

# 33500 Series Function/Arbitrary Waveform Generator Quick Guide

## QUICK FACTS

- 30 MHz bandwidth per channel
- Up to two independent channels
- Up to 16-million-point arbitrary waveform memory per channel
- 16-bit 250-MS/s arbitrary waveform generator
- Arbitrary waveform sequencing capability

## ADDITIONAL RESOURCES:

For more detailed demo resources, refer to the 33500 Series memory stick where you will find a huge amount of useful information including the new video demo series, detailed demo guide, data sheet with specifications, and more function generator hints/tips.

Also, visit our helpful Web site at [www.agilent.com/find/FunctionGeneratorSpotlight](http://www.agilent.com/find/FunctionGeneratorSpotlight)

## QUICK DEMO

**Equipment:** 3352xA, 7000 Series MSO (or equivalent scope), BNC cable

**Conventions:** Hard keys are **bold** and soft keys are underlined.

**Summary:** This demo creates a square wave and uses the sum feature to modify it.

1. Set up and turn on the scope and 3352xA. Connect the BNC cable to channel 1 of the scope and channel 1 of the 3352xA.
2. Press **Chan1** → Output Load → Set to High Z to match the 33522A to the scope's input impedance. Press Output on.
3. Press **Parameters** → Amplitude, use the key pad to enter **5** and press Vpp.
4. Press **Waveforms** → Square. Press **Autoscale** on the scope.  
A 5-Vpp square wave is now displayed on the scope.  
Next we will add some modulation to the square wave.
5. Press **Modulate** → Type → Sum → Sum Ampl → **10** → Percent → Sum Freq → **10** → KHz → Modulate on.

We just added a 10-KHz sine wave at 10% amplitude to the square wave.

6. Press **Shape** → More → Noise.

We just added 100 KHz (default setting) of noise at 10% amplitude to the square wave.

