

Managing your soundscape at home

Part of the *Managing Your Soundscapes* series provided by Akoio



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You've heard the saying, "Home is where the heart is." These days, it may also be where your work is. Where the kids play or practice violin. Where the neighbor's dog or the street noise drives you to distraction. And where you enjoy long conversations with friends and family — or short but important talks with kids. Home is also where you want to relax, sleep, and nurture your health.

The sounds in and around your home — your soundscape — changes everything about how you live, work, relax, and sleep at home. [Unwanted noise](#) can cause annoyance and "bad moods." Noise can also interrupt our ability to concentrate or work, particularly if the noise is [loud and unpredictable](#). So, it's important to take practical, intentional steps

to make our home soundscapes the best they can be.

Of course, every home is different. Older, retired couples have different needs than those using their home as an office space for work. Parents of babies or families with school-age children will have additional considerations for what makes the best sound environment. Whatever your needs, this guide can help you become more aware of the sounds in your home, and take steps toward the soundscape that's right for you.

Practical considerations for optimizing your home soundscape

Sound Level Meters

Sound level meters measure the intensity (or loudness) of sounds in your environment. You can buy standalone sound meters that come with a microphone and digital display. These professional-grade tools are very sensitive and highly accurate. But you can also turn your phone into a sound level meter by installing an app. The CDC makes a free app (called [NIOSH](#)) that works with iPhones, but there are other popular apps, such as [Decibel X](#), that work with Android

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phones, too. The Apple Watch even has a useful decibel meter app built right in.

The sound level meter displays the loudness of the sound around you in decibels. According to the [US Department of Health and Human Services](#), “Sounds at or below 70 dBA are generally considered safe. Any sound at or above 85 dBA is more likely to damage your hearing over time.”



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As you measure the everyday sounds of your home, you can see how noise levels change throughout the day in different spaces. Is your home office quieter than other rooms? What sounds and noises seem the loudest or most noticeable in the mornings, afternoons, or evenings? Consider using the [Akoio Soundscape Journal](#) to track your findings. This will help you find a baseline of the existing sound and noise in your home. Then, you can work toward improving your soundscape, making sure you can hear the sounds you want, while reducing or removing any unwanted noise.

Acoustic Treatments

One of the most popular ways to create an ideal soundscape for your home is to use acoustic treatments. [Sound](#) is similar to light in that it bounces off of objects and materials in the room. Acoustic treatments are materials that can absorb and diffuse



Considerations for Home Offices

Working from home, at least part time, is now the norm for many of us. Optimizing our soundscapes is essential for productivity.

[Sounds in traditional offices](#) (e.g., conversations, doors, phones) can cause annoyance and reduce productivity. In fact, [background noise at work](#) can interrupt our ability to think, reason, and communicate.

Fortunately, you have more control over a home-office soundscape. Start with furniture, window treatments, and acoustic paneling for a comfortable soundscape.

Music can increase energy and contentment, and result in [better-quality work](#), but the type of music varies depending on the goal. For example, instrumental music may be optimal for learning, and music with 50-80 beats per minute is [often best for creative tasks](#). Any enjoyable music may help you complete boring and repetitive tasks faster.

Nature sounds or noise generators can improve concentration. They can also create a sound barrier between the office and the rest of the house, helping with [privacy for virtual meetings](#) and phone calls. White noise, natural or generated, can improve [word learning](#) and [auditory memory](#).

unwanted noise and create a more pleasant listening environment for the sounds you want to enjoy, such as conversation, music or other media.

Acoustic panels. These panels are generally large, soft, sound-absorbing boards wrapped in fabric and mounted on walls or suspended from ceilings. Acoustic panels are typically made with foam and fabric. They absorb a broad frequency range of sound energy, making them effective options for managing problematic noise. They can also reduce sound reverberation (i.e., echoes) in rooms, which can make your home soundscape more comfortable. For example, if you enjoy music that includes heavy bass, acoustic panels can help reduce vibration in the room. The color and shape of the panels can be customized to complement any décor. You can even find acoustic panels that double as wall art or that feature classic prints from famous artists.

Acoustic window treatments, such as specialized blinds and curtains, can also help to create your ideal soundscape. These treatments reduce the transmission of noise through windows. Like wall or ceiling panels, window treatments can also absorb sound energy within a room, reduce echo, and help optimize pleasant sounds. And, of

course, the design of the curtains, blinds, or other window treatments can be tailored to match and enhance the style of the space.

Furniture and décor. Finally, adding more soft surfaces, such as rugs, pillows and soft furniture, can help absorb unwanted noise and reduce reverberation. Adding these elements can reduce the level of noise coming from outside the house as well as noises within the space. With the right mix of furniture and acoustic treatments, you can make your home comfortable and beautiful, while creating the ideal home soundscape for working, entertaining, relaxing, and sleeping.

Noise Generators

When we think of managing our soundscapes, we often think of removing unwanted noise. But there are many situations where adding sound (or noise) can help. Noise generators create low level, regular noise that can cover up (or “mask”) other distracting sounds when we’re trying to focus, relax, or sleep.

Noise generators create different types of noise. Sometimes called “white,” “pink,” or “brown noise,” these “sonic hues” can be very soothing while helping us think, work, and sleep better. Each type of noise contains equal amounts of sound energy across the entire frequency range of human hearing, approximately 20 to 20,000 Hz. Sound filtering focuses each sonic hue on higher or lower frequencies with different effects on our wellbeing.

White noise sounds similar to the static from a radio or television that is not tuned to a specific station. It is generally unfiltered with equal amounts of high and low frequency noise. White noise can help improve [sleep quality](#) for individuals in high noise environments. White noise can also help people with attention deficit hyperactivity disorder (ADHD). For those with ADHD,

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Sonic Hues: The Color of Noise

White Noise

Helps improve sleep quality



Whirring Fan



TV Static



Humming Air Conditioner

Pink Noise

Helps improve sleep quality and cognitive performance



Waterfall



Rainfall



Waves

Brown Noise

Helps improve focus and thought processing



Heavy Rainfall



Storms



Crashing Waves

white noise may improve [reading and writing](#) speed, as well as speech recognition abilities.

Pink noise is filtered to bring out more low frequency (i.e., low pitch) energy than high frequency (i.e., high pitch) energy. Pink noise is often [associated with relaxing nature sounds](#), such as a rushing waterfall, ocean waves, or rainfall. Like white noise, pink noise can also improve [sleep quality and cognitive performance](#). Specifically, pink noise increases the “slow wave activity” in the brain that is associated with [deep sleep](#).

Sound filtering for **brown noise** creates an even lower pitched, deeper sound quality than white or pink noise. Brown noise is usually associated with natural sounds like rainfall or lightning storms. Several studies suggest that brown noise is ideal in helping us [focus and think better](#).

You can buy a noise generator as a standalone device, or download a noise generation app, like [Simply Noise](#). Experiment with different types of noise while studying, relaxing, or sleeping. You may find that a noise generator masks distracting sounds, like neighborhood pets or street traffic, helping you focus. A noise generator can help you fall asleep and stay

asleep by covering up sudden sounds that normally disrupt sleep, such as a barking dog or a car door slamming outside; instead of responding to the sudden sounds, your brain focuses on the constant sound of the noise and stays relaxed and resting. Noise generators may be especially helpful for anyone who experiences [tinnitus](#), helping them focus on soothing sonic hues instead of disruptive ringing.

Music and Sound Systems

You may also consider proactively using music and ambient sound recordings to balance your soundscape at home. Installing a quality sound system can help create a pleasant environment ideal for relaxation, work, or sleep.

Relaxing sounds, such as recordings of birdsong, ocean waves, or distant thunderstorms, can positively impact mood and [lower stress levels](#). This can be a particularly helpful strategy for individuals who live in high-noise environments, such as major urban areas, where there is limited exposure to the sounds of nature.

Listening to music can make us [more productive and more content](#). Oliver Sacks, a neurologist who spent his career studying



Considerations for Babies and Young Children

It is not recommended that babies sleep in silence, since it's important for them to [learn how to sleep](#) with normal environmental sounds. With that said, it can be beneficial to optimize the baby's soundscape for healthy sleep.


Acoustic treatment options, such as panels, window treatments and multiple soft surfaces, absorb distracting sounds and echoes in the baby's room. White and pink noise can mask disrupting noises to help the baby sleep. However, these should be used sparingly, so that babies don't become dependent on noise generators to fall asleep.

And, remember that different babies have different needs. Some may not respond well to white noise, and instead prefer a warm bath and a mother's lullaby ([which has been scientifically proven to outperform even Mozart](#)).

the effects of music on the brain, reminds us that music can be a powerful tool in managing our soundscapes and our mental health. "Musical activity," he says, "[involves many parts of the brain](#) (emotional, motor, and cognitive areas), even more than we use for our other great human achievement, language." Keep in mind that our response to different kinds of music changes as we grow. So, science suggests that [teenagers may actually need different music from their parents](#) to create their ideal soundscape (but mom and dad still have the final say!).

Figuring out what works for your soundscape

When crafting your home soundscape, consider your lifestyle. Your living situation, family size, culture, interests, and age can all influence what your ideal soundscape looks (and sounds) like. Noise generators can help soothe a fussy baby. Nature sounds may help teenage students more clearly focus on their homework. Music can make a more pleasant family dinner. And a few well placed soft couches and acoustic panels can make your living space more comfortable and engaging for those important conversations. Some solutions involve reducing sounds while others involve optimizing sound or even adding new sounds.

To find what works best for you, consider using the [Akoio Soundscape Journal](#) to take inventory of the routine sounds and noises you hear at home. Note the noises that drive you to distraction, and the sounds that help you focus, relax or add enjoyment. Then, take action to adjust your home soundscape so you can think, work, sleep, and live better. 

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