

Prelab	Lab 10			Objective
	Joshua Ayers	Date:		The objective of this experiment was to observe and perform spectrum analysis
TA sig				
	Materials			
NI ELVIS II				
EMONA SIGEx Signal & Systems add-on board				
Assorted patch leads				
Two BNC – 2mm leads				
	Results			
spectrum impulse train				
Step 3				
	<p>ELV2_2P-LV2014.vi</p> <p>File Edit Tools Window Help</p> <p>R SLOPE TRIG LEVEL CH0-WHITE CH1-RED TIMEBASE RUN/STOP Y-AUTOSCALE ON</p> <p>Lab 3 Lab 4 Lab 5 Lab 6 Lab 7 Lab 8 Lab 9 Lab 10 Lab 11 Lab 12 Lab 13 Lab 14 Lab 15 Lab 16 ZOOM FFT DFD PZ plot HELP</p>			



Pulse width 5000hz

Step 7

Nulls occur at every 5000hz

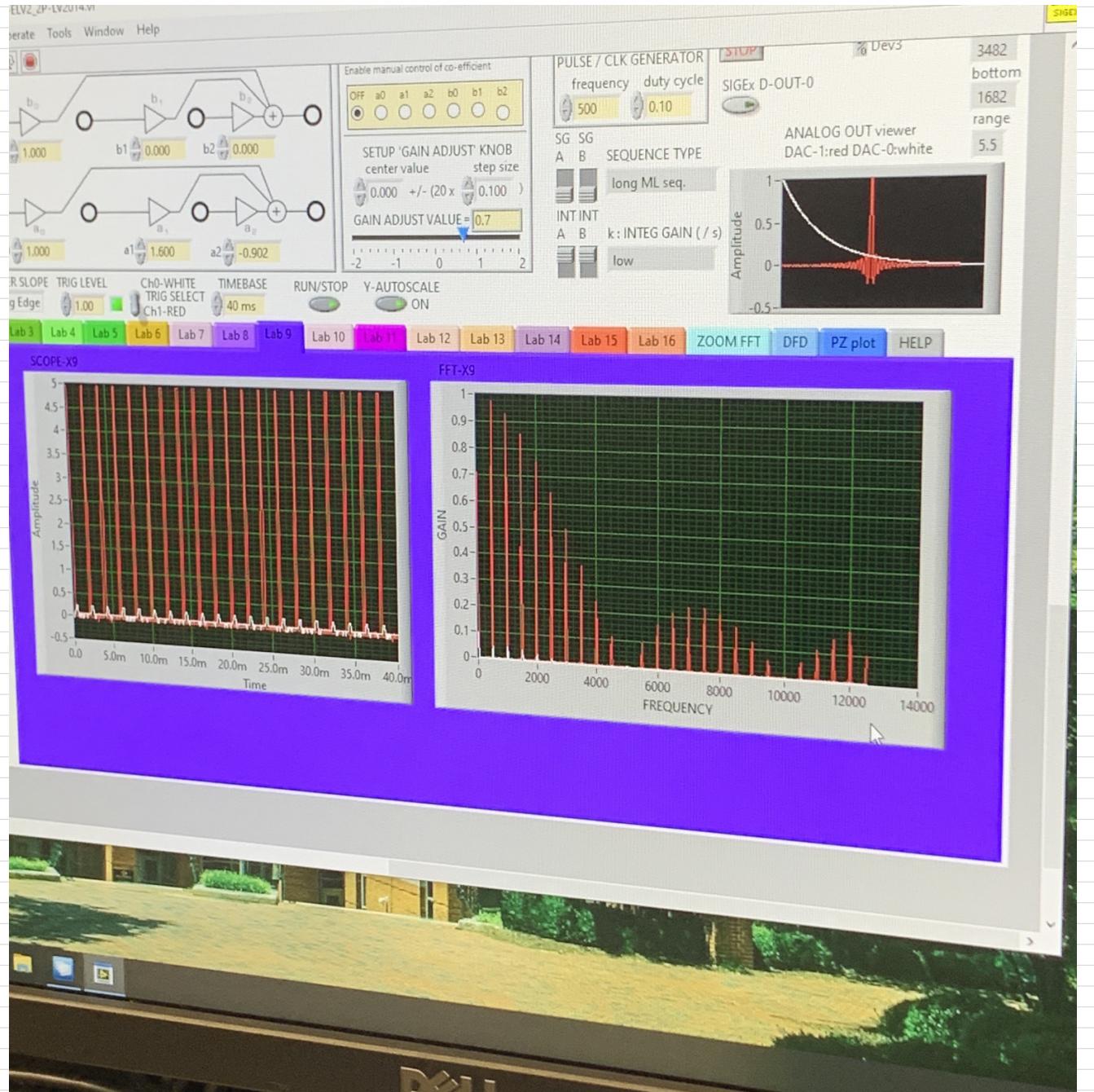
when duty cycle is doubled the pulse width is divided by 2

step 10

the null spacing is the same as the period of the impulse train

step 12

step 14  
exponential decay  
step 18  
gain aproaches zero  
question 19  
single pulse with a small gain but simicircular shape  
spectrum of the impulse train  
Step 3 and step 5





Duty Cycle	gain
0.5	0.64
0.4	0.6
0.3	0.52
0.2	0.41

Duty Cycle and Sampling

step 6

