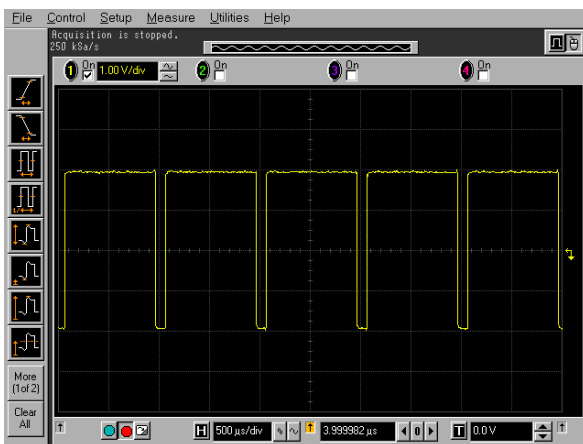
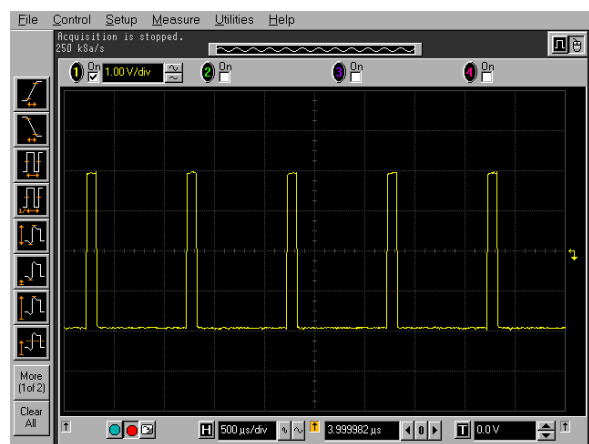


Generating Variable Duty Cycle Square Wave with DS345

1. Start the exercise by resetting the unit.
2. Press the Function Down Arrow key to select the square waveform.
3. Set pulse Frequency to 5 kHz and Amplitude to 4 Vpp.
4. Set the unit to BURST mode with the Modulation Down Arrow key.
5. Press the SHIFT then the "0" key to set TRIG SOURCE. Use the MODIFY Up/DOWN Arrow keys on the far right to set trigger source to RATE.
6. Press the SHIFT then the "1" key to set TRIG RATE. Leave it as default rate of 1 kHz.
7. Press the SHIFT then RATE to set BRST CNT (Burst Count, ie. the number of pulses in a burst). Choose 1, the default number.
8. Press the SWEEP ON/OFF key to turn the burst on.
9. Use a BNC cable to connect the DS345 to an oscilloscope, again terminating the main Output into 50 ohms. The scope should show a 90% duty cycle pulse train with a repetitive rate of 1 kHz.
10. To get a 10% duty cycle pulse train, press the PHASE key and phase shift the output 180° (use the DEG key).



90% Duty Cycle Pulse Train



10% Duty Cycle Pulse Train

To get different pulse width, press the FREQ key and change the frequency. An offset may also be added by pressing the OFFST key.