Key Features:
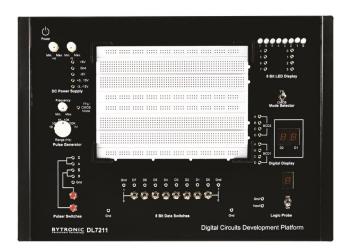
- Solderless Breadboard
- On Board DC Power supply
- On Board Pulse Generator with TTL/CMOS mode
- Pulser switches, 8 bit data switches
- Bicolor LED display
- BCD to Seven Segment Display
- CMOS/TTL outputs
- Functional blocks indicated on board mimic

The DL7211 is designed for experimentation with digital circuits. It is a self-contained trainer including DC power supplies, function generator, modulation generator, continuity tester, potentiometers and toggle switches. A breadboard is supplied with the unit to allow easy access for the students to connect and test various components without the hassle of soldering. A number of ready to use experiment circuit boards are available and fourteen boards are provided with the lab.

Experiment Boards

- Logic Gates: AND, OR, NAND, NOR and EX-OR
- Universal Gate – NAND/NOR Gate: NOT, AND, OR Gate Implementation
- EX-OR Gate Implementation
- Demorgan's Theorem
- EX-OR Gate Application: Odd and Even Parity Generator, Binary word comparator
- Code Conversion: Binary to Gray and Gray to Binary
- Code Conversion: BCD to Excess-3 Code
- Binary Adder/Subtractor: 2 Bit Binary Half Adder, 3 Bit Binary Full Adder, 2 Bit Binary Half Subtractor, 2 Bit Binary Parallel Adder
- Encoder/Decoder: 8 to 3 Line Encoder, 3 to 8 Line Decoder
- Multiplexer/Demultiplexer: 4 to 1 Line Multiplexer, 1 to 4 Line Demultiplexer
- Flip-Flops: R-S, D, J-K, T Flip-Flops
- Shift Register: 4 Bit Serial In – Parallel Out
- 4 Bit Synchronous Binary Counter: Up Counter
- 4 Bit Binary Ripple Counter: UP/DOWN Counter

Specification

DC Power Supply	+5V-1A, 5V 500mA, 3V-15V 500mA(variable) -3V-15V, 500 mA (variable)
Pulse Generator Frequency range	1 Hz to 1 MHz in 6 steps. Variable in between steps.
Amplitude	3V-15V(CMOS), 5 V (TTL)
Duty cycle	50 %. TTL/CMOS Output
Pulser Switches	2 Nos. (Push to On)
Data switches	8 Nos. (Toggle switches for both TTL&CMOS)
LED display	8 Nos. (TTL/CMOS Mode)
Seven Segment Display	2 Nos.
Logic Probe	Logic level indicator for TTL/CMOS.
Breadboard	172.5 mm x 128.5 mm
Approximate Dimensions	W326, D252, H52
Approximate Weight	3 kgs. (Approx).
Power Supply Requirements	110-220V, + 10%, 50/60 Hz

Experiment Boards

Ready to use circuit boards:

1. Logic Gates
2. Universal Gate-NAND/NOR Gate
3. EX-OR Gate Implementation
4. Demorgan's Theorem
5. EX-OR Gate Application
6. Code Conversion (Binary to Gray and Gray to Binary)
7. Code Conversion (BCD to Excess 3 Code)
8. Binary Adder - Subtractor
9. Encoder – Decoder
10. Multiplexer – Demultiplexer
11. Flip-Flops (R-S, J-K, T)
12. Shift Register (4 Bit, SIPO)
13. 4 Bit Binary Ripple Counter (Up-Down)
14. 4 Bit Synchronous Binary Counter

Ordering Information

Model Number: **DL7211**

Consists of: DL7211 Base Board
Manual
Patch Cables
14 x Experiment Boards including Experimental Manuals

Notes.
1. Specification is subject to change without notice.
2. All dimensions are in mm unless otherwise stated
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