

GENERAL SPECIFICATIONS

(vertical) position.

ELECTRICAL

Display: 1x16 character LCD dot matrix.
 Battery Life: (Standby) High Power (Carbon Zinc) - 1000 Hours.
 Ordinary (Alkaline) - 600 Hours.
 Power Supply: 9VDC 300mA AC adaptor
 (Polarity: center negative)
 or Four 1.5 "AA" batteries (optional)

PHYSICAL

Length: 6-5/16" (160.34 mm)
 Width: 4-5/16" (109.54 mm)
 Height: 2-1/8" (53.98 mm)
 Weight: 14 ounces (435.6 g)

ENVIRONMENT

Operating Temperature: 10°C to 50°C
 Storage Temperature: -20°C to 80°C

OTHER

Average Search Time: 0.8 second
 ZIF Socket: 24 Pin

TTL 74 Series :

0000	0001	0002	0003	0004	0005	0006	0007	0008	0009
0010	0011	0012	0013	0014	0015	0016	0017	0018	0019
0020	0021	0022	0023	0024	0025	0026	0027	0028	
0030	0032	0033	0034	0035	0036	0037	0038	0039	
0040	0041	0042	0043	0045	0046	0047	0048	0049	
0050	0051	0H52	0052	0053	0H54	0054	0055		
0060	0061	0063	0064	0065					
0070	0072	0073	0074	0075	0077	0078	0H78		
0080	0081	0082	0083	0084	0085	0086	0087	0089	
0090	0091	0092	0093	0094	0095	0096			
0105	0107	0109	0110	0111	0112	0113	0114	0116	
0125	0126	0128							
0132	0133	0134	0135	0136	0137	0138	0139		
0140	0141	0142	0143	0144	0145	0147	0148		
0150	0151	0152	0153	0154	0155	0156	0157	0158	0159
0160	0161	0162	0163	0164	0165	0166	0168	0169	
0170	0173	0174	0175	0176	0177	0178	0179		
0180	0182	0183	0184	0185	0189				
0190	0191	0192	0193	0194	0195	0196	0197	0198	0199
0230	0231								
0240	0241	0242	0243	0244	0245	0246	0247	0248	0249
0251	0253	0257	0258	0259					
0260	0265	0266							
0273	0274	0276	0279						
0280	0283	0289							
0290	0293	0295	0298	0299					
0322	0323								
0347	0348								
0350	0351	0352	0353						
0363	0364	0365	0366	0367	0368				
0373	0374	0375	0377	0378	0379				

APPENDIX: IC family and number

0382	0386	0390	0393	0395	0399				
0412	0425	0426							
0445	0447	0465	0466	0467	0468	0490	0518	0519	
0520	0521	0522	0533	0534	0539	0540	0541	0563	0573
0574	0576	0580	0620	0621	0622	0623	0638	0639	
0640	0641	0642	0643	0644	0645	0646	0647		
0652	0653	0668	0669	0670					
0682	0683	0684	0685	0688	0689				
0795	0796	0797	0798						
0804	0805	0808	0810	0811	0812				
0827	0832	0841	0874						
1000	1002	1003	1004	1005	1008	1011	1020		
1034	1035	1036							
1244	1245								

CMOS 40 Series :

0000	0001	0002	0006	0007	0008	0009			
0010	0011	0012	0013	0014	0015	0016	0017	0018	0019
0020	0021	0022	0023	0024	0025	0026	0027	0028	0029
0030	0032	0033	0035	0038					
0040	0041	0042	0043	0044	0048	0049			
0050	0051	0052	0053	0054	0055	0056			
0060	0063	0066	0067	0068	0069				
0070	0071	0072	0073	0075	0076	0077	0078	00H78	
0081	0082	0085	0086						
0093	0094	0095	0096	0097	0099				
0100	0101	0102	0103	0104	0106	0109	0110	0147	
0160	0161	0162	0163	0174	0175				
0181	0182	0192	0193	0194	0257				

CMOS 45 Series :

0001	0002	0003	0004	0006	0008				
0010	0011	0012	0013	0014	0015	0016	0017	0018	0019
0020	0022	0026	0027	0029	0032	0039			
0043	0051	0053	0055	0056	0060	0061	0066		
0072	0081	0084	0085						

DRAM 41 Series :

4144									
41256									
411000									
414000									

DRAM 44 Series :

44464	(41464)								
44256	(414256)								
441000	(4141000)								

LIMITED WARRANTY

This product is warranted against manufacturing defects in material and workmanship for one (1) year from the date of purchase. Within this period, MING will, at its option, repair or replace the product or any part thereof without charge for parts and labor. To exercise the warranty, the product and original invoice must be returned to MING, freight prepaid and insured.

This warranty does not apply in the following cases: Improper installation, misuse, failure to follow installation and operating instructions, alteration, abuse, accident, or tampering.

MING is not responsible or liable for indirect, special, or consequential damages arising out of or in connection with the use or performance of the product or other damage with respect to any economic loss, loss of property, loss of revenues or profit, or costs of removal, installation or reinstallation.

Except as provided herein, MING makes no express warranties, and any implied warranty of merchantability or fitness for a particular purpose is limited in its duration to the duration of the written limited warranties set forth herein.

There will be charges rendered/repairs to the product made after the expiration of the aforesaid six months warranty period.

This warranty gives you specific legal rights and you may have other rights which vary from state to state.



Genie™

EXPRESS HT-28

PORTABLE IC TESTER

INSTRUCTION MANUAL



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INTRODUCTION

Congratulations on your purchase of the DATA GENIE HT-28. This state-of-art device uses a new and unique technology known as "fuzzy logic" to test and identify logic TTL and CMOS IC's, as well as to test Dynamic RAM's. The HT-28 is small, portable, easy to use and can operate from battery power (4 each of "AA", not included) or from the included AC adaptor.

FUNCTION BUTTONS

TYPE: This button selects the IC family:

- (1) 74: TTL
- (2) 40: CMOS
- (3) 45: CMOS
- (4) 41: DRAM
- (5) 44: DRAM

UP: This button allows the selection of the previous IC number for that type. Example: if 7472 is displayed, pressing this button will go back up to 7470.

DOWN: This button allows the selection of the next IC number for that type. Example: if 7472 is displayed, pressing this button will go down to 7473.

SEARCH: This button is used for identifying unknown logic IC's, works with TTL and CMOS only.

ON/TEST: Turns IC TESTER on and starts self-test. Starts test for IC in socket.

TYPE & DOWN: By holding these two buttons down simultaneously you will turn the IC TESTER off. (The IC TESTER will also turn off automatically after 90 seconds of non-use to conserve power).

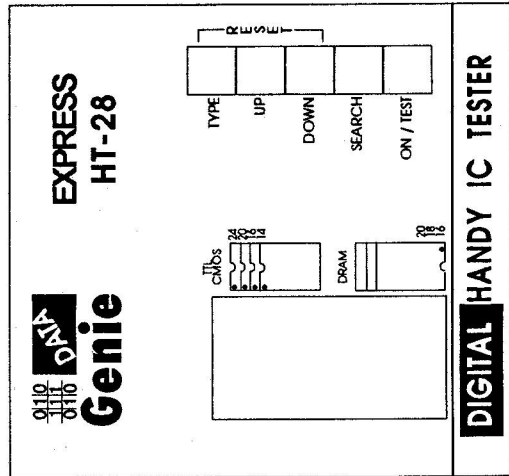


FIG 1

PREPARATION FOR USE

1. Install a set of four 1.5V AA alkaline batteries for power (not supplied) into the battery compartment. The battery compartment is on the underside of the IC TESTER.
2. The IC TESTER may also be powered from the AC adaptor provided (9VDC, 250mA), by plugging it into the "DC IN" jack located at the rear of the IC TESTER.
3. Press the ON/TEST button. This powers up the IC TESTER and starts the self-test function which completes in just a few seconds. The LCD will display the "version installed" - then a "SYSTEM CHECK" - then a "SYSTEM READY" - provided no error is detected.

NOTE: If an error occurs during SELF TEST, the LCD will display "SELF TEST ERROR" and the unit will automatically shut off in 45 seconds. By pressing the TYPE & DOWN buttons simultaneously, the IC TESTER will immediately turn off. (Turn IC TESTER off.)

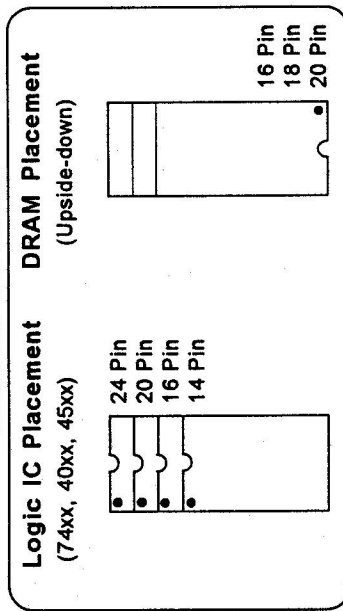
a.) Make sure there is sufficient power to the unit - check batteries.

b.) If using the AC adaptor, check to ensure that 9 volts are available - check connections.

c.) Remove your IC if installed, and check the test socket to ensure that no foreign objects have been trapped inside of it. Press the ON/TEST button to start the self-test function again.

d.) If the IC TESTER still fails to operate properly, return the unit to the dealer where purchased.

DO NOT ATTEMPT TO OPEN THE IC TESTER FOR REPAIR
***** THIS WILL VOID YOUR WARRANTY *****



Insert the IC into the socket and lower (close) the locking lever.

IMPORTANT !!

The Logic ICs are inserted into the socket with the notch facing up (top) and are placed as far down into the socket as possible (see FIG 2).

DRAMs are placed with the notch facing down (bottom) of the socket and as far down as possible (see FIG 2).

TEST PROCEDURE

For unknown logic TTL and CMOS IC's:
NOTE: This procedure will not work with DRAM's.

1. Open the test socket by raising the locking lever to the vertical position. Insert the logic IC into the test socket with the notch or dot indicates Pin 1, facing upwards, with the bottom IC pins inserted into the bottom row of the test socket (See Fig 2). IC's must be in proper position prior to placement with respect to direction, alignment and socket depth. Close the test socket by lowering locking lever to the horizontal position.
2. Press the ON/TEST button to turn on the IC TESTER, after the self-test is complete, the LCD will display the first match IC number. The display will appear as '(x) (IC number) find' - 'x' represents the IC family type:
(1) 74: TTL
(2) 40: CMOS
(3) 45: CMOS
3. Press the SEARCH button again - the next match if any will appear. If no match is found - "Not Found" will be displayed.

4. Press the TEST button:

- if the IC passes the test, the display will read "PASS".
- if the IC fails the test, the display will read "FAIL".

TEST PROCEDURE

For known logic TTL, CMOS & DRAM's:

1. Properly insert IC into the test socket with respect to direction, alignment and socket depth. Close the test socket by lowering locking lever to the horizontal position.
2. Press TYPE button until the expected IC family number appears on the LCD display. (This is the first two digits of the IC number). Supported IC families are:
(1) 74: TTL
(2) 40: CMOS
(3) 45: CMOS
(4) 41: DRAM
(5) 44: DRAM
3. Press DOWN or UP button to find the IC number of the selected IC family. (SEARCH button can also be used for TTL & CMOS IC's)
4. Press TEST button:
-if the IC passes the test, the display will read "PASS".
-if the IC fails the test, the display will read "FAIL".
5. A message of "EMPTY" indicates that the test socket does not have an IC inserted into it or the locking lever has been left in the open