AUTOMOTIVE LIGHTING SYSTEMS

- CORNERING LIGHTS
- ADAPTIVE FRONTLIGHTING SYSTEM
- LED HEADLIGHTS

A variety of experiments on different topics can be covered with this system:

- Sliding adjustment of low beam to high beam
- Dynamic cornering light
- Static cornering light
- Detection of oncoming and preceding vehicles
- Switching between motorway, highway or city traffic light
- Adaptive weather light circuit
- Halogen, Xenon and LED light sources
- Spectral comparison of halogen, Xenon and LED light

Additional product information are available on our website under the particular catalogue or item no.
CORNERING LIGHTS

Conventional vehicle lighting is designed for straight roads, curve or side streets are not illuminated optimally when turning. Engineers therefore developed systems that move the headlights depending on the steering wheel position at first mechanically, later electrically as well. This system is known as "dynamic cornering lights." A further addition is an additional lateral facing light referred to as a static cornering light.

With the equipment set (A2.1.4.3) the following topics are covered:

- Additional systems / auxiliary units
- Legal regulations (ECE)
- Installation instructions
- Schematics, symbols, terminal designations
- Wires, connectors
- Electric and electronic components, assemblies and systems
- Electrical and electronic circuits, basic variables and signals
- Regulations for the testing of electrical / electronic systems
- Requirements for testing and setting of headlights
- Safety and accident prevention in dealing with electrical components

LED HEADLIGHTS

LEDs (Light Emitting Diodes) were first used as indicators at the rear of the vehicle. Now high intensity LEDs are also used in headlights for illumination. LEDs offer higher efficiency than halogen and xenon lamps, longer life time and above all, greater design flexibility of the vehicle front.

With this teaching equipment set (A2.1.3.4) the following topics can be examined practically:

- LEDs as a lighting element
- Lighting functions (e.g. DRL)
- Special lighting functions (such as all-weather light)
- Headlight range adjustment
- LED lighting element according to ECE
- Legal regulations ECE
- Testing and adjustment of headlights
- Service orders and troubleshooting
- Reading circuit diagrams and diagnostic strategies
- Spectral analysis of LED light

FURTHER INFORMATION ARE AVAILABLE ON THE REAR SIDE OR ON OUR WEBSITE UNDER WWW.LD-DIDACTIC.COM