

Electrical automation

XK-PLC6 programmable controller training sets

Products overview:

project	content
product structure:	modular desktop structure, hanging box replacement convenient, easy to organize various training project, expand and upgrade are convenient.
main parameters:	size 1700 mm x 700 mm x 1500 mm; The power supply: the three-phase AC380V, power < 500 VA, weight: 120kg
main components:	training platform, power control panel, PLC unit, simulation load unit (2 units), stainless steel net board, electrical components, three-phase asynchronous motor, computer (optional, not contain) etc. (PLC can choose Siemens, Mitsubishi, Schneider, Omron, AB and other brands of products)
main functions:	can finish PLC commonly used programming instructions learning and training, PLC typical application project training, PLC control car linear motion project training, PLC control three-phase asynchronous motor running project training. Have a safety protection function.
annex:	experimental jump line, commonly used tools, software disc, the product specification.



Training Projects:

- 1) PLC basic instruction practice training
- 2) PLC project training
- 1) Beacon lights twinkle circle
- 2) Eight-bit code display to show numbers
- 3) Automatic mail sorting
- 4) Automatic cistern water level control
- 5) Tool Choice control of machining center
- 6) Automatic immixture of multi kinds of liquid control

- 7) Automatic mo(u)lding machine
- 8) Automatic assembly line control
- 9) Automatic rolling mill control
- 10) Traffic lights control
- 11) Manipulator motion control
- 12) Automatic material transport and beladung f control
- 13) PLC control of motor running/stopping
- 14) PLC control of motor jogging selflocking
- 15) PLC control of motor forward/reversao rotation
- 16) PLC control of motor Y-□ start.
- 17) PLC control of step motor

XK-PLC8 programmable controller training sets

Products overview:

project	content
product structure:	adopt modular desktop structure, hanging box replacement convenient, easy to organize various training project, expand and upgrade are convenient.
main parameters:	size 1700 mm x 700 mm x 1500 mm; The power supply: single phase AC220V, power < 500 VA.
main components:	training platform, power control panel, PLC unit, simulation load unit (2 units), computer (optional) composition. (PLC can choose Siemens, Mitsubishi, Schneider, Omron, AB and other brands of products)
main functions:	can finish PLC commonly used programming instructions learning and training, PLC typical application project training. Have a safety protection function.
annex:	experimental jump line, commonly used tools, software disc, the product specification.



Training Projects:

- 1) PLC basic instruction practice training
- 2) Beacon lights twinkle circle
- 3) Eight-bit code display to show numbers
- 4) Automatic mail sorting control
- 5) Automatic mill rolling control
- 6) Automatic cistern water level control
- 7) Automatic immixture of multi kinds of liquid control
- 8) Automatic mo(u)lding machine
- 9) Traffic lights control
- 10) Manipulator motion control
- 11) Automatic assembly line control
- 12) Tool Choice control of machining center
- 13) Automatic material transport and beladung f control



Electrical automation

■ XK-DQZN4 industrial automation integrated training sets

● Products overview:

project	content
product structure:	adopt modular desktop structure, hanging box replacement convenient, easy to organize various training project, expand the upgrade is convenient.
main parameters:	size 1700 mm x 700 mm x 1500 mm; The power supply: the three-phase AC380V, power < 500 VA. weight:120kg
main components:	training platform, power control panel, PLC unit, frequency converter unit, touch screen unit, simulation load unit (2 units), stainless steel training net board, electrical components, three-phase asynchronous motor, etc.(PLC can choose Siemens, mitsubishi, schneider, omron, AB and other brands of products)
main functions:	can finish PLC commonly used programming instructions learning and training, PLC typical application project training, frequency converter application training, touch screen application training, PLC and frequency inverter comprehensive application training, PLC and touch screen comprehensive application training, PLC, frequency converter and touch screen comprehensive application training. Have a safety protection function.
annex:	experimental jump line, commonly used tools, software disc, the product specification.



● Training Projects:

1. PLC project training
 - 1) PLC basic instruction practice training
 - 2) Beacon lights twinkle circle
 - 3) Eight-bit code (LED) display to show numbers
 - 4) Automatic mail sorting control
 - 5) Automatic rolling mill control
 - 6) Automatic cistern water level control
 - 7) Automatic immixture of multi kinds of liquid control
 - 8) Automatic mo(u)lding machine
 - 9) Traffic lights control
 - 10) Manipulator action control
 - 11) Automatic assembly line control
 - 12) Tool Choice control of machining center
 - 13) Automatic material transport and beladung f control

2. Typical motor control practice training project
 - 1) PLC control of motor running/stopping.
 - 2) PLC control of motor jogging and self-locking.
 - 3) PLC control of motor forward/reversal rotation.
 - 4) PLC control of motor Y-□ start.
3. Frequency converter practice training
 - 1) Converter controlled by operation panel.
 - 2) Jogging run experiment
 - 3) Running controlled based on outer potentiometer
 - 4) Running controlled by outer voltage.
 - 5) Analog export detection experiment.
 - 6) Digital export detection experiment.
 - 7) Multi-step speed control experiment.
 - 8) PLC control of running experiment.
4. Touch screen practice training
 - 1) Acquaintance and software programming.
 - 2) Comprehensive practice with PLC
 - 3) Comprehensive practice with PLC and frequency converter.

■ XK-DQZN6 industrial automation integrated training sets

● Products overview:

project	content
product structure:	adopt modular desktop structure, hanging box replacement convenient, easy to organize various training project, expand and upgrade are convenient.
main parameters:	size 1700 mm x 700 mm x 1500 mm; The power supply: the three-phase AC380V, power < 500 VA.weight:120kg
main composition:	training platform, power control panel, PLC unit, inverter unit, touch screen unit,simulation load unit (2 units), linear motion control unit,two pump frequency constant pressure water supply training model, stainless steel net board, electrical components, three-phase asynchronous motor, computer (optional) etc.(PLC can choose Siemens, mitsubishi, schneider, omron, AB and other brands of products)
main functions:	can finish PLC commonly used programming instructions learning and training, PLC typical application project training, inverter application training, touch screen application training, PLC and inverter comprehensive application training, PLC and touch screen comprehensive application training, PLC,intever and touch screen comprehensive application training, PLC control linear motion training, PLC, inverter, touch screen control double pump conversi on constant pressure water supply training. Have a safety protection function.
annex:	experimental jump line, commonly used tools, software disc, the product specification.



● Training Projects:

1. PLC project training
 - 1) PLC basic instruction practice training
 - 2) Beacon lights twinkle circle
 - 3) Eight-bit code (LED) display to show numbers
 - 4) Automatic mail sorting
 - 5) Automatic rolling mill control
 - 6) Automatic cistern water level control
 - 7) Automatic immixture of multi kinds of liquid control
 - 8) Automatic mo(u)lding machine
 - 9) Traffic lights control
 - 10)Manipulator action control
 - 11) Automatic assembly line control
 - 12) Tool Choice control of machining center
 - 13) Automatic material transport and beladung f control

- 14) Proximity switch, photoelectric sensor, and Hall Switch acquaintance and practice (real objects)
- 15) Direction control when linear motion dolly moves between five places. (real objects)
- 16) Material automatic supply dolly circularly moves between three places. (real objects)
- 17) Frequency conversion constant pressure water supply project controlled by two pumps. (real objects)
2. Typical motor control practice training project
 - 1) PLC control of motor running/stopping.
 - 2) PLC control of motor jogging and self-locking.
 - 3) PLC control of motor forward/reversal rotation.
 - 4) PLC control of motor Y-□ start.
3. Frequency converter practice training
 - 1) Converter controlled by operation panel.
 - 2) Jogging run experiment
 - 3) Running controlled based on outer potentiometer
 - 4) Running controlled by outer voltage.
 - 5) Analog export detection experiment.
 - 6) Digital export detection experiment.
 - 7) Multi-step speed control experiment.
 - 8) PLC control of running experiment.
4. Touch screen practice training
 - 1) Acquaintance and software programming.
 - 2) Comprehensive practice with PLC
 - 3) Comprehensive practice with PLC and frequency converter.

Electrical automation

XK-PLCSX programmable controller training sets

Products overview:

project	content
product structure:	adopt modular desktop structure, hanging box replacement convenient, easy to organize various training project, expand and upgrade are convenient.
main parameters:	size 1700 mm x 700 mm x 1500 mm; The power supply: single phase AC220V, power < 500 VA, weight:150kg
main components:	training platform, power control panel, PLC hanging box, PLC physical model hanging box (state instructions and tennis game experiment hanging box, traffic lights, light of high tower, dial the code salver digital pipe experiment hanging box, multistage belt conveyor, material sorting experiment, mixing material can hang box, linear motion model control experiment hang box, robot control experiment hanging box, four layers elevator control experiments hanging box, total 7), computer (optional) composition.(PLC can choose Siemens, mitsubishi, schneider, omron, AB and other brands of products)
main functions:	can finish PLC commonly used programming instructions learning and training, PLC typical application project training Have a safety protection function.
annex:	experimental jump line, commonly used tools, software disc, the product specification.



Training Projects:

1. XK-JP-1 status instruction and table-tennis match experiment hung box
 - 1) state of instruction practice experiments
 - 2) simulation of table tennis
2. XK-JP-2 traffic lights, the Light of the Sky Tower, DIP disk digital tube experiments hanging box
 - 1) traffic lights to control experiments
 - 2) Tower optical experiments
 - 3) DIP disk digital tube experiment
3. XK-JP-3 multi-stage conveyor belt, material sorting experiments hanging box
 - 1) multi-stage belt control experiments
 - 2) material sorting experiments
4. XK-JP-4 mixing tank experiments hanging box

This device can practice the use of the timer instruction, learning according to the control timing diagram programming.
5. XK-JP-5 linear motion model control experiments hanging box
 - 1) DC motor control experiment
 - 2) stepper motor control experiment
6. XK-JP-6 robot control experiments hanging box

Model to do manual, automatic, single-step, multi-step, integrated a number of experiments to practice high-speed counter, timing counter usage, familiar with the four arithmetic instructions, send instructions, high-speed counter instructions.
7. XK-JP-7 musical fountain hanging box control experiments

The built-in micro-speakers may issue the appropriate tone and 1-i port, you can use the program to play simple music.
8. XK-JP-8 four-story elevator control experiments hanging box

Two car lift and the elevator door switch control, and can be

combined to experiment.

9. XK-JP-9 rotary motion control experiments hanging box

This experimental area will be to develop a number of experiments of the switch, analog, pulse, enabling the students to a more comprehensive understanding and knowledge of the similarities and differences of the signal and its control method, PLC programming and parameter setting.

10. XK-JP-10 generator - motor group, temperature control experiments hanging box

1) analog closed-loop control experiment.

2) analog PID control experiment, the interference experiment.

11. XK-JP-11 level control experiments hanging box

This experimental box can switch, analog, pulse volume, the number of experiments. Experimental content and actual production in close contact, so that students can more deeply understand and master PLC programming, debugging techniques, parameter settings, and analog measuring, regulating and PID control method.

12. XK-JP-13 six-model experiments hanging box A

Can be achieved from the basic logic instructions to the instruction of a variety of applications programming, the experiment is rich in content, suitable from entry to Proficient in the different stages of experiment.

13. XK-JP-14 six model experiment hung Box B

Can be achieved from the basic logic instructions to the instruction of a variety of applications programming, including the switch, pulse, analog, suitable from entry-versed in the different stages of experiment.

14. XK-JP-15 six model experiments hanging box C

1) Motion control experiment

2) mixing tank experiments

3) the material conveying line experiment

4) Tower optical experiments

5) stepper motor control experiment

6) traffic lights experiment

15. XK-JP-16 five-factor model experiments hanging box A

Switch, analog, pulse volume, the number of experiments. Experimental content and actual production in close contact, so that students can more deeply understand and master PLC programming, debugging techniques, parameter settings, and analog measuring, regulating and PID control method.

XK-GCZD2 industrial automation training cabinet (virtual load)

Products overview:

project	content
product structure:	adopt nets board type training cabinet structure, easy to organize various training programs.
main parameters:	size 700 mm x 1800 mm x 450 mm; The power supply: the three-phase AC380V, power < 500 VA, weight:70kg
main components:	training cabinet, nets orifice plate, power control panel, PLC, inveter, electrical components, three-phase asynchronous motor, computer (optional) etc.(PLC can choose Siemens, mitsubishi, schneider, omron, AB and other brands of products)
main functions:	can finish PLC commonly used programming instructions learning and training, frequency converter application training, typical motor control training, typical lighting distribution electricity training, typical machine circuit training, typical relay contact device control PLC reconstruction project. Have a safety protection function.
annex:	experimental jump line, commonly used tools, software disc, the product specification.



Training Projects:

1. PLC basic instruction training
2. inverter training
 - 1) The operation panel to control the inverter to run experiments
 - 2) Inverter Jog run the experiment
- 3) based on external potentiometer to control the inverter running the experiment
- 4) based on an external voltage control of inverter operation experiment
- 5) drive analog output detection experiments
- 6) The inverter switch output detection experiments
- 7) inverter speed control experiment
- 8) PLC to control the inverter to run experiments

3. a typical motor control training project

1) PLC control motor start and stop the project

2) PLC control motor jog, and self-locking project

3) PLC control motor reversing project

4) PLC control motor star delta start-up projects

5) PLC to control the motor to reverse braking project

4. a typical lighting distribution training

5. a typical machine tool line training

6. a typical relay contactor control PLC reconstruction project

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XK-JB2 PLC experiment box

Products overview:

project	content
product structure:	experiment box structure.
main parameters:	size 500 mm x 340 mm x 160 mm; The power supply: single-phase AC220V, power < 150 VA. weight:20kg
main components:	experiment box, PLC, DC24V power supply, series simulation load constitutes.
main functions:	can finish PLC commonly used programming instructions learning and training, PLC typical application project training.
annex:	experimental jump line, software disc, the product specification.



Training Projects:

1. the basic instruction programming exercises
2. assembly line control
3. five-phase stepping motor analog control
4. the water tower water level control

5. liquid mixing device control
6. automatic rolling simulation
7. LED Digital Display Control
8. crossroads traffic lights to control the simulation training
9. the optical analog of the fireworks

XK-KDF1 PLC control virtual load experiment box

Products overview:

project	content
product structure:	experiment box structure.
main parameters:	size 420 mm x 300 mm x 120 mm; The power supply: single phase AC220V, power < 150 VA.weight:20kg
main composition:	experiment box, PLC core unit (integrated 24 road DC24V switching input, 16 road relay type switching output, 1 road high speed pulse input, 1 road high speed pulse output, 2 road analog inputs and 1 road analog output, have RS-232 and RS-485 communication interface support ladder diagram and statement table programming), DC24V power supply, virtual load interface unit and virtual load software, series simulation load (traffic lights, seven segment digital display tube, automatic feed and loading, water tower water level automatic control, machining center tools selection, the light of sky Tower, assembly line) to form.
main functions:	can direct-viewing understand the basic composition of PLC (the central processor, memory, switch input interface, switch output interface, the communication interface and power supply, etc), Mitsubishi FX series PLC and Siemens S7-200 PLC series commonly used programming instructions learning and training, PLC typical application project training (including simulation load and virtual load).
annex:	experimental jump line, software disc, the product specification.



Training Projects:

1. intuitive understanding of the PLC components: the central processing unit (CPU), memory, digital input interface, the switch output interface, communication interface and power supply and so on.
2. learning the PLC ladder programming
3. Mitsubishi FX series PLC instruction learning and training Boolean instructions
 - 1) Learning and Training
 - 2) the timing instruction learning and training
 - 3) count the instruction of learning and training
 - 4) transfer instruction, learning and training
 - 5) shift the instruction of learning and training
 - 6) Learning and training of the arithmetic instruction
 - 7) Learning and training of the logic instructions
 - 8) Learning and training of high-speed pulse input / output instructions
 - 9) analog inputs / outputs of learning and training
4. Learning and training, Siemens S7-200 series PLC instruction boolean instructions
 - 1) Learning and Training
 - 2) the timing instruction learning and training
 - 3) count the instruction of learning and training
 - 4) transfer instruction, learning and training
 - 5) shift the instruction of learning and training
 - 6) Learning and training of the arithmetic instruction
 - 7) Learning and training of the logic instructions
 - 8) Learning and training of high-speed pulse input / output instructions
 - 9) analog inputs / outputs of learning and training
5. the simulated load project training
 - 1) traffic lights
 - 2) eight out digital display
 - 3) automatic feed loading
 - 4) water tower water level control
 - 5) tool selection for machining centers
 - 6) days, the tower light
 - 7) the assembly line

6. the virtual load-project training
 - 1) a variety of liquid mixed
 - 2) Press
 - 3) vending machine
 - 4) the assembly line
 - 5) mail sorting
 - 6) days, the tower light
 - 7) traffic lights
 - 8) Responder
 - 9) plating production line
 - 10) automatic feed loading
 - 11) car transport materials
 - 12) Automatic washing machine
 - 13) three-phase asynchronous generator
 - 14) automatic molding machine
 - 15) three-phase asynchronous motor star delta starter



Electrical automation

XK-PLCS1 PLC TRAINING SET

Products overview	The PLC of this equipment adopts Siemens S7-200 PLC. In addition, it install relay , button, indicator light, function signal generator, DC10V and DC24V power, can complete various PLC experiment
main parameters	1.The Power supply : AC220V 50Hz 2.Machine capacity : ≤200W 3.Work environment: Temperature -10℃~+40℃ Relative humidity <85%(25℃) 4.Outer size : 400mm *250mm *120mm ;weight:8kg 5.PLC: CPU224XP CN DC/DC/DC, integrate 14 way Digital input, 10 way transistor type output, 2 way Analogue input&, 1 way simulation output 6.DC10V power supply :Capacity 0.5A 7.DC24V power output : Capacity 1A 8.Multiturn potentiometer :10K 9.Relay : DC24V coil, contacts capacity 24VDC 1A, 220VAC 1A, 10 pieces 10.Button : 8 self locking type, 6 self recovery type
main functions:	can finish PLC commonly used programming instructions learning and training, PLC typical application project training.For example: 1.PLC Digital input output test experiment 2.PLC Analogue input& output test experiment 3.Timer instruction application experiment 4.Cycle lights control experiment 5.Motor start and stop in proper sequence control experiment



XK-AUT1005A PLC module experiential Chamber

project	content
product Overview:	The device selected SK2168 PLC, with 32 general-purpose I / O and 4-00 high-speed I / O leads through K4mm jack can use the programming of the instruction list, ladder diagram and SFC in three ways. Suitable for students of learning and training of PLC technology.
	□ The power supply: AC220V ± 10%, 50HZ, ≤ 100W □ size: 400mm * 250mm * 120mm (L * W * H) □ Weight: <2KG
main components:	SK2168 PLC; Native I / O: 18 Channel 24VDC Input / 2-channel transistor output / 16-channel relay output; High-speed counters: single-phase counter: 2-channel, 100KHz; High-speed output: 2-channel, 20KHz
main functions:	□ PLC hardware to learn. □ PLC programming software to learn. □ PLC programming training.
annex:	experimental jump line, commonly used tools, software disc, the product specification.



● Training Projects:

- 1) Boolean instruction learning and training
- 2) timing instruction learning and training
- 3) count instruction learning and training
- 4) transfer instruction learning and training
- 5) shift instruction learning and training
- 6) arithmetic operation instruction of learning and training
- 7) logical order of the learning and training
- 8) high speed pulse input instruction learning and training
- 9) high speed pulse output instruction learning and training