

SF-401PLUS HAND-HELD FREQUENCY COUNTER



USER'S MANUAL

Congratulations on your purchase of Frequency Counter.

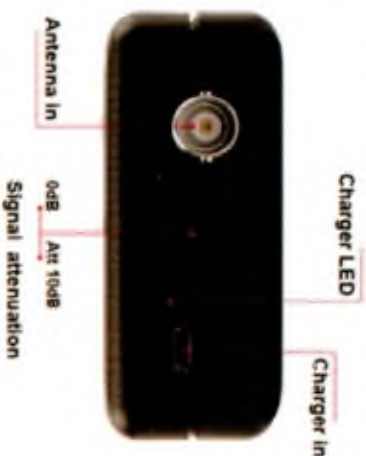
Before Operating the frequency counter, please read this manual thoroughly. Make sure that the following accessories are supplied with your frequency counter:

UNPACKING AND CHECKING EQUIPMENTS:

- SF-401PLUS (1), Antenna (1), AC Power Adapter (1), USB Charger, Cable(1), User Manual (1)

Product Introduction

The frequency meter capable of measuring the parameters of the frequency of the continuous carrier signal walkie-talkie with signal strength indicator. It is the tool of choice for maintenance personnel, test frequency and signal strength of wireless enthusiasts. This portable frequency counter is designed for counting continuous wave signal comes from "two-way Radio". There are easy ranges for you to choose. The ranges cover most of the frequency of the two way radios you want to measure. Its four-button control is easy to use and its small size allows you to carry it anywhere you like. Work by TCXO(Temperature Compensate X'tal (Crystal) Oscillator). In the range of -45 °C ~ 65 °C can reach ± 4ppm accuracy.



Feature & Specification:

- Cover for : VHF/UHF walkie-talkie
- CTCSS/DCSS Decoder (must be 136-174/400-520MHz)
- DMR Frequency counter
- Digital select digit 0.000 or 0.0000
- Work by TCXO (crystal) Osc.2 ~ 2.5ppm
- Auto power off 1-9minutes
- Frequency Response time: 0.2-0.5sec.
- (CTCSS/CDCSS >0.5-1sec)
- Color Display 240x320 Pixels, LCD Dim level setting
- Build-in 3.7V Li-ion battery
- Net Weight: 113g
- 4 buttons all function control
- Charging battery LED indicator
- Frequency range : 27MHz-3000MHz

! Note : (27MHz to 100MHz It can not be guaranteed and the corresponding normal emission appliance)

1.1 Power On/Off

Power On: Press and Hold down the [black key] by 2 second
Power Off: Press and Hold down the [black key] by 4 second of number count down to 0

1.2 Charging the battery

Plug the Power cord into adaptor, Micro usb connected SF-401
The Led indicating: *The RED light Charging *The Green light is Full

1.3 How to check walkie-talkie Frequency (See PIC.3)

The Radio transmitter is near the frequency counter antenna, see the signal reception conditions is zone green, you can test. (Zone Red is error)

1.4 How to check Frequency of Digital DMR Radio

Press[F3 Digital] button, change status from analog to Digital
Note: Digital mode have 3 Decimal only.

1.5 Signal Attenuation:

when the Radio TX signal is too strong, This optional Attenuation Less -10 dB

Cautions / Problem:

- e.g. Show 1800.000MHz: The transmitter distance is too close to the frequency counter will affect the test results, the signal bar is red (see Pic.1)
- e.g. Show 0.000 MHz: The transmitter distance is too far to the frequency counter and signal is weak, will affect the test results, the signal bar is low (see Pic.1)
- ! Note: (27MHz to 100MHz It can not be guaranteed and the corresponding normal emission appliance)

1.6 How to restore the option:

On top MENU page, Select the [System] by bottom [F3], F4 and then Press F2. See PIC4
Select the option by key F3 and F4, and then Press the F2 [edit], change the detail by button F3, F4. See PIC5 And then Press: F1 [menu], F4 [Save]

1.7 Reset factory default:

Press the Power button until the display show the restore default.

CTCSS (Hz)	LP S: Radio must be ANALOG mode and In frequency 136-174/400-520MHz
50	79.7
55	82.5
67	85.4
69.3	88.5
71.9	91.5
74.4	94.8
77	97.4
100	127.3
103.5	131.8
107.2	136.5
110.9	141.3
114.8	146.2
118.8	151.4
123	156.7
127.3	159.8
131.8	162.2
136.5	165.5
141.3	167.9
146.2	171.3
151.4	173.8
156.7	177.3
159.8	179.9
162.2	183.5
165.5	186.2
167.9	189.9
171.3	192.8
173.8	196.6
177.3	199.5
183.5	203.5
186.2	206.5
189.9	210.7
192.8	218.1
196.6	225.7
199.5	229.1
203.5	233.6

CDCSS for ANALOG mode (N code only)

Standard N	#401	Standard N	#401	Standard N	#401	Standard N	#401	Standard N	#401	Standard N	#401	Standard N	#401
23	23.0 N	115	115 N	212	N	306	306 N	431	431 N	532	N	632	N
25	25.0 N	116	116 N	223	N	311	311 N	432	432 N	554	N	654	N
26	26.0 N	122	N	225	N	315	315 N	445	445 N	662	N	662	N
31	31.0 N	125	125 N	226	N	325	N	464	464 N	664	N	664	N
32	32.0 N	131	131 N	243	N	331	331 N	465	465 N	703	N	703	N
36.0	N	132	132 N	244	N	332	N	466	466 N	712	N	712	N
43	43.0 N	134	134 N	245	N	343	343 N	503	503 N	723	N	723	N
47	47.0 N	143	143 N	246	N	346	346 N	506	506 N	731	N	731	N
51	51.0 N	145	N	251	N	351	351 N	516	516 N	732	N	732	N
53.0	N	152	152 N	252	N	356	N	532	532 N	734	N	734	N
54	54.0 N	155	155 N	255	N	364	364 N	546	546 N	743	N	743	N
65	65.0 N	156	156 N	261	N	365	365 N	565	565 N	754	N	754	N
71	71.0 N	162	162 N	263	N	371	371 N	606	606 N				
72	72.0 N	165	165 N	265	N	411	411 N	612	612 N				
73	73.0 N	172	172 N	266	N	412	412 N	624	624 N				
74	74.0 N	174	174 N	271	N	413	413 N	627	627 N				
114	114 N	205	205 N	274	N	423	423 N	631	631 N				



PIC.3



PIC.4



PIC.5