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E-TMAPS-10W

Triggerable Audio Player with Built-In 10W Amplified Speaker

User's Manual

1. Features

- ✧ Equipped with a high quality MP3 player.
- ✧ Built-in 4MB flash memory, which is able to store total of 4 minutes long (at 128Kbps) MP3 files.
- ✧ Update MP3/WAV files to the flash memory easily through the micro USB port
- ✧ Play the sound messages by negative triggering.
- ✧ 4 different trigger modes available.
- ✧ Can be controlled by buttons, switches or relays.
- ✧ Built-in class D amplifier for great sound output.
- ✧ Adjustable sound volume.
- ✧ Wide range of power input (9-24Vdc) and stable performance.
- ✧ Dimensions: 120x120x60(mm)

2. Electrical parameters

- ✧ Working voltage: DC 9V-24V
- ✧ Working current: ≤400mA (Input: DC12V)
- ✧ Power Consumption: ≤5W
- ✧ On-Board Flash memory size: 4MB
- ✧ Audio format: MP3/WAV

3. Operation Guide

3.1. Set Trigger Mode and Volume

There are 4 trigger modes and 31 volume levels available for users to set in a configuration file according to the actual needs.

Trigger Modes

Each of the parameters from “0” to “3” represents a corresponding trigger mode. See the details below.

Parameter	Corresponding Trigger Mode
0	Pulse interruptible one-on-one playback
1	Level hold loop playback
2	Pulse non-interruptible one-on-one playback
3	Standard MP3 key mode playback

- Pulse interruptible one-on-one playback: In this mode, a single negative pulse (caused by motion sensor for example) will trigger playing of an MP3 sound file. Playback can be interrupted by triggering another pulse (by re-triggering the motion sensor) which will then cause the playback to restart immediately and play until complete.

- Level hold loop playback: In this mode, the negative pulse must be held/maintained to the sound module

  Example: A motion detector senses continual motion within a room, triggering the audio file to play. Once the motion stops, playback will be cancelled.

- Pulse non-interruptible one-on-one playback: In this mode, a single negative pulse will start playback. It is 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 in its entirety.

  Example: A motion detector senses when a person enters a room, which triggers the audio player to play the MP3 sound file. Once the audio file is triggered, the playback will only end once the file has played in its entirety.

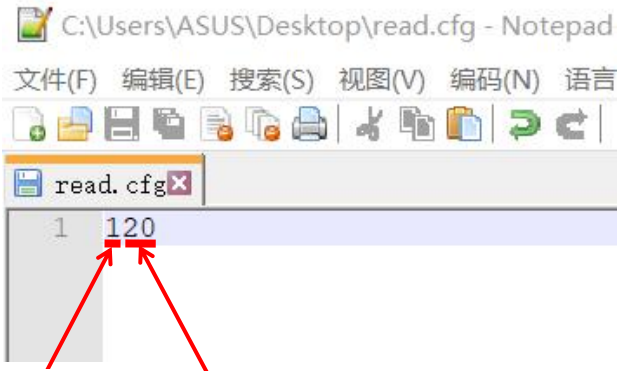
- Standard MP3 key mode playback: In this mode, the four inputs on the E-TMAPS-10W will function as Previous, Next, Play/pause, and Stop triggers respectively, allowing more than four audio files to be placed on the device.

Volume Levels

Each of the parameters “00” to “30” represents a volume level. “00” represents mute while “30” represents the max. Volume level.

Any of these 4 trigger modes and 31 volume levels can be set through a configuration file named “read.cfg”, which comes from a text file(.txt) originally. Please refer to the two steps below on how to build a configuration file successfully. Let’s take the trigger mode ”level hold loop playback” and volume level “20” as an example.

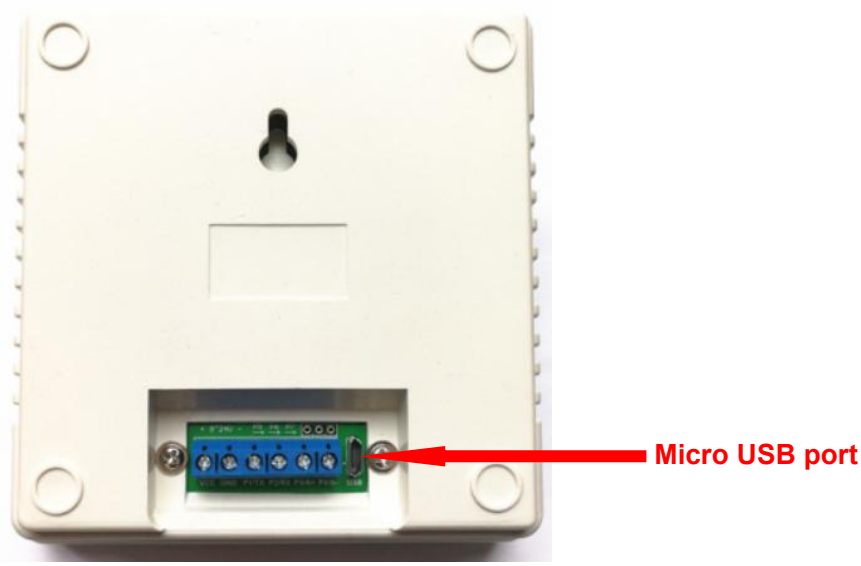
1). Build a new text file on computer and enter the corresponding number “120” that represents the trigger mode ”level hold loop playback” and volume level “20”. Refer to the image below.



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 will not work. Refer to the image below.

3.2. Loading Audio Files

See the image below. There is a micro USB socket at the back of the device. Users can connect it to computer through an Android phone purposed USB cable to load audio files and configuration file.



4 audio files need to be directly stored in the root directory of the memory/storage device. 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 "K1". The last file to be loaded in the storage device will be associated with input "K4". 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 in this new folder.

2). Rename the audio files from 001.mp3/wav to "004.mp3/wav", and make sure they are ranked from "001.mp3/wav" to "004.mp3/wav" in order. File extensions ".mp3" and ".wav" must be lowercase.

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

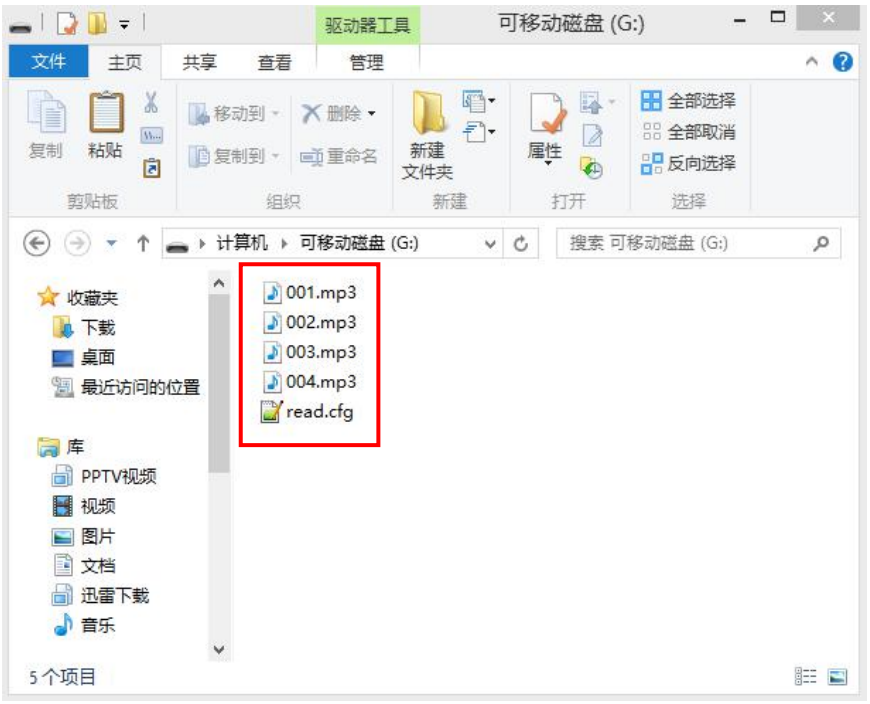
4). Delete the sample audio files pre-loaded at factory for testing purpose.

5). Select all of the 4 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 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.



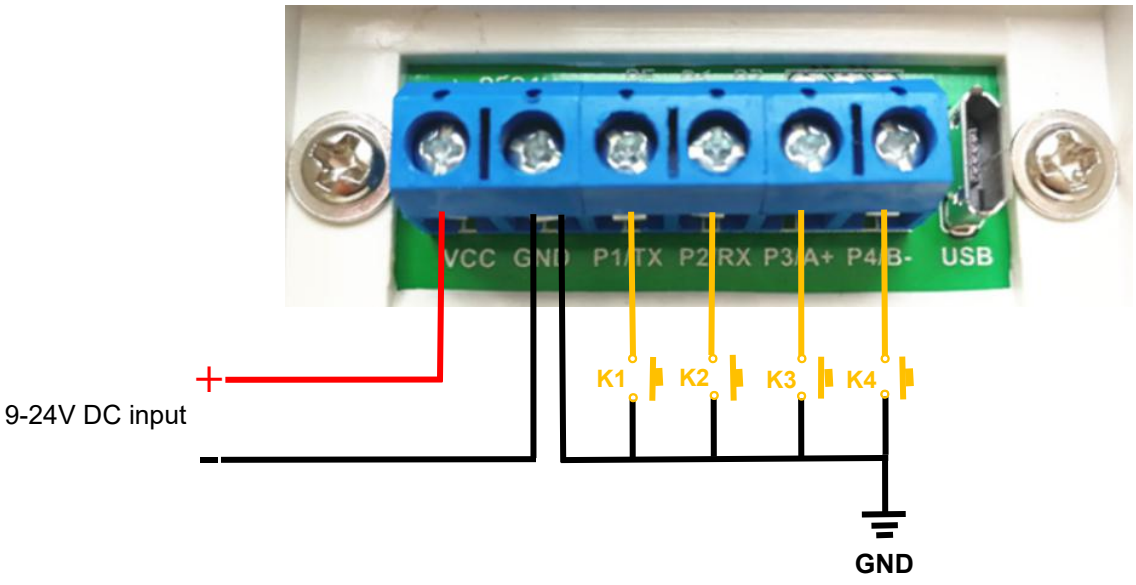
9). Safely remove the USB cable from computer.

10). Apply power to the equipment and push any of 4 buttons to play back a corresponding sound.

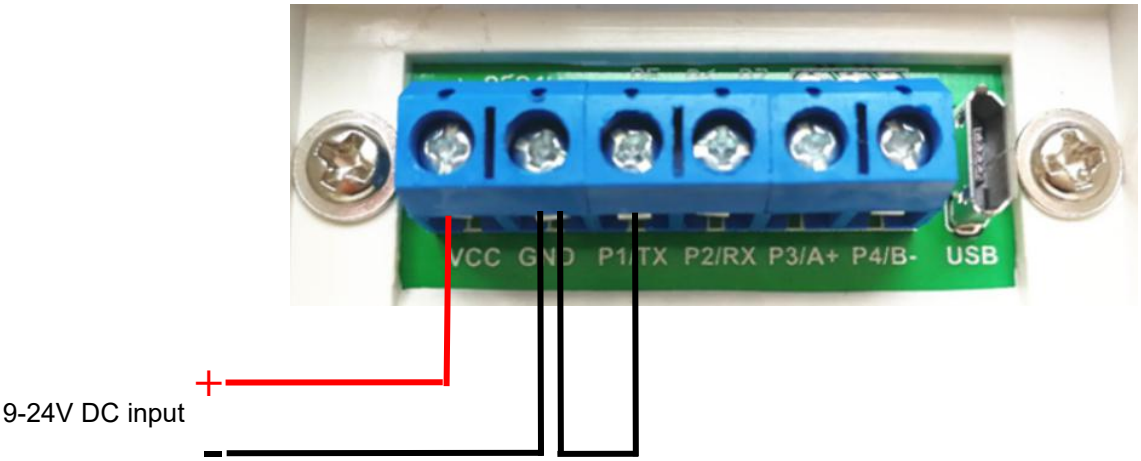
Note: If the trigger mode of pulse-interruptible one-on-one playback with the max volume is needed, the speaker will also work without the configuration file. The player uses this trigger mode and the max volume setting by default, even without a configuration file.

3.3. Examples of Wiring Connection

3.3.1. Reference for Normal Use



3.3.2. Reference for Automatic Playback When Powered ON



This wiring method is an example of how to play all sound messages automatically in a loop when it's powered ON. The connections must be made prior to applying power. In addition, to achieve this function, the trigger mode in the configuration file must be "3".

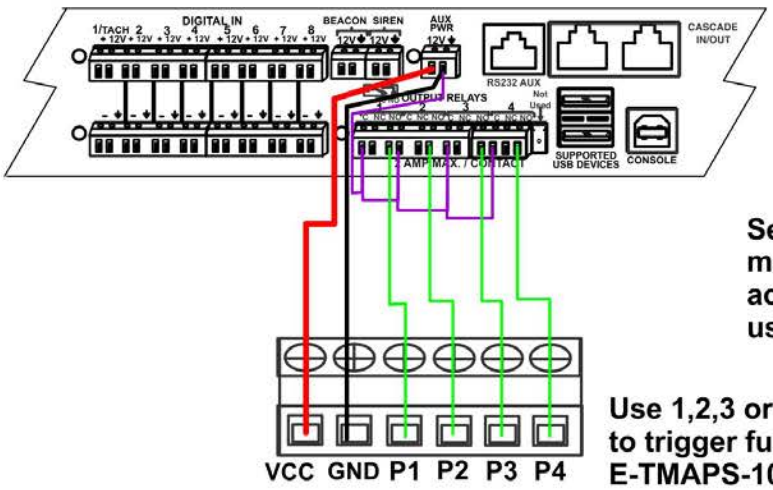
4. Relation table between flash capacity and time duration supported based on different bit rates of MP3 files

Time unit: second

Capacity / Bit rate	4Mbytes	8Mbytes
16Kbps	2022	4045
24Kbps	1309	2618
32Kbps	906	1812
64Kbps	477	955
96Kbps	325	651
128Kbps	246	493
160Kbps	194	389
192Kbps	161	323
256Kbps	120	241
320Kbps	95	191

Wiring Methods to Connect to ENVIROMUX Systems

REAR VIEW OF E-16D



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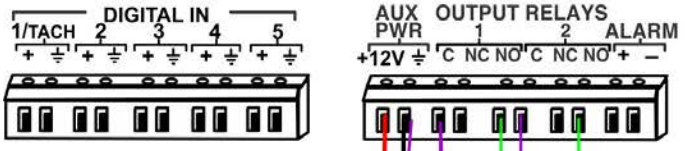
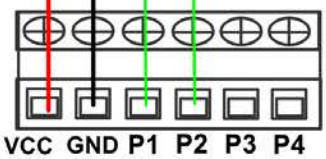
See the E-xD product manual for instruction to activate Output Relays using sensor triggers.

Use 1,2,3 or all 4 output relays to trigger functions on the E-TMAPS-10W

VIEW OF TERMINALS ON E-5D





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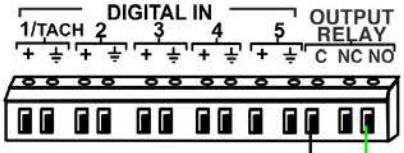
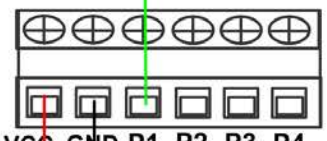
VIEW OF TERMINALS ON E-2D

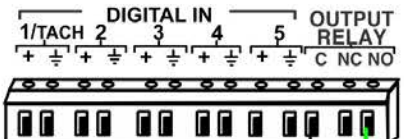


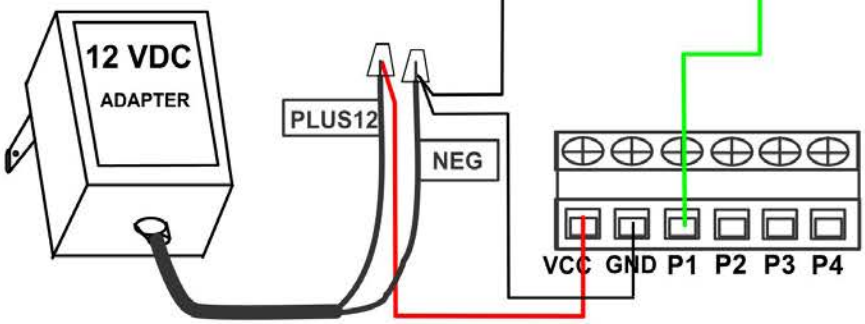


E-TMAPS-10W

For use with E-MINI-LXO, a 12V power supply is needed. (supplied with E-TMAPS-10WP)

VIEW OF TERMINALS ON E-MINI-LXO





E-TMAPS-10WP