FN-AL7T Triggerable MP3 Sound Player
# User's Manual
Version: V1.0

1. Features

✧   7 trigger inputs available and triggered by negative pulse or GND.

✧   The function / trigger mode of each input can be set individually through a configuration file.

✧   Equipped with a high quality audio decoder that is able to decode MP3 and WAV audio formats.

✧   Built-in a 8Mbytes flash memory that supports about 8 minutes of MP3 files of 128Kbps.

✧   Able to update audio files through the micro USB port based on PC like using a USB flash drive.

✧   Built-in a class D 10watts amplifier to reproduce beautiful sound output.

✧   Equipped with a DC power jack and supports 12-40V DC wide power input.

✧   Adjustable sound volume through the potentiometer.

✧   Adopts the robust and durable aluminium enclosure.

✧   Industrial grade design and strong anti-jamming capability.

✧   Dimensions:142 x 88 x 38(mm)

2. Technical Parameters

✧   Working voltage: 12-40V DC

✧   Working current: ≤1000mA

✧   Power Consumption: ≤10W

✧   Flash memory size: 8MB

✧   Audio format: MP3 / WAV

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3. Operation Guide
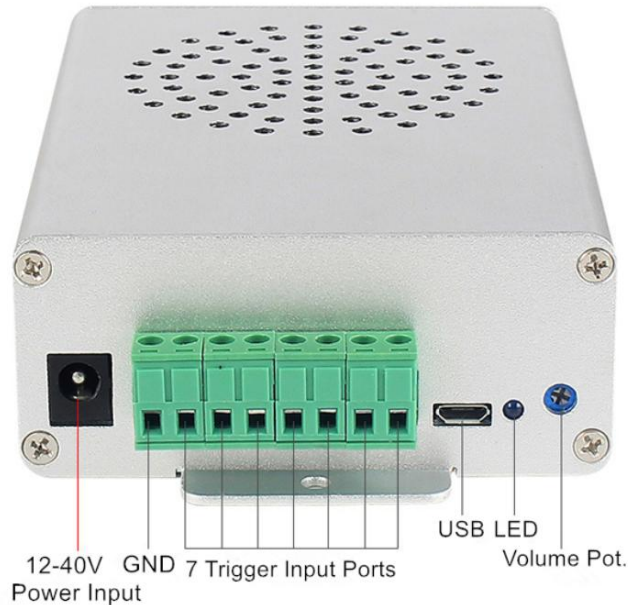
3.1. Set Work Mode

There are 4 trigger modes available for users to set in a configuration file according to the actual needs. Each of the parameters from "0" to "3" represents a corresponding work mode, which an be set individually for each of the 7 trigger inputs. See the details below.

| Parameter	Corresponding Trigger Mode
0	Pulse Interruptible
1	Hold and Play in Loop
2	Pulse Non-interruptible
3	All in Loop

Detailed Explanations

- Pulse Interruptible: 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.

- Hold and Play in Loop: 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).

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- Pulse Non-interruptible: 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.

- All in Loop: 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.

Any of these 4 work modes can be set for any of the 7 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 7 digits that associate 7 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 "0011221" that represents the input 1 and input 2 will be set with the trigger mode "Pulse Interruptible", input 3, input 4 and input 7 will be set with the trigger mode "Hold and Play in Loop" , input 5 and input 6 will be set with the trigger mode "Pulse Non-interruptible". Refer to the image below.

For input 1   **For input 7**
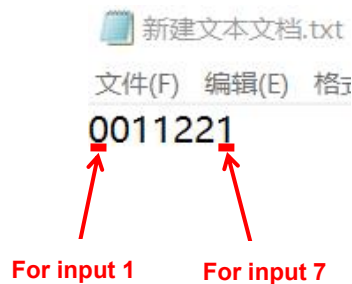
2). Save it and change the file name "xxx.txt" to "read.cfg". Please make sure your computer shows filename extensions. The extension ".txt" must be changed to ".cfg'', otherwise the file is not workable. Refer to the image below.



read.cfg

3.2. Audio Files Loading

As you see there is a micro USB socket on the device, and you can connect it to computer through an Android phone purposed USB cable to load audio files and configuration file. When it's connected with PC, the built-in flash memory will be detected and displayed on PC working as a USB flash drive.

7 audio files (or fewer according to actual requirement) 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

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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 7. 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 7 audio files into this new folder.

    2). Rename the audio files from 001.mp3/wav to "007.mp3/wav", and make sure they are ranked from "001.mp3/wav" to "007.mp3/wav" in order.

    3). Connect the equipment with computer through the USB cable, and you will see a simulated USB flash drive / removable disk.

    4). Delete the sample audio files pre-loaded at factory for testing purpose.

    5). Back to the folder and select all of the 7 audio files in the folder.

    6). Right click on the first file (001.mp3/wav) and choose "Send to removable disk".

    7). This should send the 7 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.
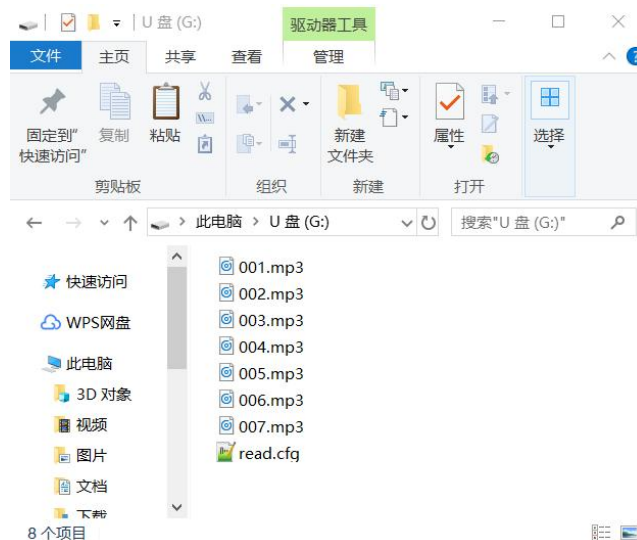
    9). Safely remove the USB cable from computer.

    10). Apply power to the equipment and push any of 7 buttons to play back a corresponding sound.

3.3. Example of Wiring Connection