

The Paravan Gateway

Operating Instructions Secondary Systems

Including Paravan Touch System & Voice Control



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Dear Customer

These operating instructions describe the functions of the PARAVAN® Gateway System. We ask that you please read the following pages carefully so that you can make optimal use of the systems. Please keep this maintenance manual accessible in your vehicle for later reference.

If you still have questions or suggestions regarding the secondary systems, please do not hesitate to contact us.

Drive safely!

Your PARAVAN Team

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1. **About these operating instructions**

1.1 **General facts**

1.1.1 **Driving direction information**

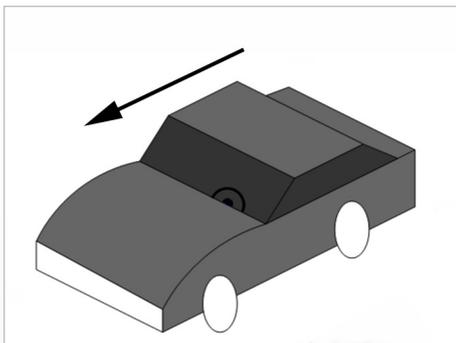


Abb. 1: *Driving direction*

These operating instructions contain information regarding the operation of the secondary systems. The most important product features are listed and described in the following. All listed product features may be combined with one another in various versions and functions.



These operating instructions are a product component of the PARAVAN® Gateway System and must always be kept in the vehicle to ensure that you have quick access to important information. All instructions concerning sides and directions are always described from the perspective of the operator looking in the driving direction!

1.1.2 Technical documentation status



All information regarding technical data/specifications, illustrations, and information in these operating instructions corresponds to the version produced following revision in april 2021.

The operating instructions for the PARAVAN® Gateway System were compiled in German and may be translated into other languages. The German version is legally binding in the event of any discrepancies.

1.1.3 Copyright

This documentation, including all of its parts, is copyright-protected. Any rights derived from the copyright, in particular those of translation, reproduction, presentation, extraction of illustrations and tables, radio broadcast, micro-film or reproduction in any other form and storage on data processing equipment are reserved, even for partial use thereof.

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2. Safety information

2.1 Generally applicable safety information

For your protection and the protection of people in your surroundings and the environment, the following safety information must be noted and followed without fail.

 HAZARD!	
Risk of death to anyone operating a vehicle with a Gateway System that is not in the original or as-delivered condition.	
Risk of death due to loss of control of the vehicle due to impermissible conversions.	
Material damage to control elements on the Gateway System caused by unapproved or incorrectly installed orthopedic attachments.	
<ul style="list-style-type: none">> Do not implement any technical changes to the control elements of the system.> Only use the Gateway System in its original or delivery state.> Only use original or approved orthopedic attachments.	

2.2 Preventing hazards, preventive measures

The vehicle and system can only be safely operated by adhering to and applying the safety information and measures for preventing undesirable events (personal injury) or conditions (property damage).



It is essential that you familiarize yourself with the contents of this safety information before using or operating the vehicle with the Gateway System.

This prevention requires the measures specified for the operator in the

> PARAVAN® Gateway Secondary Systems operating instructions

to be diligently and carefully implemented.

2.3 Exclusion of liability

Only by heeding and applying the knowledge obtained through the

> PARAVAN® Gateway Secondary Systems operating instructions

can correct and malfunction-free operation of the PARAVAN® Gateway System be ensured.



PARAVAN GmbH accepts no liability or warranty for damage or operational malfunctions due to failure to adhere to these operating instructions or due to changes made to the PARAVAN® Gateway System.

3. Primary and secondary functions

3.1 General information on function and operation



Abb. 2: Overview



These operating instructions provide the user with an overview of the function and operation of the essential secondary functions in vehicles converted for the handicapped.

Due to the number of combinations possible in the systems and control elements, only the basic operation and function are described. These combination options in the control elements make provision for a wide range of handicaps and the resulting individual needs of the operator.

- > Touch10 ①
- > Touch display ②
- > Voice control (goose-neck microphone) ③
- > Pushbutton (beeper) ④
- > Smartphone ⑤

3.2 Differences between the primary and the secondary functions



PARAVAN GmbH divides the function and control of the systems into two categories. One category comprises the primary functions (main functions of the vehicle) and the other the secondary functions comprising all other functions.

Primary functions:

- > Gas
- > Brakes
- > Steering

Secondary functions, e.g.:

- > Turn signal
- > Signal horn
- > Hazard warning lights
- > Windshield washer
- > Light system
- > Door opener
- > Comfort systems
- > etc.

Primary and secondary functions

4. Control elements

4.1 General information on control elements

PARAVAN GmbH has an extensive range of secondary operating and control elements within the PARAVAN® Gateway System. These control elements are:

- Touch display/Touch App
 - For controlling the different functions inside and installed in the vehicle.
 - Freely programmable keyboard.
- Multimote Steering wheel knob
 - For controlling the different functions inside and installed in the vehicle.
 - Partially freely configurable.
- Touch10
 - For controlling the different functions inside and installed in the vehicle.
 - Freely programmable keypad (4 keys).
- Beeper
 - For controlling the various functions inside and installed in the vehicle.
 - Freely programmable pushbutton.
- Voice control (microphone, controller)
 - For controlling the various functions inside and installed in the vehicle.
 - Freely programmable system.



The system has one or more of these control elements, depending on your individual requirements.

5. **Automatic transmissions**

5.1 **General information**

5.1.1 Driving gears, automatic gear selection



There is a wide range of automatic transmissions provided by vehicle manufacturers. The descriptions of the individual driving gears are equally varied. The driving gears listed in these operating instructions can therefore only be generally applicable and may not reflect the descriptions used in your vehicle for this reason.

The descriptions used in the US are voluntarily adopted by most vehicle manufacturers. These designations are legally specified and standardized in the US in

- > Federal Motor Vehicle Safety Standard (FMVSS) No. 102.

The following sequence is maintained and used:

- **P** Park → Parking position with mechanical locking of the transmission to prevent rolling away.
- **R** Reverse → Reverse gear.
- **N** Neutral → Idle.
- **D** Drive → Forward driving with automatic gear selection.



These driving gears are considered and described in summary in the operating instructions.



Abb. 3: Shift diagram

6. **Vehicle delivery**

6.1 **Receiving your new/converted vehicle**

Check your vehicle with the PARAVAN® Gateway System for completeness and compare the status on delivery with your order documents. If there are any discrepancies, contact PARAVAN GmbH immediately! Check (visual inspection) your vehicle for proper condition. Report any damage related to delivery or transport in writing to your

- > dealer **and**
- > to PARAVAN GmbH.

6.2 **This is how your vehicle will be delivered**

Upon delivery to you, the vehicle will be in the following condition, ready for driving and operation:

- > Completely fitted and equipped with the PARAVAN® Gateway System according to your specifications in the order.
- > All attachments and control elements will be according to your body size, as per the order, preset to your requirements.
- > A list of all functions and their operating options, e.g. voice commands or button allocations.
- > With beeper: List with the sequence of the sound signals.

6.2.1 Vehicle settings, mechanical

All electrical/mechanical components and equipment and control elements will be set to your body size. If any additional adaptation is required, this will be possible at any time. The design of your PARAVAN® Gateway System allows adaptation to all body shapes and sizes to ensure optimal accessibility and function (microphone) of the operating elements.



Have all mechanical adjustments or changes to the equipment carried out by a certified technician for your own safety. Customers are prohibited from adjusting or modifying the positions of the system components!



see Chapter "6 Vehicle delivery"

7. **Functions of the secondary systems**

7.1 **Vehicle engine start, stop**

7.1.1 **Function**



The electronic start mechanism has the same function as the engine start and stop, based on the function of the original vehicle ignition lock.

Function of the system:

- > Switching on the ignition current.
and
- > Activating the starter.
→ Vehicle engine is in operation.
- > Interrupting ignition current.
→ Vehicle engine is out of operation.

7.1.2 Operating elements



The primarily used control elements are described. Other control elements are possible. Your service technician can provide any additional instructions that may be necessary.

Touch10

- > IGN ①
 - Switches the ignition current for the vehicle on or off.
- > START ②
 - Starts the vehicle engine (starter switch).

Touch display/Touch App

- > Ignition ③
 - Switches the ignition current for the vehicle on or off.
- > Starter ④
 - Starts the vehicle engine (starter switch).

Voice control

- > Commands by voice input.



Abb. 4: Touch10

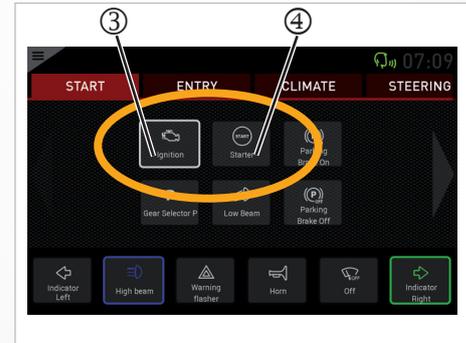


Abb. 5: Touch display/Touch App

7.1.3 Operation



Abb. 6: Ignition ON

..."Ignition on" with Touch10

Ignition ON

- > Press the "IGN" ① pushbutton for at least 2 seconds
 - Vehicle ignition will be switched on.
 - Blue LED status light will be lit.



The consuming units installed in the vehicle, e.g. lights, radio, navigational unit, etc., can be fully operated using the battery power. Avoid discharging the vehicle's battery.



Abb. 7: Ignition OFF

Ignition OFF

- > Press the "IGN" ① pushbutton for at least 2 seconds
 - Vehicle ignition will be switched off.
 - Blue LED status light will go out.

..."Motor start" with Touch10

Starting vehicle engine:

- Press the "IGN" ① pushbutton for at least 2 seconds
→ Ignition ON.
→ Blue LED status light will be lit.
- Press the "START" ② pushbutton and hold it until the engine starts.
→ Vehicle engine will start.



Abb. 8: Stopping, vehicle engine

Stopping the vehicle engine:

- Press the "IGN" ① pushbutton for at least 2 seconds
→ Ignition OFF.
→ Vehicle engine will stop.
→ Blue LED status light will go out.

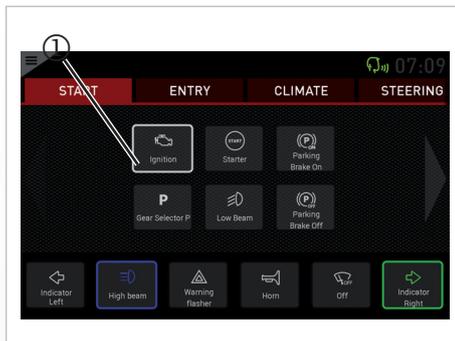


Abb. 9: Ignition ON

..."Ignition on" with Touch display /Touch App

Ignition ON

- > Touch the "Ignition" ① button for at least 2 seconds.
→ Vehicle ignition will be switched on.



The consuming units installed in the vehicle, e.g. lights, radio, navigational unit, etc., can be fully operated using the battery power. Avoid discharging the vehicle's battery.

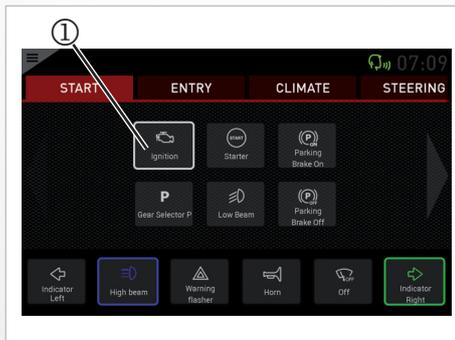


Abb. 10: Ignition OFF

Ignition OFF

- > Touch the "Ignition" ① button for at least 2 seconds.
→ Vehicle ignition will be switched off.

..."Motor start" with Touch display/Touch App

Starting vehicle engine:

- Touch the "Ignition" ① button for at least 2 seconds.
→ Vehicle ignition will be switched on.
- Touch the "Starter" ② button and hold it until the engine starts.
→ Vehicle engine will start.

Stopping the vehicle engine:

- Touch the "Ignition" ① button for at least 2 seconds.
→ Vehicle ignition will be switched off.
→ Vehicle engine will stop.

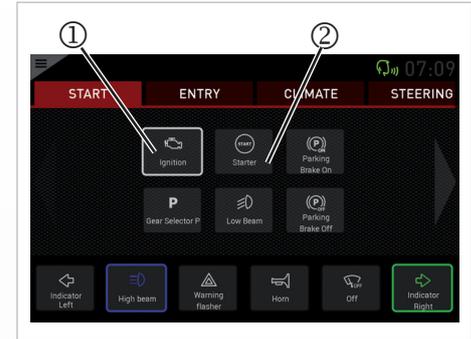


Abb. 11: Stopping, vehicle engine

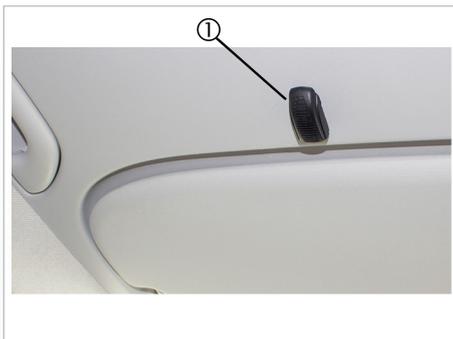


Abb. 12: Example of voice input

..."Ignition on" and "Engine start" with voice control

Starting vehicle engine:

- > Voice command: "Activate voice control"
→ Voice control (microphone) ① is active.
- > Press and hold pushbutton (beeper) .
- > Voice command: "Activate ignition".
- > Release beeper (once the LED status light has lit up in green or the command is shown on the touch display).
→ Ignition current is provided in/to your vehicle
→ The information lights in the combined instrument light up.
→ Internal consumers (e.g. radio) can be used.
- > Press and hold pushbutton (beeper) .
- > Voice command: "Start engine".
- > Release beeper (once the LED status light has lit up in green or the command is shown on the touch display).
- > Vehicle engine will start.

Stopping the vehicle engine:

- Voice command: "Activate voice control"
→ Voice control (microphone) ① is active.



This command is only required when your voice control is not or no longer active!

- Press and hold pushbutton (beeper) .
- Voice command: "Ignition off".
- Release beeper (once the LED status light has lit up in green or the command is shown on the touch display).
- Vehicle engine will stop.



Abb. 13: Example of voice input

7.2 Park Control -> handbrake, parking brake

7.2.1 Function



Abb. 14: Parking brake symbol



The electric parking brake, Park control, takes on the function of operating the original handbrake, parking brake on the vehicle.

For vehicles with an original electric parking brake:

- > The system activates the existing components of the parking brake.

For vehicles with an original mechanical parking brake:

- > The system controls the components subsequently installed for your vehicle, e.g. electric motors that take over the activation.

Function of the system:

- > "Setting" the parking brake, complete maneuver.
- > "Releasing" the parking brake

7.2.2 Operating elements



The primarily used control elements are described. Other control elements are possible. Your service technician can provide any additional instructions that may be necessary.

Touch display/Touch App

2 buttons, activated button is highlighted.

- > Parking brake fastened
- > Parking brake released

Touch10

2 pushbuttons with LED status light for feedback of the action.

- > BRAKE ON
- > BRAKE OFF

Voice control

- > Command by voice input

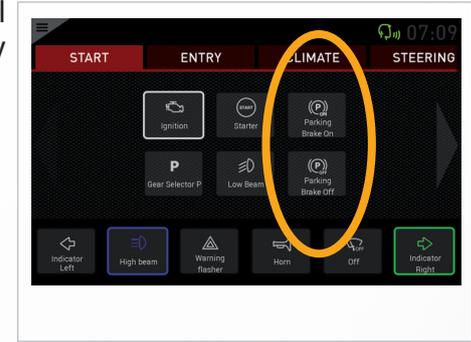


Abb. 15: Touch display/Touch App



Abb. 16: Touch10

Toggle switch

This is an autonomous toggle switch with a rocker switch for signaling.

- > ON
- > OFF



Abb. 17: Toggle switch

7.2.3 Operation

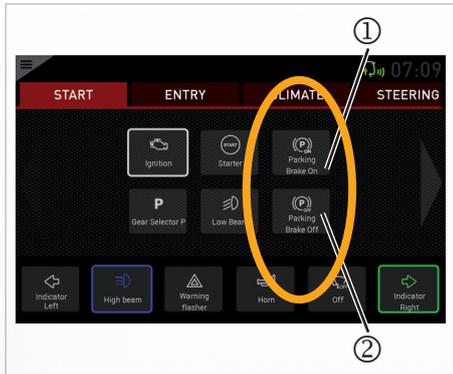


Abb. 18: Parking brake ON/OFF

... with Touch display/Touch App

Setting the parking brake:

- > Bring the vehicle to a stop.
- > Touch the Parking brake on" ① button.
 - The parking brake will be set electrically.
 - The vehicle indicator light for the parking brake will be lit.
- > Parking brake is in operation.



The parking brake can be used as an emergency brake. Keep pressing the „Parking Brake on“ button , the motor is only active as long as the button is being pressed.

Releasing the parking brake:

- > Press and hold brakes
- > Switch to Driving Gear P as required.
- > Touch the "Parking brake off" ⓘ button.
 - The parking brake will be electrically released.
 - The vehicle indicator light for the parking brake will go out.



The parking brake does not release automatically. Keep touching the "Parking brake off" ⓘ button until the parking brake has been completely released.

...with Touch10

Setting the parking brake:

- > Bring the vehicle to a stop.
- > Press the "BRAKE ON" ① pushbutton.
 - Blue LED status light will be lit.
 - The parking brake will be set electrically.
 - The vehicle indicator light for the parking brake will be lit.
- > Parking brake is in operation.



The parking brake can be used as an emergency brake. Keep pressing the „Parking Brake on“ button , the motor is only active as long as the button is being pressed.



Abb. 19: Brake ON/OFF

Releasing the parking brake:

- > Press and hold brakes
- > Press the "BRAKE OFF" ② pushbutton.
 - Blue LED status light will be lit.
 - The parking brake will be electrically released.
 - The vehicle indicator light for the parking brake will go out.



The parking brake does not release automatically. Keep the "BRAKE OFF" ② button pressed until the parking brake has been completely released.

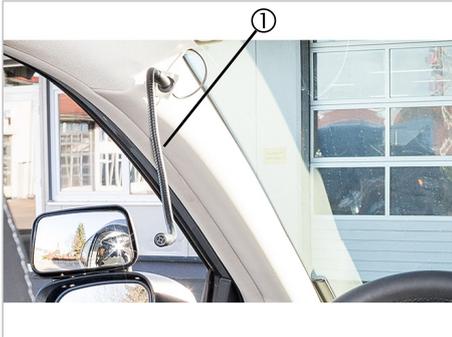


Abb. 20: Example of voice input

...with voice control

Setting the parking brake:

- Bring the vehicle to a stop.
- Voice command: "Activate voice control"
→ Voice control (microphone) ① is active.
- Press and hold pushbutton (beeper).
- Voice command: "Activate parking brake"
→ The parking brake will be electrically set.
→ The vehicle indicator light for the parking brake will be lit.
- Release beeper (once the LED status light has lit up in green or the command is shown on the touch display).
- Parking brake is in operation.

Releasing the parking brake:

- > Press and hold brakes
- > Voice command: "Activate voice control"
→ Voice control (microphone) ① is active.
- > Press and hold pushbutton (beeper).
- > Voice command: "Parking brake off"
→ The parking brake is electrically released.
→ The vehicle indicator light for the parking brake will turn off.
- > Release beeper (once the LED status light has lit up in green or the command is shown on the touch display).
- > Parking brake is out of operation.

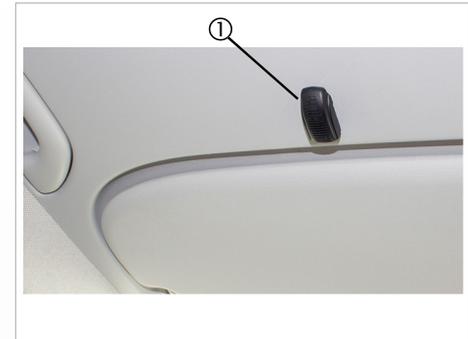


Abb. 21: Example of voice input

...with toggle switch

Setting the parking brake:

- > Bring the vehicle to a stop.
- > Press and hold brakes
- > Activate rocker switch ② (toggle switch) in the „OFF“ direction.
 - The parking brake will be set electrically.
 - The vehicle indicator light for the parking brake will be lit.
- > Parking brake is in operation.

Releasing the parking brake:

- > Press and hold foot brakes.
- > Press and hold rocker switch ① (toggle switch) in the „ON“ direction.
 - The parking brake will be released electrically.
 - The vehicle indicator light for the parking brake will go out.



The parking brake does not release automatically. Keep the rocker switch (toggle switch) pressed until the parking brake has fully released.



Abb. 22: Parking brake ON/OFF

7.3 Gear Control

7.3.1 Function



Abb. 23: Gear Control



Electronic selector mechanism of the driving gears, gear control, has the same function as the original selector lever of the driving gears of an automatic transmission.

This is only possible for vehicles with the originally installed automatic transmission.

- > The system controls an electric drive with a positioning sensor for shifting the driving gears on the automatic transmission.

Function of the system:

- > Selection and shifting of the desired gear P, R, N, D (and subgears 1, 2, and 3).
- > Activation of the indicator light (symbol) in the vehicle and on the control element.

Function of the emergency switch (emergency operation):

- > Bypasses the gear control system in an emergency or if there is a malfunction in the system. Directly controls the servo motor of the automatic transmission.
- > Activation of the indicator light (symbol) in the vehicle.

Display of the driving gear in the control element

 The selected or shifted driving gear is displayed on the instrument cluster of the vehicle and in the control element.

The manner of display for the instrument cluster in the vehicle is described in the respective vehicle documents of the manufacturer.

The signaling and display of the driving gear/sub-gear in the control element (pure control) is indicated by a

- > colored lit ring ① around the respective driving gear
 - Continuously lit for driving gears P, R, N, and D.
 - Flashing light ② for sub-gears 1, 2, and 3 of driving gear D.

 The flashing frequency changes as a function of the selected sub-gear 1, 2, or 3.

 Your service technician can adapt the color of the display and of the ring to the color of the displays in the vehicle.



Abb. 24: Driving gear display



Abb. 25: Sub-gear display

7.3.2 Operating elements



Abb. 26: Bedienfeld Gear Control



Abb. 27: Integriertes Bedienfeld



The primarily used control elements are described. Other control elements are possible. Your service technician can address any additional instructions that may be necessary.

Autonomous control panel

4 pushbuttons, lit for feedback of the action.

- > Park position „P“ ①
→ Parking, engaging the parking block in automatic transmissions.
- > Driving gear „R“ ②
→ Reverse, shifting into reverse gear.
- > Driving gear „N“ ③
→ Neutral (idle), engine and transmission are decoupled.
- > Driving gear „D“ ④
→ Drive, forward driving with automatic gear selection.
→ Selection of the sub-gears 1, 2, or 3.

Integrated control panel ① e.g. in the joystick



The same function or operation as with an autonomous control panel.

Emergency switch

i The emergency switch of the gear control is part of the safety mechanisms in the PARAVAN SPACE DRIVE® II driving system.

This is an autonomous toggle switch with a rocker switch for signaling.

- > Park position „P“ ①
→ Parking, engaging the parking lock in automatic transmissions.

i Driving gears „R“ and „N“ are selected by renewed activation or by pressing ↓ or ↑ of the rocker switch.

- > Driving gear „D“ ②
→ Drive, shifting into forward gear.
→ Selection of the sub-gears by pressing again.

i The installation position of the emergency switch may deviate depending on the vehicle. Get to know the installation position of the emergency switch so that you can locate it immediately in an emergency!

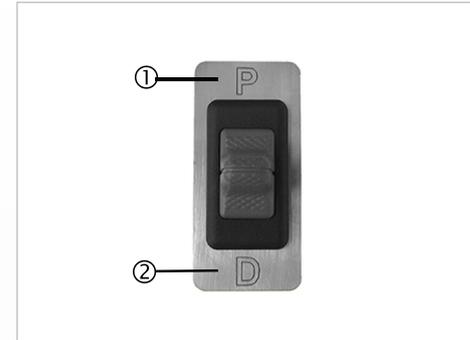


Abb. 28: Emergency switch

7.3.3 Operation



Abb. 29: Fahrstufe R, N und D

Selecting driving gears „R“, „N“, and „D“

The vehicle is in park position „P“ ①.

- > Press and hold brakes
- > Press the pushbutton for the desired driving gear (R ②, N ③, or D ④).
 - The selected driving gear will be engaged.
 - The engaged driving gear will be displayed on the instrument cluster of the vehicle and on the control element ①.
- > Release brake.
 - Vehicle will execute the selected action.



The switch between the driving gears (P, R, N, and D) can only occur with the vehicle's driving brake engaged.

Selecting the „D“ sub-gears (manual mode)



In a normal drive in driving gear „D“, it is sometimes necessary based on the driving situation, e.g. overtaking maneuver, driving up and down mountains, to select a different driving gear or sub-gear of „D“.

- Press the „D“ ① pushbutton.
→ Sub-gear „1“ will be engaged.
- Press „D“ ① pushbutton again.
→ Sub-gear „2“ will be engaged.
- Press „D“ ① pushbutton again.
→ Sub-gear „3“ will be engaged.
- Press „D“ ① pushbutton again.
→ Driving gear „D“ will be engaged.

The driver can shift directly into driving gear „D“ from any sub-gear through a longer pressing of the „D“ pushbutton.



The engaged driving gear will be displayed on the instrument cluster of the vehicle and on the control element ①.



Abb. 30: Driving gear D



Abb. 31: Park position P

Selecting driving gear „P“, parking

- > Bring the vehicle to a stop.
- > Press and hold brakes
- > Press the park position „P“ ① pushbutton.
 - The parking lock will be engaged on the automatic transmission.
 - The engaged driving gear will be displayed on the instrument cluster of the vehicle and on the control element ①.
- > Set parking brake.



Always support the automatic transmission in the park position with the parking brake!

- > Release brake.
 - Park position is then complete.

7.3.4 Emergency operation, emergency switch



Only use emergency switch during system failures or emergency situations!



WARNING

Risk of destroying vehicle and system components when operating a driving system in emergency mode caused by overloading the mechanical system.

Risk of material damage to the vehicle or the vehicle units in emergency mode due to failure of the driving system, e.g. final switch-off of the automatic transmission.

- > Shift into driving gears slowly one after another using the emergency switch.
- > Follow the driving gear display on the instrument cluster.
- > Do not shift beyond driving gear "D" or select one of sub-gears 1, 2, or 3 of "D"!
- > Avoid frequent changes in gears.
- > Establish proper operating condition of the vehicle and driving system.
- > Find a service station and eliminate the malfunction.

Selecting driving gears "D" and "P" via the emergency switch

Selecting driving gear "D":

- > Bring the vehicle to a stop.
- > Press and hold brakes
- > Activate rocker switch ② (toggle switch) in the "D" direction.
 - Driving gear "D" will be engaged.
 - The engaged driving gear will be displayed on the instrument cluster of the vehicle.

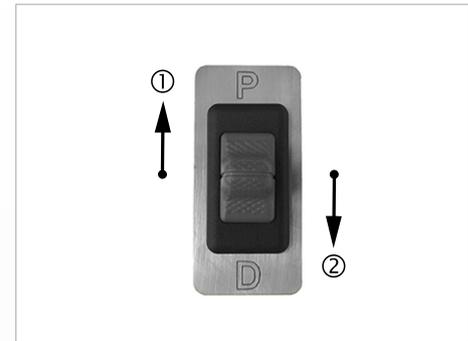


Abb. 32: Emergency switch

Selecting driving gear "P", parking:

- > Bring the vehicle to a stop.
- > Press and hold brakes
- > Activate rocker switch ① (toggle switch) in the "P" direction.
 - The parking lock will be engaged on the automatic transmission.
 - The engaged driving gear will be displayed on the instrument cluster of the vehicle.
- > Set parking brake.

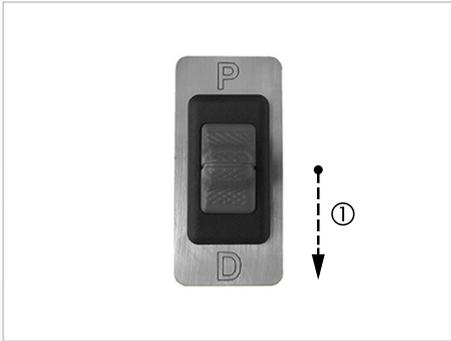


Abb. 33: Selecting driving gear

Selecting driving gears "R" and "N" via the emergency switch



The switch between the driving gears (P, R, N, and D) can only occur with the vehicle's driving brake engaged.

- > Bring the vehicle to a stop.
- > Press and hold brakes
- > Press and hold rocker switch (toggle switch) in the "D" direction ① in till the desired driving gear is displayed on the vehicle's instrument cluster.
 - The selected driving gear will be engaged.
 - The engaged driving gear will be displayed on the instrument cluster of the vehicle.
- > Release brake.
 - Vehicle will execute the selected action.

Shifting diagram of gear control with emergency switch

-  The servo motor for the automatic transmission shifts through the driving gears from the "P" position in the direction of "D" due to activation of the toggle switch.

This means the driving gears are selected and shifted in sequence through the

- > pressing and holding of the rocker switch in the "D" direction ②
 → R, N, D (manual STOP! back with ①)

-  Selecting again causes a further shift into sub-gears 1, 2, and 3 of driving gear "D". The sub-gears cannot be selected during emergency operation.

- > pressing and holding of the rocker switch in the "P" direction ①
 → D, N, R, and P (manual STOP! forward with ②)

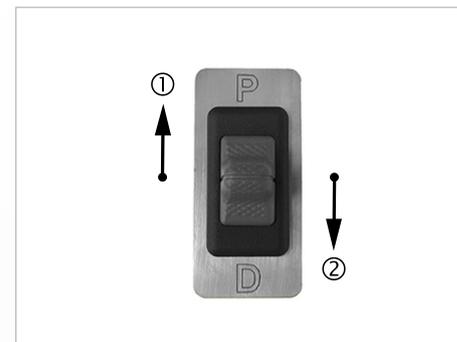


Abb. 34: Shift diagram

8. Freely configurable control elements

8.1 General facts

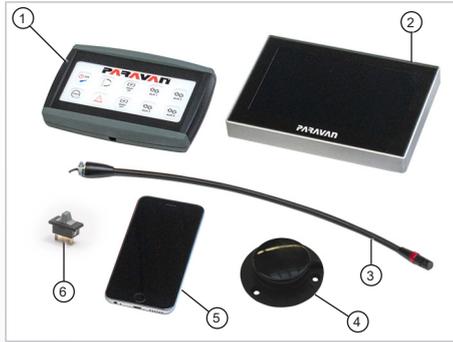


Abb. 35: Overview

With many control elements such as:

- Touch10 ①
- Touch display ②
- Voice control (gooseneck microphone) ③
- Pushbutton (beeper) ④
- Smartphone / Tablet with Touch App ⑤
- Toggle switch ⑥

Any function can be programmed, e.g. for a button, touch signal or command. The function and type of implementation can be freely programmed according to the customer's requirements. The parameters of the key/pushbutton or button can be freely selected according to the following properties:

- Desired function
- Sequence of functions
- Behavior when pushed or switched
- Trigger time of action
- Duration of activation for switch
- Function only active during specific vehicle states

8.2 Touch10

8.2.1 Function



Abb. 36: Touch10



Abb. 37: LED status light



The Touch10 pushbuttons can be used to operate the original secondary functions of the vehicle.

Function of the Touch10:

- > The system controls the existing or subsequently installed vehicle components.
- > Activating the indicator light (symbol) in the vehicle and on the control element ① (blue LED status light).

8.2.2 Operating elements

The operating panel of the Touch10:

10 pushbuttons with LED status light for feedback of the action.

- IGN ①
→ Switches the vehicle's ignition ON.
- START ②
→ Starts the vehicle engine.
- LIGHT ③
→ Vehicle light ON/OFF.
- Hazard warning lights ④
→ Hazard warning light ON/OFF.
- BRAKE ON/OFF ⑤
→ > Setting/releasing parking brake.
- AUX 1 (2, 3 and 4) ⑥
→ Freely configurable with an operating function.

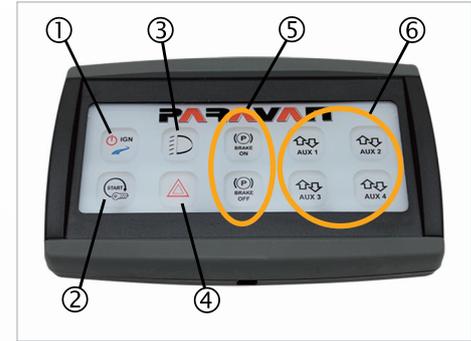


Abb. 38: Panel Touch10



The pushbuttons have a blue LED status light for confirming the respective action.

8.2.3 Operation



The Touch10 can in principle be used to control all secondary functions.

General operation of the pushbuttons: Some functions can not always be operated.
Take care of the states of these conditions:

- > Ignition
- > Brake
- > Low beam
- > Vehicle stops

Triggering an action

- > Press the pushbutton for the desired function.
 - Blue LED status light will be lit.
 - The function will be executed.
 - The respective original vehicle indicator light will be lit.

Ending an action

- > Press the pushbutton for the desired function.
 - Blue LED status light will be lit.
 - The function will be ended.
 - The respective original vehicle indicator light will go out.

Standard arrangement for the 10 pushbuttons:

- Ignition "ON/OFF" ①
- Driving light "ON/OFF" ②
- Setting the parking brake (OFF) ③
- AUX 1, freely configurable ④
- AUX 2, freely configurable ⑤
- Engine starter switch, "Start" ⑥
- Hazard warning lights "ON/OFF" ⑦
- Release parking brake (ON) ⑧
- AUX 3, freely configurable ⑨
- AUX 4, freely configurable ⑩



The function of AUX pushbuttons 1 to 4 is freely configurable and can be programmed according to the customer's wishes. Program changes may only be carried out by authorized workshops!



Abb. 39: Buttons of the Touch10

8.3 Touch display / Touch App

8.3.1 Function

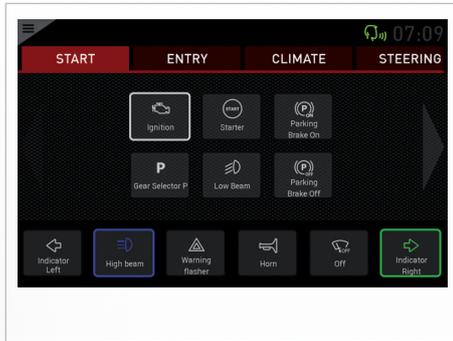


Abb. 40: Touch display/Touch App

Functions of the Touch Display/Touch App:

- > Up to 100 individual functions can be controlled with the Touch Display/Touch App
- > For voice control function: Display of the recognized command.
- > In combination with the Space-Drive-System: Settings and display of the system



Active buttons are highlighted by a colored edge.

8.3.2 Operating elements

The control screen of the Touch display/Touch App:

Illustration is showing an example of the configuration and may vary from your device. The functions are spread on several tabs and can be changed with the arrows left and right.

- Ignition ①
→ Switches the vehicle's ignition ON.
- Starter ②
→ Starts the vehicle engine.
- Low-beam light ③
→ Vehicle light ON/OFF.
- Hazard warning lights ④
→ Hazard warning light ON/OFF.
- Parking brake on/off ⑤
→ Fasten/release the parking brake.
- 6 tabs for secondary functions ⑥ remain even if the screen is being changed. If your vehicle is equipped with the Space-Drive-II-System symbols for this system will be shown.

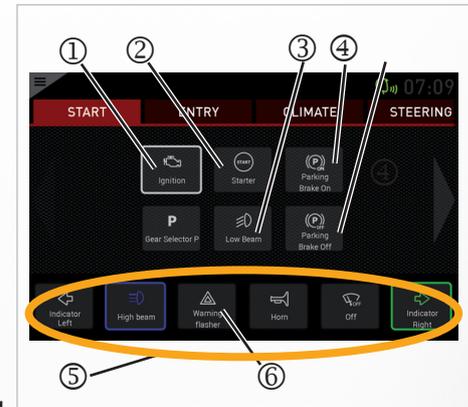


Abb. 41: Touch display/Touch App

8.3.3 Operation



The Touch display/Touch App can in principle be used to control all supported secondary functions.

General operation of the pushbuttons

Some functions can not always be operated.

Take care of the states of these conditions:

- > Ignition
- > Brake
- > Low beam
- > Vehicle stops

Triggering an action

- > Touch the button for the function required.
 - The function will be executed.

Ending an action

- > Touch the button for the function required.
 - The function will be ended.

8.3.4 Operation, menu function

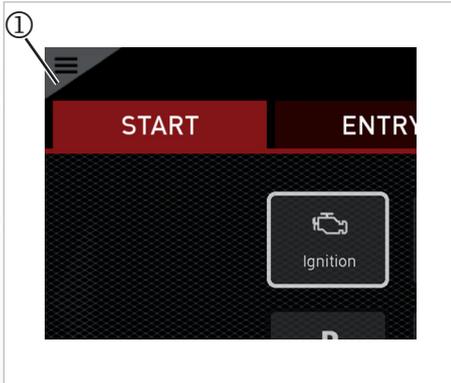


Abb. 42: Menu button



The settings of the Touch Display can be changed. To activate "MENU" ① press the symbol for 2 sec.

Functions of the "Menu" button:

- > Background lighting:
 - Brightness day: The brightness of the background lighting in percent.
 - Brightness night: The brightness of the background lighting in percent.
 - Threshold: The value between day and night at which the background lighting is changed. The actual brightness of the environment as determined by the light sensors is shown and helps to determine the threshold.
- > Date
 - Display ON/OFF.
- > Time
 - Display ON/OFF.

8.3.5 Display elements



Different display elements can be shown at the top edge on the right side of the touch display.

These display elements can be activated via the menu function.



see Chapter "8.3.4 Operation, menu function"

Possible display elements:

- > Date
- > Time ②



To set Date/Time press the symbol ② on the Touch Display for 2 sec.

- > Voice control
 - Active ① Yes/No.
- > Error
 - An error in the system will be indicated in the display

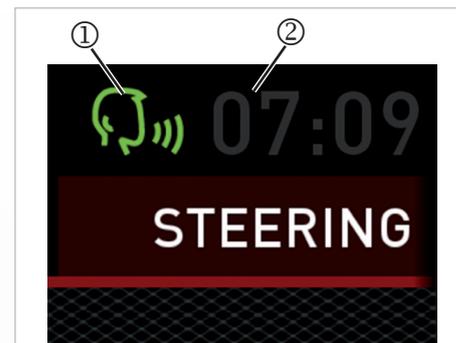


Abb. 43: Display elements

8.4 **LED status light (optional)**

8.4.1 Function



The LED status light is an optional system feature of the voice control (only possible when no touch display has been installed).

The LED status light indicates different operating states in the form of light signals:

- Green
 - Feedback by the system to the operator
 - Command (input) was recognized
- Yellow
 - For voice control: Interference factors present
 - e.g. environmental noise too high



see Chapter "9.1.1 Error sources"

- Red
 - System error found

8.5 *Beeper -> Pushbutton with acoustic signal*

8.5.1 Function



A beeper is a single pushbutton with an acoustic signal (beep sound). It can be configured with individual functions using the control unit configuration.

Function of the control element:

- > To operate secondary functions while driving
- > to operate secondary functions in combination with the Voice Control

8.5.2 Operating elements



The primarily used control elements are described. Other control elements are possible. Your service technician can provide any additional instructions that may be necessary.

Pushbutton, beeper

Autonomous pushbutton

- Freely installable pushbutton in the vehicle interior.

PARAVAN stick with beeper

Optional operating handle that can be combined with various control elements, e.g.:

- Joystick
- Gas brake slide
- Rotation guide



Abb. 44: Beeper



Abb. 45: PARAVAN stick

8.5.3 Operation

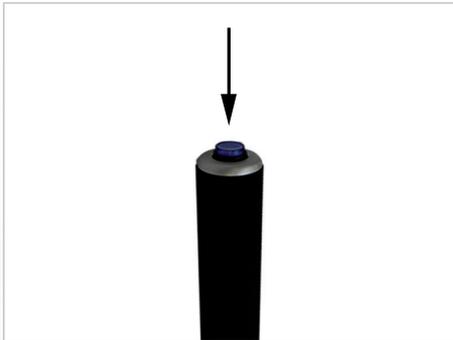


Abb. 46: Beeper operation



The type of operation does not depend on the design of the pushbutton (beeper). This means that the operation described applies to all control elements.

- > Press and hold pushbutton (beeper) ↓.
 - 1. Acoustic signal is generated.
 - There may be other acoustic signals, up to a maximum of 10, generated.
- > Count the acoustic signals.
- > Release (open) the pushbutton (beeper).
 - The selected function becomes active.



After the "10th signal with pause" without action by the operator, signal generation will stop. The sequence must be restarted and will begin with the 1st acoustic signal.



Operation is based on the "reading by hearing" principle. This means that there is a certain action behind each acoustic sequence (similar to Morse code).

Example for signal output (with standard configuration):

- Beep...beep...beep...beep...beep
→ Wipe/wash function active.



The duration of the signal output as well as the duration of the pauses between the tones can be individually adjusted.

Standard configuration (sequence) of the beeper:

- High-beam lights
- Left turn indicator
- Right turn indicator
- Signal horn
- Wipe/wash function
- Wiper interval
- Wiper stage I
- Wiper stage II
- Wiper OFF
- Hazard lights

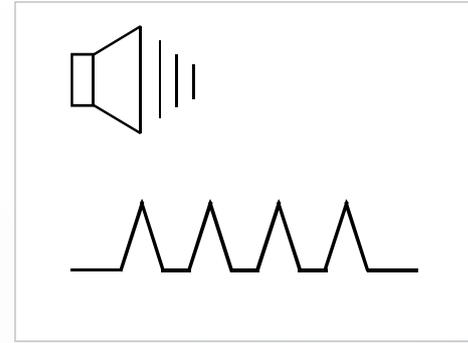


Abb. 47: Acoustic signals

8.5.4 Operation with active voice control

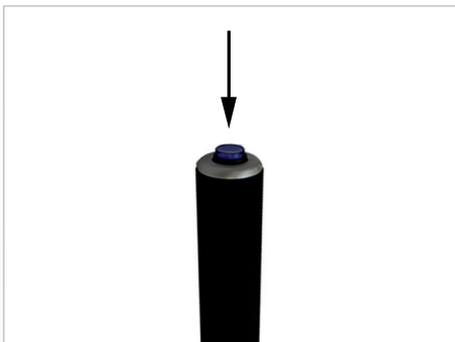


Abb. 48: Beeper operation



For safety reasons, not all the functions can be set to voice command only. The beeper must be pressed and held while certain commands are spoken. This safety function prevents faulty performance (interpretation of results).

Intended for input of safety-related commands:

- > Press and hold pushbutton (beeper) ↓.
- > Speak the command.
- > Wait for system feedback.
 - Blue LED status lights up.
 - Command is shown (touch display, etc.).
 - The selected function becomes active.
- > Release (open) the pushbutton (beeper).



The beeper button can not be operated as describe in the former chapter when Voice Control is activ. As an option your vehicle can be equipped with two buttons so it can be operated both ways.



These functions are only available when Voice Control is activ. If your system is equipped with two beeper buttons the beeperfunction is activ.

Radio setting (optional function not offered by all vehicle manufacturers)

- Briefly press the pushbutton (beeper) ↓.
→ Silences the radio for approx. 8 seconds or until a command has been recognized.

Command with activated beeper button

- Press and hold pushbutton (beeper) ↓.
→ Special commands are recognized and implemented.

Stop all active secondary functions

- Briefly press the pushbutton (beeper) ↓.
→ Stop all active secondary functions.
→ (All functions that can be terminated with the "Cancel" command are terminated)

Switch off voice control

- Press the pushbutton (beeper) 3 times within 2 seconds ↓.
→ Active voice control is terminated.
→ The beeper again has its basic functions once voice control has been terminated.

8.6 Voice control

8.6.1 Function



Abb. 49: Voice control



The innovative PARAVAN technology allows for fast implementation of the spoken commands of the operator. The controller of the voice control system can easily recognize and respond to different languages and dialects.

- > All secondary functions can be operated.
- > Individually adaptable commands are possible.
- > Fast implementation of spoken commands.
- > Recognition of different languages and dialects.

Function of language control:

- > The system controls the existing or subsequently installed vehicle components.
- > Control of the external LED status light as required.
- > Display of the recognized command on the Touch display/Touch App.

8.6.2 Operating elements

Microphone

The positioning of the microphone is one of the most important ways to affect the quality of voice control. A closer position to the speaker (operator) reduces the effects of noise interference.

The microphone should be located as close as possible to you and directed towards you.

Beeper



For safety reasons, not all the functions can be set to voice command only. The beeper must be pressed and held while certain commands are spoken. This safety function prevents faulty performance (interpretation of results).



see Chapter "8.5.4 Operation with active voice control"

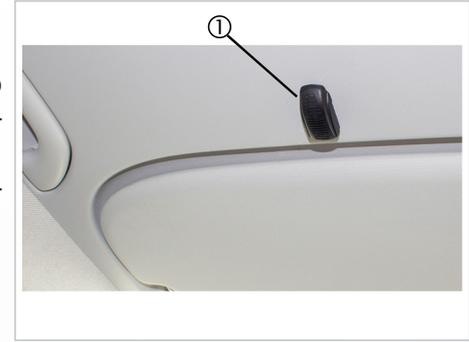


Abb. 50: Microphone, roof install.



Abb. 51: Gooseneck microphone

8.6.3 Operation



Ensure that no interference noises are generated for approx. one second before and after a voice command.



see Chapter "9.1.2 Error sources"

An action must be confirmed with the beeper when commands activate safety-related vehicle functions.



see Chapter "8.5.4 Operation with active voice control"

Procedure for entering voice commands

- > Press and hold pushbutton (beeper) as required.
- > Speak the command.
- > Wait for system feedback.
 - LED status light comes on (optional).
 - Command is shown (touch screen, etc.).
 - The selected function becomes active.
- > Release (open) the pushbutton (beeper) as required.

8.6.4 Operation, system start



The Gateway System with voice control must be restarted for each vehicle use (start of the controller) for safety reasons.

This is important due to a variety of influence factors such as:

- > Respiratory diseases (hoarseness)
- > Noise interference (discussions, noise, etc.)

and

- > The operator must deliberately switch on the voice control system.

System start

After starting the controller, the voice control system must be started with the voice command

- > "Activate voice control"

or

- > "Activate voice command".

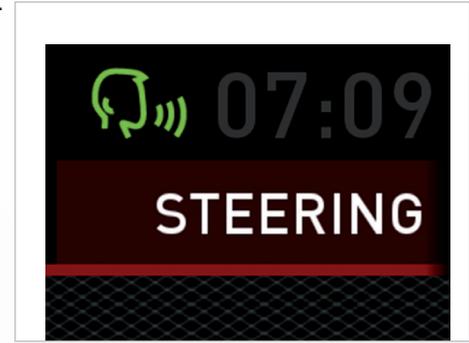


Abb. 52: Voice Control active

8.6.5 Operation, voice commands

Each PARAVAN® Gateway System can administrate and recognize a variety of individually adapted commands. It is therefore not possible to describe them. However, the procedure for using voice control is always the same.

It is also possible to use voice commands and the operating element (beeper) in combination



see Chapter "8.6.6 Examples"

Examples for possible voice commands:

- > "Activate voice control"
- > "Activate voice command"
- > "Indicator left"
- > "Window right open"
- > "Indicator off"
- > "Activate ignition".
- > "Start engine".



A list of (individually configured) voice commands valid for you or the vehicle will be provided to you by your PARAVAN service station when the vehicle is handed over.

8.6.6 Example: "Switch direction indicator on or off"

1. Voice command: "Activate voice control"
→ Voice control is active.
2. Voice command: "Indicator left"
→ Left direction indicator active (flashes).
3. Touching the beeper
→ Function is terminated.

or

4. Voice command: "Indicator off"
→ Function is terminated. w

or

5. Automatic reset according to vehicle configuration.

8.6.7 Example: "Open Window" (combined command)

1. Voice command: "Activate voice control" -> Voice control is active.
2. Press and hold beeper.
3. Voice command: "Window left open" -> Left front window opens.
4. Release beeper (after the LED status light has lit up in green or the command is shown).
5. Touch beeper -> Window opening is stopped.

or

6. Window opens completely

8.7 Multimote Steering wheel knob

8.7.1 Function

The steering wheel knob is used to operate important secondary functions while driving without having to take your hand off the steering wheel.

The following buttons are available on the steering wheel knob:



Abb. 53: Buttons Steering wheel knob

Button	Short keystroke	Long keystroke
-	Windshield wiper lower stage	Rear wiper water
Horn	Horn	
+	Windshield wiper higher stage	Windshield wiper water
Left	Turn signal left	Hazards
Right	Turn signal right	Hazards
High beam	High beam	
A	Activate low beam	Disable low beam



The assignment can be individually modified depending on the vehicle type and customer requirements.

- ▶ Short keystroke:
To activate a function via a short keystroke, the corresponding key must have been pressed for at least 100ms and a maximum of 1s. The function is only activated after the key has been released.

- ▶ Long keystroke:
To activate a function via a long keystroke, the corresponding key must be pressed for at least 1.5s. A long keystroke is confirmed acoustically

- ▶ Windshield wiper:
The - and + keys can be used to operate the front windshield wiper. The windshield wiper is not active when the system is started. The + key can be used to increase the windshield wiper level, The - key decreases it. The selected level is confirmed acoustically.

The sequence and feedback is:

- OFF (no sound)
- INTERVAL/SENSOR (beeps once)
- LOW (beeps twice)
- HIGH (beeps three times)

8.7.2 Error message



If the MultiMote beeps 5 times when a button is operated, the battery is almost empty and must be replaced. When you start driving, you must ensure that the MultiMote is working properly by pressing a the indicator button once to ensure that the MultiMote is working properly. If this activates the indicator of the vehicle and no beep is audible, the MultiMote is ready for operation.

To replace the battery, contact us or one of our service partners, as the replacement can only be carried out by a trained employee!

8.7.3 Mounting the knob

You can remove the knob from the steering wheel without using tools and with one hand.

To do this, press the release button (see picture) and carefully pull the steering wheel knob towards you, until the bolt is completely pulled out of the guide.

To reattach the knob, press the button (see picture) and carefully insert the bolt into the sleeve on the steering wheel until it stops. When the end position is reached, the button can be released again.

Check that the knob is firmly locked by pulling the knob towards you without pressing the release button. It must not be possible to pull the knob out of the steering wheel clamp.



Abb. 54: Unlocking mechanism



CAUTION

The knob is designed to withstand temperatures from -30°C to $+70^{\circ}\text{C}$. If you park your vehicle in temperatures outside this range, the knob must be removed from the car.

9. *Remedy for potential errors*

9.1 *Voice control*

9.1.1 General facts



The operation of the vehicle functions with voice control can never work with 100% accuracy. It may happen that a command is not recognized or not correctly recognized. This is not a fault in the voice control system.

Continuous background noises generated during driving such as wind noises, tire rolling noises and engine noises are filtered out by the voice recognition system and are therefore not disturbing as long as they are not extremely loud. This facilitates good recognition rates, for example at higher speed.

9.1.2 Sources of errors

Commands may not be recognized or not be correctly recognized due to various interference factors such as:

- Unclear pronunciation.
- Wrong command spoken, e.g. "indicator left" instead of "indicator right".
- Voice too soft.
- Wrong terms spoken, e.g. "open window left" instead of "window left open".
- Air flow or wind noises affect the microphone.
 - Open window.
 - Open sunroof.
 - Air nozzles directed onto the microphone.
- Environmental noise level in the passenger compartment too loud.
 - Wind noises.
 - Tire rolling noises.
 - High engine speed.
 - Radio, music system too loud.
 - Announcement on navigation system.
- Conversation of persons in the passenger compartment.
 - Conversations held at the same time or immediately before or after a command by the operator.
- No break between individual commands.
- Accidental activation of the beeper.

9.2 *System diagnosis*

9.2.1 Indication of current errors



All fault messages can be read with the Diagnostic Tester. Each PARAVAN service partner is capable of performing a vehicle and systems diagnosis.

The fault log provided includes the following information for the service technician:

- > Error code
 - Error code of the error that occurred.

10. Your link to the PARAVAN Customer Service

10.1 Hotline



PARAVAN Customer Service will gladly answer any questions related to secondary systems or obtain spare parts for your PARAVAN system.

If you have a problem with your PARAVAN system or if you need help or further information, you can reach our PARAVAN Customer Service Division during our business hours

> Monday to Friday from 8:00 AM to 12:00 PM and 1:00 AM to 5:00 PM

directly at the following phone numbers:

Language			Contact	Phone number
			Customer Service	+49 (0) 7388-9995 77
			Mr. Alexander Freiss	+49 (0) 7388-9995 945
			Customer Service (USA)	011-49-160 431 62 48
			Freecall (USA)	+1 844 887 0723

10.1.1 List of service partners



Maintenance work may only be carried out by certified dealers or certified PARAVAN® Gateway technicians. Maintenance work may only be performed by trained technicians; never carry out maintenance work yourself!

For additional quick help in your vicinity:

> Europe

Aichelau Mobility Park

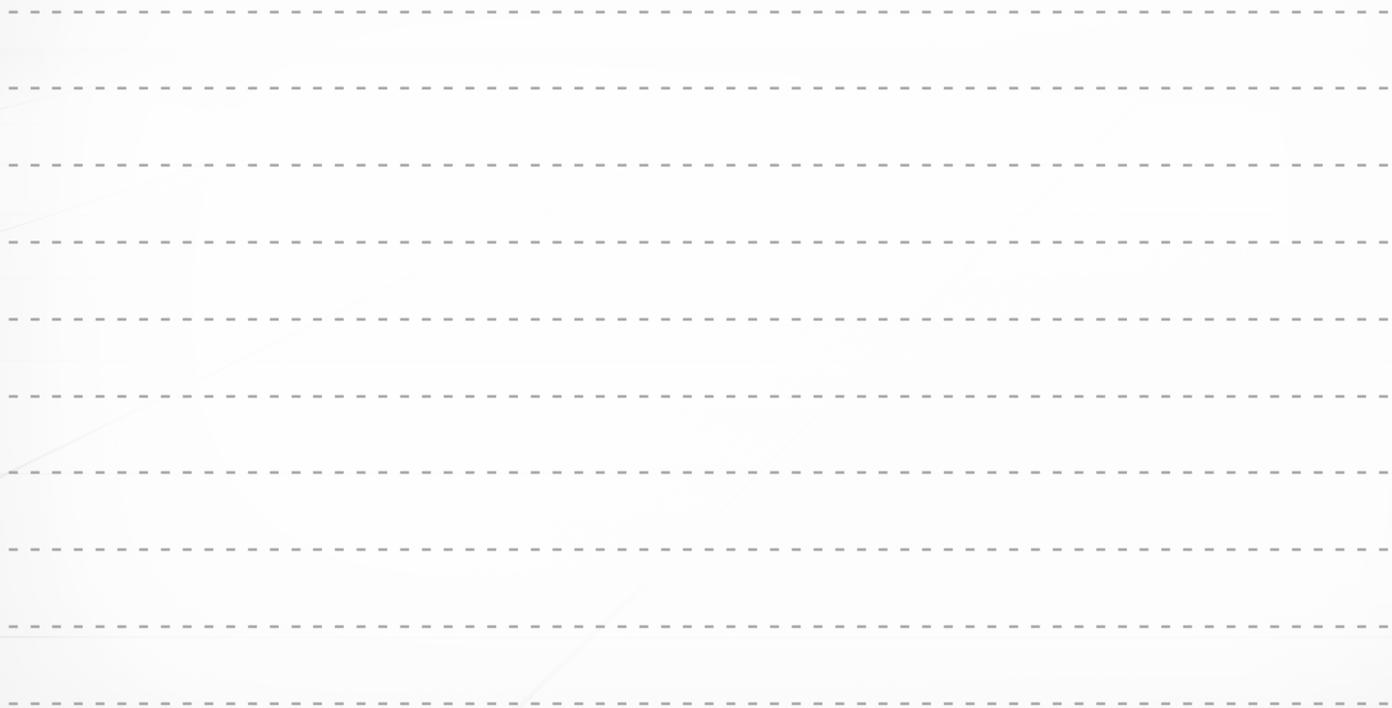
Tel.: +49 (0) 7388 - 9995 91

E-Mail: digital@PARAVAN.de

> USA

Tollfree (USA): +1 844 887 0723

E-Mail: digital@PARAVAN.de



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The Paravan Gateway

Operating instructions

Secondary functions

Including Paravan Touch System
& Voice Control



PARAVAN®

MOBILITY FOR LIFE

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EN/US V2.34

Translation of the original
operating instructions

www.paravan.com