## **Operating instructions**

There are seven keys: Up Key, Down Key, Left Key, Right Key, Shortcut Key, Enter Key, P -key and O- Key

Up and Down keys are used to adjust the directory and change the model number Left and right keys are used to move around the cursor and select the item you want to change Enter key is used to switch on/off and run the testing command Open the battery covers, put in 2 AA batteries (1.5V), and then close the battery cover

Press the Enter key for more than 2 seconds to power on. When power on, the system displays the current battery voltage automatically. When the battery power is low, please replace the batteries. Low voltage will affect the reliability of the test results and the machine will automatically shut down for protection.

How to switch on: press the Enter key for more than 2 seconds How to switch off: 1. Press the Enter key in off directory, it will shut down immediately

2. Press the Enter button in any directory exceed 10 seconds then it will shut down

3. After 60 seconds without any operation, it will shut down automatically

Shortcuts: O-key for fast shutdown P-key is the backlit key

## The following chart is for device

The bottom of the chip should align

Transistor should be in three slots which are on the bottom left

Optical coupling pin on the IC socket 13 pin (when measuring the saturable voltage drop)

Zener diode drop between 13 pin and 14 pin of the IC

Note: transistor shown corresponds to IC pin from left to right in the order of 10 pin, 11 pin, and 12 pin

Note: The order of pins shown by the transistor corresponding to 10 pin, 11pin, 12 pin of the IC from left to right.

		Function
Search	Auto mode 5.0 V mode	Device searching, put the chip in the IC holder and the device type will be identified automatically (identify automatically without input)
74HC	3.3 V mode	Other directories are the automatic mode 74HC series logic devices testing (same with 74LS series, different driver circuit) (enter the model manually)
74LS		74LS series logic devices testing (same with 74HC series, different driver circuit (enter the model manually)
CD 40		CD 4000 series logic devices testing (different from HEF40 series, the same drives circuit) (enter the model manually)
HEF40		HEF4000 series logic devices testing (different from CD 40 series, the same drive circuit) (enter the model manually)
45/145		45 series/ 145series logic devices testing (enter the model manually)
OTHER		Interface driver device testing, such as: max232, max485, 75175, 75176, 75cll (enter the model manually)
AMP		Op-amp, comparer device testing, such as: LM324, LM358, LM339, LM393, LM2902 (enter the model manually)
TR		Transistor identification: identify the transistor type and the order of pins automatically; identify the NPN, PNP, N-MOS, P-MOS, 1-SCR, 2-SCR, 2D (identify automatically without input)
ZD		Zener diode voltage regulator testing, testing range: 0V~5V, precision: 0.01V (identify automatically without input)
LIGHT	2	Optocoupler, such as: TLP521-1, PC817, PC923, 4n25, HCNW4506, BRT11\12\13, HCPL-3101
OFF	6.0	Switch off