Electronic Training Equipment & Breadboard / Accessories



Digital-Analog Training System ETS-7000A





1. Solderless breadboard: AD-222

Interconnected with 2712 tie points nickel plated contact, fits all components with DIP sizes and solid wire AWG #22-30(0.3 ~ 0.8mm). It can be changed and replaced for different purpose and can be connected with demonstration panel.

Therefore, it is very convenient for both teachers and students.

- 2. DC power supply:
 - (1) Fixed DC output : +5V±10%, 1A.
 - (2) Fixed DC output : -5V ±10%, 300mA.
 - (3) Variable DC output : 0V~+15V±10%, 500mA.
- (4) Variable DC output : 0V ~ -15V ±10%, 500mA.
- 3. Potentiometers :
 - (1) Variable resistor VR1 = 1 K Ω (B)
 - (2) Variable resistor VR2 = 100KΩ (B)
- 4. Function generator
 - (1) Frequency ranges: 0.1 Hz~2 Hz (6 ranges) 1 Hz~20 Hz

10 Hz ~ 200 Hz 100 Hz ~ 2K Hz

1KHz~20KHz 10KHz~200KHz

(2) Amplitude Sine wave output : 0~5Vpp±10% variable
Triangle wave output : 0~5Vpp±10% variable

Square wave output : 0~15Vpp±10% variable TTL mode output : +5V±10%

5. Universal counter

- (1) Frequency range: 1Hz~99.99999MHz; 10Hz~100.00000MHz
- (2) Period range TH&TL: 0.01µs ~ 999999.99µs;

1μs ~ 99999999μs

- (3) Input signal: TTL or CMOS level or any level (Vmin≥+2.3Vp±10%)
- (4) Display: 8-digital 7-segment LED display
- (5) Counter switch : External/internal
- Eight bits data switches :

When toggle switch is set at "down" position, the output is LO level; on the contrary, it will be HI level while setting at "up" position.

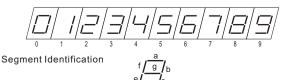
7. Speaker

 $2\frac{1}{4}$ inch diameter, $8\Omega/0.25W$ to be used for load

8. Four channel adaptor:

Both the two banana sockets' and two BNC jacks' point tips are changeable. They are suitable to connect ETS-7000A with peripherals.

- 9. Two digits of segment LED display:
 - Output display
 - Numerical designs and resultant displays





Reserve Fixed Holder

It's available for various connectors.



Expansion Features

It can perform computer interface experiments by matching universal connector.

Truth tables

Decimal	Inputs				Outputs						
Function	D	С	В	Α	а	b	С	d	е	f	g
0	L	L	L	L H	H	H	H	H L	H L	H L	L
2 3	L	L L	H	L H	H	H	L H	H	H L	L L	H
4 5	L L	H	L L	L H	L H	H L	H	L H	L L	H	H
6 7	L L	H	H	L H	L H	L H	H	H L	H L	H L	H L
8 9	H H	L L	L L	L H	H H	H	H	H L	H L	H	H H
10 11	H H	L L	H	L H	L L	L L	L L	L L	L L	L L	L L
12 13	H	H	L L	L H	L L	L L	L L	L L	L L	L L	L L
14 15	H H	H	H	L H	L L	L L	L L	L L	L L	L L	L L

10. Two pulse switch (with 2 sets of output: A, A, B, B):

2 pcs of push-buttons contain switches debouncer for eliminating the bounce caused by switch from "open" to "close" or from "close" to "open" position.

11. 8 bits LED display:

Eight red LED's separate input terminals. The LED will be lighted up when input is at "HI level", and it will be turned off when it is at no input or at "LO level".

12. Universal connector fixed holder:

It reserves universal connector fixed holder on the panel in order to be connected with various universal connectors as follows: Standard accessory:

UC-06 Centronic connector

Optional accessories:

UC-01: Card edge connector 2.54 mm 62pin

UC-02: RS-232 connector 25pin D sub connector, male & female

UC-03 : Straight header 60pin

UC-04 : Card edge connector 3.96 mm 56pin

- 13. Other standard accessories:
 - Power cord
 - Pin : 6pcs
 - User manual
- 14. Dimensions: 325 x 250 x 95 mm (L x W x H)
- 15. Weight: 4.3kg