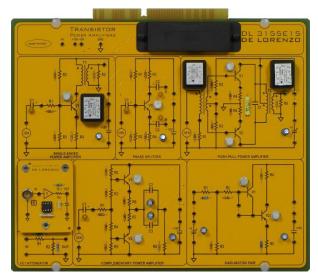




# TRANSISTOR POWER AMPLIFIER



**DL 3155E15** 

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

With this board the students can study the operation of the power transistors BJT with symmetric output, push-pull, complementary and in Darlington configuration.

## THEORETICAL TOPICS

- BJT power amplifiers
- Classification of the output stages
- Harmonic distortion
- Heat dissipation
- Amplifiers in class A
- Amplifier with load flown by direct current
- Amplifier with output transformer (singleended power amplifier)
- Phase splitter
- Amplifiers in class B
- Push-Pull amplifiers
- Transformer amplifiers in class B
- Output stage in class B (complementary power amplifiers)
- Single-ended amplifiers in class B
- Darlington configuration amplifiers
- Fault simulation

## **CIRCUIT BLOCKS**

- Single-ended power amplifier
- Phase splitter
- Push-pull power amplifier
- Attenuator
- Complementary power amplifier
- Darlington pair

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 3155E15SW)

#### 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.

