

Global Specialties is proud to introduce its revolutionary family of integrated digital logic trainers. The family consists of 3 models covering all levels of digital logic instruction. The DL-010 Combinational Logic Trainer, teaches the initial concepts of AND, OR, and XOR gates. The DL-020 Sequential Logic Trainer introduces the concept of conditional feedback includes D Flip-flop, NAND gates, and 4-to-1 Multiplexer. Lastly, the DL-030 Microprocessor Trainer utilizes an FPGA chip allowing a user to fully implement a functioning microcontroller in minutes.

Our logic trainers simplify the teaching process by eliminate the need to discretely wire IC's as all components are pre-mounted, de-coupled and de-bounced, ready for immediate classroom use. Most importantly each trainer includes training manual featuring overviews of digital logic and over 60 corresponding hands-on exercises enhancing any existing textbook currently in use.

The trainers are packaged in sturdy blow-molded cases and complete with power supply and machined pin hookup wires.



DL-010



**Combinational Logic Trainer
DL-010**



**Sequential Logic Trainer
DL-020**



**Microprocessor Trainer
DL-030**

Features	DL-010	DL-020	DL-030
NOT gates	12	12	-
2-Input AND gate	12	12	-
4-Input AND gate	8	8	-
2-Input OR gate	8	8	-
4-Input OR gate	8	8	-
2-Input XOR gate	12	12	-
2-Input NAND gate	-	8	-
D Flip-flop	-	4	-
4-to-1 Multiplexer	-	4	-
Altera Cyclone III FPGA	-	-	16k LE
LEDs	8	8	16
7-Segment LED display	1	1	3
Slide switch	8	8	16
Push Button switch	1	2	3
1 Hz / 20 Hz clock	-	1	-
8 pin General Purpose I/O	-	-	✓
270 tie point Bread Board	✓	✓	✓
Vcc & GND tie points	✓	✓	✓
USB Interface	-	-	✓
Hook up wire 100 pcs	✓	✓	✓
9 V Power Supply	✓	✓	-
DL Manual	✓	✓	✓