

Specifications

Circuit elements	AND, OR, NOT, NAND, NOR, Exclusive OR, R-S FF, J-K, half-shift register, [0] and [1] LED indicator (10 digits)
Signal sources	1 kHz square wave, about 5 Vp-p; 10 Hz square wave, about 5 Vp-p; reset pulse 0 V to +5 V; one-shot clock pulse, about 4 Vp-p, 0.3 μs
Power supply	AC 100/110/117/200/220/234 V, 50/60 Hz, 10 W
Size and weight	570 (W) X 400 (H) X 80 (L) mm, 7.5 kg
Operating temperature	0° to 50°C, 90% RH

ITF-02

Logic Circuit Training Kit

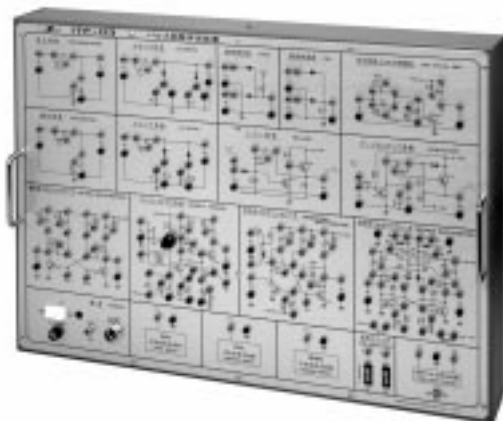
The ITF-02 is provided with circuit elements, signal sources and an indicator on its panel to promote visual learning, from the foundation to practical applications of logic circuits.

Characteristics:

- Each circuit element is indicated graphically on the panel for easy understanding.
- The level of input/output is indicated as [0] or [1] on the LED on the panel.
- Each circuit element has input/output terminals, allowing for numerous combinations of connections between circuit elements.
- Many circuit elements are provided (45 gates, 10 flip flops) to meet all requirements.
- Because signal sources are built-in, most training exercises can be performed without an external generator.

Learning items:

- Basic operation of AND, OR, NOT, NAND, NOR and Exclusive OR
- Assembly and operation of half adders and full adders
- Assembly and operation of encoders and decoders
- Basic operation of R-S and J-K flip flops
- Basic operation of shift registers and other applications



Specifications

Circuit elements	13 kinds (differentiation, integration, clamp, clip, AND, OR, NOT, Miller, bootstrap, mono-stable multi-vibrator, astable multi-vibrator, bistable multi-vibrator, Schmitt trigger)
Signal sources	1 kHz square wave, about 10 Vp-p; 1 kHz sine wave, about 10 Vp-p; 100 Hz square wave, about 10 Vp-p
Power supply	AC 100/110/117/200/220/234 V, 50/60 Hz, 20 W or less
Size and weight	570 (W) X 400 (H) X 80 (L) mm, 7 kg
Operating temperature	0° to 50°C, 90% RH

ITF-03

Pulse Circuit Training Kit

The ITF-03 is provided with circuit elements and signal sources on its panel to promote visual learning, from the foundation to practical applications of pulse circuits.

Characteristics:

- Each circuit element is indicated graphically on the panel for easy understanding.
- Constants can be designed and connected by students, allowing them to compare standard operation with operation changed by the new constant, facilitating easier understanding of applications.
- Each circuit element has input/output terminals, allowing for numerous combinations of connections between circuit elements.
- Many circuit elements are provided (13 kinds) to meet all requirements.
- Because signal sources are built-in, most training exercises can be performed without an external generator.

Learning items:

- Differentiation circuits and integration circuits
- Clip circuits and clamp circuits
- Logic circuits (AND, OR and NOT)
- Miller circuits and bootstrap circuits
- Multi-vibrators (mono-stable, astable, bistable and Schmitt trigger)