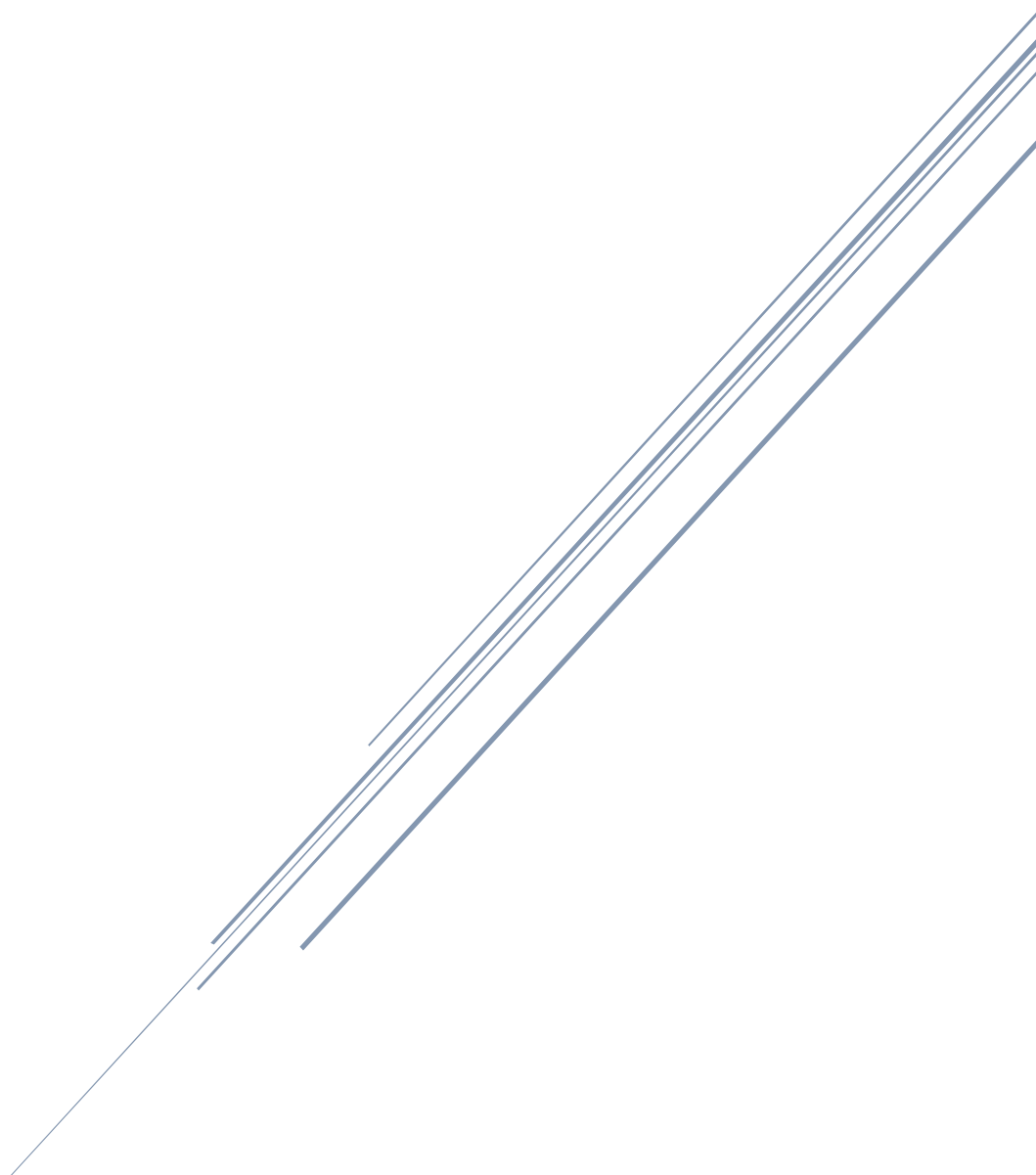


# FREQUENCY READER V1.0

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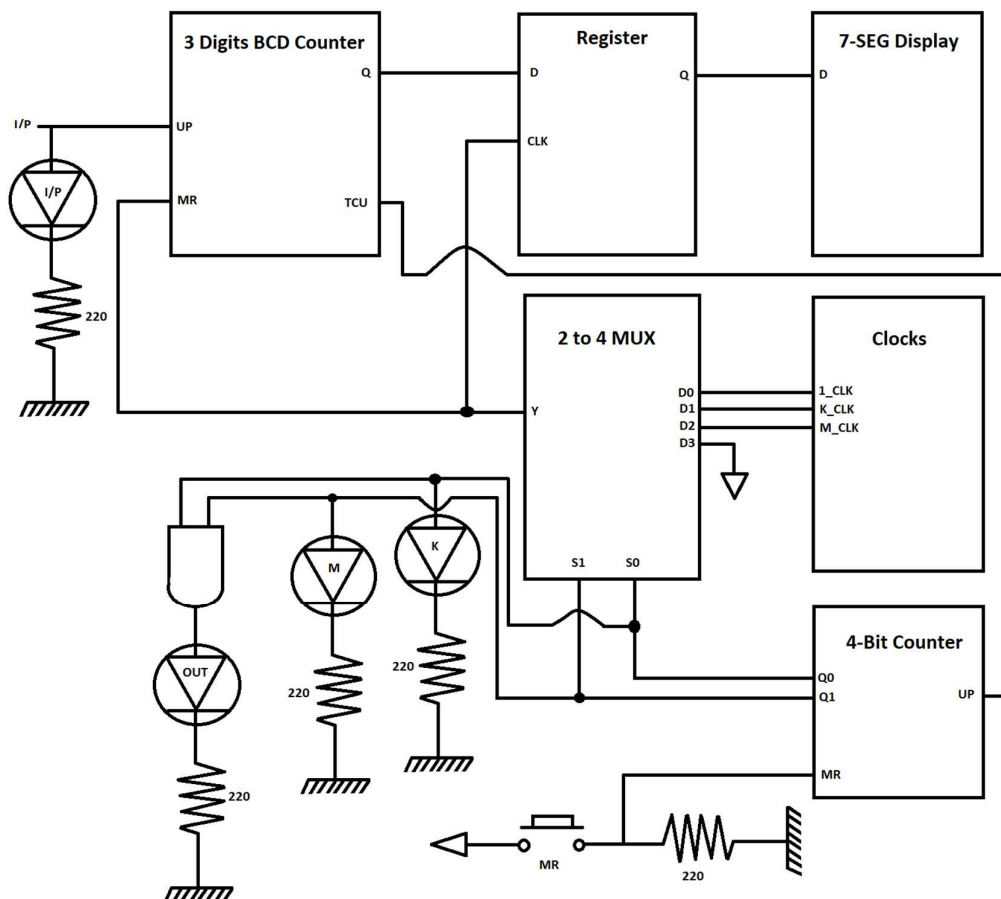
3/2020

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This device is used for reading a square wave frequency at range from 1 Hz to 9 MHz, takes 2 sec initially to operate and after pressing MR\_Button.













Its refresh rate (RR) is changed from range to another:

- a- Range 1 Hz to 999 Hz & Starting device or MR: 2 s.
- b- Range 1 kHz to 999 kHz: 200, 20, 2 ms, depending on DP & DPD choice.
- c- Range 1 MHz to 9.99 MHz: 200  $\mu$ s.



### The display items are:

- 7-SEG: indicates the value of the frequency.
- 'K' LED: indicates that the frequency is in the 'k' range.
- 'M' LED: indicates that the frequency is in the 'M' range.
- 'OUT' LED: indicates that the frequency is out of range.
- 'I/P' LED: indicates the input frequency.

I/P Range	MR_ BT	DP_ SW	DPD_ _SW	K	M	OUT	Decimal Point in 7-SEG	RR
1 to 999 Hz	0	X	X	0	0	0		2 s
1 to 9.99 kHz		No	X	1	0	0		2 ms
		Yes	1D	1	0	0		20 ms
			2D	1	0	0		200 ms
		10 to 99.9 kHz	No	X	1	0	0	
Yes			1D	1	0	0		20 ms
			2D	0	1	0		200 μs
100 to 999 kHz			No	X	1	0	0	
		Yes	X	0	1	0		200 μs
1 to 9.99 MHz		X	X	0	1	0		200 μs
More than 9.99 MHz <sup>(1)</sup>	X	X	1	1	1		0	
X	1 <sup>(2)</sup>	X	X	0	0	0		2 s

(1): in this case the value wouldn't be valid, and in some high ranges, higher than 20 MHz, the 'OUT' wouldn't work and then you will know from 'I/P' LED Refreshing Rate.

(2): in this case we restarting the device and if we still pushing the button, MR = 1, then the number shown on the 7-SEG would represent the first three digits in the Hz Range.

E.g. if the input signal is "452" Hz the output would be "452", if it was "125460" Hz the output would be "460", and if it was "52" kHz the output would be "000".