

ESCORT

A Handheld Unit with All
the
Benchtop Functionality



東方科技公司 ORIENTAL TECHNOLOGY COMPANY



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ESCORT

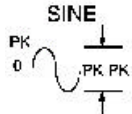
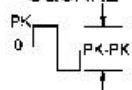
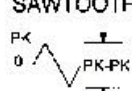
Escort 95/97 are feature-rich 40,000 count DMMs with an impressive range of capabilities, including frequency, duty cycle, capacitance, conductance and many more measurements. Escort 95/97 offers high performance and versatility for field service, educational labs and engineering test. With a unique MULTI-DISPLAY feature, Escort 95/97 allow you to analyze different components of the signal simultaneously. Even more, a standard RS-232C makes it ideal for PC instrument applications.

• COMPUTER INTERFACE

Via RS-232C interface, Escort 95/97 can be connected to personal computer. Our communication package, RS-232C and software included, allows measurement data to be recorded, filed, and even be printed out.

• AC + DC TRUE RMS

For traditional loads, a true-rms and averaging meter will read the same value. For non-linear loads, the true-rms meter displays the correct rms value while the averaging meter may show a significant error. With AC+DC true rms, Escort 97 offers higher accuracy on non-linear loads for both voltage and current measurements.

AC-COUPLED INPUT WAVEFORM	PEAK VOLTAGE		METERED VOLTAGES			DC AND AC TOTAL RMS
	PK-PK	0-PK	AC COMPONENT ONLY		DC COMPONENT only	TRUE RMS = $\sqrt{ac^2+dc^2}$
			RMS CAL*	OUR METER		
 SINE	2.828	1.414	1.000	1.000	0.0000	1.000
 SQUARE	2.000	1.000	1.111	1.000	0.000	1.000
 TRIANGLE SAWTOOTH	3.464	1.732	0.962	1.000	0.000	1.000

* RMS CAL is the displayed value for average responding meters that are calibrated to display RMS for sine waves.

• MULTI-DISPLAY

MULTI-DISPLAY allows you to select a wide variety of measurement combinations. It's particularly useful in applications requiring two different measurements of the same signal; e.g. amplifier circuits troubleshooting, where dBm output can be viewed on the primary display while the AC + DC volt is shown on the secondary display.

Multi-display combinations

Primary	Secondary	Primary	Secondary
DC, AC, AC + DC Volts	Frequency	Frequency	DC, AC, AC + DC Volts
DC, AC, AC + DC Amps	Frequency	Duty Cycle	DC, AC, AC + DC Volts
dBm	Frequency	Pulse Width	DC, AC, AC + DC Volts
dBm	AC, DC, AC + DC Volts	Frequency	DC, AC, AC + DC Amps
DC Volts (or Amps)	AC Volts (or Amps)	Duty Cycle	DC, AC, AC + DC Amps
AC Volts (or Amps)	DC Volts (or Amps)	Pulse Width	DC, AC, AC + DC Amps
AC + DC Volts (or Amps)	AC Volts (or Amps)	Celsius (°C)	Fahrenheit (°F)
AC + DC Volts (or Amps)	DC Volts (or Amps)	Fahrenheit (°F)	Celsius (°C)

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Multi-Display Multimeter Selection Guide

MODEL		Escort 95	Escort 97
Display Counts		Dual Display Primary: 4,000/40,000 Secondary: 4,000/40,000	Dual Display Primary: 4,000/40,000 Secondary: 4,000/40,000
Analog Bargraph		20 times/sec	20 times/sec
DC Voltage	Range	40mV, 400mV, 4V, 40V, 400V, 1000V	40mV, 400mV, 4V, 40V, 400V, 1000V
	Resolution	1 μ V, 10 μ V, 0.1mV, 1mV, 10mV, 0.1V, 1V	1 μ V, 10 μ V, 0.1mV, 1mV, 10mV, 0.1V, 1V
	Accuracy	40mV \pm (0.08% rdg \pm 5 digit) 400mV ~ 1000V \pm (0.06% rdg \pm 3 digit)	40mV \pm (0.08% rdg \pm 5 digit) 400mV ~ 1000V \pm (0.06% rdg \pm 3 digit)
AC Voltage	Range	40mV, 400mV, 4V, 40V, 400V, 750V	40mV, 400mV, 4V, 40V, 400V, 750V
	Resolution	1 μ V, 10 μ V, 0.1mV, 1mV, 10mV, 0.1V, 1V	1 μ V, 10 μ V, 0.1mV, 1mV, 10mV, 0.1V, 1V
	Accuracy	50/60Hz \pm (0.7% rdg + 5 digit) 45Hz ~ 5kHz 40mV ~ 400V \pm (1.5% rdg + 5 digit) 750V \pm (3% rdg + 5 digit) 5kHz ~ 20kHz 40mV ~ 400V \pm (2% rdg + 5 digit)	50/60Hz \pm (0.7% rdg + 5 digit) 45Hz ~ 1kHz \pm (1.5% rdg + 5 digit)
	Band width	45Hz ~ 20kHz	45Hz ~ 1kHz
	Frequency	10Hz ~ 200kHz	10Hz ~ 200kHz
DC Current	Range	400 μ A, 4000 μ A, 40mA, 400mA, 4A, 10A	400 μ A, 4000 μ A, 40mA, 400mA, 4A, 10A
	Resolution	10nA, 0.1 μ A, 1 μ A, 10 μ A, 0.1mA, 1mA, 10mA	10nA, 0.1 μ A, 1 μ A, 10 μ A, 0.1mA, 1mA, 10mA
	Accuracy	\pm (0.2% rdg + 3 digit)	\pm (0.2% rdg + 3 digit)
AC Current	Range	400 μ A, 4000 μ A, 40mA, 400mA, 4A, 10A	400 μ A, 4000 μ A, 40mA, 400mA, 4A, 10A
	Resolution	10nA, 0.1 μ A, 1 μ A, 10 μ A, 0.1mA, 1mA, 10mA	10nA, 0.1 μ A, 1 μ A, 10 μ A, 0.1mA, 1mA, 10mA
	Accuracy	\pm (1.0% rdg + 5 digit)	\pm (1.0% rdg + 5 digit)
Resistance	Range	400 Ω , 4k Ω , 40k Ω , 400k Ω , 4M Ω , 40M Ω , 40ns	400 Ω , 4k Ω , 40k Ω , 400k Ω , 4M Ω , 40M Ω
	Resolution	0.1 Ω , 1 Ω , 10 Ω , 100 Ω , 1k Ω , 10k Ω , 0.01ns	0.1 Ω , 1 Ω , 10 Ω , 100 Ω , 1k Ω , 10k Ω
	Accuracy	400 Ω ~ 4M Ω \pm (0.2% rdg + 3 digit) 40M Ω \pm (1% rdg + 5 digit) 40ns \pm (1% rdg + 10 digit)	400 Ω ~ 4M Ω \pm (0.2% rdg + 3 digit) 40M Ω \pm (1% rdg + 5 digit)
Capacitance	Range	4nF, 40nF, 400nF, 4 μ F, 40 μ F, 400 μ F, 9999 μ F	4nF, 40nF, 400nF, 4 μ F, 40 μ F, 400 μ F, 9999 μ F
	Resolution	1pF, 10pF, 0.1nF, 1nF, 10nF, 0.1 μ F, 1 μ F	1pF, 10pF, 0.1nF, 1nF, 10nF, 0.1 μ F, 1 μ F
	Accuracy	4nF ~ 40nF \pm (2.5% rdg + 6 digit) 400nF ~ 400 μ F \pm (2% rdg + 4 digit) < 2mF \pm (3% rdg + 4 digit)	4nF ~ 40nF \pm (2.5% rdg + 6 digit) 400nF ~ 400 μ F \pm (2% rdg + 4 digit) < 2mF \pm (3% rdg + 4 digit)
Frequency Counter	Range	100Hz, 1kHz, 10kHz, 100kHz, 200kHz, 1MHz, 10MHz	
	Resolution	0.001Hz, 0.01Hz, 0.1Hz, 1Hz, 10Hz, 100Hz, 1kHz	
	Accuracy	\pm (0.002% rdg + 1 digit)	
Signal Analysis		Dual Display: AC + DC & DC DC & AC AC + DC & AC Hz & Volt or Amp dBm & AC or DC % & Volt or Amp dBm & AC + DC ms & Volt or Amp dBm & Hz $^{\circ}$ C & $^{\circ}$ F	Dual Display: Hz & Volt or Amp
True RMS		•	
AC + DC test		Voltage/Current	
Duty Cycle		0.1% ~ 99.9%	
Pulse Width		0.1ms ~ 1999ms	
dBm: impedance selectable		4, 8, 16, 32, 50, 75, 93, 110, 125, 135, 150, 200, 250, 300, 500, 600, 800, 900, 1000, 1200 Ω	
Conductance		40ns/100G Ω	
Temperature		-40 $^{\circ}$ C ~ 1372 $^{\circ}$ C, -40 $^{\circ}$ F ~ 2502 $^{\circ}$ F	
Square wave output		Duty Cycle Adjustable 1% ~ 99%	
Timer & Signal Output		4 models, timer adjustable	
Glitch Capture/Crest		1ms (+/-40 digit)	
Max/Avg/Min		Dynamic Range	Dynamic Range
Diode Test & Continuity Beeper		•	•
Time Stamp		•	•
Input Warning		•	•
Backlit Display		•	
Communication		RS-232C	RS-232C
Standard Accessories		Test Leads 30-25129-1/2U Holster 15A-25595-1 User's Manual 91-25151-1 Battery	Test Leads 30-25129-1/2U Holster 15A-25595-1 User's Manual 91-25151-1 Battery
Optional Accessories		Communication Package 20-25002-2 K-type Transition Adaptor 30-25670-2 K-type Bead Probe 30-25659-2	Communication Package 20-25002-2
Safety Class		IEC-1010-1, 600V CAT. III, 1000V CAT. II	IEC-1010-1, 600V CAT. III, 1000V CAT. II