

SmartSound Voice Prompter With Human Body Induction

—WT0102P01 V2.05



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1. Brief Introduction

Human body induction is a kind of technology of infrared pyroelectric principle to induce human activity information. When someone enters the induction range, it can accurately identify the human activities. It is like a cat's eyes, not depending on light. Even in the dark environment, it can work stably and reliably, overcoming the shortcomings of light induction.

WT0102P01 (body induction prompt) belongs to SmartSound series. All of them support powerful DIY function. Users can choose parts according to the specific application. One of the main characteristics is using our company's mature technology of human body induction. When detecting the human body passing it can identify direction accurately and will give warm prompt, warning and greeting at the first time. According to the different applications, different voice can be replaced at any time to achieve the different needs of playing effect. This product has been used in the exhibition hall, subway station, elevator, gated prompt, automatic loudspeaker etc.

For your better understanding of installation and configuration, please read this instruction carefully.

2. Features

- Adopt infrared sensor technology, automatically triggering to play voice.
- The sensor head can be rotated around 60°, easy to change different induction field.
- Voice can be changed freely.
- The read way of the voice address is confirmed according to the file storage order.
- Can set playing modes, such as single, sequence and random mode.
- Adopt MP3 playing solution. Sound quality is better than the ordinary sound.
- Support external SD card or built-in SPI-FLASH, giving preference to SD card which supports hot plug.
- Change audio files of FLASH via SD card.
- Built in power amplifier and 2W/8Ω loudspeaker, available to adjust volume.
- Built in charging circuits, auto sleeping, low power consumption, long standby time.
- DC-5V operation voltage and DC3.7 lithium battery.

3. Parameters

Power supply mode	DC5V stabilized voltage supply	
	3.7V lithium battery	
Working Current	Sleep state, lithium battery	≤46uA
	Playing state, lithium battery	≤320mA, typical 120MA
Audio Format	MP3	Bit Rate:16~320Kbps
Audio Output power	8Ω/2W(Typical Value)	
Infrared Induction Range	≤5meters (horizontal direction 60°, vertical direction 30°)	

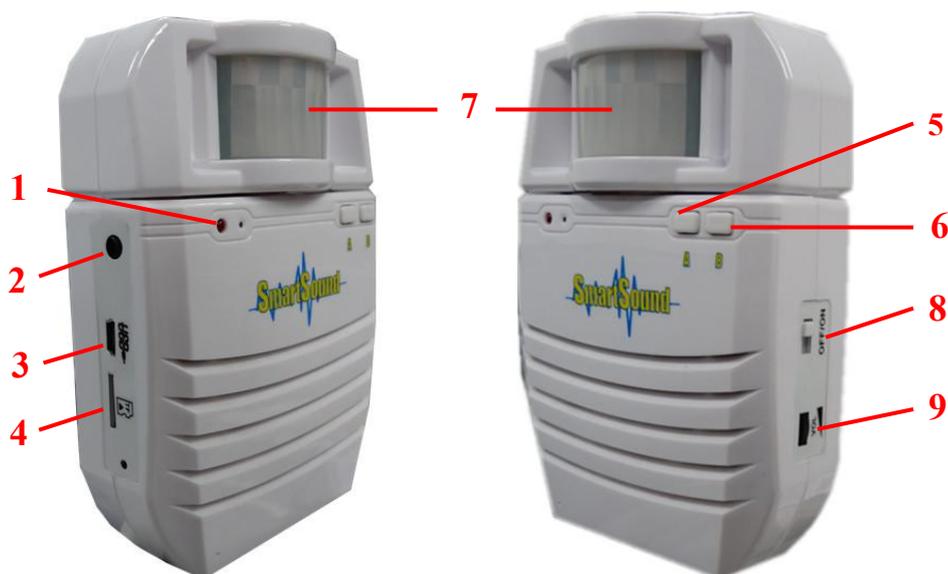
Note: The sound quality will become worse out of accordance with the above sampling rate to load MP3 voice.

4. Appearance

4.1 Size



4.2 Panel



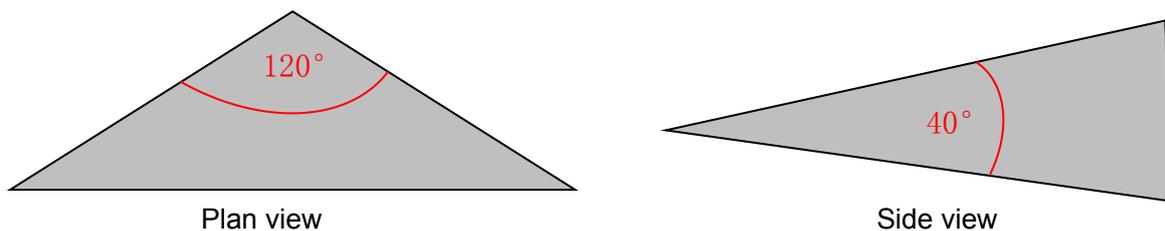
No.	Name	Function Description
1	Indicator Light	Initialization/ renewal audio/ play audio/ external power indicator
2	Audio interface	3.5mm audio output interface
3	USB port	External Micro_USB line for power supply and charging port
4	SD card interface	Used for updating internal voice or external SD card to play
5	A button	The previous one/ replacing audio/ A mode
6	B button	The next one/ B mode
7	Infrared Inductive Probe	Human body infrared inductive probe
8	Power Switch	On: open; Off: close
9	Volume button	Adjusting volume of the built-in horn

Note: The product has reserved extensible interface, which will be more widely used if replacing different induction joints.

5. Installation and fast guidance

First, mount hardware according to hardware installation diagram. Make sure all parameters are normal, especially power source.

Inductive Probe Image:



5.1. Installation condition

1. Don't install outdoors; far from direct solar radiation, peg, large temperature variation; not near air condition or pyrotoxin or rotating objects.
2. The installing surface should be firm, no vibration.
3. Installation should rotate to the different induction areas according to the actual needs.

5.2. Installation operation

There is hang hole in the back shell, with mounting bracket installed together. It's very convenient to hang in corresponding place, or install by using magic tape to stick on the wall. Sensor head with horizontal rotation of 60° is available, moving to the corresponding induction field according to the actual requirement.

5.3 Power supply and charging instruction and sleep function

It is available to use 3.7V lithium battery or external USB power for power supply; when connect to external USB power, it will charge lithium battery and supply power for the host machine until fully charged.

If opened, with external USB power supply, after initialization, LED indicator light will flash per seconds; after fully charged, the light will flash 2 times per 5 seconds. During charging, it will not move into sleep state with low power consumption. If there are triggering and key-press, it will play normally. Without USB power connection, the



indicator light will not be on for long time. Only when playing or setting is the light on. If there is no key-press operation or induction, it will move into sleep state with low power consumption.

Note: There is no any indicate to inform whether is full charged or not. With external USB power (DC5V1A), lithium battery will be fully charged about 4 hours. The built-in protection circuit with full electricity will automatically end the charging. If turn on it to charge, after initialization, when the induction probe is inductive, the prompter is into the normal working state.

5.4 Boot operation and audio storage location

When battery is supplying power, into sleep and low power consumption state, during this time, with triggering or key pressing, it will be awoken immediately and enter into normal working status and play audio automatically. There is a certain delay time from dormant status to normal working status (external FLASH about 1s, SD card about 1.5-2s, related with the card capacity and track). In normal working status, pressing key or triggering, it will play audio immediately.

Audio storage location: support SD card (supporting hot plug) or external FLASH audio, giving preference to micro SD card, otherwise, it will choose built-in Flash by default. You'd better control MP3 audio numbers less than 255. The total audio capacity of micro SD card should not be over 4G (max 32G capacity), because with bigger capacity, the trigger play will have slower reaction.

Note:

1. SmartSound is with initialization time about 10-30s after power supply. During this time, it is normal without any induction or slow induction.
2. For triggering or pressing to play, the time of voice output is related to whether there is audio muting in the forepart of audio play.

5.5 Audio replacement of internal Flash

Prepare for necessary tools such as computer, card reader and SD card (better to have capacity within 8GB). Format SD card in the computer as the format of FAT32 file system. Then, put the renewal mp3 audio file into SD card; after finishing the mp3 file copy, insert SD card into the host computer according to the SD card symbol; then long press A key (the left one), and turn on the power switch (from OFF to ON). At this time, the indicator is lighting all the way. Waiting about 6 seconds, release A key. After indicate light off, it stands for finishing audio replacement.

Note:

1. Copy audio into micro SD card, it cannot allow put other files into micro SD card. MP3 file name is without any special requirement.
2. Renewal audio capacity of micro SD card cannot be over the capacity of Flash, otherwise, there are no audios or only few. If not use SD card audio for triggering play, please remove SD card and can switch to internal FLASH.

If playing sequence is required, following steps can be realized. We usually do some audio editing in the computer, and put these audio files into the same folder. The audio file name is changed to 3bit Arabic numerals, like 001.mp3 or 001welcome.mp3 etc. Sort order chooses progressive increase, then press "Ctrl+A", right-hand click the first audio, in the pop-up menu select "send to" to "removable disk". By this way, it can store the file edited in the computer to SD card. Then, replace SD card files into into Flash.



5.6 Playing mode selection

There are A, B and random mode. Select suitable playing mode according to the actual needs. Playing mode has the function of power-down save.

- Working mode: under on mode, long press button A, when indicator flashes once, release this button. That is to select A mode. Long press button B, when indicator flashes once, release this button, which is to select B mode. Long press button A and B at the same time, when indicator flashes once, release button A and B, which is to select random mode.
- A mode: cycle mode. Triggering once, it will play the next voice. When playing to the last, triggering again will automatically return back to the first voice to play. After power on it will play from the second one.
- B mode: single mode. Triggering once, it will play the current voice, not back to others, with the function of power-down save.
- Random mode: Triggering once, it is not sure to play which one.

Note: when battery is below 3.5V, indicator will flash; below to 3.2V, indicator will flash, not able to finish playing or the speed will be slower.

5.7 Audition and setting triggering voice

- A mode: press button A or B to switch to the previous or next voice; the induction triggering voice is the next voice of the current playing voice. Track address is not power-down saved. With power up again, play voice from the second.
- B mode: press A or B to switch to the previous or next voice. The induction triggering voice is the current playing voice, that is also the current trial listening voice. Under this mode, it is able to save voice number with power down.
- Random mode: it is not sure to play which triggering voice.

5.8 Volume adjustment

In the state of power on, pressing button A or B, it will play the previous audio or the next. It is based on the volume you heard to adjust the suitable volume. If the bigger sound is needed, connecting amplifier of loudspeaker box is available through 3.5mm standard earphone audio port.

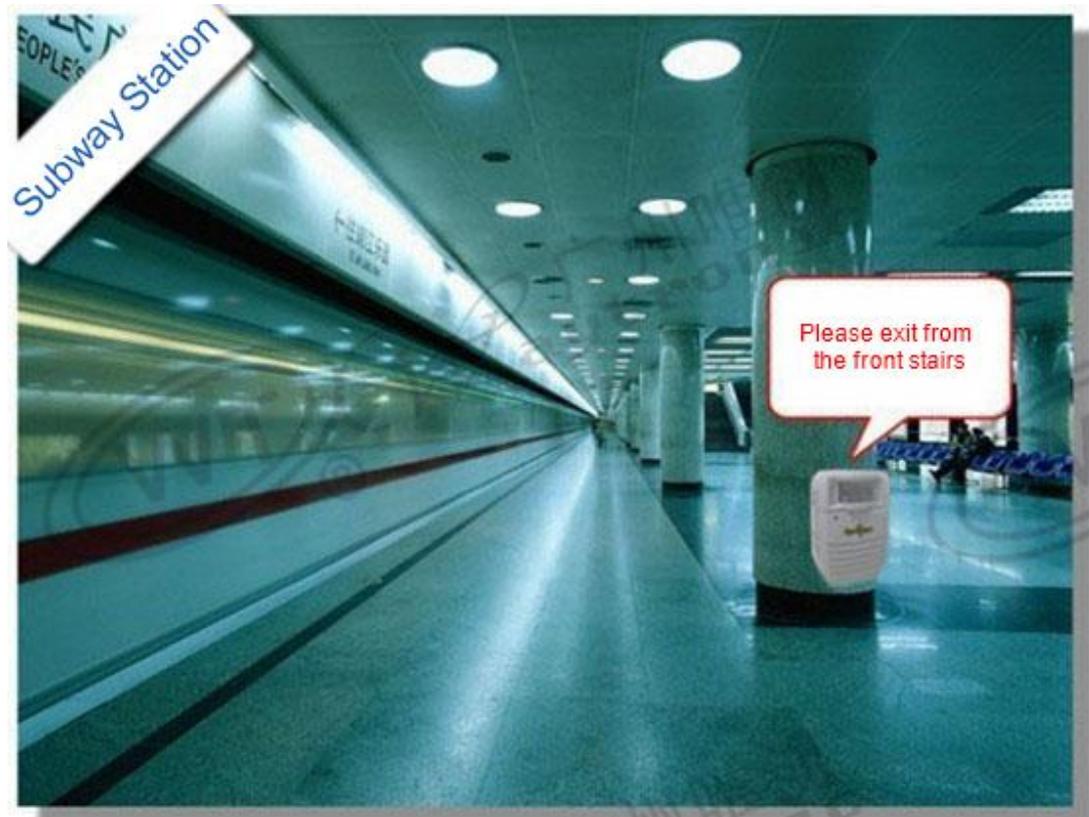
Note: If 3.5 mm audio port of the main engine is inserted the external power amplifier, the speakers will be closed.

5.9 Induction triggering test

1. When testing, please ensure that the product has been set correctly following the above steps, and ensure that there is no people, animals or other heat source within the probe detection range.

2. When supplying power by batteries, after the host is initialized and indicator light is off, that means the host finishes initialization, into the normal working state. Then the tester moves from the direction A to B (from left to right), and it will play voice of A→B direction and the light will be on. After voice play and lights out (Note: Repeatable triggering interval is about 2S. Triggering play cannot be interrupted.), tester moves from B to A direction (that is, from the right to the left), it play the same voice or the next one (related to the playing mode) with light on. Repeating several times is normal, which means the machine is good. (you can also test it by moving your hand above the inductive probe from side to side.)

6. Typical application



7. FAQ

Question 1: Can this product play WAV audio? If not, what's the solution?

Answer: This product only supports MP3 audio, no support to WAV audio. But there are the following solutions to convert to MP3 format.

Solution 1: Install audio player software with the function of MP3 encoding and decoding, converting WAV audio format into MP3 files. (The simplest way is to use "TT Player" to convert the format. For the specific operation, please use "Baidu", such as "TT Player format conversion".)

Solution 2: Search online directly and download MP3 audio.

Question 2: During use, this product is found that it interrupts when playing half, then continues to play and the cycle continues. What happened?

Answer: This is caused by unstable because lithium battery power is low or voltage is unstable. It will work just by hanging or charging the lithium battery.

Question 3: After power on, in a period time there is no response or reaction is not sensitive, such as delay phenomenon. What happened?

Answer: After power on, there will be 10-20 seconds of power initialization time. During this period, it is normal to have no response or slow reaction. After this time it will work normally.

Question 4: When updating audio, sometimes it needs to wait for a moment. What is the problem?

Answer: This may be because in the last update, it hasn't finished updating before the power is off or because the external power supply is not stable, causing the FLASH file inside the host error or damage. Thus, when updating audio again with power on, the main engine will repair the FLASH file, so the time is a little long.

Parts list

Name	Specification	Standard /Optional accessory	Quantity	Remark
Main body	The main part	Standard	1	
Rotating wall hanging	External member: rolling ball, screw cap, base.	Optional	1	The two is a complete set, not for single sale.
Wall hanging shelf	Wall hanging, locking screws	Optional	1	
Power adapter	National standard, input AC100/240V, output DC5V/1A	Optional	1	
USB cable	Convert normal USB into Micro_USB	Optional	1	White
Lithium battery	DC 3.7V/500MA	Optional	1	
Micro SD card	Standard SD card with the capacity of 128MB-4GB	Optional	1	

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