

Enhance your environment with custom immersive soundscapes

Livingston Sound is active in many market segments, providing technological and aesthetic enhancement of private and public spaces, indoors and outdoors. We offer unique audio technologies, aesthetic solutions to noise problems, seamless integration, and continually regenerating soundscapes with multichannel spatialization.

Private garden sound immersive sound environments custom-composed to meet client musical interests, based on local nature sounds: an ideal solution to noise pollution problems, creating a contemplative, artistic garden space.

There are two types of site-specific soundscapes for the built environment: the lingering garden and the strolling garden. The lingering garden evokes Song Dynasty poets and the gardens of Suzhou: depth of color and texture in a space, with a drip of water or a swish of bamboo. You rest on a rock, wait for the finch to return and whistle a tune, feel wind swirl the pines. The strolling garden, by contrast, propels you: to a far corner, up a grade, around a hedge unveiling a new vista. Like the visitor in T.S. Eliot's *Four Quartets*, a bird leads through the Burnt Norton rose garden, flitting from branch to branch as the garden unfolds. It was said of Picturesque gardens to emerge in Renaissance England—in contrast to the rigor of traditional French symmetrical parterres—they were the first gardens to "validate the stroll". My soundscapes mirror these goals, matched to the design and function of the garden experience.

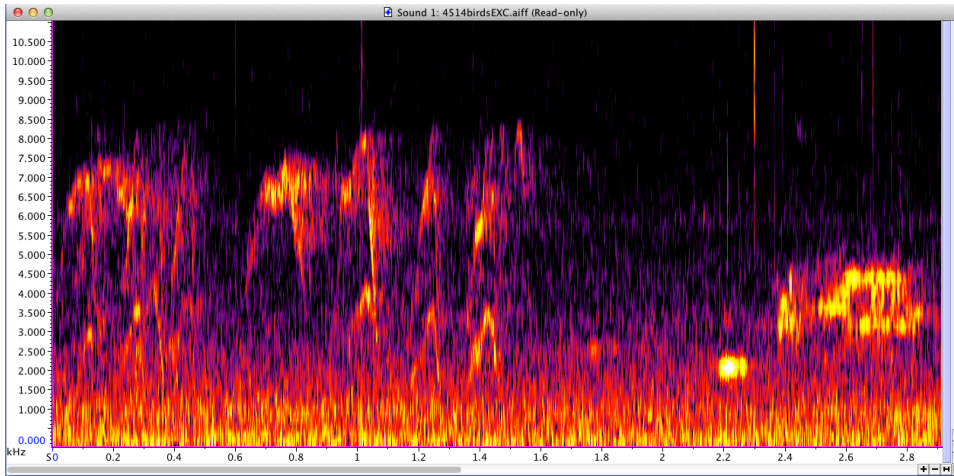
Aesthetics and Functionality The Livingston Sound solution for private gardens is at the intersection of technology (providing continuously evolving real-time generation of music and multi-channel immersive spatialization) and artwork. More nuanced than a fountain, more sophisticated than a windchime, in counterpoint to the natural energies of birdsong and wind, timed to the hours of the day and the usage of the garden space, the Livingston Sound composition fills an aesthetic need that complements the natural environment. It also serves some basic functional needs, especially the counteraction of traffic noise perception through unique application of *Sound Cocoon*[™] technology.

Technology Livingston Sound uses proprietary software which 'improvises' with large libraries of sounds, so that the soundscape has familiarity throughout the day, yet seems different every time. The software can change from meditative contemplation in the early morning to upbeat cocktail parties in the evening. It can respond to the number of people present in the garden, and to environmental conditions such as wind and rain, becoming a natural part of the diurnal and seasonal changes of the outdoor space. The software can synchronize lighting for dramatic or subtle nighttime synergy of effect. The sounds can come from conventional speakers, but Livingston Sound is also an inventor of numerous sound-producing objects, from outdoor chairs and benches to birdcages and sculptures that hang from trees, integrating the sound production into the landscape and adding to the aesthetic synergy.

Garden Sound Project Methodology

Site Acoustic Analysis documentation of the site's audio features, natural soundscapes, incursion of traffic pollution, and daily variances in sound energy, using binaural sonic complexity analysis and wind sensing.

Custom Composition designing musical textures which mesh with the natural environment, mask the distracting energy of neighborhood pollution, and enhance the aesthetics of the environment, all tailored to client interests and the desired usage.



Spectrogram of birdsong along a creek, moderate wind, demonstrating the “Niche Hypothesis”. The three birds alternate rhythms so they do not compete, and also tune their frequencies to be better heard. Note how core pitch sung by the thrush (top of the inverted V) near the center of the graph fits in between the harmony sung by the red-winged blackbird on the far right. The lower two bands are the creek sound.

Studio Recordings original instrumental and vocal recordings made in response to the site, intended to complement the natural environment and serve the project's aesthetic design.

Sound Design processing original musical recordings into thousands of fragments that will be recombined into an ongoing sonic texture, gently masking the intrusion of outside noise, and nested together according to the Niche Hypothesis to produce harmonious garden sound.

Programming creation of the infrastructure that allows the sounds to be combined with continuous variation, but still have compositional unity. The two fundamental principles are real-time generation of non-repeating music and spatialization, distributing the sounds throughout the garden to create immersive surround.

Site Testing the assembled components are matched to the site and evaluated for effectiveness in conveying the mood appropriate to the garden's usage, dependent on time of day, season of year, number of visitors, wind volatility, and so forth.

Garden Ideas

Clients may choose specific outdoor speakers to disguise in their landscape, or one of our various special sound-producing sculptural or functional outdoor elements.



Outdoor furniture that radiates sound directly through you.



Birdcages that talk to each other and evolve their songs over time to complement your garden.



Whimsy is also possible with sculptural elements that make sound!