

SAFETY – IMPLEMENTED DURING NORMAL COURSE  
OF PROVIDING SUPPORT

**U1273A-01-S**

**S E R V I C E N O T E**

Supersedes:  
NONE

U1273A True RMS Multimeter

Serial Numbers: MY52360001-MY53239999

**POSSIBLE RISK OF HAZARD EXPOSURE**

**WARNING**

**HAZARD CLASS #2**

**Incorrect DC Voltage values displayed at DC measurement mode when  
measuring mixed (AC+DC) signal source**

**Parts Required:**

P/N	Description	Qty.
NA		

**ADMINISTRATIVE INFORMATION**

SERVICE NOTE CLASSIFICATION:	
<b>SAFETY</b>	
ACTION CATEGORY: X AGREEABLE TIME	STANDARDS LABOR: 0.0 Hours
LOCATION X CUSTOMER INSTALLABLE CATEGORY: <input type="checkbox"/> ON-SITE (active On-site contract required) <input type="checkbox"/> SERVICE CENTER <input type="checkbox"/> CHANNEL PARTNER	SERVICE <input type="checkbox"/> RETURN INVENTORY: <input type="checkbox"/> SCRAP X SEE TEXT USED <input type="checkbox"/> RETURN PARTS: <input type="checkbox"/> SCRAP X SEE TEXT
AVAILABILITY: ALWAYS	NO CHARGE AVAILABLE UNTIL: EOS
<input type="checkbox"/> Calibration Required X Calibration NOT Required	PRODUCT LINE: WC AUTHOR: SW
ADDITIONAL INFORMATION: Information only	

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PRINTED IN U.S.A.

November 6, 2013

Rev. 23



**Situation:**

The U1273A Handheld Digital Multimeter may display an incorrect DC voltage reading with the Filter (LPF) switched OFF and when the signal being measured contains both DC and AC components. The incorrect reading will be stable and lower than the DC component from the mixed signal source. The hazardous voltage (⚡) symbol is not illuminated on the display if the signal being measured is equal to or greater than 30 V. This misleads users to believe the voltage present on a device/circuitry under test is non-hazardous while it may be hazardous and poses a potential risk of electrical shock.

The unit will display the accurate DC value of the signal being measured when the product's Filter (LPF) is enabled. Applications where the mixed signal measured by enabled the product's Filter (LPF), hence greatly reducing the likelihood of exposure to electric shock. The situation can be eliminated through changing the product's filter settings.

To maintain safe operation on the multimeter, it is recommended to verify the multimeter's operation by measuring a known voltage before use. Always manually select the highest measurement range when measuring an unknown signal. Users are cautioned to turn on the LPF filter at all times when making DC voltage measurements for mixed signal.

**Solution/Action:**

The U1273A Handheld Digital Multimeter will display accurate DC value of the mixed signal (that contains both AC and DC components) being measured when the product's Filter (LPF) is turned ON. This can be done through 2 methods:


- The product's Filter (LPF) can be turned on by changing the product's filter settings (see point A below), or
- Users can download the latest firmware to turn ON the Filter (LPF) by default (see point B)

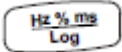
To enhance user safety, Agilent has updated the **U1273A/U1273AX Handheld Digital Multimeter User's Guide** to include additional WARNING statements to emphasize the need to turn ON Filter (LPF) at DC Voltage measurement function (see point C).

**A. Change product's Filter (LPF) settings:**

Please turn on the product's Filter (LPF) by changing the product's filter settings according to steps 1 to 4 below to measure the correct DC voltage value of a mixed AC+DC signal source:

1. Download and review the revised **U1273A/U1273AX Handheld Digital Multimeter User's Guide**. Discard the older version.
2. Verify that your multimeter(s) corresponds to the above model and serial numbers.
3. At the DC measurement mode, check if the Filter symbol LPF is shown on the display. If it is, the Filter is already turned ON. If it is not, proceed to step 4 to turn ON the Filter (LPF).
4. Follow steps 4.1 to 4.5 to turn ON the Filter (LPF) function for DC measurement mode.


4.1. Press  for more than 1 second to enter the multimeter's setup menu.

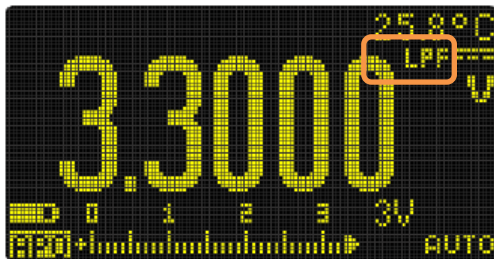
4.2. Browse to **Menu 6 > FILTER**, and press  to edit the value

4.3. Press  or  to enable the Filter. Refer below table to select the setting for respective firmware version.

Version <b>1.64</b> or older	Version <b>1.95</b> or newer
<b>on</b>	<b>DC</b>

4.4. Press  to save your changes.

4.5. Press  and hold until the multimeter restarts to return to normal operation. Turn the multimeter to DC Voltage measurement mode to verify that the Filter: is turned on.



**Filter ON symbol**

**B. Download and install latest Firmware revision:**

1. Users can turn ON the Filter (**LPF**) by default without manually changing the filter at the setup mode if users download the new firmware version 1.95 from Agilent website. The new firmware can be downloaded from [www.agilent.com/find/U1273Afw](http://www.agilent.com/find/U1273Afw).
2. Please confirm that you have either manually turned on the filter of your product, or have downloaded the new firmware from Agilent website into your product(s), by completing the web form available at this link: <http://www.agilent.com/find/U1270A-03-response>.

**C. Download latest product User’s Guide:**

To enhance user safety, Agilent has updated the **U1273A/U1273AX Handheld Digital Multimeter User’s Guide** to include additional WARNING statements to emphasize the need to turn ON Filter (**LPF**) at DC Voltage measurement function.

<b>User’s Guide</b>	<b>U1273A/U1273AX Handheld Digital Multimeter User’s Guide</b>
<b>Filter use and setting at measurement</b>	Chapter 2 Making Measurements > Measuring DC Voltage; and >Measuring AC and DC Signals
<b>Filter setting</b>	Chapter 4. Multimeter Setup Options > Setup Menu Items > Enabling the filter

For the latest user’s guide version, please visit our Web site at:

<http://www.agilent.com/find/hhTechLib>

- **U1273A/U1273AX Handheld Digital Multimeter User’s Guide**  
(<http://cp.literature.agilent.com/litweb/pdf/U1273-90017.pdf>)

**Revision History:**

<b>Revision Number</b>	<b>Date</b>	<b>Author</b>	<b>Reason For Change</b>
1.0	11-05-2013	SW	As published