

# The Devil's Dictionary

## Performance

The piece consists of a number of entries from *The Devil's Dictionary* by Ambrose Bierce. Since each dictionary entry is self-contained, a performance can be tailored to any desired length by omitting certain sections. Likewise, availability of an autoharp will determine whether those sections with an autoharp part are performed. To provide artistic verisimilitude, the chosen sections should be performed in alphabetical order (with the Frontispiece first and Colophon last).

A speaker with a suitably authoritative, resonant voice should, after the introductory Frontispiece, intone "The Devil's Dictionary", and introduce each word being defined in a serious tone. At the conclusion of the Colophon, the speaker should announce, "The End." I imagine a baritone, but other ranges are certainly possible. A suitably thespian tone should make amplification unnecessary. For a truly superior performance, the speaker should be provided with a lectern on which a weighty tome can be placed, with the pages turned before each section, and closed with finality at the end.

Immediately following the announcement of each word, the pitch should be given to the chorus on a marching band bell lyre, chromatic toy xylophone, or other similar instrument. As with the speaker, the chorus member entrusted with this important duty should approach his or her task with a suitably serious and impressive demeanor.

## The Autoharp

Some sections of the piece use an autoharp with a special tuning described below, as well as some extra gadgets to get different sounds out of the autoharp.

In folk music, the autoharp is traditionally played upright, held against the chest, with finger picks on the right hand and the left hand working the chord bars. In several sections of this piece, the autoharp is indeed intended to be played that way. However, other sections require the autoharp to be laid flat, so that things can rest easily on the strings. The player will need to alternate between these two positions.

## Autoharp Tuning

The autoharp should be a chromatic instrument with at least the chords found on an old-fashioned 12-bar autoharp: E7, F Maj, G Maj, G 7, G min, A 7, A min, Bb Maj, C Maj, C 7, D 7, and D min. It is to be tuned to an octatonic scale by lowering the tuning of some strings:

- All C strings lowered to B
- All D# strings lowered to D
- All F# strings lowered to F
- All A strings lowered to G#

This is one of three possible sets of pitch-lowered octatonic tunings; it was chosen to work best with the standard autoharp chord bars. The set of available chords will change as a result of this tuning. For completeness, the table below contains all possible chords an autoharp might have, showing how the chord bar would be labeled and how it would actually sound in the alternate tuning. The highlighted chords are those available on my 12-bar (dark grey) and 21-bar (both dark and light grey) autoharps.

Bar	Sounds	Bar	Sounds	Bar	Sounds	Bar	Sounds
E Maj	no change	G Maj	no change	Bb Maj	no change	C# Maj	no change
E 7	no change	G 7	no change	Bb 7	no change	C# 7	no change
E min	no change	G min	no change	Bb min	no change	C# min	no change
F Maj	F dim	Ab Maj	G dim	B Maj	B dim	D Maj	D dim
F 7	F dim 7	Ab 7	G dim 7	B 7	B dim 7	D 7	D dim 7
F min	F dim	Ab min	G dim	B min	B dim	D min	D dim
F# Maj	Bb min	A Maj	C# min	C Maj	E min	Eb Maj	G min
F# 7	Bb min #4	A 7	C# min #4	C 7	E min #4	Eb 7	G min #4
F# min	C# Maj	A min	E Maj	C min	G Maj	Eb min	Bb Maj

Chords for E, G, Bb and C# are unchanged.

Chords for F, Ab, B and D become diminished or fully diminished 7<sup>th</sup> chords. Note that all four diminished 7<sup>th</sup> chords (F, G#, B and D) are identical.

Chords for F#, A, C and Eb are affected in somewhat unusual ways. Major chords become minor chords a major third up. Dominant 7 chords also become minor chords a major third up, but with the addition of a #4 to the chord. Minor chords become major chords a fifth up.

As a result of all of this, the following sounding chords are available on a 12-bar autoharp:

- C# min #4 (played as A7)
- D dim (played as D min)
- D dim 7 (played as D 7)
- E Maj (played as A min)
- E min (played as C Maj)
- E min #4 (played as C 7)
- E 7
- F dim (played as F Maj)
- G Maj
- G 7
- G min
- Bb Maj

A 21-bar standard autoharp would also be able to play G dim (using the Ab Maj button) and Bb 7, and would have a dedicated button for E min; the other buttons are duplicates. Given the limited benefit of these extra buttons, the music sticks with the standard 12, to make it easy to find a suitable autoharp.

## Picks

In the fingerpicked sections, I generally use plastic picks, but metal ones should work as well.

In the sections where the autoharp lies flat, I use a plastic guitar pick. For picking individual strings, a thicker pick works much better. It makes less noise, and flexes less, so it's less likely to slap against the neighboring string. However, for fast strumming, a thin, flexible pick provides more reliable contact, and is easier to control. I switch between thick and thin picks within a section, according to the material to be played.

## The eBow

Some sections of the piece call for one or two eBows. An eBow is a little gadget originally designed for electric guitar. It is designed to take the place of the guitar pick, and uses a magnetic field to set up a feedback loop that causes the string to vibrate, creating indefinitely sustained tones. For more information about the device, go to <http://www.ebow.com>. eBows are generally available at stores like Guitar Center and Sam Ash. I am not the only one to have thought of using eBows on an autoharp. A quick search on the Web will turn up a number of videos of this sort of thing, which gave me the confidence to go out and invest in a couple of them.

The eBow was designed to work with standard guitar string spacing. It plays one string while resting against (and muting) the strings on either side. Autoharp strings are much more closely spaced, so that the eBow actually plays two adjacent strings, while resting on the strings on either side. Experimentation revealed that the eBow's feedback loop eventually settles on one particular string and sets it vibrating, while the other string falls silent. It's hard to predict which string will be chosen, which can cause some uncertainty. But luckily, because of the special tuning described earlier, there are many pairs of strings tuned to the same note. For instance, F# is tuned down to F. If the eBow is placed across the F and F# strings, the sounding note will always be an F.

The volume of sound produced by the eBow depends on its position along the string. The maximum volume comes from sliding it up next to the chord bars. As it is slid back towards the tuning pegs, the volume decreases, and for the upper strings will fade away altogether. Some sections of the piece exploit this to create dynamic changes.

Another effect, especially on the lower middle strings, can be triggered by sliding the eBow to a position a quarter of the way along the string (between the tuning pegs and the midpoint). This tends to set the string vibrating at the first harmonic, as the magnetic feedback interacts with the string in the location where the first harmonic is at its highest amplitude. On newer eBows with the little blue LED that illuminates the string, this effect is clearly visible. The midpoint of the string is stationary, with vibration on either side. It is much difficult to get this to work with harmonics beyond the first, and with the shorter strings.

Newer eBows have a special "harmonic mode", designed to get the string vibrating at the first harmonic automatically. On the autoharp, this sometimes works, and sometimes doesn't,

depending on the string and the placement of the eBow. I chose not to use this effect; the eBow should always be set to regular mode.

The eBow doesn't work on the lowest half-dozen strings, the ones made of the other-colored metal. The magnetic field must not be effective on that material for some reason.

## The Squeegee

The first harmonic is relatively easy to produce on an autoharp, using the same technique as on a guitar: Place a finger on the midpoint of the string while picking the string. I also wanted to be able to use harmonics when strumming across open strings. The side of the hand works passably, but accuracy is difficult. To solve the problem, I went to Home Depot and got a couple squeegees (the kind with a short handle or no handle at all, just a place to affix a pole). One is designed for windows, and has a rubber edge supported by a metal frame. The other is designed for showers, and has a thin, flexible plastic edge. Either one works well, but I think the rubber-edged squeegee is slightly preferable. I hold the squeegee across the strings with my right hand (the handle extending over the chord bars), and strum with a pick in the left hand.

With care, the squeegee can produce higher harmonics. Another effect used in the piece is holding the squeegee, not right at the midpoint of the string as would be used to produce the first harmonic, but a few inches to the left (toward the tuning pegs). This results in a deadened, thumpy fundamental with interesting ringing overtones. With the squeegee positioned about three inches left of the midpoint, the overtone is an octave and a fifth above the fundamental. At an inch and three quarters, it's two octaves and a third above. The sound is relatively quiet, but has an interesting bell-like quality.

## Amplification and Processing

The autoharp is not a particularly loud instrument, making amplification desirable. Many autoharps have audio output jacks, making this relatively straightforward. In a dry space, some stereo reverb may help the sound; in a reverberant church this may be unnecessary for the more folksy fingerpicking sections.

In the sections which rely on special effects such as harmonics and eBow, the sound should be given an ambient feel dripping with extra reverb, delay, chorus everything anything else.