



**BOSCH**  
Invented for life

# Driven by **SOLUTIONS**

## **Professional diagnostic systems for every workshop**

ESI[tronic] 2.0 Online – KTS – DCU



# ESI[tronic] 2.0 Online Overview

The diagnostic software offers everything needed for efficient and professional vehicle maintenance, diagnosis and repair. Workshops can license the modular software packages as needed. The software updates itself in the background with constantly expanding vehicle coverage – so it stays up to date.



## Secure Diagnostic Access

The central, integrated, and standardized function provides fast, uncomplicated access to secure vehicle data from participating vehicle manufacturers.



## Vehicle information

Important basic information for all of the vehicles covered, such as model series, rated power, engine designation, and type of drive, as well as installed systems and assigned information.



## Diagnosis of control units

Diagnostics are the centerpiece, displaying installed systems and error codes stored in memory with km mileages in a summary, deleting error codes, displaying actual values and preparing them in a graphic format, activating actuators, resetting service intervals, running automated tests, calibrating sensors and systems, and teaching components.



## Vehicle equipment catalog

Access to the complete Bosch automotive equipment catalog, including spare and exchange part numbers, service information and installation instructions.





### Experience-based repair (EBR) / Known faults

Finding the correct solution in a few seconds, even with challenging errors. Experience-based repair (EBR) comprises summaries of recurrent faults across several vehicle models in easy-to-read data records. Whenever one of these known faults occurs during a diagnostics process, ESI[tronic] recommends one of those repair solutions to the technician that have already helped to solve the problem.



### Handbooks and manuals

Step by step to the cause of a fault: Verified diagnostic and repair manuals and handbooks from Bosch and OEMs provide information backed up with component test instructions, installation position, removal and installation instructions, nominal values, circuit diagrams, functional descriptions, bus overviews, and helpful explanations about operating principles.



### Bosch Connected Repair

Brings together the data from office and workshop devices. Customer and vehicle data, diagnostic results, test reports, and photographic documentation on mobile terminal devices can be created, sorted, and backed up.



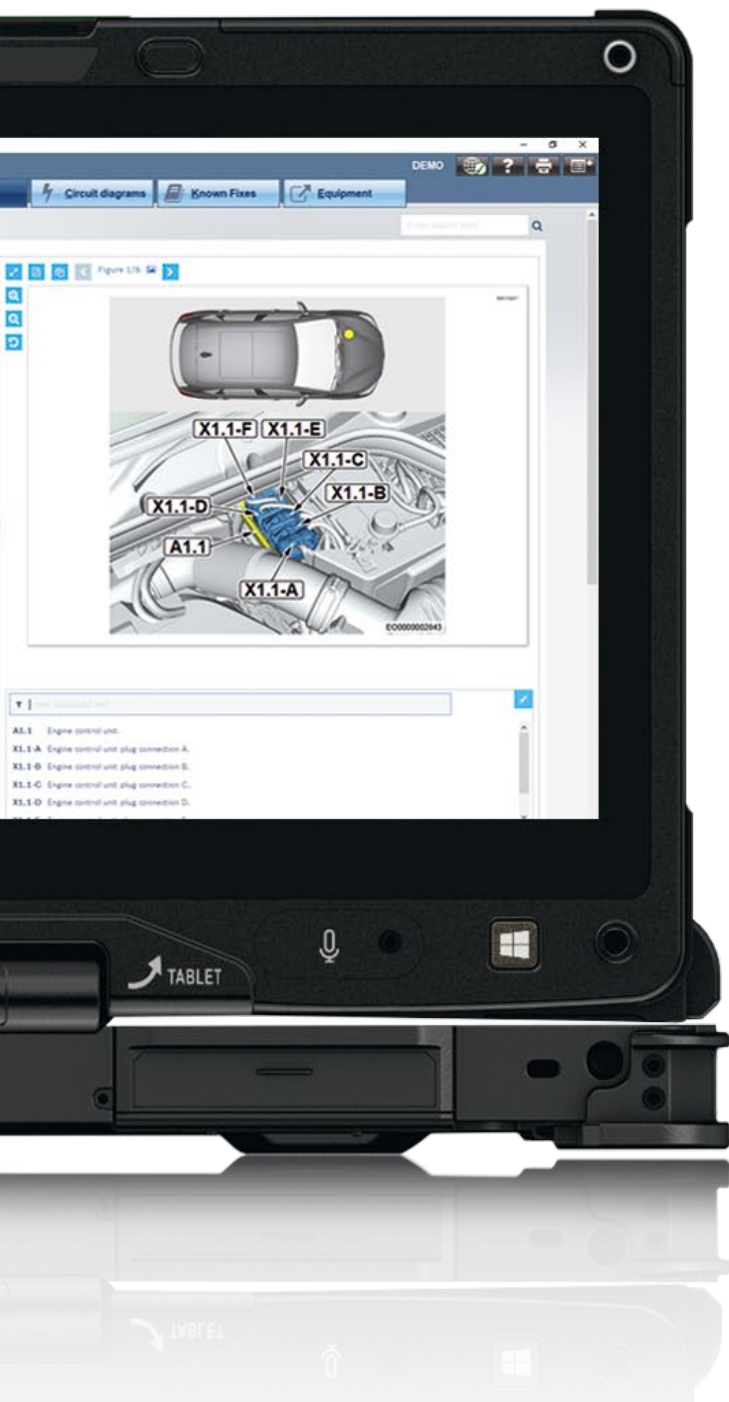
### Circuit diagrams for comfort systems

The comprehensive database contains all the circuit diagrams for important vehicle systems such as engine management, comfort and bus systems. It refers to the direct installation location and designation of each component, while also offering efficiency thanks to quick and easy-to-read overviews.



### Maintenance schedules and information

Important information about repairing vehicles can be called up from several tabs. Among other things, these include information about service times, the parts needed, tire size and pressure, as well as centralized programming information. All tabs are provided with a direct link to diagnostics. Vehicle-specific workflows guarantee that every repair is carried out in accordance with the manufacturer's specifications and are therefore covered by the manufacturer warranty.





**ESI[tronic] 2.0 Online  
offers information for  
over 90,000 vehicles  
from around**





**brands.**

# ECU diagnostic

## Overview

Teamwork is required for ECU diagnostic: The diagnostic devices communicate with the vehicle, and the ESI[tronic] 2.0 Online diagnostic software supports diagnosis, maintenance, and repair.

### Diagnostic devices



**KTS 250**  
Multifunctional diagnostic tester for fast ECU diagnosis



**KTS 560**  
Wireless diagnostic module with measurement technology (1-channel multimeter)



**KTS 590**  
Wireless diagnostic module with measurement technology (2-channel multimeter and oscilloscope)



**DCU 120**  
Mobile tablet PC with big screen



**DCU 220**  
Flexible and powerful notebook and tablet PC in one

### Diagnostic software

**ESI[tronic] 2.0 Online** – The diagnostic software for maintenance, diagnosis, and repair with comprehensive vehicle coverage is used in conjunction with the diagnostic devices.

Workshops can license different software packages according to their needs – flexibly and efficiently.



## Diagnostic systems\*




DCU 220

FSA 500

KTS 560

**KTS 995**

Premium diagnostic system with extended measurement technology: **KTS 560 + DCU 220 + FSA 500**




DCU 220

KTS 590

**KTS 980**

Diagnostic system with **KTS 590 + DCU 220**



DCU 220

KTS 560

**KTS 960**

Diagnostic system with **KTS 560 + DCU 220**



KTS 560

DCU 120

**KTS 465**

Basic diagnostic system with **KTS 560 + DCU 120**

\* Information on the diagnostic devices **KTS Truck** and **KTS 900 Truck** as well as ESI[tronic] 2.0 for **commercial vehicles and off-highway vehicles** is available in a separate brochure.

# Diagnostic devices

## Introducing the team

Whether stand-alone diagnostic device, tablet/convertible PC, or communication module: The control unit testers from Bosch provide support during everyday workshop tasks, ensuring reliable and professional vehicle diagnostics.

### KTS 250

#### The compact all-rounder

The multifunctional tester is equipped with the **ESI[tronic] 2.0 Online** diagnostic software: The compact and robust **KTS 250** has been specially developed for everyday workshop use and is particularly suitable for fast ECU diagnostic.



[Watch KTS 250 video](#)



### KTS 560 and 590

#### The robust specialists

With their integrated Ethernet interface, the **KTS 560** and **KTS 590** communication modules use state-of-the-art technology and are well adapted to the use of the **ESI[tronic] 2.0 Online** diagnostic software. To simplify the daily workshop routine, the devices can be connected to any Windows PC or to a **DCU 220** or **DCU 120** on which the ESI[tronic] 2.0 Online software is installed.



## DCU 120 The mobile workshop companion

The **DCU 120** is a portable, rugged 11,6-inch tablet PC with full HD touch designed specifically for everyday workshop use. The DCU 120 is equipped with the Windows 10 operating system and controls the separately available **ESI[tronic] 2.0** Online diagnostic software. In combination with one of the two communication modules **KTS 560** or **KTS 590**, the DCU 120 allows mobile vehicle diagnosis.



## DCU 220 The flexible multi-talent

The **DCU 220** is a notebook and tablet PC in one, allowing flexible and comfortable work – especially in the rough and tumble of everyday workshop life. It controls the test and diagnostic systems of the Bosch KTS series and at the same time impresses with a easy-to-use design. The powerful Windows 10 PC represents a milestone in terms of speed and is considered a premium diagnostic unit among Bosch DCUs. In addition to the **ESI[tronic] 2.0 Online** diagnostic software, it is possible to install other workshop software such as Bosch Connected Repair, CompacSoft (vehicle systems analysis), or the BEA PC software for emissions inspection.



Watch **Bosch diagnostic testers video**



# Diagnostic devices

## Product details

### Stand-alone diagnostic device



Performance characteristics	KTS 250
<b>Diagnostic software</b>	ESI[tronic] 2.0 Online (Diagnostic Package)
<b>Online updates</b>	✓
<b>Plug and play with ESI[tronic] 2.0 Online preinstalled</b>	✓
<b>Vehicle identification</b>	automatic
<b>Screen size</b>	7" TFT touchscreen (1024 x 600 px)
<b>Battery</b>	Lithium ion 7.2 V/2600 mAh
<b>Operating system</b>	Android (AOSP) 6.0.1
<b>RAM</b>	2 GB RAM
<b>Hard drive</b>	16 GB SSD
<b>PassThru function</b>	–
<b>DoIP Ethernet interface</b>	–
<b>Suitable for calibration of driver assistance systems with DAS 3000</b>	–
<b>Interfaces</b>	WLAN 802.11 b/g/n, 1x USB 2.0 Type A, 1x USB 2.0 Type B, LAN 10/100 Mbit
<b>Access to protected vehicle electronics*</b>	✓

\*Coverage for available manufacturer brands via central, integrated Bosch access “Secure Diagnostic Access (SDA)” and individual solutions of vehicle manufacturers with a security concept.

## Tablet/convertible PC



Performance characteristics	DCU 120	DCU 220
<b>Diagnostic software</b>	ESI[tronic] 2.0 Online	ESI[tronic] 2.0 Online
<b>Online updates</b>	✓	✓
<b>Plug and play with ESI[tronic] 2.0 Online preinstalled</b>	✓	✓
<b>Screen size</b>	11,6" Full HD Touchscreen (1920 x 1080)	11.6" full HD touchscreen (1920 x 1080)
<b>Battery</b>	Lithium-Polymer 7,7 V / 5900 mAh / 8 hours	Lithium ion 2x 24 WH (replaceable)
<b>Operating system</b>	Windows 10 IoT	Windows 10 Pro
<b>RAM</b>	4 GB RAM	8/16 GB RAM
<b>Hard drive</b>	256/512 GB SSD	256/512 GB SSD
<b>Suitable for calibration of driver assistance systems with DAS 3000</b>	✓	✓
<b>Interfaces</b>	WLAN 802.11 a/b/g/n/ac, 2x USB 3.0, LAN 10/100/1000 Mbit, micro HDMI, Audio, Bluetooth 5.0	WLAN IEEE 802.11ac, 1x USB 3.0, 2x USB 3.1, Gigabit LAN RJ45, HDMI, Audio in/out, Docking, Bluetooth 5.2
<b>Camera</b>	Front/Rear	Front

## Communication modules



Performance characteristics	KTS 560	KTS 590
<b>PassThru function</b>	✓	✓
<b>DoIP Ethernet interface</b>	✓	✓
<b>Suitable for calibration of driver assistance systems with DAS 3000</b>	(in combination with DCU DCU 220/120)	(in combination with DCU DCU 220/120)
<b>Access to protected vehicle electronics*</b>	✓	✓
<b>Diagnostics protocols (ISO, SAE, CAN)**</b>	✓	✓
<b>Integrated measurement technology</b>	1-channel multimeter	2-channel multimeter and 2-channel oscilloscope
<b>Oscilloscope sampling rate</b>	-	20 MS/s

\*Coverage for available manufacturer brands via central, integrated Bosch access "Secure Diagnostic Access (SDA)" and individual solutions of vehicle manufacturers with a security concept.

\*\*Supported diagnostic protocols: ISO 9141, SAE J2818, KWP1281, KWP 71, KWP 81, KWP 82, Kühner+RTMD+Bodensteiner MB, Holden MPI VN/VP, KWP 2000, ISO14230, DS2 BMW, Magneto Marelli IAW04, Volvo D2, Nissan 3 wire, flashing code, ISO15031, SAE J1979, KWP 2000 Lada, PSA free-running, SAE J1850 VPW+PWM, Toyota M-OBD, DS1 BMW, GM Class 2, Mitsubishi GDI, SAE 2740, BMW Fast, Ford UBP, Chrysler CCD, SAE J1939, ISO 11898, LIN, ISO15765, CAN VOLVO TP, VAG TP 1.6, VAG TP 2.0, GM LAN, ISO 13400 (DoIP), CAN FD (hardware supported).



# Diagnostic systems

## Introducing the team

With Bosch diagnostic systems, you can perform diagnoses safely and reliably, identify and correct faults, and maintain and repair vehicles. The different systems are ready for immediate use and offer the right solution for every workshop and its individual requirements.

### KTS 995

The premium diagnostic system with vehicle system analysis

The **KTS 995** is a professional, mobile diagnostic test system for workshops. It combines the advanced mobility and compatibility of a **KTS 560** and the **DCU 220** with the versatile measurement capabilities of the **FSA 500**. With over 30 preset component tests, workshops are equipped for diagnosis and vehicle system analysis on a variety of vehicles.



### KTS 980

The **KTS 980** diagnostic system allows every workshop to meet the challenges of increasingly complex vehicles. **KTS 980** combines the Bosch **KTS 590** with the **DCU 220** to create a complete, high-quality wireless package. The efficiency of workshops is boosted at key interfaces thanks to advanced control unit diagnostics as well as PassThru compatibility.





## KTS 960

The **KTS 960** improves vehicle diagnosis in workshops: It consists of the robust, wireless **KTS 560** module and the adaptable **DCU 220**, which can be used as a notebook or tablet PC as desired. With this versatile system for vehicle diagnosis, workshops are prepared for today's as well as tomorrow's requirements.

## KTS 465

### The basic diagnostic system

The **KTS 465** combines the robust **KTS 560** module with the portable 11,6-inch **DCU 120** tablet PC, making work more flexible and freer. The mobile tablet can be passed from technician to technician or connected to an external monitor, for example, to view diagnostic results together on a larger screen.



# Future-proof and efficient work thanks to the assistance of the latest technology

In conjunction with the ESI[tronic] 2.0 Online software, Bosch diagnostic devices support numerous communication modules and the latest technology standards. Bosch offers future-proof solutions for every workshop by enabling communication with the vehicle.

## PassThru

Since 2009, vehicle manufacturers have been obliged to make all technical repair information available to independent workshops, thus enabling the reprogramming of control units. With the PassThru interface from Bosch, workshops can use the Internet portals of vehicle manufacturers for reprogramming as usual and update control unit software as necessary.

## Bosch Connected Repair

ESI[tronic] 2.0 Online is compatible with the Bosch Connected Repair workshop networking solution and ensures greater efficiency in the workshop as well as optimized workflows: workshop equipment, vehicle data, and repair data are connected to Bosch Connected Repair. This saves workshops up to 10 minutes per vehicle in the repair process.



[Watch video on how Bosch Connected Repair works](#)

## Protocols such as DoIP and CAN FD

More and more vehicle manufacturers are using the Ethernet-based Diagnostics over Internet Protocol (DoIP) diagnostic interface. It enables up to 100 times faster data transfer speeds as well as secure and stable data transfer. In addition to conventional vehicle interfaces, Bosch diagnostic devices also support Ethernet. Basic diagnoses are still possible via CAN interfaces such as CAN FD.

## Considerably faster data transmission with the PassThru interface



**Workshop**  
KTS 560 / 590



PassThru software via J2534 DLL



**PC platform**  
DCU 220 / 120



Manufacturer's software



**Vehicle manufacturer**  
Service portals



# Technical support and service training

## Backup for workshops

Even the most experienced technician may encounter questions when diagnosing complex cases. Technical support and service training sessions help technicians find the solution to various vehicle repair situations.



### Service and repair become easier and faster

In addition to classic hotline support, our competent experts are also available to subscribers live via diagnostic offers such as technical inquiries, remote diagnosis, and the Visual Connect Pro app. Benefit from Bosch's extensive industrial knowledge of vehicle repairs (passenger cars as well as commercial vehicles) and product support for workshop equipment from Bosch.

### Service training

Today's vehicles are becoming increasingly complex and new technologies are challenging. That is why it is important to stay up to date and to increase one's know-how. Workshops can choose from more than 100 practice-oriented classroom training sessions and digital offerings on current topics. These are supplemented by online and live webcast training sessions.

With Bosch service training, technicians learn to solve practical cases on commercially available automotive systems. The goal is to apply the newly acquired knowledge directly in their own workshop environment, thereby increasing productivity and reducing waiting times for customers.

## Benefits at a glance

- ▶ **Extensive expertise** in vehicle systems technology from Bosch
- ▶ **Expertise in the mechanical and electrical systems** of all vehicle manufacturer brands
- ▶ **Fast problem solving**
- ▶ **Constant availability** of the latest information



Find more information, trainings and registration at [Automotive Campus site](#).

# What drives you, drives us

Bosch technologies are used in most vehicles worldwide. People, and assuring their mobility, is what we are focused on.

Therefore, we have dedicated over 130 years of pioneering spirit and expertise in research and manufacturing to achieving this.

We provide the aftermarket and workshops worldwide with modern diagnostic and workshop equipment and a wide range of spare parts for passenger cars and commercial vehicles:

- ▶ Solutions for efficient and effective vehicle repairs
- ▶ Innovative workshop equipment and software
- ▶ One of the world's most comprehensive ranges of new and exchange parts
- ▶ Large network of wholesale customers, for quick and reliable parts supply
- ▶ Competent technical support
- ▶ Comprehensive educational and training offers
- ▶ Targeted sales and marketing support

Find out more at:  
[boschaftermarket.com](https://boschaftermarket.com)

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