DYTRAN TEST PROCEDURE CALIBRATION OF THE 4007 QUAD SENSOR CONDITIONER				TP-4035 Page 1 OF 4
ORIGINATOR	F. CERON	ORIG DATE	07/16/2008	REVISION
CHECKED	D. VARAK 7/16/08	CHECK DATE	7/16/08	A
APPROVED	A. SHNDER	APPR DATE	7/16/08	

REVISION	ECN	DESCRIPTION OF CHANGES	DATE/APPROVALS
A	5360	Initial release	7/16/2008

1.0 SCOPE

This procedure is dedicated to the explanatory of calibration technique for 4007 Quad Sensor Conditioner.

2.0 APPLICABILITY

4007 series

3.0 EQUIPMENT

- Oscilloscope, no manufacture specified
- Dual Display Multimeter, Fluke 45
- LIVM Sensor Simulator, Dytran 4515
- DC Power Supply, no manufacture specified
- Function Generator, no manufacture specified
- Set of appropriate cables

4.0 CALIBRATION CERTIFICATE CONTENT

- Customer identification
- Unit Identification
- Environmental condition during calibration
- Sensor Supply Voltage (each channel)
- Sensor Drive Current (each channel)
- Filter @ 3kHz and 10kHz
- DC Voltage and Current
- List of equipment used
- Uncertainty of calibration and error

5.0 PROCEDURE

5.1 TEST SETUP

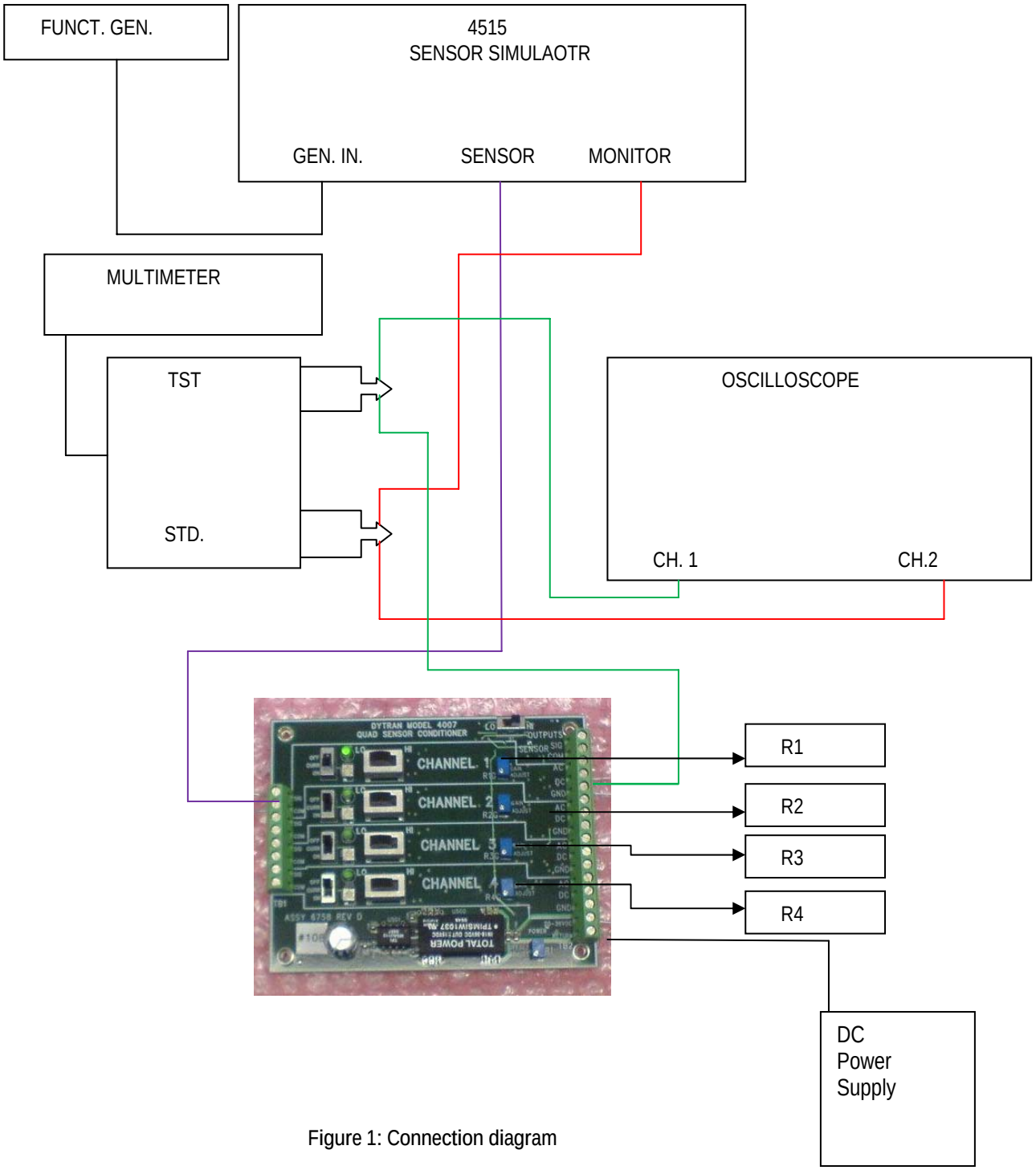

Figure 1: Connection diagram

5.2 TEST PROCEDURE

- Equipment must be connected as shown on figure 1.
- Turn on all equipment, and make sure you are getting output from the 4007 board.
- Check DC offset voltage; turn off the function generator, put switch box on TST to read the voltage off the multimeter. Adjust potentiometer R1 to obtain 1.000 VDC
- Measure Sensor Supply Voltage and Sensor Drive Current
- Print out 4007 blank certificate from the Manufacturing drive (M). (Calibration Certificates, New Certificates, Electronics, 4007)
- Calibrate each channel at each G level stated on the Calibration Certificate. For example 1GRMS = 10Mvac, 10GRMS = 100mVAC, 50GRMS = 500mVAC, 100GRMS = 1.0VAC, 150GRMS = 1.5 VAC
- Set function generator to 150GRMS = 1.5VAC input, adjust the gain pot R2 on each channel to obtain the reading DC CALCULATION (V).
- Calibrate starting from 100G 50G, 10G, and 1G respectively.
  Maximum error percentage is 1.