



## Motorola M930NAV GSM In-Vehicle Phone with GPS

The Motorola M930NAV is a dedicated in-vehicle phone for GSM networks fully equipped with advanced turn-by-turn navigation and a GPS accessory. The combination of a phone that is designed exclusively for the vehicle environment with navigation offers an all-in-one solution for today's commercial users who need to stay connected on the road.

### **In-Vehicle Navigation System**

The navigation application enables voice-guided turn-by turn driving instructions and on-screen directions to ensure users reach their destination conveniently and efficiently. The application also provides optimized routing and real-time traffic advisories as well as information on various points of interest such as restaurants, hotels and gas stations.

### **Performance**

The M930NAV boasts a unique design that delivers enhanced network coverage via an external antenna and

superior hands-free audio quality using advanced algorithms to incorporate background noise suppression and echo cancellation.

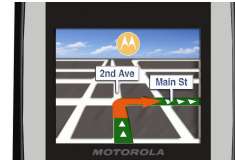
### **Greater Accessibility**

Delivering greater accessibility in the vehicle, the M930NAV features a large, widely spaced keypad for dialing accuracy and speed along with a sharp color display with enlarged fonts for easy reading. The device also incorporates speech recognition with a 'One-Touch' smart key that activates name and number dialing through the use of spoken commands.



## GPS Characteristics

- Very sensitive Sirf-III based chipset.
- Developed specifically for the M930NAV data connector and voltage.
- Rigorous reliability and environmental tests for the vehicle environment conducted in Motorola Labs.
- Internal battery assures very fast Time To First Fix (TTFF).
- Connected to M930NAV with wired data link and constant power supply.



## GPS Installation

The placement of the GPS receiver including aesthetic concealment of the cable is important for navigation performance. Instructions:

1. Locate the best installation spot for the GPS accessory. The GPS should be positioned in a place with the best "line of sight" to the sky in order to receive proper GPS satellite reception:
  - A typical installation is generally performed on the dashboard, underneath the windshield.
  - If your vehicle is designed with a 'Heat Reflective' or 'Comfort' wind screen, it is recommended that the accessory be installed elsewhere in the vehicle such as the rear windscreen, so that better GPS results can be generated.
2. Clean the surface of the installation location using alcohol.
3. Peel off the cover paper from the adhesive on the back of the GPS accessory, press the unit against the dashboard surface and hold in place for approximately 20 seconds.
4. For increased safety, it is recommended to connect the GPS cable under the dashboard with a zip tie. Route the GPS cable neatly towards the phone head unit.
5. With the phone switched off, connect the GPS cable to the 14 pin connector of the octopus cable.
6. Following installation, with the car positioned in an outdoor environment, launch the navigation application to verify satellite reception.

## GPS Installation (cont'd)

Models with 'Heat Reflective' or 'Comfort' windscreens	
Audi	All models from 2001
BMW	Models of Series 7, E38, E65/66
Citroen	Xsara Picasso, C5, C2 Exclusive
Jaguar	X-type
Opel	Zafira
Peugeot	Range "x07" model "x06" if the climate windshield was purchased
Renault	All models since 2001 and Laguna
Vauxhall	All models since 2002 and Zafira
VW Passat	All models since 2002

## GPS Specifications

Chipset	Highly sensitive Sirf-III with 20 parallel channels
Interface	HiRose 14 pin connector, Serial data CMOS Levels
Time To First Fix (TTFF)	5 seconds typical, 10 seconds maximal
Accuracy	5 meters (CEP 95%)
Sensitivity	-159dBm Tracking, -155dBm Navigation
Dimensions	60'42'17mm (LxWxT)
Cable length	6 meters



## Part Numbers

#	Description	Motorola P/N
1.	M930NAV NAV GPS accessory 6 meter	FTN3148A



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