

SCR TRAINER

- SCR characteristics
- Rectifier and phase control
- Trigger and gate control
- Motor speed control

ED-5060



> EXPERIMENTAL MODULES

- | | |
|---|---------------------------------------|
| 1. Characteristics of SCR(U-5060A) | 6. Battery Auto Charger(U-5060F) |
| 2. Rectifier and Phase Control(U-5060B) | 7. DC to AC Inverter Circuit(U-5060G) |
| 3. Trigger and Gate Control-1(U-5060C) | 8. Motor Speed Control(U-5060H) |
| 4. Trigger and Gate Control-2(U-5060D) | 9. DC Regulator Circuit(U-5060I) |
| 5. Photo Control Circuit(U-5060E) | |

> SPECIFICATIONS

CONSOLE(MAIN FRAME) ED-5060(P)

- **Load Resistor**
 - » 100Ω~1100Ω
 - » 200Ω(50W) : 2ea, 300Ω(30W) : 1ea, 400Ω(30W) : 1ea
- **Load Lamp** : AC 110V, 10W
- **DC Motor** : 12V 4000RPM Max.(Tacho Generator Section)
- **Metering**
 - » DC Range : INT, 50/150V
 - » AC Range : 50/150V
- **DC Output** : 0~25V Continuous Variable 1A
- **AC Output** : Overload Protection 1A Max.

- **Input Voltage** : AC 220V, 50/60Hz
- **Dimension** : 610(W) x 210(H) x 195(D)mm
- **Weight** : 11.2kg
- **Dimension of Module** : 250(W) x 65(H) x 166(D)mm
- **System Weight** : 20kg

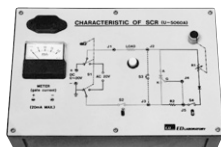
ACCESSORIES

- Patch Cord(ø2 Plug) : 1set
- AC Power Cord : 1ea
- Module Power Cord : 2ea
- Experimental Manual : 1ea

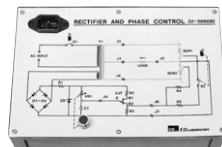
SCR TRAINER

ED-5060

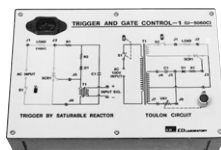
Basic Module


U-5060A
Characteristics of SCR

- SCR in DC circuit : Gate current, Turn ON/OFF by Anode and Cathode
- U SCR in AC circuit : SCR's rectification characteristics, ON/OFF operation by Gate control


U-5060B
Rectifier and Phase Control

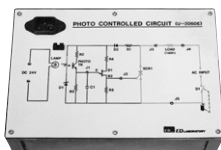
- Phase control, half wave rectification characteristics
- Phase control, full wave rectification characteristics


U-5060C
Trigger and Gate Control-1

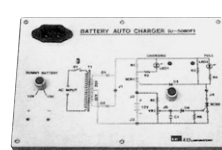
- P1. Transformer Turn Ratio
- P2. Step Up/Down Transformer


U-5060D
Trigger and Gate Control-2

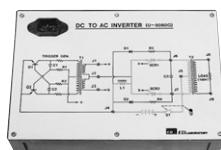
- UJT Oscillation Trigger Circuit : Trigger circuit experiment by Relaxation Oscillator which is widely used in SCR phase control
- Two-way Trigger Circuits by Diac


U-5060E
Photo Control Circuit

- Application of insulation control non-contact switch
- SCR control by Photo Coupler


U-5060F
Battery Auto Charger

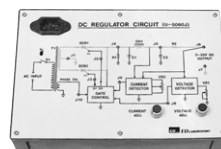
- Automatic battery charging circuit by SCR and sensing adjustment


U-5060G
DC to AC Inverter Circuit

- Inverter experiments by SCR


U-5060H
Motor Speed Control

- SCR Chopper experiments : Principles of widely used Jones Chopper and DC Motor speed control


U-5060J
DC Regulator Circuits

- DC constant voltage supply circuit by SCR