

## **Series 2900 Vector Signal Generator**

Keithley Instruments, Inc. 28775 Aurora Road Cleveland, Ohio 44139 1-888-KEITHLEY www.keithley.com Version 3.0 Firmware Release Notes

## Version 3.0 firmware release overview

Table 1

Upgrade considerations for the Series 2900 Vector Signal Generator

Consideration	From version 2.0
Recalibration required	No
Requalification suggested	No

## **Version 3.0 firmware release**

Table 2

**Enhancements in version 3.0 firmware** 

Enhancement	2910	2920
Added arbitrary waveform generator modes to perform at 25 Mega-sample with 20MHz bandwidth or 50 Mega-sample with 40MHz bandwidth.	Х	
Added arbitrary waveform generator modes to perform at 25 Mega-sample with 20MHz bandwidth, 50 Mega-sample with 40MHz bandwidth, or 100 Mega-sample with 80MHz bandwidth.		Х
Added a button to the cdma2000 and W-CDMA editors that normalizes the power sum to 0.0dB.	Х	Х
Added an indicator in the W-CDMA and cdma2000 editors that reports the total power for the code domain.	Х	Х
Added the choice of switching individual channels on and off for cdma2000 and W-CDMA editors.	Х	Х
Added a new automatic leveling control (ALC) choice that sets the power out to the maximum available value without leveling. This enhancement includes control of the feature through the SCPI command : MPOWer.	Х	Х
Added an arbitrary waveform sequencing mode that keeps the timing consistent when changing between arbitrary waveforms or when changing the amplitude and frequency.	Х	Х
Added "Auto-Restart" below the "Single" and "Continuous" choices in the arbitrary waveform sequence setup pull-down menu.	Х	Х

## **Critical fixes**

Table 3
Critical fixes in version 3.0 firmware

Critical fixes - Symptom	Resolution	2910	2920
PR10863 - All current FSK modulations are performed with the newly-renamed NRZ Gaussian filter type.	Changed the pull-down menu for the FSK filter selection from "Gaussian" to "NRZ Gauss." The SCPI command changed from :GAUSsian to :NGAuss.	Х	Х
PR10675 - When a remote command is used to load a problematic *.csv file for a digital modulation, an error is not put into the SCPI error queue.	A SCPI command error message, "Waveform File Error," is now evoked. The SCPI command error message is added to the Help: Remote control > SCPI command error messages.	Х	×
PR10645 - When a badly-formed list file is opened remotely using the :LIST:LOAD command, the SCPI interface is unresponsive to further remote commands.	The :LIST:LOAD command no longer halts the SCPI interface.	Х	Х
PR10642 - When adding an ARB file to the list in an established sweep sequence, the sweep mode stops.	Adding an ARB file to the list in an established sweep sequence no longer stops the sweep mode.	Х	Х
PR10640 - When the display is switched back on after executing the :DISP:ENAB OFF command, the frequency and amplitude values are reset to default values.	The frequency and amplitude settings are no longer reset when the display is switched on.	Х	Х
PR10604 - When the display is switched back on after executing the :DISP:ENAB OFF command, a number of modified parameters such as user flatness, cdma2000, WCDMA, and GSM/EDGE waveforms are reset to default values.	The modified parameters are no longer reset when the display is switched on.	х	X
PR10603 - The frequency limits on the arbitrary file sequence mode prevent the Model 2920 from going above 2.5GHz or below 400MHz.	The frequency limits are corrected for the arbitrary file sequence mode.	Х	X
PR10602 - When using the arbitrary waveform sequence mode, short glitches appear after the trigger event and before the ARB signal begins after selecting Restart. Need to change ALC behavior to avoid large glitches before and after the arb waveform when using the externally-triggered ARB sequence mode.	When in the arbitrary waveform modulation panel, the auto-selection for ALC is now "Off" instead of "Sample & Hold."	Х	Х

Critical fixes - Symptom	Resolution	2910	2920
PR10601 - The currently-playing arbitrary waveform is restarted when the display is off and the SCPI command :DISP:ENAB ON is received.	The currently-playing arbitrary waveform is no longer restarted when the display is off and the SCPI command : DISP: ENAB ON is received.	х	Х
PR10595 - The short form for the SCPI command : SWEep: SETTLe does not work as documented in the Help.	The short form for the SCPI command was corrected to :SWEep:SETTLe in the Help.	Х	Х
PR10587 - The "About Keithley" page in the application does not indicate the PLD revision of the amplifier board.	The "About Keithley" page in the application now indicates the PLD revision of the amplifier board.	Х	Х
PR10563 - The currently-playing arbitrary waveform sequence file is lost when the display is off and the Local key is pressed.	The currently-playing arbitrary waveform sequence file continues to play when the display is off and the Local key is pressed.	х	Х
PR10534 - The source configured to "Trigger a sweep/list" should wait for the trigger after tuning and leveling at the first point of the sweep.	The source configured to "Trigger a sweep/list" now waits for the trigger after tuning and leveling at the first point of the sweep.	Х	Х
PR10506 - The SCPI query of the Event Register is not responding as described in the Help.	Updated the Help to correctly describe the expectations for a query of the Event Register.	Х	Х
PR10431 - The carrier phase should be adjustable, but is not.	The carrier phase can now be controlled.	Х	Х
PR10385 - When the FSK2 digital modulation is configured, a carrier offset is added to the FSK2 signal.	The FSK2 signal no longer has a carrier offset.	Х	Х
PR10323 - The LXI information in the Help does not directly link to instructions on how to reset the LXI user name / password.	A link was added in the LXI Help topic that jumps to the "LAN Config Init" topic.	Х	Х
PR10299 - After loading a PSK digital modulation, the Load button does not gray out as it should to indicate the modulation has loaded.	The PSK signal now loads properly and the Load button grays out, as expected.	Х	Х
PR10205 - When a VXI-11 discovery command is sent out from a PC, all of the instruments connected over the LAN go into remote mode.	When a VSI11 connection over the LAN terminates, all of the instruments are put into local mode.	Х	Х
PR10196 - When using the :MMEM:DATA command to transfer files, the name of the transferred file gets capitalized, creating duplicate	The case of the original file name is now preserved when transferring files using the	х	Х

files with "different" names.	MMEM: DATA command.		
Critical fixes - Symptom	Resolution	2910	2920
PR10119 - Upon viewing the code domain display when editing a WCDMA signal, it is only possible to select one of the first 110 scrambling codes.	Changes were made to the pop-up menu so that when it fills the entire display, the maximum number of scrambling codes available for selection is 142.	Х	Х
PR10099 - When a row is deleted in the cdma2000 or W-CDMA editors, the table gets scrolled to the top row of the table.	The table in the cdma2000 and W-CDMA editors no longer scrolls to the top when a row is deleted.	Х	Х