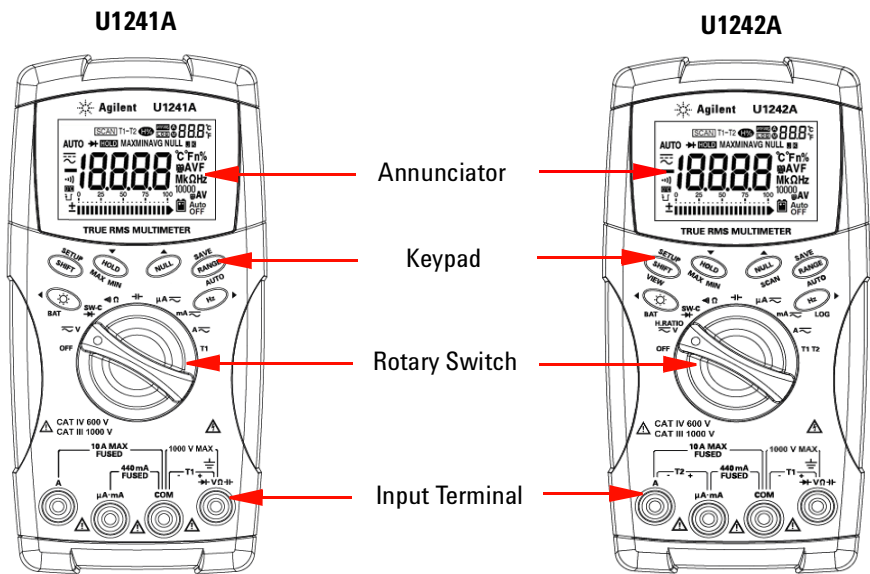


# Agilent U1241A/U1242A Handheld Digital Multimeter

## Quick Start Guide

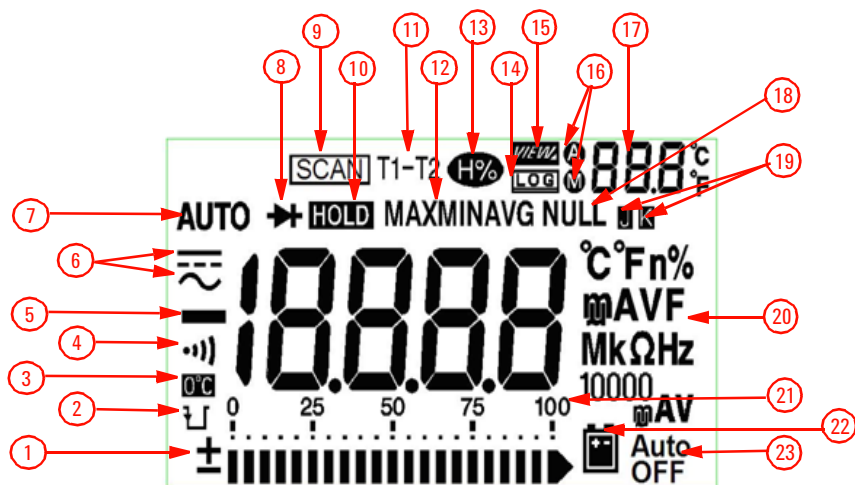


Measurement Functions	Input terminal		Overload Protection
Voltage	$\rightarrow \nabla \Omega \leftarrow$	COM	1000 V R.M.S.
Diode			1000 V R.M.S
Resistance			< 0.3 A short circuit current
Capacitance			
$\mu A$ & mA	$\mu A$ mA	COM	440 mA/1000 V 30 kA/fast-acting fuse
A	A	COM	11A/1000 V 30 kA/fast-acting fuse
Temperature	+T1	-T1	1000 V R.M.S.
Temperature (for U1242A)	+T2	-T2	440 mA/1000 V 30 kA/fast-acting fuse

**WARNING**

To avoid damaging this device, do not exceed the input limit.

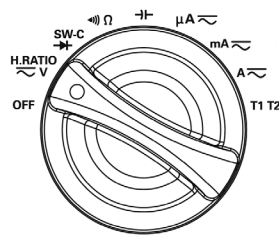
## Annunciator Display



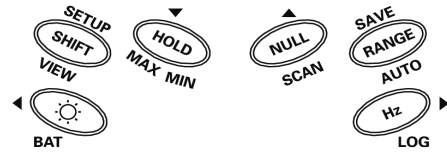
No.	Descriptions	No.	Descriptions
1	21-segment analog bar graph display	12	MINMAX Recording mode
2	Capacitor discharge indicator	13	Harmonic Ratio mode (for U1242A)
3	Cold junction of ambient temperature	14	Data logging mode (for U1242A)
4	Audible continuity for resistance and diode function	15	Data logging viewing mode (for U1242A)
5	Primary display <b>-18888</b>	16	Auto or manual data logging mode and datalog viewing mode
6	AC or DC measurement mode	17	Secondary display (temperature display)
7	Auto range	18	Null math function
8	Diode / Audible continuity	19	Thermocouple type for temperature measurement
9	T1, T2 and T1 – T2 temperature measurements scan (for U1242A)	20	Primary measurement units
10	Data hold	21	Measurement range
11	T1, T2* and T1 – T2* temperature measurements	22	Low battery indicator
		23	Auto power off indicator

\*T2 temperature measurement and delta (T1 – T2) are only available for U1242A.









# Features and Functions













**Rotary Switch**

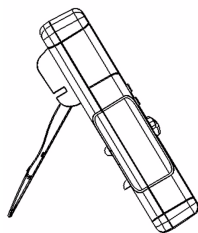


**Keypad**

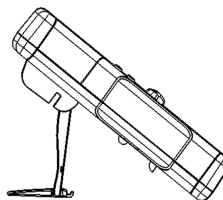
Function	First level functions	Range	Second level functions (press  )	Range
<b>OFF</b>	Turn off the meter			
	DCV measurement	0.1 mV to 1000 V	ACV measurement	0.1 mV to 1000 V
			Harmonic ratio (for U1242A)	0.0% to 99.9%
	Diode measurement		Switch counter measurement	
	Resistance measurement	0.1 Ω to 100 MΩ	Audible continuity measurement	
	Capacitance measurement	0.1 nF to 10 mF		
	DCμA	0.1 μA to 10 mA	ACμA measurement	0.1 μA to 10 mA
	DCmA	0.01 mA to 440 mA	ACmA measurement	0.01 mA to 440 mA
			mA% scale	
	DCA	0.001 A to 10 A	ACA measurement	0.001 A to 10 A
<b>T1</b>	T1 temperature	−40 °C to 1000 °C	T2 and T1–T2 temperature measurements (for U1242A)	−40 °C to 1000 °C

Actions	Steps
Turns ON backlight	Press 
Checks battery capacity	Press and hold  for > 1 second
Freezes the measured value	Press 
Starts MIN/MAX/AVG recording	Press and hold  for > 1 second
Offsets the measured value	Press 
Scan the measured temperature (for U1242A only)	Press and hold  for > 1 second
Changes the measuring range	Press 
Turns on auto range	Press and hold  for > 1 second
Measures frequency for AC signal	Press 
Starts manual data logging	Press and hold  for > 1 second

## Tilt Stand



Tilt stand at 60°



Tilt stand at 30°

## Safety Information

The Agilent U1241A and U1242A are safety-certified in compliance with the following safety and EMC requirements:

- IEC 61010-1:2001 / EN61010-1:2001
- USA: UL 61010-1:2004
- Canada: CSA C22.2 No. 61010-1:2004
- IEC 61326-1:2005/ EN 61326-1:2006
- Canada: ICES-001:2004
- Australia/New Zealand: AS/NZS CISPR11:2004

### Safety Notices

#### CAUTION

A **CAUTION** notice denotes a hazard. It calls attention to an operating procedure, practice, or the like that, if not correctly performed or adhered to, could result in damage to the product or loss of important data. Do not proceed beyond a **CAUTION** notice until the indicated conditions are fully understood and met.

#### WARNING

**WARNING** notice denotes a hazard. It calls attention to an operating procedure, practice, or the like that, if not correctly performed or adhered to, could result in personal injury or death. Do not proceed beyond a **WARNING** notice until the indicated conditions are fully understood and met.

### Safety Symbols



Caution, risk of danger (refer to this manual for specific Warning or Caution information)



Caution, risk of electric shock



Earth (ground) terminal

**CAT III**  
**1000 V**

Category III 1000 V Overvoltage Protection

**CAT IV**  
**600 V**

Category IV 600 V Overvoltage Protection

*For further safety information details, refer to the Agilent U1241A and U1242A Handheld Digital Multimeter User's and Service Guide.*

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