

GARMIN[®]



AppInteract

How to hand over a geo position to Garmin StreetPilot and NAVIGON for iOS

A lot of iPhone apps deal with great content...





... only a few provide great navigation.



Now they can interact!

- We provide a simple and easy-to-implement interface for Apps to interact with Garmin StreetPilot and NAVIGON apps.
- Just hand-over a link and it will automatically launch these apps and to provide navigation to the target destination.
- A brief technical description on this can be found on the following slides.



How the URL looks like?

[APPNAME://gm?action=\[AKTION\]&name=\[NAME\]&address=\[ADRESSE\]&city=\[CITY\]&state=\[STATE\]&lat=\[LAT\]&lon=\[LON\]](#)

Example URL:

[garminonboardusa://gm?action=nav&name=1334+Grand+Ave&address=1334+Grand+Ave&city=Kansas+City+MO&state=&lat=39.097907&lon=-94.581272](#)

The Garmin StreetPilot app names:

- **garminonboardusa** (Garmin StreetPilot USA)
- **garminonboardna** (Garmin StreetPilot North America)
- **garminonboardwesterneuropa** (Garmin StreetPilot Western Europe)
- **garminonboardukandireland** (Garmin StreetPilot UK & Ireland)

Supported actions:

- **nav** (start navigation)
- **map** (display position on the map)
- **address** (paste address in address search field)
- **poi** (show poi(s) located nearby)



Coordinates only:

The combined syntax looks like:

`navigon://coordinate / Any name / Longitude / Latitude`

`navigon://coordinate / MyCoordinate / 9.929001 / 49.793999`

Some examples:

`navigon://coordinate/Apple Cupertino/-122.031906/37.330908`

`navigon://coordinate/Some nice place/9.937156/49.800074`

`navigon://coordinate/Another place/2.324621/48.881273`



Detailed address:

The combined syntax looks like:

```
navigon://address / Field1 / Field2 / Field3 / Field4 / Field5 / Field6 / Field7 / Field8
```

```
navigon://address / NameOfPOI / Country-FederalState / ZipCode / City / Street / HouseNumber / Longitude / Latitude
```

Some examples:

```
navigon://address/Garmin Wuerzburg GmbH/DEU/97080/Würzburg/Beethovenstrasse/1
```

```
navigon://address/Another place/FRA/75008/PARIS/rue de Turin/17/2.324621/48.881273
```

```
navigon://address/Apple/USA-CA/95014/Cupertino/Infinite Loop/1/-122.031906/37.330908
```




Scheme name: navigon

Field1/NameOfPOI: Name of POI (e.g. Navigon AG Würzburg)

Field2/Country: ISO 3166-1 alpha-3 code for country (<http://unstats.un.org/unsd/methods/m49/m49alpha.htm>) (e.g. DEU)

-> Exception: for USA / CAN following scheme is needed: USA-(2-letter-state-abbreviation) (e.g. USA-CA, CAN-ON)

Field3/ZipCode: Postalcode, ZIP code of the POIs city (e.g. 97080)

Field4/City: Name of POIs city (e.g. Würzburg)

Field5/Street: POIs street name (e.g. Berliner Platz)

Field6/HouseNumber: POIs street/house number (e.g. 11)

Field7/Longitude: Longitude in WGS84 (e.g. 9.870) (optional)

Field8/Latitude: Latitude in WGS84 (e.g. 49.938) (optional)

In order to work properly, you have to escape every occurrence of „/“ with „%2F“

```
field = [field stringByReplacingOccurrencesOfString:@"/" withString:@"%2F"];
```



To pass it to the application as a valid URL, you have to percent escape the URL string.

Example:

```
escapedUrl = [url stringByAddingPercentEscapesUsingEncoding:NSUTF8StringEncoding];
```

->

```
navigon://address/Garmin Wuerzburg GmbH/DEU/97080/WÜRZBURG/Beethovenstrasse/1
```

becomes

```
navigon://address/Garmin%20Wuerzburg%20GmbH/DEU/97080/W%C3%9CRZBURG/Beethovenstrasse/1
```



Recommendations:

- For best address resolution you should provide the complete address data incl. house/streetnumber. Also add coordinates if available.
- If no or only some address data is available, please use the „coordinates only“ format.
- To check if the device has a NAVIGON app installed, try
- `BOOL navigonInstalled = [[UIApplication sharedApplication] canOpenURL:
[NSURL URLWithString:escapedURL]];`