



The Voice Off is a new and innovative product for the security industry. You can use it to playback a wide variety of sound files, these range from messages welcoming guest or warning off intruders. You can even have informative messages. Alternatively you can store and play music using the Voice Off as a digital media player for indoor or outdoor use. All the sound files are stored in the Voice Off on a removable SD card so it's really easy to do quality recordings away from site in a suitable recording location.

Some people even use the Voice Off to playback sound effects such as a dog barking or very faint police car in the distance to scare off unwelcome visitors who have entered restricted areas they shouldn't have.

It's really 2 products in 1 because of its 2 distinct features.

Feature 1 is its ability to playback pre-recorded MP3 sound files through its built in amplifier and speaker. These sound files can be recorded and customised by the end-user for maximum flexibility.



Feature 2 is the audio amplifier. The Voice Off can be used as an internal or external loudspeaker, to allow the operator to convey a message to visitors or even crowds in proximity to the Voice Off speaker. In the security industry, the Voice Off can be connected to the audio output of a Digital Video Recorder (more commonly known as a DVR) so that suitable DVRs with 2-way audio can have their audio output broadcast in different locations.

This feature can be used for security purposes to warn off an intruder for business and property management purposes by using it to communicate with a visitor. Councils use them for example to tell someone to pick up litter they have dropped or to warn them they are illegally parked.

For the majority of businesses that are not manned 24/7, using this talkback feature gives the owner/manager an extra pair of eyes and voice even when they are not there. If an intruder breaks into the property or its perimeter during the night, they can be alerted by an alarm input such as a break beam detector and then "warn off" the intruder.



Feature 1 - How the Voice Off can be used to playback pre-recorded audio files

The Voice Off can store and play up to 10 audio files that are stored on a standard SD card which is connected to the SD card reader in the unit. To playback an audio file, the Voice Off is triggered by connecting one of its alarm inputs to zero Volts or ground. It really is that easy to use the Voice Off!

For example, to trigger audio file 1, alarm input number 1 is simply connected to ground, similarly to play audio file 2, alarm input 2 is connected to ground and so on. Each audio file is stored in the industry standard MP3 format. The Voice Off is really easy to use and because the sound files are stored on removable media, it does not have the limitations of other products where files are stored on built in flash memory. This means that you can record, edit and store sound files at your own convenience.

The MP3 audio file can be any audio file you wish to play. It could be a voice recording of a welcome greeting or warning message. It could even be a dog barking or a police car in the distance!



You could, for example, have a message to welcome guests such as "Welcome to our garden centre". This may be triggered using a PIR detector that starts the message when someone walks in through the entrance.

Or you could use the Voice Off to warn people away. This message may say for example, "You have been detected on CCTV. Please leave the area!" Whatever you put your imagination too, the Voice Off has an application - even now you are using the Voice Off for another use - to playback information.

Visitors to an unmanned reception area could press a doorbell and the Voice Off could give them information on what to do next - like "Please help yourself to a free coffee from the vending machine and someone will be with you shortly!" The Voice Off is remarkably flexible.

You can also store music on the Voice Off so that when someone enters a shop, or display area it will playback pleasing music. It could also playback what special offers are available. For example, in a DIY store it might playback today's special offers in the plumbing department!!

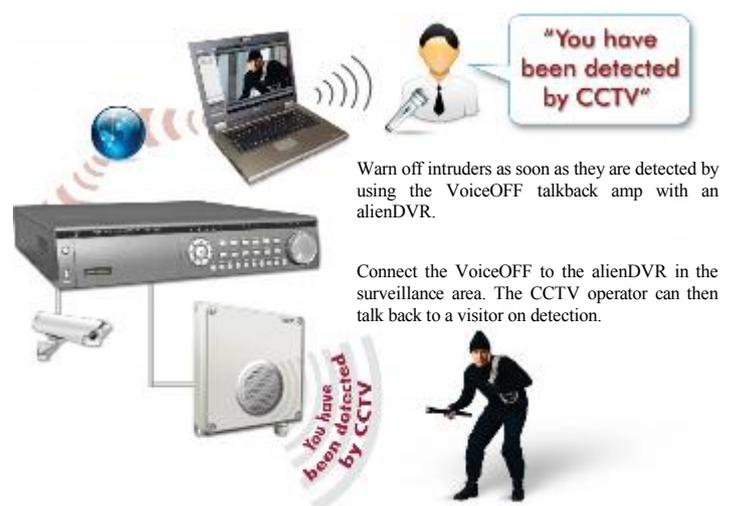
We heard of one customer who was using the Voice Off in toilets and hospitals to inform people and staff who enter to "Now please wash your hands!"

Feature 2 - Using the audio amplifier and loudspeaker

The built in audio input, amplifier and speaker makes the Voice Off a very useful live loudspeaker. It has an industry standard RCA, phono style connector for an audio input. Whenever audio is input, the Voice Off plays that incoming audio. This could be from a DVR which is a "Digital Video Recorder" used for CCTV. Some DVRs have remote monitoring software bundled with them, that allows a person who is located remotely to the DVR, to talk into a microphone connected to their computer and the speech they say comes out of the DVR's audio output connector.

If the DVR's audio output is then linked to the Voice Off, it will amplify this sound and play it back through its built in weatherproof speaker. Councils have been known to use this feature for example, to remotely tell someone to pick up litter they have dropped after being spotted on CCTV.

The Voice Off has intelligence built in to it as well. For example, if it is playing back a sound file from the built in SD card, lets say its an in-store promotional audio file and the shop wants to play a live loudspeaker message through the Voice Off, such as announcing the store closes in 5 minutes, the MP3 file is stopped as soon as the Voice Off realises that audio is present at the phono input.



Warn off intruders as soon as they are detected by using the VoiceOFF talkback amp with an alienDVR.

Connect the VoiceOFF to the alienDVR in the surveillance area. The CCTV operator can then talk back to a visitor on detection.

Similarly, in a security application, the Voice Off would start to play a pre-recorded warning message whenever it is triggered by a PIR detector that detects an intruder. If the person using CCTV to remotely monitor this site, wanted to talk back to the area, the Voice Off switches off the warning MP3 file and plays the operator's live message as soon as it detects audio coming from the DVR.

Recording your own files

It's quite easy to record your own audio for the Voice Off unit. You just need an audio recording device and a computer.

The Voice Off only plays back audio files that are stored in the industry standard MP3 format, so you need to either record your messages or sound in this format or convert them to it.

Once you have recorded your messages or sounds you need to copy them to an SD card that is then inserted into the Voice Off unit. The audio files need to be stored on the SD card in a certain way and the files need to be saved with names that allow the Voice Off unit to know which MP3 file to play depending on which alarm input is triggered.

Inside the lid of the Voice Off unit you will find a simple diagram, which is displayed in the wiring schematic below. This will help you to see what needs to be done.

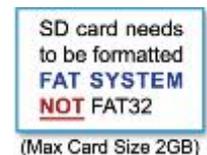
Please note when you buy your Voice Off unit, it already comes with a pre-recorded SD card formatted and ready to go.

We recommend when you are playing about with new sound files you use an SD card other than the free one provided with the Voice Off, so you always have a fallback solution.

Using your own SD card

Step 1 – This involves Formatting the SD card

You need a standard SD card that is 2 Gigabytes or less, the Voice Off currently cannot work with cards bigger than 2 Gigabytes.



The SD card needs to be formatted to what is called the FAT file system. It is quite possible when you buy your SD card that it is already formatted to this standard, just like the card supplied free with the Voice Off unit.

You must check before trying to use your own card that it is formatted to the FAT standard as the Voice Off unit simply cannot play back from SD cards formatted to the FAT32 standard. If your SD card is FAT32 formatted you must change it to the FAT file system instead.

To format your new SD card to the FAT file system, please place the card in a computer running the Windows Operating System. If your computer does not have an SD card reader you will need to obtain one. These do not cost a lot, and are typically used to read multimedia cards from digital cameras.

Using your computer mouse, navigate to the SD card using "My Computer" and right click on it using the mouse. Select the 'Format' option from the popup menu that appears, then select the FAT entry from the options presented in the drop list under 'File System'. Now start the formatting process.

Step 2 – This involves creating a folder on the SD card to store the MP3 files in

Once the SD card is formatted you need to create a folder on it to store the MP3 files that you wish to play. The Voice Off has been pre-programmed to look for a folder on the SD card called "Advert01". You must create this folder on the SD card if it does not already exist.

Step 3 – Rename your audio files

The Voice Off decides which MP3 file to play for each alarm input by how the MP3 files are named. For example, when alarm input 1 is triggered, the Voice Off looks for an MP3 file that has been named 001.mp3. It looks for this file in the

folder called Advert01 on the SD card. Similarly if alarm input 2 is triggered, the Voice Off looks for an MP3 file named 002.mp3 and so on.

Please now name your audio files 001.mp3, 002.mp3 all the way up to 010.mp3 if you wish to put on the maximum number of 10 MP3 files on the Voice Off.

On the SD card in the folder Advert01, the Voice Off unit also looks for a system file called COF.mp3 and if this is present, the Voice Off knows it is looking in the correct folder for the sound files it needs to play.

You can download this system file from the Voice Off website or copy it from the existing card supplied. The website address is: www.voiceoff.com

Once you have downloaded the system file, simply place it in the Advert01 folder with the other sound files you have created.

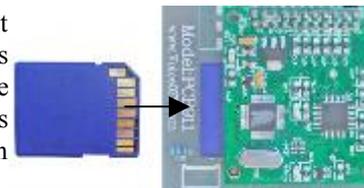


Step 4 – Copy your MP3 files to the SD card

Once you have renamed your MP3 files correctly, you can copy them to the folder named Advert01 on your SD card using your computer.

Step 5 – Insert the SD card into the Voice Off unit

With your audio files done, renamed and copied to your SD card, you need to insert it into the Voice Off unit. Please look at the diagram on the lid to see how this is done and which way up the SD card needs to be when inserted into its holder. Please take great care when doing this as it is a delicate PCB and all electronic assemblies need handling with care. If you are a little heavy handed, please get someone with more nimble fingers to do this.



Step 6 – Ready to play the files

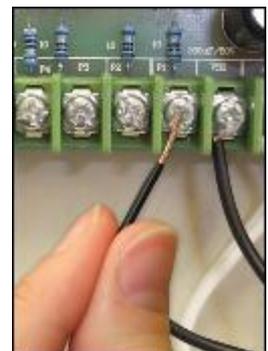
With the card now correctly inserted back into the Voice Off unit, you can re-apply the power and trigger the sounds.

On the Voice Off PCB, alarm input 1 is labelled up P1; alarm input 2 is labelled P2 and so on.

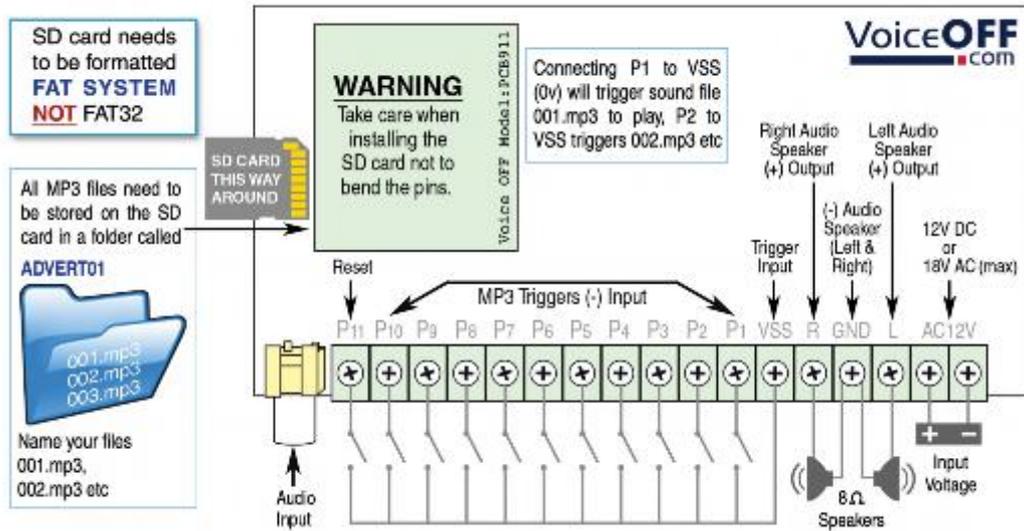
By connecting P1 to the terminal marked VSS (please note VSS is ground) then the MP3 file named 001.mp3 will now play.

If you wish to replace the messages recorded on the free SD card provided with the Voice Off unit just make your own sound files and rename them so they overwrite the corresponding files on the card.

You can make your own sounds and record your own messages or alternatively you can download both free and paid for versions from the Voice Off website. At the website you can also upload text and pay to have this converted to a message by a professional voice over artist. Please go to www.voiceoff.com for details and pricing.



Schematic



Installation Instructions

1. The VoiceOff unit can be installed either internally or externally using four screw locations, one on each corner of the unit.
2. A free SD card is provided with the unit containing professionally recorded voice messages and sounds. They are as follows:

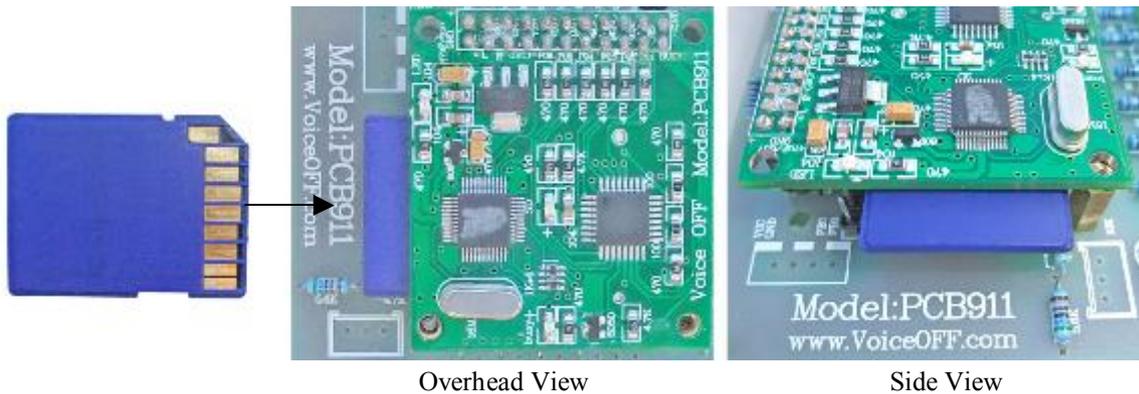
| Filename | Description/text |
|----------|--|
| 001.mp3 | Warning message "You have been detected in an unauthorised area, please leave the area or the police will be called." |
| 002.mp3 | Warning message "This is a restricted area and trespassing is forbidden, you have been caught on CCTV and your images will be saved as evidence against you." |
| 003.mp3 | Warning message "Warning ! Intruder Detected! CCTV System recording." |
| 004.mp3 | Welcome message "Welcome, this area has time limits on parking. Please observe the restrictions printed on the warning signs to prevent penalties being imposed." |
| 005.mp3 | Welcome message "Welcome, please help yourself to the self service coffee and someone will attend to you shortly." |
| 006.mp3 | Police Siren in the distance. |
| 007.mp3 | Sample of background music. |
| 008.mp3 | Introduction to Voice Off Unit |
| 009.mp3 | Tips & Tricks |
| 010.mp3 | How to record voice files |

You can record or download your own files onto an SD card for use in the unit but the card must be formatted to the FAT file system standard and not FAT32. It should also be no larger than 2GB in size. Additional voice and sound files for use can also be downloaded at the website: www.voiceoff.com

3. Each MP3 file must be created in a folder called ADVERT01 and the file must be called <nnn> <description>.mp3 where <nnn> = 001 ~ 010 <description> = recording title. Note: <description> is not mandatory but useful for identifying recording. The folder must also contain the system file cop.mp3 which can be downloaded from the website www.voiceoff.com or copied from the original SD card supplied.

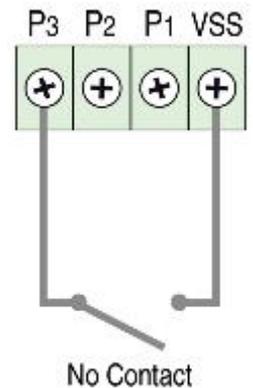
For example the first file could be called 001siren.mp3,
 the second file for example 002welcome.mp3,
 the third file for example 003dogbarking.mp3,
 the fourth file for example 004.mp3 etc.

4. The SD card is fitted as shown in the diagram below



5. Note that the internal SD reader is located on the underside of the small PCB and will protrude about 6mm. Ensure the SD card is entered the correct way as shown above.

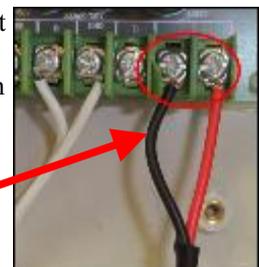
6. Now connect the alarm connections, which must be a zero volt switch to the VSS common and the relevant alarm connection, which triggers the required alarm recording. For example you have a dog barking on 003dogbarking.mp3 that you require triggering when a PIR detects something, so connect the PIR to VSS and P₃



7. Note that the MP3 file will only run once on being triggered, i.e it's a “one shot” close, even though an alarm may continue for a much longer period. If you require the VoiceOff alarm to continue, then the length of the recorded file will dictate the run time.

8. You may have a special or different use for the Voice Off that does indeed require instant termination of any message that is playing. Of course, provision is provided for this with a “re-set” terminal. You can immediately terminate a triggered recording by connecting a switch to VSS and P₁₁.

10. Connect a power supply 8vDC ~ 18vDC or 8vAC ~ 18vAC to connections shown here
Note connections are not polarity sensitive.



DVR Talkback function using Audio Line In Connection

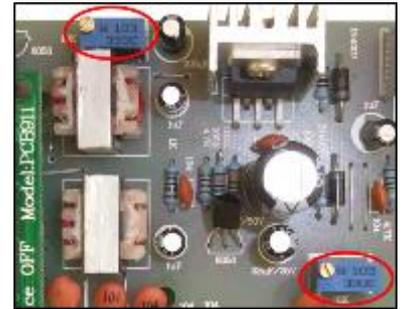
1. A DVR talkback function is also employed which is available on the Alien DVR range. This allows you to connect a microphone to the DVR using the Audio In connection, setting audio functions in the menu and then taking an audio out connection to the VoiceOff unit.
2. At the VoiceOff unit connect into the yellow phono connection.
3. In the CCTV Window client, switch on Audio. Note that this function automatically overrides the alarm trigger recording that will be immediately closed. To switch on audio alarms, switch off audio function in CCTVWindow.

Volume Control

The Voice Off has a volume control that is set on installation to match the site requirements. For example, if you are installing the unit to play warning messages to deter unwanted visitors to a secure parking lot, you may want the volume on maximum as you want those intruders to hear your message loud and clear. However, if you are installing the Voice Off to

play in-store promotions in a supermarket, you want the volume turned quite low so the message can just be heard, so as to not annoy the customer but perhaps help direct their buying choices of what's on offer that particular day.

On the Voice Off PCB, you will see two blue volume controls; they don't look like the volume controls you would see on a TV or Hi-Fi as they are only for the engineer to use on initial set up so they are deliberately discrete to stop people fiddling with them. To find them, look for two blue rectangular items on the PCB, notice that each has a small adjustable screw on the top of it. When you have located them you will soon observe you need a small precision screwdriver to adjust them, obviously use the right tools for the job, so if you don't have a small precision screwdriver please purchase one as you don't want to damage the volume controls by accident using the wrong tools.



There are two separate volume controls. One is at the top of the PCB for adjusting the output volume of the speaker that is built in to the Voice Off's lid. The other volume control pre-adjusts the output when you use a second slave speaker connected to the Voice Off. This is because you may have speakers in different areas such as one inside and one outside, in this instance you may want different levels of volume in the two areas, hence two controls are provided. When you are adjusting the volume control don't turn up the volume too high or you will simply get distortion and the clarity of the message you are delivering will be lost or the quality of sound poor.

When you receive the Voice Off unit, the volume levels will have already been adjusted to a mid way point to suit most applications, so if it sounds right when you get it out of the box why not leave it at that setting. Note that the volume controls have a wide range adjustment, so you may find that the volume is slow to adjust if you are making major changes to the volume setting.

Example of Uses



Deterring Vandals

The VoiceOff is a great tool to warn off unwanted visitors in vulnerable areas prone to vandalism.



Welcoming Visitors

Use the VoiceOff to automatically welcome visitors to your premises and promote your business.



Protecting Property

Use a door bell, door contact or an external PIR to detect visitors on your property and use a recording such as a dog barking, TV recording or even voices to deter them when you are not at home.



Warning Off Intruders

Using an Alien DVR with talkback function, you can deliver real time voice warnings from the VoiceOff from a local or remote location.

What can be used to trigger the Voice Off unit?

The Voice Off is triggered by simply connecting any of its alarm input terminals to ground or zero volts. Obviously you can do this using a piece of wire and simply connect the alarm terminal to ground but most people want to do this automatically. For example when a person walks through a doorway, the Voice Off is triggered and a message starts playing.

To do this you have quite a few options. By fitting a “magnetic door contact” to the door you can use it to automatically connect to one of the Voice Off’s 10 alarm inputs to ground and start Voice Off playing back that corresponding audio file when the door opens. You will need a door contact that has what’s called “normally open” contacts, these are readily available items.

Similarly, you could use a movement detector such as PIR. Again, when the PIR detects movement you will use its “normally open” contacts to connect one of the Voice Off’s alarm inputs to ground. This in turn makes the Voice Off start playing the related audio file, be it a welcome message, a warning or something else perhaps a barking dog!

Other devices can be used to trigger the Voice Off, these includes Digital Video Recorders, burglar alarm panels, bell boxes, key fobs and so on. Almost every one has a different way of triggering the Voice Off and what it is used for.

Instead of having a burglar alarm with just a siren why not have an additional sounder that tells passers by to call the police or another telephone number?

What happens when more than one alarm is triggered in quick succession?

A common question people ask about the Voice Off is “what happens if its playing back one message and another alarm input or perhaps the same alarm input is re-triggered?” The answer is the original message plays out until it reaches the end of that message. This is a deliberate feature. Its so that if you are using a Voice Off unit to warn away intruders and a message is played when a PIR detects the intruder you want the message to complete even if the PIR is re-triggered by movement again. If this did not happen, the warning would sound a bit fake especially if it’s cut off midway through and restarts again. Ideally you want the listener to believe its possible (even if only at a subconscious level) that a real person is delivering the message. Similarly you may be using the Voice Off to deliver a welcome message, you will want the welcome message to play out in full and not be cut off midway through delivery because the unit is re-triggered by someone else.

Over time, some of the more unusual uses will be published on the Voice Off website to show the ingenuity people have. The website address is www.voiceoff.com.

Technical Specifications

| | |
|--------------------------|--|
| Operating Voltage | 8v AC ~ 18v AC or 8v DC ~ 18v DC |
| Power Supply recommended | POW802 12vDC 1.2A |
| Current Consumption | 120mA Standby, 200mA max (depending on volume) |
| Alarm Inputs | 10 |
| Case | Ivory ABS |
| IP Rating | IP65 |
| Mounting | Wall |
| Speaker | 8w 80ohms |
| Usage | Internal or External |
| Dimensions | 234mm x 188mm x 85mm |
| Memory | SD card 32Mb, 64Mb, 18Mb, 256Mb, 512Mb, 1Gb, 2Gb |
| SD card supplied | 512Mb |
| Formats available | MP3 |
| Voltage Noise | ≤ 50Mv |
| Signal to Noise Ratio | ≤ 86dB |
| Audio Decoder | DAC 24bit/s stereo, 196KHz |

All specifications are approximate. Voiceoff.com reserves the right to change any product specifications or features without notice. Whilst every effort is made to ensure that these instructions are complete and accurate, voiceoff.com cannot be held responsible in any way for any losses, no matter how they arise, from errors or omissions in these instructions, or the performance or non-performance of the equipment that these instructions refer to.



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This symbol on the products and/or accompanying documents means that used electronic equipment must not be mixed with general household waste. For treatment, recovery and recycling please return this unit to your trade supplier or local designated collection point as defined by your local council.