

Therolin

Artists | Ryan Elmendorf + Nick Geurts

Completed | 2017

Materials | Stainless steel, piano string

Dimensions | 20' x 6'

Funding | Burning Man, crowdfunding

Engineering: re:engineering + yetiweurks

The *Therolin* is a revolutionary new type of large scale musical instrument. By pairing a 20 foot long piano string suspended in a steel pipe to a theremin, the *Therolin* converts the musical output from the theremin into notes played on the string by “plucking” it with electromagnet actuators on specially engineered frets. Traditionally a theremin responds to the hand movements of its player to create electronic sounds, but now *Therolin* players will use it to play a giant stringed instrument, creating a physical sound in lieu of the traditional synthesized sound.

The *Therolin* consists of a single 20 foot long piece of 10 inch diameter stainless steel pipe that emerges from the ground at a shallow angle. The end of the pipe is approximately 5'-6" off of the ground. As you approach, you will notice that there is a pedestal located near the end of the pipe which has a theramin antenna built in. Looking down the pipe you will see a continuous strand of

piano wire along its center line, and a series of supports (or frets) and electromagnetic coils.

A low-profile base plate sits just below the Earth's surface, and is anchored to the ground with four screw anchors. This will give the illusion that the pipe is emerging from the ground with no support.

Therolin is designed to be minimal and unassuming, while still having an intriguing presence. Participants will be drawn in by its form, and only upon closer inspection will they discover something completely unexpected and wonderful. As they get close to, or reach out to touch the theramin antenna, they will notice a soft musical sound starting to emit. If they move their hand closer to the antenna, the pitch of the sound will rise, and as they move their hand away the pitch will fall. The experience will be the interface of a traditional theramin, but with a more real, physical sound in lieu of the traditional synthesized sound.

Therolin is meant to inspire collaboration. Once a participant learns how to play it, they will begin to create impromptu performances and draw in more participants. Based on the artists' experience with their past works, they anticipate waves of people interacting with it, i.e. once one person discovers how it works they spread the knowledge and excitement to friends and even strangers passing by until a crowd forms, and then eventually dissipates for the whole process to repeat.