

For your convenience, this section outlines what you need to know about the Touareg's Navigation System. Review each topic for important details.

- **Sales Tips**
- **Dealer Preparation**
- **Customer Demonstration**
- **Common Concerns**
- **System FAQs**
- **Dealer FAQs**
- **Customer FAQs**



Sales Tips

Below are suggestions that can help you make your sales experience with the Touareg's Navigation System successful.

Preparation

The most important step in preparing to sell the Touareg Navigation System is to use it. You should also study this section of the Toureg Sourcebook and the navigation module on vwwebsites.com. This section gives you detailed information on the operation of the system, provides you with coverage information, and supplies answers to common customer concerns and frequently asked questions about the Touareg Navigation System.

Familiarize yourself with the Touareg Navigation System by using it on the road prior to promoting it to customers. Your own positive personal experiences will make it much easier for you to communicate the benefits of the system to your customers.

Introducing the Navigation System

The Touareg Navigation System offers a number of advanced navigation features. You will want to introduce the system by referring to the major features:

- **Route Planning** – the system automatically calculates a route to a desired location, such as a specific address, street intersection, restaurant, hotel, bank, etc.
- **Route Guidance** – the system provides audible and visual guidance instructions for each driving maneuver along the planned route.
- **Rerouting** – the system automatically recalculates the route if the driver deviates from the original route plan.

We recommend a simple 3-step process that you may use to successfully introduce the Touareg Navigation System to your customers.

1 Identify the Customer Needs and Interests

The Touareg Navigation System offers numerous features that can make the customer's driving experience more rewarding. A critical element to successfully introducing the Touareg Navigation System is understanding individuals and their purchase criteria.

- Ask customers about their travels.
- Ask them about their interests and their primary use of their vehicle(s).
- Try to identify safety-sensitive and chronically busy customers, as they are likely candidates to purchase the Touareg Navigation System.

Most customers are concerned with BOTH safety and convenience.

2 Explain the Benefits of the Navigation System

Once you have identified your customer's needs and interests, explain the relevant benefits of the Touareg Navigation System to them.

If your customer is concerned about safety, you may suggest the following safety benefits the Touareg Navigation System provides:

- Location of and guidance to medical facilities, law enforcement agencies, etc., if the need arises.
- Exact location of your vehicle in the event that you need to request roadside assistance.
- Map screen display of where you are at all times.
- Real-time voice guided directions to your destination.
- Guidance to unfamiliar areas or points of interest.
- Automatic rerouting to your destination if you miss a turn or exit.

If your customer spends a lot of time in their vehicle, emphasize what the following convenience benefits of the Touareg Navigation System provide:

- The benefit of not having to get directions before you get into your vehicle.
- Reduction in time spent searching for a destination or being lost.

- Display of a recalculated route, list of planned maneuvers, and display of your travel time to your destination. As you are driving, the travel time to your destination will also be constantly updated so you can more accurately predict the time to your destination.
- Reduction in your travel distance, stops, and wrong turns, helping you reduce your fuel consumption.
- Assistance in rerouting around traffic jams and construction (that you may learn about from TV or radio).
- Large "zoomable" visual display on the map screen of where you are at all times. You no longer have to squint to read the tiny print on a road atlas.

3 Demonstrate the Navigation System

There is no substitute for experiencing the system in the Touareg. Demonstrate the Touareg Navigation System to the customer in the showroom, and as part of their vehicle test drive, make the system an integral part of their driving experience.

Show the customer the following features:

- Ease of address selection
- Ease of point of interest (POI) selection within a certain distance of a given location (help them find the closest Chinese restaurant to where they are located)
- Automatic rerouting capability
- Detour option selection

For more detailed information, refer to the topic *Demonstrating the Touareg Navigation System*.

Stay in Touch with Your Customer After the Sale

Try to stay in touch with your customers that purchased the Touareg Navigation System to learn about their usage and satisfaction with the navigation system. Inquire about "true life" experiences with the navigation system and share these experiences with your prospects.



Dealer Preparation

Before you can demonstrate the Touareg Navigation System, it must be properly calibrated in a demonstration vehicle. This preparation needs to be done only once upon the initial delivery of the vehicle from the factory. Failure to perform these steps may cause the system to function improperly during a customer demonstration.

Then, follow the detailed steps to make sure your vehicle is correctly located on the Touareg Navigation System screen, and enter your dealership address into the system.

Insert the navigation CD into the system. Be sure the vehicle has an unobstructed view of the sky in order to obtain GPS signal. It may take up to ten minutes for the system to “lock” into position.

Upon inserting the navigation CD, the navigation program will self-boot. If you like, you may listen to the radio or a CD (via the CD changer) while in navigation mode.

- 1 Enter the navigation mode by pressing **NAVI**.



- 2 Select the **DESTINATION** key to enter the address of your dealership.



- 3 Select the **NEW ADDRESS** key on the left menu.



- 4 Select the **CITY** key on the left menu. This will take you to a smart dynamic keypad that lets you enter the name of the city in which your dealership is located. At any point, you can press **OK** to obtain a list of city names. Select your city using the knob and press **OK** to confirm.



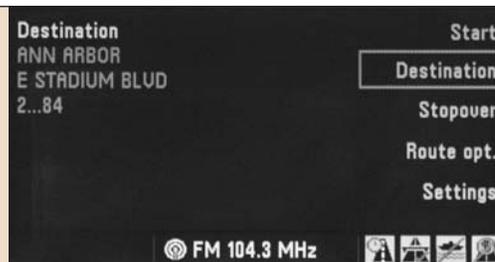
5 Select the **STREET** key on the left menu. This will take you to a smart dynamic keypad that lets you enter the name of the street for your dealership. At any point, you can press **OK** to obtain a list of street names. Select your street name using the knob and press **OK** to confirm.



6 Select the **HOUSE NUMBER** key on the left menu. This will take you to a smart dynamic keypad that lets you enter the street address/number of your dealership. Select your street address using the knob and press **OK** to confirm your selection.



7 Select the **DESTINATION** key and make sure the destination is set to your dealership.



8 Select the **EDIT MEMORY** key on the right menu to save your dealership address into the navigation system address book.



9 Select the **SAVE DEST.** key on the right menu.



10 Use the knob to enter the name of your dealership or other label for this entry. Upon completion, hit **OK**. Hit **OK** again to confirm your destination entry into the address book.



Customer Demonstration

- Make sure that someone in the dealership has gone through the Dealer Preparation steps for the vehicle you will be demonstrating.
- Pre-drive a planned route to verify that the area of the demonstration drive is complete and won't present unexpected obstructions. This includes making sure that your drive is done through digitized roads and streets where route guidance is possible.
- Plan a route on "minor" roads, not highways, to ensure the customer receives a sufficient number of guidance instructions. This will make a stronger, more positive impression. Pick a well known destination and avoid entering a customer's home address.
- Review the buttons on the Touareg Navigation System so you will be familiar with the system.
- Do not move too fast through the entry process, as it may overwhelm the customer.

Review the step-by-step instructions for demonstrating the following features of the Touareg Navigation System:

- Ease of address selection
- Ease of POI selection within a certain distance of a given location
- Ease of memory selection

Address Selection

- 1 Enter the navigation mode by pressing **NAVI**.



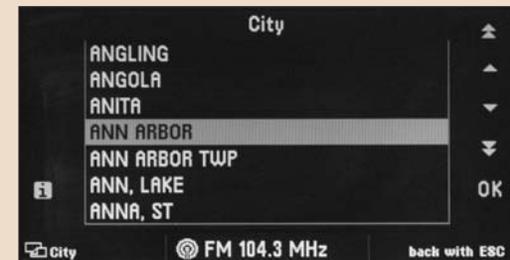
- 2 Select the **DESTINATION** key to enter the address of your destination.



- 3 Select the **NEW ADDRESS** key on the left menu.



- 4 Select the **CITY** key on the left menu. This will take you to a smart dynamic keypad that lets you enter the name of the city of your desired location. At any point, you can press **OK** to obtain a list of city names. Select your city using the knob and press **OK** to confirm.



- 5 Select the **STREET** key on the left menu. This will take you to a smart dynamic keypad that lets you enter the name of the street. At any point, you can press **OK** to obtain a list of street names. Select your street name using the knob and press **OK** to confirm.



- 6 Select the **HOUSE NUMBER** key on the left menu. On the smart dynamic keypad, enter the street address/number of your destination. Select your street address using the knob and press **OK** to confirm your selection.



- 7 Select the **START** key to start your route guidance.

- 8 Proceed to drive to your destination once the route calculation is completed.

- 9 *At an approaching intersection, take a wrong turn.* Inform the customer of this and let them see the ability of the system to quickly reroute to the selected destination.

- 10 Once you arrive at the destination, guidance will automatically stop.



Point of Interest (POI) Selection

- 1 Enter the navigation mode by pressing **NAVI**.



- 2 Select **DESTINATION**.



- 3 Select the **POIs** key on the left menu.



- 4 Select the **NEAR POSITION** key to find a point of interest near your current location.



- 5 Choose a category type for the desired point of interest. Use the knob to toggle through the menu to select your category. Hit **OK** once you have made your selection. You may be required to select a sub-category for certain selections. If so, follow these same steps.



- 6 Select the point of interest to which you want a route. Use the knob to toggle through the menu to select your POI. Hit **OK** once you have made your selection.



- 7 Select the **START** key to start your route guidance.



- 8 Proceed to drive to your destination once route calculation has completed.

Memory Selection

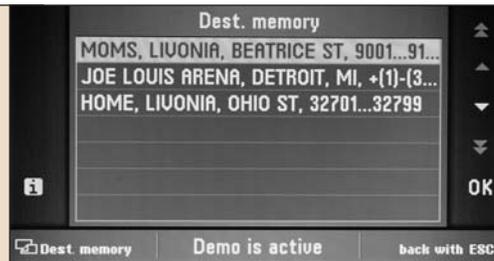
- 1 Enter the navigation mode by pressing **NAVI**.
- 2 Select the **DESTINATION** key.



- 3 Select the **DEST. MEMORY** key on the left menu. Select the entry for your dealership. The steps to enter this route into memory are included in the Dealer Preparation topic.



- 4 You can use the knob to toggle through the memory entries to select your dealership. Hit **OK** once you have made your selection.



- 5 Select the **START** key to start your route guidance. Once the route has been calculated, start driving your vehicle.



- 6 Proceed to drive back to your dealership once route calculation is completed.

Navigation System



For detailed operating instructions, please refer to the Quick Reference Guide and Owner's Manual for the Touareg Navigation System.



Common Concerns

"I don't need a map to get around because I know where I am going. Why would I need a navigation system?"

Your Touareg Navigation System gives you more than just directions from your origin to your destination. It can:

- Help you find the closest ATM, gas station, or restaurant.
- Give you an alternative route to your destination if you learn that your normal route might be overly congested.
- Help you navigate through unfamiliar neighborhoods.
- Pinpoint your exact location should you require assistance.

"Why should I spend several thousand dollars on a navigation system when I can buy a road map for \$2 at a gas station?"

Your Touareg Navigation System can plan a route to your destination and give you turn-by-turn voice guidance while you are driving. It offers many more features than a regular map, including turn restrictions, one-ways, speed limit attributes, etc. A regular map will only show you the road network, leaving you to figure out your route on your own. And imagine you're driving through an unfamiliar area and your low fuel light comes on, or your child tells you they are hungry. You can search your map database for points of interest such as gas stations and restaurants. Your Touareg Navigation System offers many enhanced benefits and conveniences compared to conventional maps.



"I can print my directions from an online mapping service. Why should I buy a navigation system?"

An online mapping service gives you turn-by-turn directions. But what happens if you miss a turn in an unfamiliar area? Your Touareg Navigation System will automatically reroute and give you revised directions to your destination. It also prompts you with voice guidance as the turn is approaching. With printed directions, you have to constantly look at the directions and be aware of street signs on the road to make sure you don't miss a turn. Your Touareg Navigation System will let you pick a detour if you know that traffic congestion is bad on your original route. Furthermore, your navigation system can help you find a restaurant, hotel, ATM, or other point of interest close to your current location or en route to your destination.

"I can get directions from an operator using a telematics service provider, so why would I also need a navigation system in my car?"

Directions from a telematics service provider are very similar to directions you get from an online mapping service. You will have to remember the directions or write them down as they are given to you, because they are only provided once. Your Touareg Navigation System provides you with real-time, turn-by-turn, spoken directions that guide you to your destination.

"My house is not in your navigation system. Why should I get it?"

The map database company is working to provide additional coverage. Roads constantly change and new subdivisions are constantly added. Map data is continually updated to account for these road changes, and Map Data CD updates are made available on a regular basis.

"I don't want this navigation system because my favorite restaurant is not included on your POI list."

The points of interest that change most often are banks, gas stations, hotels, restaurants, and auto service stations. These changes are reflected in the updated versions of the map database. We recommend a map update be purchased as it becomes available, so you have the most current information.

	Navigation System	Paper Map	Internet Mapping Service (e.g., MapQuest, Yahoo Maps)
Voice guided turn-by-turn directions	■		
Proximity POI directory search	■		■
Detailed area map	■	■	■
Map display with dynamic vehicle location	■		
Visual route maneuver list	■		■
Automatic trip updating while on route	■		
Automatic rerouting (if you get off your planned route)	■		
Alternate routing (in event of construction or congestion)	■		
Vehicle location information	■		
Storage of favorite locations	■		■

System FAQs

Navigation System

How does a navigation system work?

The first thing a navigation system needs to know is where the vehicle is located. This is determined by the Global Positioning System (GPS) satellites that pinpoint your vehicle's location. There are a total of 24 satellites circling the planet; four satellite signals allow for a navigational accuracy of up to 100 feet (30.5 meters).

In addition to GPS, there are other sensors that measure the car's movement and record driving distance. An electronic signal from the speedometer, a gyroscope that measures turns and software in the car translate this information into latitude, longitude and direction of travel.

The second thing a navigation system needs to know is where on a map the vehicle is. Correlating the raw data from the sensors to a navigable map database enables meaningful map display of the car's location, calculation of distances between possible destinations and turns, and route calculation. These functions are only as good as the map database on which they rely – accuracy, detail and coverage are crucial to satisfactory performance. This correlation also improves the navigational accuracy to 15 feet (4.6 meters).

Position and Location

How does the system determine vehicle position and location?

A combination of three navigation calculations: GPS signal, dead-reckoning, and map-matching.





GPS

What is GPS?

GPS stands for Global Position System – a network of 24 earth-orbiting satellites. The satellites continually transmit time radio signals.

Does the navigation system use all 24 satellites?

No. The Touareg Navigation System requires a minimum of three satellites at any given time to calculate the current vehicle position.

What does it cost to use these satellites?

There is no cost associated with your Touareg Navigation System for using these satellites.

Is the satellite signal ever lost?

Tunnels, bridges, mountains, and large buildings may temporarily interfere with the signal.

What happens when the signal is lost?

The system will continue to function despite temporary signal loss through its use of dead-reckoning.

Dead-Reckoning

What is dead-reckoning?

Dead-reckoning allows the system to accurately predict the vehicle position despite the temporary degradation or loss of GPS signals. Dead-reckoning makes the Touareg Navigation System as accurate as possible.

How does dead-reckoning work?

A sensor on the wheels and a gyroscope inside the navigation system allow the system to determine a highly accurate image of the path the vehicle has traveled on. This information, used in conjunction with map-matching, enables the system to provide precise guidance advice despite the temporary loss of GPS signals.

Map-Matching

What is map-matching?

Map-matching is the process of comparing vehicle position, heading, distance, and speed data produced by the vehicle sensors against the data from the map database to determine the most likely location of the vehicle relative to the map.

How does map-matching work?

The on-board navigation computer processes “all available data,” including changes in speed and direction detected by the vehicle sensor. This data is then compared with the digital information on the Map Data CD in the Touareg Navigation System. Map-matching occurs when current vehicle position, as calculated by the on-board computer, is matched to the information on the CD.

Dealer FAQs

Map Data CDs

How can I order additional/replacement/missing CDs?

Dealers can contact Navigation Technologies at 1-866-VW4-AMAP for assistance or visit their website at <http://www.navtech.com> for additional Map Data CDs.

Can I use the Map Data CDs in other navigation systems I sell?

No. The format is proprietary and won't function in other systems. The Map Data CDs will only work in your Touareg.

Can I stock Map Data CDs?

No. The distribution process has been carefully planned. Each new vehicle receives a prepaid, updated Map Data CD package. The Dealership Parts Manager is sent all CDs, tracked by the VIN.

Can I rent Map Data CDs on a short-term basis?
For instance, for a few days?

Map Data CDs cannot be rented for any length of time.

How do I identify a Map Data CD?

The map name and number will be on the CD.

Customer FAQs

System

Where does the system get the information it uses to navigate?

The information comes from GPS signals gathered by your system's GPS receiver and the database in the Map Data CDs.

Where can navigation systems be used?

Anywhere in the continental United States (excluding Alaska) and limited parts of Canada.

Will the system allow me to change travel plans en route?

Absolutely. Simply re-program your destination. Just be sure the vehicle is stopped and off the road – for example, while refueling. The Touareg Navigation System will also automatically recalculate an optimal route if you drive off the originally calculated route.

Why does the navigation system not show what I know is the shortest/fastest route?

We all know shortcuts within our local areas that we use to avoid rush hour traffic or poorly timed traffic lights. The Touareg Navigation System calculates routes using the detailed information within the database and takes into account various circumstances including actual distance, allowable speed, physical/functional classification of the road, turn restrictions, etc. You can use the Detour option in your Touareg Navigation System to enter your personal preferences, including avoiding freeways, emphasizing speed over distance, or avoiding specific roads.



I seem to have drifted off my route. Why does my navigation system not show me on the road?

This may happen because of changes to the road since the Map Data was created. Other reasons include:

- Loss of position data due to GPS signal interference.
- Driving in heavy stop-and-go traffic.
- Driving in parking lot lanes and privately maintained driveways, which are not part of your map database. You may be starting or ending your route in such an area.
- Persistent tracking errors. These errors may be an indication of hardware or installation problems.

Is the navigation system covered in my warranty?

The navigation system hardware is covered by the Touareg's comprehensive 4 year/50,000 mile (80,000 km) warranty. VW will provide diagnosis and repair free of charge for any hardware difficulties that you may encounter during the warranty period.

Can I change my destination while I am driving?

Once a destination has been entered, the navigation system will continue to function at all times, providing voice and visual guidance, and will also automatically reroute in the event of a missed turn. Users are allowed to enter a new destination into the navigation system while driving, but the disclaimer screen will pop up informing the customer that it is unsafe to operate the system while driving.

Coverage

What is the difference between Detailed Coverage and Intertown Coverage?

Detailed coverage provides "turn-by-turn" guidance on every road. Intertown coverage provides "turn-by-turn" guidance utilizing only major highways and main roads.

Does my area have Detailed Coverage?

It depends on the customer's driving area and travel patterns. The customer must be specific about current and future driving areas for you to provide a meaningful answer. Most areas of the US and parts of Canada have detailed coverage, however, some remote areas are still in the mapping process. The navigation system will not be able to provide route guidance in those areas.

Map Data CDs

Where do the Map Data CDs come from?

The Map Data CDs originate from Navigation Technologies, the same company that creates and maintains the map database. For more information on Navigation Technologies, visit their web site: www.navtech.com.

Do Map Data CDs come with the system, or do I have to order them separately?

Navigation CD packages will be shipped directly to dealers. They will be:

- VIN sequenced from the port
- 2-day FedEx with a signature guarantee
- Addressed to Parts Managers



Boxed package will contain:

- VIN number
- Part number
- Leather CD wallet embossed with Touareg logo
- Ten Navigation CDs
- "Quick Start Guide" for customer use

Why do Map Data CDs cost so much more than a music CD?

Navigation Technologies invests in extensive research and field-testing for each map database. Their employees drive over one million miles (1,609,000 km) a year to ensure that the database is accurate.

Will map updates be available?

The current plan is to offer an annual update. Customer can call 888-NAV-MAPS to purchase updates when they are available.

Why not just one Map Data CD for the entire United States?

The map database for the US is too large and detailed to fit onto a single CD.

How many map areas are there?

The Touareg Navigation System uses nine for the United States and one for Canada.

- Map 1: California, Nevada and Hawaii
- Map 2: Northwest/Southwest
- Map 3: North Central
- Map 4: South Central
- Map 5: Midwest
- Map 6: Ohio Valley
- Map 7: New England
- Map 8: Mid-Atlantic

- Map 9: Southeast
- Map 10: Canada

What if I am traveling from Michigan to Florida, do I need to swap three different CDs at the border of each map area?

Each of the U.S. CDs includes a Route USA feature which allows you to map the entire major interstate route from Michigan to Florida. Once in the local area, you would swap to the local area disc.

Can I use Map Data CDs in my CD player?

No. The Map Data CDs contain data that is only readable by your Touareg Navigation System.

Can I make duplicate Map Data CDs to use in my other cars?

No. The licensing agreement does not allow end users to copy the data; "burned" copies will not operate in the system.

How can I (a customer) report a problem or error in the map data?

Errors may be reported by customers on the web site:
<http://update.navtech.com>.

Can I play the radio while in navigation mode?

Yes. The navigation system will continue while the radio is playing, and the voice guidance will inform you of your next maneuver by lowering the music volume over the vehicle speakers.

Can I play a music CD and a navigation CD at the same time?

Yes, but only from the optional CD changer. Be sure to suggest your Navigation customers who want to play music and navigation CDs at the same time purchase the optional 6-disc CD changer.

