

OziExplorer File Formats

Waypoint File (.wpt)

Line 1 : File type and version information

Line 2 : Geodetic Datum used for the Lat/Lon positions for each waypoint

Line 3 : Reserved for future use

Line 4 : GPS Symbol set - not used yet

Waypoint data

- One line per waypoint
- each field separated by a comma
- comma's not allowed in text fields, character 209 can be used instead and a comma will be substituted.
- non essential fields need not be entered but comma separators must still be used (example „,“)
defaults will be used for empty fields
- Any number of the last fields in a data line need not be included at all not even the commas.

Field 1 : Number - this is the location in the array (max 1000), must be unique, usually start at 1 and increment. Can be set to -1 (minus 1) and the number will be auto generated.

Field 2 : Name - the waypoint name, use the correct length name to suit the GPS type.

Field 3 : Latitude - decimal degrees.

Field 4 : Longitude - decimal degrees.

Field 5 : Date - see Date Format below, if blank a preset date will be used

Field 6 : Symbol - 0 to number of symbols in GPS

Field 7 : Status - always set to 1

Field 8 : Map Display Format

Field 9 : Foreground Color (RGB value)

Field 10 : Background Color (RGB value)

Field 11 : Description (max 40), no commas

Field 12 : Pointer Direction

Field 13 : Garmin Display Format

Field 14 : Proximity Distance - 0 is off any other number is valid

Field 15 : Altitude - in feet (-777 if not valid)

Field 16 : Font Size - in points

Field 17 : Font Style - 0 is normal, 1 is bold.

Field 18 : Symbol Size - 17 is normal size

Field 19 : Proximity Symbol Position

Field 20 : Proximity Time

Field 21 : Proximity or Route or Both

Field 22 : File Attachment Name

Field 23 : Proximity File Attachment Name

Field 24 : Proximity Symbol Name

Event File (.evt)

Line 1 : File type and version information

Line 2 : Geodetic Datum used for the Lat/Lon positions for each event

Line 3 : Reserved for future use

Line 4 : Reserved for future use

Event data

- One line per event
- each field separated by a comma
- non essential fields need not be entered but comma separators must still be used (example ,,)
defaults will be used for empty fields

Field 1 : Number - this is the location in the array (max 1000), must be unique, usually start at 1 and increment.

Field 2 : Latitude - decimal degrees.

Field 3 : Longitude - decimal degrees.

Field 4 : Symbol - 0 to number of symbols in GPS

Field 5 : Map Display Format - not yet used, set to 0

Field 6 : Foreground Color (RGB value)

Field 7 : Background Color (RGB value)

Field 8 : Symbol Size - 17 is normal size

Track File (.plt)

Line 1 : File type and version information

Line 2 : Geodetic Datum used for the Lat/Lon positions for each trackpoint

Line 3 : "Altitude is in feet" - just a reminder that the altitude is always stored in feet

Line 4 : Reserved for future use

Line 5 : multiple fields as below

Field 1 : always zero (0)

Field 2 : width of track plot line on screen - 1 or 2 are usually the best

Field 3 : track color (RGB)

Field 4 : track description (no commas allowed)

Field 5 : track skip value - reduces number of track points plotted, usually set to 1

Field 6 : track type - 0 = normal , 10 = closed polygon , 20 = Alarm Zone

Field 7 : track fill style - 0 =bsSolid; 1 =bsClear; 2 =bsBdiagonal; 3 =bsFdiagonal; 4 =bsCross;

5 =bsDiagCross; 6 =bsHorizontal; 7 =bsVertical;

Field 8 : track fill color (RGB)

Line 6 : Number of track points in the track, not used, the number of points is determined when reading the points file

Trackpoint data

- One line per trackpoint
- each field separated by a comma
- non essential fields need not be entered but comma separators must still be used (example ,,)
defaults will be used for empty fields

Field 1 : Latitude - decimal degrees.

Field 2 : Longitude - decimal degrees.

Field 3 : Code - 0 if normal, 1 if break in track line

Field 4 : Altitude in feet (-777 if not valid)

Field 5 : Date - see Date Format below, if blank a preset date will be used

Field 6 : Date as a string

Field 7 : Time as a string

Note that OziExplorer reads the Date/Time from field 5, the date and time in fields 6 & 7 are ignored.

Example

-27.350436, 153.055540,1,-777,36169.6307194, 09-Jan-99, 3:08:14

-27.348610, 153.055867,0,-777,36169.6307194, 09-Jan-99, 3:08:14

Point File (.pnt)

Line 1 : File type and version information

Line 2 : Geodetic Datum used for the Lat/Lon positions for each point

Line 3 : Reserved for future use

Line 4 : Reserved for future use

Line 5 : multiple fields as below

Field 1 : point set fore color (RGB)

Field 2 : point set back color (RGB)

Field 3 : point set size

Field 4 : point set font size

Field 5 : point set format

Field 6 : point set style

Field 7 : point set description (no commas)

Point data

- One line per point
- each field separated by a comma
- non essential fields need not be entered but comma separators must still be used (example ,,)
defaults will be used for empty fields

Field 1 : Latitude - decimal degrees.

Field 2 : Longitude - decimal degrees.

Field 3 : rotation angle

Field 4 : point name

Field 5 : description 1 (no commas)

Field 6 : description 2 (no commas)

Field 7 : description 3 (no commas)

Route File (.rte)

Line 1 : File type and version information

Line 2 : Geodetic Datum used for the Lat/Lon positions for each waypoint in the routes

Line 3 : Reserved for future use

Line 4 : Reserved for future use

Route data

- One line per route followed by each waypoint in the route
- each field separated by a comma
- comma's not allowed in text fields, character 209 can be used instead and a comma will be substituted.
- non essential fields need not be entered but comma separators must still be used (example ,,)
defaults will be used for empty fields
- Any number of the last fields in a data line need not be included at all not even the commas.

Route Record

Field 1 : R - indicating route details

Field 2 : Number - this is the location in the array, must be unique, usually start at 0 for Garmins 1 for other and increment.

Field 3 : Name - the waypoint name, use the correct length name to suit the GPS type.

Field 4 : Description.

Field 5 : Route Color as displayed on map (RGB).

Route Waypoint Record

Field 1 : W - indicating route waypoint details.

Field 2 : Route Number - location in array of routes

Field 3 : Number - this is the location in the array of route waypoints, **this field is now ignored.**

Field 4 : Wp Number - this is the number of the waypoint (the Wp number within the GPS for lowrances)

Field 5 : Name - the waypoint name, use the correct length name to suit the GPS type.

Field 6 : Latitude - decimal degrees.

Field 7 : Longitude - decimal degrees.

Field 8 : Date - see Date Format below, if blank a preset date will be used

Field 9 : Symbol - 0 to number of symbols in GPS

Field 10 : Status - always set to 1

Field 11 : Map Display Format

Field 12 : Foreground Color (RGB value)

Field 13 : Background Color (RGB value)

Field 14 : Description (max 40), no commas

Field 15 : Pointer Direction

Field 16 : Garmin Display Format

While all the waypoint details are stored with each route it is always the waypoints loaded on the map which have priority, in other words if a waypoint on the map has the same name and/or array number location as a waypoint in a route loaded from a route file the waypoint on the map could replace the waypoint currently loaded from the route record. This occurs when the user presses the relink waypoints button on the Route Editor.

Date Format

Delphi stores date and time values in the TDateTime type. The integral part of a TDateTime value is the number of days that have passed since 12/30/1899. The fractional part of a TDateTime value is the time of day.

Following are some examples of TDateTime values and their corresponding dates and times:

0 - 12/30/1899 12:00 am

2.75 - 1/1/1900 6:00 pm

-1.25 - 12/29/1899 6:00 am

35065 - 1/1/1996 12:00 am