

TYPWiz 5 & UNICODE

vers 5.1

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Languages and Codepages

Text/labels can be written in 31 languages

Please, note there may be more as yet undiscovered Basecamp compatible codepages.

Also note that **most if not ALL gps devices DO NOT cater for codepages <1250 – so no Chinese,Japanese etc.**

Code Page	Language
1250	Central European
1251	Russian/Slavic
1252	West European
1253	Greek
1254	Turkish
1255	Hebrew
1256	Arabic
1257	Baltic
1258	Vietnamese
874	Thai
932	Japanese
936	Simple Chinese
949	Korean
950	Traditional Chinese
65001	UTF8

Which Codepage?

Not 65001	65001
Shorter TYP file	Longer TYP file
GPS user can only use 1 language	GPS User can switch to more than 1 language
Languages restricted to standard codepages	You can in theory use a wider range of languages

If you are designing maps for different countries , we suggest 65001.

If you are designing maps for yourself then perhaps stick to the code page for your country.

If you are using 3rd party TYP files and want to add a new language then use 65001

Codepages 1250 - 950

The Text Editor can only display one codepage if you select any codepage other than 65001. This is because Garmin can only display one language, the one set by your codepage.

Characters are displayed according to the current codepage – see illustrations below.

Don't worry if you get text looking like âåëîñèïåääïÿ äîðîæêà.

These are compacted 'Garmin/html code' characters.

You will notice the effect in the following examples:

<p>1250</p> <pre> [_line] Type=0x01000 ;AE ;typ=0 String1=0x00,cyclepath String2=0x19,âleĩñċďlăřf` aĩđĩċęf String3=0x17,ďďăçëáôďăñüěďö String4=0x24,»çŘĚ[Ā °ć.Ī String5=0x25,Ž©"]ŽŎ"ą String6=0x26,×ŎĐĐłμμŘ string7=0x15,ściezka rowerowa UseOrientation=Y Xpm="32 6 2 1" "0 c #0000FF" "1 c #FFFFFF" "11111111111111111111111111111111" "00000000111111110000000011111111" "00000000111111110000000011111111" "00000000111111110000000011111111" "00000000111111110000000011111111" "00000000111111110000000011111111" "11111111111111111111111111111111" [end] </pre>	<p>1251</p> <pre> [_line] Type=0x01000 ;AE ;typ=0 String1=0x00,cyclepath String2=0x19,велосипедная дорожка String3=0x17,рпдзлбфпдсьмпх String4=0x24,»зAMEĀ °ж·Ŏ String5=0x25,Ŧ©"]ŦФ"№ String6=0x26,ϘФРРιμμΑ string7=0x15,њcieřka rowerowa UseOrientation=Y Xpm="32 6 2 1" "0 c #0000FF" "1 c #FFFFFF" "11111111111111111111111111111111" "00000000111111110000000011111111" "00000000111111110000000011111111" "00000000111111110000000011111111" "00000000111111110000000011111111" "00000000111111110000000011111111" "11111111111111111111111111111111" [end] </pre>
<p>1253</p> <pre> [_line] Type=0x01000 ;AE ;typ=0 String1=0x00,cyclepath String2=0x19,βελεξροθεδνυ □ δξπεζκυ String3=0x17,ποδηλατοδρόμου String4=0x24,»ηιMEĀ °ζ·Ξ String5=0x25,©"]Ŧ"Ŧ String6=0x26,ΧΤΠΠ³μμĪ string7=0x15,cieřka rowerowa UseOrientation=Y Xpm="32 6 2 1" "0 c #0000FF" "1 c #FFFFFF" "11111111111111111111111111111111" "00000000111111110000000011111111" "00000000111111110000000011111111" "00000000111111110000000011111111" "00000000111111110000000011111111" "00000000111111110000000011111111" "00000000111111110000000011111111" "11111111111111111111111111111111" [end] </pre>	<p>936</p> <pre> [_line] Type=0x01000 ;AE ;typ=0 String1=0x00,cyclepath String2=0x19,伎朮籽饒漕? 漕痊彌? String3=0x17,痲糖轔麸漕·秕 String4=0x24,鞏撈努 版肺 String5=0x25,幟揮开擗 String6=0x26,自行车道 string7=0x15,浩ie緞a rowerowa UseOrientation=Y Xpm="32 6 2 1" "0 c #0000FF" "1 c #FFFFFF" "11111111111111111111111111111111" "00000000111111110000000011111111" "00000000111111110000000011111111" "00000000111111110000000011111111" "00000000111111110000000011111111" "00000000111111110000000011111111" "11111111111111111111111111111111" [end] ;generated by TYPWiz 5.015 </pre>

Codepage 65001

TYPWiz5.1 supports loading and saving TYP files with codepage 65001.

Codepage 65001 (utf-8) incorporates all major codepages.

When converting to 65001 the TYP file has to be recompiled,saved and reloaded.

The same has to be done when converting from 65001 to another codepage.

If you create maps covering different countries it may be advisable to use codepage 65001. This ensures that different languages are displayed correctly.

Note

The advantage of using codepage 65001 is that unlike say codepage 1253, Greek , Russian and Japanese characters are displayed correctly, whereas with codepage 1253 (Greek) only Greek is displayed correctly

hex	language	codepage
0	unspecified	Current codepage
1	french	1252
2	german	1252
3	dutch	1252
4	English	1252
5	italian	1252
6	finnish	1252
7	swedish	1252
8	spanish	1252
9	basque	1252
A	catalan	1252
B	galician	1252
C	welsh	(1252)
D	gaelic	(1252)
E	danish	1252
F	norwegian	1252
10	portuguese	1252
11	slovak	1250
12	czech	1250
13	croatian	1250
14	hungarian	1250
15	polish	1250
16	turkish	1254

17	greek	1253
18	slovenian	1250
19	russian	1251
1A	estonian	1257
1B	latvian	1257
1C	romanian	1250
1D	albanian	1250
1E	bosnian	1250
1F	lithuanian	1257
20	serbian	1250
21	macedonian	1251
22	bulgarian	1251
23	Brazilian	1252
24	korean	949
25	japanese	932
26	chinese	936
27	traditional chinese	950
28	thai	874
29	arabic	1256
2A	belarusian	1251
2B	ukrainian	1251
2C	moldavian	
2D	monteneg	
2E	Irish	(1252)
2F	?	

Note :

- 1) ***When using unspecified (0x00) TYPWiz5 presumes the characters entered relate to your current codepage***
- 2) ***TYPWiz5 presumes that only Greek text is entered as 0x17, Japanese as 0x25, etc. Entering the wrong language can produce 'gibberish' .***
- 3) ***The difference between text written as codepage 1250 ,1257 and 1252 will only appear if you use special characters***
- 4) ***You can enter Polish text under any language with the same codepage, ie , ie 0x12,0x13,0x14,0x15... etc etc***
- 5) ***However, when displaying an element's label , TYPWiz5 searches for an entry based on your preferred language.***
- 6) ***Use 0x00 for Vietnamese or Hebrew .***
- 7) ***Although 1258 is the codepage for Vietnamese, for some reason Garmin does not display this codepage correctly***
- 8) ***Label font is linked a language and ignores your preferred font . To avoid this tick 'Lock Fonnt' – see Settings below.***

Settings

TYPWiz5 provides the following Language / Font options:

The screenshot shows the 'Language / Font' settings window. On the left is a sidebar with four tabs: 'Language / Font' (selected and highlighted in blue), 'Colours / Icons', 'Elements', and 'Advanced'. The main area contains the following settings:

- Language on Labels: 0x1b latvian (dropdown menu) Override
- Label Options: Type & Text (dropdown menu)
- Label Font: KaiTi (dropdown menu) Lock Font
- Label Font Size: 8 (text input)
- Editor Text Font Size: 12 (text input)
- Editor Text Font: Arial (dropdown menu)
- Show Font Colors

Override

Tick this box if you want your TYP file to show your preferred language.

Note:

Garmin gives automatic preferences to 0x00 (unspecified) or 0x04 (English).

- 1) If you desire your preferred language, German, Polish, Greek, etc., to be *used* by your device/Basecamp or Mapsource, we need to do some tricks to obtain the desired effect.
- 2) Ideally TYP files need to be designed for each language you offer.

Lock Font

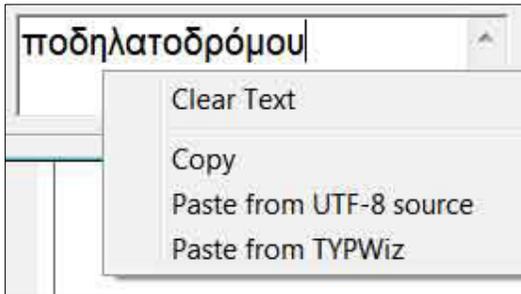
Check this if you want your labels to show the font you specify.

Pros: All labels have the same font and size

Cons: Some labels may show gibberish when TYPWiz5 cannot find a String(n) matching your codepage.

How to add unicode to TYPWiz5

Method 1 Copy and Paste



Right click on text box to obtain the following options:

Clear Text

Copy

Either copy text from TYPwiz or from an external source

Paste

There are two options:

- a) Paste from UTF-8 source

Select the appropriate language !

- b) Paste from TYPwiz

Paste from UTF-8 source

Copy any unicode text from a webpage or another text.

When pasting into Typwiz5 , the text is converted to Garmin Code

Any text pasted is added to the current text. Select 'Clear Text', to delete previous text.

CTRL V has been disabled to avoid confusion.

Paste from TYPWiz

Any text copied from TYPWiz is Garmin Code , not UTF8

If pasted as UTF-8 the text will be wrongly converted.

Any text pasted is added to the current text. Select 'Clear Text', to delete previous text.

Method 2 Use (notepad+) text editor

Save text as UTF-8 in TYPwiz5 then use a text editor to add your own unicode text into the 'Strings' section.

le Adding Greek text

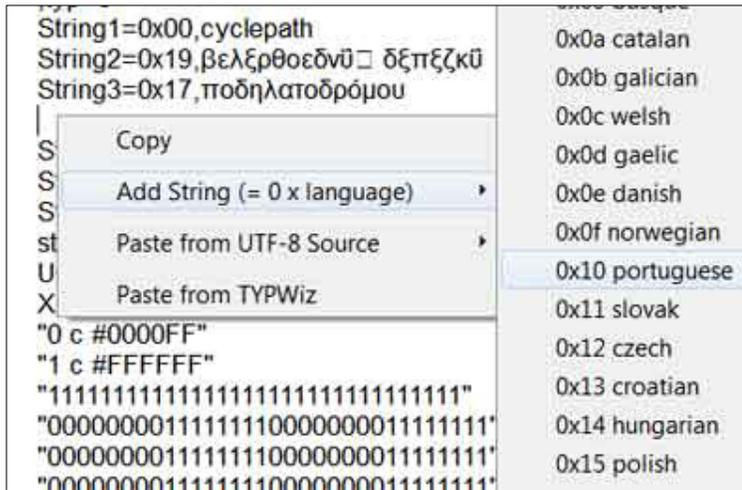
```
[_point]
Type=0x00400
String1=0x0,Large city
String2=0x17,Μεγάλη πόλη
ExtendedLabels=Y
FontStyle=Default
dayxpm="24 24 137 2" colormode=16
etc
```

Save file in Notepad+ and load file back into TYPWiz5 **as UTF8** and save as TYP

Method 3 Use TYPWiz5 editor

Please note that our editor is very basic and cannot display different character sets. However, we have added a few options which will help.

Right Click on your text to show the following menu:



Copy

Add String (=0 x language)

This selects the language you want to enter as a line with the correct language and string number :ie

String5=0x10,

Paste from UTF-8 Source

Copy from say Google Translate and convert automatically to Garmin Code.

Paste from TYPWiz

Copy characters from TYPWiz – no need to convert

Why do I get ??? in my text?

- 1) This happens when Garmin encounters an unknown a UTF8 character.

Most codepages , except those for Chinese and Japanese, are restricted to 128 characters.

For codepage 65001 see below.

With Chinese and Japanese Garmin

- 2) When you are pasting copied text into the wrong 'language textbox'



Can I combine two codepages in one textbox?

The answer is : only if the other codepage equals 1252

Can I attach 2 different codepages to one element, ie polygon?

Yes, you can have as many as you like, however Garmin 's TYP file can only display one language at a time. It is set by the TYP's overriding codepage.

My codepage is set to 1253 but the labels of some of the elements are not in Greek. Why?

This happens when an element has multiple language labels

- Garmin by default gives priority to 'unspecified' or 'English' language.
- Next, it uses the first language it encounters in the 'label string'
- It does not search for the lowest language hex number other than language 0 and 4. However, this may depend on your device.

My language is not listed . What do I do?

There are 2 possible scenarios

- 1) Language is not listed but codepage is

Ie Hebrew is not included as a language but the codepage is 1255.

Solution: Set codepage to 1255 and use 0x00 for Hebrew.

- 2) Both languages and codepages are not listed.

If the codepage is not listed it is very unlikely that Garmin is able to parse your special characters, ie Icelandic.

TYPWiz5 is unable to parse your non ansi characters correctly as the textbox cannot match the correct script.

You can select different codepages to check out the nearest match to the original.

What is the difference between Load and Load as UTF-8?

The difference is important !

Normal Load

This presumes that the text only contains 'Garmin Code' and will not need to convert any text.

Load as UTF-8

This presumes that all text needs to be converted to 'Garmin code'. The beauty of this is that you can with Notepad+ etc , see all the languages correctly displayed.

Pasting Unicode into 65001 textbox

When pasting say Greek into a textbox you may get ????

Instead, rightclick on textbox and select Paste from UTF-8 Source.

The Greek text will be entered into a small text box , bottom right.

Copy this text and paste into your main text box.