

Sanitarium

Dark and Disturbing Impulse Responses



User's Guide

Version 1.0



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Introduction

Welcome to the Sanitarium, home for poor souls demented by tragedy, misfortune and human frailty. Here in these walls we house those with a wide assortment of conditions and impediments. Some that are unfit for social interaction, others that are a danger to themselves and the populace at large and some who merely cannot exist in the outside world. But lest we sound moribund, let us not fail to mention that since the Great War, there have been many wonderful advances in the medical treatment of the brain. To wit, we house a wonderful assortment of modern electric healing machines and medications that we employ in a variety of accepted manners to rid our patients of the evils that corrupt their minds.

Allow us to take you on a brief tour of the Sanitarium and explore some of the marvels herein. Mind your step and please do not offer any of the patients anything. And remember to stay with your guide, and do not wander into any restricted areas.

Our first stop is the **Basement** – a dark and forboding place under the main building. The Basement has long since been the source of dread among our nurses who show less than the stoutest of constitution. Many nurses report hearing strange noises and feeling the presence of ghosts while down here, but of course that is the silly fantasy of a childish mind. Though once a functioning ward, the basement now functions as a storage space only. The deepest and darkest sounds are found in here.

Through this door is the **Boiler Room** – a place of machinery and fluid dynamics, the Boiler Room contains sounds that remind us of water and metal. Our boiler, though not state-of-the-art, does function well and provides us with all the steam and heat we require. Like most Boiler Rooms, though, we do have our fair share of problems with pests, so do be careful and mind the rat traps on your way out.

As I mentioned before, we employ a variety of **Electrotherapy** techniques here at the Sanitarium. From static generators to Kinraide Coils, we have all the modern marvels of the Electric Age at our disposal for patient treatment. Often new patients are frightened of the thought of having electricity coursing through their bodies, but rest assured many advances have been made in this emerging field that greatly reduce the amount of possible damage done to weaker patients. These sounds are bright and sound like electricity.

Occasionally some of our patients end up here, **In A Padded Room**. A Padded Room provides comfort and security for a patient as he or she recovers from any number of afflictions that deem he or she uncontrollable by ordinary means. Those sounds In A Padded Room are often likened to various stages of mental deficiency one experiences in such a place.

Our **Maximum Security Ward** is a place to behold, ladies and gentlemen. Therein are the poor souls suffering some of the most vile and loathsome afflictions known to mankind. Unfortunately due to the nature of their illnesses, we cannot permit you inside, but know that these sounds are intense and brutal.

Over here we have our **Medication Closet** – a storage place for the assortment of modern medications that was mentioned earlier. For every symptom there must be a treatment, so we have a closet stocked full of the very best in medication for our patients. Each sound in the Medication Closet reflects the nature of its purpose. Please follow all dosage recommendations.

Ah, and here we have our **Minimum Security Ward** – Sanitarium “Light,” if you will. These poor creatures offer no ill-will towards their fellow man, but simply cannot co-exist in our day-to-day real world. Some cases are sad and tragic, others we find amusing, despite ourselves. These sounds are on the nicer side and offer more traditional results.

Occasionally one of our patients has an unsustainable breakthrough that we call **Moments Of Clarity**. Though usually very brief and unproductive, these moments often make for an interesting point of study for doctors, as they can evoke a wide range of emotions and responses. Each sound contained here is under one second in length and great for dementing and twisting percussion tracks or sequencers.

Our next stop is **The Day Room** – the patients playroom. During the waking hours the patients often come in here to mingle and entertain themselves. We have games that they can play as well as a phonograph and a radio. Typically they remain content for hours, though we occasionally have to reprimand some for their behavior. Sounds of The Day Room are percussive and often glitchy, yet fun.

If we pause here for a moment we can peek in on a **Therapy Session** in progress. Most of our patients can be managed through successive therapy sessions with our staff. These sessions, in conjunction with electrotherapy and medication often provide more than adequate results without having to resort to desperate measures such as lobotomy. Our Therapy Sessions uncover sounds akin to any number of afflictions affecting our patients.

Visiting Hours are highly regarded among our more responsive patients as the best hours of the day. During this time they may receive any visitor that is on the list approved by the Head Doctor. These sounds have been tailored specifically to bring to mind incidents that may occur during Visiting Hours.

And that, I'm afraid to say, concludes our tour of the Sanitarium. We do so hope that you enjoyed your stay and that when next we meet, it be under similarly ideal circumstances. We would also wish that you help us to help our patients, these people in need through no fault of their own, by dispelling some of the nasty rumors you may have heard about our fine establishment. We do thank you, and please come again.

WARNING: please take care to moderate the output volume when using this or any other convolution product. By its nature, convolution can result in resonances that amplify the source material significantly. Spirit Canyon Audio cannot accept responsibility if you blow some speakers, or worse, your ear drums!

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Installation

Installation of this product could not be much simpler. You have two main choices:

1. Copy To Hard Drive

Find the location on your hard drive or network drive where you store other impulse response files, and ensure you have at least 700MB free space in that location.

Using the file explorer of your choice, drag/drop the full contents of the CDROM to that location. The contents will thus be copied to your preferred location.

2. Use Directly From CDROM

Alternatively, if you wish to save space on your hard drive, you can use Sanitarium directly from the CDROM. This requires no installation at all.

The only downside to this approach is that most CDROM drives are slower than hard drives, and so loading impulse responses into your convolution engine may be slower using this technique.

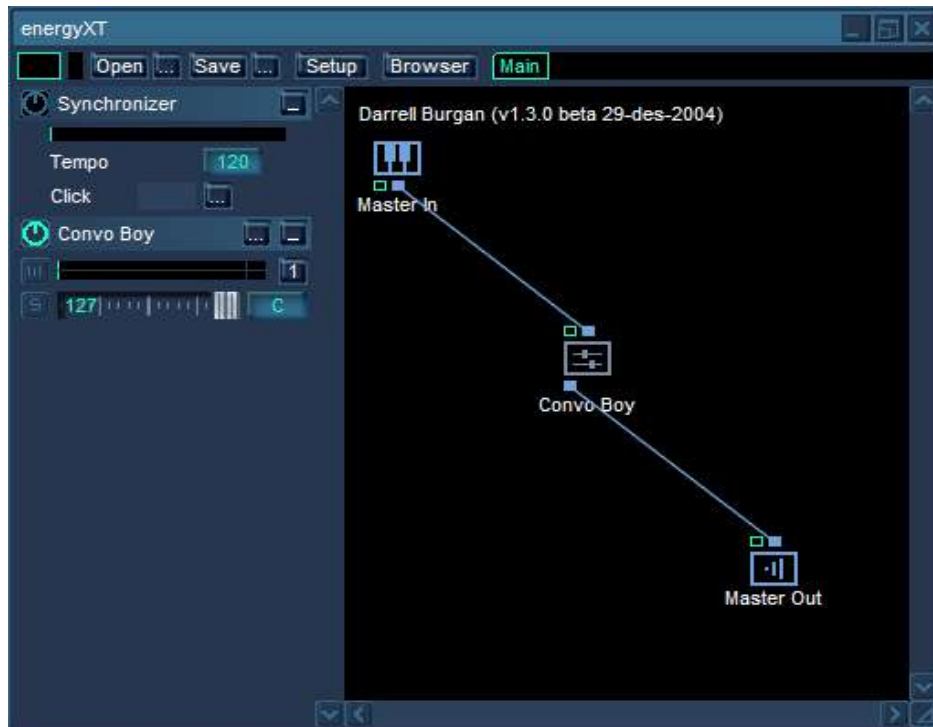
WARNING: please take care to moderate the output volume when using this or any other convolution product. By its nature, convolution can result in resonances that amplify the source material significantly. Spirit Canyon Audio cannot accept responsibility if you blow some speakers, or worse, your ear drums!

Example Usage

How you use Sanitarium is completely dependent upon the convolution engine of your choice. Please consult the user's manual for that product for details on how to import or use WAV files as impulse responses for convolution. All Sanitarium impulse responses are in stereo 24-bit WAV format, at a constant sample rate of 44.1KHz.

The following example session shows how Sanitarium might be used with Elevayta Convo Boy (a popular commercial convolution engine for the Windows/VST platform), within the energyXT program. This example is provided for customers who may not be familiar with the convolution process. Note that there are many convolution engines that run within many hosts, on a variety of operating systems. This is merely an example to illustrate how impulse responses can be used.

First, open your DAW/host software and instantiate your convolution plugin:



Next open the editor window for the plugin:



Load a Sanitarium impulse response into the plugin. Now adjust the gain, wet/dry balance, and any other controls to reflect your preferences:



At this point, the plugin ready to process audio through Sanitarium.

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Tips

Sanitarium is a set of unique DSP filters that musicians can use in any way they desire to create novel sounds and textures. There is no right way or wrong way to use the library. In fact, even the categorizations of IRs should be considered to be broad guidelines. There is no reason to assume, for example, that a particular IR in the Boiler Room folder won't provide the desired response as well as one from the Basement on some signals.

In addition, some of these tips may be useful:

- **Be careful with the output volume.** By its nature, convolution can cause resonances to occur around specific frequencies that match up in both the source material and the impulse response. These resonances can add volume to a signal, well beyond the maximum volume present. Many convolution engines offer no protection against digital clipping, so it is up to you to ensure the signal volume never exceeds the maximum.
- **Use EQ to balance the resulting sound.** Many times, very interesting sounds can be uncovered by using a parametric EQ following your convolution engine, which is tuned to eliminate unwanted resonances created in the convolution process. A good parametric EQ as well as a good spectral analyzer are very handy tools to have when using convolution in this manner.
- **Any particular impulse response might affect sound differently depending upon the source material being processed.** Therefore it is difficult to classify impulse responses by what the end result might sound like. If a particular favorite file isn't producing the result it usually does, experiment with others.
- **The shorter the impulse response, the less it will modify the input signal.** Short IRs create less dramatic changes to input signals, while longer IRs are useful for "spreading out" an input signal.
- **Use your convolution engine's full capabilities.** Most convolution engines nowadays offer such features as IR stretch/shrink, attack/release envelopes, overall volume curves, early fade, simple EQ, etc. If you use these capabilities to the fullest, you may be able to adapt a Sanitarium IR that is "close but not quite right" for your audio, to be something that is perfectly suited to your purposes.
- **Try stacking impulses.** Stacking two or more IRs can result in wild sonic distortion.
- **Adjust the dry/wet mix creatively.** Sometimes very stunning effects can be made by including varying amounts of the source material in with the convolved output signal.
- **Share your Sanitarium tips.** The Spirit Canyon Audio web site includes an online forum where users can share tips and techniques. Be sure to participate!

Impulse Response Guide

The following table describes each category of impulse response in the Sanitarium library, along with a high level description of each. Please note, however, that an impulse response by nature can have significantly different results when convolved with differing source material. Therefore, these descriptions are at best a loose guide, and you should feel free to use impulse responses in any particular category for any purpose.

Category	Description
Basement	Deep, Dark Impulse Responses
Boiler Room	Metallic and Fluid Impulse Responses
Electrotherapy	Bright, Electric Impulse Responses
In A Padded Room	Various stages of mental degradation portrayed in Impulse Responses
Maximum Security Ward	Brutal and Deranged Impulse Responses
Medication Closet	Every symptom must have a medication. Every medication has an Impulse Response.
Minimum Security Ward	Sanitarium "Light" - Softer Impulse Responses for more traditional effects
Moments Of Clarity	Very short Impulse Responses that are great for dementing percussion tracks or sequencers.
The Day Room	Percussive Impulse Responses; often glitchy or lo-fi
Therapy Session	Impulse Responses that provide a variety of effects to mimic various afflictions of the mind.
Visiting Hours	Impulse Responses formulated to provide effects akin to various incidents that occur between conversing individuals.

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Convolution Engines

Nearly all convolution engines support the use of 24-bit 44.1KHz stereo WAV files as impulse responses. Because the music software market changes so quickly, however, you should obtain the most up to date compatibility list here:

<http://www.spiritcanyonaudio.com/convolvers.php>

Note that vendors are free to change their products at any time, so we can assume no responsibility if your favorite product drops support for WAV file impulse responses or introduces a change that causes their product to no longer be compatible.

Also, see the following notes regarding specific convolution engines for tips on how to best use Sanitarium with them:

Convolver	Notes
Audioease Altiverb	To import WAV files into Altiverb, you must first convert all stereo WAV files into L and R Sound Designer II files before they can be used. Most any Mac DAW software should be able to perform this conversion, including Bias Peak, Digital Performer, Logic, etc.
Bias Peak	Some users have reported that WAV files must be converted to AIFF before use in ImpulseVerb. If you encounter problems loading a Sanitarium IR in ImpulseVerb, you should try converting it to AIFF and see if the problem is resolved.
Delaydots SpectrumWorx	SpectrumWorx is fully compatible with Sanitarium. However, be aware that SpectrumWorx processes signals monophonically. SpectrumWorx gives you the option to load the L or the R channel, or a mix of both, whichever gives you the rendering of the IR you prefer.
Prosoniq Rayverb	Rayverb is fully compatible with Sanitarium. However, bear in mind that Rayverb is not technically a convolution engine. Instead, it builds an internal model of an impulse response by analyzing the IR and performing some sophisticated DSP calculations. Therefore, the results you get with a particular Sanitarium IR in Rayverb are likely to be very different than results you would get in a more conventional convolver.
Steinberg Nuendo	The convolution engine included in Nuendo, called Acoustic Stamp, has a 12 second maximum IR limit. While all of Sanitarium will work within this limit, be aware that if you time-stretch any Sanitarium impulse responses it is possible to bump up against this limitation.
Waves IR-1	IR-1 limits impulse responses to a maximum of six seconds, therefore most of Sanitarium will work with IR-1. If you alter or stretch any Sanitarium impulse responses, however, you may bump up against this limit.

Support

If you need support for your Spirit Canyon Audio product, please visit the Spirit Canyon Audio home page at:

<http://www.spiritcanyonaudio.com>

Support there may be found in several forms:

- Online FAQs or other Help - some information may be available directly from the website regarding the product
- User's Forum - there is a support forum where users can ask questions and receive support from other users
- Contact Form - finally, you can email me directly via the contact form

Direct support is available via email only; sorry, no telephone support is offered. In general, we will try to respond to a support request within one business day (usually much faster), but exceptions may occur. Business days are Monday through Friday, excluding any holidays.

Bottom line: we believe strongly that software and soundware authors should provide good support for their products, and we will support you to the best of our abilities; but we do go on vacation from time to time like everyone else. We want your experience with Spirit Canyon Audio products to be a positive one, and we will do our best to ensure that happens.