

HEADLAMP LEVELLING DEVICE with 2 camera systems and touch operation



for automotive, MCR technology

Technology fields

MCR technology, bus systems and radio, software development

Project requirements

The **project objective** was the development of an electronic measuring system for measuring and evaluating headlamps for vehicles (passenger cars, trucks, motorcycles) in test centers and workshops, but also for quality assurance of headlamps at the vehicle manufacturers. Another requirement was the possibility of data storage and the output of an archivable measurement protocol.

Facts/Highlights

- Battery operation, integrated battery charger
- 7" TFT display with touch screen
- Camera based headlight measurement
- 600 MHZ CPU for fast image processing
- Connection of USB devices, Bluetooth and WLAN
- Inclination sensor for compensation of unevenness at the measuring place
- Wireless software update for new headlamp systems
- Customized operating system based on Android/Linux
- Driver and app development
- Automatic measurement of the headlight height by means of an optical distance sensor
- Interfaces for PC connection, printer or an automatic driving system
- Radio (Bluetooth, WLAN) and LAN connection

Services of KNESTEL

Potential analysis, target price estimation, project management, specifications, project planning, development of software and hardware, electrical and mechanical design, EMC test, prototyping, series production

Possible Applications

- Customized systems with touch input
- Mobile, battery-powered devices of all kinds
- MCR and bus node with touch user interface
- Man-machine interface with measuring and monitoring function

About KNESTEL: Knestel has been developing and producing customized electronic and mechatronic special solutions in the fields of motor and machine control, frequency converters, image processing, MCR technology, software development, radio, bus systems and gas analysis for 40 years. We support our customers from the idea to the finished implementation. Individual solutions and concepts - technically up to date. Our production - electronics manufacturing, device and switch cabinet construction, Production of subassemblies, assembly and mechanical processing - is equipped with the latest technology.