

# PC 5200

Quick operating and installation guide Notice d'utilisation et de montage Kurzbedienungs- und Einbauanleitung Korte gebruiksaanwijzing en montage-instructies Istruzioni per il montaggio e brevi istruzioni per l'uso Instrucciones breves de uso y de montaje Kortbeskrivning och monteringsanvisning Kort betjenings- og monteringsvejledning Pikaopas ja asennusohjeet

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## Notes on operating instructions

These operating instructions include only a fraction of the functions available in your multimedia system. You can find the complete version in Adobe PDF format on the supplied DVD-ROM. We recommend that you read the complete version in order to make use of the many options the system offers.

The following reading aids are used to simplify these operating instructions:

- asks you to perform an action.
- shows the unit's reaction.
- provides extra info.
- identifies a list.

▲ Safety instructions and warnings contain important information for safe use of the unit. Failure to observe this information may result in material damage or personal injury. Therefore, please observe this information with particular care.

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Subject to technical and visual changes and typing errors.

## For your safety!

The use of the navigation system by no means relieves the driver of his/her responsibilities. Always observe the applicable traffic regulations and take the current traffic conditions into consideration. You always have priority over the information provided by the navigation system if the actual traffic situation and the information from the navigation system conflict.

• For the sake of traffic safety, perform inputs to the navigation system only prior to the trip or when the vehicle is stationary.

Only look at the monitor if it is safe to do so. Find a suitable place to stop should you need to look at the screen for a longer period of time. The system does not take the relative safety of the suggested routes into consideration. Road blocks, building sites, height or weight restrictions, traffic or weather conditions or other influences which affect the route safety or travel time are not taken into consideration for the suggested routes. Use your own discretion in order to decide on the suitability of the suggested routes. Use the "Alternative Route" function to receive better routing suggestions, or simply follow your preferred route and the automatic routing recalculation will plan the route for the remainder of your journey.

▲ In certain areas one-way streets, turn-off and entry restrictions (e.g. to pedestrian zones) have not been surveyed. In areas such as these the navigation system will issue a warning. Pay particular attention to one-way streets, turn-off and entry restrictions.

The values displayed on the system's "Trip computer" giving the current speed, driving time and the elapsed distance are calculated values. Accuracy cannot always be guaranteed. In the case of speed, the vehicle speedometer must always be given priority. The current legal road traffic speed limit always takes priority over the values stored on the navigation SD card. It is impossible to provide an assurance that the speed values of the navigation system will always match those of the current traffic regulations in every situation.

Do not rely exclusively on the navigation system when attempting to locate an emergency service (police, fire service, etc.). It cannot be guaranteed that all available emergency services in your vicinity are stored in the database. Use your own discretion and abilities to secure help in such situations.

A Please make certain that all persons using your multimedia system have access to this manual, and that they read the instructions and suggestions concerning system operation prior to use.

SETUP

## Range of functions of your navigation system

### Range of functions

Some of the functions described in this manual are only to be used in conjunction with optional accessories. It may also be that use cannot be made of certain functions in some countries because the data has not been surveyed. Due to the large range of functions, a conscious decision was taken not to allow all the settings to be used in any combination in the interests of ensuring ease of use and functionality.

### Operating restrictions (country-specific)

If a symbol depicting a crossed-out hand appears in the bottom status line it means that only limited operating options are available whilst driving. Whether or not this function is activated will depend upon the prevailing national regulations.

## Inserting/changing SD cards

### Inserting the card

- Insert the card into the SD card slot with the label facing up and the slanted corner on the right.
- Press the card into the slot until it engages.

### Removing the card

- IS Carefully press the centre of the card.
- ✓ The SD card is released.
- Pull the card straight back to remove it from the SD card slot.

### Information on SD memory cards

Only insert SD memory cards in the SD card slots. Inserting other card types can result in malfunction or destruction of the unit and the card.

Only use SD memory cards from well-known manufacturers. The use of other cards may result in malfunctions.

Do not use miniSD<sup> $\infty$ </sup> cards with adapters. The miniSD<sup> $\infty$ </sup> card could become detached from the adapter when removing it from the card slot. The adapter could then get stuck in the device.

### **Remote controls**

Depending on the scope of supply, various remote controls might be used. Full functionality can only be ensured if the correct remote control is activated.

### Activating the correct remote control

- Select "Settings -> Remote control" and activate the desired remote control by pressing the OK button.
- If you additionally use a steering wheel remote control, activate this with a tick.

Please do not expose the remote control with inserted batteries to direct sunlight.

### Active holder (accessory)

If you only use your remote control in ist active holder, we recommend that you remove the batteries from the remote control. The system can be operated when the remote control is in its holder.

### Battery change display

If the system no longer responds when the buttons are pressed or the battery symbol appears in the status line, the batteries of the remote control must be changed.

SD is a registered trademark of the Toshiba Corporation.

The SD logo is a registered trademark.

### **OPERATION**

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#### Notes:

In many countries, flat batteries may not be disposed of together with the normal domestic rubbish. Please determine how to dispose of flat batteries in accordance with local regulations.

Use only leak-proof batteries. Battery leakage can cause damage to the remote control or to your vehicle.

Never expose the remote control to direct sunlight or extreme heat. The batteries discharge at high temperatures and there is a risk of leakage.

### **RC 5400**

- 1 **VOICE/ALT-R**: *Press briefly*: Calls up the current audible guidance message. *Press and hold*: Switches to "Alternative Route" menu.
- 2 ◀, ►, ▲, ▼: Cursor buttons, move the cursor in the menus.
- **3 OK**: Confirms a selection.
- ESC: Press briefly: Jumps back to the previous menu.
   Press and hold: Jumps directly to the Start menu.
- 5 NAVIGATION: Press briefly: Switches the display type of the guidance screen. Press and hold: Moves directly to the Start menu.



- 6 **ENTERTAIN**: *Press briefly*: Calls up the previously used entertainment source.
- FAVOURITE: This button is freely programmable to provide direct access to selected functions. Detailed information on programming this button can be found in the "Settings" section of the PDF version of the operating instructions.
- 8 –, +: Volume setting.
- 9 **HOME**: *Press briefly*: Adopts the address stored under "Home" for directional guidance.

*Press and hold*: Adopts the address stored under "Work" for directional guidance.

The buttons  $\bowtie$ ,  $\bowtie$  and  $\bowtie$  have no function in relation to the navigation system.

## Switching on/off

The navigation computer is switched on and off together with the ignition.

- Switch on the ignition.
- ✓ As soon as the navigation system is operational, an instruction about using the system appears in the display.
- Read this instruction and confirm it by pressing the **OK** button on the remote control.
- ✓ The Start menu appears.

#### Stand-by mode

You can switch the system into stand-by mode as follows:

- Select "Stand-by" in the Start menu.
- ✓ The display and the audible guidance messages are deactivated.
- Image Press one of the cursor buttons ◄, ►,
   ▲, ▼ or the OK button on the remote control to exit stand-by mode again.

If the navigation system is switched off in stand-by mode, it restarts in stand-by mode when the ignition is switched on again.

### OPERATION

#### INSTALLATION

### Shutdown delay time

Immediately after switching off the ignition, the monitor is deactivated, but the navigation computer remains active for a period that can be set. This has the advantage that you can continue the directional guidance after a short stop (e.g. at the petrol station), without the navigation computer having to calculate the route again.

The shutdown delay time can be set between 1 and 10 minutes in the "Settings -> General settings -> Shut-down timer" menu.

### Volume adjustment

You can set the volume of the audible guidance messages as follows:

- Press the + button once or several times to increase the volume of the audible messages.
- Press the button once or several times to decrease the volume of the audible messages.



### **Start Menu**

The Start Menu appears after you have confirmed the user instruction.

In the Start Menu, the following menu options are available:

- □ **Navigation:** Calls up the main navigation menu (e.g. for destination input, guidance, address book, etc.).
- □ **Map:** Calls up the previously selected guidance screen.
- Travel info: Calls up the menu with the available travel information products (e.g. travel guide, restaurant and hotel guide).
- Info: Calls up the Info menu with TMC traffic information.
   Other information relating to the current route is also available.

- Trip computer: Calls up the trip computer display with the trip data and the current GPS position.
- Settings: For the individual adjustment of the navigation system.
- □ **TV/Video\*:** Switches to the connected TV/video source (e.g. TV tuner).
- ❑ Stand-by: Switches the system into stand-by mode.
   Press one of the cursor buttons ◄, ►, ▲,

✓ or the **OK** button on the remote control to activate the system again.

\* Only available if the option has been activated in the Settings menu.

## **Destination input**

The following types of destination input can be used:

- Direct address input via town/city or postcode (ZIP), road, house number or junction.
- Input of special destinations (hotels, restaurants, filling stations, public institutions, etc.).
- Adopting addresses stored in the address book.
- Destination map.
- Input via GPS coordinates (geographical longitudes and latitudes).
- Adopting destination from travel info (e.g. travel guide).
- For a complete description of all destination input options, please refer to the operating instructions on the supplied DVD/CD-ROM.

A Navigation	TMO		4000 m
Deutschland		Name:	
WETZ_			
Road:		Nr:	
Special Destination		Tel:	
ABCDEFGHIJK	MNOP	QRSTU	VWXYZ
.'-, @&		12345	67890
Space Delete	List	Quit	ОK
→• 1:52h	48 6	<b>B</b>	• 9:18

SETUP

## Entering a destination and navigating

**OPERATION** 

- Select "Navigation" in the "Start Menu".
- ✔ The Navigation menu appears.

### Selecting from the navigation database

You have the option of storing several navigation databases on a navigation SD card.

If you have not yet selected a database, the menu option "Database:" appears first in the navigation menu.

- In order to enter a destination, you must first select the desired database.
- To chose another database, highlight the country's name and then press OK.
- Then select "Database" in order to choose the desired database.

### Selecting the country

If your destination is in a country other than the displayed country or if a country has not yet been selected, first select the destination country from the list of available countries.

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### Entering destination and road

- Enter the destination address under "City/ZIP:" and "Road:".
   To do so, highlight the relevant characters and then confirm with the **OK** button.
- If the character sequence is unequivocal, the system will complete the entry automatically and the cursor jumps to "OK".
- If house numbers for the relevant road are stored on the navigation SD card, you can restrict the destination address even more with "No.:".
- If you would like to enter a junction, select "Special Destination -> Junction".
- Under "Name:" and "Tel:", you can give the address a name of your choice and also program the relevant telephone number. You can the save the destination address in the address book.

### Options for character input

The following options are available for character input:

- **Space:** Inserts a space into the character sequence.
- **Delete:** Deletes the character entered last.
- □ List: Displays all entries in the selected navigation database which begin with the character sequence entered so far.
- **Quit:** Cancels the input and moves to the next higher menu level.
- **OK:** Accepts the entered character sequence.

## Guidance

When you have entered all of the available data for the destination address, you can start the guidance function.

- For guidance purposes, it is sufficient if you enter a town/city name. The navigation system then guides you to the town or city limit.
- Select "Guidance" in the navigation menu.
- ✓ The route is planned and the guidance screen appears on the monitor. Depending on the previously selected type, the display may be in symbol, map or split-screen view (see also the "Screen displays" section).
- The navigation system will then guide you to the input destination with graphic and audible messages.

## **Screen displays**

Four types of screen display are available for guidance:

- □ Symbols: Graphic display of the "turnnow" advice
- Map\*: Map display of the planned route. The arrow shows the current vehicle position

and the combination of both display types (split screen):

- □ Map\*/symbols
- Map\*/trip computer

### Switching display type

By pressing the **NAVIGATION** button, you can switch between the various display types:

\* The map display can optionally be shown in 2-D or 3-D (with perspective) format.



### Symbol display

The symbol display provides the following information:

- 1 Distance to destination or to next via point.
- 2 Directional arrow (linear distance) to destination or to next via point.
- 3 Menu title.
- 4 Distance to the next change of direction.
- 5 Name of the street to turn into (next change of direction).

6 Directional arrow and, if necessary, early warning for next junction or crossing.

Detailed turn-now advice appears as soon as you approach a junction or crossing. In addition, directional changes are announced with audible messages.

- Current location of the vehicle: road name, town name and area if available in the selected navigation database.
- 8 Status line

### Menu options in the symbol display

- Press the OK button to display a menu with the following options:
- **Return:** Returns to the Navigation menu.

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- □ **Map:** Switches to map display.
- □ Info: Opens the Info menu.
- **Stop guidance:** Stops guidance.
- Local detour: Upon request, plans a detour if there is a road obstruction in less than 50 km on the planned route. This option is only displayed if dynamic route planning is deactivated and TMC traffic information is activated. See "Dynamic route planning", page 17 and "Settings -> Message selection", page 21.
- Plan new route: Upon request, plans a new route in light of the current traffic situation.

This option is only displayed if dynamic route planning is activated. See "Dynamic route planning", page 17.



### Map display

The map display shows the following information:

- 1 Selected scale.
- 2 Planned route (shown in white).
- 3 Compass: The black arrow points north.
- 4 Distance to the next change of direction.
- 5 Simplified diagram of the driving direction, the next junction or crossing.
- 6 Vehicle position; the arrow indicates current steer direction.

### Menu options in the map display

- Press the OK button to display a pop-up menu with the following options:
- Return: Returns to the Navigation or Start menu.
- **Scale**: Opens the window for adjusting the scale.
- Map mode: Switches the map display ("Northwards", "Steer direction", "2D/3D" and 3D angle).
- The display type "Steer direction" is not available in the scales 50 km to 1,000 km.
- The display type "3D" is not available in the scales 50 km to 1,000 km and is always given in direction of travel.
- □ Info: Opens the Info menu.
- □ Stop guidance: Stops guidance.

- Traffic view: Activates the cursor for the selection of TMC symbols on the map. See "TMC traffic information" section.
- The option "Traffic view" is only available in the "2D/Northwards" map mode.
- Local detour: Upon request, plans a detour if there is a road obstruction in less than 50 km on the planned route. This option is only displayed if dynamic route planning is deactivated and TMC traffic information is activated. See "Dynamic route planning", page 17 and "Settings -> Message selection", page 21.
- Plan new route: Upon request, plans a new route in light of the current traffic situation. This option is only displayed if dynamic route planning is activated. See "Dynamic route planning", page 17.



### Split-screen display (combined display)

The two split-screen displays combine the map display on the left side with the symbol or the trip-computer display on the right.

- The menu options for the split-screen display are the same as for the map display.
- In this display type, the "Traffic view" menu option is not available.
- The data in the trip computer is deleted automatically when a new destination is entered.

### Status lines

At the upper and lower edges of the screen, two status lines are displayed, which show a variety of information for navigating and about the system status.

Much of the displayed information can be selected for display in the "Settings -> Screen config." menu.

The top left status line shows the menu title of the active menu. The "Status line top left" can be configured for the navigation screens. Refer to the "Settings" section, page 21. In the lower status line, you can find the following symbols which are not configurable:

- □ 5 <sup>2</sup>: Display of the GPS reception status (number of satellites).
- $\Box \quad \boldsymbol{\zeta}^{\boldsymbol{\pi}}: \text{The dynamic route planning is activated/deactivated.}$
- Image: It is a state of the state of the
- □ ۞: Selected route criterion for the route planning (in this case, "Fast").

## **TMC traffic information**

Your navigation system receives traffic information via its integrated Dynamic TMC Receiver, which is then used for the dynamic route planning.

You can also collect information about the current traffic situation, either as a text message or in the map display.

To be able to use this TMC information, the following prerequisites must be fulfilled:

- The TMC data are supported by the selected database on the navigation SD card in this region.
- **TMC** traffic information is broadcast in this region.
- You have activated any TMC messages which you would like to have displayed or taken into account under "Message selection" in the "Info" or "Settings" menu.

You can see the TMC status in the status line on the screen\*:

SETUP

- "TMC" green: TMC information is available. Alternatively, the name of the provider (TMC provider) may be displayed.
- "TMC" black: No TMC data for the region available on the inserted navigation SD card.
- "TMC" red: TMC reception distorted/no TMC transmitter set.

\* The display of "TMC" must be activated in the status line. Refer to the "Settings" section, page 21.

### TMC products subject to a fee (Pay TMC)\*

In some countries or regions, extended TMC information might be available for an additional charge.

- Pay TMC stations are generally identified by a coin in the TMC station list.
- \* These TMC services subject to a fee are only supported by the Pay-TMC version of the navigation system.

### **Display of road obstructions**

### In the status line

In the top right status line, the system displays whether there are any road obstructions on the planned route.

- "\triangle" red: Road obstructions on the planned route that would cause a severe delay.
- □ "△" green: Less than 50 km to the road obstruction on the planned route. It is possible to plan a detour using the "Local detour" function (available only with dynamic route planning deactivated).
- "\trace{1}" orange: Accepted or avoided traffic jams on the original route (with dynamic route planning activated).

CONTENTS OPERATION SETUP

#### In the map display

If traffic information is available, the system will show the positions of accidents or stationary traffic on the map.

- 1 Obstructions on the route (with a red border).
- 2 Affected section of route.
- 3 Symbols with a grey or orange border are not on the planned route and are not relevant to the guidance.
- The system only displays TMC messages which you have activated under "Message selection" in the "Info" or "Settings" menu.

### TMC symbols

The TMC symbols are displayed differently depending on the scale of the map:

- Map scales of over 10 km: The traffic obstructions are displayed as triangles with a directional arrow. The arrow indicates the travel direction of the road obstruction.
- Map scales of 10 km or less: The symbol indicates the type of traffic obstruction (e.g. accident, roadblock). The road section affected is marked with arrows.
- You can find an overview of the TMC symbols in the detailed PDF operating instructions on the supplied CD-ROM.



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### View TMC messages in detail

- Press the **OK** button to open the pop-up menu.
- Select "Traffic view".
- ✔ A cursor appears on the map as black brackets.
- Move the cursor to the desired TMC symbol with the cursor buttons and then press the **OK** button.
- ✓ Detailed information on the selected traffic information is displayed.



### In the symbol display

- TMC symbol of the next road obstruction on the planned route.
   If a number of obstructions exist, this is indicated by means of a second TMC symbol which is partially obscured by the first.
- Length of the section in which the traffic obstruction is located.
   If you are already located in the affected section: distance to end of the section of route with the road obstruction.
- 3 Distance to the next road obstruction on the planned route.
- Simplified presentation of the route (black bar) and location of the road obstruction (red segment). Vehicle position is shown as a circle with an arrow inside.

- The system only displays TMC messages which you have activated under "Message selection" in the "Info" or "Settings" menu.
- In the case of urgent traffic messages within a radius of 50 km of the vehicle's current position, a special message appears on the screen (e.g. vehicle on wrong carriageway). This message can be hidden by confirming with the **OK** button. In addition, this information is provided as an audible message.
- Road obstructions on the route are only displayed when the guidance function is activated.

## Dynamic Route Planning – DRP

With the help of the TMC traffic information, the dynamic route planning – DRP – integrates the entire traffic situation in an adjustable radius (traffic horizon) around the current position into its calculation of the route. If a traffic obstruction (e.g. stationary traffic) is reported via TMC for the planned route, the navigation system will analyse the information and calculate the anticipated delay.

If there is a traffic problem on the planned route, you will be informed of this by the navigation system and may decide whether the system should take a detour by changing the route in order to avoid the segment concerned or whether it would be more sensible just to drive through the problem.

The basis for the possible delay due to a traffic obstruction and calculated by the navigation system is data that the system receives via the currently selected TMC station. The actual delay may deviate from the calculation. If you have activated the automatic mode, the system automatically plans the route so that you are guided extensively around the road obstructions without the system issuing a message.

During guidance, the system checks continuously on the basis of the traffic information whether there is a better route for route guidance and a new route is sometimes calculated, for example, if a traffic jam has disappeared.

Depending on the setting in the dynamic route planning, there are two different types of detour:

### Extensive detour (with activated DRP only)

As soon as the navigation system has received information about one or more traffic obstructions via RDS-TMC that would mean a relatively long delay for navigation to your destination, the system offers you the option well in advance of detouring the traffic obstructions extensively.

- The criteria that influence a new planning of the route (re-routing level, traffic horizon and entire delay) can be set under "Settings -> Dynamic route".
- It is possible to replan the route manually at any time in light of the current traffic situation with the "Plan new route" menu item on the guidance screen.

### Local detour (with deactivated DRP only)

With the local detour, it is possible to bypass the next traffic obstruction ahead which is announced by TMC.

As soon as you have arrived up to approx. 50 km from the road obstruction, you will receive an appropriate message.

With the "Local detour" menu item on the guidance screen, you can bypass the imminent road obstruction if required.

### Activating dynamic route planning

- Select "Info" in the Start menu.
- Select "Route criteria" in the Info menu.
- Re Activate "Dynamic route".
- Select "Return" to save the setting.

## **Via points**

If you wish to visit other locations en route to the entered destination address, these can be stored as via points. The navigation system then plans the route to include the via points in the given sequence before the destination address is reached.

### Entering via points

- Select "Via points" in the navigation menu.
- ✔ The "Via points" menu is displayed.
- Enter the via points as described under Destination input.

In the "Via points" menu, the following options are also available:

- □ **Store via point:** Stores the currently entered via point.
- List via points: Displays the list of previously entered via points.
- Delete via point: Deletes via points from the list of via points.

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■ Defining a flexible route point As well as the normal via points, you can also ask the navigation system to plan the route so that the route passes as close as possible to a specific point on the map.	<ul> <li>Deleting a flexible route point</li> <li>Select "Info" in the Start menu.</li> <li>Select "Via points" in the Info mer</li> <li>Select "Delete flexible route point</li> </ul>	<ul> <li>The following options are available in the pop-up menu:</li> <li>a Return: Returns to the Tour menu.</li> <li></li></ul>

- Select the map display during guidance.
- Move the cursor with the cursor buttons
  ◄, ▶, ▲ or ▼ to the point on the map which you would like to define as a flexible route point.
- Press OK.
- In the pop-up menu, select "Store -> Flexible route point".
- You can only define one flexible route point.
- A flexible route point can only be defined via the map display when the guidance function is activated.
- The flexible route point is deleted as soon as you enter a new via point (see above) or stop the guidance function.
- In contrast to a normal via point, you do not receive a message when you have reached the flexible route point.

### Tours

The Tours menu provides you with the option of driving to a series of various destinations one after the other without having to enter each destination individually.

You only need to enter the individual stages of the tour once via the destination input or the address book and store this tour under a freely selectable name.

The tour memory can store a total of 7 tours each with a maximum of 10 stages.

- Select "Via points" in the navigation menu.
- Select "Tour editor" in the pop-up menu that appears.
- ✔ The "Tour editor" menu is displayed.
- Select "New tour" to create a new tour,

or:

select one of the saved tours to display options for this tour.

Start tour at: Starts the selected tour from

□ Start reverse: Starts the selected tour in

**Show list:** Displays the stages of the se-

**Edit tour:** Opens the menu for editing

Select the "New tour" menu item in the

This displays the menu for editing the

IS You can now enter tour stages (inter-

mediate destinations).

reverse from the last stage.

a certain stage.

lected tour.

Entering new tour

Tours menu.

new tour.

~

the selected tour.

## Address book

The navigation system provides the capability to store at least 200 destination addresses in a personal address book. The address book is divided into the two categories "Private" and "Business".

You can also store an address for quick access (e.g. via the remote control) under "Home" and "Work".

With the "Retrieve address -> Prev. destinations" option, you can also call up the previous addresses used for guidance.

### Calling up the address book

**OPERATION** 

Select "Address book" in the "Navigation" menu or in the "Via points" menu, if you would like to use the address book for entering via points.

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- ✔ A pop-up menu with the following options appears:
- □ **Retrieve address:** Loads an address already stored in the address book as the destination or as a via point.
- □ **Store address:** Stores the currently entered address in the address book.
- Delete address: Deletes an address or all the addresses in a selected category from the address book.
- □ **Store car position:** Stores the current vehicle position in the address book.

### **Storing addresses**

- Enter the address (see destination entry).
- Select "Store address" and confirm with the **OK** button.
- Select the address book category and confirm with the **OK** button.

## PC Copy Tool

The PC Copy Tool enables you to transfer map and travel guide data or language files from the DVD supplied to SD memory cards. Detailed information on the functions of the PC Copy Tool can be found in the program's online help.

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### OPERATION

## Adapting navigation system

You can change several settings to adapt the navigation system to meet your personal requirements. For a detailed description of all functions, please refer to the operating instructions on the DVD/CD-ROM.

### Map view

Activating and changing settings for the automatic map scale.

If Automatic is activated, the scales are specified for the following regions:

- Highway
- Rural areas
- Urban areas

### **Screen configuration**

Setting the following screen properties:

- Status lines
- Day colour
- Night colour
- Setting the dependency of the colour scheme on the vehicle lighting:

 Automatic switching (depending on the setting of the headlights)

- Always day colours
- Always night colours

### **Message selection**

Selection of the type of TMC traffic messages that should be displayed by the navigation system.

- Store the modified selection list with "Store".
- Urgent traffic messages cannot be deselected.

### **Route criteria**

Various criteria can be selected for route calculation:

- □ **Fast:** Suited to all situations.
- □ **Short:** Recommended for trips within cities.
- □ **Main roads:** Recommended if you prefer routes via motorways.
- □ **No main roads:** Recommended if you prefer to avoid routes via motorways.
- The symbol for the selected route criterion is displayed in the status line.

You can also activate the following route options:

- Minimize toll roads
- □ Minimize ferry usage
- Minimize tunnel usage
- Dynamic route: Activates/deactivates the dynamic route planning.
- You can find the settings for the dynamic route planning under "Dynamic route", see below.

### **Dynamic route**

You can set the following parameters for the dynamic route planning:

- □ **Re-routing level:** Use this setting to specify whether or not the navigation system should plan a detour in the event of traffic obstructions. Five levels are available. The lowest level (1) means that the direct route should go through the stationary traffic depending on the conditions and the anticipated delay. If the highest level is selected, an alternative route should be planned in most cases.
- Level 3 is a standard setting for dynamic route planning. It is the factory setting (default).

- □ **Traffic horizon:** This setting determines the radius in which the navigation system should take traffic obstructions into account when planning your route.
- □ Entire delay: Use this value to indicate the anticipated delay time due to a traffic obstruction at or above which the navigation system should suggest that a new route be planned.
- The anticipated delay is calculated on the basis of the data received from the TMC station and may deviate from the actual situation.
- Automatic mode: When this function is activated, the dynamic route planning automatically guides you around traffic jams. There is no further query.

### Speed warning

Settings for the messages and warnings if the statutory or manual speed limits are exceeded:

- □ Warning ... over limit: Setting for the tolerance value for exceeding the statutory speed limits stored on the navigation SD card. When the set value is exceeded, the speed display in the status line is displayed red.
- For this purpose, the speed display in the status line must be activated. See also the "Screen config. -> Status lines" section.
- Availability of the legal speed limit depends on the navigation SD card used and on the relevant country.

WARNING: No responsibility is accepted for the correctness of the speed limit information provided by the navigation system; it may not always reflect the currently valid regulations. Always observe the applicable legal speed limits and traffic regulations. The vehicle speedometer must always be given priority for display of the vehicle speed.

- Warning at: Setting of an absolute value for a speed warning. A warning is displayed when this value is exceeded.
- This function is suitable e.g. in the case of a speed limit for winter tyres.
- □ **P. sp. lim. warn. on/off:** Activates/deactivates an audible message for the speed warning.

### **Remote control**

Settings for the support of various remote controls:

Activate the remote controls with which your system can be operated (e.g. if you also use a steering wheel remote control).

### **FAVOURITE function**

Definition of the functions which should be assigned to the **FAVOURITE** button on the remote control. It is possible to select one function from the function list for both the short and the long press of the button.

CONTENTS	OPERATION SETUP	INSTALLATION
General settings The following options are available in the "General settings" menu: Language Selection of the language for menus and voice information.	<ul> <li>Device configuration</li> <li>Connection settings which have to be carried out once when the system is installed and/or in the case of subsequent system upgrades.</li> <li>Shut-down timer</li> <li>Setting of the after-running time for the</li> </ul>	<b>Info points</b> Selection and activation/deactivation of the messages concerning info points (e.g. tourist attractions, petrol stations, etc.).
The language for menus can be set in- dependently of the language for navi-	navigation computer (sensible e.g. for short intermediate stops).	
<ul> <li>gation instructions.</li> <li>An SD card with the corresponding language files is needed for loading a language other than the two language files displayed.</li> <li>The language files can be transferred from the supplied DVD-ROM to an SD card using the PC Copy Tool.</li> </ul>	<ul> <li>System information</li> <li>The following options are available in the "System information" menu: <ul> <li>Diagnosis: Code-protected menu for installation and service purposes.</li> <li>Default settings: Resets the user-specific settings to the factory values.</li> <li>Configuration: Display of unit identifica-</li> </ul></li></ul>	
Audible settings.	tion and hardware and software versions.	
<ul> <li>Settings for the audible guidance messages:</li> <li>SDVC: Adjustment for speed-dependent volume increase.</li> <li>Volume: Setting of the volume of the guidance messages.</li> <li>Voice on/off: Activates/deactivates the audible guidance messages.</li> </ul>	Speed correction: The navigation system uses an average cruising speed to calcu- late the remaining travel time and the estimated time of arrival. If required, you can adapt this speed to your actual average speed. However, we do not rec- ommend you deviate significantly from	
Measuring units	the standard value of 100 %.	
Setting of time and date format, measuring units for distance specifications and adjust- ment of the current time zone.		

CONTENTS

### **OPERATION**

SETUP

### INSTALLATION

## Troubleshooting

In very rare cases, it can happen that your multimedia system does not function as you would expect. Before you contact customer service, please read the detailed operating instructions on the DVD-ROM and review the following checklist, as an apparent malfunction can possibly be remedied quickly.

Symptoms	Possible cause/remedy				
System does not start, screen dark.	Ignition switched off:				
	Switch on the ignition.				
	Ignition is already switched on, and system is on stand-by:				
	<ul> <li>Press one of the cursor buttons, the OK button, or the menu button on the remote control.</li> </ul>				
The system switches itself off after a period of normal operation.	At extremely high or low temperatures, the system is automatically switched off to protect against damage. It switches on again as soon as the temperature has returned to normal.				
System does not react to actuation of	No batteries inserted or batteries empty:				
the buttons if remote control is not in its active holder.	<ul> <li>Replace the batteries in the remote control, or install the remote control in its holder.</li> </ul>				
Guidance information not audible.	<ul> <li>Check whether "Audible information" has been activated in the "Settings" menu.</li> <li>Check whether "Volume" in the "Settings" menu is set to minimum. If no external speaker is connected:</li> </ul>				
	Check the volume setting of the monitor.				
Some of the symbols or specifications shown in the operating instructions are not displayed in the status line.	<ul> <li>Activate the required specifications in the "Settings -&gt; Screen config&gt; Status line" menu.</li> </ul>				
Colour of the satellite symbol in the	No GPS reception.				
status line is constantly red.	• Ensure that the GPS antenna is not obscured by any objects.				
Current time in the status line is incor- rect.	<ul> <li>Set the correct time zone in the "Settings -&gt; General settings -&gt; Measuring units" menu.</li> </ul>				
Guidance is not accurate.	An accuracy of 50 m falls within the specified tolerance limits. Please contact an authorised dealer if greater inaccuracies occur repeatedly.				
Displayed position does not correspond to actual vehicle position.	Problems with GPS reception persist. The position is corrected auto- matically as soon as GPS reception is satisfactory.				
	If necessary, wait a few minutes.				
	• Have your installation workshop verify that the mounting angle of the navigation computer has been set correctly.				
Directions do not correspond to the ac- tual traffic conditions.	It is possible that the car's position as calculated by the navigation system is not currently correct. Traffic routing may have been changed and no longer corresponds to the information on the navi- gation data medium.				
"TMC" logo in the status line is perma- nently red, and no traffic information is displayed on the map.	Poor/disrupted TMC reception.				

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Symptoms	Possible cause/remedy
System reports "Wrong or defect media!".	Inserted SD card is not suited to your system.
System reports "System error".	Your system requires service.
	Please contact your installation workshop or your dealer.

## Installation

### **Important notes**

The system must only be installed by trained personnel.

Observe automotive industry quality standards.

A Fire hazard. When drilling, take care not to damage concealed wiring harnesses, the fuel tank or fuel lines.

Never drill into supporting or safety-relevant body parts.

It is essential to observe the following when installing components in the passenger compartment:

Ensure that the driver has a clear all-round view.

▲ Increased risk of injury in the event of an accident. Do not install components in the inflation range of the airbag or in areas where the head or knees may knock against them.

▲ Only install the unit in vehicles with a 12-V on-board voltage and negative pole on the vehicle body. Risk of malfunction, damage and vehicle fire if installed in vehicles with other electrical systems (e.g. 24 V without suitable converter).

System components

At least the following components are required for installation:

SETUP

- Navigation computer
- GPS antenna with cable
- Power supply cable
- IR remote control
- Monitor with monitor cable
- Map software on SD card

### Accessories

**OPERATION** 

- RCD 5400: Active remote control holder. The remote control works without batteries in the active holder.
- MA 6500: TMC antenna
- ML 5100: External loudspeaker
- Second SD card (not a VDO Dayton accessory)

## **Take safety precautions**

Before starting work, disconnect the earth lead from the negative terminal of the vehicle battery in order to prevent short circuits. At the same time, follow the vehicle manufacturer's safety instructions (alarm system, airbag, immobiliser, radio coding, etc.).

INSTALLATION

## Selecting the installation location

- For access to the two SD card slots, sufficient clearance of at least 40 mm must be available in front of the navigation computer.
- A rigid connection to the vehicle body is a prerequisite for correct functioning of the system



### Adjusting the gyro sensor

The PC 5200 can be installed within a range from -90 to +90 degrees. Before final installation of the computer, the gyro-sensor must be adjusted to the relevant installation position in the navigation computer.

- Set the gyro-sensor angle to the existing installation position using a coin or similar suitable object on the side of the navigation computer.
- Deviations of -10 to +10 degrees in the sensor settings can be compensated by the navigation computer. Larger deviations may result in malfunctions.
- The navigation computer can also be installed overhead. To adjust the navigation computer for the overhead installation see "Adapting the system" on page 30.

### Securing the computer

The navigation computer can be installed at various installation locations (e.g. in the glove compartment, in the luggage compartment or under the seats).

- When deciding on a suitable installation, good heat dissipation should also be taken into account. For example, do not cover computer with carpet, as the housing acts as a heat sink.
- Secure the computer in the desired installation location using the screws supplied.
- Alternatively, the computer can also be secured to a smooth surface using the double-sided adhesive tape supplied.

### **Installing the GPS antenna**

The GPS antenna may be installed in the passenger compartment, for example on the dashboard or the rear shelf. The antenna needs to have unrestricted "visual contact" to the sky.

- Vehicles with metallised windows should have the antenna installed on the boot lid, on the roof or in the plastic bumper.
- To guarantee the functioning of the antenna, maintain a minimum distance of 10 cm to any metal parts (window frame, etc.) during installation.
- The mounting surface must be free of dust and grease.
- The installation temperature should be at least 15° Celsius so that the adhesive strip can develop its full adhesive strength.
- Place the antenna with the supplied double-sided adhesive strip onto the cleaned surface and press firmly into place.

CONTENTS

**OPERATION** 

SETUP

INSTALLATION



## **Remote control holder**

### 1. Sticking on the holder

- Stick the supplied adhesive pad onto the area provided on the holder, then stick on the holder, pressing firmly.
- The mounting surface must be free of dust and grease.
- The installation temperature should be at least 15° Celsius so that the adhesive strip can develop its full adhesive strength.

### **2.** Screwing on the holder

Screw the holder directly to the installation position using two suitable screws.

Pin	Cable colour	Connection	
A1	Black/white	Speedometer signal input, digital (long cable)	0
A2	White/yellow	Switch input reversing signal (reversing light positive)	•
A3	Black/white	Speedometer signal input, analogue (short cable)	0
A4	Red	+ 12 V permanent positive; terminal 30 (where necessary via 10 A cable fuse)	•
A5	White/blue	"Accessory" switch input	0
A6	Grey	Low beam positive	•
A7	Purple	+12 V ignition positive; terminal 15 (without switch-off on starting engine)	•
A8	Brown	Battery negative; terminal 31	•

• = Connection required

O = Connection optional

## Making the electrical connections

Install all cables with care. For wiring details, refer to the connection diagram and to the adjacent table.

### Power supply cable (ISO chamber A), Fig. 2:

Only connect electrical signals to suitable connecting points in the vehicle.

 If connection is made directly to the battery, protect the positive lead (red lead) with a 10 A fuse close to the battery (approx. 10 - 15 cm).

Connect the free wire ends A4, A7 and A8 of the power supply cable to suitable connection points in the vehicle in accordance with the connection diagram and the table. Do not cut non-assigned wires. Instead, wind them together and secure to one side. They may be required for retrofitting additional functions.

## Speedometer signal (ISO chamber A):

Depending on the type of speedometer signal, either the digital (A1) or the analogue (A3) input must be selected. Check speedometer signal using an oscilloscope if necessary. Many vehicles are equipped with a speedometer signal on one of the radio connectors. For further information contact your vehicle dealer or our hotline.

If your vehicle is not equipped to produce an appropriate speedometer signal, an optional speed sensor can be installed. This is available as an accessory from your installation service.

Never collect the speedometer signal from the ABS control!

	CONTENTS	OPERATION	SETUP	INSTALLATION
🔳 Digi	ital (standard):	Other signals	(ISO chamber A):	Playback of voice messages via the
® Ro wi pi	bute the black/white A1 cable of the iring harness to the speedometer signal ck-up point. Refer to the vehicle-specific	Connect the suitable poin lead (positiv	white/yellow wire (A2) to a nt of the reversing signal e lead of reversing lamp).	<b>vehicle loudspeaker</b> For playback of the acoustic guidance in- structions via the front left vehicle loud-
da de	ata sheets for location and connection etails (available on CD-ROM).	Connect the	grey wire (A6) to a suitable	speaker, an MA 1300 adapter cable (acces-

#### **Digital speedometer signal requirements:**

- Frequency: 0 Hz 4 kHz square-wave signal (no inductive sensor)
- □ Low level: < 1 V
- High level: 4 V 24 V

#### Analogue (for retrofitted speedometer senders and magnetic sensors):

Connect the short black/white A3 cable (directly at ISO chamber A connector) of the wiring harness to the output of the speedometer sensor or the magnetic sensor.

### Operation without speedometer signal

Operation of the navigation system is possible without a speedometer signal. However, in the absence of a speedometer signal the following functional restrictions may arise:

- Inaccurate navigation
- Inaccurate or invalid information in trip computer
- □ Limitations with regard to SDVC (speeddependent volume control)

- point of the low beam (not to the dash panel illumination!).
- Sconnection to the dash panel illumination may result in malfunctions of the navigation system (e.g. extremely slow reactions to operating steps and system crashes.).

### **Connecting system components** (ISO chamber B)

#### Active remote control holder RCD 5400 (accessory):

Connect the remote control cable plug to the mini-DIN socket on the signal cable.

#### Loudspeaker (accessory):

If required, connect separate loudspeaker to signal cable (B5 and B6). The loudspeaker impedance should be between 4 and 8 Ohm.

### Loudspeaker mute/MUTE (option):

Connect the brown/white wire (B4) of the signal cable to the MUTE input of the car radio.

sory) can be connected between the loudspeaker lead and the audio output of the navigation computer.

Connect the brown/white wire (B4) of the signal cable to the MUTE input of the adapter cable.

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### Mounting the computer

- Connect the GPS antenna to the "GPS" socket and the TMC antenna (accessory) to the "TMC" socket.
- 2. Connect the power supply cable to the ISO socket A' of the navigation computer.
- 3. If used: Connect the signal cable to the ISO socket B' of the navigation computer.
- 4. Connect the monitor cable to the monitor socket D' of the navigation computer.

## **Initial operation**

- 1. Reconnect the battery.
- 2. Insert SD card with the map data into one of the computer's SD card slots.
- Insert batteries in the remote control battery compartment.
   If an active holder (accessory) is being used for the remote control, in the holder the remote control also works without batteries.
- 4. Park the vehicle outdoors to ensure unimpeded GPS reception.

 Switch on the ignition. The LED on the navigation computer must light up.

The screen display appears (information on the safe use of the system).

- Confirm the user information using the OK button on the remote control. The main menu appears.
- Wait for a few minutes with the ignition switched on until the navigation system has adequate GPS reception. The integrated GPS receiver requires approx. 2 - 10 minutes following the first start-up to receive the system time and to calculate an adequately accurate GPS position.

### Adapting the system

- Select "Settings -> System Information -> Diagnosis -> Code" (see also operating instructions).
- Enter the code "6330".
- You can now perform the necessary adaptation of the navigation computer to the installation position and configuration of the overall system.

### Display adaptation

Select "Screen format", and set the navigation computer to the relevant monitor type (4:3 or 16:9).

## Setting the language for the display text and voice messages

A description on loading languages can be found in the section entitled "Settings" in the detailed operating instructions on the DVD-ROM supplied.

### Adjusting the installation position

When the computer is installed overhead:

Select "Installation position" and activate the corresponding option.

### OPERATION

## Checking the vehicle functions

Check the safety-relevant vehicle functions only when the vehicle is stationary, or moving at low speed. Only perform the check in an open area.

Brake system, lights, speedometer, trip computer.

Restore perfect functioning of the electrical system (clock, trip computer, alarm system, airbag, immobiliser, radio coding etc.).

### **Checking the navigation functions**

Check the following functions in the stationary vehicle:

### Remote control (batteries inserted)

Press the buttons on the remote control and watch for the reaction on the navigation system.

### Active remote control holder

Insert the remote control into the holder (without batteries):

The navigation system must react to actuation of the buttons.

### Night/day colour display

Switch on the low beam: The navigation system should switch from day to night colours.

### GPS reception

Call up the "Map" option in the main menu. The map with the calculated vehicle position is displayed. The GPS reception status is indicated at the centre of the bottom status line. As soon as adequate GPS reception is ensured, the colour of the GPS logo changes from red to black. There should be a minimum of 4 satellites received.

### TMC reception

The reception status for the Traffic Message Channel is indicated at the centre of the top status line. TMC reception is not available when "TMC" is written in red.

### Calibration

As soon as adequate GPS reception is available (green GPS logo), perform a short test drive (approx. 10 minutes) on digitised roads in order to calibrate the system. Calibration takes place fully automatically. Turn off several times and drive through a number of junctions.

You can then check whether the navigation system indicates the correct vehicle position in the map display.

### Speedometer signal

The functioning of the speedometer signal can be tested using the trip computer function of the navigation system. The trip computer must show the current vehicle speed during driving. The wrong speed may be indicated prior to final calibration.

### Hotline

Hotlines are available in many countries to handle queries regarding the multimedia system.

On the Internet: www.vdodayton.com

Subject to technical modifications and errors.



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Car Multimedia Systems.



VDO Dayton. The Car Brand.

## Installation

### **Important notes**

The system must only be installed by trained personnel.

Observe automotive industry quality standards.

▲ Fire hazard. When drilling, take care not to damage concealed wiring harnesses, the fuel tank or fuel lines.

Never drill into supporting or safety-relevant body parts.

It is essential to observe the following when installing components in the passenger compartment:

Ensure that the driver has a clear all-round view.

▲ Increased risk of injury in the event of an accident. Do not install components in the inflation range of the airbag or in areas where the head or knees may knock against them.

▲ Only install the unit in vehicles with a 12-V on-board voltage and negative pole on the vehicle body. Risk of malfunction, damage and vehicle fire if installed in vehicles with other electrical systems (e.g. 24 V without suitable converter).

### System components

At least the following components are required for installation:

- Navigation computer
- GPS antenna with cable
- Power supply cable
- IR remote control
- Monitor with monitor cable
- Map software on SD card

### Accessories

- RCD 5400: Active remote control holder. The remote control works without batteries in the active holder.
- MA 6500: TMC antenna
- ML 5100: External loudspeaker
- Second SD card (not a VDO Dayton accessory)

## **Take safety precautions**

Before starting work, disconnect the earth lead from the negative terminal of the vehicle battery in order to prevent short circuits. At the same time, follow the vehicle manufacturer's safety instructions (alarm system, airbag, immobiliser, radio coding, etc.).

## Selecting the installation location

- For access to the two SD card slots, sufficient clearance of at least 40 mm must be available in front of the navigation computer.
- A rigid connection to the vehicle body is a prerequisite for correct functioning of the system





### Adjusting the gyro sensor

The PC 5200 can be installed within a range from -90 to +90 degrees. Before final installation of the computer, the gyro-sensor must be adjusted to the relevant installation position in the navigation computer.

- Set the gyro-sensor angle to the existing installation position using a coin or similar suitable object on the side of the navigation computer.
- Deviations of -10 to +10 degrees in the sensor settings can be compensated by the navigation computer. Larger deviations may result in malfunctions.
- The navigation computer can also be installed overhead. To adjust the navigation computer for the overhead installation see "Adapting the system" on page 30.



### Securing the computer

The navigation computer can be installed at various installation locations (e.g. in the glove compartment, in the luggage compartment or under the seats).

- When deciding on a suitable installation, good heat dissipation should also be taken into account. For example, do not cover computer with carpet, as the housing acts as a heat sink.
- Secure the computer in the desired installation location using the screws supplied.
- Alternatively, the computer can also be secured to a smooth surface using the double-sided adhesive tape supplied.



### Installing the GPS antenna

The GPS antenna may be installed in the passenger compartment, for example on the dashboard or the rear shelf. The antenna needs to have unrestricted "visual contact" to the sky.

- Vehicles with metallised windows should have the antenna installed on the boot lid, on the roof or in the plastic bumper.
- S To guarantee the functioning of the antenna, maintain a minimum distance of 10 cm to any metal parts (window frame, etc.) during installation.
- The mounting surface must be free of dust and grease.
- The installation temperature should be at least 15° Celsius so that the adhesive strip can develop its full adhesive strength.
- Place the antenna with the supplied double-sided adhesive strip onto the cleaned surface and press firmly into place.



### **Remote control holder**

### 1. Sticking on the holder

- Stick the supplied adhesive pad onto the area provided on the holder, then stick on the holder, pressing firmly.
- The mounting surface must be free of dust and grease.
- The installation temperature should be at least 15° Celsius so that the adhesive strip can develop its full adhesive strength.

### **2.** Screwing on the holder

Screw the holder directly to the installation position using two suitable screws.

Pin	Cable colour	Connection	
A1	Black/white	Speedometer signal input, digital (long cable)	0
A2	White/yellow	Switch input reversing signal (reversing light positive)	•
A3	Black/white	Speedometer signal input, analogue (short cable)	0
A4	Red	+ 12 V permanent positive; terminal 30 (where necessary via 10 A cable fuse)	•
A5	White/blue	"Accessory" switch input	0
A6	Grey	Low beam positive	•
A7	Purple	+12 V ignition positive; terminal 15 (without switch-off on starting engine)	•
A8	Brown	Battery negative; terminal 31	•

• = Connection required

O = Connection optional

## Making the electrical connections

Install all cables with care. For wiring details, refer to the connection diagram and to the adjacent table.

### Power supply cable (ISO chamber A), Fig. 2:

Only connect electrical signals to suitable connecting points in the vehicle.

 If connection is made directly to the battery, protect the positive lead (red lead) with a 10 A fuse close to the battery (approx. 10 - 15 cm).

Connect the free wire ends A4, A7 and A8 of the power supply cable to suitable connection points in the vehicle in accordance with the connection diagram and the table. Do not cut non-assigned wires. Instead, wind them together and secure to one side. They may be required for retrofitting additional functions.

## Speedometer signal (ISO chamber A):

Depending on the type of speedometer signal, either the digital (A1) or the analogue (A3) input must be selected. Check speedometer signal using an oscilloscope if necessary. Many vehicles are equipped with a speedometer signal on one of the radio connectors. For further information contact your vehicle dealer or our hotline.

If your vehicle is not equipped to produce an appropriate speedometer signal, an optional speed sensor can be installed. This is available as an accessory from your installation service.

Never collect the speedometer signal from the ABS control!

#### Digital (standard):

Route the black/white A1 cable of the wiring harness to the speedometer signal pick-up point. Refer to the vehicle-specific data sheets for location and connection details (available on CD-ROM).

#### Digital speedometer signal requirements:

- Frequency: 0 Hz 4 kHz square-wave signal (no inductive sensor)
- □ Low level: < 1 V
- □ High level: 4 V 24 V

## Analogue (for retrofitted speedometer senders and magnetic sensors):

Connect the short black/white A3 cable (directly at ISO chamber A connector) of the wiring harness to the output of the speedometer sensor or the magnetic sensor.

#### Operation without speedometer signal

Operation of the navigation system is possible without a speedometer signal. However, in the absence of a speedometer signal the following functional restrictions may arise:

- Inaccurate navigation
- Inaccurate or invalid information in trip computer
- □ Limitations with regard to SDVC (speed-dependent volume control)

### Other signals (ISO chamber A):

- Connect the white/yellow wire (A2) to a suitable point of the reversing signal lead (positive lead of reversing lamp).
- Connect the grey wire (A6) to a suitable point of the low beam (not to the dash panel illumination!).
- Connection to the dash panel illumination may result in malfunctions of the navigation system (e.g. extremely slow reactions to operating steps and system crashes.).

## Connecting system components (ISO chamber B)

#### Active remote control holder RCD 5400 (accessory):

Connect the remote control cable plug to the mini-DIN socket on the signal cable.

#### Loudspeaker (accessory):

If required, connect separate loudspeaker to signal cable (B5 and B6). The loudspeaker impedance should be between 4 and 8 Ohm.

### Loudspeaker mute/MUTE (option):

Connect the brown/white wire (B4) of the signal cable to the MUTE input of the car radio.

## Playback of voice messages via the vehicle loudspeaker

For playback of the acoustic guidance instructions via the front left vehicle loudspeaker, an MA 1300 adapter cable (accessory) can be connected between the loudspeaker lead and the audio output of the navigation computer.

Connect the brown/white wire (B4) of the signal cable to the MUTE input of the adapter cable.

### Mounting the computer

- Connect the GPS antenna to the "GPS" socket and the TMC antenna (accessory) to the "TMC" socket.
- 2. Connect the power supply cable to the ISO socket A' of the navigation computer.
- 3. If used: Connect the signal cable to the ISO socket B' of the navigation computer.
- 4. Connect the monitor cable to the monitor socket D' of the navigation computer.

## **Initial operation**

- 1. Reconnect the battery.
- 2. Insert SD card with the map data into one of the computer's SD card slots.
- Insert batteries in the remote control battery compartment. If an active holder (accessory) is being used for the remote control, in the holder the remote control also works without batteries.
- 4. Park the vehicle outdoors to ensure unimpeded GPS reception.

 Switch on the ignition. The LED on the navigation computer must light up.

The screen display appears (information on the safe use of the system).

- Confirm the user information using the OK button on the remote control. The main menu appears.
- Wait for a few minutes with the ignition switched on until the navigation system has adequate GPS reception. The integrated GPS receiver requires approx. 2 - 10 minutes following the first start-up to receive the system time and to calculate an adequately accurate GPS position.

### Adapting the system

- Select "Settings -> System Information -> Diagnosis -> Code" (see also operating instructions).
- Enter the code "6330".
- You can now perform the necessary adaptation of the navigation computer to the installation position and configuration of the overall system.

### Display adaptation

Select "Screen format", and set the navigation computer to the relevant monitor type (4:3 or 16:9).

## Setting the language for the display text and voice messages

A description on loading languages can be found in the section entitled "Settings" in the detailed operating instructions on the DVD-ROM supplied.

### Adjusting the installation position

When the computer is installed overhead:

Select "Installation position" and activate the corresponding option.

## Checking the vehicle functions

Check the safety-relevant vehicle functions only when the vehicle is stationary, or moving at low speed. Only perform the check in an open area.

Brake system, lights, speedometer, trip computer.

Restore perfect functioning of the electrical system (clock, trip computer, alarm system, airbag, immobiliser, radio coding etc.).

### **Checking the navigation functions**

Check the following functions in the stationary vehicle:

### Remote control (batteries inserted)

Press the buttons on the remote control and watch for the reaction on the navigation system.

### Active remote control holder

Insert the remote control into the holder (without batteries):

The navigation system must react to actuation of the buttons.

### Night/day colour display

Switch on the low beam: The navigation system should switch from day to night colours.

### GPS reception

Call up the "Map" option in the main menu. The map with the calculated vehicle position is displayed. The GPS reception status is indicated at the centre of the bottom status line. As soon as adequate GPS reception is ensured, the colour of the GPS logo changes from red to black. There should be a minimum of 4 satellites received.

### TMC reception

The reception status for the Traffic Message Channel is indicated at the centre of the top status line. TMC reception is not available when "TMC" is written in red.

### Calibration

As soon as adequate GPS reception is available (green GPS logo), perform a short test drive (approx. 10 minutes) on digitised roads in order to calibrate the system. Calibration takes place fully automatically. Turn off several times and drive through a number of junctions.

You can then check whether the navigation system indicates the correct vehicle position in the map display.

#### Speedometer signal

The functioning of the speedometer signal can be tested using the trip computer function of the navigation system. The trip computer must show the current vehicle speed during driving. The wrong speed may be indicated prior to final calibration.

### Hotline

Hotlines are available in many countries to handle queries regarding the multimedia system.

On the Internet: www.vdodayton.com

Subject to technical modifications and errors.

# NPD5200 & AOM7694 RGB CONNECTIONS



NPD5200 CONNECTOR "A" POWER/TRIGGER WIRE FUNCTIONS

AOM7694 POWER/TRIGGER WIRE FUNCTIONS

# VR187 WITH NPD5200 SYSTEM DIAGRAM RGB and NTSC Input



NOTE: Connecting in this

(current version).

configuration replaces CA1255

ASA Electronics For Reference Only 9-5-2007 Rev A