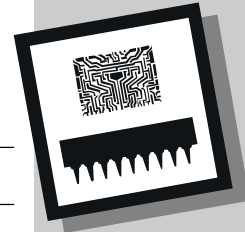
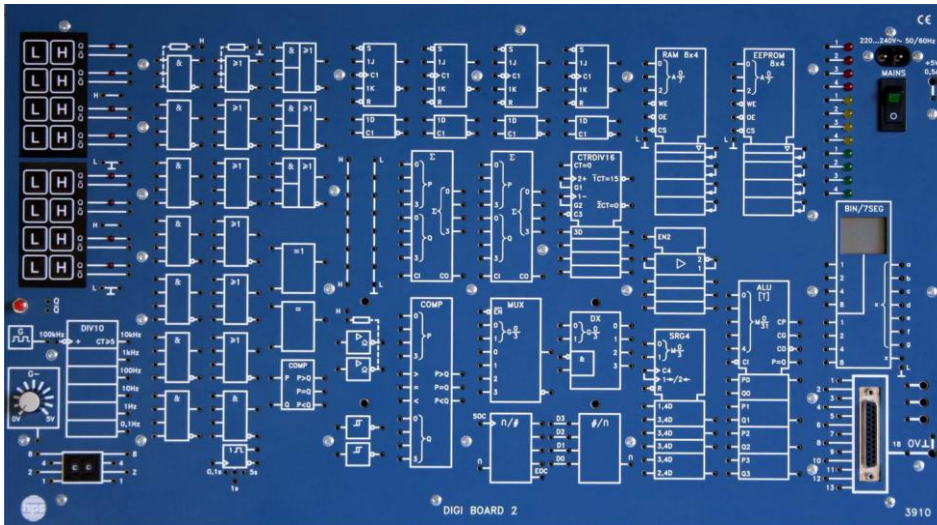


Digital Technology / Microcomputer Technology



DIGI BOARD 2

Type 3910



DIGI BOARD 2 (Type 3910)

- Universal training and exercise unit for fundamental digital technology/microcomputer technology
- The DIGI BOARD 2 contains all function groups and the power supply for fast experiment setup
- Can be used as a desktop, demonstration or portable training unit
- Individual expansion possibilities
- With an adapter for connection to a computer

The DIGI BOARD 2 has been developed for the instruction and detailed study of fundamental digital technology, non-contact control engineering and microcomputer technology.

All the function groups required for conducting experiments in digital technology are integrated in the DIGI BOARD 2 and supplied with power by a built-in power supply unit.

The individual function groups are connected in 2 mm connection technique.

The DIGI BOARD 2 can be set up as a desktop unit for conducting experiments or suspended in a rack for demonstration purposes.

The DIGI BOARD 2 can be converted into a portable training unit by simply screwing it into a Box. All the experiments can be conducted directly in the Box. Dust-free storage and protection against transport damages are further advantages of the Box version.

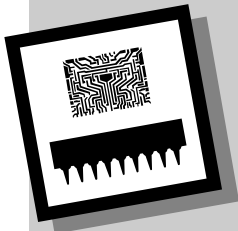
The experiment manual „Experiments in Digital Tech-

nology" (Type V 0160) is offered together with the DIGI BOARD 2.

This manual contains detailed experiment instructions with problems and solutions section.

Function Groups of the DIGI BOARD 2

- 2 input keyboards with 4 pairs of keys (L/H) each
- Clock generator with divider, TTL level, crystal-controlled
- DC signal source 0...5 V/ 10 mA
- Hexadecimal/dual coding switch (double)
- LED display, divided into 3 groups with the colours red, yellow, green
- HIGH/LOW, for tapping HIGH, LOW states
- 7-segment display (2-digit), with decoder: dual/7-segment
- Adapter (2 mm jacks/ SUB-D socket), for adapting 2 mm jacks to SUB-D connector (25-pin), pins 1...13 and 18 assigned
- 8 AND gates, with pull-up Resistors, one gate is disconnectable
- 6 OR gates, with pull-down Resistors, one gate is disconnectable
- 3 AND/OR combi-gates
- 1-bit comparator



DIGI BOARD 2

Type 3910

- 4-bit comparator
- 4 JK-flipflops, can also be used as RS flipflops
- 4 D-flipflops
- 2 adders (4-bit), with input and output carry
- Monoflop, settable times: 0.1 s; 1 s; 5 s
- Multiplexer, 4 channels
- Demultiplexer, 4 channels
- Shift register (4-bit), parallel and serial operation possible, bidirectional
- ALU, for conducting 16 arithmetic and 16 logical computing operations with 4-bit dual numbers
- Binary counter (4-bit), up/down counter
- 2 inverters with open collector (pull-up resistors can be connected)
- 2 Schmitt triggers, inverting
- Units complements for negating a 4-bit binary number
- Antivalence and equivalence gates
- RAM 8x4, static RAM, 8 addresses, 4 bits data width

- EEPROM 8x4, storage time without power supply approx. 1 hour
- AD / DA converter (4-bit)
- Two slots for expanding a circuit with additional plug-in modules

Recommended Accessories

- Experiment manual: „Experiments in Digital Technology“ (Type V 0160) with problems and solutions section for the following subjects:
 - Basic logical circuits
 - Schmitt triggers
 - Bistable flipflops
 - Monostable flipflops
 - Code converters, coders
 - Computing circuits
 - Counting circuits
 - Register circuits
 - Multiplex mode
 - ALU
 - Memory circuits
 - Analog-digital converter, digital-analog converter
- Set of Accessories (Type 3910.1), comprising 2 mm connecting leads (60 in all)

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Expansion Possibilities

The components listed below are used for setting up experiments above and beyond those described in the experiment manual „Experiments in Digital Technology“ (Type V 0160).

- IC BOARD (Type 3530)
- IC Socket, dual-in-line (Type 9156)
- IC Socket, 20-pin (Type 9156.2)
- IC Socket, 28-pin (Type 9156.3)
- Assembly kit comprising:
 - Empty Housings (Type 9152.7)
 - Universal PCB, with dot grid (Type 9167)
 - Universal PCB, with line grid (Type 9167.1)
 - Jacks (Type 9168), Stickers (Type 9162.5-6)

Technical Data

Mains connection

- Voltages (via LE connector): 230 V AC / 115 V (110 V) AC; 30 VA; 50 ... 60 Hz

Integrated power supply for additional plug-in modules

5 V DC/max. 1 A; the power is supplied via the plugs in the base of the modules.

DC voltage source +5 V / 0.5 A

For connecting external equipment

IC components

All IC components are inserted in sockets.

Mechanical design

The front panel of the DIGI BOARD 2 is made of 5 mm thick Laminate, matt blue in colour with white engraving representing the built-in function groups.

The rear of the DIGI BOARD 2 is protected with a grey plastic cover. Its shape allows the Board to be placed at an ergonomically favourable angle for example on a table.

Dimensions and weights

- Board version, Type 3910: 532 x 297 x 95 mm (w x h x d); weight: 3.5 kg
- Box version, Type 3910 and Type 3910.20: 580 x 450 x 155 mm; weight: 7.5 kg

Subject to technical modifications.