

Capturing a Burst of 91 Low Duty Cycle Pulses

By: Hewlett-Packard Company

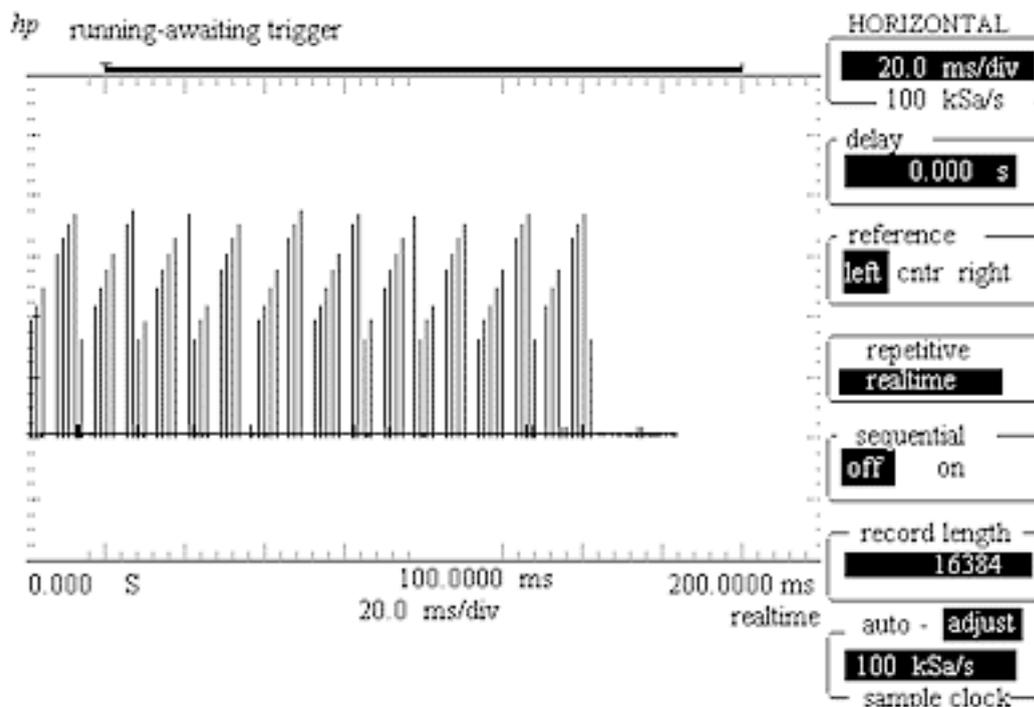
Purpose:

In this hands-on exercise, you will learn how to use Sequential Single-shot to capture a burst of low duty cycle events with high resolution.

Equipment:

- HP 54520-Series Oscilloscope
- HP 54720-66506 Application Training board

- Using a 50Ω(Ohm) BNC cable, **connect J8** of the HP 54720-66506 training board to CH1 of the HP 54542A scope.
 - “Close” switch #1 on S1.
 - Set **VAR LFCK fully CCW**
- Load the scope setup from the disk file.
 - Press the **[blue shift key]** and then press **[Disk]**.
 - Select the **load scope** soft key and then select **SET**.
 - Turn the general entry knob to select setup from file **[LAB3A1.SET]**.
 - Press **execute**.



- Press the **SINGLE-SHOT/GLITCH** button on the training board.
- Select the **HORIZONTAL** setup menu and make note of the present sample rate. _____ Notice that by using **peak detect** at this timebase and memory setting (16K on screen), the scope has captured just one point on each of the 91 pulses. Is this sufficient data for detail pulse analysis on each pulse?
- Change the timebase to **1 ms/div** and then press the **SINGLE-SHOT/GLITCH** button once again to observe the low duty cycle nature of this pulse stream.

