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System requirements

CPU:	Pentium II or comparable processors
Memory:	Minimum 64 MB, without the Europe map 16 MB
System:	Windows 98, ME, 2000 and XP
Free hard disk memory:	100 MB without maps, with maps up to 1.4 GB
Graphics card:	VGA
Compatibility:	GPS MAP 500 operating systems V2.02ZA and higher only

Installation description

There are two possible installation procedures:

- **Automated procedure by using Map 500 CD ROM with a full performance range.**
- **Manual procedure using the single mapshow.exe versions (restricted performance range), map and program downloaded from internet**

While using the automated installation routine, a general Europe overview map will be installed on your PC and displayed together with MapShow. This map enables the user to comfortable select and arrange single maps.

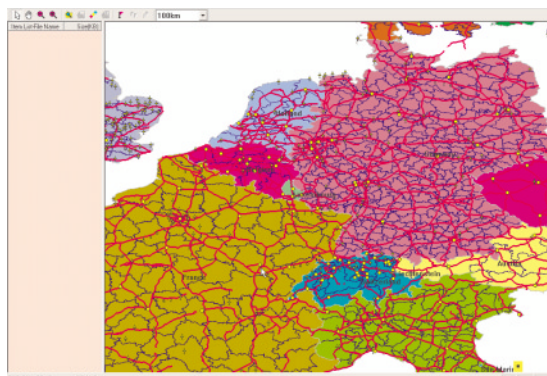
While using the manual installation routine, single maps need to be selected from the local hard disc directory. Preconditions are basic geographic knowledge of the necessary areas to assure correct map selection by the user.

We recommend to use the comfortable automatic installation procedure. After inserting the CD ROM follow the instructions on the screen. If the CD doesn't automatically start, search for **setup.exe** on the CD ROM and start the application with double-click.

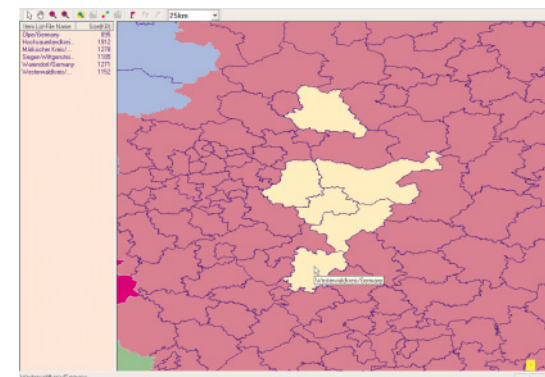
We recommend to accept the proposed folder structure. Otherwise the successful installation of the necessary maps can not be guaranteed.

A menu item will be created in the Windows start menu. Both MapShow, the operating instructions, additional notes as well as the reinstallation routine can be selected here. As standard the German language version is installed. In addition to that the English, French, Spanish and Italian MapShow versions can be installed at any time.

After total installation the Europe map will be displayed



Example for a zoomed Europe map



The European map you see the first time the MapShow program is opened, is the same you have on the Map500. This is called the “base map”, and shows only the main roads and the main European cities. As option the detailed European maps (ALAN Map Europe CD v1.1) are available. They show very detailed information about streets and also “point of interest” such as hotels, restaurants, monuments and so on. The installation’s procedure is made by an installer wizard that take care of all the necessary steps for a correct installation. Only after this installation you will be able to zoom in and see all the details of the maps.

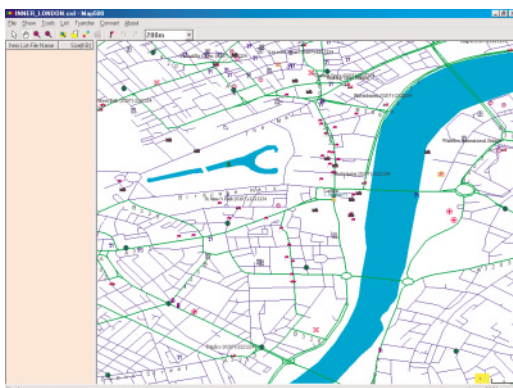
Attention: to load the maps into the GPS, you need an optional Compact Flash Memory Card installed in your Map500

The combination and saving of detailed maps for the GPS Alan Map 500 is easier by using the complete Europe map. While selecting the required region, the corresponding card names will appear in the left list field. At the end the whole list needs to be stored as a **LST** file (**File, Save As**) or directly be transferred to the Compact flash card plugged into the GPS (**transfer, PC→GPS, map view**).

Select and view a single map from the Europe map

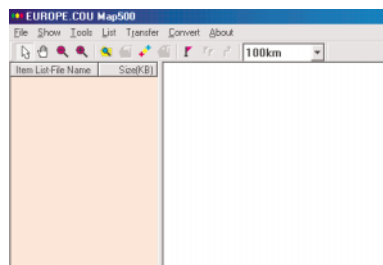
Do you only want to view a single detailed map first?

- Place the mouse pointer on the desired place of the complete version of the Europe map.
- Press SHIFT button and keep it pushed down.
- Double click with the left mouse button on the desired map.
- The detail card is published on the screen.
- Release the SHIFT button.
- To leave the detailed map view click on the X of the upper right edge of the window.



Tip: Although the GPS ALAN MAP500 supports Compact flash cards up to 512 MB we recommend to install only those maps and regions to a LST file which are necessary for the planned tour. This will lead to faster response times of the Map 500 (e.g. during Compact flash card exchange or scrolling during object search).

The MapShow user interface without the Europe map



The screenshot at the bottom on the left shows the map show user interface without installed Europe map (e.g. downloaded **mapshow.exe** from internet). It is possible to save other map show language versions as a single “exe” file on your local hard drive and immediately start MapShow without starting the installation procedure again.

With **File** and **Open...** single maps can be started from the local hard disc. New Alan maps V1.1 (and higher) are available in compressed form on both CD ROM 1 and 2. Please note that the new ALAN maps V1.1. needs to be installed first before the individual maps can be used in the CRD format. Installed maps can be found at:

C:\Program Files\map500\europel

It is possible to use Self developed vector maps or other types of maps from other vendors, but you must be sure that the map's file format is .crd. You can use special conversion software like MapEdit to convert the maps into the .crd format.

Description of the individual functions (applies to all kinds of installation)

File

Open, Save As, Close, Last Used File, Exit

To open and close files, save map files and exit the program.

View

Delete, Show streets, Show POIs, Symbol choice, Point ..., Hide ..., Show (Cou file), Hide (Cou file).

This menu item allows the user to hide and show information in the map. The "Cou" file is the automatically displayed Europe map with zoom functionality. It is possible to zoom inside the map to exactly select districts, which should be transferred to the compact flash card of the Map 500. While moving the mouse pointer over the maps the district or region name will be displayed. Selected maps will be displayed in the left hand map list field.

Tools

Pointer, Move, Zoom +, Zoom -, Object research, New waypoint, Waypoint list, Route and Metric System.

Viewing of POIs (Points of Interest, important addresses), waypoints or routes, increase and reduce the map view, search function according to map information, acquisition of way points or routes and waypoint lists.

List

Adding element, Removing element, Adding several elements

This menu item is only necessary in case of the Europe map is hidden. With this menu item single detail maps can manually be added and removed by the user. The German maps always contain exactly one district or town. The new list needs to be saved as "List file" and synchronised with the GPS Alan Map 500.

Transfer (Data transmission)

GPS→PC, PC→GPS

The function PC→GPS is used to transfer operating system programs, documents, maps, track logs, way points and routes from the PC to the Alan Map 500. With the function GPS→PC track logs, way points or routes can be transferred from Alan Map 500 to the PC.

Convert

Track Log TLG→TRL, Waypoint_Route WRT→WPR

With the function Convert Track Log TLG→TRL or Waypoint_Route WRT→WPR it is possible to convert old Track Logs, Waypoints and Routes into the new file structure. From the MapShow Versions 2.0 and the Map500 operating systems V.2.00 onwards the Track Logs are saved as **TRL**-files or the Waypoints and Routes are saved as **WPR**-files. The old **TLG** and **WRT** files also can be converted with the shareware Software MapEdit.

About Map500

This function shows information about the MapShow version and depending on installed language version contains a link to the ALAN / CTE homepage.

Basic data transfer between PC and GPS

The correct file transfer procedure between the GPS and the PC can be summarized in two main steps:

- Step 1: Activate the desired file transfer feature first on the GPS side
- Step 2: Activate the corresponding file transfer feature on the MapShow software on the PC side

To transfer files, a correct connection of the data cable is necessary. Make sure that cables are correctly attached between PC and ALAN MAP 500. Do **not activate** the **NMEA function** at the GPS device during data transfer between GPS and MapShow! The NMEA function is only provided to transfer GPS position data to other devices or software (e.g. Moving Map or Routing software like Marco Polo or Maptech nautical maps or others).

Do not change any settings at the COM interfaces of your PC. MapShow automatically detects the used COM interface.




Note: Always follow the proposed sequence:

- a) First of all start the data transfer at the GPS handheld. The GPS handheld sends out identification signals.
- b) Secondly activate the data transfer at the PC, MapShow searches for identification signals on all COM interfaces and automatically starts the right connection. MapShow is able to detect COM Port numbers between COM 1 and COM 9 automatically. However, we recommend that COM Port numbers should stay below COM 6
- c) Without the RS232 serial interface a separate USB connection cable is needed. Please only install the correct USB cable driver (the following operating systems are supported: Windows 98, Me, 2000 and XP). The USB driver simulates a COM interface ("Profilec USB to serial interface) which will be used by MapShow. The newest driver can be downloaded from our internet pages at ALAN / CTE web site.
- d) Make sure that enough battery capacity is available to ensure that synchronisations between the Map 500 and PC won't be interrupted. This specially counts during transfer of a new operating system version.


Step 1: Activate the desired file transfer feature first on the GPS side

Connect the MAP 500 with the PC by using the RS 232 interface cable (or the optional USB connection cable) and choose on the GPS the right file transfer procedure, based on your need. This procedure is common to all the file transfer procedure, the difference

is only the last step where you choose the purpose of.

- From each page it is possible to press the button  and choose **Main menu** (or press two times , confirm with .



- The main menu appears. Choose **Loading** and confirm with .




- Then the progress screen will appear, asking you to press the menu button




- Press the button  to get file transfer list.



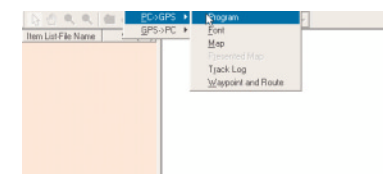
- Choose the desired function and confirm with .
- The following screen will be displayed, telling you that the GPS is ready for transfer.



- At this point you can start the "step 2" on the PC side, open the MapShow software and choose the file transfer procedure according to the one selected on the GPS. To finish the up- or download press the button  ESC on the GPS equipment.

Step 2: Activate the corresponding file transfer feature on the MapShow software

Start the program MapShow, click on **Transfer** in the tool bar and choose the corresponding file transfer feature.



Data transfer from the PC to the GPS (PC→GPS)

This procedure lets you transfer fonts, way point, route, track logs and maps from the PC to the Map500

Font (transfer language sign files)

It is used to transfer other language sign files (e.g. Chinese). **Do not use in European Versions!!**

- Go to **Transfer, Download, Language Sign** and choose the desired fonts (double-click on *.fnt file).
- Click on **Open**. The file will automatically be transferred.

The function download fonts refers to fonts like Russian, Chinese, Thai, Arabian, Korean or Japanese and is usually not necessary in Central Europe.

Maps (upload of one or more maps):

Maps can be uploaded in the GPS using two different menu commands:

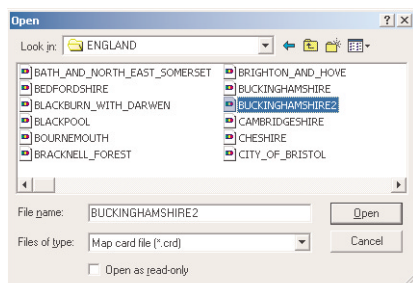
- **Map** to upload an existing ".LST" file with one or more maps.
- **Presented Map** to upload the selected maps on the fly.

Attention: to upload the maps, your MAP500 must be equipped with an optional Compact Flash Memory card.

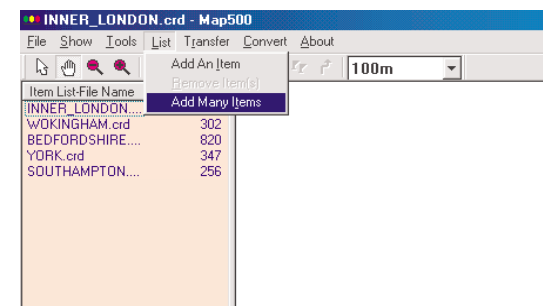
Transfer, PC→GPS, Map (transfer maps with a .LST file)

Before you can use this menu command, you must create a .LST file.

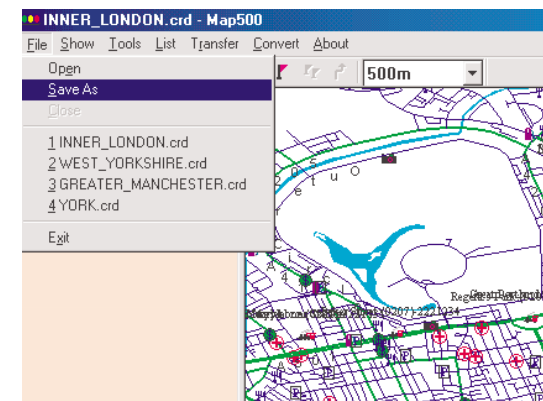
1. If you installed the optional detailed maps successfully, you can click on the Europe base map to select the region of interest.
2. On the left side you will see the list of the selected maps regions
3. You can also select a map directly from the hard disk, using the open command under the File menu (maps file has the .CRD extension).



4. When the map has been loaded you can add it to the list on the left using the menu command **"Add an item"** under the "List" menu.



5. To delete a map selection, click on the map from the list on the left and choose **"Remove item(s)"** from the "List" menu.
6. You can now choose the **"Save as"** command under the "File" menu and save the list of maps on your hard disk (like a .LST file).



Now you can transfer the .LST file from the GPS to the PC. Choose the menu command **Transfer, PC→GPS, Map** under the Transfer menu, a dialog box will appear asking you to select the .LST file from your hard disk.

Transfer, PC→GPS, Presented Map (upload all the selected maps to the GPS)

The menu items "Presented Map" lets you transfer to the GPS all the selected regions listed on the left side.

- Select one or more maps regions, simply clicking on the Europe base map.
- Select from the Transfer menu, the command "**Presented Map**".
- The transfer procedure will start immediately.

Note: download of maps from the PC

- Only **one single LST** file is allowed to be transferred and saved on the compact flash card of the MAP 500.
- You can save as many .LST files as you want on the hard disk of your PC, but you can download and use only one on the MAP500.

The procedure above only describes the data transfer using with the RS232 data cable (or the USB cable) to the compact flash card inside the Map500. Due to the limited band with of the RS232 interface the data transfer of large map files may results in relatively long synchronisation processes. We recommend you to use a **compact flash card reader or PCMCIA notebook slot** to transfer maps directly to a compact flash card. These adapters are available at relatively low costs and provide multiple band width and high speed compared to the RS232 interface.

Transfer maps directly to the Compact Flash memory card

To transfer the maps on the CF card, you need a Compact Flash memory card reader and simply copy the .LST file from your hard disk to the CF card.

1. Save the maps you choose on your hard disk as a .LST file - you can follow the same steps explained in the chapter above "**Transfer, PC→GPS, Presented Map** (upload all the selected maps to the GPS)
2. Copy the .LST file to the CF memory card
3. Insert the CF memory card in your Map500

Track Log (transfer track log)

- Click at **Transfer** and choose **PC→GPS**.
- Click at **Track Log** and choose a **TRL** file (double-click). The file will automatically be transferred.

Way Point and Route (transfer Way Point and Route)

- Click at **Transfer** and choose **PC→GPS**. Click on **Way Point and Route** and choose a **WPR** file (double-click). The file will automatically be transferred.

During the data transfer the following screen will be displayed:

finished: xy%
MAP 500 ESC - button to Break off

As soon as the procedure is completed (100% fulfilled), the screen disappears.



Note: If the cable is defect or not correctly attached to both interfaces, the following screen appears. The same message also appears if the transfer order was not right, such as the transfer was started at the PC first:

Check COM Port

Map500 Operating System update (also called firmware)



The procedure to update the Operating System is slightly different from the one explained before. The main difference consists on the way you start the communication on the GPS side

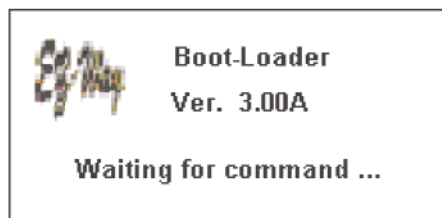
On the GPS

- Be sure the GPS is well connected to the PC
- Push down both buttons for 2 seconds  and .
- The Boot-Loader will be displayed:



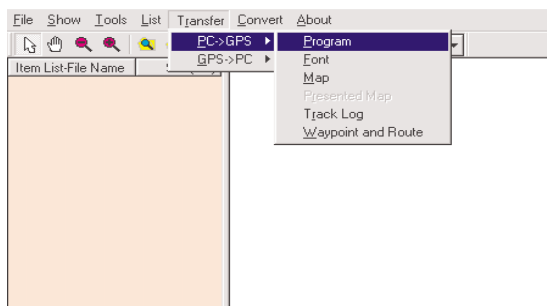
For ALAN Map500 V2.0.2

- Move the pointer to the button **Serial Load Program** and confirm with  or cancel the function with . The following message will be displayed:



On the PC

- Start the MapShow program
- Select the "Program" command from the Transfer-PC→GPS menu



Choose the program file (e.g. V202ZA.bin) from the local hard disk directory. Confirm with OK, before the new operating software is loaded the old version will be deleted from the Map 500. After successful operating system update the MAP 500 automatically turns off. If a problem should occur during transfer, stop MapShow, take out the batteries from the Map 500 for a moment, insert them again and start the boot sequence once more.

Data transfer from the GPS to the PC (GPS→PC)

This procedure lets you transfer way points, routes, track logs from the Map500 to the PC

Track Log or Waypoint / Route

- Click on **Transfer** and choose **GPS→PC**. Click on **Track Log** or **Waypoint and Route**.
- Enter a filename for the file coming from the GPS:
 - Extension .TRL for Tracks
 - Extension .WPR for Waypoint and Route

Now click on the Save button.

The following screen appears:

finished: xy%

As soon as the process is completed (100% fulfilled), the screen disappears.

Note: If the cable is defect or not correctly attached to both interfaces, the following screen appears:

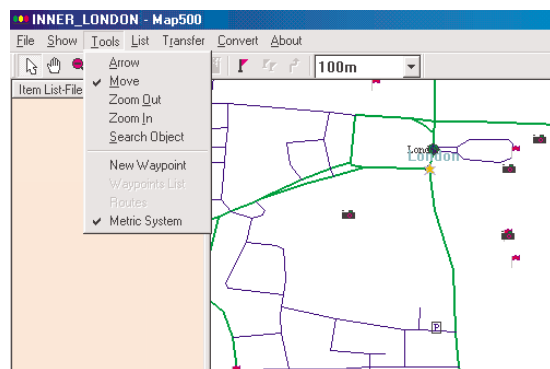
check COM Port






Special operating system to save files of Way Point/Routes and Tracklog file on compact flash cards (e.g. V202ZA-CF)

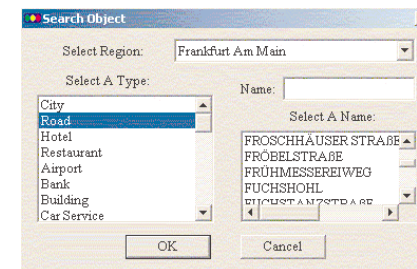
Through our service download WebPages (www.cte.it or www.hobbyradio.de/GPD/Map500) special OS versions are available which enables the user to directly store all **WRT** and **TRL** files to the inserted Compact flash card instead of to the internal MAP 500 memory. The main advantage is, that data transfer of the above mentioned file types does not require the RS232 data cable. Users who store their different tours on separate compact flash cards always have the customized way point and track information at hand. This operation system version requires a compact flash card inserted in the device.


Further functions

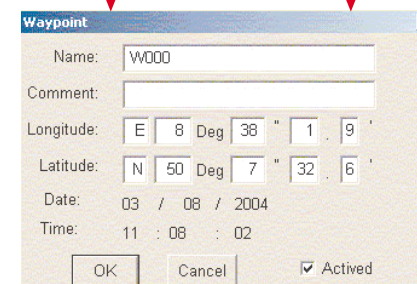
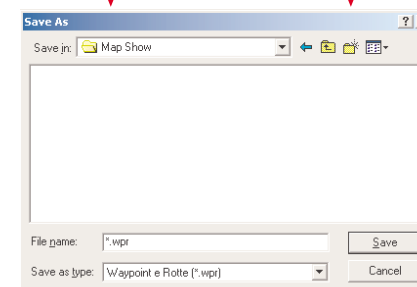
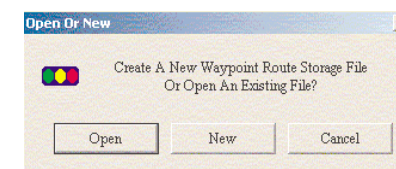
Tools



- **Tools/Pointer** or symbol : By selecting any position available information will be displayed (longitude, latitude, street names, ...)
- **Tools /Move** or symbol : move map
- **Tools /Zoom +** or symbol : Increasing the map scale
- **Tools /Zoom -** or symbol : Decreasing the map scale
- **Tools /search object** or : searches for any object in the open map file .

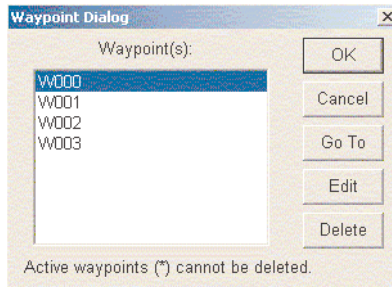



Tools/New Waypoint or symbol : with these tools a new waypoint will be created.

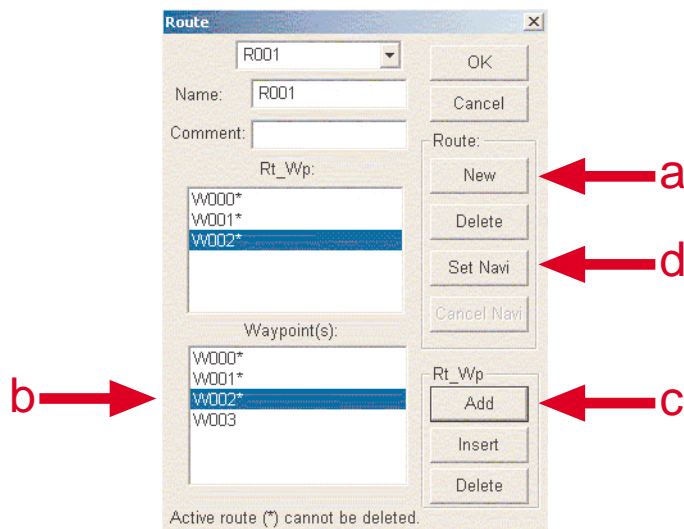


For ALAN Map500 V2.0.2

- **Tools/List of Waypoints** or symbol  . List of all recorded waypoints.




- **Tools/Routes** or symbol  : To record new routes.
 - a. **New:** Record a new route starting by R001
 - b. Choose waypoint (W001,W002,.....)
 - c. Insert the waypoints in „Rt_WP“.
 - d. Click at **Set Navi**.

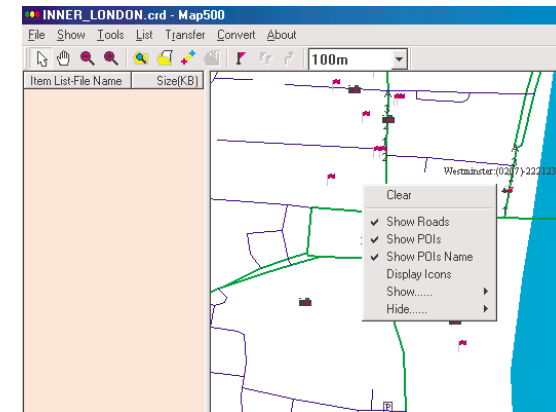


- **Tools/Metric System:** Sets the standard for the Distance scale (meter or english miles).

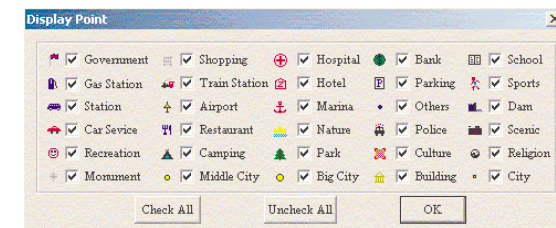
Scale: **Metric:** 100m, 200m, 500m, 1km, 2km, 5km, 25km, 100km, 200km or
Miles: 0.1mi, 0.2mi, 0.3mi, 1mi, 2mi, 5mi, 25mi, 100mi, 200mi

Note: The maximum zoom of the Map 500 is 50 m. All other zoom steps are similar to the MapShow.

- **List/Add Elements** or  : add maps (to transfer or save maps with new file name)
- **Context**
Open the menu context by a right mouse click at the open map file:



- **Show streets:** shows all street names in the open map file.
- **Show POI:** shows all points of interest in the open map file.
- **Display Icons:** Choose of all Icons in the open map file.



- **View:** shows/hides all kinds of POIs or streets, if the functions **show POIs** or **show Streets** was chosen.
- **Show/Track Log:** opens the transmitted track log (TRL).
- **Show/Waypoints_Route:** to open the **WRT** files, which include Waypoints & routes.
- **Hide/ Track Log:** hides loaded track logs.
- **Hide/ Waypoint & Route:** closes all **WRT** files, which contains waypoints & routes.
- **Hide/ searched point:** hides all POI's in an open map file.

ALAN MAP Europe CD v1.1

Notes for the Alan detail maps:

Alan detail maps are delivered separately from the Map 500 as a set of 2 CD ROM. Each of these CD's can separately be installed at the PC, like the Map 500 CD. In case of the proposed folder structure was accepted during the Map 500 installation the detailed maps will automatically be installed into the right folder.

The installed and therefore uncompressed maps can be found in the folder called Europe and used on own behalf. If uninstalled maps are selected in MapShow the following message will appear:

Insert the other disk

The message above implies that selected maps can be installed from CD ROM at any time. Detailed maps (from software version 1.1) can easily be implemented. Precondition: proposed folder structure is used!. The map folder name must be **Europe**.

The Europe map can't be used in case of the proposed folder structure was not accepted and maintained by the user or single detailed maps from third sources need to be implemented. To manually open the necessary files click at **File, Open** and search for the map on the hard disk.

For specialists: CRD maps can be also edited, drawn and modified with the shareware **MapEdit** which can be downloaded and registered on www.geopainting.com. A trial version is delivered together with our Map500 CD. The trial version can convert Waypoint / Route and Tracklog files (old and new types) into other often used formats, while editing CRD maps is only possible after registration.

Thank you for choosing the ALAN Map 500.