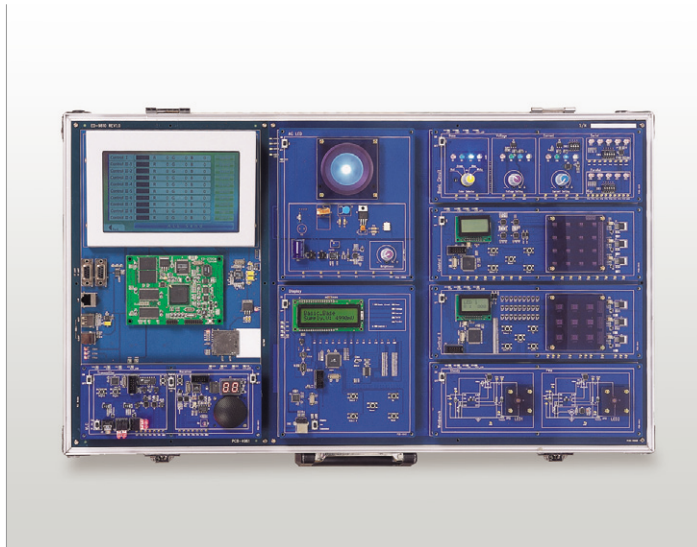


LED(Light Emitting Diode) LAMP TRAINER

New
ED-9810

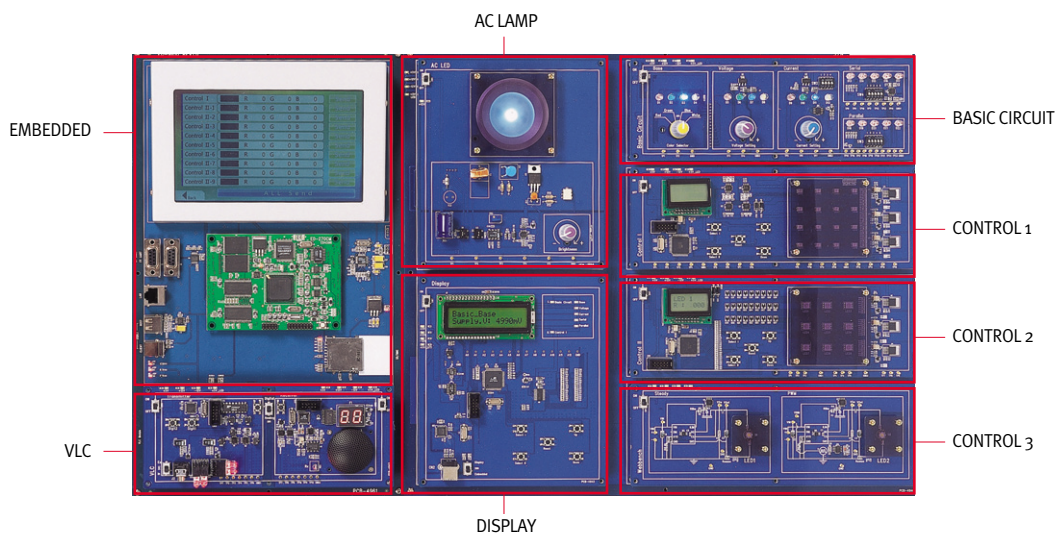
- Practice basic method how to operate such as basic operation, Constant voltage, Constant current, serial connection, and parallel connection
- Brightness control, Color control, and lighting
- Simulation for Steady/PWM
- Brightness control for AC LED
- Digital and analogue VLC
- Monitoring control operation data and basic circuit data
- Control and monitoring using PC(LabVIEW) and Embedded GUI



> EXPERIMENTS

- LED Basic operation experiment (Constant voltage, Constant current, serial connection, and parallel connection)
- LED Brightness control, Color control, and lighting experiment
- LED control program practice
- Webbench Simulation
- Experiment LED operation using AC Dimming
- Experiment VLC(Visual Light Communication)
- LED control using PC LabVIEW program
- LED control using Web server
- LED control using Embedded GU

> CONFIGURATION



LED(Light Emitting Diode) LAMP TRAINER

ED-9810

> SPECIFICATIONS

EMBEDDED BOARD

- **H/W**
 - » CPU : PXA270(520MHz)
 - » FLASH : 32MByte
 - » SDRAM : 128MByte(32bits Access)
 - » SRAM : 1MByte(32bits Access)
 - » TFT LCD : Touch Pad(7inch), 16bits, 800 x 480
 - » Ethernet : 10Mbps Ethernet(CS8900A)-1Port
 - » Serial Port : FF, ST, BT UART
 - » USB 1.1 : Bluetooth UART-1Port(VLC use)
 - » Touch : Host(SL811HST), Client ADS7846
 - » Slot : MMC/SD-1 Slot
 - » Stereo I/O : Cirrus CS4202
 - » VLC I/O : 24Pin x 2 Connector
 - » Multi-ICE : Multi-ICE 20Pin Connector
 - » JTAG : PC Interface 10Pin Connector
 - **OS**
 - » Kernel : Linux 2.6.17
 - » Bootloader : u-boot-1.1.4
 - » File system : Ramdisk, jffs2
 - **S/W**
 - » Device Driver
 - » 7" TFT LCD
 - » UART 3Port, FF/ST/BT
 - » Jffs2 Device Driver
 - » CS8900 Ethernet
 - » MMC/SD
 - » USB Host
 - » USB Client
 - » AC'97 CODEC
 - » Application : LED Lamp Control Application
-
- » Blue LED x 3(5V)
 - » Selector x 1(3pole 4position)
 - » 1K VR x 2
 - » Control 1
 - » 12V, 5V Supply
 - » Full Color LED x 16(5V)
 - » Character LCD 8 x 2 Line
 - » Atmega 128 MCU
 - » Tack SW x 5(for using control)
 - » Control 2
 - » 12V, 5V Supply
 - » Full Color LED x 9(5V)
 - » Character LCD 8 x 2 Line
 - » Atmega 128 MCU
 - » Tack SW x 5(for using control)
 - » Webbench
 - » 12V, 5V Supply
 - » White LED x 2(Steady, PWM Control)
 - » AC LED
 - » 220V, 12V Supply
 - » M-AC LED x 1(110V~220V)
 - » 10K VR(Dimming Control)
 - » VLC
 - » 12V, 5V Supply
 - » Digital & Analog VLC Support
 - » ATmega8 x 2(RX parts, TX parts)
 - » 3.5pi Audio Jack(IN)
 - » TX : Red LED x 8
 - » RX : FND(Digital), Speaker(Analog)
 - » Display
 - » 12V, 5V Supply
 - » Character LCD 8 x 2 Line
 - » Atmega 128 MCU
 - » USB B type x 1(PC to Mega128 Serial Com)
-
- **S/W**
 - » Application
 - » LED Lamp Control Application(LabVIEW, WEB)

LED BOARD

- **H/W**
 - » Basic Circuit
 - » 12V, 5V Supply
 - » Red LED x 13(5V)
 - » Green LED x 3(5V)

LED(Light Emitting Diode) LAMP TRAINER

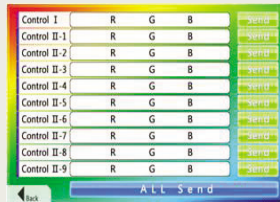
ED-9810

SOFTWARE

• QT Program(Embedded GUI)



Main Screen



Color Control Screen



VLC Screen

• LabVIEW Program(PC GUI)



Color Control Screen

GENERAL CHARACTERISTICS

- Dimension : 690(W) x 180(H) x 420(D)mm

ACCESSORIES

- Cable (Power, Serial, Printer, USB, AVR ISP, ARM JTAG, UTP Corss) : 1set
- Manual : 1ea
- Program CD : 1ea