



# **TRANSISTOR AMPLIFIER CIRCUITS**



DL 3155E14

## THEORETICAL TOPICS

- Idea of linear amplification of current, voltage and power
- Common base configuration: circuit and behaviour
- Common emitter configuration: circuit and behaviour
- Common collector configuration (emitter follower): circuit and behaviour
- Circuits for the control of alternate current motors
- Thermal and bias stabilization of a linear amplifier
- Static and dynamic load lines
- Multi-stage amplifiers
- RC coupled amplifiers
- Transformer coupled amplifiers
- Direct-coupled amplifiers
- Fault simulation

## **CIRCUIT BLOCKS**

- Attenuator
- Common Base / Emitter
- Common Collector
- Bias Stabilization
- RC Coupling / Transformer Coupling

The design and construction of electronic circuits to solve practical problems is an essential technique in the fields of electronic

With this board the students can study, in addition to the various configurations of the BJT transistor as an amplifier, even how to stabilize its polarization and how to connect more stages by RC, with transformer or direct.

engineering and computer engineering.

• Direct Coupling

Complete with theoretical and practical manual.

Dimensions of the board: 297x260mm





#### CAI SOFTWARE:

Each board of the TIME system can be supplied complete with a Student Navigator software that allows students to perform their learning activities through a Personal Computer, without the need for any other documentation. **Ordering code**: please add SW after the code of the board (i.e. DL 3155E14SW)

#### **Required:**

POWER SUPPLY NOT INCLUDED

Base frame with power supply (completed with connecting cables):

- > DL 3155AL3 Base frame with power supply and interface to pc and virtual instrumentation
- > DL 3155AL2 Base frame with power supply and interface to pc

Basic power supply (connecting cables not included):

- DL 2555ALF DC power supply ±5 ±15 0±15 Vdc, 1A
- > TL 3155AL2 Connecting cables

Choosing this power supply, for the execution of the experiments, it is normally required the use of an oscilloscope and two multimeters.

