Manual Supplement

Manual Title:	5730A Service	Supplement Issue:	**1**
Print Date:	October 2015	Issue Date:	3/16
Revision/Date:		Page Count:	6

This supplement contains information necessary to ensure the accuracy of the above manual.

FLUKE®
Calibration

Change #1, 251, 469, 479

On page 6, replace the **Electromagnetic Compatibility (EMC)** with:

Electromagnetic Compatibility (EMC)

International.....IEC 61326-1: Controlled Electromagnetic Environment

IEC 61326-2-1: CISPR 11: Group 1, Class A

Group 1 equipment has intentionally generated and/or use conductively coupled radio-frequency energy which is necessary for the internal functioning of the equipment itself.

Class A equipment is equipment suitable for use in all establishments other than domestic and those directly connected to a low voltage power supply network which supplies buildings used for domestic purposes.

Emissions which exceed the levels required by CISPR 11 can occur when the equipment is connected to a test object. The equipment may not meet the immunity requirements of 61326-1 when test leads and/or test probes are connected.

Korea (KCC).....Class A Equipment (Industrial Broadcasting & Communication Equipment)

This product meets requirements for industrial (Class A) electromagnetic wave equipment and the seller or user should take notice of it. This equipment is intended for use in business environments and not to be used in homes.

USA (FCC).....47 CFR 15 subpart B, this product is considered an exempt device per clause 15.103

On page 1, replace Note 4 in **AC Current Secondary Performance Specification and Operating Characteristics** with**:**

4. 5725A Amplifier may be used in a range-lock mode to 1 A.

On page 1, under **Frequency**, replace the Specification with:

Specification.....±0.0025 %

On page 23, replace the second table in the ***Wideband AC Voltage (option 5730A/03 and 5730A/05) Specifications (99 % Confidence Level)*** with:

Frequency (Hz)	Frequency Resolution (Hz)	Amplitude Flatness, 1 kHz Reference Voltage Range, 1 Year			Temperature Coefficient ±ppm/°C	Settling Time To Published Specification (Seconds)	Harmonic Distortion (dB)
		1.1 mV	3.3 mV	>3.3 mV			
		±(% output + floor indicated)					
10 - 30	0.01	0.3	0.3	0.3	100	7	-40
30 - 119.99	0.01	0.1	0.1	0.1	100	7	-40
120 - 1.1999 k	0.1	0.1	0.1	0.1	100	5	-40
1.2 k - 11.999 k	1	0.1	0.1	0.1	100	5	-40
12 k - 119.99 k	10	0.1	0.1	0.1	100	5	-40
120 k - 1.1999 M	100	0.2 + 3 μV	0.1 + 3 μV	0.1 + 3 μV	100	5	-40
1.2 M - 2 M [1]	1 k [3]	0.2 + 3 μV	0.1 + 3 μV	0.1 + 3 μV	100	0.5	-40
2 M - 11.9 M	1 k [3]	0.4 + 3 μV	0.3 + 3 μV	0.2 + 3 μV	100	0.5	-40
12 M - 20 M	10 k [3]	0.6 + 3 μV	0.5 + 3 μV	0.4 + 3 μV	150	0.5	-34
20 M - 30 M	10 k [3]	1.5 + 15 μV	1.5 + 3 μV	1 + 3 μV	300	0.5	-34
30 M - 50 M [2]	10 k	3.0 + 15 μV	3.0 + 3 μV	2.0 + 3 μV	600	0.5	-34

Note:

1. For output voltages <50 % of full range in the 33 mV, 110 mV, 330 mV, 1.1 V, and 3.5 V ranges, add 0.1 % to the amplitude flatness specification.

Additional Operating Information:

dBm reference = 50 Ω

Range boundaries are at voltage points, dBm levels are approximate.

$$dBm = 10 \log \left(\frac{Power}{1\,mW} \right)$$; 0.22361 V across 50 Ω = 1 mW or 0 dBm

2. Applies to Option 5730A/05 only.
3. Resolution specified applies to 5730A/03 and 5730/05 models ordered or upgraded after October 2015. To easily identify newer models, output 20 MHz from the Calibrator. A newer model will show 20.00 MHz versus 20 MHz.

On page 22, change:

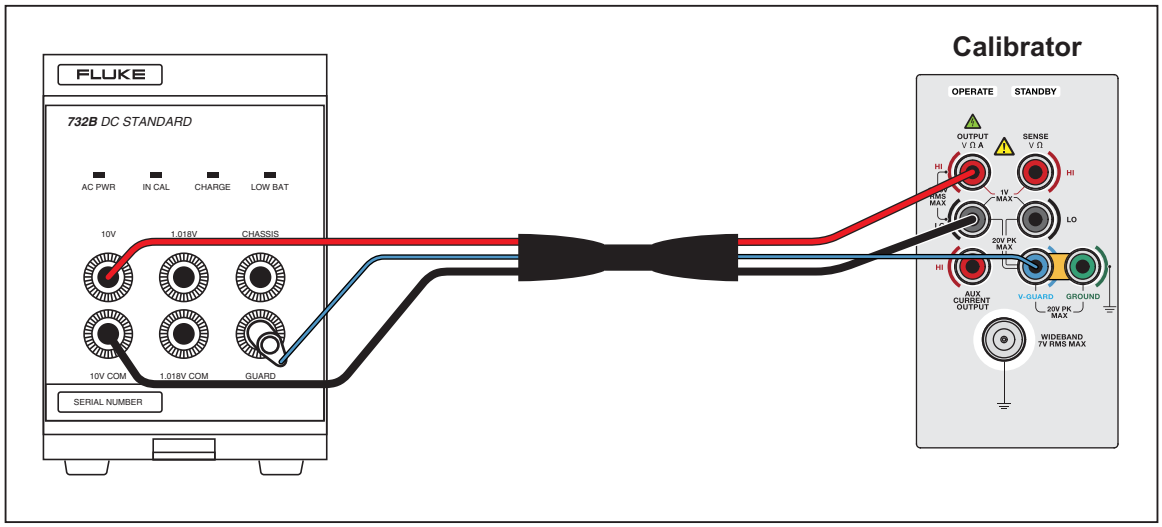
From: ***52120A Specifications when Operated with a 5730A***

To: ***52120A Specifications***

On page 23, replace **Safety** with:

Safety.....EN/IEC 61010-1, Overvoltage II, Pollution Degree 2

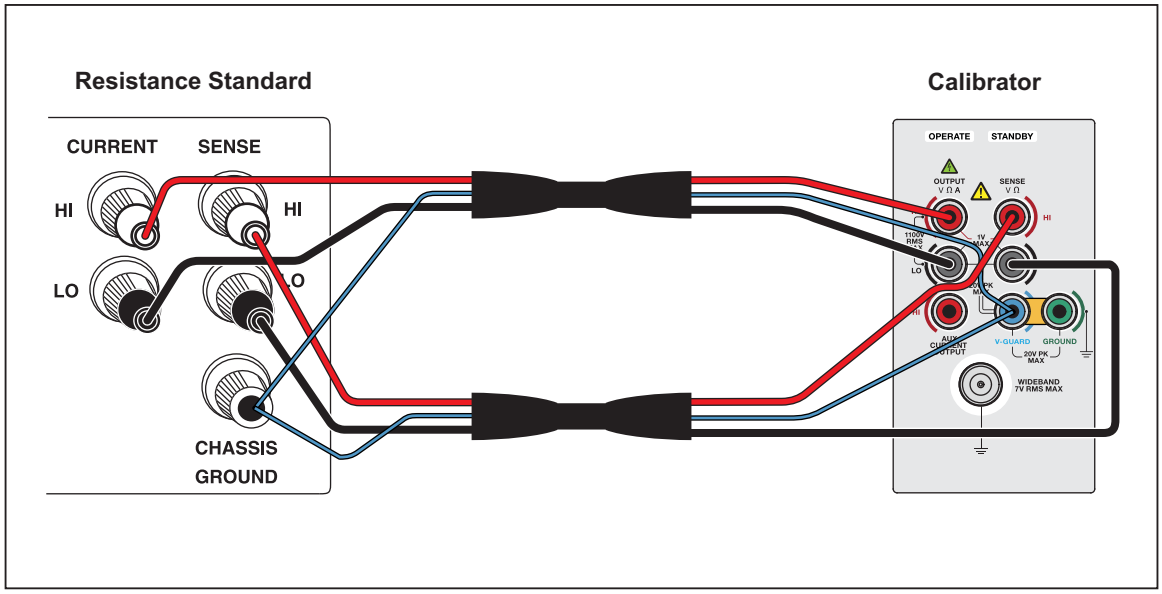
On page 41, replace Figure 4 with:



hhp027.eps

Figure 4. 732B External Calibration Connections

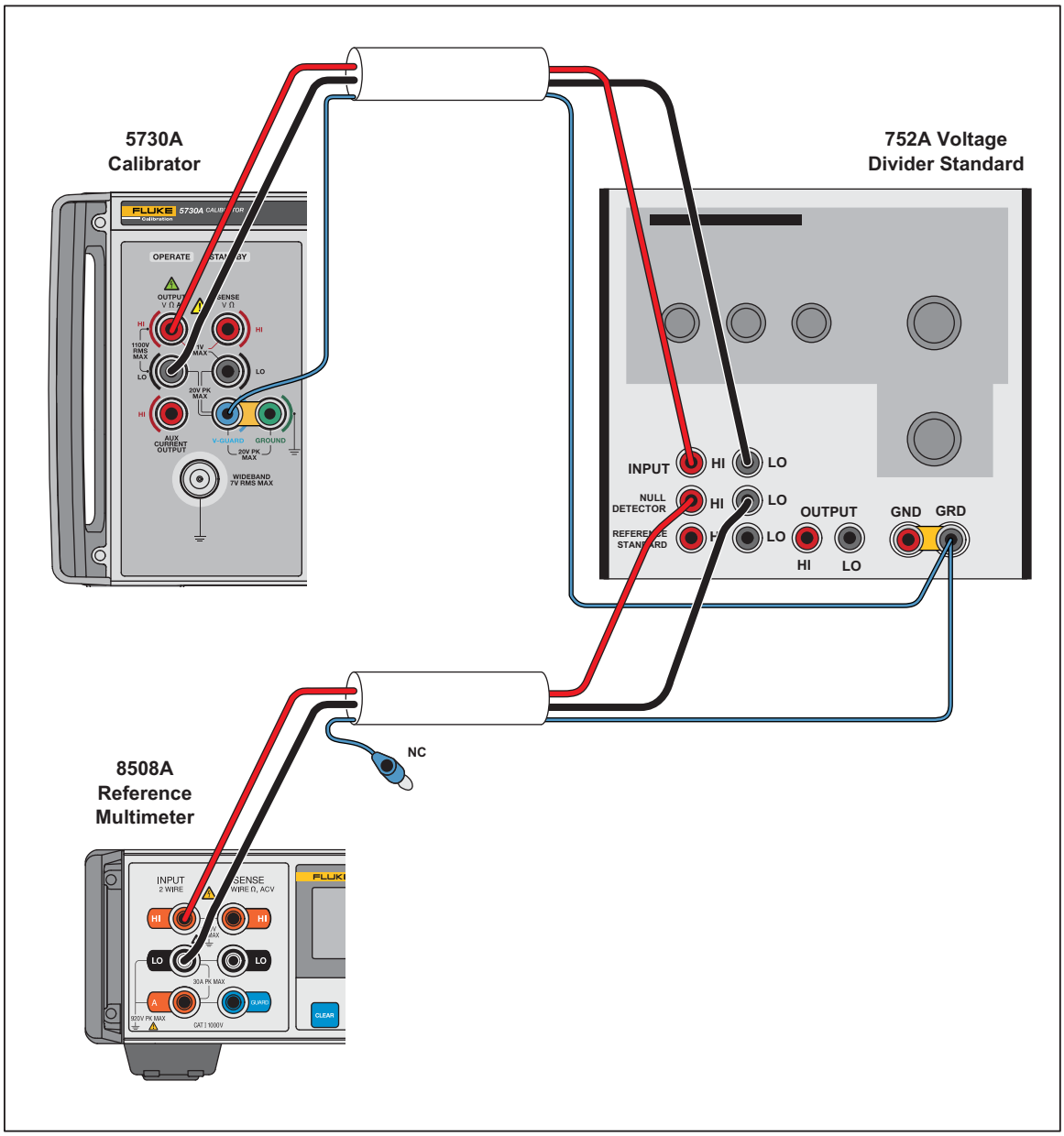
On page 42, replace Figure 5 with:



hhp028.eps

Figure 5. 742-1 and 742-10 k External Calibration Connections

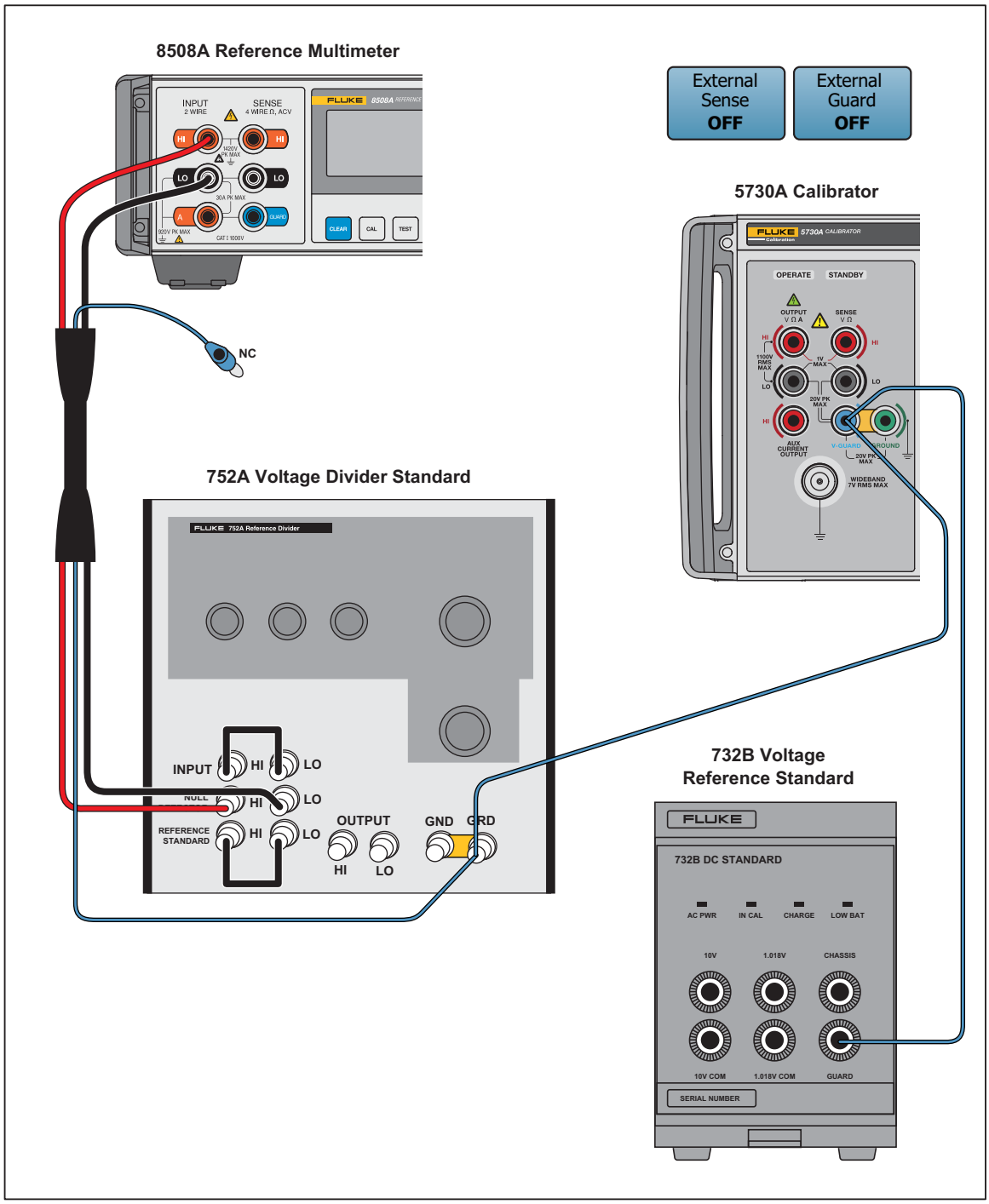
On page 67, replace Figure 12 with:



hhp305.eps

Figure 12. Zero Null Detector Connection

On page 70, replace Figure 13 with:



hhp301.eps

Figure 13. Zero Null Detector Connection

On page 87, Table 18, replace the top 3 rows of the table with:

20 µA	1 kHz	Aux Output	22 mV				12.34 nA
200 µA	5 kHz	Aux Output	220 mV				79 nA
200 µA	10 kHz	Aux Output	220 mV				300 nA

On page 22, add:

Wideband AC Voltage (Option 5730A/03 and 5730A/05) Specifications (95 % Confidence Level)

Specifications apply to the end of the cable and 50 W termination used for calibration.

Range		Resolution	Absolute / ±5 °C from calibration temperature 30 Hz - 500 kHz			
			24 Hours	90 Days	180 Days	1 Year
Volts	dBm		±(% output + mV)			
1.1 mV	-46	10 nV	0.32 + 0.32	0.39 + 0.32	0.47 + 0.32	0.63 + 2
3.3 mV	-37	10 nV	0.32 + 0.78	0.35 + 0.78	0.39 + 0.78	0.55 + 3
11 mV	-26	100 nV	0.16 + 3	0.28 + 3	0.39 + 3	0.55 + 7
33 mV	-17	100 nV	0.16 + 8	0.24 + 8	0.35 + 8	0.47 + 13
110 mV	-6.2	1 mV	0.16 + 32	0.24 + 32	0.35 + 32	0.47 + 32
330 mV	+3.4	1 mV	0.16 + 80	0.20 + 80	0.28 + 80	0.39 + 80
1.1 V	+14	10 mV	0.16 + 320	0.20 + 320	0.28 + 320	0.39 + 320
3.5 V	+24	10 mV	0.12 + 390	0.16 + 390	0.24 + 390	0.32 + 390

Frequency (Hz)	Frequency Resolution (Hz)	Amplitude Flatness, 1 kHz Reference Voltage Range, 1 Year			Temperature Coefficient ±ppm/°C	Settling Time To Published Specification (Seconds)	Harmonic Distortion (dB)
		1.1 mV	3.3 mV	>3.3 mV			
		±(% output + floor indicated)					
10 - 30	0.01	0.24	0.24	0.24	100	7	-40
30 - 119.99	0.01	0.08	0.08	0.08	100	7	-40
120 - 1.1999 k	0.1	0.08	0.08	0.08	100	5	-40
1.2 k - 11.999 k	1	0.08	0.08	0.08	100	5	-40
12 k - 119.99 k	10	0.08	0.08	0.08	100	5	-40
120 k - 1.1999 M	100	0.16 + 2.4 mV	0.08 + 2.4 mV	0.08 + 2.4 mV	100	5	-40
1.2 M - 2 M [1]	1 k [3]	0.16 + 2.4 mV	0.08 + 2.4 mV	0.08 + 2.4 mV	100	0.5	-40
2 M - 11.9 M	1 k [3]	0.32 + 2.4 mV	0.24 + 2.4 mV	0.16 + 2.4 mV	100	0.5	-40
12 M - 20 M	10 k [3]	0.47 + 2.4 mV	0.39 + 2.4 mV	0.32 + 2.4 mV	150	0.5	-34
20 M - 30 M	10 k [3]	1.2 + 12 mV	1.2 + 2.4 mV	0.8 + 2.4 mV	300	0.5	-34
30 M - 50 M [2]	10 k	2.4 + 12 mV	2.4 + 2.4 mV	1.6 + 2.4 mV	600	0.5	-34

Note:

1. For output voltages <50 % of full range in the 33 mV, 110 mV, 330 mV, 1.1 V, and 3.5 V ranges, add 0.1 % to the amplitude flatness specification.

Additional Operating Information:

dBm reference = 50 Ω

Range boundaries are at voltage points, dBm levels are approximate.

$dBm = 10 \log \left(\frac{Power}{1mW} \right)$; 0.22361 V across 50 W = 1 mW or 0 dBm

2. Applies to Option 5730A/05 only.
3. Resolution specified applies to 5730A/03 and 5730/05 models ordered or upgraded after October 2015. To easily identify newer models, output 20 MHz from the Calibrator. A newer model will show 20.00 MHz versus 20 MHz.