Sea Trumpets manual 1.0
Tangent Edge Instruments
www.tangentedgeinstruments.com
info@tangentedgeinstruments.com
visit the site for:
* the latest free update
* freebies
* discount offers on other instruments
* blogs
About the Sea Trumpets

“Sea Trumpets” is a virtual musical instrument that’s built with samples of conches. Seashell horns. Conques. Shell trumpets. Conch horns. Triton’s Trumpets. They have many different names, but they’re made of shells of large sea snails and they have been used for thousands of years.

I sampled 35 conches of the collection of water musician Reinier Sijpkens, he blew them himself. It took him decades to collect that many, and now he has one of the biggest collections in the world.
“Sea Trumpets” comes with 583 samples of about 30 seconds. Two groups have seamless loops so they sound even longer. Full version of Kontakt 3.5 or higher is required. The instrument will work for 30 minutes in the free Kontakt Player and can’t be deeply edited.

“Sea Trumpets” comes with two presets: Ensemble and Monophonic. Monophonic allows legato playing. There’s a short glide between notes that makes it sound more like a flute. The only way to play multiple notes together is by playing and releasing keys while the pedal is down. The Ensemble patch allows more notes and tricks.

Important: make copies of the nki files and name them “edit”. If you leave the original alone you can always roll back to the original version.

Fun fact about the interface: you can control the buttons with the knobs. Buttons are still useful for bypassing the effect without changing the setting though.
Mixer Page

The “main pages” can be accessed by clicking “main pages” on the bottom of the interface. The first one, mixer, is like built-in parallel processing. It has volume settings for eight sample groups:

“Pure” is a group with the least processed samples. Just a little high pass and low shelf filtering, no noise removal was needed. “Layered” is a group with extra layers that give the instrument more different colours throughout the velocity range. I created these layers by filtering the frequency spectrum of samples using Match EQ and the Waves Manny Marroquin EQ for high- and low-pass filtering. The AET filter in Kontakt is supposed to do that but it’s unreliable, so I made my own sample layers. “Harmonic” has the fundamentals removed. Only the overtones of the conches are left. By turning this group up you can make the instrument much brighter without using EQ. I added a bit of colour from a Waves EMI TG12345 channel strip. “Max” has samples processed by the BBE Sonic Maximiser. Like “Pure” and “Layers” it can work on its own while sounding natural.
“Excite” has samples processed by the Waves Vintage Aural Exciter, an emulation of a tube Aphex Exciter. Dial in according to taste.

“Vit” has samples processed by Waves Vitamin. Dial in according to taste.

“Reverse” has samples processed backwards through Waves Abbey Road EMT 140 Reverb Plates and then reversed again and phase aligned with the other groups. Dial in according to taste.

“Release” has release samples that you may or may not like.

**Engine Page**

The “engine” page can be reached via the “pages” drop down menu when you’re on “main pages”. The Monophonic patch has an “extra” page there.

“Voices” - only in the Ensemble patch - is where it gets more interesting. There are five possibilities:

“Voices” is what it is: 35 conches over three octaves. “Best trumpets” is only half of them, stretched over the spaces in between them. “Second best” is the other half of them, also stretched. “Best trumpets” has the most stable and relaxed sounding samples, “second best” are the less stable samples. If you run two instances of Kontakt in a DAW you can make them
play together without having to worry about letting them play the same key. It will always be a different sample. This will not work in the free version because it doesn’t have enough samples.

“Duo” plays “best trumpets” and “second best” at the same time. If you set “spread” to 100% they will play on their own channel: left or right, making the stereo imagine extremely wide. If you use “keyfollow” they will be close together. Without keyfollow or spread the sound will be mono.

“Trio” does the same with three voices. With “spread” set to 100% the best voice will be in the middle - meaning left+right.

“Keyfollow” spreads the samples over the stereo field. In positive settings high keys sound more to the right, in negative settings the other way around.

“Spread” - only in the Ensemble patch - places the duo or trio voices in the stereo field.

“Horror” - only in the Ensemble patch - randomises the tuning. Setting “1” - which is what the script does anyways, is like a natural change for each stroke. Setting “100” works great for horror soundtracks, the pitch will always be somewhere between a quarter tone higher and a quarter tone lower then the key you play. Works great with “trio”. I randomised the pitch a bit to make the instrument more lively, did the same thing with velocity.

“Vel -> vol” decides how much the loudness is influenced by the speed of the key. 0% makes everything the same loudness, 100% make the sound too dynamic.

“Fixed velocity” allows a knob to control how loud you play. If you automate it in a DAW you can make really smooth crescendos and diminuendos. If you keep it at one level the instrument becomes like an organ or a synthesizer without key
sensitivity.
“Samplestart” - only in the Ensemble patch - decides at what sample point the sample starts playing after being triggered. At 100% you miss the start of the sample, at 0% you have silence before the conch starts.
“Fade” - only in the Ensemble patch - sets long attack and release times for notes.
“Crossfade” - only in Monophonic patch - sets long crossfades between notes.

**ADSR Page**

In the “Ensemble” patch the “adsr” menu can be reached the same way as “engine”. In the “Monophonic” patch only the lower four knobs are available, they’re on the “extra” page.

“ADSR” controls volume of playback over time. These controls only control the first seven groups, not the release group.
“Attack” sets the time it takes before playback reaches its maximum volume.
“Decay” sets the time it takes after maximum volume to go to sustain level.
“Sustain” sets sustain level - in dB.
“Release” sets the time it takes after key release for the sound
The “filter” adsr controls do the same thing for the cutoff level of some low pass filters that can be selected in the “filter” menu.

LFO page

The “lfo” page is the first page on the “fx” pages that can be reached clicking “fx” on the bottom of the interface. LFO is short for Low Frequency Oscillator. It makes waves and this one does it in multiple shapes. The instrument has two other ones - for Sample & Hold and for Autopan, but I only made interface knobs for the one controlling the tremolo and the filter oscillation.
“Sine” sets the strength of the sine wave. Triangle, rectangle and saw are simply other waveforms, while “random” uses set levels for the set amount of time, it creates steps. Click on the wrench above the trumpet icon in the interface, scroll down and click “modulation” to see the waveform. It’s the first one.

“Tremolo” links the playback volume to the LFO. With the knob you can control the speed, I set the unit to 1/32, that’s 1/8 of a beat. If you want a different time unit, like Hertz or triplets, go to the LFO settings using the wrench and click “Modulation”.

“Autopan” swings the sound left and right. The knob sets the speed, again in 1/32. Change the time unit of the “pan” LFO after clicking the wrench and “Modulation”.

“Sample & Hold” triggers delay and phase shifting. The phase shifting is linked to a random LFO, you can set the speed, again in 1/32. The LFO is the middle one under “Modulation”.
The “filters” page can be reached using the “pages” drop down menu after selecting “fx”.

“High-pass” rolls off the lowest frequencies. High quality plugins from FabFilter, Waves, Brainworx etcetera have better sounding high-pass filters then Kontakt has, but the advantage of using the Kontakt one is that the cutoff frequency can be linked to the pitch. A 523.25Hz note usually can do without sounds below 200Hz but a 220Hz note shouldn’t have a cutoff set that high. A high-pass filter that’s linked to pitch cleans things up nicely, that’s why I leave the filter on on default in the Ensemble patch. The Kontakt 5 high-pass sounds a lot better then the legacy one, by the way.

“Low-pass 2” is a simple filter that cuts off high frequencies. Can be linked to ADSR and Oscillation.

“Low-pass 4” is a more aggressive filter. Can be linked to ADSR and Oscillation as well and responds to velocity too.

“Pro53” - “Daft” in Kontakt 5 - adds more colour. Can be linked to ADSR and Oscillation and responds to both velocity and pitch.

“Band-pass” only allows one frequency band through. The knob controls the centre frequency of the band. Can be linked to ADSR and Oscillation and responds to velocity and pitch. The
Kontakt 5 version uses the AR 2/4 Band-pass. “ADSR” decides if, and how much, Low-pass 2, 4, Pro53, Daft and Band-pass are influenced by the ADSR envelope. Positive settings make the cutoff frequency lower than the one set so the decay opens the sound all the way to the sustain level of the envelope. Negative settings work the other way around, the filter will start open and then lower the cutoff frequency to the sustain level.

“Oscillate filters” sets the speed in 1/32 for tremolo and filter oscillation.

“Equalizer” switches the equalizer on or off. Removes some boxiness around 231.5Hz, boosts some character around 2.2kHz and the “treble” knob allows the control of “air”, around 11.7kHz. If the instrument is used on its own these settings might work for you, for a mix it’s better to use plugins. The Kontakt 5 version uses SSL emulation, sounded better than the legacy EQ.

**Classic fx page**

The “classic fx” pages can be accessed using the “pages” drop down menu after selecting “fx”.

![Tangent Edge Classic fx page](image_url)
In Kontakt 5, “compressor” sets the mix level of the Feedback Compressor. In older versions, it sets the threshold of the compressor. The result will be subtle.

“Saturation” adds some analog colour.

“Distortion” adds some growl to the sound. Turning it up adds fuzz. Low settings sound wonderful with the Rotator.

“Rotator” emulates the rotating panels in a Leslie speaker, traditionally used for electric Hammond organs, they throw the sound around. I linked the sustain pedal to the speed knob. If the knob is set at 0dB, only the sound of the rotator comes through, lower settings allow the original sound as well.

“Cabinet” emulates 7 different speakers, some with different microphone positions. The Leslie speaker sounds best to me.

“Reverb” controls the level of a traditional algorithmic reverb. It’s a send effect.

“Convolution” controls the level of the convolution module. It’s a send effect. You can change settings or the impulse response (drag and drop!) by clicking the wrench, SendEffects and double clicking Conv.

“Delay” controls the level of the delay module, another send effect. I set the speed to 5/32. You can tweak the delay by going to SendEffects.
Modulators Page

You can reach the “modulators” page using the pages drop down menu after selecting “fx”.

“Chorus insert” sets the wet/return level of the insert chorus module. You can tweak the settings after clicking the wrench and going to “InsertEffects”.

“Chorus send” sets the wet/return level of the send chorus module. I put both in the instrument because a chorus before a speaker and reverb is very different to a chorus after a speaker and parallel to reverb.

“Flanger” is a send effect. Go to “SendEffects” to tweak.

“Balance” balances left and right before the audio reaches stereo effects like rotator, reverb and delay. Turning the knob to the right turns up the right level and turns down the left level. Turning the knob left does the opposite.

“Phaser insert” sets the wet/return level of the insert phaser module. You can tweak the settings after clicking the wrench and going to “InsertEffects”.

“Phaser send” does the same for the send phaser module.

“Phase shifter” is a weird one. Switching it on also turns the filter LFO on.

“Aftertouch” decides how aftertouch influences the pitch. 8% is
a little less than a half step. A lot of keyboards don’t have aftertouch.

Advanced use

![Image of a software interface]

After clicking the wrench, there are more choices for tweaking the instrument. You could change settings per group. First unselect “Edit All Groups”, then go experiment. Notice the HQI: standard drop down menu? Selecting HQI: high or perfect improves the sound quality of pitched samples (used in “voices” settings” and above and below the middle three octaves) but puts more strain on the CPU. If you want to bounce the instrument and use pitched samples it’s best to change it to “perfect”. If your computer has no problem with “perfect” while playing live you can leave it at “perfect”.

The “constant” slider sets the sample start point. In the “Ensemble” patch you can access it using the interface, in the “Monophonic” patch you can access it here. If you change the sample start per group, you will mess with the phase correlation. Not advised.
“GroupInsertFx” gives access to details of the Group fx modules. Half of the settings are not linked to the interface so if you change them you can’t get them back by simply clicking a button!

“Amplifier” controls the pan and volume of playback. If you unselect “Edit all groups” and set up Kontakt as a multi-output instrument, you can send all groups to different outputs for further parallel processing! I am planning to write a blog about bouncing multi-output instruments, keep an eye on www.tangentedgeinstruments.com.
“InsertEffects” allows access to all details of the insert modules. All groups are fed into this, unless you select a different output. Inserts have serial processing: the result of the comp is processed by the following modules. “Sends” sets the send levels of the SendEffects. Also controlled by the script.

“SendEffects” allows access to all details of the send modules.
“Modulation” allows access to all parameters of the Envelopes and LFO’s. These Modulators work on group level, so if you have “edit all groups” unselected, you only tweak the modulator of the group that’s selected in the “group editor”. The top Multi is for tremolo & filters, the second Multi is the ADSR envelope for the filters, the first “cutoff” controls the phase shifter when “sample & hold” is selected, the “volume” ADSR envelope does the volume and the “pan” does the auto pan.
About the Kontakt 3, 4 & 5 versions

Not everyone wants to pay upgrade prices every time a software manufacturer releases a new version, that's why I added a Kontakt 3.5 patch. Kontakt 3.5 is the last version that works on PowerPC Apples. The only difference between the 3.5 and the 4 patch is that the non-automatable buttons are replaced by automatable switches. Kontakt 5.21 is a big difference though, I replaced everything that can be replaced with its new FX. Kontakt 5 users might want to try the Kontakt 4 patch as well, easier on the processor. Kontakt 5.21 is the last Kontakt version that's supported under Windows XP and OSX Snow Leopard.

Why I make instruments that are backwards compatible? Because we're wasting way too much money and resources trying to keep up with the latest technology. The latest technology creates incompatibility with older technology and forces us to replace stuff that still works perfectly. You could make a modern sounding album - in the box! - with a 2004 PowerMac G5 using Reaper or Logic 7, 8 or the first release of 9, or with a decent Windows XP computer with an old version of Cubase, or a new version of Reaper. Latest developments mostly make work easier, but at what cost?
About Reinier Sijpkens

Reinier Sijpkens is a genuine “water musician”. He mostly performs music from a tiny boat that dances on the waves. He slowly travels through the canals of Amsterdam or Utrecht while he enchants pedestrians with his flugelhorns, trumpets, conches and all sorts of other instruments while he accompanies himself with a barrel organ. Find him on Youtube and iTunes and check out his website www.reiniersijpkens.nl.
Half of the profit of the Water Trumpets go to Reinier, so if you want to support his art and his family - kids at academies cost a lot of money - please buy this product, don’t use illegal copies, don’t hand out copies and spread the news about this instrument: be our ambassadors!

The other half of the profit will support my business. I have ideas for an extended version of the Sea Trumpets, more instruments from Reinier’s World and a long, long list of niche products that have not been sampled before that I can only work on if I have a budget for traveling and renting studios and musicians for a longer time... All of that can’t happen without sales!
As soon as you upload something that uses the Sea Trumpets, please let us know!
About Tangent Edge Instruments

Tangent Edge Instruments is a virtual instrument product line by Dutch composer/pianist Niels Dolieslager – me – since October 2014.

With TEI I want to help people who make music with computers. The world of virtual instruments and audio software is getting more exciting every year and I would like both the music world and aspiring musicians to benefit from new possibilities as much as possible.

I am developing inspiring instruments that are easy to use for the softsamplers Kontakt, Halion and Sforzando and the EXS24 softsampler integrated in GarageBand and Logic and I’m writing blogs about the things I’ve learned over the years and the things I’m still learning.

End User License Agreement - September 2016

When buying these instruments you agree to the following: sales are final and non-transferrable. You cannot sell or give these samples or presets to someone else if you no longer use them. You are not allowed to upload them for others to download for free or add them to a filesharing system like torrents, you will be reliable for my loss - people using my work without paying for it. If you bought or got these instruments
from someone else besides Sampleism or me you will not receive updates or upgrade offers.

These instruments are meant for making music. You are allowed to create (and sell) presets for these samples though, so other people can use the instruments in other soft samplers. Even then, you are not allowed to sell copies of the samples themselves.

(c) 2016 Niels Dolieslager - www.tangentedgeinstruments.com