Reverse light switch

With the aid of the reverse light switch, the navigation system detects whether reverse gear is engaged. On manual transmission vehicles, the reverse light switch is located in the manual gearbox. On automatic vehicles, the reverse signal comes from the selector lever switch.

Principle of Operation

The navigation computer DVD represents a further-development of the MK-3 computer. The computing capacity of the navigation computer DVD has been doubled (from previously 54 MHz to 108 MHz). Likewise, the capacity of the memory modules has been enlarged and a new flash module integrated to allow for considerably faster flashing (from previously 15.6 MIPS to 70.0 MIPS, million instructions per second).

The previous functions of the MK-3 computer have been fully adopted. Only the new or modified functions are outlined in the following section.

The following functions are new:
- Additional destination inputs
- More accurate calculation of arrival time
- Improved direction
- Improved map presentation on the CID
- New map presentations
- Digitized road maps on DVD

The following new destination inputs are possible:
- Direct input of border crossing points
- Address book extended to 100 entries (20)
- Storage of last 20 destinations (10)

More accurate calculation of arrival time

Abstract: By including traffic information (TMC), e.g. in the event of a traffic queue ahead, an alternative route is calculated and displayed.

The expected time of arrival is calculated more accurately by including the average vehicle speed corresponding to the type of road.

For this purpose, the average speed of the last 7 minutes is stored corresponding to the type of road (motorway, major trunk road, district road). Based on the selected route, the computer calculates the share of different types of road and the determined average speed so it can calculate the arrival time more accurately.

Improved direction

When changing from one motorway to another, the number of the new motorway is announced (voice information).

Improved map presentation on the CID

In future, the maps will be presented in up to 256 colors. The indicator for the current position has been enlarged.

New map presentations

The scaling of the maps has been extended to 1000 miles. The scales 200 miles, 500 miles and 1000 miles have been additionally introduced. As a result, all the USA can be shown on the display. The selected route is highlighted in white.

In addition, 3 maps can be shown in different scales.

The following scales can be presented:
- The scale bar on the display corresponds to 1000 miles
- The scale bar on the display corresponds to 500 miles
- The scale bar on the display corresponds to 200 miles

The 200 miles, 500 miles and 1000 miles scales can only be presented in connection with DVD maps. The previous CD maps only provide scales of up to 100 miles.

The map scales are selected in the "Settings" menu under "Announcement."

Digitized maps on DVD

The navigation computer DVD is equipped with a DVD drive. The navigation computer DVD is retro-compatible and can be used in all MK-x systems. It can also read the previously used CDs.

Operation

The High navigation system is controlled by selecting the "GPS navigation" menu in the main menu of the central information display.

Basic settings are possible under the menu item "Settings" in the main menu to adapt the display to country specific requirements. The various settings can be carried out in the windows. The red markings correspond to the current settings.

With the "Screen" menu item in the Settings menu it is possible to switch between full and split screen.

As a result, it is possible to show the map and the navigation arrow simultaneously.

Navigation is represented with arrows while in split screen or using the OBC functions.

The mask for entering the destination is accessed after selecting the "GPS navigation" menu. A submenu is selected by pressing the rotary push-button on the CID control panel.

In the "Announcement" menu, the last voice announcement is repeated by pressing the button. By pressing the button for longer than 2 seconds, the announcement is deactivated or activated depending on the setting.

"Route selection" menu
Destination input
By pressing the button, current directions are ended in the "Destination input" menu and the input mask is selected in order to enter a new destination.

New route
It is possible to switch between map presentation mode and arrow presentation mode in the "Route map" menu.

Information on the current traffic situation can be selected in the
"Traffic information" menu.

"New route" menu
Corresponding to the traffic situation, e.g. accident, traffic congestion etc., it is possible to calculate an alternative route. The distance for the route to be newly calculated can be selected between 1-10 miles.

Service Information

Conversion
The navigation computer DVD is retrocompatible for all MK-x systems. The following point must be observed when the navigation computer DVD is fitted in a vehicle with MK-1 system:
The GPS receiver must be disconnected as the navigation computer DVD features an integrated GPS receiver.

Service mode
Service mode in the High navigation system supplies information for system diagnosis.

Accessing service mode

The test functions can be selected via the "Settings" menu in the central information display. Proceed as follows:
- Terminal R active
- Select main menu
- Select "Settings" menu
- Press and hold rotary push-button for 8 seconds
- Select the required menu item from the list that now appears
- Confirm selected menu item with the rotary push-button

Switch off terminal R to end the test functions.

Diagnosis

Diagnosis of the navigation systems comprises the following features:
- Read identification
- Diagnosis enquiry, e.g. gyro value, wheel speed, eject button

Coding

Coding of the navigation systems comprises the following functions:
- Recoding a control unit
- Retrofitting a control unit

Car & key memory

No functions are available for the car & key memory.

Notes: