Figure 5 A sampling, or equivalent-time, oscilloscope does not take all the points in a single sweep. It varies the delay from the trigger to the acquisitions to build up a representation of the waveform over many repeated sweeps by adding a small set of points to the waveform each sweep. It first takes the red points; adds to the delay; and then adds the black points, the blue points, and so on. Because the scope is acquiring constantly, it also provides a pretrigger acquisition.