Industrial MP3 Player 7 Input Trigger Audio Player for Museums and Talking Displays

User's Manual

Model: FN-T718

Version: V1.0

Overviews

The FN-T718 is an industrial MP3 player designed to provide stereo audio output for museum exhibits, talking displays and other industrial/commercial applications. It has not only a built-in 8MB flash memory but also a slot for a micro SD card as well as a USB connector for a USB pen drive that hold the sound file(s), and connectors for up to 7 push buttons for sound activation. Upon activation the unit will immediately play the sound file once (by default) and become ready for the next activation. And it supports 8-type trigger modes to meet different needs in different applications. A trigger mode can be set with a config file easily. Besides, it's possible to switch on an external LED light during playback of a sound file. Please note that a computer is required for copying sound files onto a storage device (built-in flash memory, micro SD card or USB pen drive).

Features

- ✧ A negative trigger version or a positive trigger version can be selected.
- ✧ Built-in a high quality MP3 player with 8MB flash memory.

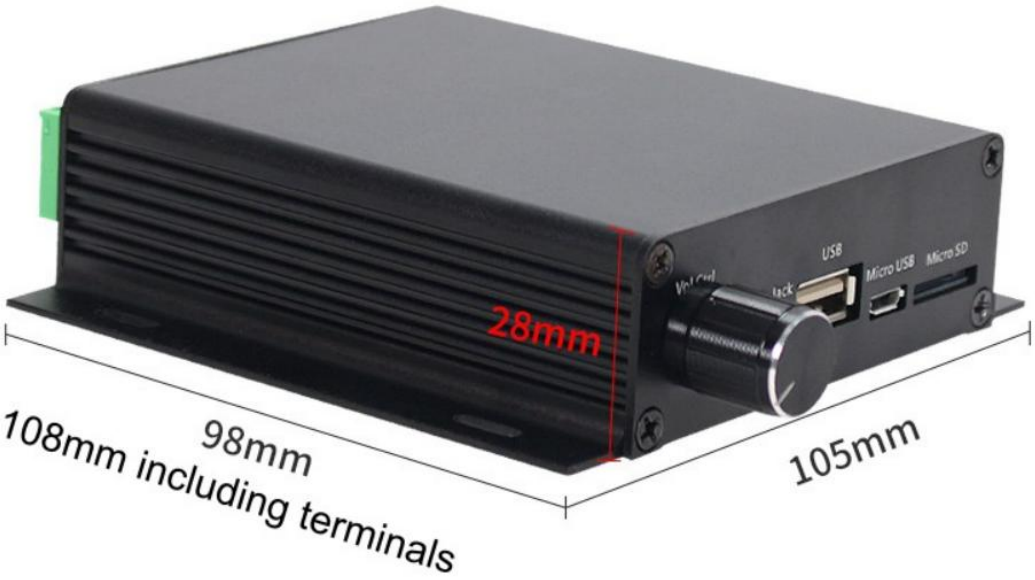
- ✧ Supports inserting USB flash drive and micro SD card as the extended storage devices.
- ✧ Supports max. 32GB USB flash drive and max. 32GB micro SD card.
- ✧ 7 trigger inputs available and they can be connected with as many as 7 push buttons/switches/relays, etc.
- ✧ Supports 8 types of trigger modes and each trigger mode can be set easily through a config file (text document).
- ✧ Built-in a 50W*2 class D amplifier and the audio output is powerful.
- ✧ Uploading audio files by connecting the micro USB port of the device to computer with a USB data cable.
- ✧ Sound volume is adjustable through turning the volume knob.
- ✧ Able to drive an external equipment like a warning light or a motor simultaneously when it is playing a sound.
- ✧ Equipped with a 3.5mm audio output jack that can be connected to an external amplifier or an active speaker.
- ✧ Adopts solid and durable aluminium alloy case.
- ✧ Industrial grade design and strong anti-jamming capability.

Technical Parameters

- ✧ Working voltage: 12-24V DC
- ✧ Working current: ≥8500mA @12V (when it has two 50W 8 ohm speakers)
  ≥4250mA @24V (when it has two 50W 8 ohm speakers)
- ✧ Power consumption: ≤100W
- ✧ Flash memory size: 8MB
- ✧ Audio format: MP3

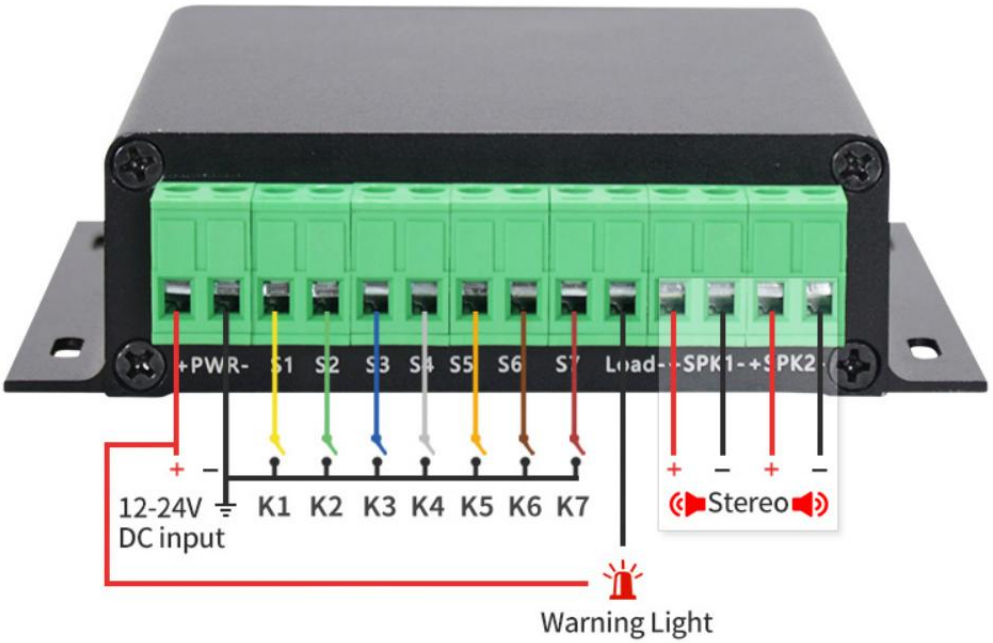
Interfaces

Dimensions

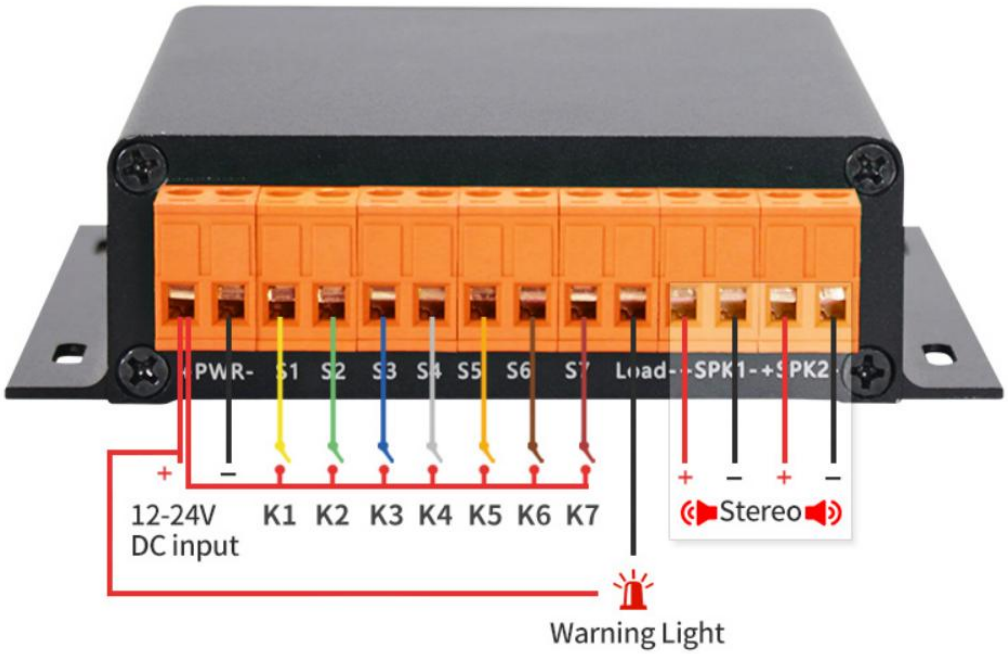


Examples of Wiring Connection

1. Negative Trigger Version



2. Positive Trigger Version



Operation Guide

1. Select a Trigger Mode

There are 8 trigger modes available for users to choose according to the actual needs. Any of these 8 trigger modes can be set/acquired through a config file, which is a text file (.txt). Users just need to fill in a number that is corresponding to a trigger mode in a new built text file. Save it and rename the file “Config” or any name you like, then put it in the root directory of the built-in flash memory/micro SD card/USB flash drive together with the audio files or folders. Please refer to the below sheet about the number and the associated trigger modes.

Number in Config File	Corresponding Trigger Mode
0	Short press the button to start playing, and during playing, if you press the button again, the playback will be interruptible and it will play from the beginning.
1	Press the button and hold to start playing repeatedly, and when the button is released the board stops playing.
2	Short press the button to start playing, and during playing, if you press the button again, the playback will be NOT interruptible.
3	In this mode, K1 works as Next, K2 Previous, K3 Play/Pause, K4 Stop, K5 Volume Up, K6 Volume Down, K7 Random playback (it plays a sound randomly after each triggering). Special function: When K1 is short-circuited to GND first and use this mode in the config file and once power is applied, the board is able to play a sound in a loop or play multiple sounds one by one in a loop until power is off.
4	In this mode, sound file 000.mp3 will play in a loop when power is applied. Any button from K1 to K7 (associated 001.mp3 to 007.mp3) can interrupt it and switch to play the associated sound file. Once the associated sound file finishes the playback, sound file 000.mp3 will continue to play in a loop.
5	Each button from K1 to K7 have their associated folders from 01 to 07 respectively. Each folder can store multiple files (for example from 001.mp3 to 030.mp3). Short press the button to play sound file 001.mp3, and short press again to play the next file 002.mp3, and so on. When the last sound file finish playing, short press again to go back to playing file 001.mp3. During playing, if you press the button again, the playback will be interruptible and it will play next file.
6	The same as mode “5”, but during playing, the playback will be uninterruptible.
7	Each button from K1 to K7 have their associated folders from 01 to 07 respectively. Each folder can store multiple files (for example from 001.mp3 to 030.mp3). Short press the button to play all of the sound files in order one by one. During playing, if you press the button again, the playback will be interruptible and it will play next file and continue to play the rest of the file. When the last sound file finishes playback, it’ll stop.

Note: If there is no config file on the built-in flash memory/micro SD card/USB flash drive, the device will always works with the mode “0” by default.

2. How to create a config file

Users can create a config file without or with volume setting. The volume knob on the device controls the speaker outputs only, so if some users want to adjust volume from the 3.5mm audio jack output, it’s necessary to create a config file with volume setting, otherwise a config file without volume setting is enough. By the way, in the same time the speaker outputs is also subject to the volume setting in the config file.

2.1. Create a config file without volume setting

1). Firstly create a new text file on computer (desktop or somewhere else).

2). Open it and enter a number (mode) you need. Suppose you need mode “1”, just enter “1”. See below.

3). Save it and close it.

4). Rename the file “Config” or any other name you like.

2.2. Create a config file with volume setting

There’re thirty-one volume levels from “00” to “30”. “00” means mute while “30” means the max. volume level.

1). Firstly create a new text file on computer (desktop or somewhere else).

2). Open it and enter a number (mode) you need, and enter a volume level right after the mode number. See below.

3). Save it and close it.

4). Rename the file “Config” or any other name you like.

3. Audio Files Loading/Updating

Users can use a micro USB data cable to connect the board to computer. The built-in flash memory will be detected as a USB flash drive on computer. If the built-in flash memory is not large enough to store your audio file, you can use a micro SD card or USB flash drive instead. When there is an inserted micro SD card, there will be two simulated USB flash drives on computer (one is the built-in flash memory and the other one is the micro SD card), so please note to recognize.

3.1. For Trigger Mode 0-3

To these four modes, the audio files need to be placed on the root directory of the storage device (built-in flash memory or micro SD card). The arrangements of the audio files are managed by a physical index order. In other words, the file that is to be loaded first in the storage device will be associated with input “K1”. The last file to be loaded in the storage device will be associated with input “K7”. 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 in this new folder.

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

3). Connect the device to computer through a USB data cable.

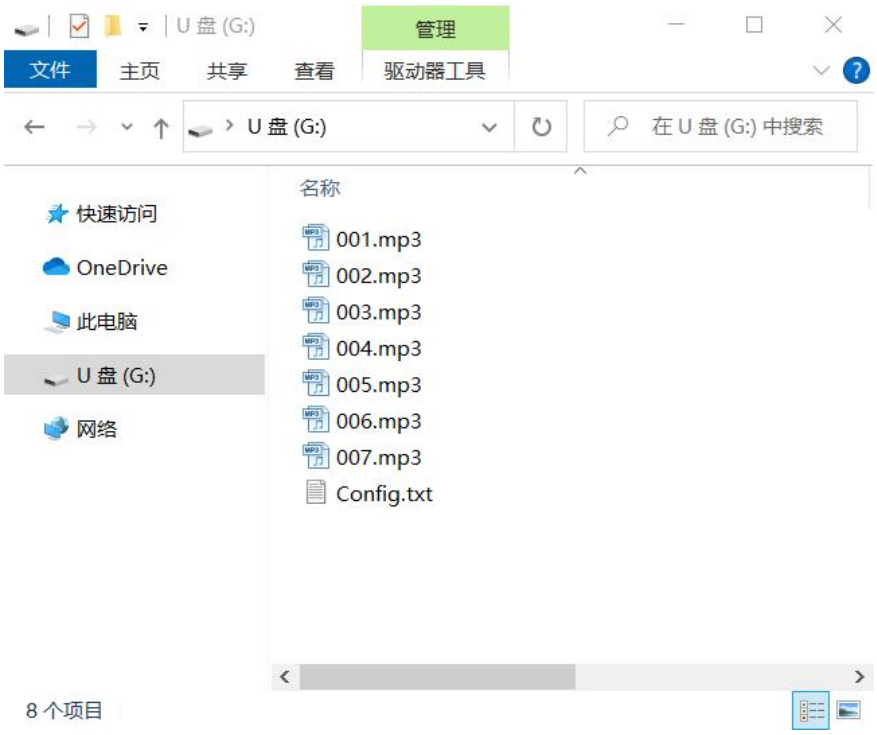
4). Delete the pre-loaded audio files for tested purpose at factory, or empty the micro SD card if it has other files inside.

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

6). Right click on the first file (001.mp3) and choose "Send to removable disk" or “Send to USB flash drive”.

7). This will send the 7 audio files to the on-board flash memory or micro SD card one by one in a correct sequence.

8). Move the prepared config file with the trigger mode needed onto the root directory together with the audio files as below then refresh.

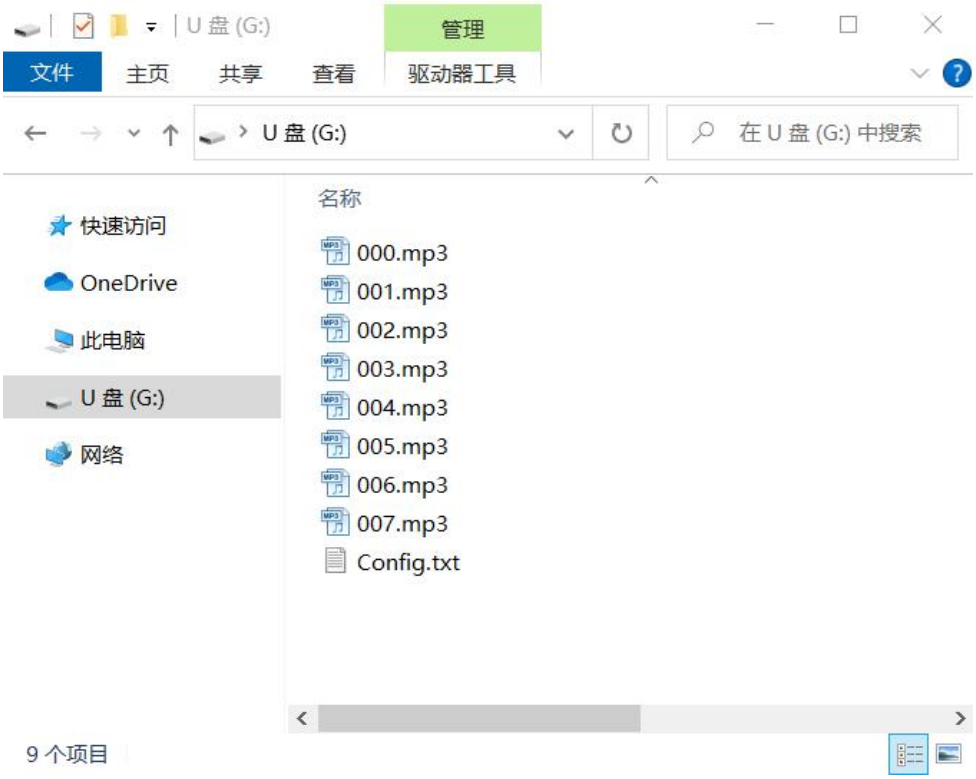


9). Safely remove the USB connection from computer.

Note: When you use the trigger mode "3", you can definitely place more than 7 audio files.

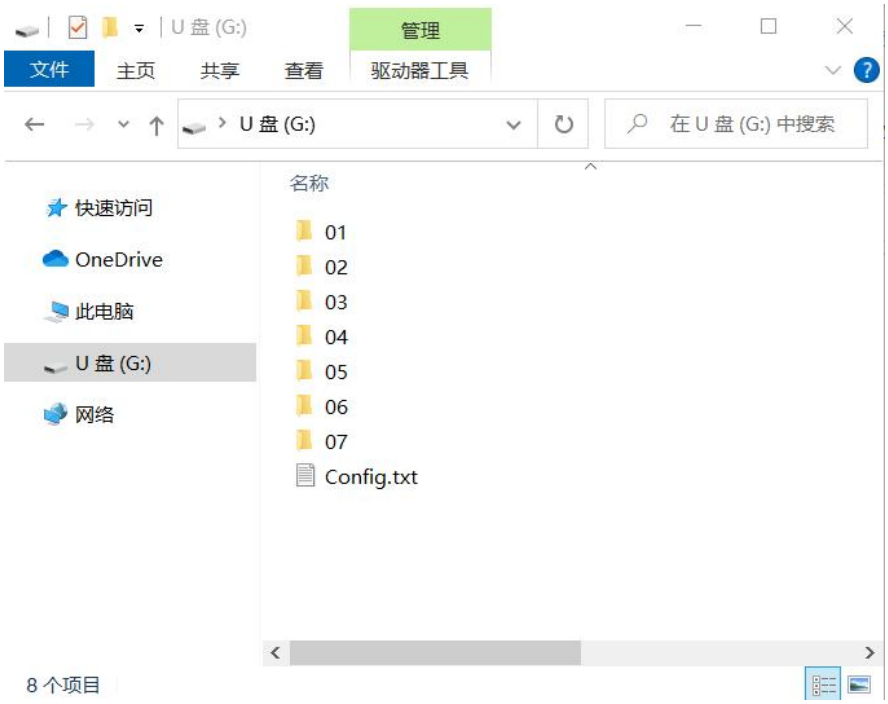
3.2. For Trigger Mode 4

Like the first four trigger modes, the audio files need to be placed on the root directory of the storage device (built-in flash memory/micro SD card/USB flash drive). In this mode, the device recognizes the files by name instead of physical index order, so it'll be alright to directly copy your audio files onto the storage device and rename the files 000.mp3-007.mp3 according to your actual needs. Please refer to the screenshot below.

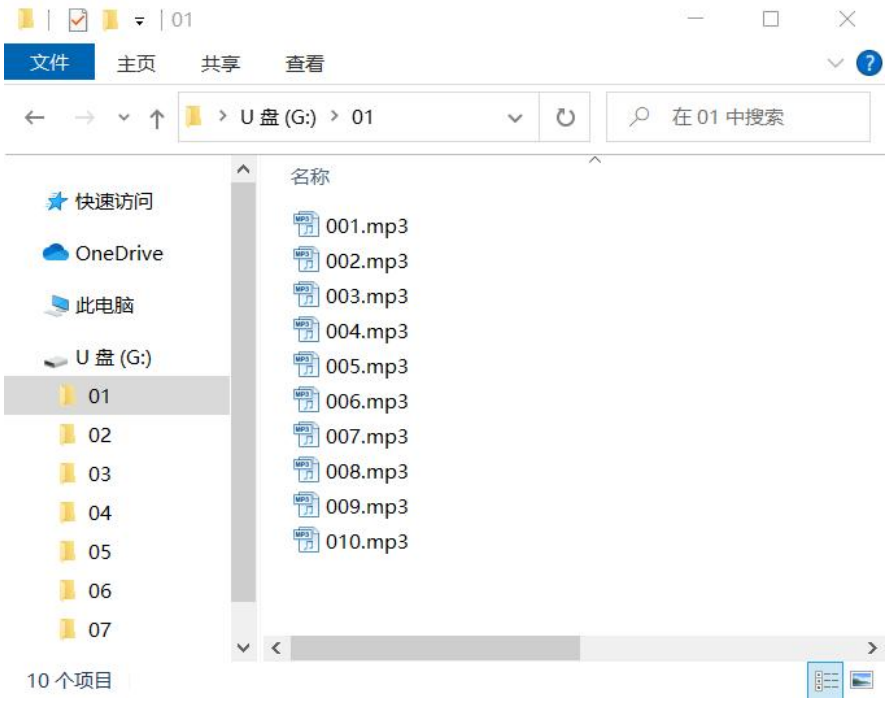


3.3. For Trigger Mode 5-7

At first, users need to create seven folders on the storage device (built-in flash memory/micro SD card/USB flash drive), and rename them 01, 02, 03, till 07, then put the config file together with the folders on the root directory. Of course, if you don't have to use so many buttons, then you don't need to create as many as seven folders. See the screenshot as below.



After that, copy your audio files to each associated folder, and rename them 001.mp3, 002.mp3, and so on. In these three modes, the device recognize the audio files by physical index order, so when you copy audio files to each folder, please note the copy order. See the screenshot as below.



Note: When you rename a file, you can still keep the original file name and you can rename it like 001-Never Say Goodbye.mp3, 002-Season in the Sun.mp3, 003-Angel.mp3, and so on. This rule applies to all of the trigger modes.