

Fleet Management / Navigation

Garmin Navigation Device Interface

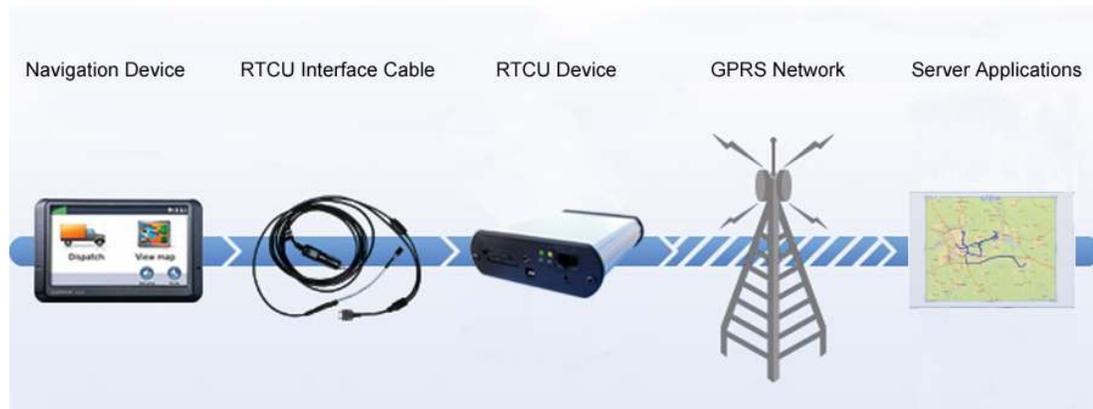
The Garmin Fleet Management / Navigation interface enables fleet tracking, messaging, dispatch and navigation directly on Garmin's portable navigation devices. Fleet dispatchers can send multiple destinations and other instructions directly to their drivers. With a tap on the screen, drivers can access detailed turn-by-turn, text-to-speech, voice prompted directions to their destinations. Automatic estimated time of arrival (ETA) can be sent back to the fleet dispatcher for timely information and reduced operating costs.



The Garmin Fleet Management / Navigation interface offers a comprehensive palette of advanced functionality to support development of feature rich fleet management applications utilizing navigation, messaging, route planning, estimated time of arrival notifications. The Garmin Fleet Management / Navigation interface is supported on the powerful, fully programmable RTCU MX2i Series and the new RTCU CX1 flex/pro. Additionally there is support in the RTCU IDE Simulator for rapid development of advanced applications. The combination of the powerful RTCU concept with the features offered with the Garmin Fleet Management / Navigation interface opens up for a wide range of application areas, where a connected navigation is a key parameter for a successful integration. Combining the I/O capabilities available on the RTCU units, including I/O, CAN-bus and 1-Wire, with the powerful features of the Garmin Fleet Management / Navigation API offer the Fleet dispatcher the right answers to questions such as:

- vehicle location
- driver identification and current status
- speed, direction and distance of travel
- battery and thermostat levels
- cargo temperature
- elapsed time and estimated time of arrival
- fuel status
- idle times, number and status of stops.
- driver performance and vehicle maintenance information

As a logical extension to the huge library of functionality already available on the RTCU platform the Garmin Fleet Management / Navigation interface has been completely integrated into the concept and the result stands out as the most advanced, flexible and programmable Fleet Management platform on the market today!



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The Fleet Management / Navigation Interface Application Programmers Interface (API) utilizes an advanced multithreading event based interface and includes the following functionality:

- Navigation Device
 - Presence of Garmin device
 - Serial-number of Garmin device.
 - Personalized text on main-screen of the Garmin device.
 - Delete specific data – including all – to bring Garmin device to a known start state.
- User Identification
 - Read user-id entered by user on Garmin display keyboard
 - Set user-id of active user.
 - Define list of status available for the user to select.
 - Current status of user can be set by the user or from the API.
 - Current user status can be returned from the Garmin device.
 - Up to 3 simultaneous users with authentication.
- Text Messaging
 - Allows a range of text messages sent to and from the Garmin device
 - Message threading
 - Confirmation and status of text messages available.
 - Quick messages can be defined for fast no-entry user feedback
 - Application defined reply messages for fast no-entry user response to messages
- Route management
 - A number Stops can be sent to the Garmin device as part of a route
 - Sorting or route for shortest path for cost and fuel reduction.
 - A stop can be activated, set to 'done' or deleted by user or by the API
 - Confirmation and status of each Stop available.
 - Auto-arrival feature will automatically signal a Stop 'done'.
- Estimated Time of Arrival (ETA)
 - ETA of current Stop available on request
 - Automatic generation of periodic ETA on current Stop.
- Point of Interest
 - Transfer GPI file to the Garmin device.
- Waypoints
 - Set and Delete Waypoints
 - User defined Waypoint icon.



Logic IO is offering interface cables as well as Garmin Navigation devices constituting a complete solution.

Currently we are offering the Garmin Nüvi 1390 (Europe) and a complete MX2i FMI Starter kit with everything to get started on the development of applications.

Please visit our website www.logicio.com for additional information.