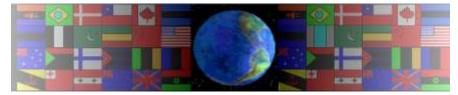
THE 555 IC

V.Ryan © 2000 - 2009

On behalf of The World Association of Technology Teachers

W.A.T.T.



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This exercise can be printed and used by teachers and students. It is recommended that you view the website (www.technologystudent.com) before attempting the design sheet.

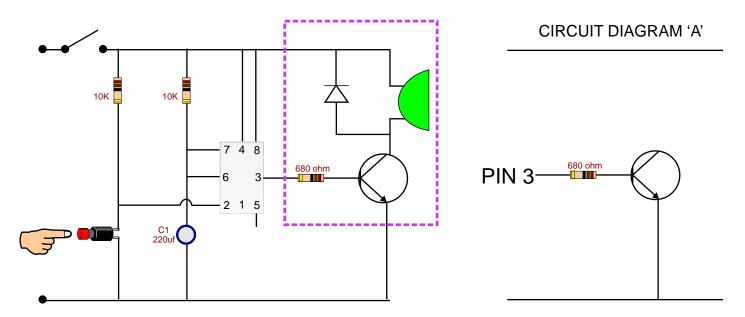
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THE MONOSTABLE CIRCUIT IN DETAIL

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The circuit below is a 555 monostable timer. It is set to turn on a buzzer when the push switch is pressed, sounding for approximately 8 seconds. This monostable circuit works only once. The switch must be pressed again for the buzzer to sound again. The area within the dotted line can be altered to have a variety of outputs.

It has been decided to replace the buzzer with a relay so that a secondary circuit can be added. Complete the circuit diagram 'A' by adding a relay and associated components.



What is a secondary circuit? Include a description of an example.

TABLE OF PIN FUNCTIONS

FUNCTION	555	
	1	
	2	
	2 3	
	4	
	4 5 6	
	6	
	7	
	8	

Complete the table by adding the correct function for each pin of the 555 Integrated Circuit.

OUTPUT	DISCHARGE	THRESHOLD		GROUND		
TRIGGER	Vcc	RESET	DISCHARGE			
CONTROL V						

One of the pins of the 555 has a 'ground' connection. What does this mean?

One of the pins of the 555 is the 'output'. What does this mean?