ELECTRONIC **EI** INSTRUMENTATION

Using Wave Files in Analog Discovery Wavegen

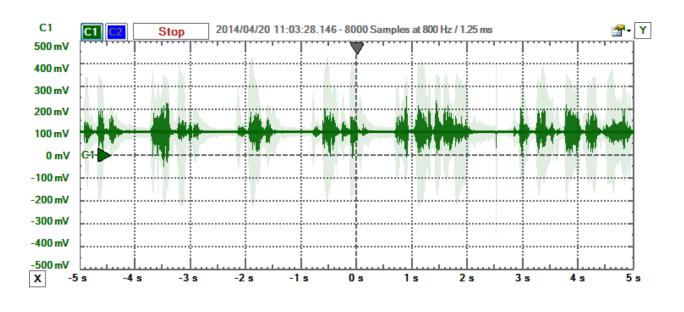
Find or create an audio file in .wav format and save it in an easy-to-find directory. Be sure to note the sample rate used to record the file, if the information is readily available. The buffer size for the signal is limited, so lower sample rates mean longer signal time durations. Note that *Wavegen* lists both the sample rate and number of samples after the signal has been imported. For these instructions, the file selected is jfkmoon.wav.

• Open Wavegen from the Digilent Waveforms Window



- Under the *Basic* tab, select *Player*
- Then select *Add* and go to the directory where you downloaded the wav file. Select (*Open*) the file, which will add it to the list.
- Set the playback frequency to equal the sample frequency. Note the total number of samples and sample frequency are found above the file list. Set the amplitude to be the level you desire. In this case, the amplitude is chosen to be 0.5V.
- Run AWG 1 and the Scope and you should see the following on the scope.

Channel 1 (AWG 1)		
Enabled 🕨 R	un AWG 1 😭 🗸	Preview
Basic Sweep Advanced		
Trig: None	▪ Wait: none ▪ Run: continuous ▪ Repeat: infir	nite 👻
Standard	Frequency Amplitude Offset	
Custom Player	11 kHz 👻 500 mV 👻 0 V 👻	SP
Add 🚰	M 200 kHz - M 5V - M 5V -	y h ma
💢 Remove		m s
Channel 1		e e t
348.11 kSa		r V
11.02 kHz		,
silentnight.wa 🔺		
silentnight-nr.		
silentnight-eql PPW.wav	M M M	
jfkmoon.wav 💌	n 1 Hz • n 0 V • n -5 V •	







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