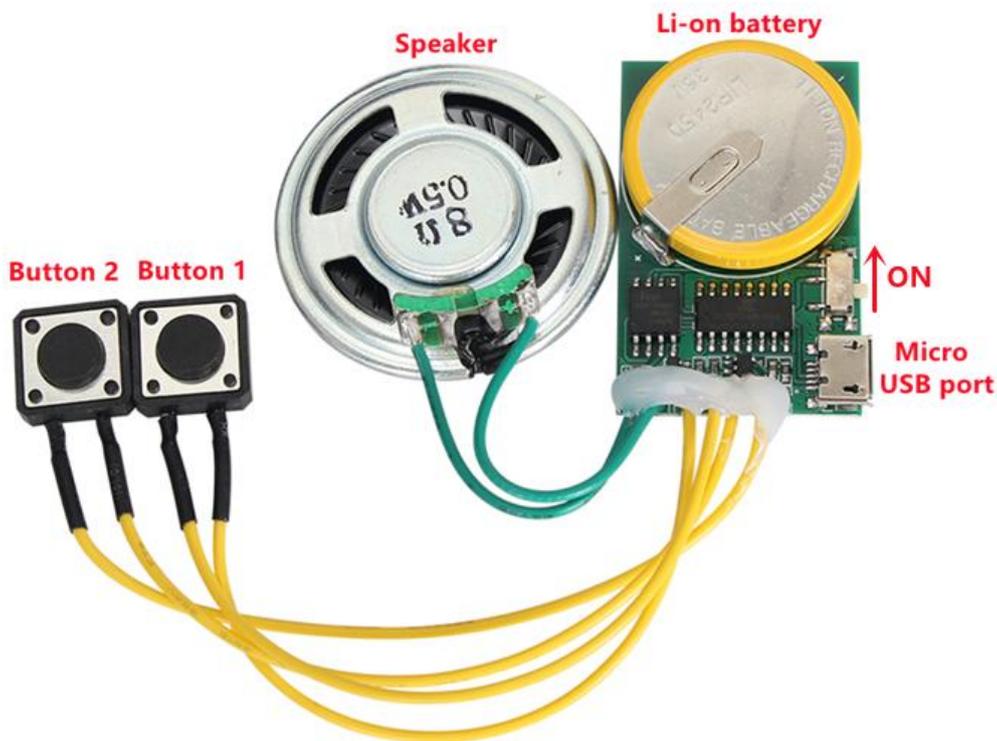


# Recordable MP3 Sound Module for Cards and Boxes

## User's Manual

Model: FN-G2450 Version: V1.0



### Features

1. Built-in high-quality audio decoder chip.
2. Supports MP3 and WAV formats of sound files.
3. Built-in 4MB flash memory. It can store max. 4 minutes long MP3 files of 128Kbps.
4. Update sound files easily on computer through USB connection.  
-No need any software for help. It'll be detected as a USB flash drive on computer.
5. Equipped with 120mAH Li-ion rechargeable battery (LIR2450).
6. The Li-ion battery can be recharged using a power charger (5V 1A) through the micro-USB port.
7. Two buttons available and each button activates an associated sound file.
8. Supports 4 trigger modes and the trigger mode for each button can be set individually.
9. Trigger modes and volume level can be set with a config file.
10. Equipped with 0.5W 8ohm speaker. Sound output is clear and good quality.
11. Low-power design.
12. Comes with a double-sided adhesive.
13. PCB size: 40\*25\*6mm

### Set a Trigger Mode

There are 4 trigger modes (from “0”to “3”) available for users to set in a config file according to the actual needs.

Each of the number from “0”to “3” represents a corresponding trigger mode, which can be set individually for each of the two buttons. See the details as below.

Num	Corresponding Trigger Mode	Explanation
0	Pulse interruptible (default mode)	When a button is pressed, it plays the associated sound file. It is possible to interrupt the playback by pressing the same button or the other button. Once playback is interrupted, it will automatically start the sound that is associated with the button pressed.
1	Hold and play in a loop	The sound file will only play while button is held/maintained during playback. Once the button being held is removed, the playback will be stopped/canceled. Once the button is kept holding, when the playback of the sound file is finished, it will start to play it repeatedly (loop playback).
2	Pulse non-interruptible	When a button is pressed, it plays the associated sound file. It is NOT possible to interrupt the playback by pressing the same button or the other button. The playback will only end when the sound file has played its entirety.
3	Hold and play once	The sound file will only play while button is held/maintained during playback. Once the button being held is removed, the playback will be stopped/canceled. Once the button is kept holding, when the playback of the sound file is finished, it will STOP.

Any of these four trigger modes can be set for either of the two buttons through a config, which comes from a text file (.txt) originally. In the config file, there are five digits in total. Each digit, from the first two, represents a specific trigger mode that is associated with a button. The latter three digits represent a volume level. There are 31 volume levels from 000 to 030, and 000 means mute while 030 means the max. volume. Please refer to the two steps below on how to build a config file successfully.

1). Build a new text file on computer and enter the corresponding number like “01030” that means button 1 will be set with the trigger mode “Pulse interruptible”, and button 2 will be set with the trigger mode “Hold and play in a loop”.



2). Save it and change the file name “xxx.txt” to “Config.txt” or any other name you like. Then the config file is done easily.

**Note: If there is no config file on the memory, the module always works with the trigger mode “Pulse interruptible” for each button, and the volume is at max. level.**

## Sound Files Loading/Updating

There is a micro USB socket on the board, and users can connect it to computer through an Android phone purposed USB cable to load audio files and config file. The built-in flash memory will be detected and displayed as a USB flash drive on PC.

Two audio files need to be directly stored in the root directory of the flash memory. No folders can be in the root directory. The arrangements of the audio files are managed by a physical index sequence. In other words, the file that is to be loaded first in the memory will be associated with button 1. The second file to be loaded in the memory will be associated with button 2, so it's okay whether you rename the files.

Please refer to the following steps on how to load sound files.

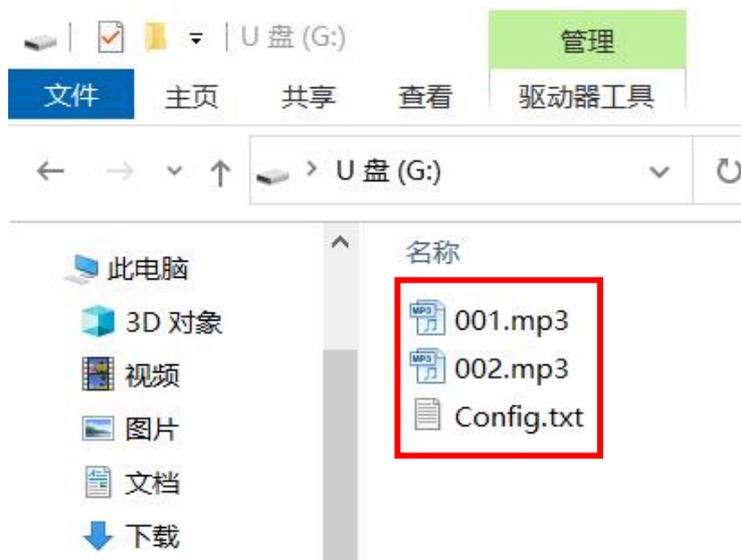
Step 1: Switch on the power switch.

Step 2: Connect the module to computer through a USB data cable. A simulated USB flash drive will be displayed on PC.

Step 3: Delete the pre-loaded files at factory for testing purpose.

Step 4: Copy your own sound files onto the memory.

Step 5: If needed, put the config file on the memory as well. See below.



Step 6: Disconnect the module from computer safely.

**Note: When it is connected to computer for sound updating, the power switch needs to be switched to ON first, otherwise computer can't recognize it.**

## About Battery Charging

When the battery is charging, the red LED light will be on. And once the battery is fully charged, the LED light will be off. A 5V 1A power charger is suggested to use.