SE 3K04

Assignment 2

Testing

Group 18

Dec 2, 2018

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No Natural Paces

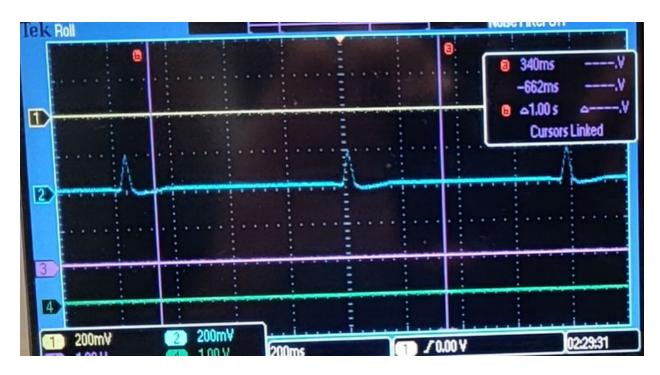
Parameters	Inputs	Conversion	Expected Result
p_lowrateInterval	1000	60 BPM	Only pacemaker's
p_vPaceWidth	10	10	paces should appear on
p_vPaceAmp	60.0	3V	the oscilloscope.
p_VRP	80	80	
MOVEMENTS	NONE	NONE	
INHIBITION	0 BPM	0 BPM	



Test PASSED as there are only paces from the pacemaker.

Only Natural Paces 60 BPM

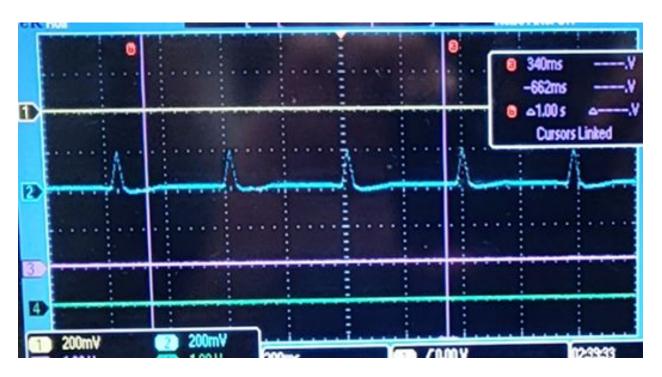
Parameters	Inputs	Conversion	Expected Result
p_lowrateInterval	1000	60 BPM	No pacemaker paces
p_vPaceWidth	10	10	should occur, only
p_vPaceAmp	60.0	3V	natural paces.
p_VRP	80	80	
MOVEMENTS	NONE	NONE	
INHIBITION	60 BPM	60 BPM	



Test PASSED as there is no pacing from the pacemaker.

Only Natural Paces 120 BPM

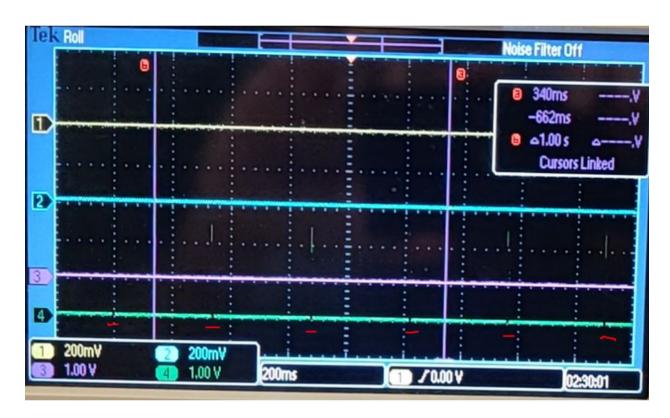
Parameters	Inputs	Conversion	Expected Result
p_lowrateInterval	1000	60 BPM	Only pacemaker's
p_vPaceWidth	10	10	paces should appear on
p_vPaceAmp	60.0	3V	the oscilloscope.
p_VRP	80	80	
MOVEMENTS	NONE	NONE	
INHIBITION	120 BPM	120 BPM	



Test PASSED as only natural paces appear, and there are no pacemaker paces.

Rate Adaptive Paces

Parameters	Inputs	Conversion	Expected Result
p_lowrateInterval	1000	60 BPM	Only pacemaker paces
p_vPaceWidth	10	10	should appear on the
p_vPaceAmp	60.0	3V	pacemaker. Frequency
p_VRP	80	80	of paces slowly
MOVEMENTS	FAST	FAST	increases
INHIBITION	0 BPM	0 BPM	



Test PASSED and the pacing increased to a higher frequency.

Slow Natural Pace Correction

Parameters	Inputs	Conversion	Expected Result
p_lowrateInterval	1000	60 BPM	Natural and pacemaker
p_vPaceWidth	10	10	paces alternate evenly.
p_vPaceAmp	60.0	3V	The combined pacing
p_VRP	80	80	should be 60 BPM.
MOVEMENTS	NONE	NONE	
INHIBITION	30 BPM	30 BPM	



Test PASSED, first the pacemaker pace occurs and then the natural pace occurs after.

Slow Natural Pace Correction with Rate Adaptivity

Parameters	Inputs	Conversion	Expected Result
p_lowrateInterval	1000	60 BPM	Multiple pacemaker
p_vPaceWidth	10	10	paces in between the
p_vPaceAmp	60.0	3V	natural paces should
p_VRP	80	80	appear on the
MOVEMENTS	FAST	FAST	oscilloscope.
INHIBITION	60 BPM	60 BPM	



Test PASSED, there are multiple pacemaker paces between the 2 natural paces. Properly sensed the natural pace and waited the right amount of time to pace again, which is seen in the even spacing between the 2^{nd} and 3^{rd} pacemaker pace compared to the space between the 1^{st} natural pace and 2^{nd} pacemaker space.