

KIWI Format Viewer

Getting Started with KIWI Format Viewer

Thank you for purchasing our KIWI Format Viewer.

KIWI Format Viewer will not only enable you to verify your car navigation systems software created on KIWI format (V1.22), but it will also help you develop your own KIWI relating products. Your comments and requests will be a great help for us to upgrade our KIWI Format Viewer to make it more efficient. We appreciate your cooperation in advance.

This document can be viewed in "Adobe Acrobat Reader", which is a part of this KIWI Format Viewer kit.

If you have any questions or any comments, please send us an e-mail to the following address.

Kiwi@datawest.co.jp

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Install Start-up

This section describes introductory operation to help you use this software efficiently. Before starting up this tool, please stick HASP Key into your printer port.

➤ Copy necessary folders from the CD

Please find the folder named "KIWIVIEWER" in the CD and copy it into your PC (e.g. C:\Windows\Program Files\). Create a shortcut of "KwDebug.ext" at this point so that you will be able to start up this tool easily from the next time.

➤ Install Driver for HASP Key

Run "inst.bat" which can be found in the folder you've just copied. If reboot is required, follow the instruction and please do so. (It may be required on Win95 but not on WinNT)

➤ Run the Tool

Run "KwDebug.exe" in the copied folder or run its shortcut. This has to be done every time you wish to start up this tool.

➤ About HASP Key

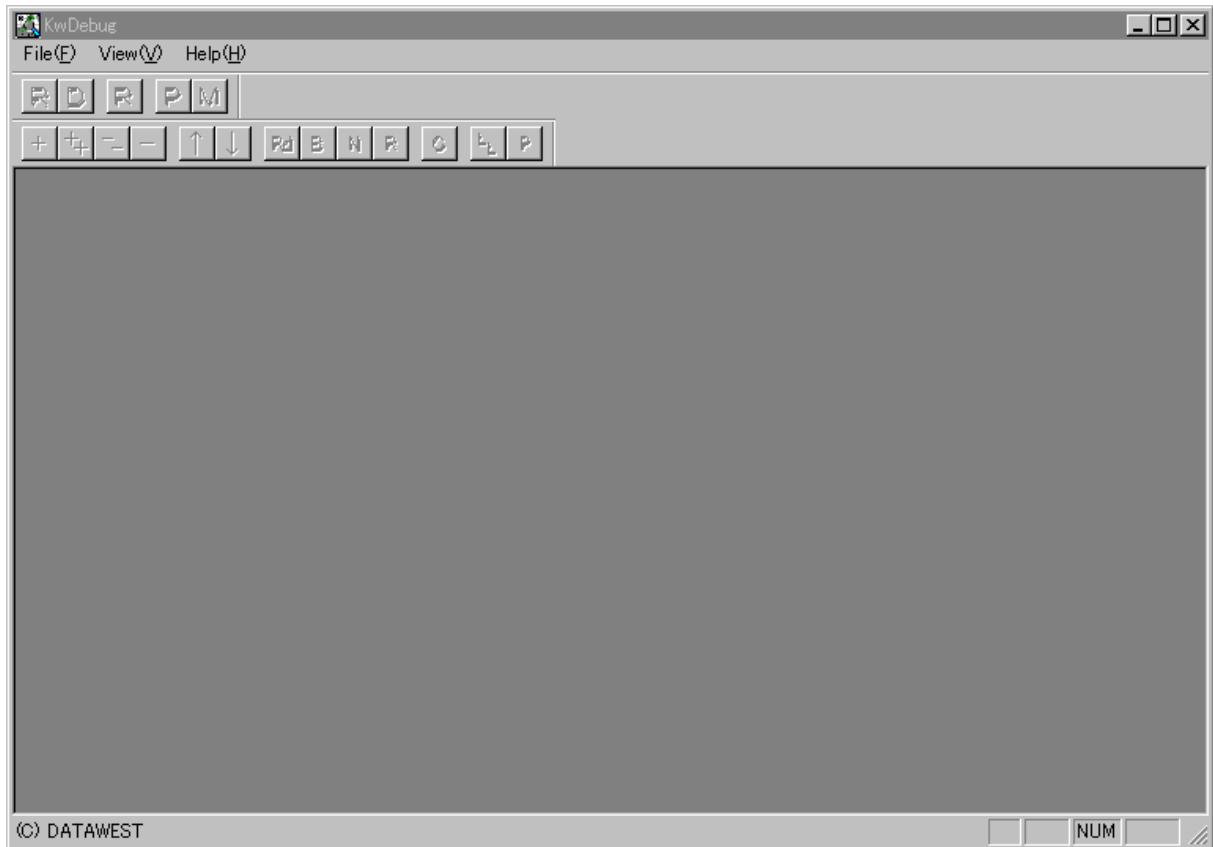
Before putting HASP Key into or out of your printer port, make sure your PC is switched off.

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Main Window

This is a first window that will be displayed after the start-up. This is used for handling data, managing multi-data and etc.



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Menu

There are 2 types of menus for different situations.

When no data files have been loaded, the menu below will be shown.

File(F) View(V) Help(H)

When more than 1 data file have been loaded, the menu below will be shown.

File(F) View(V) Window(W) BranchOperation(E) MapOperation(M) Search(S) DisplayOption(O) Help(H) OptionService(I)

File(F)

Open (O)	Opens KIWI's allocate file. Mainly specifies ALLOCATE.KW.
Track Files	Resisters up to 10 already opened files.
Exit Application (X)	Closes this tool.

View (V)

Branch Operation Toolbar (E)	Displays or hides Branch Operation Toolbar.
Map Operation Toolbar (T)	Displays or hides Map Operation Toolbar.
Status Bar (S)	Displays or hides Status Bar.

Window (W)

Cascade (C)	Displays multiple windows in cascade.
Tile (T)	Displays multiple windows in tile.
Align Icons (A)	Aligns minimized windows.
Track Files	Prompts you to select a file to activate.

Branch Operation (E)

View Route Map (P)	Displays Route Map when the selected branch is <i>Route Calculation Frame</i>
View Parcel Map (R)	Displays cartographic parcel data of selected branch when the currently selected branch is below <i>Main Map Distribution</i> .
View All (P)	Opens Map Display Window to show the entire map.
Move (M)	Moves the map to correspond to the selected branch when the currently selected branch is below <i>region record</i> or <i>main map distribution header</i>
View Dump (D)	Displays Dump Window of the selected branch.

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Map Operation (M)

Zoom In (U)	Maximizes Data Window Map which is currently set to be active.
Zoom Out (O)	Minimizes Data Window Map which is currently set to be active.
Level Up (T)	Moves the map to a higher map parcel level in the currently active data window.
Level Down (B)	Moves the map to a lower map parcel level in the currently active data window.
Options On / Off (I)	Sets On / Off for parcel options.
Roads (R)	Displays or hides roads.
Backgrounds (B)	Displays or hides backgrounds.
Strings (S)	Displays or hides strings.
Routes (R)	Displays or hides routes.
Select Category (K)	Displays or hides individual display class of roads, backgrounds and strings.
Long / Lat (L)	Moves the map on the map display window by specifying longitude and latitude.
Read new POI (P)	Loads newly registered POI Information of your own.
Display Font (F)	Sets a font style to be displayed on the map display window.
Graphic Output (G)	Saves currently shown graphic display as a BITMAP file. Creates a proper output only when the resolving power is set to be a full color.

Search (S)

Highlight Link ID (L)	Highlights links including specified link ID.
POI Search (P)	Starts-up POI Search.
Surrounding Search (A)	Starts-up Surrounding search

Display Option (O)

Polygon Frame (P)	Frames up polygon data.
Information (I)	Displays data information including strings and landmarks.

Help (H)

Version Information (KwDebug) (A)	Displays Version Information of the tool.
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Toolbar

Shown in gray when KIWI Data File is not open.

Branch Operation Toolbar



- R Displays route map when currently selected branch is *Route Calculation Frame*.
- D Displays the dump of the currently selected branch.
- R Shows cartographic parcel data of selected branch when the currently selected branch is below *Main Map Distribution*.
- P Opens Map Display Window and shows the entire map.
- M Moves the map to correspond with the selected branch when the currently selected branch is below *Region Record* or *Main Map Distribution Header*.

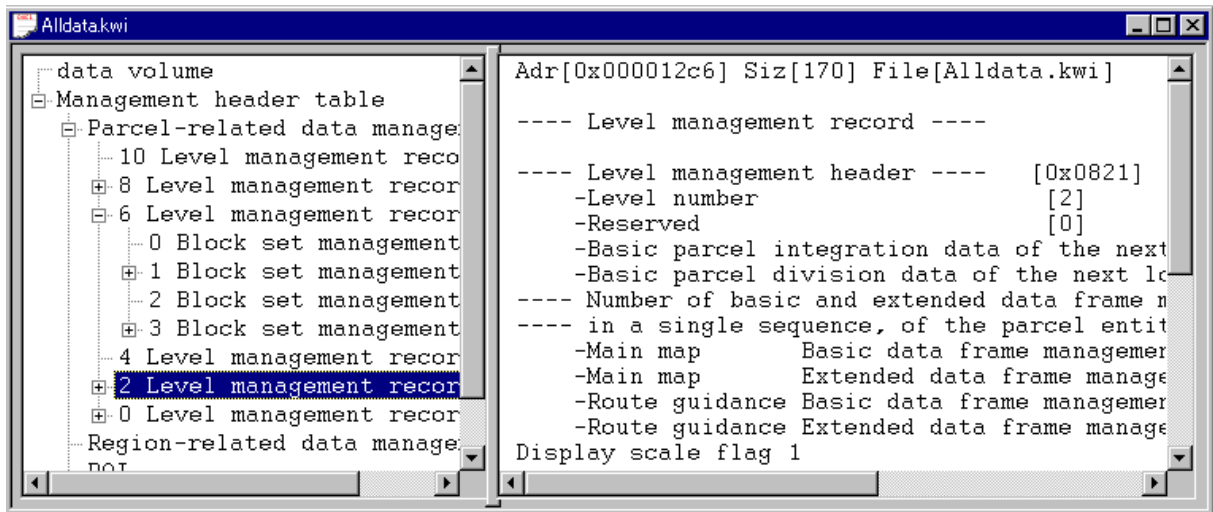
Map Operation Toolbar



- Maximizes currently active Data Window Map. (Low scale)
- Maximizes currently active Data Window Map. (High scale)
- Minimizes currently active Data Window Map. (High scale)
- Minimizes currently active Data Window Map. (Low scale)
- Moves the map to a higher map parcel level in the currently active data window.
- Moves the map to a lower map parcel level in the currently active data window.
- Rd Displays or hides roads.
- B Displays or hides backgrounds.
- N Displays or hides names.
- R Displays or hides routes.
- C Displays or hides individual display class of roads, backgrounds and strings.
- LL Moves the map on Map Display Window by specifying longitude and latitude.
- P Loads newly registered POI Information.

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Data Window



- Data Window shows contents of KIWI Data. This is a main window for already loaded KIWI data. If you close this window, all other windows relating to the data, which you are currently working on, will be all closed, too.
- Left part of the window shows KIWI data in a tree structure. By selecting a branch, the contents of the selected record or the frame will be shown in the right side of the window. And if there are any related records below, new branches will be created below the selected branch.
- A dump window can be created when selecting each branch. To view a dump window, click **D** button on the Branch Operation toolbar or select **View Dump** on the Branch Operation menu.
(Details of the dump window are more fully described in the Basic Functionality section under Dump Window.)
- Branches created below *Route Calculation Frame* can display a route map of the selected region.
To view a route map, click **R** button in the Branch Operation toolbar or select **View Route Map** on the Branch Operation menu.
(Details of the route map display window are more fully described in the Basic Functionality section under Region Route Map Display Window.)
- Parcels can be displayed in the branches under *Main Map Data Frame*. When *Parcel*

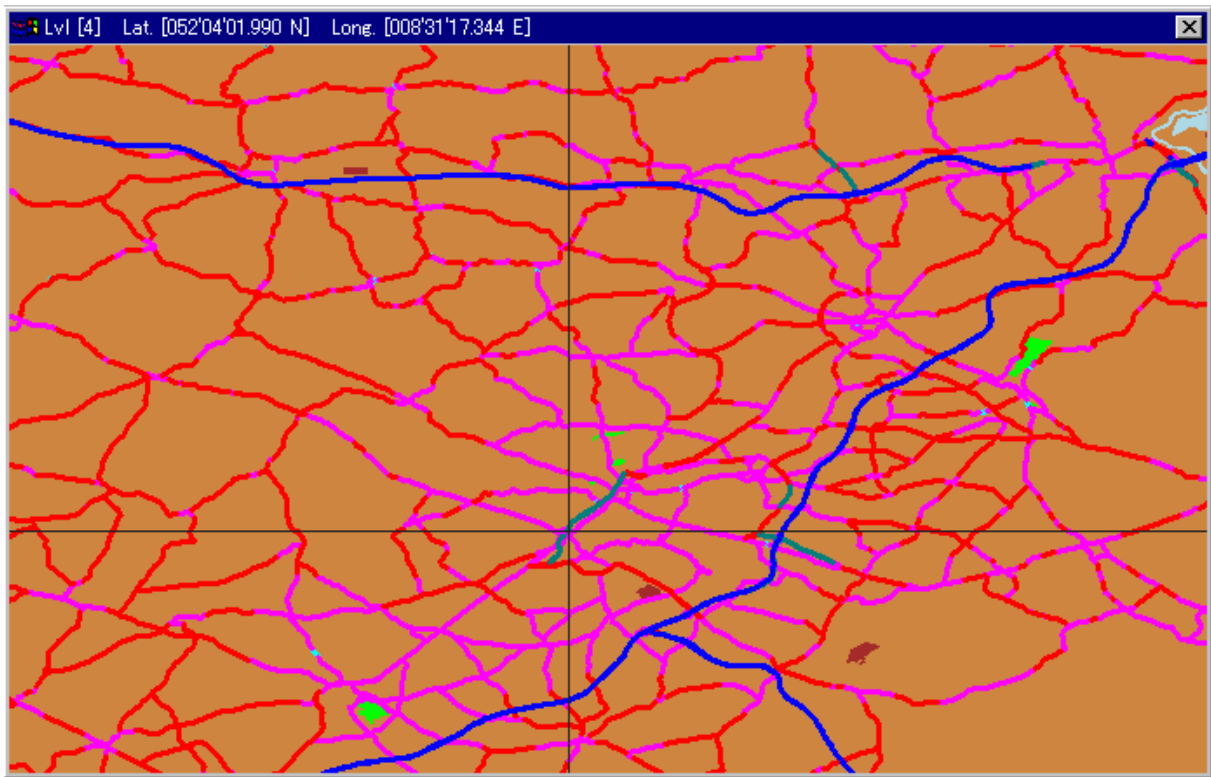
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Managing Record is selected, it shows all the data included in that parcel. Road data and name data can also be shown under its *Road Data Frame* and *Name String Data Frame* respectively. As for *Background Data Frame*, it is basically the same as *Road Data Frame*, but for minimum graphic data, individual minimum graphic data can be displayed separately. To view a map display, click on branch operation button, or select **View Parcel Map** on the Branch Operation menu.

Details of the parcel display window are more fully described in the Basic Functionality section under Route Map Display Window.

- In branches to be created under *Region Managing Record* or *Main Map Distribution*, you can move the map to a point where the selected branch specifies. To move the map, click on branch operation button **M**, or select **Move** on the Branch Operation menu.

Map Display Window



- This Window is used to view parcel relating data stored in KIWI Data. If there is a parcel relating data frame, this window will be created as soon as the data is loaded.
- Colors defined in each parameter section are used in this window. When there is no parameter, then default colors of this tool will be used instead.
- To confirm the contents of a META data, META file will be required. For example, META data should include Display Class and Name Strings.
- For general operations including maximizing or minimizing a map data and changing levels, use the Map Operation toolbar, **Map Operation** on the main menu or Pop-up menus.

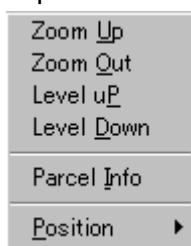
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Basic Functionality

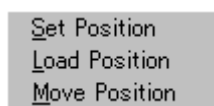
Left Click	By holding down the left mouse button and dragging across the window, you can move the map on the window. Release the mouse button where you wish to have the map. By following these steps, you will be able to move the position of the map.
Right Click	By right clicking the mouse on top of the map, you will be able to have the pop-up menu shown below.

Pop-up menu that appears when right clicking on the map.



Zoom In	Maximizes the map with the central point where you right click.
Zoom Out	Minimizes the map with the central point where you right click.
Level up	Moves to an upper level of the map with a central point where you are right clicking.
Level Down	Moves to a lower level of the map with a central point where you are right clicking.
Parcel Info	Moves a branch of the data window to a corresponding parcel position where you are right clicking.
Position	Displays a sub pop-up menu for POI information.

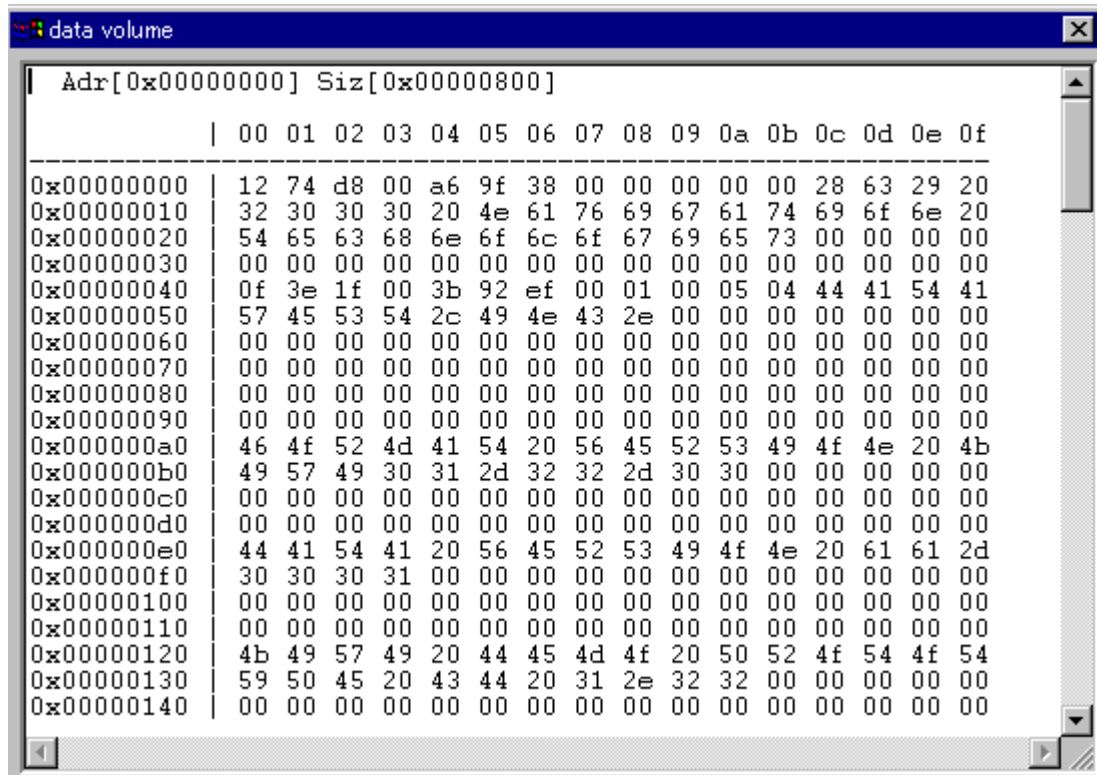
Up-up Menu for POI information



Set Position	Registers a point where you right click as a new POI of your own.
Load Position	Loads newly registered POI information.
Move Position	Moves the map by specifying longitude/latitude.

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Dump Window

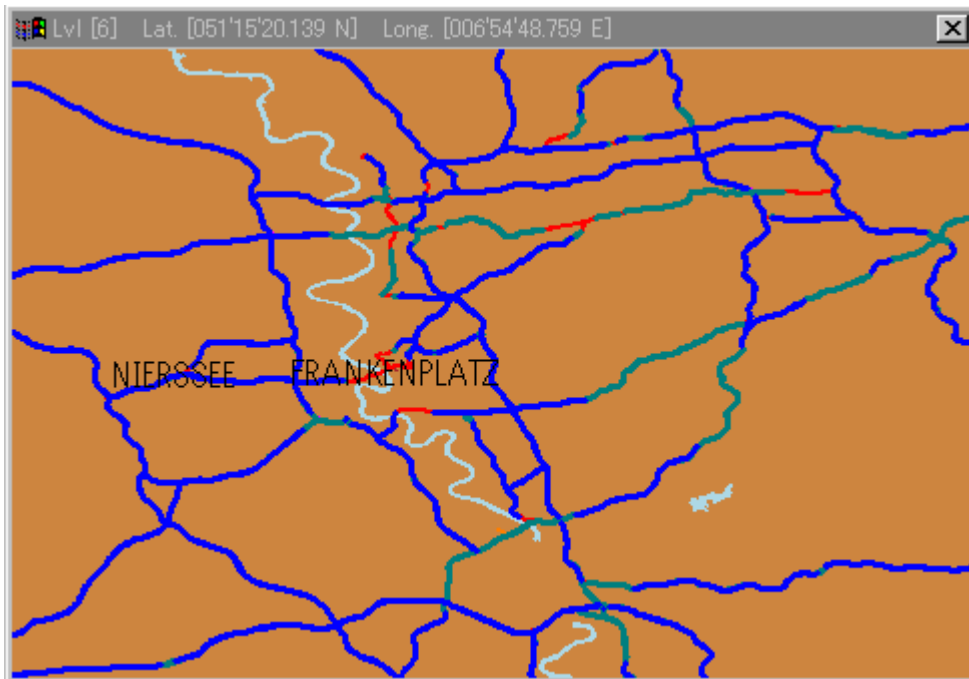


- The window shown above can be created by selecting **Dump Display** on the Branch Operation menu. You can create a dump window for each data window. If a dump window is already open and used in the data window, displaying a new dump window in a new branch will update the older dump window.
- If the amount of dump data is big, then use the scroll bar on the right side of the window.

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Parcel Display Window



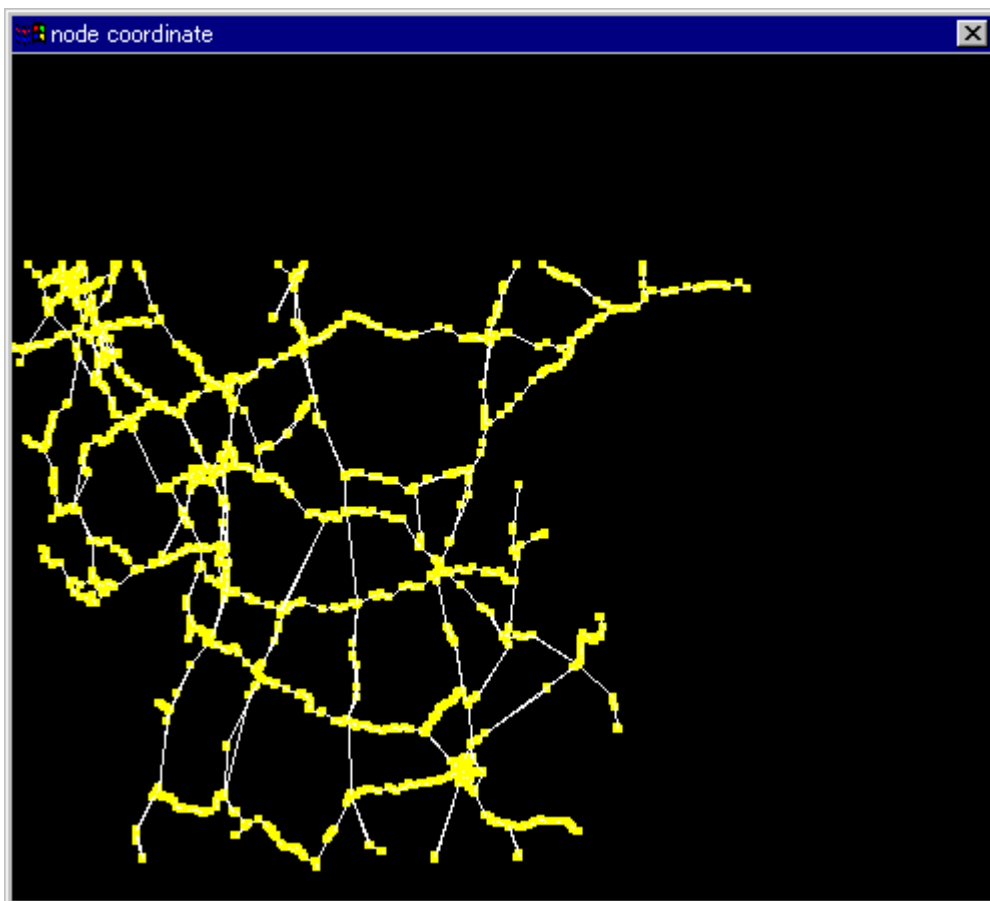
- The window shown above can be displayed when the selected branch is under *Parcel Managing Record*. Select **Parcel Display** on the Branch Operation menu to view it. In this window, only the selected parcel will be displayed.
- What to be displayed will depend on a selected branch.
 - ✓ When selecting a branch under *Parcel Managing Record*:
Road Frame, Background Frame, Name Frame will be all displayed.
 - ✓ When selecting a branch under *Road Data Frame*:
Road Frame will be displayed.
 - ✓ When selecting a branch under *Background Data Frame*:
Except for minimum graphic data:
Background Frame will be displayed.
- Minimum graphic data:
Minimum graphic data will be displayed.
- ✓ When selecting a branch under *Name Data Frame*
Name Frame will be displayed.

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- There is a parcel display window for each data window. If the parcel display window is already in the data window, displaying a new parcel window will delete the older data and upgrade it with a new data.
- The colors used in this window for display are specified in parameter. If there are no parameters, the default colors of this tool will be used instead.
- To confirm the contents of a META data, META file will be required. For example, META data should include Display Class and Name Strings.

Route Map Display Window



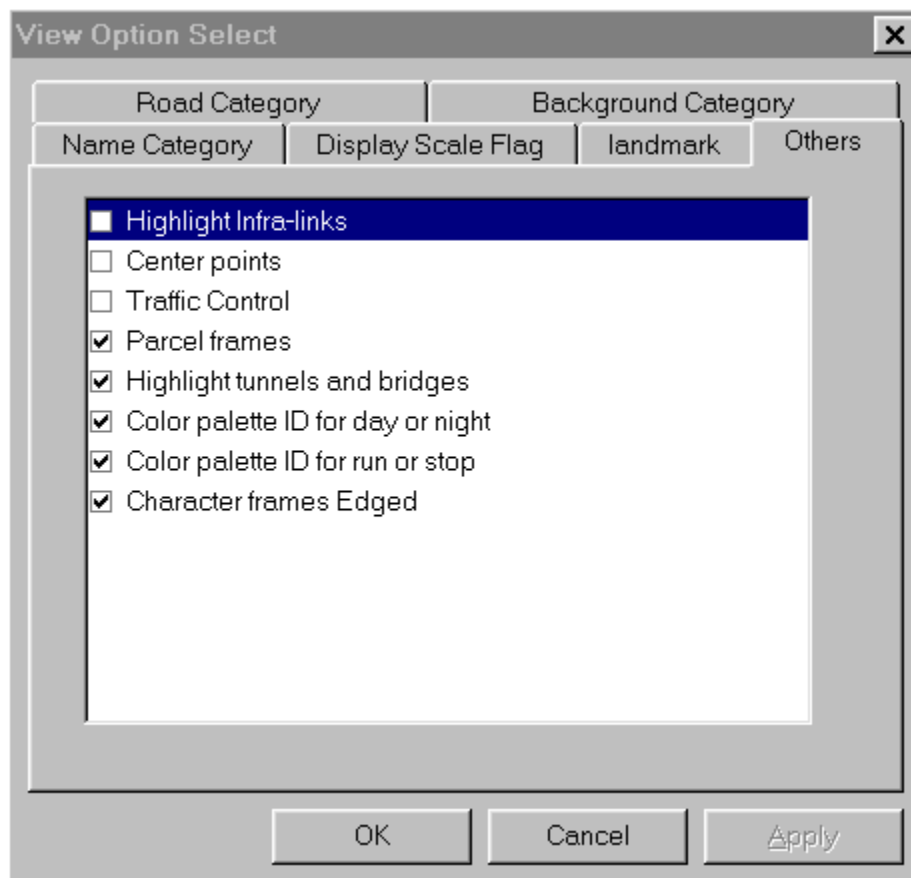
- The window shown above can be displayed when the selected branch is under *Region Managing Record*. Select **Route Map Display** on the Branch Operation menu to view. The route map window will be displayed based on the node coordinate frame. If there are no nodes in the corresponding region, it will display empty window.

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- There is a route map display window for each data window. If a route map display window already exists, displaying a new route map window will delete the older data and update the route map display window.

Select Category Dialog



- The dialog shown above is used to view display classes in each Roads, Backgrounds, and Strings. By deselecting category checkboxes, you can exclude some of the objects to be displayed. Click OK to continue with the options selected. If you click Cancel, the settings will not be committed.

- Others

You can select or deselect the options listed below.

Highlight roads with VICS information stored

Central point marks

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Traffic regulations for Road Frames

Parcel frames

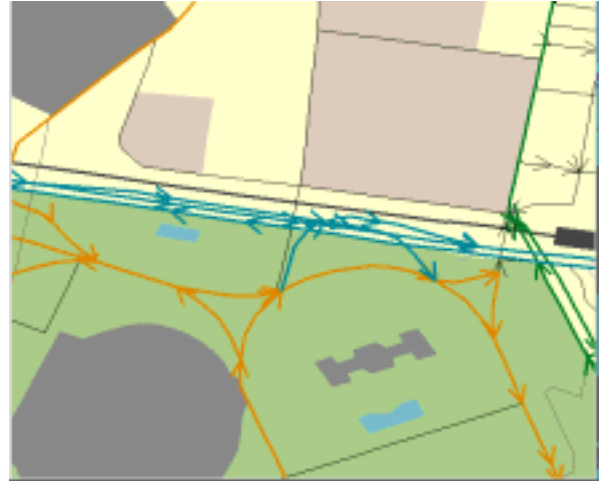
Highlight tunnels and bridges

Color palette ID for day or night

Color palette ID for run or stop

(Available for Japanese data only)

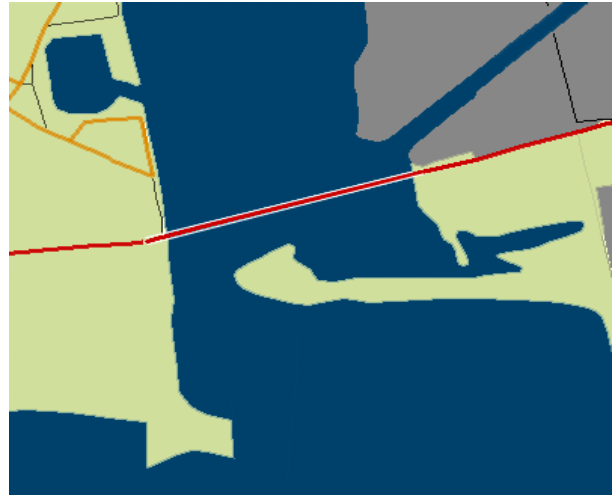
VICS (highlighted in yellow) Traffic regulations



Tunnel (dotted lines)



Bridge(framed with white)



Display scale flag

Sets ON or OFF for each display scale flag

Land Mark

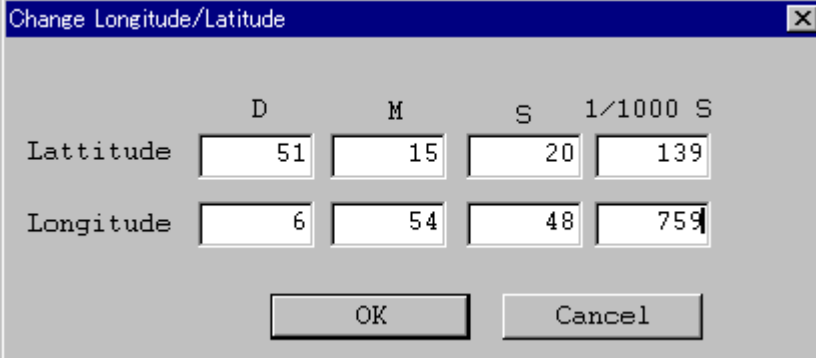
Determines what land mark pattern table to use.

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Strings in display class will be created based on *META data Definition Frame* in KIWI Format Chapter 32. As for non-Japanese data, Strings will be created in the form of *n display class*.

Change Longitude and Latitude



A dialog box titled "Change Longitude/Latitude" with a close button (X) in the top right corner. It contains two rows of input fields. The first row is labeled "Latitude" and has four fields with values 51, 15, 20, and 139. The second row is labeled "Longitude" and has four fields with values 6, 54, 48, and 75. Above the first three fields of each row are labels "D", "M", and "S". Above the fourth field of each row is a label "1/1000 S". At the bottom of the dialog are two buttons: "OK" and "Cancel".

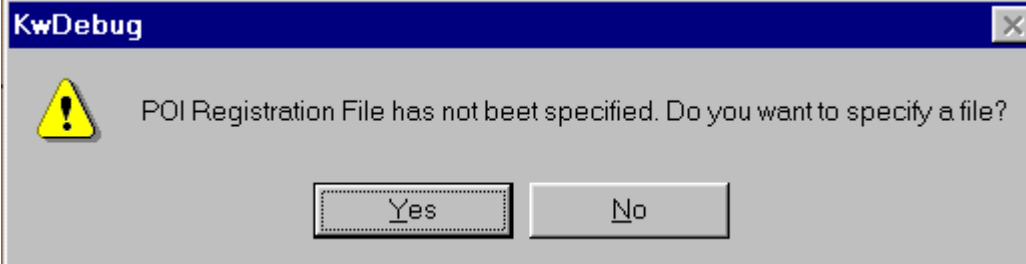
	D	M	S	1/1000 S
Latitude	51	15	20	139
Longitude	6	54	48	75

OK Cancel

- This dialog is used to move the central point of the map display window by specifying longitude and latitude. Input longitude and latitude of the point where you wish to move the map to, and click OK. The figures shown in the first dialog is the current position of the map's central point.

POI Information Dialog

POI registration file will be required when running this operation for the first time.



A dialog box titled "KwDebug" with a close button (X) in the top right corner. It features a yellow warning triangle icon on the left. The text inside reads: "POI Registration File has not beet specified. Do you want to specify a file?". At the bottom are two buttons: "Yes" and "No".

POI Registration File has not beet specified. Do you want to specify a file?

Yes No

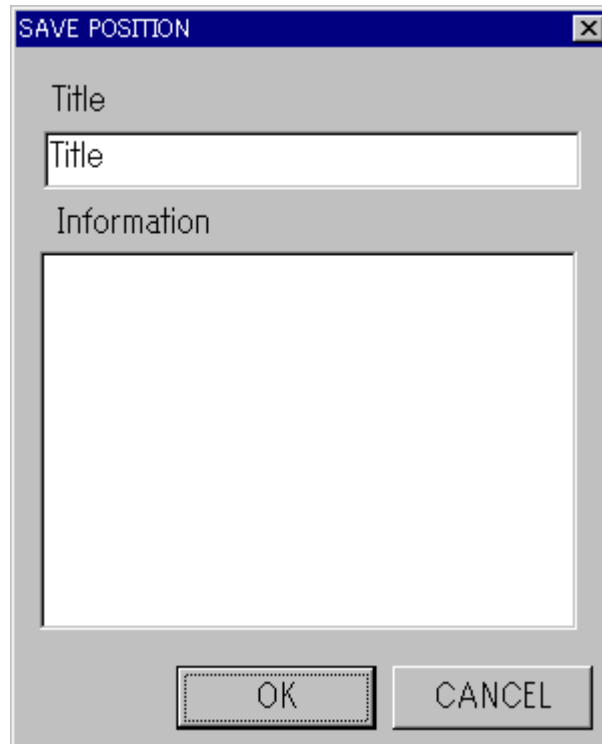
- Click **No** to cancel or click **Yes** to continue.
- When choosing **Yes**, the Open dialog will appear so you can select a POI registration file. If you wish to create a new file, enter a new file name. Or if you have a registration file already created, then select it.

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Register new POIs of your own

By following the steps on the previous page, the Save Position dialog will appear.



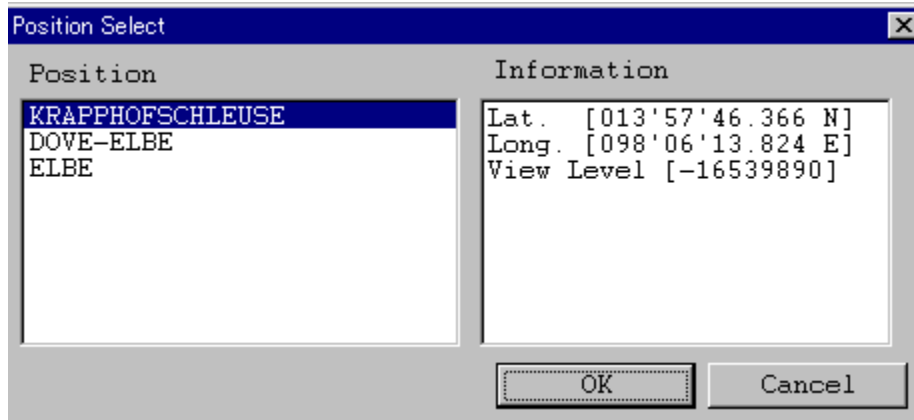
- Enter a title and a description of the POI into the textboxes in the dialog, and then click OK to register. Apart from the titles and the descriptions, you can also store information like currently selected parcel level.

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Load your own POIs

When selecting **Position Select**, the following dialog will appear.



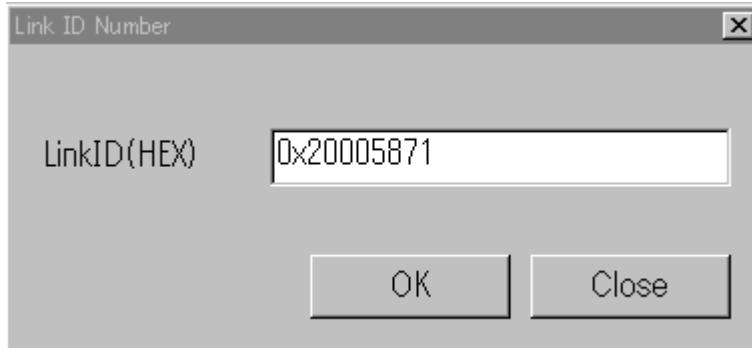
- A list of your newly stored POIs and information of these POIs, which are stored in a POI registration file, will be displayed in this dialog. Select a required POI name in the list and click OK. It will move the map to the point where the POI you have just selected exists, and then it will display the map window with the POI on.

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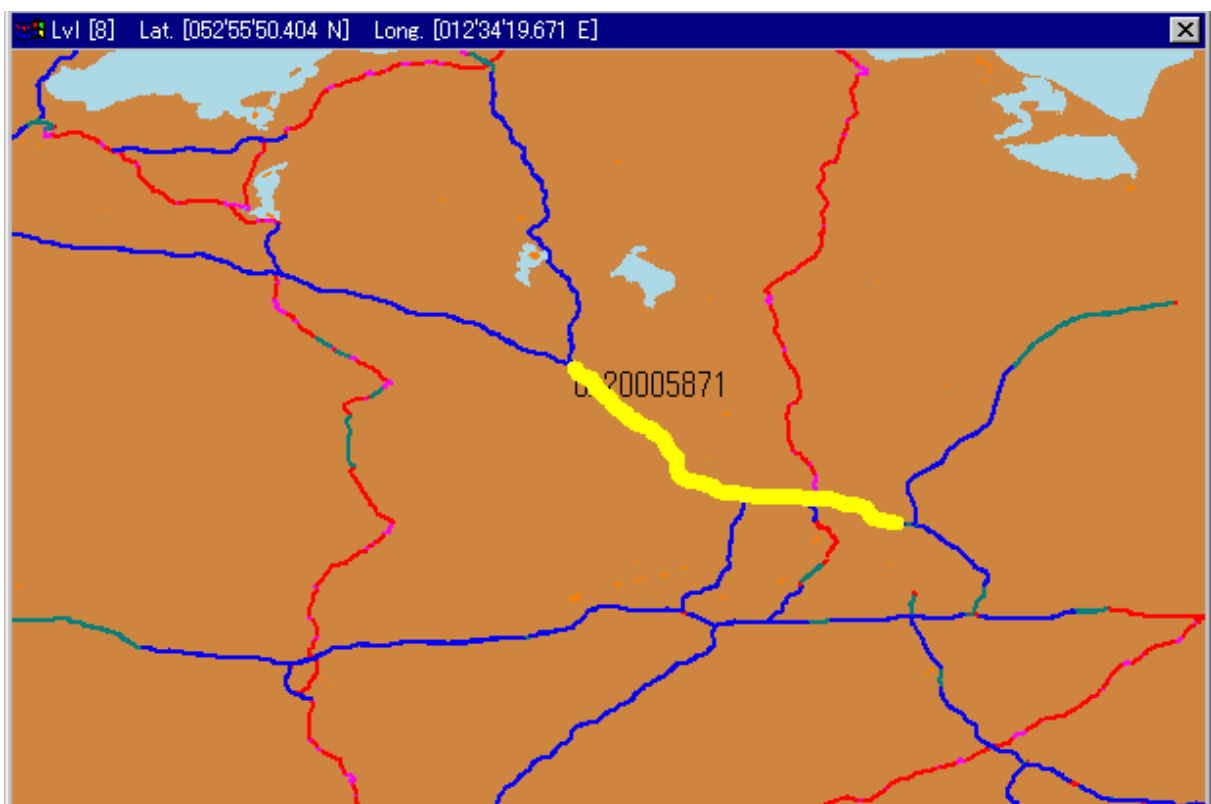
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Highlight Link ID

Click **Highlight Link ID** on the Search menu, then the following dialog will appear to specify a link ID.

A dialog box titled "Link ID Number" with a close button (X) in the top right corner. It contains a label "LinkID(HEX)" followed by a text input field containing the hexadecimal value "0x20005871". Below the input field are two buttons: "OK" and "Close".

- In this dialog, you can enter hexadecimal number into the textbox. After entering a link ID, click OK. If the specified link ID exists in the currently displayed area, then it will be highlighted on the displayed map.



- The line highlighted in yellow on the displayed map includes the specified link ID.

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Information Display

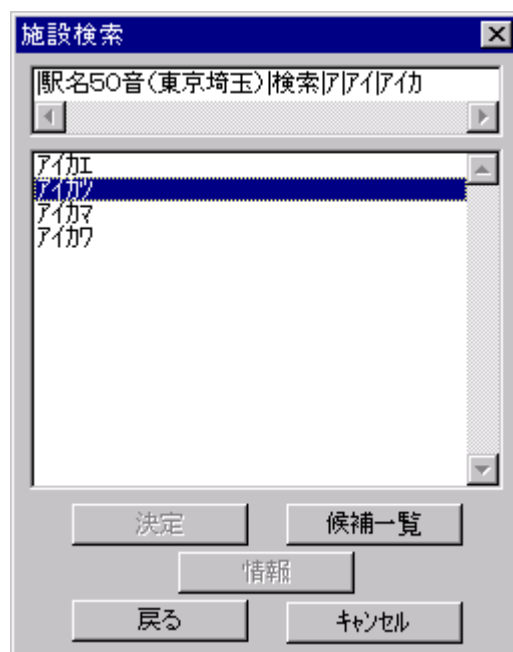
```
barycentric string  
Type Code [0x0128]  
X[2997] Y[3201]
```

```
Route Node  
Lvl[6] Region[1]  
Node [1256]
```

```
string TypeA  
Type Code [0x0210]  
X[1982] Y[1497] Group[1]
```

- It shows information of name strings and route nodes. On the Display Option menu, click **Information Display** to view.

POI Search



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- This is a search engine tool for POI search. As shown in the dialog above, there are 5 buttons, OK, List, Info, Back and Cancel. The buttons with characters in black are available.

Functionality for each button:

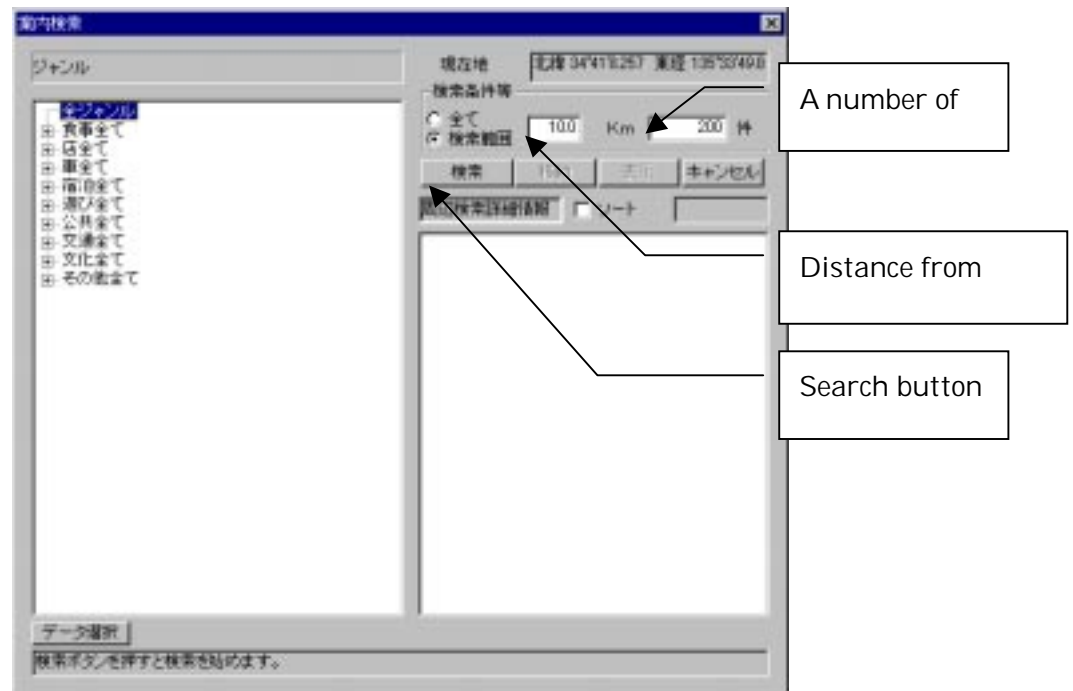
- OK Narrows down genre search or moves the map to display a POI.
- List Displays a list of required items.
- Info. Displays information of the currently selected POI.
- Back Goes back to a previous dialog.
- Cancel Exits

* POI Search is supported only in Japanese Windows.

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Surrounding Search



- This is a search engine tool for a surrounding search. As shown in the dialog above, there are 5 buttons, Search, Move, View, Cancel, and Select Data. The buttons with characters in black are available.

Functionality for each button:

Search	Searches with the specified genre.
Move	Moves to the currently selected point and exits.
View	Displays detailed information of the currently selected POI.
Cancel	Cancels searching or exits this tool.
Select Data	Selects an individual POI data file for surrounding search. (It is useful to search for multiple search data.)

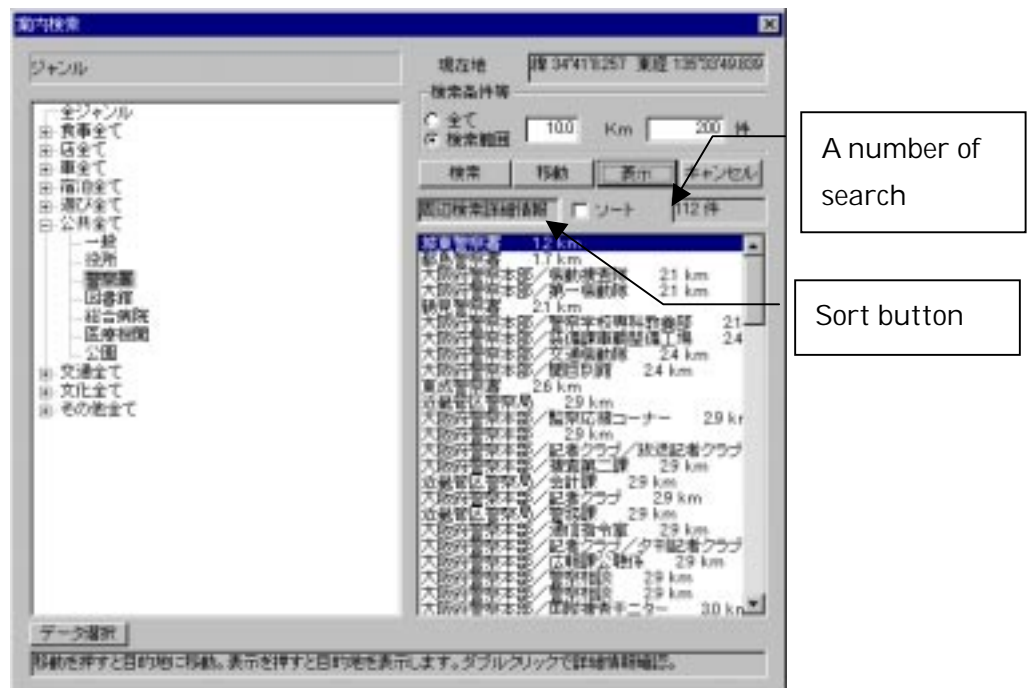
- In the Search Option box, you can specify the scope of your search from the current position and the number of search results you want. If you enter 0 in Number of Search Results, it will ignore the number and show a list of all the applicable POIs. If you select All on the Search Option box, it will search for a POI from the entire data.
- Select a genre type from a genre tree, then click **Search** to commit it. If you wish to cancel searching, then click Cancel.

* Surrounding Search is supported only in Japanese Windows.

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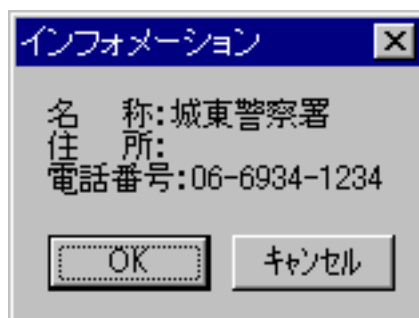
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Example of a Search result.



- It will list all the applicable facility names in order of the closest to the search requirements you specified before searching. Click **Sort** to sort the list in alphabetical order.
- Select a facility name in the list and click **View**, or double click on the facility name. It will move the map to the POI facility you have selected and display the information about the facility. Click OK or Cancel to go back to the previous point.

Example of detailed facility information.



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Notes

You have to create a META data that corresponds to the contents of the data. If the META data and the data do not match with each other, you will not be able to have a proper display.

This tool has been verified with Zenrin KIWI Text Disc 4 and IPC KIWI Test Disk 3.

POI Search and Surrounding Search are supported only in Japanese Windows.

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