



<http://www.scaryguys.com/soundideas1.htm>

## Sound Ideas

### Did You Hear That?

#### **Thump.... Thump.... Thump....**

One of the most often overlooked parts of a haunt is the soundtrack. Unlike a real abandoned house, a quiet haunt is a lonely, empty place... "Hey, wait! we need some sounds!".

Second only to sight, sound is most powerful medium to enhance a haunting experience. Sound is useful to add apprehension and increase tension before a scare, intensify the scare, and offer a breathing space to relax the guest for the next scary scene. All kinds of sounds can be used, sounds to excite, delight, relax, arouse fear, put on edge, make nervous, and startle.

Putting together a well thought out sequence of sounds for your guests to enjoy as they proceed through your haunt will greatly enhance their excitement. Creating a sound landscape, or 'soundscape', can make the difference between a ho-hum haunt and a haunt that everyone talks about. Doing this requires practice, patience, some equipment, and above all, the ability to listen.

#### **Enhance and Surprise**

Listen to movies with your eyes closed. No kidding. Go rent your favorite movie, pop it into the VCR, sit back, turn up the volume, and close your eyes. Listen to how the sounds 'tells you' what's happening, or what's going to happen next. The main intent of sound in movies is to accent the visual presentation and add to the action. You can 'hear' the anticipation, the action, the release. This is exactly what is needed in a haunt. Using sound effectively will greatly enhance the haunt experience. In addition, in the live theater of a haunted house, the sound can not only effectively enhance, but deliver much of the intended effect. Choosing the right sound for the right moment is a very important

part of giving the guest a good show. On the other hand, having just any sound or sound effect with a scene may dramatically reduce the impact.

Everyone carries expectations with them. We are all "pre-wired" to expect certain things to happen when presented with a situation. Scene designers take advantage of this all the time in haunts, either by presenting a familiar space and delivering an unexpected action, or by creating an unfamiliar space and delivering an expected action - unexpectedly!

Add to this idea, sounds that enhance the space the guests enter, go through, then leave. Given enough time in the room, an entire sound presentation is possible. But even for a short time, the right sound environment can make a real difference. There are several classes of sounds effective in haunting, including the most important use of sound - silence!

### **The Sound of Silence**

The effective use of sound also includes the absence of sound - silence. Suddenly changing from a loud sequence to silence carries tension. Alfred Hitchcock is the master of tension and silence. In his movies, notice the sudden absences of music, dialogue, or sound effects. This keeps the audience on the edge of their seats, all while making room to add higher levels of excitement. In general, many modern movie directors use silence effectively to enhance the mood. They will have a music or sound effect track suddenly stop, then let the dialogue carry the action, then the music track blasts back in to accent the action.

Here's a simple, if not obvious, example: Say you have a large space designed as a forest. As guests enter, they hear the sound of crickets chirping constantly in the background. Then, suddenly, the crickets stop. The guests are filled with apprehension, with their senses on full alert. Something is going to happen! Then the crickets start again, and the guests relax a bit. They guess something is not going to happen after all. (now they are ready for the tree monster to jump out!) A simple use of silence caused a dramatic change in guest's perception of what is going to happen next.

### **Incidental Sounds**

There are many sounds that put peoples 'teeth on edge' or heighten unease. Some of them include: high-speed dentist drills, fingernails on chalkboard, child or baby sounds (a child's scream, a child's voice in the dark, a baby crying or screaming), low growling, heavy breathing, whispers in the dark, heartbeats, the highest and lowest pitched sounds at the very edge of hearing - the list goes on and on. Utilizing these 'incidental' sounds in-between scenes adds to the environment, especially when the guest doesn't expect to have anything happen. For example: right after a main scene, the group goes around a corner into a short, dark tunnel. The sound of fingernails on chalkboard is heard, or suddenly, a whisper right at ear level "Look out! Don't step on the spiders!".

### **The Sound That Scares**

In a 'jack-in-the-box' room, playing ghost sounds or growling, gnashing monster sounds will often not be as effective as a children's "pop goes the weasel" or other nursery rhyme song. Here an expected sound works to help deliver the action. Modifying the song by varying the tempo, pitch, or echo will produce an exciting, action-heightening, attention-getting experience. Using a growling monster sound will have everyone looking for the monster. But using a nursery rhyme will heighten the effect, because there is no good clue about what is about to happen next. Everyone knows something will happen, sometime around the "Pop! goes the weasel", right? But, they won't know what! Having expected, or situation-familiar sounds will 'disarm' expectations, enabling a highly effective scare when the six foot Jack the clown monster jumps out from a 2 foot tall box (it can happen!). This orientation to the familiar 'forces' a perspective for the guest, and effectively sets them up for the scare.

For another example, one of the most unique sounding instruments is the theremin. Its electronic, haunting, edge-on sound is always guaranteed to get attention. By now, everyone has heard it in sci-fi movies. But, few have ever had a chance to experience one personally. A good setup is to place a theremin at the entrance or in one of the first rooms of the haunt, and let guests play with it. As soon as they just begin to play - blast them through the wall with a crazy guy screaming "stop it!". Or have the theremin speaker blast out "stop that!".

In each case, the audience was entirely focused on the sound. In the jack-in-the-box, to 'tell' them when the scare was going to occur. In theremin example, to deliver a totally unexpected scare, or the sound itself delivers the scare.

## **Tell A Story**

Always remember the first rule of soundscaping: Avoid Monotony! Just like constant screaming at a guest loses its effect after a while, a spooky organ playing endlessly will lose its edginess at best, and at worst, it will become increasingly annoying. Constantly delivering an interesting series of sounds keeps the ears "perked up", ready and waiting for the next aural clue. Begin your soundscapes early, while the guests are in line waiting to go in. Make it interesting (did I say that already?).

Tell a story with sounds. Sequence sounds to build from a beginning, move through a buildup in tension, then relax to the ending. Keep the audience listening for the next aural clue. Mix up screams with short silences, industrial machines with wind, thunderstorms with door knocks, seance with metal rock'n'roll, and so on. Juxtaposition is the key to keeping the ears listening. Listen to recordings to hear how composers take the listener through an aural journey of foreboding and fear. Industrial or gothic rockers use a wall of noise. Movies use textures, and juxtaposition. Classical works use dissonance.

Tell a story with words. Take a hint from Disney's Haunted Mansion, where at the very beginning, your 'Ghost Host' begins with a simple, effective description of your journey into the unknown. This immediately sets the mood and gets you tuned into the experience. You can use this idea while your guests are waiting in line, or as with the

Haunted Mansion, in the very first room. (side note: notice even before you go into Disney's Haunted Mansion, there is a low level ambient sound track playing!)

There are two main parts to soundscaping a haunt. Producing an overall background soundscape is called ambient sounds, and specific sounds that support the action in a scene is the scene sound.

## **Ambient Sounds**

The overall background soundscape sets the mood for the haunt or a scene. It can be rock'n'roll, haunting ghost sounds, banshees, organs, clanks, creaks, howls, or all the above and more! It sets an aural background and doesn't intrude on the scene sound. It also hides unwanted noises and maintains an atmosphere for the guest. For example, dishes clattering in a kitchen or restaurant, wind sounds in a forest, or mechanical sounds in a factory. These sounds provide expected clues to give the guest important background information that locate them in place and in time.

Usually ambient sound is lower in overall volume than the scene sound. Just like detail scenery should not distract from the main part of the scene, the ambient sound should not mask the scene sound. Remember, its the 'background'!

## **Scene Sounds**

The scene sound delivers the action. Its the slam! of the door, the banshee's scream, the monster's roar. The scene sound should be heard above any other sound in the area. The key to an effective sound performance is how well the ambient and the scene sound work together to deliver the intended effect for the audience.

## **Work Together!**

The sound for a room in your haunt should help set the mood for the performance. Both the ambient and the scene sounds must work together! Go for the best balance. Try several different sound effects. Work for the overall sound effect that produces the best environment in your room. Try different volume levels. Find the best volume that doesn't hide the main sound. Experiment!

Simple scenes where a quick scare is delivered should not demand as elaborate a soundscape as would benefit a fully produced theatrical scene. If your guests are only passing through a scene, the sound effects must be quick and repetitive, to ready for the next group, while a theatrical scene needs sounds to accompany and enhance the action with some time to reset.

In a theatrical mad scientist room, the electrical and bubbling sounds should enhance, not get in the way of the scientist yelling "Its Alive!", or the monster growling as it rises. Both the ambient and the scene sounds should accent the rise in action, build the suspense, then help deliver the scare.

An important point - neither the ambient or the scene sounds have to be recorded sounds! Either may be produced by the props or the actors. An actor moaning on a dungeon rack while chains rattle is the ambient sound behind the executioner's screaming "Next!".

## **The Cover Up**

Another useful role sound plays in a haunt is to cover up unwanted mechanical sounds, like air cylinder noises, or staff conversations behind the walls. Having some sounds going on all the time in these locations help the guest to focus on the intended source, instead of picking up unwanted, distracting sounds that take away from the experience.

Minimize the source of the unwanted sound. Its a good practice to encourage the staff to minimize conversation, and to talk away from guest pathways. Filter air valve and air cylinder exhausts to reduce or eliminate unwanted air or mechanical sounds. Here's a tip to eliminate the exhaust noise from an air cylinder exhaust: Try wrapping and taping a bit of open cell foam rubber around the exhaust line, or insert a section of pipe cleaner into the exhaust air line.

## **What's That Ringing Sound?**

Don't forget your staff! A good rule of thumb: If you have to speak loudly to carry on a conversation, its loud enough to eventually hurt your hearing. Leave a place in the room for your actor to avoid constant, direct exposure to loud sounds. A niche around the corner from the speaker, a hole to hide behind, or a nearby exit will help relieve the fatigue that comes from working in a very noisy environment. Give the actors frequent breaks, by rotating other actors in from break, or rotate actors from other rooms.

While playing sound tracks, place yourself where the actors are positioned to hear what they will have to hear for hours and days on end. Your guests only hear loud sounds in a room for a moment, but your staff will need to avoid continual long exposure to excessively loud sounds.

Keep a supply of those simple, foam ear plugs for the actors who have to work around loud sounds. Encourage your actors to use them. This will keep you actors from experiencing prolonged hearing loss. It will also keep that 'screamer' from piercing your eardrums, too!

## **Listen**

Just as your eyes see details that may take away from a scene, your ears can tell you what sounds need improving. Listen intently for details that "just don't sound right". Again, experiment to see what works. Change speaker placement, the kind or size of speaker, the volume, the timing. Remember, sound direction, volume, timing, frequency, and clarity each affect the quality of the sound, and the quality of your presentation!

Try recording with a tape recorder while you walk through your haunt with all the sounds going. Listen to the recording away from the haunt. You will quickly discover where the sounds need improving. Your soundscapes should be able to work on their own to build an environment, even without the haunt!

## ***Reliable Reproduction***

In the first installment of Sound Ideas, several topics on the uses of sound in haunts was covered. In this segment, the components of sound systems is covered.

### **Equipment 101**

The components that make up a sound system include a sound source, an amplifier, speakers and the connectors and wires. Think of this as the sound chain. Every link in this chain is an important part of sound reproduction. Skimping on any part of the chain results in loss of optimum sound. A great amp and speaker combination will still sound bad if the tape player can't run at a steady speed! The best CD player is useless unless the amp and speakers can reproduce the sound.

### **Volume and Distortion**

A certain killer of ears, speakers and amplifiers is excessive distortion. Basically, distortion 'colors' the sound and causes amplifiers and speakers to overheat and fail. You hear distortion as a fatiguing 'fuzzy' sound. A simple test to recognize distortion is to take a small radio and turn up the volume until the music loses its clarity. Unfortunately, at about the same time, you will hear a marked increase in apparent volume. The volume increase is due to the nature of distortion overdriving the audio components, and thus producing more volume. In this case, louder isn't better. Any distortion you can hear is bad for audio components. The cost of repair is far greater than the little extra volume you might get overdriving your amp or speakers. If you discover your system begins to distort before the volume is sufficient, you will need to obtain a higher power amplifier, or more efficient, higher rated speakers, or both.

### **Amplifier Shopping Tips**

Usually a 100 watt per channel stereo amplifier will give adequate coverage for most haunts. Getting a higher power amp is always better. Having the power in reserve means cleaner sound going out to the speakers. Getting a professional audio amplifier built to take the physical abuse of a haunted house is highly recommended. They are usually rated conservatively, have internal cooling fans, and more robust components.

Points to look for when purchasing a high-power amplifier for haunt use:

- To protect from amplifier failure in the event a speaker should fail and short out, or a pair of speaker wires accidentally are connected together, check power ratings for multiple speaker impedance, i.e., 8 ohm, 4 ohm, and 2 ohm. Verify the

amp can deliver its rated power under a 2 ohm load. Most amps will not. This will tell you whether the amp can take low resistance loads under high power.

- Although not absolutely necessary, a 70 volt output is a plus, and is very handy for haunts requiring long wire runs over 75 feet.
- Almost all amplifiers have low distortion at very low volume settings. Verify distortion ratings are at rated output, not just minimum distortion. For example, a rating like 0.1 percent distortion at 100 watts continuous is a far better rating than .001 distortion without an output qualifier.
- Ignore peak power ratings. They are essentially useless. If you cannot find 'continuous' or 'RMS' power ratings, look elsewhere.
- If you require multiple sound sources to feed a single amp, check that the amp has a pre-amp section that combines the inputs. Each input should have a volume control and the right kind of connections for your input units.
- Check that a power amp has volume controls. Its always handy to be able to control the main volume from the amp.
- Check the speaker connections. Heavy duty, screw-in binding posts are best.
- Check for an external fuse. In the unlikely event a fuse does go out, it is much easier to replace from the back than having to take the unit apart.
- Check for a comprehensive, long term warranty. A full coverage one year warranty tells you this unit is built tough. A 90 day warranty is average. A 15 or 30 day warranty should be avoided. Most manufacturers offer a mixed warranty, like 90 days parts and labor, 1 year parts. Longer warranties mean better quality, but it also means higher cost.
- Get solid rack mount capability. Even if you don't use the rack mount feature right away, the better amplifiers have solid rack mount fronts. Usually, only commercial quality amps have them, most home stereo amplifiers do not. This is a great convenience if you ever have the need to consolidate your haunt's sound system. The rack mounts should support the full weight of the amplifier and maintain a solid feel in the rack.
- Ensure the frequency response doesn't vary widely over the amplifiers range. For example, a rating of 2 dB or less over a frequency range of 20-20,000 hertz is acceptable. This is a good gauge for quality components.
- Test before buying! This is especially true if you are looking at a used amplifier. Run it at high output and listen for noticeable distortion for at least 10 minutes, longer if possible. If anything doesn't 'sound right', move on.
- When evaluating a used amp, check for signs of physical damage such as dents, or a lot of paint scratches. Look for loose screws, or loose panels that may indicate kitchen maintenance. Look for any indication the unit may have gotten wet, or had a soft drink spilled into it. Be sure all parts of the amp function smoothly and have a solid 'feel'.

Ok, with all that said, use your judgment when selecting an amplifier. Only you know your specific needs. If a home stereo amp works for you, use it! But be aware that home units were not designed for the demanding needs of a commercial environment like a haunted house.

## **Combination Amp/speakers**

Be sure to check out the new combination amplifier/speakers designed for computer sound systems. They offer compact size, matched components, multiple inputs, and on the high-end, give superior sound quality and volume in a rugged enclosure. Usually these units have separate left and right speakers that can be placed almost anywhere in a room. Three-piece units have a separate subwoofer unit. These are slightly more difficult to place in a room, but can offer better sound quality. Let your ears be your guide! A reliable tape player with a continuous 30-second tape cassette combined with a combo amp/speaker makes a great sound system for almost any room in a haunt.

## **Speakers**

It's easy to spend a fortune on speakers. You could get almost any used stereo speaker to work for ambient house sound, but standardizing on one type gives you better control over your soundscape and your budget. One solution is to buy small speakers like the Radio Shack Minimus 7 with angle mount brackets for placement high on the wall. A less expensive solution is to buy surplus speakers in small quantities and build your own enclosures. In his book, "Building a Portable Modular Dark Attraction", JB Corn describes an excellent design for a triangular custom-built haunted house speaker system. As he points out, the speaker and enclosure doesn't have to be pretty to be functional, and it is less attractive to potential theft or vandalism.

## **House/Ambient Speakers**

The ambient track can be produced from a single tape or CD player and amplifier, and distributed by multiple speakers. If you produce a single tape to use as your ambient soundscape, it should be at least as long as the average time it takes for guests to go through the haunt before starting over. This keeps it from sounding repetitive, and thus losing its effectiveness. Put the tape or CD into continuous play and let it run the entire time the haunt is open.

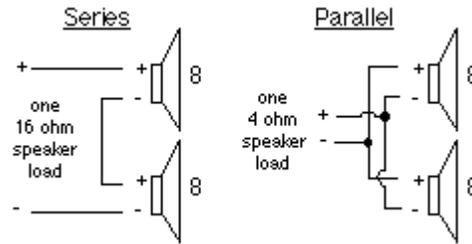
Usually, the ambient sound system requires a more powerful amplifier than scenes because it is driving lots of speakers over longer wires.

Pay close attention to speaker connections. Connecting speakers has two important aspects, the physical connection and the electrical connection. Ignoring either of these can either deliver great sound, or melt your amplifier.

For the physical connection, use at least 16 gauge or larger wire to connect speakers. This ensures that the power the amplifier delivers gets to the speakers instead of getting used up in the wires. Try the wire used for low voltage landscape lighting. It's readily available, inexpensive, and very rugged. It has more insulation than regular speaker wire and can take more abuse.

To physically connect the speaker wires, use electrical wire nuts to connect the wires together. Its a secure connection, and is easily removed when needed.

Electrically, speakers look like coils of wire to the amplifier. If not connected correctly, they can appear like a short circuit, overheating and damaging expensive components. Connecting two 8 ohm speakers in parallel results in 'one speaker load' of only 4 ohms. Connecting together four 8 ohm or two 4 ohm speakers in parallel gives a 2 ohm load. This is getting into heavy load for an amplifier. Connecting two 8 ohm speakers in series gives one 16 ohm load, and two 4 ohm speakers in series gives one 8 ohm load.



For series connections, always connect the (+) terminal on one speaker to the (-) terminal of the next speaker. For parallel connections, always connect (+) terminals together, and (-) terminals together. This keeps the speakers all moving together, delivering the maximum amount of sound possible.

Series and parallel connections can be combined to produce the desired impedance (coil resistance) needed by the amplifier. Taking advantage of this feature, you can wire as many speakers as you need and still correctly match the output needs of the amplifier.

Generally, for ambient 'background' sound, a 10-20 watt, 6-8 inch speaker serves very well when placed in a small enclosure. Its frequency response may be less than "stereo quality", but it will work. If the speaker system includes a 'tweeter' (a high frequency speaker), the sound quality is greatly improved.

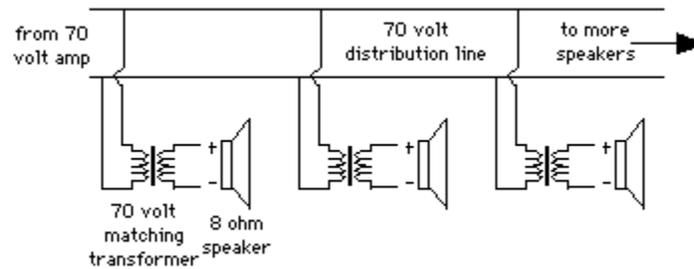
Smaller speakers may not deliver the volume needed cleanly, or have a limited frequency response. Larger size speakers become too unwieldy for general use, but can serve well as scene speakers.

Always evaluate your sonic needs carefully throughout the haunt. There may be a place where that clunky old stereo speaker might just work out perfectly!

Going beyond a single speaker in a box, there are several facts of speaker design that must be considered before the speaker will function properly. The volume of the enclosure, the size and characteristics of the speakers, the crossover, dampening material, and so on. There are several in-depth books that cover speaker design in detail. Start with the speaker design booklets from Radio Shack. They are relatively cheap and are very easy to understand.

## 70-Volt Speaker System

The 70-volt speaker system was specifically designed many years ago to connect dozens of speakers with long wire runs. It is simply a series of speakers connected to transformers. The amplifier is connected to a large transformer that supplies power to the 70-volt distribution line.



Each speaker has a transformer that 'taps' power from the distribution line, and converts it for use by the speaker. This method is extremely useful for very long wire runs. It keeps the cost of wire and speakers low - but adds the additional cost of the transformer. Unless you are using wire runs in excess of 100 feet, the 70-volt system may not be cost effective.

## Scene Speakers

The selection of sound systems for scene use depends on the needs of the scene. Some scenes require reproduction of loud, very low sounds (heartbeats, machinery) which require subwoofers. Moderate volume speech or music needs a normal, full-range speaker. Low volume voices or high-pitched sounds only require a small, well placed speaker.

Low frequency, loud sound is the realm of the subwoofer, usually a large speaker in a specialized cabinet. An all-in-one subwoofer amplifier/speaker combination gives the best combination of cost, size, sound quality, and power. Units of 100 watts or greater are more than sufficient. Do not overlook the subwoofer speaker systems designed for automobile use. They are built to reproduce high volume levels in very rugged enclosures. Put simply, this combination "kicks"!

For situations needing moderate sound level, for voice or music, a 6-8 inch speaker in a small enclosure, like the ambient speaker, will work well. A combination amplifier/speaker for computer sound is excellent in this application, too.

For high pitched sounds, or whispers, a small, well-placed speaker will do the job. For example, in a dark hall where there is suddenly a ghostly whisper "watch out!", use one of those digital recorder/speaker combinations. It comes with a 3" speaker with a small

built-in amplifier. It definitely cannot reproduce the full range of sounds at any volume. But, it is excellent for the 'whisper' application.

## **Speaker Placement**

Where the sound is coming from is important. Pay close attention to speaker placement.

For an ambient, background sound for your entire haunt, try placing the speakers overhead facing downward. This is useful for several reasons: they deliver better sound coverage with less spillover into other areas, the speakers are away from prying hands, it takes less wire to connect them, and they are more accessible for repair or replacement.

For scene sound, conceal the speakers in or near the area where the sound is supposed to appear. Having the electrocution sounds coming from speakers above the electric chair is less effective than from just beside the chair. Scene speakers are easily concealed with paint, thin black cloth, or placement in dark shadows.

## **Tape Players**

Small portable cassette players are excellent for haunt use. Their rugged construction, small size and minimal power requirements fit perfectly. They connect easily to portable computer amplifier speakers, or to larger stereo amplifiers.

## **Reliability**

Always attempt to keep a backup in case of failure of your components. This includes copies of all the tapes used in the haunt, a spare tape or CD player, several spare batteries, a spare AC adapter, cables, and so on. It's far easier to take the few moments to quickly replace a failed piece of gear than to go without it all night.

Never forget maintenance. Proper maintenance is a must. It's one of the most boring and tedious jobs ever, but if you don't do it, you will spend a lot of money for repairs and replacement. Keep all outside and internal mechanisms clean and well maintained. This includes cleaning tape heads and rollers, removing dust, using CD cleaning discs, keeping the outside cases clean, and carefully storing cords. TIP - save the spools that wire comes on. Use these spools to carefully wind your cables back onto when you're storing everything. While you wind the cable onto the spool, pass the wire through a damp cloth to remove any dirt.

Always allow sufficient ventilation for any piece of equipment. Heat is a sure killer of amplifiers. Never block any cooling vent holes or fans. If the unit cannot cool itself, it will fail. The tops of amplifiers should never get too hot to touch. If it gets too hot, turn it off immediately and replace it. In this case, it's better to lose the sound than to burn down the show!

Also, never let any equipment get wet. If liquid accidentally spills into a piece of gear, turn it off immediately and unplug it from all connections. Try to shake out any liquid. If it is just water alone, letting the unit air dry for several hours may be all that is needed. If the liquid is anything else, take the unit to a repair shop for cleaning as soon as possible.

## **Cheap Source of Equipment**

An excellent source of recordings, tape players, CD players, speakers, and amplifiers (and almost anything else) is your local weekend yard sale. Regularly attending yard sales within a few miles of your house can result in many bargains. I've purchased several portable tape players in good working order for only 50 cents each! The secret of successful bargains is to try before you buy! Bring a cassette, two to four AA batteries, and a set of small stereo headphones with you when you go shopping. This gives you opportunity to test out any portable cassette player before laying down your money.

## **Storage**

Use the same care for your haunt equipment as you would take for your home stereo equipment, tapes, and CDs. After all, its the same kind of equipment!

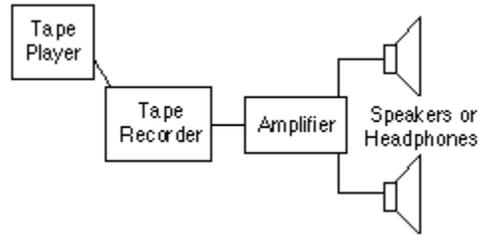
- Clean and inspect all equipment before packing. Get repairs done immediately before storage.
- Wrap equipment in plastic bags and store in secure, padded containers.
- Store speakers and electronic equipment in a dry place, with a moderate temperature variation. A closet in your house is good. Your garage or storage trailer is bad.
- Store tapes indoors, away from temperature extremes, and away from direct sunlight.

## **Recorded Sound Sources**

Soundscape recordings are available anywhere that sells music. Blockbuster, Best Buy, K-Mart, Wal-Mart, discount/closeout bins, yard sales, flea markets, catalogs are all great sources. If you use prerecorded sounds, be sure to get public performance releases from BMI or ASCAP if you're a commercial haunt. The cost is reasonable and gives you lots of flexibility. For example, the rate for a blanket license for a small radio station can be as little as \$800 a year! Non-compliance penalties can be severe. Check with them first before using pre-recorded materials.

Don't rule out recording your own sounds. You'll be surprised how many sounds are around you which work in a haunt. You don't need expensive, elaborate equipment to

record your own sounds. Just a good tape recorder, microphone, tapes, headphones and imagination are all that's needed.



Be patient and listen, useful sounds are all around you! Here's a fun example: Find a long guy wire or clothesline, put the microphone against the wire, then rap the wire with a piece of metal. You've got a ray gun sound! Tape dogs howling, babies laughing, washing dishes, water spraying against a wall. Playing the sound back while dragging the tape gives astonishing monster-like sounds.

Make lots of tapes with individual sounds and don't forget to label them!

To combine, or mixdown your sound collection into soundscapes, you will need at least one tape player to play the recorded sounds, and a recorder to sequence the sounds.

### **Basic Equipment for Recording**

Use a 'track sheet' to first assemble the sequence of sounds you want to record. Listen to all the source tapes and position each tape to the start of the sound. Arrange the tapes in the order they will be used during mixdown.

Use a new tape in the recorder. Put the source tape into the player, press play, then carefully use the record and pause buttons to record just the section you want on the mixdown tape. You can add audio effects units between the tape player and recorder to add echo, reverb, pitch shifting and all sorts of special audio effects. With the addition of an audio mixer, you can use several tape players at the same time to layer many sounds together.

Always keep a list of what you have handy, otherwise mail your duplicates to me! In stores, always look for the sound effects and ambient sounds sections. That's usually where the Halloween sound effects are hidden. I only get a blank look from the store clerks when I ask for the "Halloween Sounds". Try the New Age section for natural sound collections. The Movie Soundtrack section is good, too.