

# Bill Of Materials for mark vu meter 14ch

**Design Title** mark vu meter 14ch  
**Author**  
**Document Number**  
**Revision**  
**Design Created** Monday, 23 March 2020  
**Design Last Modified** Friday, 10 April 2020  
**Total Parts In Design** 48

## Notes

RV4,RV5,RV6, I used RK09K113-LIN10K ALPS they dont fit perfectly but you can make it work  
SW1 and SW2 are simple tectile switches

\*\*\*\*

Gen1 is a ARDUINO MEGA 2560 PRO ....pro version is important because it has smaller pcb then the normal one.  
U4 is a SI5351Board ....both GEN1 and U4 can be ordered for a few bucks at aliexpress

If you want to use a microphone, you will need a cheap conden mic.

If you want to switch between mic and line in, like in my setup, you will need a toggle switch. If you are only using one of the two, you can use a jumper on the pcb

Power supply is critical. make sure it has 5V on the output. If leds are behaving strange....check the power is not to high/low

And ofcourse you'll need ledstrips...

Be Wamed...I ordered several MSGEQ7 chips at Aliexpress...none of them worked!! Even my local supplies couldn't provide working chips. In the End I ordered at Mouser.com...they are the only official supplier...my advice, order it there!

## 0 Modules

<u>Quantity</u>	<u>References</u>	<u>Value</u>	<u>Stock Code</u>	<u>Unit Cost</u>
Sub-totals:				£0,00

## 16 Capacitors

<u>Quantity</u>	<u>References</u>	<u>Value</u>	<u>Stock Code</u>	<u>Unit Cost</u>
2	C1-C2	1u	Digikey P14505-ND	
2	C3-C4	0.01u	Digikey C1206C183J2RACTU-ND	
10	C5-C8,C10-C15	0.1u	Digikey 478-1556-2-ND	
2	C9,C17	470U	Digikey P5155-ND	
Sub-totals:				£0,00

## 12 Resistors

<u>Quantity</u>	<u>References</u>	<u>Value</u>	<u>Stock Code</u>	<u>Unit Cost</u>
-----------------	-------------------	--------------	-------------------	------------------

3	R1-R2,R12	100k	Digikey RT1206FRE07100KL-ND
1	R3	680k	Digikey RT1206FRE07680KL-ND
5	R4,R6-R8,R10	10.0k	Digikey RT1206CRD0710KL-ND
1	R5	470	Digikey 311-470FDKR-ND
2	R9,R11	22.0K	Digikey 311-22.0KFDKR-ND

Sub-totals: £0,00

#### 4 Integrated Circuits

<u>Quantity</u>	<u>References</u>	<u>Value</u>	<u>Stock Code</u>	<u>Unit Cost</u>
2	U1,U3	MCGEQ7	Don't buy at Aliexpress most are fake, I bought at mouser.com	
1	U2	LM358N		
1	U4	SI5351BOARD		

Sub-totals: £0,00

#### 0 Transistors

<u>Quantity</u>	<u>References</u>	<u>Value</u>	<u>Stock Code</u>	<u>Unit Cost</u>
Sub-totals: <span style="float: right;">£0,00</span>				

#### 1 Diodes

<u>Quantity</u>	<u>References</u>	<u>Value</u>	<u>Stock Code</u>	<u>Unit Cost</u>
1	D1	DIODE		

Sub-totals: £0,00

#### 15 Miscellaneous

<u>Quantity</u>	<u>References</u>	<u>Value</u>	<u>Stock Code</u>	<u>Unit Cost</u>
1	GEN1	ARDUINO MEGA 2560 PRO		
1	J1	CONN-H2		
2	J2,J7	SIL-100-15		
1	J4	CONN-H4		
1	J5	TBLOCK-I3		
1	J6	TBLOCK-I2		
1	JP1	JUMPER2		
1	RV1	100K	Digikey 3252W-1-104LF	
1	RV2	500K	Digikey 3252W-1-504	
3	RV4-RV6	1k	Any value >500ohms and <500K will do	
2	SW1-SW2	PUSH-BUTTON		

Sub-totals: £0,00

Totals: £0,00