# Capturing a Sound Shadow

Welcome to the fascinating world where technology and art merge! This is a quick reference guide to help you provide the best audio for a perfect personalized Sound Shadow. If at any point you even begin to feel overwhelmed by it all, drop us a line at <a href="mailto:support@soundshadowsart.com">support@soundshadowsart.com</a>. You can even send us a file to take a look at. If you're even a little tech savvy, though, the following should guide you through most aspects of getting a good recording.

# Creating a New Recording – What Should I Record?

A child saying something is our most common request, but that's just one of many really great ideas. The main advice we offer is to think about a sound you'll want to reflect on in years to come. A child's voice is an obvious one as it changes so quickly – and is worth capturing during all the life phases. Here's a word cloud to get your creative brain working!

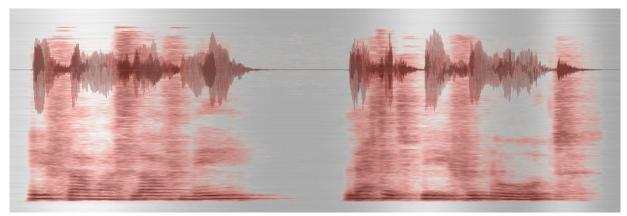


## Length

Bigger isn't always better. We recommend keeping your recording under 30 seconds, in most cases – under 10 seconds is best for showing detail. A 10-second limit is surprisingly easy to

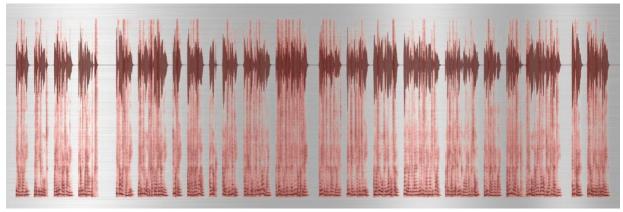
achieve. The details of sound really do shine when the Sound Shadow isn't squeezing them into a small space, but the there's also something to be said for looking at a longer sound in one go.

Here's an example of a recording about 3.5 seconds long, "If thou must love me, let it be for nought", which is from the poem "If thou must love me", by Elizabeth Barrett Browning. Every word and sound is clear.



3.5 Seconds

This Sound Shadow is of the full poem, which is about a minute long. It's still beautiful and provides a view of the overall structure of the speech patterns, which is cool. It's just a matter of deciding what makes you happy, especially when you play it back using the Sound Shadow Tag.



One Minute

#### Noise

Unless you really want background noise and sounds in the recording, which is actually okay if you want some ambience, do your best to record in as quiet an environment as possible. Rooms or spaces with hard surfaces, like kitchens, bathrooms, and prison cells often create a little more echo than you really want. Kitchens also have extra noise, like refrigerators,

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extractor fans, cupboard doors and the like. Find a quiet room, close your eyes and focus on what sounds you can hear. If you can turn anything noisy off, do so.

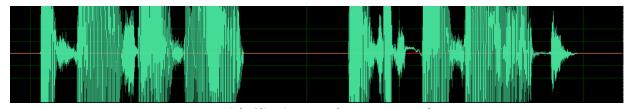
#### Volume

A Sound Shadow looks best if the recording volume is good enough that you can easily hear the replay across a room; how you would expect to hear it over a phone, for instance. We apply a number of techniques to optimize things like volume level, but the best time to control for that is during recording. A sound that's too soft won't display very well as a Sound Shadow. A sound that's too loud may result in something called "clipping", which even harder to recover from.

If you know how to look at your signal, either in your recording app or in another app, like Audacity, it's worth a look to see if the volume is appropriate. In the images here, the top shows a good volume level, with the green lines not touching the top or bottom of the window. In the bottom image, the top and bottom portions of the signal are "clipped" because they don't fit in the recorder's expected volume range.



No Clipping - Good Volume



With Clipping - Volume Too Loud

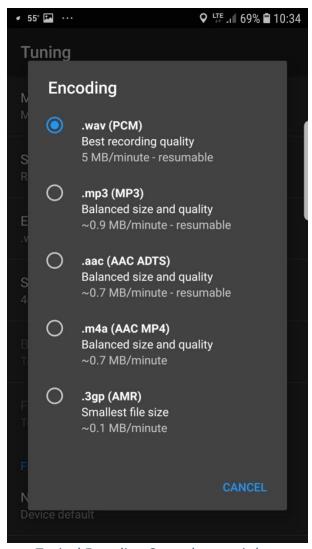
#### Hardware and Software

Most people have a smart phone or tablet at hand with a recorder already built in. Handheld recorders and PC microphones are also commonly available. If you don't have anything to record with, chances are a friend or family member can hook you up.

## Quality - Encoding

We mentioned that noise can affect audio quality, but another aspect of quality includes the recording file format. "MP3" is a common encoding standard. We're all used to it, but it does compromise the quality of any recording – it's called a "lossy" format for a reason. We have a set of special set Sound Shadow algorithms to help us recover lost quality in MP3 files, but if you want the best possible outcome, ensure your audio is recorded in WAV format. By the way, re-encoding an MP3 file to WAV won't improve the quality.

Encoding can be controlled in an app's "Settings" menu.



Typical Encoding Control - .wav is best

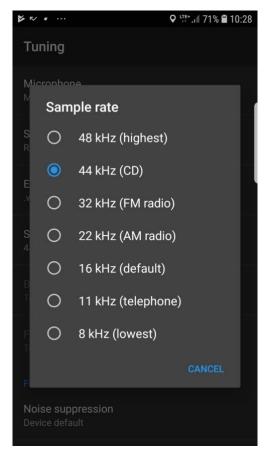
Quality - Sample Rate

Typically in a recording app's "Settings" menu, Sample Rate determines how much of the signal is recorded. As an example for comparison, a phone call sounds different, with less quality, than an FM radio broadcast because much less of the signal is being transmitted over the phone line. It's also another reason why we must concentrate a little harder to properly listen to a phone. In this image the lines drawn across the spectrogram represent how much more or less sound information is being passed.



Typical Encoding Control - .wav is best

The most important speech sounds are in the lower range, below 8kHz, so a phone recording is still a reasonable option for creating a Sound Shadow, it's just with a low level of fidelity. We tune our Sound Shadows to best suit the recording.



Typical Sample Rate Control – 44 kHz is plenty

## Phone or Tablet Apps

As with most things, there are a lot of apps in the market for recording sound. If you don't already have a recording app, it's worth the time to google "voice recording app" for the latest, but we found this review by PC Mag very helpful.

### Hand-held Recorders

Not many people outside the audio recording world use a dedicated recorder. If you have one, you likely already know how to copy the audio from the device to your computer, phone, or tablet. If you need help in this area, it's best to contact us with the make and model of the recorder and we'll help you figure out how to get the audio to us.

## Uploading the Audio

You'll be required to upload your audio file when you purchase your Sound Shadow. If that's not possible for some reason, contact us and we'll help you get the file to us via e-mail or in a private file sharing folder.

Thank you for visiting our store and getting this far. If you're having second thoughts or need additional information that isn't answered elsewhere on our site, please contact us; we love helping people! support@ soundshadowsart.com