

Learning Objectives

In this lesson you will:

compare idea waveforms to actual waveforms define pulse rise and fall times see pulse and square wave signal not based at zero volts define the parameters pulse width and duty cycle see pulse tilt, undershoot, overshoot, and ringing

Ideal versus Actual Pulse Waveforms

Idea waveforms are a theoretical concept

Function generators produce non-ideal waves that approximate theoretical shapes

The Comparison

Ideal (Theoretical)

Levels can change Instantaneously Waveforms have no harmonic distortion

Waveforms have unlimited amplitude

Actual (Generated)

Levels change requires a finite time

Harmonic distortion adds small amounts of other frequencies

Amplitudes limited to capabilities of generator

























