



# FREQUENZIMETRO DSI 3550

## RIFERIMENTI

Genere	DATA	Generalità	Note	Distribuzione
radio	gennaio 2019	Il mio primo frequenzimetro		Af - web

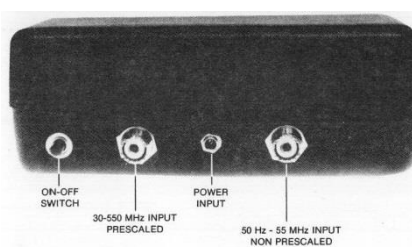
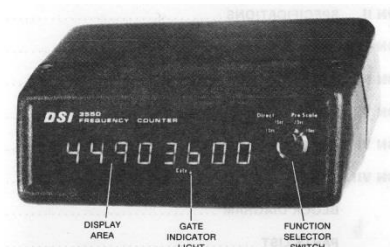
## GENERALITA'

Ho ritrovato schemi e note del mio primo frequenzimetro, a dire il vero era in condominio con il capostazione di allora (mio padre) ISFZF.



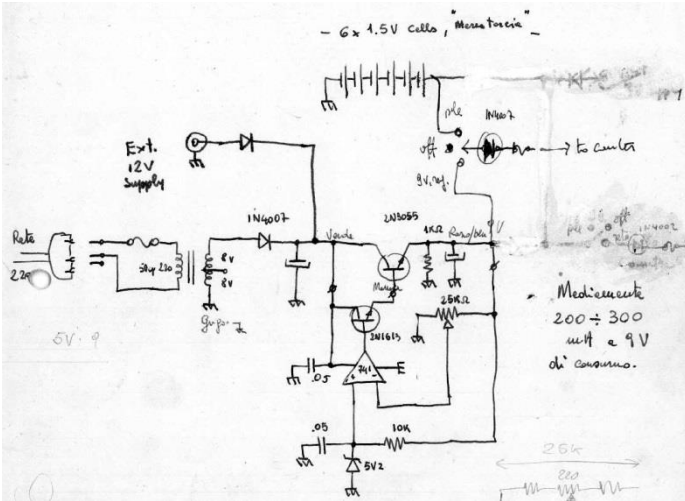
Fu acquistato a New York, mi sembra nel 1979. Il costo era basso, per quello fu scelto, sia per risparmiare che per evitare problemi con la dogana. Chi oggi fa acquisti liberamente su internet probabilmente non apprezza una libertà tutt'altro che scontata.

La scatola di plastica che veniva fornita era veramente miserabile quindi lo montai in un contenitore metallico che se non bello almeno era più robusto.





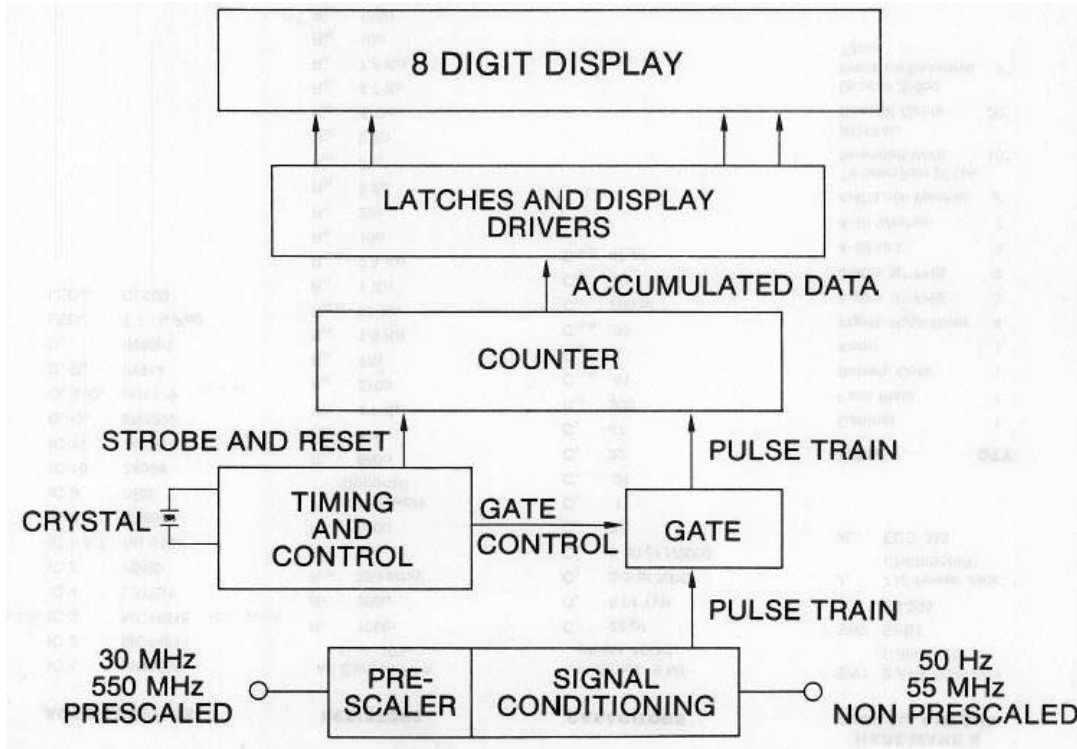
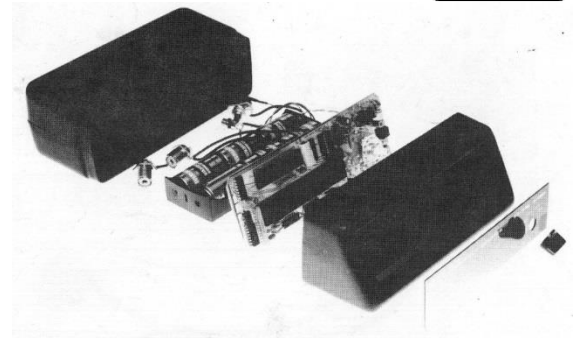
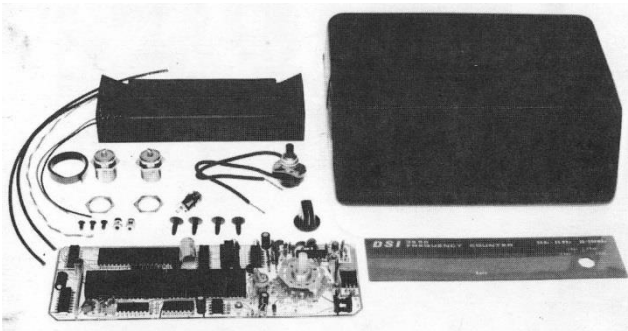
Fu munito di alimentatore da rete e da batteria.



Ecco i dati tecnici, non un gran ché ma ai tempi era ottimo.

DSI		SPECIFICATIONS, MODEL 3550	
DSI INSTRUMENTS, INC.			
<b>PERFORMANCE</b>			
<b>Frequency Range</b>	Direct	50Hz to 55MHz	
	Prescaled	30MHz to 550MHz	
<b>Gate Times</b>		Selectable 0.1 second 1.0 second	
<b>Sensitivity</b>		25mV Typical 100Hz to 25MHz 20mV Typical 25MHz to 250MHz 30mV Typical 250MHz to 450MHz	
<b>Resolution</b>		1Hz 50Hz to 55MHz* 10Hz 55MHz to 550MHz**	
		* using 1 second gate and non-prescaled input. ** using 1 second gate and built-in prescaler.	
<b>Accuracy</b>		1 part in 10 <sup>6</sup> 65° to 85° F typ.	
<b>Aging</b>		1 part in 10 <sup>7</sup> /month typ.	
<b>Input Impedance</b>	Direct	1 meg in parallel with 25pf	
	Prescaled	50Ω in parallel with 25pf	
<b>GENERAL</b>			
<b>Display</b>		8 Digit LED with following features: Easy to read .5" high seven segment characters. Leading zero suppression assures error-free readings. Display blanking to minimize power consumption. When no input signal is present first seven digits are blanked, eighth digit displays 1 or 0.	
<b>Operating Temperature</b>		65° to 85° F for 1 ppm accuracy 32° to 100° F for reduced accuracy	
<b>Storage Temperature</b>		-40° to +140° F	
<b>Input Connectors</b>		Two SO-239	
<b>Power Requirements</b>		A. 8.2 VDC to 14.5 VDC B. 115 AC 50/60Hz with optional AC adapter. C. Battery pack: 6 "C" cells (10 hours service typ.) (non-rechargeable alkaline batteries recommended). D. Current requirements: 150 ma standby 300 ma operating.	
<b>Dimensions</b>		Length: 8 1/4" Depth: 6" Height: 2 3/4" Weight without batteries (approx.) 15 oz. Weight with batteries (approx.) 29 oz.	

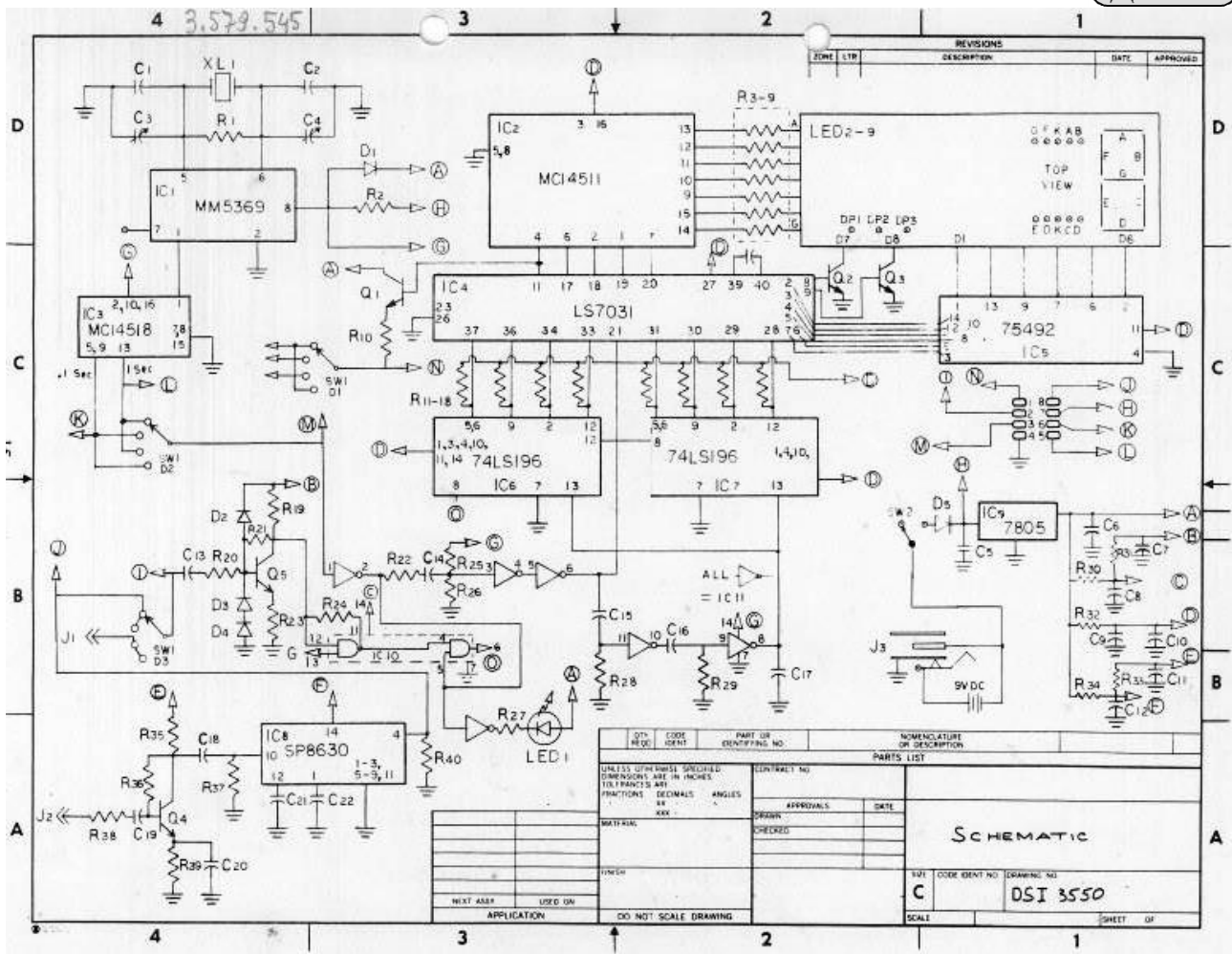




ACTIVE DEVICES		RESISTORS	CAPACITORS	HARDWARE & MISCELLANEOUS			
IC 1	MM5369	All Carbon Film ¼ w 10%	All values in Mf unless noted.	SW1	2 APA 00701374 (Centralab)		
IC 2	MC14511			C <sub>1</sub>	22 pf	SW2	SPST
IC 3	MC14518 ECG 4518B			R <sub>1</sub>	10MΩ	C <sub>2</sub>	5 pf Typ.
IC 4	LS7031			R <sub>2</sub>	200Ω	C <sub>3</sub>	3-5 pf NPO
IC 5	75492			R <sub>3-9</sub>	33Ω array	C <sub>4</sub>	5-30 pf N2000
IC 6 & 7	74LS196			R <sub>10</sub>	47Ω	C <sub>5</sub>	22
IC 8	SP8630			R <sub>11-19</sub>	820Ω (1 KΩ Network Optional)	C <sub>6</sub>	.1
IC 9	7805			R <sub>19</sub>	680Ω	C <sub>7</sub>	.01
IC 10	74S08			R <sub>20</sub>	47Ω	C <sub>8</sub>	22
IC 11	74LS14			R <sub>21</sub>	4.7 KΩ	C <sub>9</sub>	47
Q <sub>1-Q<sub>3</sub></sub>	2N2222	R <sub>22</sub>	270Ω	C <sub>10</sub>	200		
Q <sub>4</sub> & Q <sub>5</sub>	2N5179 ECG 314	R <sub>23</sub>	270Ω	C <sub>11-12</sub>	.01		
D <sub>1-D<sub>4</sub></sub>	IN914	R <sub>24</sub>	47Ω	C <sub>13</sub>	.5		
D <sub>5</sub>	IN4001	R <sub>25</sub>	1.5 KΩ	C <sub>14-16</sub>	.01		
LED <sub>1</sub>	T - 1¼ Red	R <sub>25-26</sub>	47 KΩ	C <sub>17</sub>	260 pf		
LED <sub>2-9</sub>	DL500	R <sub>27</sub>	1 KΩ	C <sub>18</sub>	.01		
		R <sub>28-29</sub>	2.4 KΩ	C <sub>19-20</sub>	47 pf		
		R <sub>30</sub>	10Ω				
		R <sub>31</sub>	27Ω				
		R <sub>32</sub>	2.2Ω				
		R <sub>33</sub>	27Ω				
		R <sub>34</sub>	2.2Ω				
		R <sub>35</sub>	470Ω				
		R <sub>36</sub>	4.7 KΩ				
		R <sub>37</sub>	7.5 KΩ				
		R <sub>38</sub>	10Ω				
		R <sub>39</sub>	100Ω				
		R <sub>40</sub>	1.5 KΩ				

ITEM	QTY
Cabinet	1
Face Plate	1
Battery Case	1
Knob	1
Plastic Push Rivet	4
4-40 x ¼" FHS	3
4-40 x ⅜" FHS	2
4-40 Nut	2
4-40 Washer	2
4-40 Lock Washer	2
Twisted Pair 20 GA Stranded Wire	10"
RG174U Coaxial Cable	20"
Double Sided Pressure Sensitive Tape	6"



Buon divertimento, Alessandro Frezzotti