

## 33522A 2-Channel Audio Demo Guide

Summary: The guide explains how to setup and operate the 33522A 2-channel audio demo.

Equipment:

1. 33522A 2-channel function / arbitrary waveform generator (demo unit)
2. Stereo Speakers with “Channel 1” and “Channel 2” labeled BNC connectors

Procedure: Hard keys are in **bold** and soft keys are underlined

1. Turn on the 33522A and turn on the stereo speakers and adjust the volume control all the way down. Connect the stereo BNC labeled “Channel 1” to the 33522A chan1. Connect the stereo BNC labeled “Channel 2” to the 33522A chan2.
2. Press **Waveforms**→Arb→Arbs→Select Arb use the front panel knob and arrow keys to select the arb “CHAN1\_AUDIO” and press Select (ignore warning messages).
3. Press **Parameters**→Sample Rate key in **22** and press KSa/s. Press Amplitude and key in **750** and press mVpp. Press **1** (above chan 1 output BNC) →Output On to turn the chan1 output on (if the speakers are not turned down you will hear audio).
4. Press **Burst**→Infinite→Burst to turn burst mode on (ignore warning messages).
5. Press **2** and repeat steps 2 thru 4 for chan2 but this time load in the arb entitled “CHAN2\_AUDIO”.
6. The chan1 and chan2 audio arbs will start in sync once the front panel trigger button is pressed twice.
7. Adjust the stereo speaker volume knob to around  $\frac{1}{2}$  to  $\frac{3}{4}$  of max volume . Press **Trigger twice** and the audio will start.

The audio takes about 1 min to play. The arbs are on a continuous loop and will continue to play until the unit is reset, outputs turned off, or the volume on the speakers is turned down. The “CHAN1\_AUDIO.arb” and “CHAN2\_AUDIO.arb” are approximately 1.3 M points in size. They were recorded and played at 22 KHz.