Key Features:
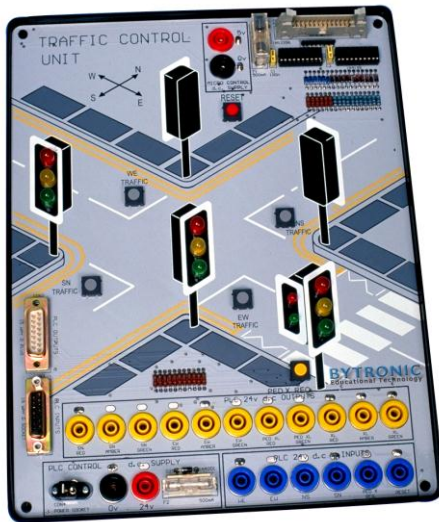
- Self contained easy to setup

- Control from PLC or PC

- Connections for PLC through 24V d.c. 'D' type connectors

- 4mm colour coded shrouded sockets

- PC connection through IDC TTL

- Clear, visual mimic of a crossroad junction

- Familiar environment for easy understanding of programming requirement

The Traffic Control Unit (TCU) can be used an application for control from either PLC or PC. For programming from a PLC six digital inputs and eleven digital outputs are required for control of all features on the unit. From a PC a suitable interface card is required allowing control programs to be developed in various programming languages.

The TCU represents a typical crossroads junction controlled by two pairs of traffic lights together with a pedestrian crossing on one approach. The TCU features a clear mimic of a traffic junction with the lights and pedestrian crossings represented by LED's in the appropriate colours. Four buttons are used to simulate vehicle sensors built into the surface of the road and represent traffic flow. Further buttons are used to control the pedestrian crossing and a 'reset' signal.

The TCU is supplied with a manual that includes a user guide, courseware suggestions and solutions to the exercises.

Curriculum Coverage
- Introduction
- Getting started
- The traffic control unit signals
- Connecting the TCU to a PC
- Connecting the TCU to a Programmable Logic Controller
- Using LADSIM to control the traffic control unit

Labworks
- Basic traffic light sequence
- Dual traffic light sequence
- Traffic counting
- Time alteration according to traffic flow
- Pedestrian crossing (stand alone)
- Complete system control
- Adjusted pedestrian priority

LADSIM Labworks
- Basic traffic light sequence
- Dual traffic light sequence
- Traffic counting
- Green time alteration according to traffic
- The pedestrian crossing

Specification

Inputs	11 x Inputs • red, yellow, green for north/south traffic • red, yellow, green for east/west traffic • red, yellow, green for pedestrian crossing • red, green for pedestrian walk/don't walk
Outputs	6 x Outputs • push buttons for traffic flow: NS, SN, EW, WE • push buttons for pedestrian crossing request • Push button for reset
PLC I/O requirement	Min: 6 digital inputs, 6 digital outputs Max: 6 digital inputs, 11 digital outputs
Connectors	2 x 15 way D type connector 24v dc 1 x IDC 26 pin TTL 19 x 4mm colour coded shrouded sockets 2 x 4mm power terminals 2.1mm power jack socket
Fuses	2 x 500mA
Power supply required	5V d.c. @ 0.5A for PC/microcontroller 24V d.c. @ 0.5A for PLC 24V d.c. @ 1.0A

Required

A suitable PC with minimum; Pentium processor, 1GB RAM, 20GB HDD, CDROM Drive, and Windows XP or above

Ordering Information

Model Number:	**TCU**
Consists of:	1 x Traffic control unit 1 x 24V d.c. power supply unit 1 x User and courseware manual 1 x Software CD

Weights and Dimensions

Un-Packed		Packed	
Approximate Dimensions (mm)	225W x 285D x 95H	Approximate Dimensions (mm)	300W x 400D x 300H
Approximate Weights	800g	Approximate Weights	3.5Kg