

**GUT-6600A**  
**Handy Digital IC Tester**

**USER MANUAL**

**GW INSTEK**

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## I. GENERAL SPECIFICATION

**Display:** 16 characters in 1 line(LCD Dot Matrix)  
**Test Pins:** 14 to 24 pins  
**Testable IC series:** TTL74xxx, CMOS40xxx, CMOS45xxx, DRIVER2xxx

**Test Voltage:** 5.0V, 3.3V, 3.0V, 2.5V  
**Average Search Time:** 0.6 second  
**Power Supply:** 2 x 9 volt battery  
9V / DC 500mA adapter

**Dimensions:** 160 × 110 × 45 mm (L W H)  
**Net weight:** 0.4 kg (not included battery)  
**Operating temperature:** 10 °C to 50 °C  
**Storage Temperature:** -20 °C to 80 °C

### \*Getting Started

The GUT-6600A can be powered in two ways:

- 1.Insert TWO 9V batteries (in the bottom of the GUT-6600A, polarity as indicated).
- 2.Connect a 9 Volt 500 mA DC adapter to the power connector on the back. Use a 2.1 mm plug with the positive pole outside.

\*Do not use batteries or adapters with other plug types, polarity or voltages, your equipment may be damaged.

## II. FUNCTION KEYS

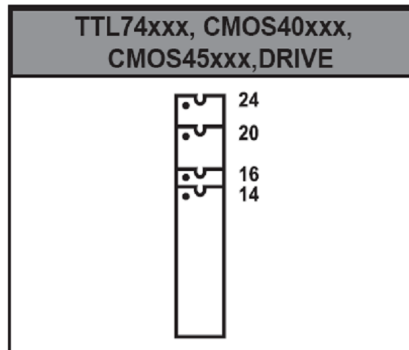
- Power on:** Press POWER-ON / TEST key to switch on the GUT-6600A
- Power off:** Simultaneously press TYPE and DOWN keys to switch off.
- TYPE key:** Select IC family.
- UP [▲] key:** Back to the previous IC number within the selected series.
- DOWN [▼] key:** Forward to the next IC number within the selected series.
- AUTO key:** Auto-search compares the inserted IC to all known IC numbers in the database
- TEST key:** Test inserted IC with the functions of the selected IC number.
- VOLT.SET:** Press [AUTO] and [▼]Key to switch the voltage. The cycle is 5V,3.3V,3V,2.5V.
- Select Voltage:** Simultaneously press AUTO and DOWN keys to select IC VCC.
- Select AUTO:** Simultaneously press TYPE and UP keys to select AUTO
- Power-Off times:** Power-Off times.

### III. OPERATION

#### 1. Press the "TEST" key to switch on the GUT-6600A.

After this, the GUT-6600A will perform a self-test ("SYSTEM CHECK..."). If there are no internal errors, the display will show "SYSTEM READY !!".

#### 2. Insert the IC into the ZIF socket in the following position:



#### 3. Now you can select the IC Type by pressing the "TYPE" key:

TTL74xxx	"[1] 7400"
CMOS40xxx	"[2] 4000"
CMOS45xxx	"[3] 4501"
DRIVE	"[4] ULN2001"

#### 4.(a) After this, you can select the IC number with the UP [▲] and DOWN [▼] keys. If you hold down the key, the device numbers will automatically increment [▼]

Then, select the IC VCC. The GUT-6600A provides 5.0V, 3.3V, 3.0V, 2.5V 4 kinds of voltage. We can press "AUTO" and "UP" or "DOWN" for selection. The default is 5.0V. When you change the IC, the voltage will come back to 5.0V.

#### (b) Another way to select an IC: You can press the AUTO key. (Before press "AUTO", please set voltage first)

The GUT-6600A will compare the inserted IC component to the components in its database. The GUT-6600A will return the first component number from its database, which matches the inserted device. This is not necessarily the correct component. By pressing the AUTO key again, the GUT-6600A will search the remainder of its database.

When a component has been found, the display will show "[X] NNNNN FIND" where X stands for the IC type and NNNNN for the IC number.

If a component does not match any device in the database of the LEAPER-1A, the display will show

"\*\* NOT FOUND \*\*".

**5. Now you can test the IC by pressing the TEST key:**

If the device performs OK, the display shows:

**"[X] NNNNN PASS"**

If the device test fails, the display shows:

**"[X] NNNNN FAIL"**

(X stands for the IC type and NNNNN for the IC number)

**6. Now you can test another IC or you can switch off the GUT-6600A**

By pressing the TYPE and DOWN [▼] keys simultaneously.

The GUT-6600A will be automatically turn off after idle 90 seconds by the default.

We can adjust the automatically turn off time to 30s, 1m30s, 3m or Never. After restart the GUT-6600A, it will come back to the default 90 seconds.

## IV. SUPPORTED DEVICES

### 74 Series

7400	7401	7402	7403	7404	7405	7406
7407	7408	7409	7410	7411	7412	7413
7414	7415	7416	7417	7418	7419	7420
7421	7422	7423	7424	7425	7426	7427
7428	7430	7432	7433	7434	7435	7436
7437	7438	7439	7440	7441	7442	7443
7445	7446	7447	7448	7449	7450	7451
74H52	7453	7454	74H54	7455	7460	74H61
7463	7464	7465	7470	7472	7473	7474
7475	7477	7478	74H78	7480	7481	7482
7483	7484	7485	7486	7487	7489	7490
7491	7492	7493	7494	7495	7496	74105
74107	74109	74110	74111	74112	74113	74114
74116	74125	74126	74128	74132	74133	74134
74135	74136	74137	74138	74139	74140	74141
74142	74143	74144	74145	74147	74148	74150
74151	74152	74153	74154	74155	74156	74157
74158	74159	74160	74161	74162	74163	74164
74165	74166	74168	74169	74170	74173	74174
74175	74176	74177	74178	74179	74180	74181
74182	74183	74184	74185	74189	74190	74191
74192	74193	74194	74195	74196	74197	74198
74199	74230	74231	74240	74241	74242	74243
74244	74245	74246	74247	74248	74249	74251
74253	74257	74258	74259	74260	74265	74266
74273	74274	74276	74279	74280	74283	74289
74290	74293	74295	74298	74299	74322	74323
74347	74348	74350	74351	74352	74353	74363
74364	74365	74366	74367	74368	74373	74374
74375	74377	74378	74379	74382	74386	74390
74393	74395	74399	74412	74425	74426	74445
74447	74465	74466	74467	74468	74490	74518
74519	74520	74521	74522	74533	74534	74539
74540	74541	74563	74564	74573	74574	74576
74580	74597	74620	74621	74622	74623	74638

74 Series (continued)

7463974640	74641	74642	74643	74644	74645
7464674647	74652	74654	74668	74669	74670
7468274683	74684	74685	74688	74689	74795
7479674797	74798	74804	74805	74808	74810
7481174821	74827	74832	74841	74874	741000
741002741003	741004	741005	741008	741010	741011
741020741034	741035	741036	741244	741245	

40 Series

4000	4001	4002	4006	4007	4008	4009
4010	4011	4012	4013	4014	4015	4016
4017	4018	4019	4020	4021	4022	4023
4024	4025	4026	4027	4028	4029	4030
4031	4032	4033	4035	4038	4040	4041
4042	4043	4044	4048	4049	4050	4051
4052	4053	4054	4055	4056	4060	4063
4066	4067	4068	4069	4070	4071	4072
4073	4075	4076	4077	4078	40H78	4081
4082	4085	4086	4093	4094	4095	4096
4097	4099	40100	40101	40102	40103	40104
40106	40109	40110	40147	40160	40161	40162
40163	40174	40175	40181	40182	40192	40193
40194	40257					

45 Series

4501	4502	4503	4504	4506	4508	4510
4511	4512	4513	4514	4515	4516	4517
4518	4519	4520	4522	4526	4527	4529
4532	4539	4543	4551	4553	4555	4556
4560	4561	4566	4572	4581	4584	4585

41 Series (DRAM 1-bit)

416441256411000	414000
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44 Series (DRAM 4-bit)

446444256441000
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Driver

ULN2001	ULN2003	ULN2004
ULN2005	ULN2803	ULN2804

\*\* 74756 74574 need to be selected manually. \*\*