

# LEAPER-2 Handy Linear IC Tester User Manual

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## I. INTRODUCTION

LEAPER-2 is a handy linear IC tester, which can search and test the linear ICs on the device list. Before testing, just press "AUTO" key to search for the IC number. It will display the IC number and device category. It is very convenient to operate. You just need to press "TEST" key and it will display the testing result "PASS" or "FAIL". It is easy to operate especially under repairs of the test.

LEAPER-2 can test Operational Amplifiers and Common Analog ICs. The testing is described on the device list of the manual. Please note it can't test the ICs which is not on the device list

LEAPER-2 is equipped with Auto - Power - off function after 45 seconds to save the battery life. You can use DC adaptor or 1-2 9V batteries to work.

## II. INSTRUCTION

### 1.FUNCTION KEYS

(1) [TYPE]: Select IC family

1.OP

2.OPTO

3.REG

4.NE555 series

5.ULN2001 series

(2) [UP]: Back IC number to the previous one.

(3) [DOWN]:

1.Forward IC number to the next one.

2.Go along with [TYPE] key to Power off.

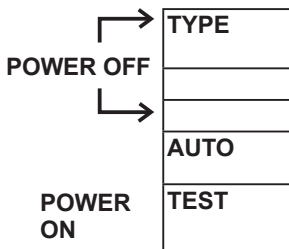
(4) [AUTO]: Auto search all unknown IC numbers.

(5) [TEST]:

1.Normal IC test

2.After power off, it is the power switch.

3.When system is faulty, press this key to instant power off.



## 2. OPERATION

\* Before power on, please do not put IC on the textool to avoid failure of self-test.

(1) Press [TEST] key to power on and enter self-test system to test normal mode. (LCD will show OP 324 on the display.)

(2) Self Test:

1. When lock IC on the textool, it will automatically power on search and back to normal mode.

2. When lock IC on the textool, it will be back to normal mode after normal test.

3. System test error enter system error mode.

(3) Normal Mode: Please operate according to function keys' instruction.

(4) Power Off Mode:

1. Press TYPE-DOWN to force to power off.

2. Power off automatically while without pressing any key after 45 seconds.

(5) System Error:

1. Check if there is anything or untestable IC on the textool.

2. Take the other thing or untestable IC away, then it will recover to normal mode.

3. Press [TEST] key to power off or after 45 seconds to automatically power off.

4. Repeat step 1, 2, 3.

5. If the unit still has error, please send to repair. Never open the unit.

### III. FEATURE

1. Adopt the concept of FUZZY to design and press AUTO key to work out 90% functions.
2. High-precision and stability test function.
3. Able to test OP, OPTO, REG, NE555 series and ULN2001 series.
4. Automatically power off or compel to power off to save the battery life.
5. Search OP, OPTO, REG, NE555 series and ULN2001 series Linear IC when encounter an unknown IC.
6. Average search time: 0.8 seconds.
7. Equipped with empty-load test to shorten test time.
8. 24pin IC textool, 16x1 LCD display, 5 function keys and 4x1.5V number 3 batteries.
9. Able to search unknown linear IC.
10. Automatically search if there is any IC on the TEXTTOOL or not after power on and distinguish it.
11. If system error, it will power off automatically after 45 seconds to avoid consuming the battery life.

### IV. SIX TESTABLE CATEGORIES OF IC

1. OPERATIONAL AMPLIFIERS
2. COMPARATORS
3. OPTOCOUPPLERS
4. TRANSISTOR ARRAYS
5. ANALOG SWITCHES
6. VOLTAGE REGULATORS

### V. SPECIFICATION

Display	: 16 X 1 Character LCD Dot Matrix
Battery Life	: 1000 Hours
Power Supply	: 1.5V * 4 or Adaptor 9V 500mA
Length	: 16cm
Width	: 11cm
Height	: 4.5cm
Net Weight	: 340 mg
Test Pins	: 14 to 24 pins
Average Search Time	: 0.8 second
Operating Temperature	: 10°C to 50°C
Storage Temperature	: -20°C to 20°C

### VI. NOTE

1. Linear IC has many the similar qualities IC. If the users do not know the IC number and adopt auto-search, please note their replacement.
2. If the users use batteries to work, please note if the batteries is run out when the test is unstable.

### VII. Supported Device

OP (OPERATIONAL AMPLIFIERS , COMPARATORS)
LM101 LM310 TL022 LF347 uA741
LM107 LM318 TL061 LF351 uA747
LM108 LM324 TL062 LF353 uA748
LM118 LM348 TL064 LF355 OP07
LM124 LM358 TL071 LF356 OP27
LM148 LM1458 TL072 LF357 OP37
LM158 LM2900 TL074 LF411 OP42
LM201 LM2902 TL081 LF412 OP90
LM207 LM2904 TL082 ICL7611 OP87
LM208 LM3900 TL084 ICL7621 OP290
LM218 LMC660 TL094 ICL7641 OP490
LM224 CA358 MC3303 ICL7642 TLC252
LM248 CA3130 MC3403 AD648 TLC275
LM258 CA3140 MC3503 AD711 LP124
LM301 CA3160 MC34004 AD712 LP324
LM307 CA3240 NE5532 LT1013 HA17324
LM308 CA3260 NE5534 LT1014 uPC451
RC4558 C4082
COMPARATORS
LM139 LM193 LM239 LM293 LM339 LM393 LM2901 LM2903 LM3302 LP239 LP339 LP2901 TLC339 TLC393
OPTO ( OPTOCOUPERS )
4N25 4N26 4N27 4N28 4N29
4N32 4N33 4N35 4N36 4N37
4N38 4N45 4N45
TIL111 TIL116 HILA1 HILB1 HILD1
H11D2 H11D3 H11D4 CNY75 MCT2
PC817 PC827 PC827 PC847 K827P
K847P

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REG. ( VOLTAGE REGULATORS )
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uA7805...( LM2930-5.0,LM2931-50,LM2940CT-5.0)
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uA7806...( Use adaptor only)
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uA7905
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LM217 LM317
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SPECIAL FUNCTIONS DEVICE
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NE555 NE556 TLC555 TLC556
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4016 4066
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TRANSISTOR
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ULN 2001 ULN2003 ULN2004 ULN2005
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