

Using Wave Files in the M2k Signal Generator

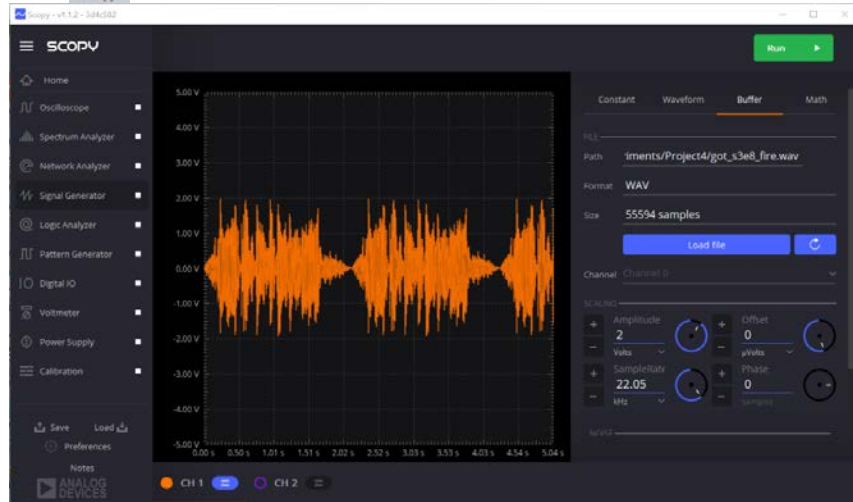
Find or create an audio file in .wav format and save it in an easy-to-find directory. It is best to note the sample rate used to record the file if the information is readily available. The buffer size in the M2k is limited, so lower sample rates allow for longer signal durations. The M2k Signal Generator will list the number of samples and typically automatically sets the sample rate correctly.

- Open *Signal Generator* in Scopy



- For the channel to be used, select *Buffer*

- Click on *Load file*, a folder window opens
 - For the file type select *Waveform Audio File Format (*.wav)*
 - Find your .wav file and click *Open*



- The *SampleRate* should automatically be set, typically 20-40kHz

- The *Amplitude* can be changed. For Project 4:
 - Recommend start with something that has peaks at -2V to +2V
 - Adjust the amplitude so that the plot shows about -2V to +2V
 - This level will likely cause some distortion and can be reduced later

- Run the *Signal Generator*

Notes:

- 1) Large files will cause Scopy to lockup and eventually crash. I don't know the size limit.
- 2) Not all .wav files seem to work.
- 3) You can play with the frequency to change the playback rate.