



PTS E10

PLC trainer

Are you ready for an amazing automation hands-on experience?



THE BEST CHOICE IN EDUCATIONAL OR TRAINING EQUIPMENT!

In the world of automation a good learning of PLC is becoming a need. You can notice that as a professional you will be involved somehow with PLCs: applying for a job, designing an automation project, running an automated machine , troubleshooting an electrical system that already has a PLC.

In the market you find a lot of offers of PLC trainers. Most of them are related to simulation software , some others are trainers oriented to specific brands that in some cases make it unaffordable. In other cases, the trainers are assembled with just a few elements which don't help much in the learning process.

Why to use software simulators for training when you can have both :

Ladder logic

You can learn the classical concepts of ladder logic in the changing world of industrial automation.

Saves You Extra Costs

Why to pay for only a PLC when you can have a complete trainer with pushbuttons, switches, relays, LEDs and power supply, for the same cost.

Educational and Real

These PLCs are used for many multinationals Anyone or any educational center can take his application to the real world.

Fixable Equipment

Yes, our training stations are fixable. We are aware that the learning process is associated to mistakes. In our PLCs all the chips are mounted on DIL Basis so you can remove/replace defective chips for only few dollars.

More Fun

You don't need to spend time in wiring every project. With the trainer you see your application ready in a blink!

Raise your knowledge

Our units allow you to work from simple applications up to highly sophisticated designs.

Simulator and PLC trainer... ..for much less cost.

Our customers include:

- Educational institutions all over the world
- PLC programmers and developers.
- Engineers and technicians.
- Self learners.
- Industries that develop automated machinery

In summary, if you are looking a powerful but low cost equipment for training yourself or quick development of small projects ...

...then you need our PTS E10

A lot of educational institutions use out equipments to provide education, training and practical projects.

- RMIT (Australia)
- TAFE (USA)
- Old Dominion University (USA)
- Purdue University (USA)
- State University of New York (USA)
- Sait Polytechnic (Canada)
- Torreon University (Mexico)
- University of el Paso (Texas)
- Kent State University (USA)
- Florida International University (USA)
- SENA (Colombia)
- Miami Dade College (USA)
- and many other colleges and universities around the world

Our PLC Trainer PTS E10 is ideal for:



- ✓ Self learners that want to learn about Programmable Logic Controllers PLCs.
- ✓ Engineers and technicians that require this knowledge in their current or future jobs.
- ✓ Professors that want to teach a regular course on PLCs at any educational institution.
- ✓ Professionals that want to have a more practical approach of learning about PLCs.
- ✓ People that have no time to attend a regular course at any physical place.
- ✓ Companies that want to encourage self training among their personnel.

Our PLC Trainer E10 offers the following advantages:

- ☺ Really low cost. You get the complete PLC trainer with all the hardware/software features needed for your learning and practicing experience.
- ☺ PLC with pure ladder logic, that can be programmed and monitored through your PC software.
- ☺ Pushbuttons, switches and Jumbo lights for you to simulate the operation before going into real applications
- ☺ External connectors for you to connect real devices like sensors, switches, lamps, valves and motors. Your application becomes real!
- ☺ No extra elements required. The PLC trainer PTS E10 comes with a wall adapter power supply, programming cable and software.
- ☺ Portable units. You can carry the PLC trainer PTS E10 to any place you want: classroom, home, work, near the machine, etc
- ☺ Mistakes are allowed. We know that learning process is associated with mistakes. We have added fuses to the power supply and to the outputs.

Just three easy steps to work with the trainer

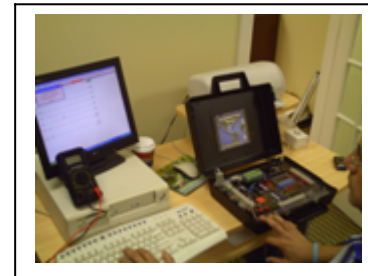
1. Install the software and connect the programming cable to your PC and to the PLC trainer PTS E10.



2. Apply power to the PLC trainer.



3. Start practicing: write your program, test it with software simulator and download it to the trainer.

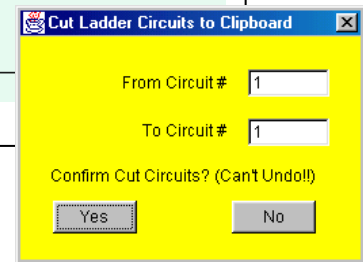
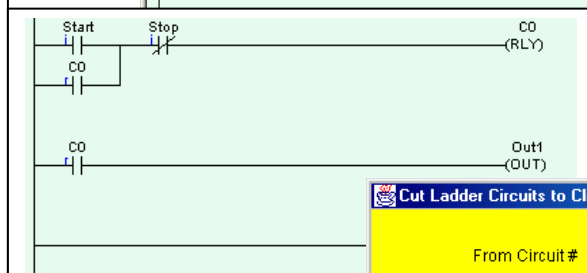
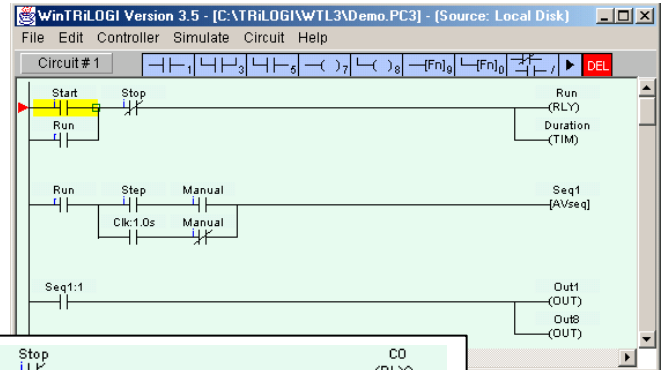


Either you are an experienced PLC programmer or a novice you will enjoy to see your applications working in just minutes!

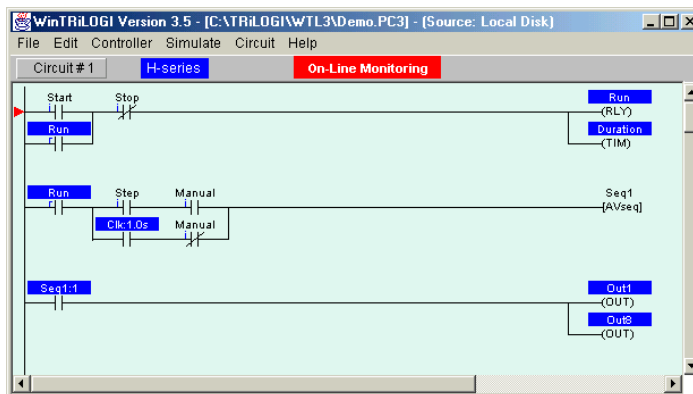
Technical Specifications

Software Features

- Works on any environment XP/NT/2000/Vista using the Java Runtime Environment
- Set of instructions related to common ladder of any brand. Used by all the popular brands of PLCs.
- Software Simulation Tool. You can simulate your project directly on your computer. Excellent for education since it can be used for homeworks.
- Includes other PLC models. In addition to the PLC on the trainer. Other bigger models are supported by the software.
- ON - LINE monitoring. This unique feature allows you to see or control the operation of the PLC, from your PC.
- No specific computer requirements. You can use the computer you have, no major hardware is required.
- Online monitoring and control. You can activate outputs, simulate inputs, etc from your PC in addition to the real hardware elements.
- All popular software commands like : save, edit, cut, paste, move

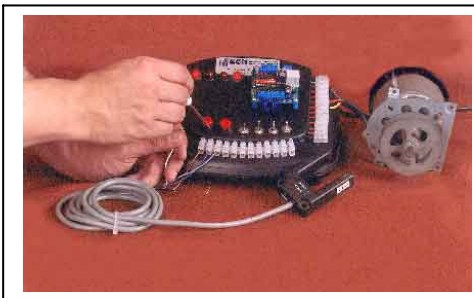
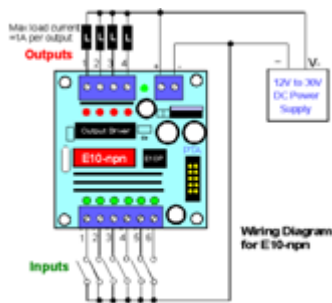


Input	Timer	Counter	Relay	Output
1 Start	0	2 Seq1	1 Run	1 Out1
2 Stop	Duration	3	2	2 Out2
3 Manual		4	3	3 Out3
4 Step		5	4	4 Out4
5		6	5	5 Out5
6		7	6	6 Out6
7		8	7	7 Out7
8		9	8	8 Out8
9		10	9	9
10		11	10	10
11		12	11	11
12		13	12	12
13		14	13	13
14		15	14	14
15		15	15	15



Hardware Features.

- PLC with 6 inputs / 4 outputs.
- 216 Programming steps
- 4 Timers
- 4 Counters
- 1 Sequencer of 32 steps
- 8 Internal relays
- 2 Internal outputs.
- EEprom program storage (40 years)
- Password protection.
- 4 Jumbo Indicating LEDs
- 2 Push buttons
- 4 Switches
- Power supply protection fuse
- Relay contact protection fuse.
- Mini case (15x12x9 cm)
- 110 VAC connection.
- Connectors to interact with the real world.
- 24VDC supply available on connectors.
- RS232C serial connection cable



One of our first models of PTS E10

With the PLC training station PTS E10 you can do the following:

Quick Prototypes. Using our trainers is the best and quick solution to have your prototype running in no time.

Small projects. With the PTS E10 you can develop small yet powerful automation projects for industrial applications.

Industrial emergencies. Temporarily replace the function of any costly device until you get a spare. Keep the machine running!

Robotics. Students and hobbyists love our trainer because in short times have their projects operative.

Replacement of timers/counters. If you need a quick way of replace timers and/or counters use the trainer and its contacts.

Star-Delta Motor starting. For your test or for real applications use the Trainer to develop star-delta connections



Attention Educational Institutions

Most of the educational institutions are interested in providing the best tools to their students to guarantee the right background the new professionals deserve. But , with the budget restrictions of everyday, the task of spending the money wisely becomes really difficult.

In a group of up to six students, who would you think that will learn

One single group of 6
students

VS

Three groups of 2
students each

- 1) Like no other brand, our PLC trainers allows you to have one trainer per student because they are low cost. If you want to make a smart of use your budget you should try to buy several units. Imagine a lot of opportunities: Thesis projects, Industrial applications, Robotics contests, etc.
- 2) You can teach high tech topics such as Internet/ ethernet monitoring and control since this driver is included in the PTS T100 trainer or just cover the Basics of ladder programming using the PTS E10 trainer.
- 3) The software allows Simulation and your students can take the programming software and test their creations at home in their own computers. Most of the other trainer manufacturers will charge you for the software. On the other hand your lab sessions are going to be limited to the number of trainers you have.
- 4) Our units are fixable. If your students make mistakes other than blowing off fuses, we can replace all the ICs since they come on Dual In line Bases.
- 5) They include all what you need for a training: Pilot lights, Push buttons, Switches, Four 10amps relay outputs, DC Power supply, Fuse, AC cord, Programming cable. The PTS T100 also has Display , Analog inputs/outputs and two comm ports and the best of all.... in a small size package that can fit in any normal desk.

Our main concern was to develop a PLC trainer that will allow having more covered topics and having more trainer equipments per students.

Comments from Professor Bo Barry.

University of North Carolina

“In reference to the proposal from Latin-tech, Inc, it should be noted that they are the only company providing ALL of the components required, and ALL of the capabilities required for the PLC trainers.

They are the only company providing PLCs with Ethernet & Internet connectivity at zero cost. Additionally the system, AS PROVIDED BY Latin Tech, are programmable in normal ladder logic, in BASIC, in C, and their unique software allows control & monitoring thru Microsoft EXCEL spreadsheets.

Their units are very popular both in industry (for use as PLCs and as trainers) and at many universities, including Old Dominion, Purdue, Kent State, State Univ of NY, and others.

A significant amount of time was spent researching this item, and it is felt that the systems as provided by Latin Tech, will not only completely satisfy our educational needs, but that they are by far the most economical systems providing all of the features available, including the items mentioned above.”

Ambrose G. Barry
Assoc Prof
Eng Tech Dept
UNCC

Comments from Professor John Hackworth

Old Dominion University

"I use TRiLOGI in the college classroom. I have each student download and install TRiLOGI on their home computer, and I then give them programming assignments to do at home. They individually write, run and debug their PLC programs, and then email their program files to me for testing and grading. Since TRiLOGI will simulate PLC operation off-line, each student is able to obtain hands-on programming and debugging experience without having to wait for their turn on an expensive laboratory PLC. The students enjoy using TRiLOGI because they can see their programs run at home without loading them into an actual PLC, it is easy to learn, and the cost for the off-line version is zero."

Prof John Hackworth, Old Dominion University
www.eng.odu.edu

Why Purdue University is one of the most important engineering schools of the world?

This is IE575 course, conducted at Purdue University. Our equipments were selected to teach students about industrial automation. Some project pages of the link contain photos of projects constructed using our Super Plc.

[Click here to know about IE575 course](#)