

- AC and DC voltage tests up to 690V with LEDs and LCD
- Comply with the latest standards IEC 61243 and IEC 61010
- Novel design  
Large and bright LEDs: Values are visible in the dark place  
Ergonomic design fits in the hand
- Two functions are available in one model  
"Measurement without battery" and "Self Test (all LED on)"
- Test leads withstand harsh environments at low temperature
- Penlight (white LED)
- Auto-power ON/OFF
- Audible indication
- Variable test tips,  $\varnothing 2\text{mm}$  or  $\varnothing 4\text{mm}$
- Probe protection cover can store the attachment of caps
- IP65 (IEC 60529)



### Voltage Test (Double-pole Test)

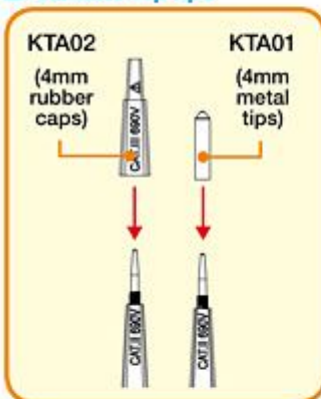
- The voltage is indicated by LEDs.  
Buzzer sounds and Live circuit LED lights up when a threshold voltage of 50V is exceeded.
- Voltage polarity is indicated in following manner.



### Single-pole Phase Test



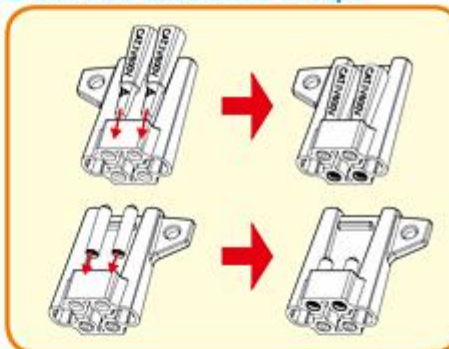
### Variable top tips



### Probe Protection Cover



### Store the attachment of caps



### 4mm Tips Replacement

How to fixing 4mm Tips on L1 probe- and L2 probe+.



Voltage Test		
Voltage Range	12~690V AC/DC	
LED	Nominal Voltage	12/24/50/120/230/400/690V AC (16~400Hz), DC ( $\pm$ )
	Tolerance (Threshold Voltage)	Light on at more than: 7 $\pm$ 3V (12V LED) 18 $\pm$ 3V (24V LED) 37.5 $\pm$ 4V (50V LED) 75% $\pm$ 5% of nominal voltage (120/230/400/690V LED)
	Response Time	<0.6s at 100% of each nominal voltage
LCD	Range/Resolution (Auto-range)	300V AC/DC (6.0~299.9)/0.1V 690V AC (270~759)/1V 690V DC (270~710)/1V
	Accuracy (23 $\pm$ 5°C)	$\pm$ 1.5V (7~100V) $\pm$ 1% $\pm$ 5dgt (100~690V) AC (16~400Hz), DC( $\pm$ )
	Over limit Indication	"OL"
	Response Time	Approx. 1s at 90% - 110% of each voltage
Peak Current	I <sub>s</sub> <3.5mA (at 690V)	
Measurement Duty	30s ON (operation time) 240s OFF (recovery time)	
Single-pole Phase Test		
Voltage Range	100~690V AC (50/60Hz)	
Phase Rotation Test		
System	Three-phase 4-wire system 200~690V phase-to-phase AC (50/60Hz)	
Phase Range	120 $\pm$ 5 degree	
Continuity Test		
Detection Range	0~400k $\Omega$ +50%	
Test Current	Approx. 1.5 $\mu$ A (battery 3V, 0 $\Omega$ )	
General		
Operating temperature and humidity ranges	-15~55°C, max 85% RH (No Condensation)	
Storage temperature and humidity ranges	-20~60°C, max 85% RH (No Condensation)	
Applicable Standards	IEC 61243-3, IEC 61010-1, IEC 61010-031, IEC 61557-7 CAT.III 690V / CAT.IV 600V Pollution degree 2	
IP Rating	IP65 (IEC 60529)	
Power Source	LR03 (AAA) 1.5V $\times$ 2	
Dimensions	246(L) $\times$ 64(W) $\times$ 26(D) mm	
Weight	190g (including batteries)	
Accessories	LR03 (AAA) 1.5V $\times$ 2, KTA01 (4mm metal tips [2pcs/set]), KTA02 (4mm rubber caps [2pcs/set]), Instruction manual	