Porsche Advanced Cockpit with hybrid-specific displays

A particular highlight of the second-generation Porsche Panamera is its display and control concept, in the form of the standard Porsche Advanced Cockpit with touch-sensitive panels and individually configurable displays. The interactive cockpit takes the form of two seven-inch screens. The Panamera Turbo S E-Hybrid is distinguished from other cars in the model line by its unique power meter for hybrid driving, with an acid-green indicator and "turbo S" logo. The power meter provides data such as the amount of electrical energy currently being used or the energy being recovered through recuperation.

A 12.3-inch touchscreen in the centre console functions as a central PCM control and display unit, via which the driver can access various items of hybrid-specific information. The boost assistant and hybrid assistant are both practical and informative. The boost assistant display shows the energy available for boosting, while the hybrid assistant provides various visual signals for regulating the electrical drive power.

Among the other "Porsche E-Performance" features are the Sport Chrono Package as standard. This includes the MODE switch integrated in the steering wheel, which is used to activate four different driving modes. As in the case of the other Panamera models equipped with the Sport Chrono Package, these are the familiar "Sport" and "Sport Plus" modes as well as the "Sport Response button" for accessing maximum performance. The two hybrid-specific modes "E-Power" and "Hybrid Auto" are also included. Two additional modes – "E-Hold" and "E-Charge" – are controlled via Porsche Communication Management (PCM). (For a detailed description of the hybrid-specific modes, see the "Next-level performance" chapter.)

The Porsche Advanced Cockpit – digital display and control elements

The Porsche Advanced Cockpit is provided as standard in the Panamera. Analogue indicators have generally been replaced with high-resolution displays, with one exception: The analogue tachometer remains, and is designed to pay homage to the Porsche 356. From the ergonomic low seat position, the driver enjoys views not only of the sporty front wings and power dome, but also of the two seven-inch displays installed directly in his line of vision, which each feature two round instruments as standard. The analogue tachometer with integrated power meter sits between these two displays. As is common practice at Porsche, the speed is also shown digitally on the analogue tachometer. To the left is the virtual tachometer. In the centre, information on the assistance systems and other hybrid-specific information is clearly displayed. This instrument is called "Speed & Assist". To the right of the tachometer and power meter is the "Car & Info" display. The driver can use this to customise and view vehicle settings or display information from the on-board computer. Alongside the "Speed & Assist" and "Car & Info" displays, the driver can select from a defined range of options to individually configure two smaller round instruments. The entire system is controlled via the buttons on the multi-function steering wheel.

Porsche Communication Management (PCM)

The switch panel between the driver and passenger is dominated by the 12.3 inch

touchscreen display of the Porsche Communication Management (PCM). The driver can personalise a sub-area of the home screen using tiled windows. The display is operated using multi-touch gestures. As with a smartphone or table, navigation maps, for example, can be rotated in any direction with two fingers. The display also recognises handwriting, which means the driver can simply write the navigation destination on the screen.

As soon as a hand nears the PCM, it is detected by a proximity sensor and a sub-menu bar that offers additional context-related functions opens in the left of the display. If a sub-menu contains multiple pages, the user can simply scroll through the pages by swiping just like with a smartphone. On the right-hand side of the display, the driver can open tiles, or widgets, and arrange them to personalise the layout. Depending on the driver's preferences or the situation, the widgets can be used to display navigation information, the current playlist or air conditioning information. The widgets enhance the main menu of the PCM with individually customisable displays. The PCM can also be expanded with the addition of a CD/DVD autochanger, a digital radio, a Burmester® sound system (Bose® sound system is standard on the Turbo S E-Hybrid) and a Porsche Rear Seat Entertainment System.

Controlling the hybrid functions via Porsche Connect

One of the standard functions of PCM is Porsche Connect Plus. This interface to the online world includes Apple® CarPlay and the Porsche Car Connect app (PCC). Drivers of Panamera hybrid models can use the app on their smartphone or Apple® Watch to access hybrid-specific Car Connect services, including battery and charge management and the ability to control hybrid functions remotely. The battery and charge management feature, for example, allows the driver to view important information on the charge status of the car, including the purely electrical range and total range, the current charge levels of the hybrid battery and the remaining charging time. The remote control function enables the driver to control hybrid-specific functions, including starting the charging process or setting the latest possible charging finish time. The user can also use the app to adjust the standard air conditioning system and thus cool or heat the passenger compartment before starting the engine.

The smartphone and Apple® Watch apps can also be used to control other PCC functions, including Safety Services (breakdown assistance and automatic emergency calls), Security Services, vehicle statistics, vehicle status and Carfinder, speed fencing and geo-fencing and the Porsche Vehicle Tracking System (PVTS Plus). With speed fencing, the app warns the user when the car exceeds a defined speed when being driven by a third party; geo-fencing informs the user when the Panamera leaves a specific area. PVTS Plus refers to a theft detection system with a location and tracking feature.

PCM also includes an LTE telephone module with SIM card reader, wireless Internet access (Wi-Fi hotspot), real-time traffic information, Google® Earth and Google® Street View. The Porsche Connect App (PCM Connect) provides another level of online interaction; this app is also part of the standard Porsche Connect Plus package. PCM Connect enables the driver to search for the required destination using a smartphone and Google before getting behind the wheel, and then to transfer this saved destination to PCM in the car. Calendar entries and contacts with address information can be displayed, updated and set as destinations in PCM. A further innovative new feature Alternatively, smartphone photos linked with GPS data can also be used as navigation destinations. The Panamera also uses PCM Connect to access a virtually unlimited online selection of Internet radio stations and online streaming services. Songs are streamed using services

such as Napster and radio.net.

Connect Plus also offers apps such as "Parking" (search for and check availability of parking spaces), "Fuel prices" (search for fuel stations and check prices), "Dictate messages" (dictate and send an SMS using voice control), "Twitter" (tweets are read out; information is displayed), "Train information", "Flight information"„ "Weather" (current location or destination), "Event info" and "Messages" – all of which can be easily activated as menu items in PCM.

Centre console functions configured using Direct Touch Control

The high-resolution, high-end display of the PCM area transitions harmoniously into the black-panel concept of the centre console with a shift-by-wire gear selector gate for the PDK. In the centre console, a control panel with a high-quality glass look and touch-sensitive buttons offers intuitive control of various functions for vehicle and climate control. Even the slats of the central air vents can be electrically adjusted via a sensitive slider function. In the Panamera Turbo S E-Hybrid Executive, rear-seat passengers benefit from a four-zone automatic climate control system, which is installed as standard and adjusted via a black panel dedicated to climate control and infotainment functions.

Two sound systems delivering 710 and 1,455 watts respectively

The Panamera Turbo S E-Hybrid is equipped with a Bose® sound system as standard. Key information: 14 loudspeakers including passive subwoofer, 14 amplifier channels and a total output of 710 watts. As an option on its top-of-the-range model, Porsche offers a powerful 1,455 watt 3D high-end surround sound system by Burmester®, with 20 directly controlled speakers and an active subwoofer. Two additional USB charging points and a 12-volt socket in the rear ensure that smartphones and tablets in the Panamera are kept fully charged – even if the playlists on these devices are in constant use as a media source for the sound systems.

Porsche Rear Seat Entertainment

At the heart of the optional Porsche Rear Seat Entertainment system are two 10-inch touchscreens. These high-resolution, non-reflecting screens (1,920 × 1,200 pixels) attach to the backrests of the front seats and can also be used as tablets away from the Panamera. Sound for the Rear Seat Entertainment is played back via the loudspeakers integrated in the touchscreens, the vehicle sound system or Porsche Bluetooth® headphones. A wide range of digital sources can be used: PCM media can be accessed via the SD card, Jukebox, CD/DVD drive and USB stick. Passengers in the rear can also control the radio. Vehicle data can also be displayed, as well as the current navigation route with corresponding additional information. The Porsche Rear Seat Entertainment can also be used to enter the destination for the navigation system of the PCM. Rear-seat passengers can access all content in the Google® Play Store, significantly broadening the range of entertainment on offer. The Porsche Rear Seat Entertainment system can either be controlled via the touchscreens or the PCM. The Porsche Rear Seat Entertainment system uses the Android operating system. It features 32 GB of internal flash memory, which can be extended by means of a microSD card. The touchscreens also feature a camera for conducting video calls and chats.

Sporty touring car with ample room for four

The new Porsche Panamera Turbo S E-Hybrid provides ample room for four people to travel in comfort; there is sufficient space in the rear for the car to be used as a chauffeur-driven vehicle. This is particularly true of the Executive model, which boasts a 150-millimetre wheelbase extension. Both versions feature three foldable rear seats in a 40:20:40 configuration. Depending on the seat configuration, the luggage compartment volume measures between 405 and 1,245 litres (Executive: 1,395 litres).