Model 7225 DSP Lock-in Amplifier Firmware History since Rev 7.4

Purpose

This document summarizes the changes made to the **SIGNAL RECOVERY** (formerly EG&G/PerkinElmer) Model 7225 Dual Phase DSP Lock-in Amplifier's operating firmware since revision 7.1

7225 Firmware History

The table below lists the major firmware revisions. Revision numbers missing from the sequence were not formally released.

Revision	Date	Changes Included
9.6	2nd February 2011	Improved the accuracy of the synchronous time constant filter
		length computation to give smoother response. Changed the way
		the reference period is determined when in internal reference
		mode. Fixed bug that would cause instrument to freeze in
		synchronous time constant mode when oscillator frequency
		(internal reference) set to 0.107 Hz and time constant set to 100
		seconds.
9.5	6th November 2006	Updated the way that phase calibration parameters are used on
		instruments built with the latest host and reference boards
9.4	8th March 2006	New firmware to support updated host and reference boards.
		Backward compatible with older instruments.
9.3		Internal development version.
9.2	24th August 2005	Fixes a bug in the Oscillator Frequency sweep, whereby if the
		start frequency were set below 1 kHz and the stop frequency
		above 65 kHz, the lock-in stopped measuring the input signal
		when the oscillator was > 63 kHz.
9.1	12th May 2005	No change to firmware operation but unified version numbers of
		all internal firmware variants.
8.9 - 9.0	10/1 1/ 000/	New internal firmware variant for OEM use
8.8	13th May 2004	Corrected low level oscillator calibration.
8.7	11th March 2004	No change to firmware operation, but new combined code
0.6	01 · D 1 0002	including OEM variants.
8.6	21st December 2003	Changed company logo in bootcode to SIGNAL RECOVERY
8.5	6th October 2003	Corrected reporting of ID when used in BFP variants
8.4	11th March 2003	Additional model IDs for OEM use
8.3	6th September 2002	Changed company logo to SIGNAL RECOVERY
8.2	16th July 2001	Harmonic in menu not displayed.
8.1	21st February 2001	Correction to fast X and Y trim. Was previously not enabled.
8.0	16th January 2001	Input options extended so that –B is now allowed.
7.9	11th October 2000	Amplitude sweep allowed and TDT0 command added.
7.8	27th September 2000	Fixed bug in noise mode, which was only a problem for the
		factory.

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Revision	Date	Changes Included
7.7	26th September 2000	Fixed frequency sweep through 1 Hz.
		Fixed curve dump of data taken using fast externally triggered
		burst mode dual ADC's.
7.6	27th July 2000	PerkinElmer logo replaced EG&G logo.
		DCB command for binary dumps now includes RS232.
7.4	15th February 2000	Serial Poll on DCB corrected.

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