

For spectrum analyzer Logging software
Introduction of MAS410-510



MICRONIX

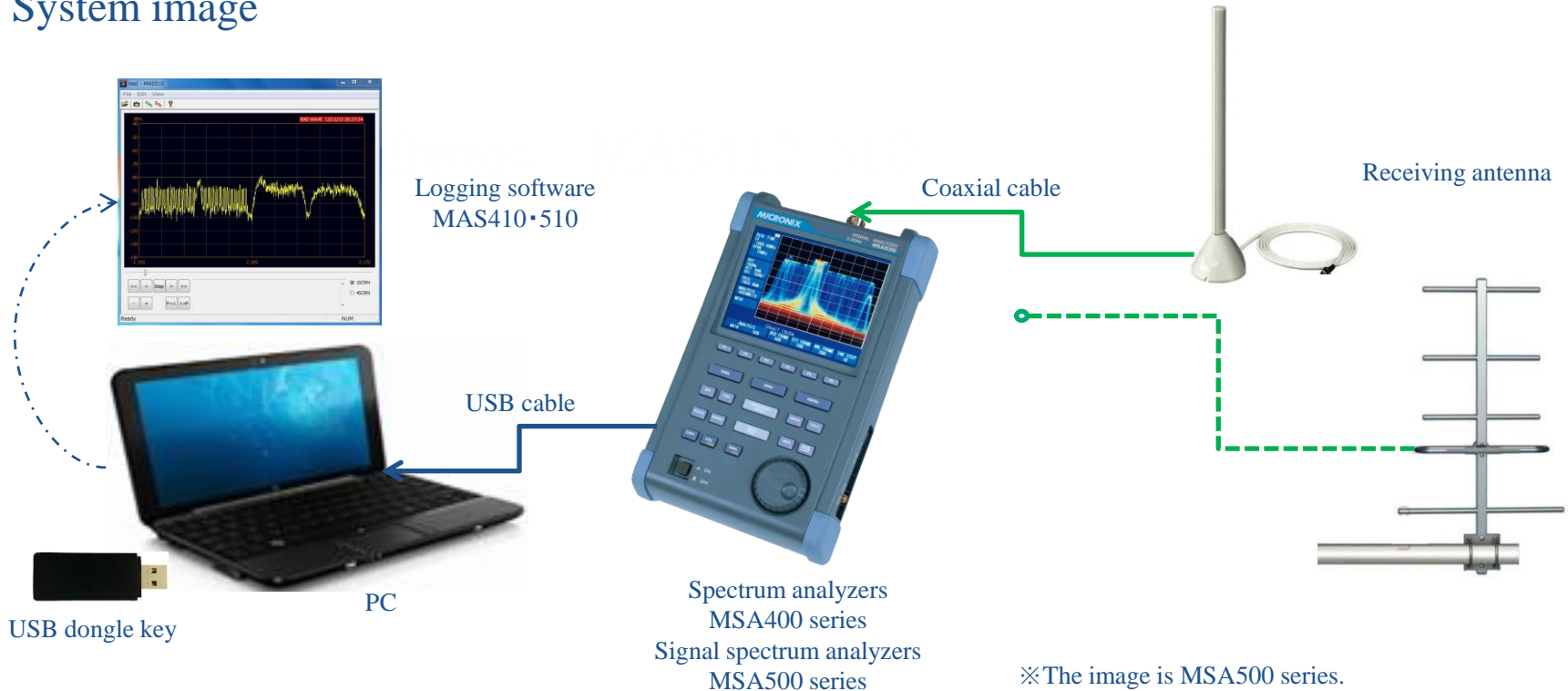
MICRONIX CORPORATION

Logging software MAS410·510

1. Introduction

PC software for controlling spectrum analyzers (MSA400 series) and signal spectrum analyzers (MSA500 series) and logging measurement data. It is ideal for monitoring abnormal signals, interference, and interfering radio waves during the day and night, and for recording unmanned data for a long time.

2. System image



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3. Operating environment

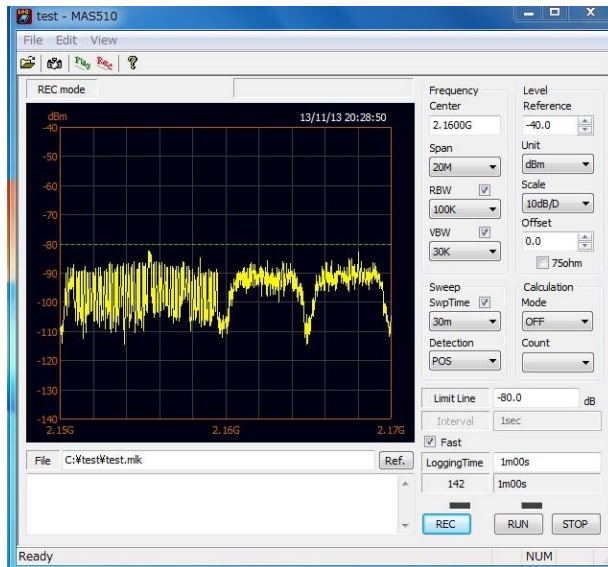
Recommended PC : CPU 2GHz or more, memory 2GB or more, HDD free space 1GB or more
Compatible OS : Windows 7 / 8 / 10 ※32 / 64bit compatible
Interface : USB 2 ports or more

4. Software overview

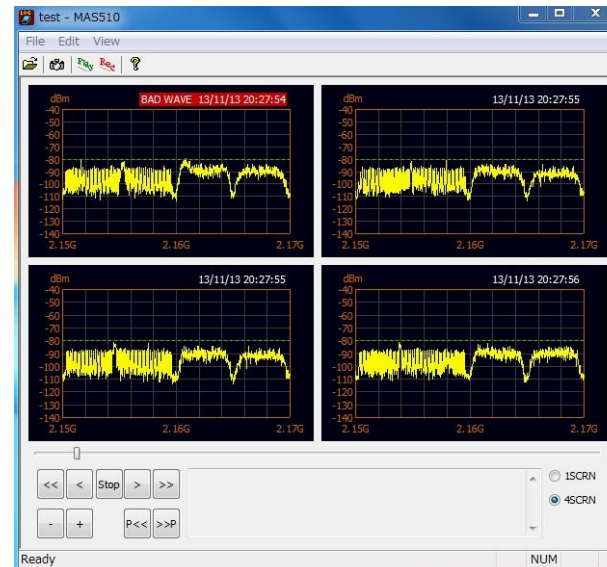
It consists of two screens, recording mode and playback mode.

Only PCs with a USB dongle key can be transferred to the recording mode (1 license per spectrum analyzer).

Recording mode (setting screen)



Playback mode (when 4 screens are displayed)



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5. Software specifications (recording mode)

The screenshot shows the MAS410-510 software interface in recording mode. The main display is a spectrum plot with a yellow signal trace and a horizontal green limit line at -80.0 dBm. The plot shows a signal between 2.15G and 2.17G. The interface includes a menu bar (File, Edit, View), a toolbar with icons for File, Play, Rec, and Help, and a status bar at the bottom. The right side of the interface contains a settings panel with various parameters for frequency, level, sweep, and logging. Annotations with callout boxes point to specific features: 'Mode selection' points to the REC mode button; 'Date and time synced to Windows' points to the timestamp '13/11/13 20:28:50'; 'Analyzer settings' points to the settings panel; 'Limit line (Threshold) setting' points to the -80.0 dBm limit line; 'Measurement time interval' points to the 'Interval' field set to '1sec'; 'Log time setting' points to the 'LoggingTime' field set to '1m00s'; 'Log elapsed time display' points to the '142' value; 'Operation check button' points to the 'REC' button; 'Specify save destination file' points to the 'File' field; and 'Comment field' points to the empty text area below the file field.

Mode selection

Date and time synced to Windows

Analyzer settings
Settings can be saved and read

Limit line
When a signal that exceeds the set threshold value is detected, it is judged as an abnormal signal.

Limit line (Threshold) setting

Measurement time interval
Minimum setting interval: 1 second or Fast Mode

Log time setting

Log elapsed time display

Operation check button

Specify save destination file

Comment field

Recording start button



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6-1. Software specifications (playback mode)

Mode selection

Limit line

When a signal that exceeds the set threshold value is detected, it is judged as an abnormal signal.

Trackbar

Operation buttons

Fast forward / return / reverse play / play / Stop / 1 frame advance / return / BAD WAVE search (forward / reverse)

“BAD WAVE”
Recognize abnormal signals

Switching the number of waveform displays

Comment field

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6-2. Software specifications (playback mode)

Copy screen image to clipboard

Copy waveform data to clipboard in text format

Read settings from the analyzer, Saving the configuration file, Read the configuration file

Jump

Jump

Date
2013 Y 11 M 13 D
20 h 34 m 15 s
Cancel OK

1SCRN
4SCRN

Switching to 4-screen display

test - MASS10

dBm BAD WAVE 13/11/13 20:27:54

dBm 13/11/13 20:27:55

dBm 13/11/13 20:27:55

dBm 13/11/13 20:27:56

Ready NUM

Jump to the waveform data of the specified date and time. Easily move from a huge amount of recorded data to any time.



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7. Estimated recording capacity

The approximate recording capacity for the recording time (period) is as follows.

※ Measurement interval: 1 second

1 minute	1 hour	1 day	1 week
60 frame	3,600 frame	86,400 frame	604,800 frame
About 70KB	About 4.2MB	About 100MB	About 700MB

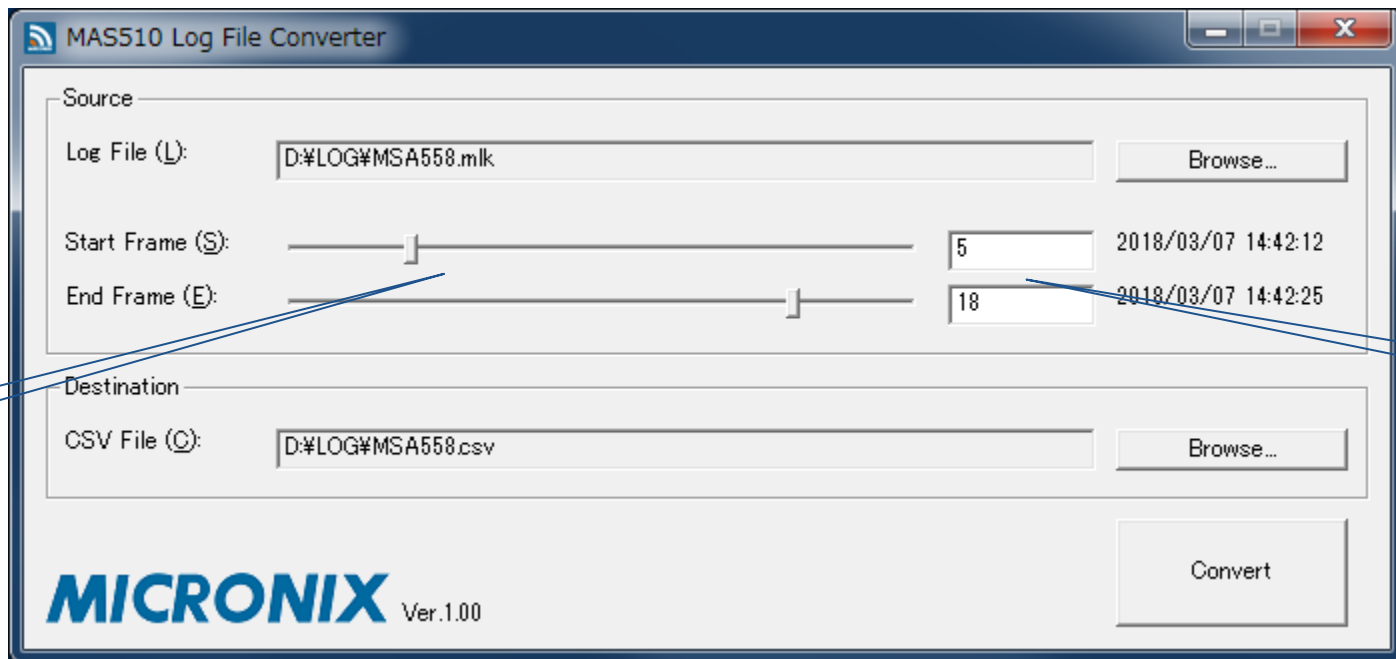
8. Supplementary information ▪ Precautions for handling

- If your PC has multiple SIO ports, you can control multiple analyzers by launching this software for multiple tasks and allocating the ports.
- When operating this software continuously, the operation will stop if the logout function of the screen saver is ON. If you want to operate for a long time, turn off the logout function.
- If the virus check software is running or resident, a communication error may occur. In such a case, stop the virus check function.

Log file converter MAS410CONV·510CONV

1. Introduction

Log file converter is PC software that converts log data collected by MAS410 or MAS510 logging software into CSV files. Specifies the range of frames recorded in the log file that are output to the CSV file. Slide the trackbar of each start frame and end frame left or right or specify the frame number in the edit box. If not changed, all frames will be output.





Log file converter MAS410CONV·510CONV

2. Extracted CSV data

CSV data consists of a measurement condition part and a waveform data part.

Measurement condition part

CF : Center frequency
SPAN : Frequency span
REF : Reference level
SWP : Sweep time
DET : Detection mode
RBW : Resolution bandwidth
VBW : Video bandwidth
SCALE : Display scale
LmtLv : Limit level
TRACE : Spectrum data score

Waveform data part

The first line is the heading (frequency), and the second and subsequent lines are the measurement date and time and waveform data.

	A	B	C	D	E	F	G
1	CF	1.0000GHz					
2	SPAN	20MHz					
3	REF	10.0dBm					
4	SWP	30ms					
5	DET	SMP					
6	RBW	100KHz					
7	VBW	30KHz					
8	SCALE	10dB/D					
9	LmtLv	0.0dBm					
10	TRACE	1001					
11	DATE	TIME	9.90E+08	9.90E+08	9.90E+08	9.90E+08	9.90E+08
12	2018/3/7	14:42:08	-20.4	-22.4	-27.6	-35.6	-46.4
13	2018/3/7	14:42:09	-61.2	-60	-60	-62	-69.6
14	2018/3/7	14:42:10	-87.2	-76.4	-72	-71.2	-71.2
15	2018/3/7	14:42:11	-77.2	-79.6	-78.4	-74.8	-71.2
16	2018/3/7	14:42:12	-65.2	-64.8	-64.4	-64.4	-65.2
17	2018/3/7	14:42:13	-73.2	-68.8	-66.4	-65.6	-65.6
18	2018/3/7	14:42:14	-66	-64.4	-64	-65.2	-67.2
19	2018/3/7	14:42:15	-63.6	-62.8	-63.2	-64.8	-70
20	2018/3/7	14:42:16	-64.4	-64	-64.8	-66.4	-70.4



For inquiries regarding quotations, orders, repairs, etc., please contact the following.
The information provided is subject to change without prior notice.

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