

14-007 B

October 17, 2014

TROUBLESHOOTING T SERIES WITH ANALOG AND DIGITAL VOLTAGE ISSUES

I. PURPOSE:

To identify and isolate the intermittent issues that causes the analyzer to display warnings.

II. TOOLS:

Digital voltage meter (DVM)

III. PARTS:

N/A

IV. PROCEDURE:

NOTE: Please perform the initial measurements before doing anything such as or power cycling the instrument. Do not disturbing or move any wires or connectors.

1. Please use a digital volt meter (DVM) to measure the various points.
 - a. Measure the points
 - b. Write them in the table at the end
 - c. E-mail or FAX the form back to us
 - i. SDA_TECHSUPPORT@TELEDYNE.COM
 - ii. (858-657-9816)
2. Write your company name, analyzer model and serial number. Also any noteworthy problems.
3. Record all active warnings on the front panel, press the MSG button to see all of the warnings and write the names of the warnings in the table.
4. Press SETUP, MORE, DIAG, ENTR, ENTR (go into the SIGNAL I/O), press NEXT to find the readings below and write the readings in the table.
 - a) SAMPLE_TEMP
 - b) BOX_TEMP
 - c) REF_4096_MV
 - d) REF_GND
5. See the Figures and table below to observe where to place the DVM test points and write in the table.

Troubleshooting all T series with analog and digital voltage issues

14-007 Rev B (DCN 6999) 10/16/2014

Page 1 of 5

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Place the **RED** meter lead on the Pin on the back of the power supply board – PIN 1

NOTE: it is easy to short the meter lead to the surface of the board and cause the analyzer to reboot

Place the **BLACK** meter lead on the Pin on the back of the power supply board – PIN 3

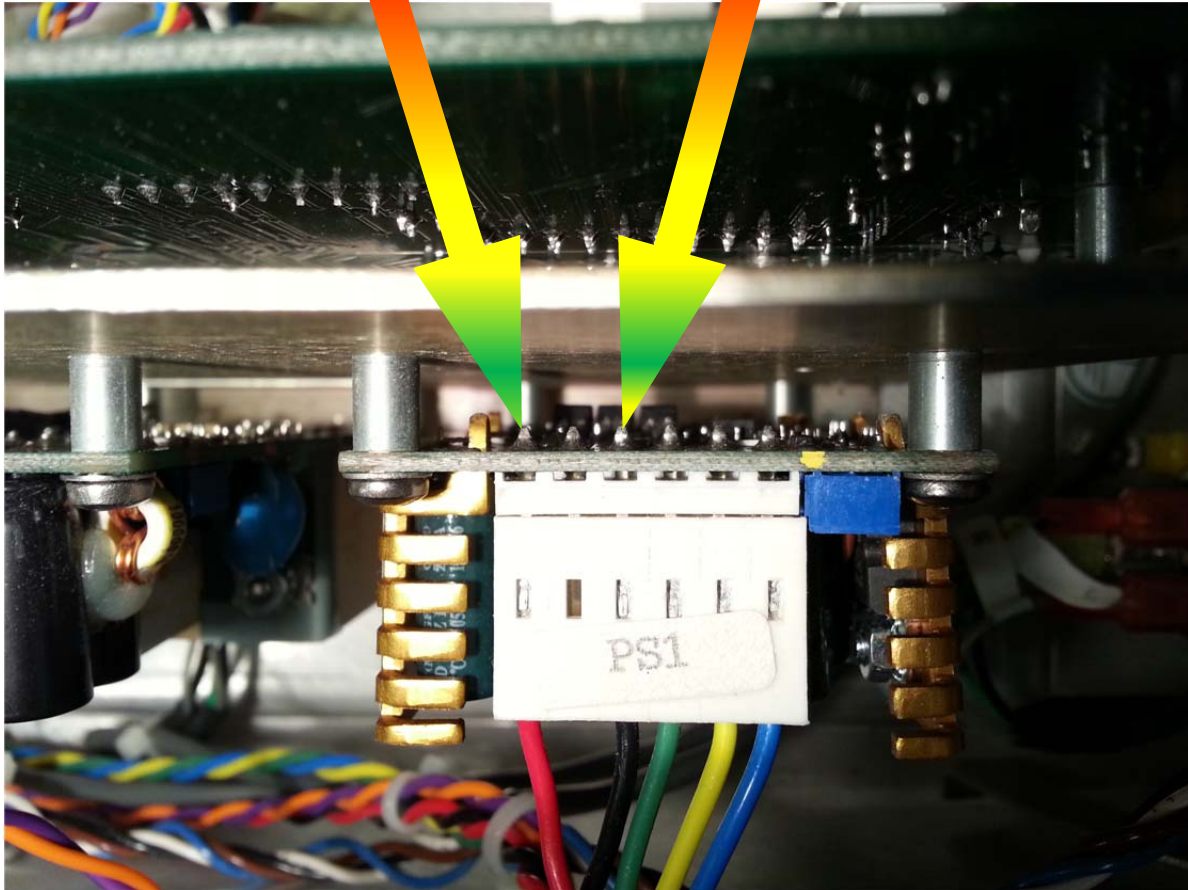


Figure 1

Troubleshooting all T series with analog and digital voltage issues
14-007 Rev B (DCN 6999) 10/16/2014
Page 2 of 5

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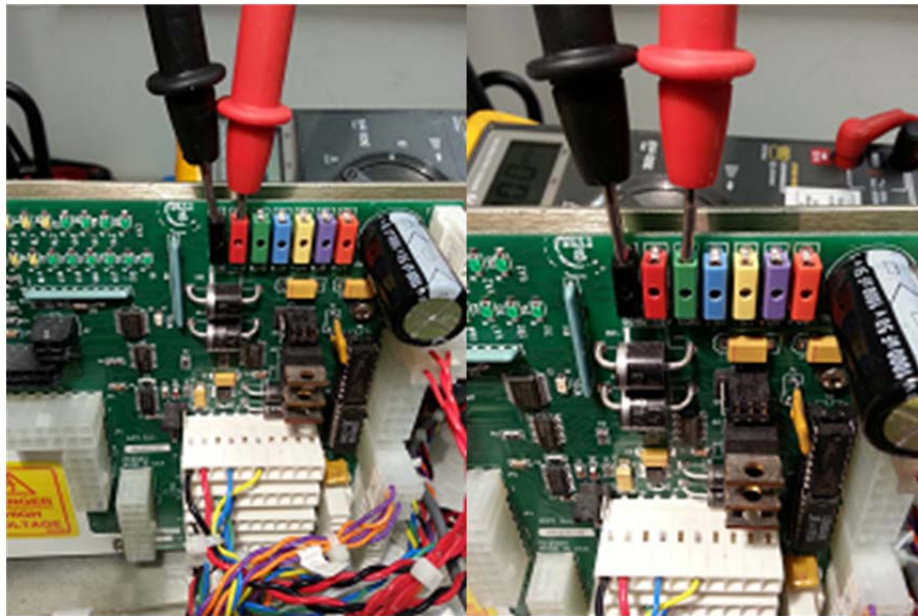


Figure 2

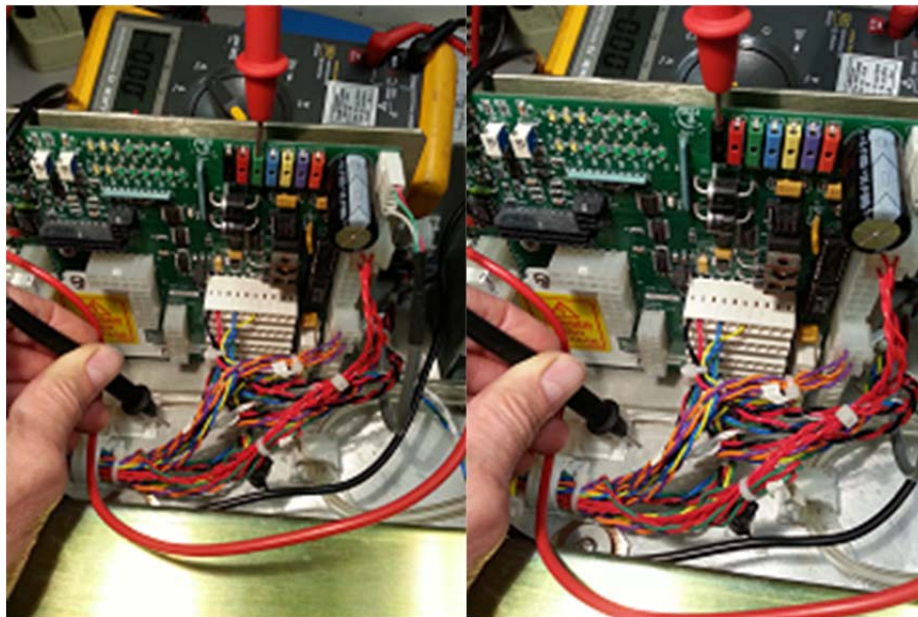


Figure 3

Troubleshooting all T series with analog and digital voltage issues
14-007 Rev B (DCN 6999) 10/16/2014
Page 3 of 5

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CSF0001J (DCN6504)

6/18/2012

6. Power cycle the instrument and note whether this resolves the problem.
7. If power cycling by itself does not solve the problem, turn the instrument power off. Disconnect and reconnect the power supply output connector in Figure 1 and reapply power to instrument and note whether this solves the problem.
8. After recording results on the below form contact TAPI technical support.
 - a. E-mail or FAX the form back to us
 - i. SDA_TECHSUPPORT@TELEDYNE.COM
 - ii. (858-657-9816) FAX

Troubleshooting all T series with analog and digital voltage issues
14-007 Rev B (DCN 6999) 10/16/2014
Page 4 of 5

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Cable Tiger Team Info Form

Customer Name	Model	Serial Number

Initial Problem, such as symptoms, how often, and initial actions

Warnings Present (press the MSG button to see all of the warnings)

Record the below values in SIG I/O	Reading
SAMPLE_TEMP	
BOX_TEMP	
REF_4096_MV	
REF_GND	

Positive Lead (RED meter lead)	Negative Lead (BLACK meter lead)	Reading
Back side of power supply board solder pad where pin is going through the board to the RED wire - PIN 1 (see Figure 1)	Back side of power supply board solder pad where pin is going through the board to the BLACK wire – PIN 3	
RED relay board test point (see Figure 2)	BLACK relay board test point	
GREEN relay board test point (see Figure 2)	BLACK relay board test point	
GREEN relay board test point (see Figure 3)	Chassis ground (any chassis surface)	
BLACK relay board test point (see Figure 3)	Chassis ground (any chassis surface)	

Did resetting the power fix the issue?	
Did reseating the cable fix the issue?	

- a. E-mail or FAX this form back to us
- iii. SDA_TECHSUPPORT@TELEDYNE.COM
- iv. (858-657-9816) FAX

Troubleshooting all T series with analog and digital voltage issues
 14-007 Rev B (DCN 6999) 10/16/2014
 Page 5 of 5

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