



MAXWELLON MX1942

5Hz~6/12MHz
Digital AC Millivoltmeter
2023

The MX1942-6 and MX1942-12 are 4½-digit LCD display dual-channel digital AC millivoltmeters with a frequency range of 5Hz to 6MHz and 5Hz to 12MHz, respectively. These instruments serve as both digital AC millivoltmeters and can function as power meters and level meters. Additionally, they have the capability to simultaneously display frequency values and can be used independently as frequency counters.

Intelligent Microprocessor Control: Utilizes intelligent microprocessor control technology for precise measurements.

Amplifier Circuit and A/D Linear Detector: Employs excellent amplifier circuitry and A/D linear detectors, resulting in inherent voltage measurement accuracy better than 1%.

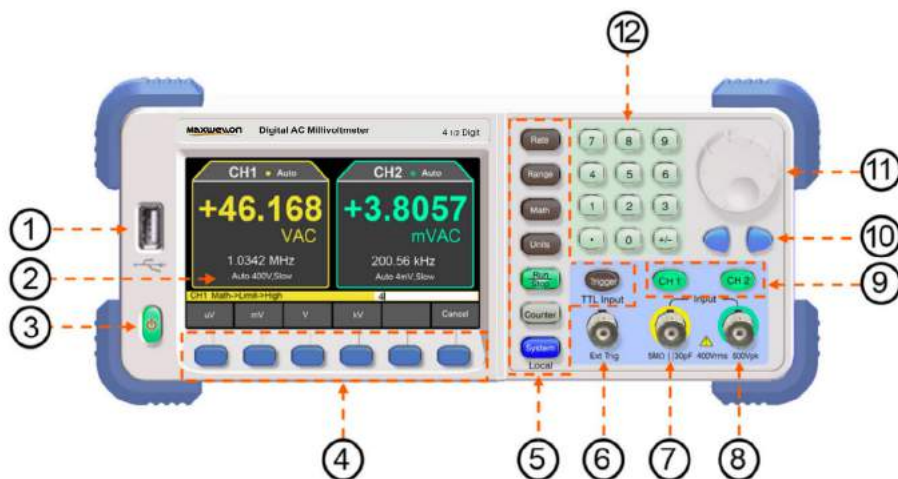
Compact and Lightweight Design: Manufactured using surface-mount technology (SMT) and assembly processes, making the millivoltmeters compact, lightweight, and highly stable.

High Reliability: Demonstrates high reliability in terms of stability and quick measurement speed.

Low Frequency Response Error: Provides excellent performance with a minimal error in frequency response.

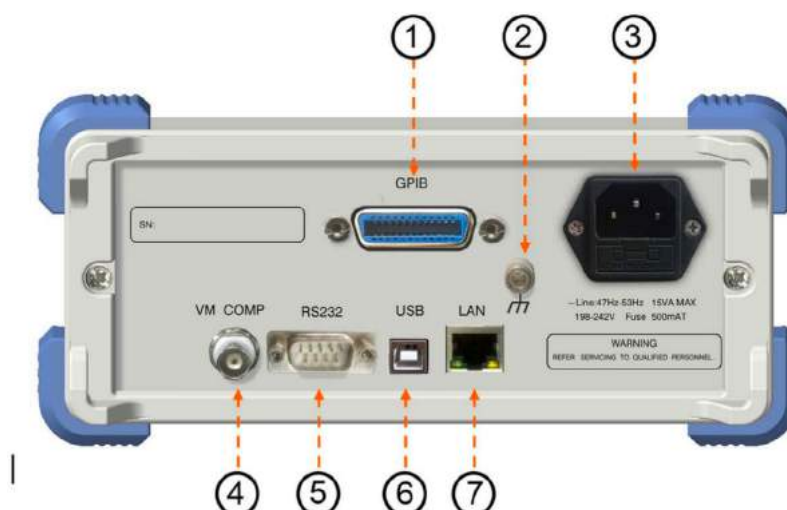
■ Key Feature

- 4 ½ Dual channel LCD display with the ability to simultaneously display measured frequency values
- Measurement voltage range: 50 μ V~400Vrms, 500V peak
- Measuring power level: -83.8dBm~54.2dBm (0dBm=1mW, 600 Ω load)
- Measurement power: 0.00417nW to 266.6W (load resistance R=600 Ω , load resistance can be set)
- Measure voltage level dBV range: -86dBV~52.04dBV (0dBV=1V)
- Input resistance of millivolt meter: 5M Ω , parallel capacitance of about 30pF
- Max, Min recording function and percentage, menu function setting calculation, and multifunctional combination display
- Source impedance settings for different signal sources to measure power and dBm values
- Float measurement
- Automatic and manual range switching function
- Multiple interfaces: Standard configuration: USB (Device, Host supports USB read and write), RS232
- Optional: LAN, GPIB
- 4.3 inch color TFT LCD display screen, user-friendly and intuitive interface



1. USB Host Interface
2. TFT LCD Display Screen
3. Power Switch Button
4. SoftKey Soft Keys
5. Function Keys
6. External Trigger Input Port

7. Channel 1 Signal Input Port
8. Channel 2 Signal Input Port
9. Channel Key
10. Cursor Direction Key
11. Knob
12. Numeric Keys



1. GPIB Interface
2. Grounding Post
3. Power Socket
4. VM COMP Output

5. RS232 Interface
6. USB Device Interface
7. LAN Communication Port

Specifications

Model		MX1942-6	MX1942-12
Channels		Dual Channel	
Frequency Bandwidth		5Hz ~ 6MHz	5Hz ~ 12MHz
Voltage Measurement Range		50μV ~ 400Vrms	
Voltage Measurement Ranges		4 mV, 40 mV, 400 mV, 4 V, 40 V, 400V	
Display Mode		4 1/2 digits, LCD dual-channel simultaneous display, selectable units: V, W, dBm, dBV, Vpp	
Input Impedance		5MΩ 30PF	
Frequency Response Error	5Hz~20Hz	± (4% reading+0.5% full scale)	
	20Hz~3MHz	± (2% reading+0.5% full scale, input voltage>10 mV)	
		± (4% reading+0.5% full scale, input voltage<10 mV)	
	3MHz~6MHz	± (4% reading+0.5% full scale)	
Counter	6MHz~12MHz	± (4% reading+0.5% full scale, input voltage>10 mV)	
	Frequency input range	5Hz ~12MHz	
	Input voltage range	10 mV ~ 400Vrms	
	Frequency measurement gate time	100ms , 1S, 10S, 100S	
Interfaces	measurement accuracy	6 digits/s	
	Standard: USB (Device, Host with support for USB flash drive read/write), RS232		
Power Voltage		220V±10%	
Mechanical Dimensions(W*H*D)		260mm × 105mm × 290mm	

■ Ordering Information

Standard

No.	Name	Qty.
1	USB Communication Cable	1 pc
2	RS232 Communication Cable	1 pc
3	BNC Test Cable	1 pc
4	BNC Double Clip Cable	1 pc
5	Power Cord	1 pc
6	Product User Manual	1 pc
7	Product Certificate of Conformity	1 pc
8	0.5A/220V Fuse (already installed in the socket)	1 pc
9	USB Driver and Test Software	1 pc

Option

No.	Name	Qty.
1	LAN Interface and Test Software	1 pc
2	GPIB Interface	1 pc



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