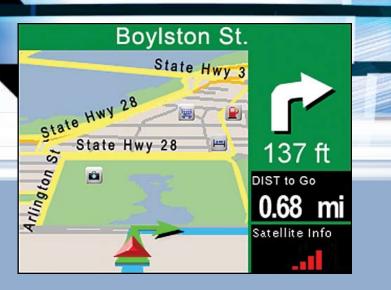


GPS NAVIGATION Developer Tools

1.800.717.4478 www.teletype.com

TeleType offers GPS navigation SDK and ESRI converter tools for implementing navigation solutions on Windows CE portable GPS systems, laptops and Windows XP based devices.

The TeleType GPS Advanced SDK (Software Developers Kit) provides a high-level application programming interface (API) for accessing the features of the TeleType WorldNav Navigation software. Using the SDK, a developer can interact directly with the TeleType navigation program through the developer's own application. The API allows you to zoom in and out, shift the map in any direction, pass search criteria directly from your application, and route from any two specified points. The advanced version supports complete control over the WorldNav navigation application including the ability to have your application run as a window within a window. Supports Windows CE 4.2 and 5.0.



The TeleType navigation solution can be jointly implemented to achieve robust solutions for a variety of industries including:

- Agriculture
- Applied Geography
- Disaster Management
- Environmental Management
- Exploration
- Homeland Security
- Logistics and Routing

- Health Care
- Law Enforcement
- Local and State Government
- Military and Defense
- Transportation
- Utilities and Telecommunications

In addition to the SDKs, TeleType offers map conversion tools and utilities for developers wishing to implement their own maps on portable navigation devices. The tools allow the popular ESRI shape file formatted maps to be converted to the TeleType Map (TTM) format.

The navigation software is based on TeleType's award-winning GPS product line. The company offers it's own navigation solution on the WorldNav product line.

Established in 1981, TeleType has emerged to become a leader in the field of Global Positioning Systems. TeleType specializes in software system integration and produces innovative products for a variety of industries. GPS software solutions include support of Windows CE, Pocket PC, and Windows XP, for vehicle navigation, fleet tracking, and geographic information systems data collection.



GPS NAVIGATION Developer Tools

BENEFITS

- Allows you to access the functions of the WorldNav navigation program through your own application.
- Window within window functionality allows your application to run . alongside the TeleType WorldNav application.
- WorldNav emulator application for use on Windows XP to streamline • testing and implementation of code.
- Our navigation application can become completely transparent such • that the end user concentrates solely on your application.
- We provide sample source code to shorten your development time.
- . We provide access to all navigation functions including routing, address search, map display, and more.

NOTES:

(1) Program and map licenses must be purchased separately.

- (2) Text to Speech licensing is part of the WorldNav program license.
- (3) Custom programming may be required to support your device.

BINARIES

WorldNavGPSAPI.dll WorldNavGPSAPI.lib

COMPATIBILITY

Operating Systems Windows CE 4.2 and higher Windows XP, Vista, 2000, Embedded

Find Address

by Telephone Number

Show/Hide POI's

Find POI by Nearest, by Place, by Name,

Platforms

ARMRel - WinCE 3.0 ARMV4Rel - WinCE 4.2 X86 – WinCE 4.2

CALL FUNCTIONS

WorldNav SDKs offer the following call functions with exception of Window Control which is available in the Advanced SDK only.

General

GPSFree Free allocated memory from certain API calls **GPSGetWnd** Get the main window handle of WorldNav GPSSetForeground Bring WorldNav to foreground Quit WorldNav Navigation program GPSExit

Window Control (Advanced SDK only)

WindowRect	Customize the size of screen Width and Height to your specifications for your own application to run alongside the navigation program. (Window in a Window)
GPSSetWindowPos	On CE Devices, Map dimensions are the same as the WorldNav's WindowRect dimensions on Windows Desktops, Map dimensions are the same as the WorldNav's ClientRect dimensions
Man Disular	

Map Display

GPSRefreshMap	Re-center map above current location,
	same as moving joystick (if available) up
GPSMapUp	Re-center map above current location,
	same as moving joystick (if available) up
GPSMapDown	Re-center map below current location,
	same as moving joystick (if available) down
GPSMapLeft	Re-center map left of current location,
	same as moving joystick (if available) left
GPSMapRight	Re-center map right of current location,
	same as moving joystick (if available) right
	sume us morning joystick (in utunusic) right

Zoom

GPSZoomIn	Zoom in
GPSZoomOut	Zoom out
GPSZoomToPoint	Re-center map to given point using GPS coordinates
GPSZoomToRect	Re-center map to given rectangle using GPS coordinates to form a bounding box

Get Position

GPSCurPos	Get Current Position using GPS coordinates,
	based on cursor (Center of Screen)
GPSPosInfo	Get GPS coordinate information at Position
GPSLocaleInfo	Get Locale Information (City, State/Province) at Position

Search GPSFind

GPSFindPOI

POIs GPSPOIMode GPSGPSInfo

Routing

GPSRouteSettings GPSDeleteRoute GPSRouteTo

Query or Set the Route Settings (Quickest, Shortest, Truck, etc) Delete the current route Route from Point to Point

GPS Information (lat/long coordinates, gps time, elevation,

heading, speed, number of satellites, signal validity)

Trip Statistics

GPSTripStat Obtain data from the trip statistics screen GPSFree() Release the allocation when the data is no longer needed GPSTripStatReset Resets the trip statisics (ie. set odometer to 0)

Nav Panel

eTTNAVPANEL_TYPE	Select the type of Nav Panel display such as
	small, large, transparent, or none.
eTTNAVPANEL_INFO	Select data to be displayed such as DTG, ETA, Heading,
	Odometer, Trip Timer, System Time, etc
GPSNavPanel	Navigation Panel query the current setting
POI Categories	Use GPSFindPOI and TTWorldNavGPSPOIMode to
-	query POI category

Query or Set the Map Mode

GPSMapMode	Controls cursor type (square cross hair, triangle indicating GPS Locked in)
GPSUnitMode	Query or Set the System of Units, Metric or English
GPSDayNightMode	Query or Set the Day/Night Mode
GPSViewMod	Query or Set the View Mode (2D/3D, Auto Zoom On/Off)
GPSSimulator	Query or Set the Simulator

Specifications are subject to be changed without notice.*

TeleType Company

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