



# BASIC ELECTRICAL ELECTRONICS AC-DC TRAINING SET





Basic Electrical Electronics AC-DC Training kit has ready-made modules for practicing the applications during the experiments. The set is suitable for desktop use. Hook-ups are supplied with 2mm female gold alloyed metal sockets. Connection cables are 2mm spring gold plated. The training set is designed as a grouped-by-subject modular structure, involving the core assembly, equipments and circuit applications, to be able to achieve electronics practices.





## CORE ASSEMBLY

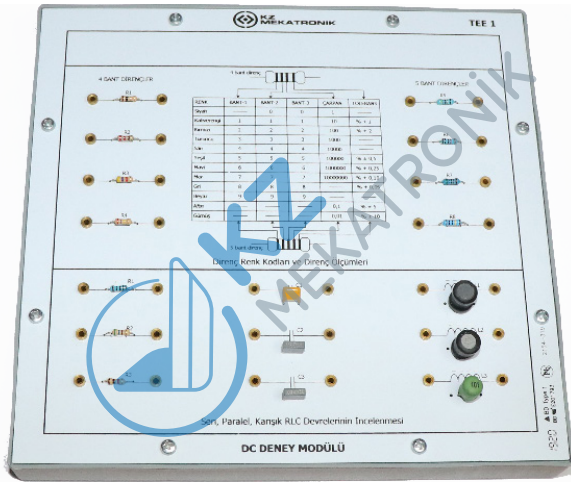
## BASE EXPERIMENTS



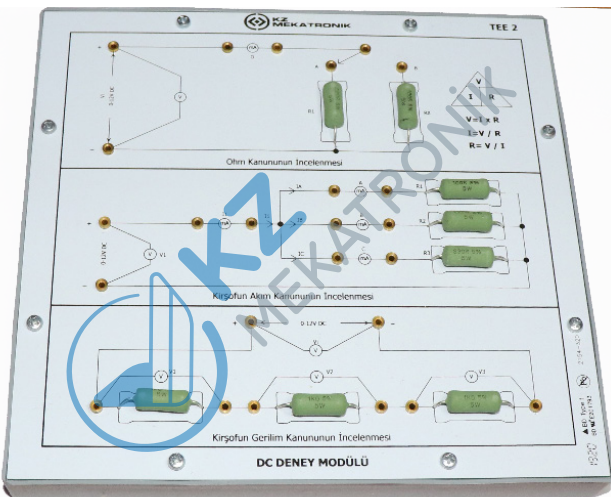
- The training set consists of 220-240V AC/50Hz IEC supply input, detachable circuit breaker, on/off switch with LED power indicator and 1 unit of 2m IEC power cable
- DC power supplies are 0-30V minimum 1A voltage and current adjustable, regulated and short circuit protected
- Digital Voltmeter and Ampermeter display
- +5V, -5V and +12V, -12V minimum 1A stable, regulated, short circuit protected outputs
- AC power supply with 12V-0-12V 1A stable output
- Function generator has Sinus, Triangle, Square wave outputs, 0-10Vpp magnitude range and 1Hz-100kHz Frequency range

TRAINING MODULES

EXPERIMENTS OF MODULE



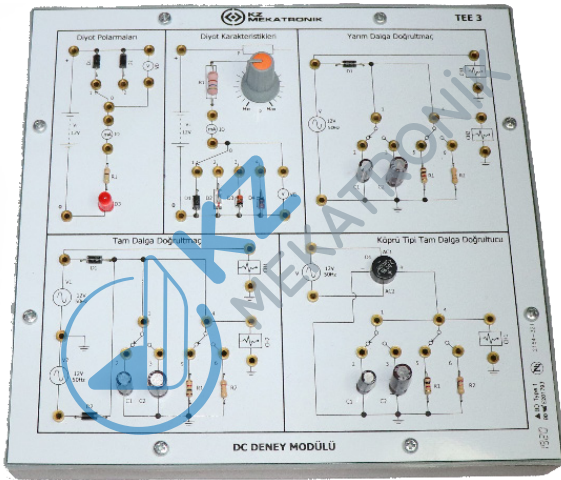
- Reading 4- and 5-band resistors
- Examination of series, parallel, mixed RLC circuits



- Examination Of Ohm's Law
- Examination Of Kirchoff Current Law
- Examination Of Kirchoff Voltage Law

## TRAINING MODULES

## EXPERIMENTS OF MODULE



- Examination Of Diode Polarity
- Examination Of Diode Properties
- Examination Of Half Wave Rectifier
- Examination Of Full Wave Rectifier
- Examination Of Bridge Type Full Wave Rectifier

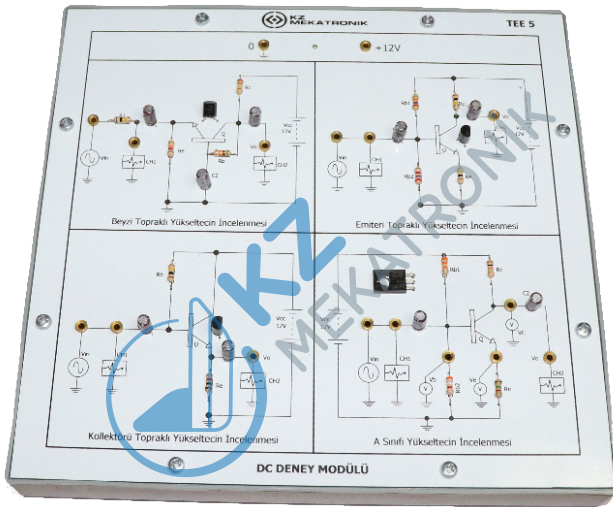


- Observing voltage multipliers
- Observing the Zener Diode Regulator
- Examination Of Transistor Properties

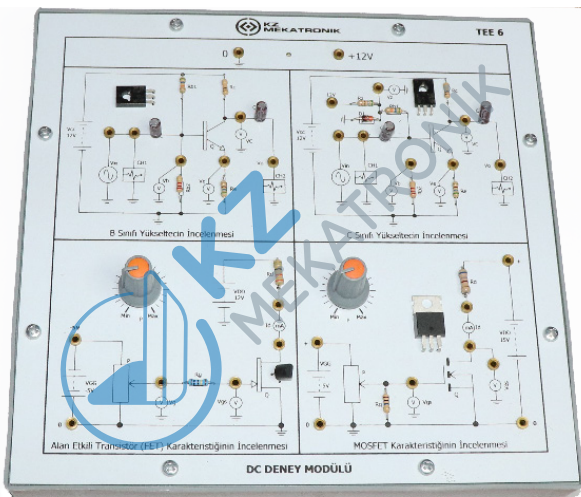
## TRAINING MODULES



## EXPERIMENTS OF MODULE



- Observing the common base configuration
- Observing the common emitter configuration
- Observing the common collector configuration
- Observing class A amplifiers

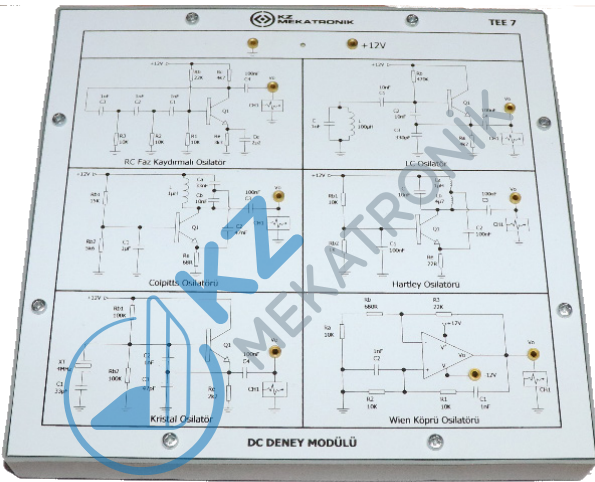


- Observing class B-C amplifiers
- Observing the FET and MOSFET

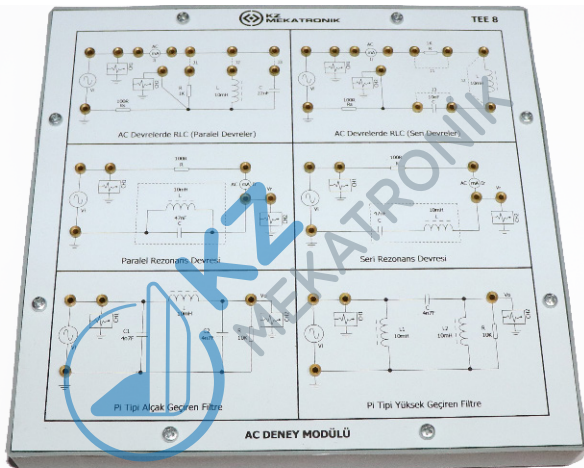


## TRAINING MODULES

## EXPERIMENTS OF MODULE



- Examination of RC phase shift oscillator
- Examination of LC oscillator
- Examination of Colpitts Oscillator
- Examination of The Hartley Oscillator
- Examination of Crystal Oscillator
- Examination of Wien Bridge Oscillator



- Observing the parallel configuration of circuit elements (R,L,C) in alternating current
- Observing the series configuration of circuit elements (R,L,C) in alternating current
- Observing the series resonant circuit
- Observing the parallel resonant circuit
- Observing the PI low-pass filter
- Observing the PI high-pass filter