

## Instrument Firmware Release Notes

### Models

DS4012, DS4014, DS4022, DS4024, DS4032, DS4034, DS4052, DS4054, MSO4012, MSO4014, MSO4022, MSO4024, MSO4032, MSO4034, MSO4052, MSO4054

### Version Information

Released version: 00.02.03.00.03

Release Date: 05/03/2016

### Compatibility

Compatible with earlier versions of the hardware

### Change Log

Key:

E – Enhancements. Changes that add functionality

M – Modifications. Changes to improve performance on existing features

C – Cancellation. Removal of function or capability

\*Note: Engineering change log is translated from engineering documentation

Version : 00.02.03.00.03		Date : 2016-05-03
1	Add models of DS4014E and DS4024E for 100M and 200M bandwidth	E
2	Somewhere around 300mV/div the scope loose trigger and the signal jumps up	M
3	The record start time can be read from scpi command FUNCTION:WRECORD:TSTART?	M
4	The sample rate is not right when the time base is ROLL	M
5	There should not be any message when the vertical offset is adjusted	M
6	Russian menu translation error	M
7	Digital filter menu item lose focus when changing the type	M
8	Changing the source of Decode2 will make sense of Decode1	M
9	LA label will not refresh after rerunning the AUTO operation	M
10	xMask will not be set to 0.24 in the record analysis mode	M
11	The year of system date can't be set to 1999	M
12	Chinese menu has some translated errors for English	M
13	The zoom scale can be set whether it is coarse or fine	M
14	The sample rate cannot refresh in time when it is in zoom	M
15	The result of AUTO operation is not suitable for PP first when the	M

	signal has a large offset.	
16	The horizontal reference should not be set when in zoom mode	M
17	:MEASure:FDElay:SDEviation command was invalid	M
18	The delay and phase measure cannot set one source as D4	M
19	Fixed bug where sending two STOP commands could not stop the scope	M
20	The right value should be the MAX when the input value is more than the MAX for time scale.	M
21	The step has no direction when changing the vertical scale in coarse and fine modes	M
22	The scpi command of :acq:mdep has no 1.4M option	M
23	Wave displayed incorrectly when adjusting the vertical offset	M
24	Pattern cannot trigger correctly when changing the sources	M

<b>Version : 00.02.02.05.02</b>		<b>Date : 2015-11-23</b>
1.	Add 16x16 and 21x21 font size for measure	E
2.	Add decoder and trigger for Lin	E
3.	Add the tracking function for X axis	E
4.	Fixed bugs for probe recognition and calibration	M
5.	The specific Math formula make the machine crash	M
6.	There is error occurred when showing English menu	M
7.	The FFT can't continue to work when timebase is slow scanning	M
8.	The screen displays invalid picture sometimes	M
9.	Adjusting the timebase in the Zoom mode will make the machine crash	M

<b>Version : 00.02.02.04.03</b>		<b>Date : 2015-07-16</b>
1.	Supporting the interworking with DG4 over USB	E
2.	Added the hexadecimal input for bus trigger configuration	E
3.	No changing the model after upgrading the bandwidth	M
4.	(AE 201504000067) There is an error about the sampling rate of digital filter under delay scan	M
5.	(AE 201504000065) Signal attenuation is too large in the 200M bandwidth limitations	M
6.	(AE 201504000062) Fixed the decoder results of parallel and LA data for consistency	M

7.	(AE 201504000051) Made the command of ‘:SYST:SET able to work over socket communication with port 5555	M
8.	(AE 201504000049) The quick printing file number is limited to 64	M
9.	(AE 201503000047)The LA wave doesn’ t play back when in the WAIT status	M
10.	The threshold of all decoders don’ t consider the probe ratio	M
11.	The 10 bits address of I2C trigger error for restarting condition	M
12.	There is an error for trigger holdoff	M
13.	The pass/fail result in an error for failed wave	M
14.	There is an error for the Cosine(CH2) operation of Math	M
15.	The trigger position has 2~4ns offset error when the source is LA	M
16.	There is an error for the Pattern edge trigger when two logic source are set	M
17.	There is an error for the Pattern trigger when the source is through D11 to D15	M
18.	The logic operation of Math can’ t set the LA as source	M
19.	The SPI trigger has errors when the logic channel set as sources	M
20.	The Trigger source is shown invalid when it is digital channel	M
21.	A specific Math formula make the machine crash	M
22.	Opening decoder, restart the machine after Auto operation, then the wave needs fixed after restoring to default settings	M
23.	Adjusting the vertical scale will cause abnormal waveform	M

<b>Version : 00.02.02.03.05</b>		<b>Date : 2015-04-08</b>
1.	Modify the message hint for the license and firmware installing window	M
2.	Improve the friendliness of the license installing and updating menu	M
3.	Fixed the bug of SCPI GPIB communication	M

4.	Fixed the bug of SCPI USB communication	M
5.	Fixed the data fetching of the decoder	M
6.	Supporting the license file installed by U DISK	E
7.	Supporting the upgrading of bandwidth by license	E
8.	Supporting the decoder of multi-modules license file	E
9.	Fixed the data fetching of the decoder	M
10.	Fixed the crashing problem of high-res mode sampling	M
11.	Fixed the status error of reading ASCII format memory data	M
12.	Fixed the crashing problem of adjusting the offset in the slow scan mode.	M

<b>Version : 00.02.02.01.01</b>		<b>Date : 2014-10-10</b>
1.	Added the function and menu support for T2R1000	E
2.	Added the function and menu support for RP7000S	E
3.	Added the label for Math	E
4.	Added RMS measure of n cycle	E
5.	Added phase and delay measure of different edge	E
6.	Added menu languages for German, Portuguese, Japanese, Korean and Polish	E
7.	Create shortcut menu in decoder.	E
8.	The wave can't refresh when opening and closing measure statistics repeatedly.	M
9.	The menu can't refresh after opening wave zoom when STOP	M
10.	The menu are wrong after inserting the active probe.	M
11.	The Measure value are not refresh after changing the thresholds when STOP	M
12.	The wfm is wrong, when loading from ROLL mode.	M
13.	The record will play back by Navigation buttons after ending record	M
14.	The wave will be offset when adjusting the delay calibration and rest the horizontal offset after STOP	M
15.	The navigation buttons adjust the current frame when the ending frame is selected	M
16.	The items of phase measure will refresh when sources are changed	M

17.	The deviation values are wrong sometimes	M
18.	The LA frequency counter will be the quarter of the original value when STOP	M
19.	The record interval time did not work well.	M
20.	The waveform is error while opening channel in 'Wait' status.	M
21.	Fixed the RS232 decode error while switching memory depth during delay mode.	M
22.	Fixed the crush issue of delay screen in vernier timebase while main screen in slow mode.	M
23.	Update LXI driver	M
24.	While the IIC trigger type is data, the trigger status is influenced by IIC address.	M
25.	Adjusting LA offset in STOP, the waveform of analog channel changed.	M
26.	Use the browser manual IP successfully changed, executed after initialization crashing	M
27.	System crash when track NONE.	M
28.	SCPI commands (WAVEform:SOURce) support logic channels	M
29.	Fixed the blurred screen problem	M

<b>Version : 00.02.01.00.03</b>		<b>Date : 2013-11-29</b>
1.	Fixed the crash issue when the length of decode overflow in binary format	M
2	Optimize the operation speed of MSO model	E
3.	Fixed the crash issue when switching time base mode during zoom mode	M
5	Optimized software to increase the storage speed of PNG format	E
4.	Fixed the crash issue when switching wave size of LA	M

<b>Version : 00.02.00.00.04</b>		<b>Date : 2013-07-30</b>
1.	Fixed measure jitter at some particular freq	M
2.	Optimized the wave intensity in zoom mode	E

3.	Decreased the default brightness of grid	E
4.	Optimized socket communication(201302000018)	E
5.	Fixed wave data error by continues SCPI command	M
6.	Fixed cursor display error when switch track mode form auto mode(201303000024)	M
7.	Fixed the problem of waveform freezing when decode function is activated.	M
8.	Solved the abnormal waveform problem of MSO4000 in vernier timebase.	M
9.	Fixed the MSO4000 crash issue when using default function in XY mode.	M
10.	Solved the abnormal waveform problem when vernier timebase greater than 100ms.	M
11.	Fixed the crash issue when using AUTO function.	M
12.	Fixed the crash issue when fetching image remotely	M

<b>Version : 00.01.00.00.06</b>		<b>Date : 2013-01-08</b>
13.	Optimized the speed of PNG file storage	E
14.	Added SCPI command for channel delay-cal(:chan1:tcal? )	E
15.	Added SCPI command for pattern trigger.( :TRIGger:PATTern:SOURce?)	E
16.	Fixed the data error of .csv file	M
17.	Increased the sampling rate in ROLL mode	E
18.	Optimized the algorithm of AUTO setip	M
19.	Merged the latest LXI module which support socket protocol	E
20.	Modified the priority of trigger channel after auto setup	M
21.	Added some SCPI commands including REF setup FlexRay trigger and cannel delay calibration	E
22.	Incorporated the MSO module to firmware at first time	E
23.	Optimized the compatibility for updated flash chip and writing/reading speed	E
24.	Optimized the trace display in normal trigger mode when change the horizontal or vertical setting	M

25.	Switched the position of channel in XY mode	M
26.	Fixed the trigger issue which is CANNOT trigger in CAN data trigger	M
27.	Fixed the SCPI issue which is the vertical scale cannot set rightly by SCPI command when probe ratio is not 1X	M

## End of Change Log History

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