



Sciencetech 2710 is a learning platform which helps Students to understand the concept of TCA785 firing scheme and Triangular comparator firing scheme for performing the single phase controlled rectifiers. 2710 is also useful for Students to understand the firing angle control in various rectifier configurations like half wave, full wave, bridge, symmetrical & asymmetrical configurations. This platform is provided with built in AC & DC Power Supplies, sockets for making different interconnections in circuit and exhaustive an learning material.

Features

- Built in Power Supply
- Easy to operate and understand
- Two firing circuits on single board
- Gradual firing angle control upto 180 degree
- Test points to observe output of different blocks
- On board AC sources of 15 V and 18 V
- More than six experiments can be performed on single board

Scope of Learning

Study of:

- TCA 785 IC firing circuits.
- Triangular comparator firing circuit
- Half wave controlled rectifier
- Full wave controlled mid point rectifier
- Fully controlled bridge rectifier
- Common anode configuration of rectifier
- Common cathode configuration of rectifier
- Asymmetrical configuration of rectifier

Technical Specifications

On board AC source : 0 V - 15 V, 18 V - 0 V - 18V

On board firing circuits :

TCA785 firing scheme

Triangular comparator firing scheme

Interconnections : 2mm sockets

SCR assembly : 4 SCRs 2P4 M, 400V/2A

Mains Supply : 220V/110V, 50 Hz / 60 Hz

Test Points : 9 nos

Product Tutorial : Online on
www.SciencetechLearning.com

Dimensions (mm) : W 420 x D 255 x H 100

Weight : 2 Kg. (approximately)

Operating Conditions : 0-40°C, 85% RH

Included Accessories : 2mm Patch cord (Red) 16"-6 nos.
2mm Patch cord (Black) 16"-6 nos.
2mm Patch cord (Blue) 16"-6 nos.
Mains cord-1 no.

Optional :

Simtel Power Electronics Simulation Software