BASIC ELECTRONICS CIRCUITS

Model: BEC-101100

I. FEATURES

1. THIS DEVICE INCLUDES SOME BASIC EXPERIMENT UNITS AND CAN BE EXPANDED TO THE ADVANCED SYSTEM. MODULAR DESIGN MAKES IT EASY TO USE AND MAINTAIN.
2. EACH EXPERIMENT UNIT CONSISTS OF SEVERAL MODULE BOARDS. ALL INPUT AND OUTPUT SIGNALS, CONTROL FLOWS AND WIRINGS ARE SHOWN ON THE MODULE BOARDS.
3. CIRCUIT DIAGRAMS AND/OR BLOCK DIAGRAMS, ARE SILKSCREENPRINTED ON THE MODULE BOARD.
4. ALL THE TEST POINTS AND CONNECTION TERMINALS ARE BROUGHT OUT ON THE FRONT FOR EASY ACCESS AND MEASUREMENT,
5. CONNECTION TERMINALS ARE STANDARD .16"/4MM DIAMETER JACKS.
6. MAIN PANEL FRAME (STAND) IS MOLDED, SPECIALLY TREATED AND PAINTED FOR LONG-LASTING.

II. EXPERIMENTS

1. HALF-WAVE AND FULL-WAVE RECTIFIER FILTER CIRCUIT
2. CONSTANT-VOLTAGE POWER SUPPLY
3. CHOPPER CIRCUIT
4. CLAMPING CIRCUIT
5. TRANSISTOR AND FET SWITCHING CIRCUIT
6. TRANSISTOR BIAS AND AMPLIFIER CIRCUIT
7. CASCADE AMPLIFIER
8. DARLINGTON AMPLIFIER
9. ZENER DIODE
10. VARIABLE VOLTAGE STABILIZING CIRCUIT
11. SINGLE TERMINAL INPUT, SINGLE/DUAL TERMINAL OUTPUT DIFFERENTIAL AMPLIFIER
12. DUAL TERMINAL INPUT, SINGLE/DUAL TERMINAL OUTPUT DIFFERENTIAL AMPLIFIER
13. OTL AMPLIFIER CIRCUIT

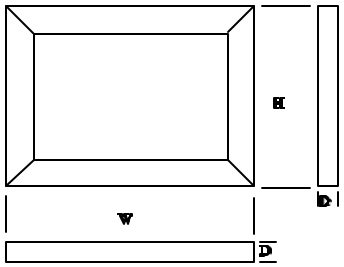
III. SPECIFICATION

A. MAIN PANEL FRAME

SIZE: 31"(W) X 34.6"(H) X 15.7"(D).
MATERIAL: STEEL FRAME AND ALUMINUM RACK.

B. MODULE BOARD

1. USING COMBINATION OF SMALL COMPONENT AND MODULE BOARDS FOR EXPERIMENTS.
2. BOARD SIZE: Type-A: 80mm x 150mm, FIBER OPTIC; Type-B:160mm x 160mm, FIBER OPTIC; Type-C: 300mm x 200mm, FIBER OPTIC; Type-M: 13.4"/.34mm (W) X 9.45"/.24mm(H) X 1.9"/.048mm (D)., PLASTIC EXTRUSION.
3. MAGNETIC PINS: 30MM X 10MM DIAMETER, 20 PIECES. THEY



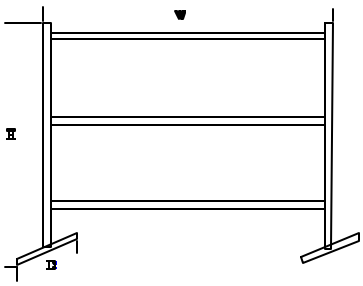
ARE USED WITH TYPE-A, TYPE-B, AND TYPE-C MODULE BOARDS TO ATTACH TO THE WHITE DEMO BOARD.

C. CONNECTION WIRES

1. EXTRUDED HERMAPHRODITIC BANANA PLUGS, STANDARD 1.6"/4mm DIAMETER.
2. TOTAL 30 WIRES OF LENGTH 7.9"/.2M, 31.5"/.8M AND 59"/1.5M.

D. COMPONENTS

1. FUNCTION GENERATOR/COUNTER:
   a). WAVEFORM: SINE, TRIANGLE, SQUARE, AND PULSE.



b). FREQUENCY RANGE: 2Hz - 200KHz.
c). ADJUSTMENT: 5-RANGE COARSE AND 1 FINE.
d). DUTY CYCLE ADJUSTABLE ON (PULSE) KNOB.
e). ATTENUATION: ADJUMENT,COURSE 0~20 dB AND FINE.
f). DIGITAL FREQUENCY COUNTER: 4-DIGIT, LED DISPLAY.

2. DUAL DC POWER SUPPLY: 0~30V CONTINUOUS VARIABLE, 1A.
3. DC POWER SUPPLY: +/- 12V, + 5V, 2A.
4. ANALOG MULTIMETER MODULE, x1B.
5. WIRE CONNECTION MODULE, x2A.
6. RESISTOR MODULE, x2A.
7. CAPACITOR MODULE, x2A.
8. VARIABLE RESISTOR MODULE, x2A.
9. NPN MODULE, x1B.
10. RELAY MODULE, x1A.
11. LED DISPLAY MODULE, x1A.
12. DIODE MODULE, x1A.
13. FET MODULE, x1B.
14. PNP TRANSISTOR MODULE, x1B.
15. ZENER MODULE, x1A.
16. OTL AMPLIFIER MODULE, x1M.
17. PULSE TRANSFORMER MODULE, x1B.

F. EXPERIMENT MANUAL
ENGLISH, COPYRIGHTED IN USA.

G. POWER:
AC 110V/220V +/- 10%, 60/50Hz.

IV. ACCESSORIES

A. CONNECTION WIRES
1. EXTRUDED HERMAPHRODITIC BANANA PLUGS, STANDARD 1.6"/4mm DIAMETER.
2. TOTAL 30 WIRES OF LENGTH 7.9"/.2M, 31.5"/.8M AND 59"/1.5M.

B. EXPERIMENT MANUAL
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Specification is subject to change without prior notice.

SEC Sun Equipment Corporation
P.O. Box 97903 Raleigh, NC 27624-7903 U.S.A.
Tel: (919)881-2141/(919)870-1955 Fax: (919)870-5720