:

- 1 DTMF audio controller must use stable work of DC 12V power supply (recommendations 1A or above the power adapter)
- 2 remote control the controller by a mobile phone, the receiver must be the phone with 3.5MM audio interface, the transmitter can be a cell phone or landline
- 3 as a receiver of the phone or a computer installed the "DTMF Dial" software must output a sound (not muted), or they will not control relays.

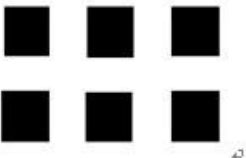
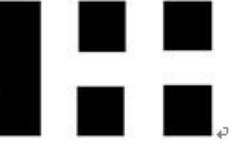



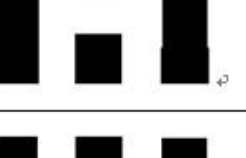
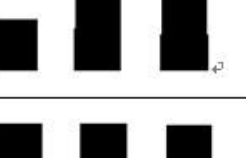

Glossary:

- NO: Normal open
- COM: Common terminal
- NC: Normal Connect
- Relay open: COM connected NO but disconnected NC
- Relay close: COM disconnected NO but NC connected COM.
- Non-locking (Momentary): Dial 1 (2/3/4 is the same), relay 1 "Open", relay close after 1 second delay
- Self-locking: Dial 1, relay 1 "Open", dial 1 again, relay 1 "off", and so on
- Inter-lock: Dial 1, relay 1 "Open", other relays "Off"; dial 2, relay 2 "Open", other relays "off", and so on
- "Delay": Dial 1, relay 1 "Open", relay 1 "Close" after a time

Mode selection:



Eight modes of operation, electric iron jumper (picture above) on the pads

Mode selection (M0 M1 M2)		Function	Illustrate
	Mode 0	(Default mode) Non-locking (Momentary)	Relay open for 1 second
	Mode 1	self-locking (Toggle)	Relay open->Relay close Relay close-> Relay open
	Mode 2	Inter-locking (Latch)	The current channel relay open, the other channel relay close
	Mode 3	Delay 5S	Relay open for 5 seconds
	Mode 4	Delay 20S	Relay open for 20 seconds
	Mode 5	Delay 60S	Relay open for 60 seconds
	Mode 6	Delay 120S	Relay open for 120 seconds
	Mode 7	Delay 250S	Relay open for 250 seconds