# FN-AS72 Triggerable MP3 Player / Recordable Speaker User's Manual

Version: V1.1



# 1. Features

- Adopts exquisite ABS plastic enclosure
- ♦ Built-in a high quality audio decoder.
- ♦ Equipped with a 16MBytes flash memory that supports max. 16 minutes long MP3 files (at 128Kbps).
- ♦ Load MP3 files to the internal flash memory easily through the micro USB port connected with computer.
- ♦ 4 trigger inputs available and the trigger mode /function of each input can be set individually.
- ♦ Supports 7 different trigger modes, and 5 auxiliary modes.
- ♦ Trigger modes are set through a configuration file easily.
- ♦ Activate a sound through negative triggering / negative pulse / GND.
- ♦ Able to play one-on-one 4 sounds.
- ♦ Able to play multiple audio files per input channel (play next track in the associated folder).
- ♦ Able to start audio files automatically and play in loop, once it's powered on.



- → Equipped with a class D 5watts audio amplifier.
- ♦ Adjustable sound volume and wide range power input.
- ♦ Two colors (black and white) available.
- ♦ Portable design and easy to install.
- ♦ Dimensions: 70mm (diameter) x 20mm (height)

# 2. Technical parameters

♦ Working voltage: 6V-30V DC
 ♦ Working Current: ≤1000mA
 ♦ Standby Current: 10mA

♦ Flash Memory Size: 16MBytes

♦ Audio Format: MP3 (32Kbps-192Kbps)

# 3. Operation Guide

### 3.1. Set Work Mode

There are 7 main trigger modes (from "0" to "6") and 5 auxiliary modes (from "7" to "B") available for users to set in a configuration file according to the actual needs

Each of the parameters from "0" to "B" represents a corresponding trigger mode, which can be set individually for each of the 4 trigger inputs. See the details below.

Parameter	Corresponding Trigger Mode
0	Pulse Interruptible
1	Hold and Play in Loop
2	Pulse Non-interruptible
3	Hold and Play Once
4	All in Loop
5	Play Next in Associated Folder
6	Single in Loop
7	Play/Pause
8	Previous
9	Nex
A	Vol+
В	Vol-

# **Detailed Explanations on the Main Trigger Modes 0-6**

• <u>Pulse Interruptible</u>: In this mode, a single negative pulse will start playback. It is possible to interrupt the playback by pressing the same button used to activate. Once playback is interrupted, it will automatically restart the audio file immediately. It's also possible to interrupt the play back



by pressing any of the other 3 buttons. Once playback is interrupted, it will automatically start the sound that is associated with the button pressed.

- <u>Hold and Play in Loop</u>: In this mode, the negative pulse must be held/maintained to the sound module trigger for audio file to complete. The audio file will only playback while button, or negative pulse, is held/maintained during playback. Once the button being held, or negative pulse, is removed, the playback will be stopped/cancelled. Once the button is kept holding, when the playback of the audio file is finished, it will start to play it repeatedly(loop playback).
- <u>Pulse Non-interruptible</u>: In this mode, a single negative pulse will start playback. It's not possible to interrupt the playback by pressing the same button or the other buttons. Once an audio file is triggered, the audio file will not be able to be interrupted/cancelled during playback. The playback will only end when the audio file has played its entirety.
- <u>Hold and Play Once</u>: In this mode, the negative pulse must be held/maintained to the sound module trigger for audio file to complete. The audio file will only playback while button, or negative pulse, is held/maintained during playback. Once the button being held, or negative pulse, is removed, the playback will be stopped/canceled. Once the button is kept holding, when the playback of the audio file is finished, it will not start to play it again.
- <u>All in Loop</u>: In this mode, a single negative pulse will start playback. Press the button and it's able to play all the audio files in the storage device one by one in loop. During playback, if the the same button is pressed again, the playback will be stopped. In addition, if the associated trigger input is shortened with GND first, the player will automatically play the audio files one by one in loop once it is powered on.
- <u>Play Next in Associated Folder</u>: In this mode, a single negative pulse will start playback. Every time press the button and it's able to play next audio file and stops when the audio file is finished in the associated folder. During playback, if the the same button is pressed again, the playback will be interrupted and it will activate the next audio file at the same time. In this mode, as many as 100 audio files can be loaded into the folder.
- <u>Single in Loop</u>: In this mode, a single negative pulse will start playback. Press the button and it's able to play the associated audio file in loop. During playback, if the same button is pressed again, the playback will be stopped.

Any of these 12 work modes can be set for any of the 4 trigger inputs through a configuration file named "read.cfg", which comes from a text file(.txt) originally. In the configuration file, each digit that represents the work mode is associated with one trigger input, so there are total of 4 digits that associate 4 trigger inputs respectively. Please refer to the two steps below on how to build a configuration file successfully.

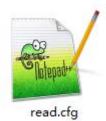
1). Build a new text file on computer and enter the corresponding number like "0113" that represents the input 1 will



be set with the trigger mode "Pulse Interruptible", input 2 and input 3 will be set with the trigger mode "Hold and Play in Loop", input 4 will be set with the trigger mode "Hold and Play Once". Refer to the image below.



2). Save it and change the file name "xxx.txt" to "read.cfg". Please make sure your computer shows filename extensions. The extension ".txt" must be changed to ".cfg", otherwise the file is not workable. Refer to the image below.



## 3.2. Audio Files Loading



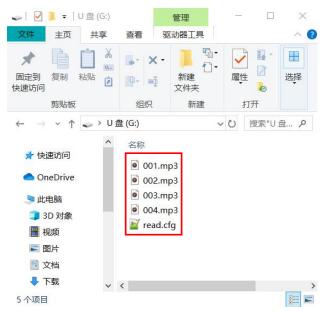
As you can see the picture above, there is a micro USB port, and you can connect it to computer through an Android phone purposed USB data cable to load audio files and configuration file. Once the connection is done, the internal flash memory will be detected and displayed on PC working as a USB flash drive.

## 3.2.1. Files Loading Method for Trigger Mode 0-4 and 6



Except for the trigger mode 5 (Play Next in Associated Folder) that supports multiple audio files, all of the other 6 main trigger modes(0-4, and 6) work based on one-on-one control. 4 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 indexing sequence. In other words, the file that is to be loaded first in the storage device will be associated with input 1. The last file to be loaded in the storage device will be associated with input 4. In order to guarantee a correct 'one-on-one' order, please refer to the following steps.

- 1). Build a new folder on the computer and put the 4 audio files into this new folder.
- 2). Rename the audio files from 001.mp3 to "004.mp3", and make sure they are ranked from "001.mp3" to "004.mp3" in order.
- 3). Connect the equipment with computer through the USB cable, and you will see a removable disk / USB flash drive
- 4). Delete the sample audio files pre-loaded at factory for testing purpose.
- 5). Back to the folder and select all of the 4 audio files in the folder.
- 6). Right click on the first file (001.mp3/) and choose "Send to removable disk / USB flash drive".
- 7). This should send the 4 audio files to the memory in a correct sequence.
- 8). Put the prepared configuration file into the root directory together with audio files and then refresh. Refer to the image below.



- 9). Safely remove the USB data cable from computer.
- 10). Apply power to the equipment and push any of 4 wired buttons to play back a corresponding sound.

Note: Any of the 5 auxiliary modes (from "7" to "B") can be set for any of the 4 trigger inputs as well if required.

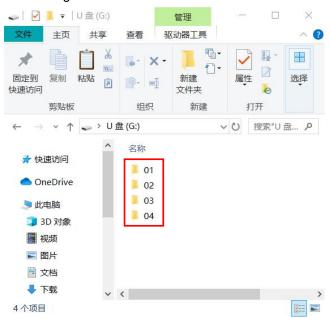
# 4.2.2. Files Loading Method for Triggering Mode 5

The trigger mode 5 (Play Next in Folder) is a special feature of this device that is able to meet some special applications. When building the configuration file, please fill in the number "5555". In this way all of the 4 trigger inputs will be worked in mode 5 (Play Next in Folder). It's also fine if you just want the first 2 trigger inputs to be worked in mode 5, and the other 2 trigger inputs to be worked in the other modes like filling in the number"5512".

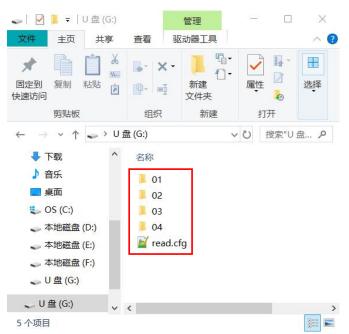


Let's take all of the 4 trigger inputs to be worked in mode 5 as example. Please refer to the steps below on how to load the audio files.

- 1). Firstly connect the device to computer using the USB cable, and you will see a removable disk / USB flash drive.
- 2). Build 4 new folders in the memory and rename them 01, 02, 03, and 04. The first trigger input will be associated with the folder 01, the second trigger input will be associated with the folder 02,...and the fourth trigger input will be associated with folder 04. Refer to the image below.



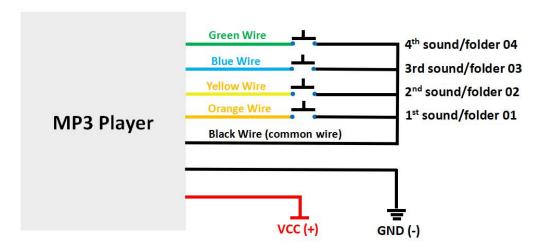
- 3). Respectively copy audio files from computer to the associated folder. The audio files in the folders can be renamed as 001.mp3, 002.mp3, 003.mp3.....It also works if you don't change the names.
- 4). Put the prepared configuration file into the root directory together with the folders and then refresh. Refer to the image below.



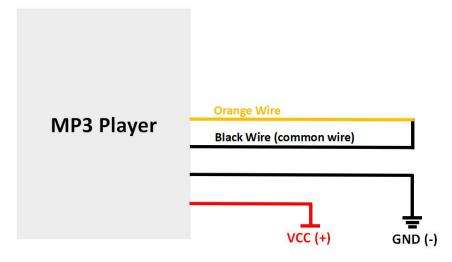
- 5). Safely remove the device from computer.
- 6). Apply power to the equipment and push any of 4 buttons to play back a sound from the associated folder.

# 4. Schematic of Connection

# 4.1. Connection for Normal Use



# 4.2. Connection for Automatic Loop Playback When Powered Up



This wiring method is for those customers' reference, who need the player to play the sound messages automatically in a loop once it's powered up. Besides, to achieve this function the trigger mode in the configuration file must be "4" for the first trigger input only.

# 6. Installation

As the picture is shown below either you can use two screws or use a sticker to install / fix the player easily.

