

Issues with Siglent SHS1062

Software V3.01.02.02R7 Hardware V1-21-3.3

1. Scope/Meter in trend mode

a) Saved CSV file does not have a time/date stamps for the data.

SHS1062 Scope Trend CSV

	A	B
1	Record Length	37
2	Measure Type	Param A:CH1 Vrms Param B:CH1 Vpp
3	Vertical Scale	Param A:20mV Param B:100mV
4	Model Number	SHS1062
5	Serial Number	SHS100
6	Software Version	3.01.02.02R7
7		
8		
9		
10		
11		
12	Param A	Param B
13	40	80
14	40	80
15	40	40
16	40	80
17	40	40
18	40	40

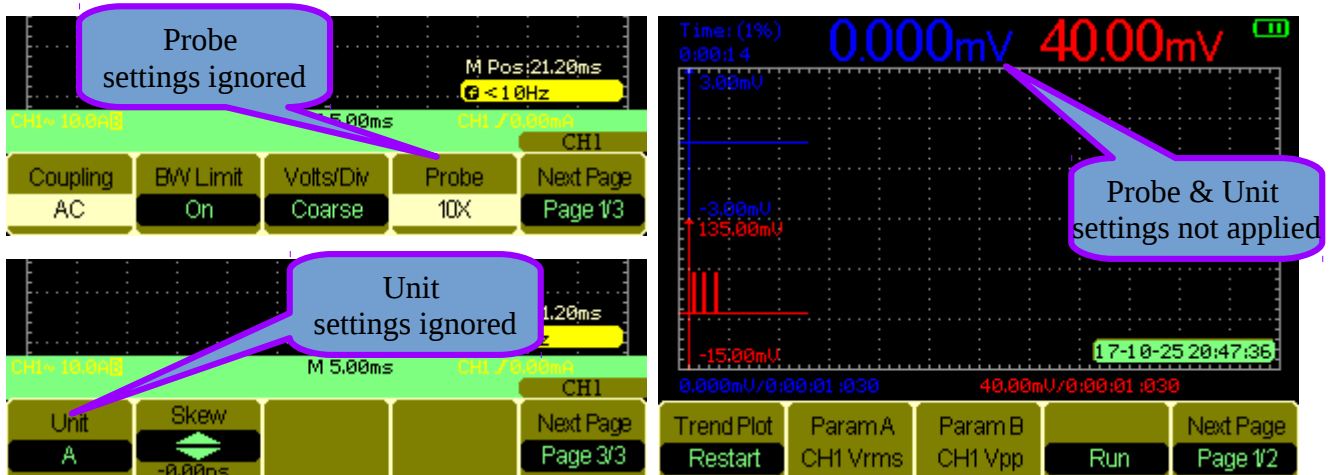
SHS1062 Meter Trend CSV

	A	B
1	Record Length	127
2	Measure Type	DCV
3	Vertical Scale	2mV
4	Model Number	SHS1062
5	Serial Number	SHS100
6	Software Version	3.01.02.02R7
7		
8		
9		
10		
11		
12	Value	
13	0	
14	0	
15	0	
16	0	
17	8.8	
18	8.8	

Example of a USB temperature logger with timestamps.

	A	B	C	D	E	F
1	Index	Timestamp	Temp.(°C)	RH(%rh)	Ext. Temp.(°C)	Dew Point(°C)
2	0	07/08/17 04:34:34 PM	24.1	66.8	26	17.5
3	1	07/08/17 04:35:04 PM	24.2	61.6	28.3	16.4
4	2	07/08/17 04:35:34 PM	24.2	60.4	30.4	16
5	3	07/08/17 04:36:04 PM	24.3	59.6	32.2	15.9
6	4	07/08/17 04:36:34 PM	24.4	59.1	33.3	15.9
7	5	07/08/17 04:37:04 PM	24.4	58.6	34.2	15.8
8	6	07/08/17 04:37:34 PM	24.4	57.9	34.6	15.6
9	7	07/08/17 04:38:04 PM	24.5	57.8	35	15.6
10	8	07/08/17 04:38:34 PM	24.5	57.4	35.4	15.5
11	9	07/08/17 04:39:04 PM	24.5	57.7	35.6	15.6
12	10	07/08/17 04:39:34 PM	24.5	57.7	35.7	15.6
13	11	07/08/17 04:40:04 PM	24.6	57.7	35.8	15.7
14	12	07/08/17 04:40:34 PM	24.6	57.7	36	15.7
15	13	07/08/17 04:41:04 PM	24.6	57.6	36.1	15.7
16	14	07/08/17 04:41:34 PM	24.6	57.4	36.1	15.6
17	15	07/08/17 04:42:04 PM	24.6	57.4	36.2	15.6

b) Trend scope mode ignores probe settings.

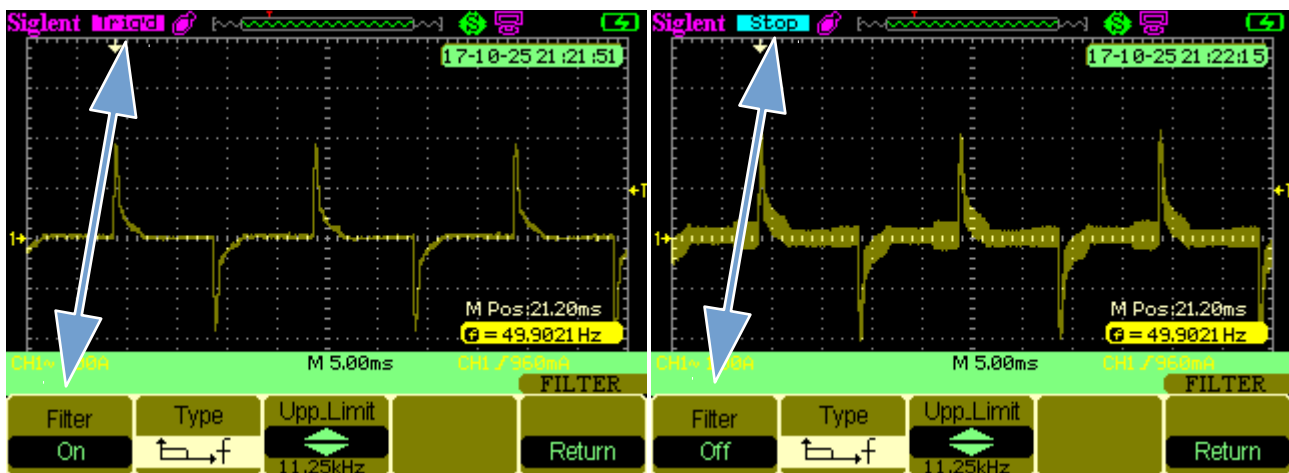


- c) If you leave the scope in scope trend mode for several hours (5-10) measuring a signal, when you come back the unit is very slow to respond. Button presses take 3-5 seconds to take effect and sometimes it is completely unresponsive and a reset is needed (loosing all recorded data).

When the measured signal is more stable and has less changes the responsiveness is much better over the same time period.

2. Filter switching off

The filter is turned off after the Run/Stop button is pressed or it is single shot triggered.

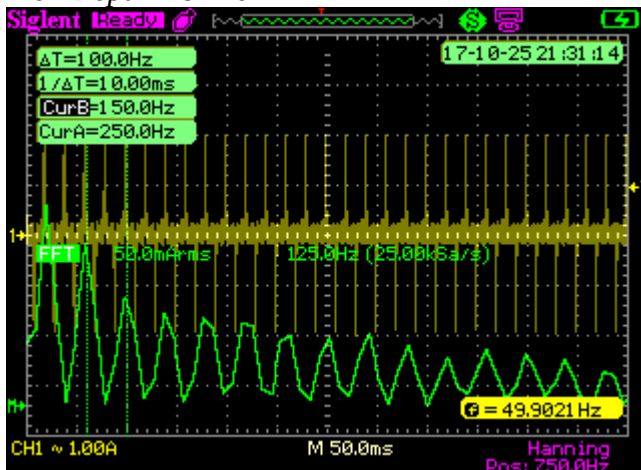


3. FFT frequency measurements (Normal v Logmem)

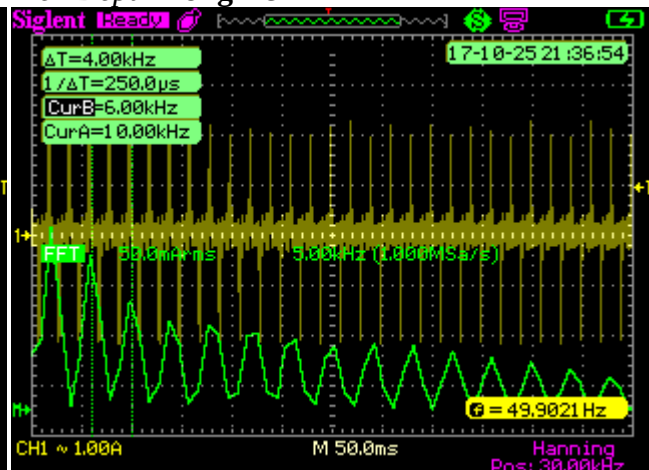
There is a x40 difference to the frequency measurements when Longmem is selected (amplitudes are identical).

The Normal MemDepth frequency measurements are correct (FFT below is of 50Hz current).

MemDepth Normal



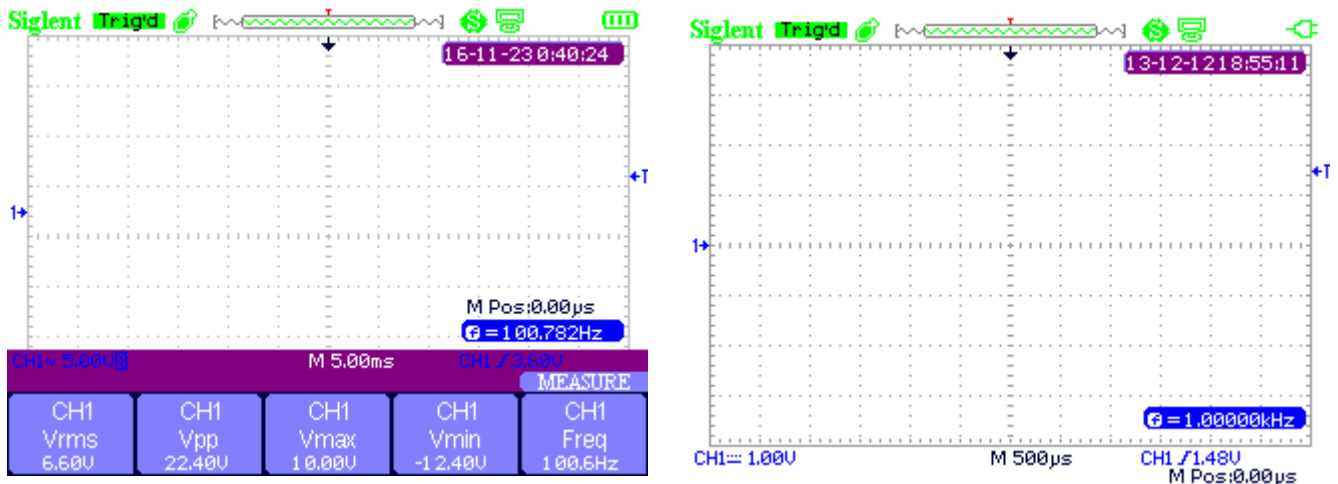
MemDepth LongMem



4. Saving of BMP images

Occasionally when saving a snapshot BMP of the screen the displayed waveform disappears. Only later after viewing the BMP image on my PC I find there is just an empty grid.

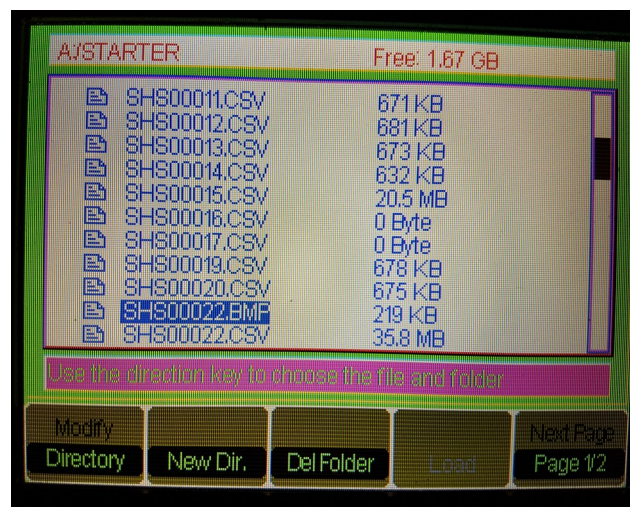
I can not replicate the situation, it seems to be random. If you notice in the bottom left of the images below the channel is still selected and was displayed on the screen at the time but the waveform did not make it to the saved BMP.



5. 0 Byte saved files

Occasionally saving a CSV file will produce an empty file of 0 Bytes. There is no error message just "STORE DATA SUCCESS", it seems random as I can not reproduce the error. In the image below the files were being saved roughly every 5 minutes.

The USB memory stick is a FAT formatted Sandisk Cruzer Fit 4Gb FAT32



Suggested improvements

(I know most will have no chance but the small ones might make it)

- On the meter adding another DCI current measurement mode for 4-20mA current loops used in industrial instrumentation. The screen would display a mapped 0%-100% value on to the measured 4-20mA value. This could be a pressure, temperature, or any process value which the user could adjust in the span settings (the 0%-100% value or possibly 20°C-700°C). Putting this together with the ability to trend these signals would be very useful.
- The ability to connect AC/DC current probes to the meter connections with adjustable scaling.
- FFT displaying harmonics for 50/60Hz power systems, the user could set the fundamental frequency and display the values of the individual harmonics and maybe even the overall THD%. Displayed in a simple tabular form or as a basic bar graph.
- A low battery warning in the middle of the screen giving the user time to plug the power in.
- In the file manager swap the up/down buttons with the left/right buttons as pressing up or down to move the cursor left or right can be confusing some times.
- Adding envelope trigger would be useful, losing the video triggers would be ok by me.
- Adjust the acceleration of the up/down buttons when setting a value (adjusting the filter frequency for example). I find it is easy to overshoot the value you want.
- In scope trend when only one parameter is needed to be measured could the other be turned off (maybe using the full screen like when in meter trend mode).
- When the scope is in Display-Screen-Inverted the green background makes it hard to view CH2 V/Div (light blue text on light green background).