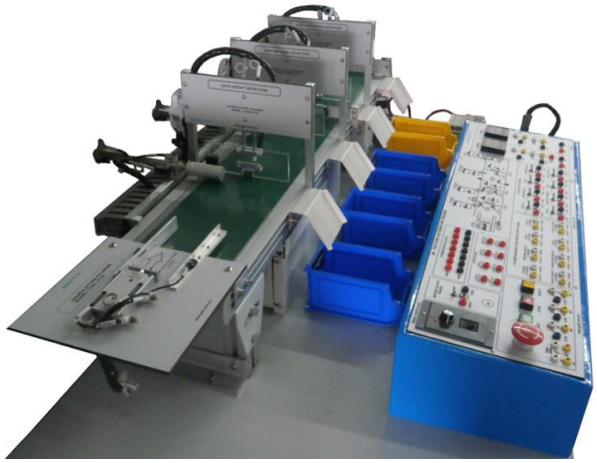
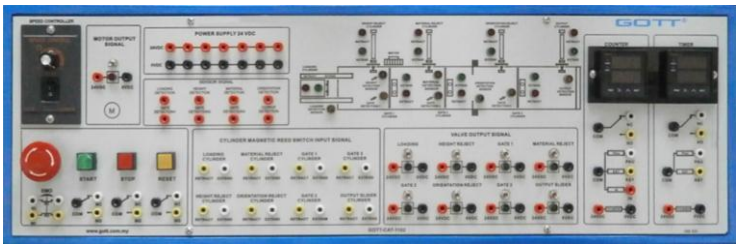
PLC SIMULATOR TRAINER

Model Number : GOTT-PLC-CONVEYOR-02





DESCRIPTION :

The Conveyor System Trainer GOTT-PLC-CONVEYOR-02 is an ideal training system to those who are in charge of automating high volume production lines. The system offers most realistic environment possible to maximize educational efficiency. Pneumatic valves and cylinders, and an PLC are the main components of the simulated environment. The system is based on a belt type conveyor with sensors placed at variou locations to detect the size of the object on the belt. When the PLC functions are properly utilized, the obtained information can be processed to generate desired control functions such as determining pass or fail, or separating good parts from bad parts. Time control or parts count can be programmed when a preset counter or a timer is utilized.

The complexity of this system allows further study of PLCs in process
control systems. Students are required to consider in more detail the structure of complete control systems. Complex control scenarios can be developed using combinations of timers and counters with master and zone control functions.

GOTT-PLC-CONVEYOR-02 FEATURES

- Actual conveyor simulation.
- Part selection by logical detection.
- Introduction of pneumatics.
- Realistic simulation of an automated factory
- Object Detection.
- Performing measurement on locating hole positioning
- Easy relocation of sensors, cylinders or the entire system
- 5-Sensor & 4-Air Cylinder Controls with 4-Solenoid Valve
- Sensors detect the physical dimensions of an object placed on the conveyor belt
- Induction and Opto-electronic sensors.
- Can be interfaced with all PLC types.
- Comprehensive courseware manual.
- Introduction of motion control.
- Count & Timer Control.
- Diverse decision making processes.
- Manipulating component.

PLC programming Software

Allows PLC main unit to be programmed from a Personal Computer in either ladder or mnemonic codes

Communication module

- Personal Computer module or communication module for connecting the PLC to the host PC
- Communication of PLC to PC should be through RS 232
- Interface cable and user manual
- The PLC can support device net system

COMPONENT SPECIFICATION :

The system consists of the following standard items :

(I) PLC MAIN UNIT

DESCRIPTION	UNITS
1. CPU with 240VAC power supply	1
2. 24VDC input	24
3. Relay contact outputs	16
4. 2K EEPROM memory	1
5. Programming Console	1
6. Full programming features on a back lit, two line LCD display.	1
7. Keypad	1
8. Hand-held programmer (optional)	1
9. Connector Adapter.	1

ACCESSORIES

- Connecting cables for drive unit to switches
- LED, relays & other peripherals
- Connection cable
- Experiment manual and transparency

Other Value Added Services

Trainer is completed with

- Instruction user manual
- List of suggested experiments and programs examples that can be conducted

PLC SIMULATOR TRAINER

Model Number : GOTT-PLC-CONVEYOR-02

(II) CONVEYOR UNIT

ITEMS	DESCRIPTION
Conveyor Type	Belt
Belt Size	1000(L) × 150(W)mm
Conveyor Speed	Auto : 20mm/s to 10mm/s (in 3 steps) Manuals : 15mm/s to 40mm (Continually Variable)
Object selection & sorting	Pneumatic Cylinder with pneumatic Valve Double Acting with 2-Position Sensor 10ϕ-60 (3ea),10ϕ-20(1ea)
Object Detecting	Photo Sensor : 3ea Proximity Sensor : 2ea Micro Switch : 1ea
Object Transfer system	Rejecting : 1 position Sorting : 1 position Interval : 1 position
Conveyor Motor	RPM : 18 (approx.)with Speed Reduction Gear Input Power : AC 220V,0.17A (Approx)
Preset	Counter 0000 to 9999 (4 digits)
Preset Timer	0.1sec to 100 hours
Output Terminal for PLC input	12Points (Exception Common Terminal)
Input Terminal for PLC output	12Points (Exception Common Terminal)
Control Modes	Manual & Auto (by PLC)
DC Output (for Solenoid valve & sensor)	24V,2A
Operation Conditions	0 to 45C,85% or Less (R.H.)
Input Power	AC 220V,50/60Hz 1-Phase (or AC 110V,50/60Hz 1-Phase by Order)
Pneumatic Pressure Input	1.5 kgf/s^2(Approx.)
Dimensions	1400(L)×340(H)×100(D)mm

(III) SEQUENCE SWITCH & INDICATOR UNIT

DESCRIPTION	UNITS
1. DC Relay	6
2. Indicator	10
3. Switch	2

EXPERIMENT TOPICS :

- Introduce sequential control
- Initial process condition can be set
- Introduce to interrupts
- Interrupt device control
- Timed sequence control
- Windows base operating programming.
- Fundamentals of Logic
- Developing Ladder Logic Programs
- Programming timers
- Structure of Control Systems
- Sequencer Programs
- Master Control and Zone Control Instructions
- Programming Counters
- Jump Instructions and Sub-routines
- Combined Counter and Timer Functions
- PLC Installation Practices

PRODUCT MODULES

TESTING MATERIALS	CODE 733-117	AIR UNIT	CODE 733-118	SOLENOID VALVE	CODE 733-119	EXPERIMENT MANUAL	CODE 733-120

Manuals :
(1) All manuals are written in English
(2) Model Answer
(3) Teaching Manuals

General Terms :
(1) Accessories will be provided where applicable.
(2) Manuals & Training will be provided where applicable.
(3) Designs & Specifications are subject to change without notice.
(4) We reserve the right to discontinue the manufacturing of any product.

Warranty :
2 Years

ORDERING INFORMATION :

ITEM	MODEL NUMBER	CODE
PLC SIMULATOR TRAINER	GOTT-PLC-CONVEYOR-02	733-116

*Proposed design only, subject to changes without any notice.