

harman/kardon®

ENGLISH



guide + play™

GPS-410/510

Portable Touchscreen Navigation System and A/V Media Player

User Manual

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Battery Notes:

The Harman Kardon® GPS-410/510 uses a lithium-polymer battery. Under normal operating conditions, this battery will provide superior service with a lifespan that is superior to those of other battery types.

To protect the performance of your GPS-410/510 and its battery, please observe the following guidelines:

- Do not operate the GPS-410/510 in ambient temperatures outside of the following range: 14° F (–10° C) to 131° F (55° C).
- Do not store the GPS-410/510 even for short periods in ambient temperatures outside of the following range: –4° F (–20° C) to 140° F (60° C).
- Do not store the GPS-410/510 for long periods in ambient temperatures outside of the following range: 32° F (0° C) to 77° F (25° C).

The GPS-410/510 will not charge the battery at temperatures above 122° F (50° C).

Introduction

Your new GPS-410/510 is a powerful portable touchscreen navigation system and audio/video media player. The GPS-410/510's GPS-powered navigation features will make it easy for you to travel to almost anywhere in Europe with remarkable accuracy. Its A/V media player lets you listen to your favorite music, and you can even watch videos on its high-resolution 480 x 272 pixel screen. (video 510 only)

We know you're eager to start using your GPS-410/510, so we've included a Quick-Start Guide that will help you use its basic features right away. This User Manual contains detailed information about all of the GPS-410/510's features and functions. To get the most out of your GPS-410/510, please read it thoroughly.

Unpacking

Your GPS-410/510 box should contain these items:

- GPS-410/510 Unit
- Wall Charger
- Car Charger
- USB Cable
- Fold-Flat Mounting Bracket
- Mounting Base Disc for Dash-Mounting
- Adhesive Pad for Mounting Base Disc
- Alcohol Cleaning Pad for Dash Surface
- Carrying Case
- Quick-Start Guide
- TMC Wire Antenna

If anything is missing, notify the dealer where you purchased your GPS-410/510 right away.

Unpack your GPS-410/510 carefully and save the box and packing materials so you can safely ship the unit in the future.

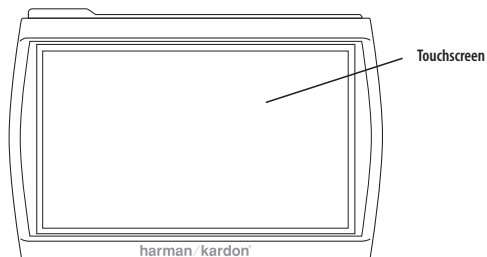


WARNING: Operation of any feature of this device while driving is dangerous. Do not operate this device while driving. Do not view or operate audio or video modes while driving.

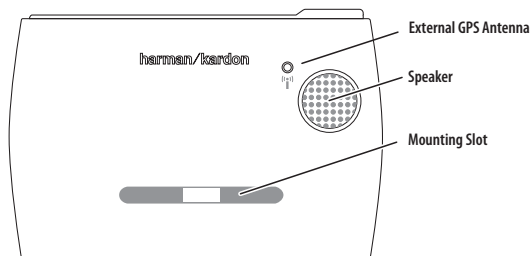
For safety reasons, this device will cease navigation functions when the video mode is enabled. Do not attempt to disable any safety function incorporated in this device. Any alteration of this device may cause serious injury and shall void the warranty.

Controls and Features

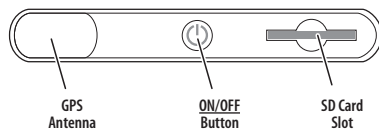
FRONT



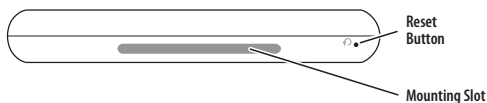
BACK



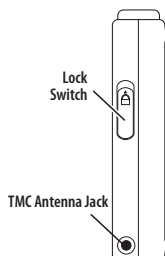
TOP



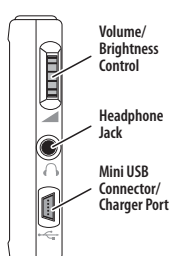
BOTTOM



LEFT SIDE



RIGHT SIDE



Controls and Features

Front:

TOUCHSCREEN: 480 x 272 pixel WQVGA LCD touchscreen.

Back:

SPEAKER: Built-in speaker plays navigation voice guidance commands and audio/video files that are stored on an SD memory card (see below).

MOUNTING SLOT: Lets you lock the GPS-410/510 onto the included fold-flat mounting bracket for use in a vehicle.

EXTERNAL GPS ANTENNA: In case of problems with bad GPS reception (e.g. due to heat-reflecting windscreens) an external GPS antenna with mMCX connector can be plugged in here. Please note that the antenna only works if the GPS unit is connected to either AC or DC power.

Top:

GPS ANTENNA: Must have a clear "view" of the sky to receive signals from GPS satellites.

ON/OFF BUTTON: Hold down to turn the unit on; hold down again to turn the unit off.

SD CARD SLOT: Accepts SD or SDHC memory cards up to 32GB. The SD card is required to store audio and video media to be played on your GPS-410/510.

Bottom:

RESET BUTTON: Lets you reset the unit if it becomes unresponsive or won't power-off. Insert a paper clip or similar item into the small hole to press the switch. (Resetting the unit does not erase information that you have entered, such as your home location, etc.)

MOUNTING SLOT: Lets you lock the GPS-410/510 onto the included fold-flat mounting bracket for use in a vehicle.

Left Side:

LOCK SWITCH: Locks the GPS-410/510's touchscreen and all of its controls. This prevents accidental operation without your having to turn the unit's power off, so you can carry it in your pocket or purse.

TMC ANTENNA JACK: Connect the TMC antenna to receive FM traffic information

Right Side:

VOLUME/BRIGHTNESS CONTROL: Adjusts the volume of the GPS-410/510's built-in speaker. The volume control will also adjust the volume of headphones or an audio system that you have connected to the GPS-410/510's headphone jack (see below).

To adjust the brightness, press the volume control knob in. The Brightness indicator will be superimposed on the screen and you can change the screen's brightness by rotating the volume knob.

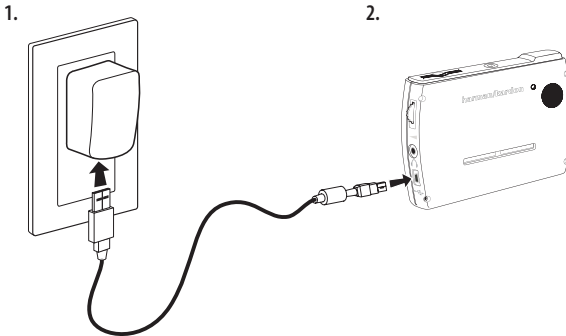
HEADPHONE JACK: Lets you connect headphones for personal listening. You can also connect the headphone jack to an auxiliary input on your vehicle's audio system.

MINI USB CONNECTOR/CHARGER PORT: Connects to your computer and to the included wall charger using the included USB cable. Connects to your vehicle's cigarette lighter or accessory power port using the included car charger.

Before You Begin

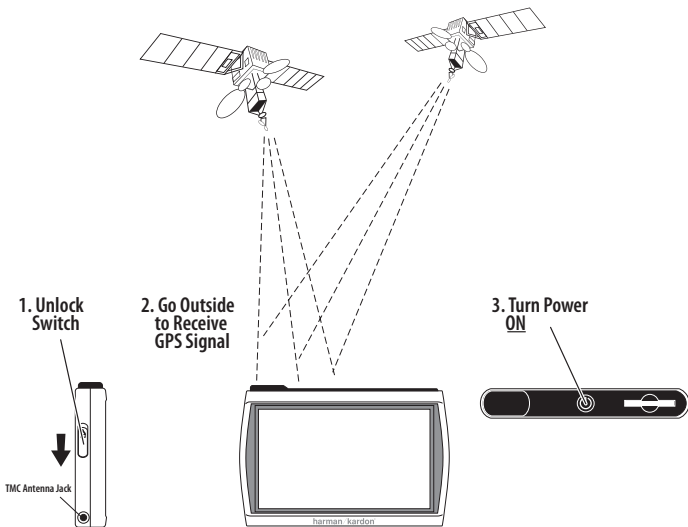
Before you begin using your GPS-410/510, you will need to charge its battery for a minimum of 6 hours.

1. Plug the included wall charger into a wall outlet.
2. Use the included USB cable to connect the GPS-410/510's Mini USB Connector/Charger port to the wall charger.



After the battery has charged for at least 6 hours:

1. Make sure the **LOCK** switch is in the **DOWN** (unlocked) position.
2. Go outdoors to obtain GPS reception.
3. Hold down the **ON/OFF** button until the unit turns on.



Initial Setup

When you turn your GPS-410/510 on for the first time, the Setup Wizard will appear. The Wizard will guide you through the GPS-410/510's initial setup steps:

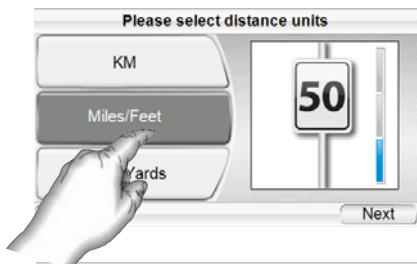
1. Touch the button for the screen language you want to use (Nederlands, English, Français, Deutsch, Italiano, Español).

Touch the NEXT button.



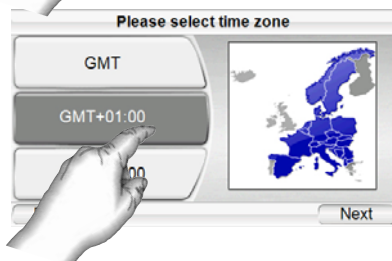
2. Touch the button for the distance units you want to use (km/m, miles/ feet or miles/yards).

Touch the NEXT button.



3. Touch the button for the time zone where you are located.

Touch the NEXT button.



4. Set the current local time. You can also set the clock to display either 12-hour or 24-hour time.



When you touch the NEXT button on the PLEASE SET THE TIME screen, the GPS-410/510 will display the NAVIGATION MAIN MENU screen (see page 8).

NOTE: Once you complete these initial setup steps, the Setup Wizard will not reappear. To change any of these settings, see *CHANGING NAVIGATION SETTINGS*, on page 16.



The geographic information provided by this device serves as a navigational aid only and does not include information pertaining to construction, road closures, speed restrictions, road or traffic conditions, or other circumstances relevant to public safety. The driver must always be aware of the actual road conditions and surroundings, and decide whether or not to follow the information provided by this device. Obey all traffic laws and observe safe driving practices. The manufacturer does not accept responsibility for any inaccurate or incomplete information provided by this device.

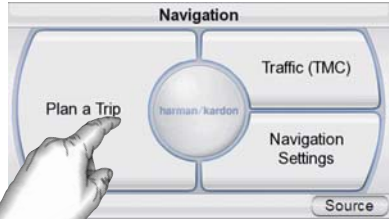
Navigation

After you complete the initial setup steps, the NAVIGATION screen (right) appears.

Planning a Trip

To begin navigation, touch the PLAN A TRIP button. The WHERE WOULD YOU LIKE TO GO? screen (right) appears.

The WHERE WOULD YOU LIKE TO GO? screen gives you several ways to plan your trip. You can enter a specific street address, choose a place from the GPS-410/510's extensive point-of-interest database, enter a city center, intersection or postal code, or navigate to locations you have recently visited or saved. The GPS-410/510 also lets you store your home address so you can quickly enter it as your destination from wherever you happen to be.



ENTERING A STREET ADDRESS

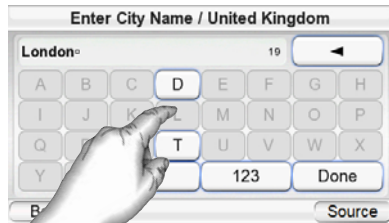
1. Touch the ADDRESS button on the WHERE WOULD YOU LIKE TO GO? screen. The SEARCH screen appears (right).

2. Touch the appropriate button for the city you want to travel to.

- If you select one of the city buttons, the ENTER CITY NAME screen (below) appears.

- Changing the country by pressing SELECT COUNTRY. The ENTER CITY NAME screen (right) appears.

3. Spell the name of the desired city. When you have finished, touch the DONE button. The ENTER STREET NAME screen (right) appears.



- In most cases, once you've entered some letters, the screen will display all of the cities that fit. Press DONE and select the desired city from the list.

4. Spell the name of the street. When you are finished, touch the DONE button. The ENTER HOUSE NUMBER screen appears.



- In many cases, once you've entered some letters, the screen will display all of the streets that fit. Select the desired street from the list.

5. Enter the desired address number. When you touch the DONE button, the CONFIRM ADDRESS screen (*right*) appears.

6. Touch Go to begin navigation. The map screen will appear. Once you start driving, the GPS-410/510 will guide you to your destination. (See *Navigating To Your Destination*, on page 13.)



PLEASE NOTE WHEN ENTERING STREET AND CITY NAMES:

Special characters may not appear on the screen. This is no problem, as your GPS 200/300 translates the necessary characters. As an example: Enter "ü" as a "u", enter "ö" or "ø" as "o". Along these lines, enter special characters in the form of the ordinary character looking most like the one you need. The internal map will find and show the correct names.

CHOOSING A PLACE (POI) (FROM THE GPS-410/510'S DATABASE)

The GPS-410/510 has a built-in point-of-interest database with millions of entries in many different categories.

TO NAVIGATE TO A PLACE (POI)

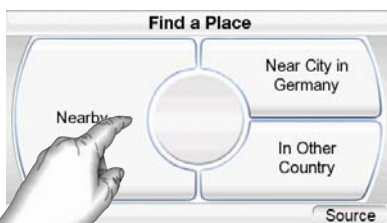
1. Touch the PLACE (POI) button on the WHERE WOULD YOU LIKE TO GO? screen (see page 8). The FIND A PLACE screen (right) appears.
2. Select the desired area. The SELECT A CATEGORY screen (right) appears. (If you know the name of the place, you can enter it instead of searching by category.)
3. Use the up/down arrow buttons to find the desired category, then touch it. The SELECT PLACE (POI) screen (right) appears.
4. Use the up/down arrow buttons to scroll through the list of places, then touch the button for the place you want to go. The CONFIRM ADDRESS screen (right) appears.
5. Touch Go to begin navigation. The map screen will appear. Once you start driving, the GPS-410/510 will guide you to your destination. (See *Navigating to Your Destination*, on page 13.)

SELECTING A CITY CENTER, INTERSECTION OR POSTAL CODE

The GPS-410/510 can guide you to a city center, to the intersection of two streets or to a specific postal code.

NAVIGATING TO A CITY CENTER:

1. Touch the CITY CENTER button on the WHERE WOULD YOU LIKE TO GO? screen (see page 8). The CITY CENTER SEARCH screen (right) appears.
2. Touch the appropriate button and enter the city's name. When you're finished, the CONFIRM ADDRESS screen appears (see next page).

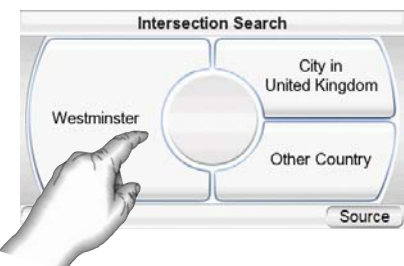


3. Touch the Go button to begin navigation. The map screen will appear. Once you start driving, the GPS-410/510 will guide you to the center of the city you selected. (See *Navigating to Your Destination*, on page 13.)



NAVIGATING TO AN INTERSECTION:

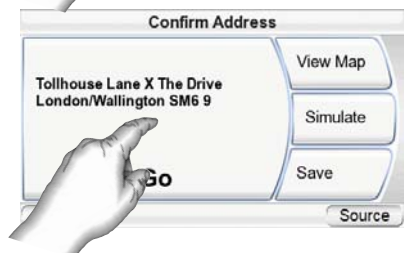
1. Touch the Junction button on the WHERE WOULD YOU LIKE TO GO? screen (see page 8). The IN WHICH CITY IS THE JUNCTION? screen (right) appears.



2. Select the city. The ENTER STREET NAME screen appears.

3. Enter the name of the first street. When you are finished the ENTER SECOND STREET NAME screen appears.

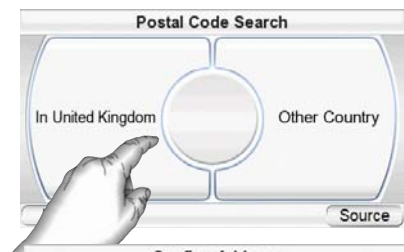
4. Enter the name of the second street. The CONFIRM ADDRESS screen (right) appears.



5. Touch the Go button to begin navigation. The map screen will appear. Once you start driving, the GPS-410/510 will guide you to the intersection you selected. (See *Navigating to Your Destination*, on page 13.)

NAVIGATING TO A POST CODE CODE:

1. Touch the Post Code CODE button on the WHERE WOULD YOU LIKE TO GO? screen. The FIND A POSTAL CODE screen (right) appears.



2. Select the country and enter the postal code. (You can change between letters and numbers by pressing "Numbers" and "Letters"). The ENTER STREET NAME screen appears.

3. Spell the name of the street. When you are finished, touch the DONE button. The ENTER HOUSE NUMBER screen appears.

4. Enter the desired address number. When you touch the DONE button, the CONFIRM ADDRESS screen (right) appears.



5. Touch Go to begin navigation. The map screen will appear. Once you start driving, the GPS-410/510 will guide you to the address you've entered. (See *Navigating to Your Destination*, on page 13.)

NAVIGATING TO YOUR HOME

The GPS-410/510 stores your home address so you can easily select it as a destination, no matter where you are in Europe.

1. Touch the HOME button on the WHERE WOULD YOU LIKE TO GO? screen (see page 8). The CONFIRM HOME ADDRESS screen (right) will appear.



2. Touch Go to begin navigation. The map screen will appear. Once you start driving the GPS-410/510 will guide you to your destination. (See *Navigating to Your Destination*, on page 13.)

NOTE: If you have not yet set your home address, the GPS-410/510 will have you do so.

NAVIGATING TO RECENTLY VISITED OR SAVED LOCATIONS

The GPS-410/510 stores a list of your recently visited locations in a HISTORY page and also lets you save locations to a special list. You can easily select your destination from either of these lists.

1. Touch the RECENT PLACES or HISTORY button on the WHERE WOULD YOU LIKE TO GO? screen (see page 8). The HISTORY page (right) or the SELECT PLACE list (right) will appear.



2. Use the up/down arrow buttons to scroll through the list of places, then touch the button for the place you want to go. The CONFIRM ADDRESS screen (right) will appear.



3. Touch Go to begin navigation. The map screen will appear. Once you start driving, the GPS-410/510 will guide you to your destination. (See *Navigating to Your Destination*, on page 13.)



CONFIRM ADDRESS SCREEN OPTIONS

Besides touching the Go button to begin navigation, the CONFIRM ADDRESS screen (see page 12) also gives you these options:

VIEW MAP: Touch to see a map showing your destination. You can change the map view and zoom the view in and out (see *Map Screen Options*, on page 14).

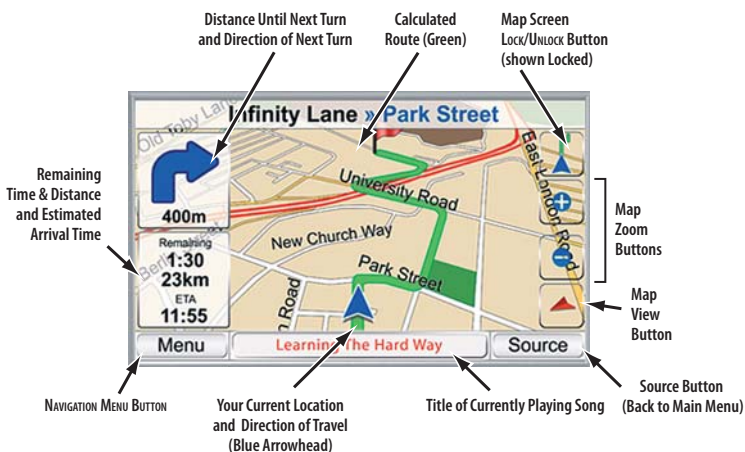
NOTE: Touching the VIEW MAP button does not begin navigation.

SIMULATE: Touch to have the GPS-410/510 simulate the trip. The simulation includes all map movements and voice-guidance turn prompts, and takes place at high speed. To abort the simulation, touch anywhere on the screen.

SAVE: Touch to save the address in the GPS-410/510's address book. If you want to, you can add a name to the address.

Navigating to Your Destination

Once you have entered your destination, touching the Go button on any of the GPS-410/510's CONFIRM ADDRESS screens will begin navigation. The Map screen (below) will appear. The blue arrowhead indicates your present location and your direction of travel. The route that the GPS-410/510 has calculated is indicated by the green line.



The map shows the distance to and direction of your next turn, and also shows the remaining time and distance of your trip and your estimated arrival time.

NOTE: If you are playing music on the GPS-410/510's Music Player (see page 22), the MAP screen will also display the title of the currently playing song.

As you drive, the GPS-410/510 keeps track of your position via GPS, will issue voice-guidance commands through the built-in speaker, telling you when and where to turn, and the map will continually update your position along your route. If you make a wrong turn, the GPS-410/510 will automatically calculate a new route and will continue to guide you to your destination.

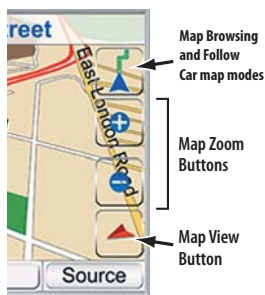
MAP SCREEN OPTIONS

MAP BROWSING/FOLLOW CAR BUTTON:

Touching this button switches between

1) Map Browsing, where you can move the map position by moving your finger on the touchscreen in the direction you want the map to move. You may also zoom in and out of the map

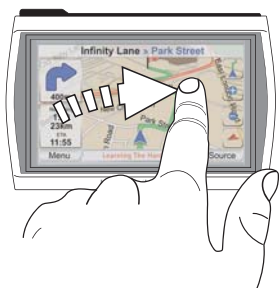
2) Follow Car, which shows you the navigation map for your route. (See illustration, below, left.)



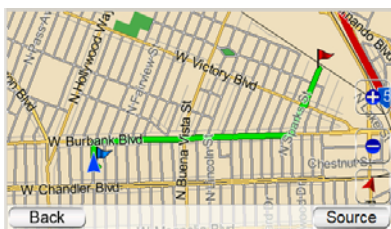
Map Screen Option Buttons

MAP VIEW BUTTON: Touching this button cycles the map view between 2D, 2D north-oriented and 3D. (See illustrations, below, right.)

MAP ZOOM BUTTONS: Repeatedly touching the "+" and "-" MAP ZOOM buttons zooms your view from a distance of just a few yards off the ground all the way to a view from thousands of miles in space. (See illustrations, below, left.)



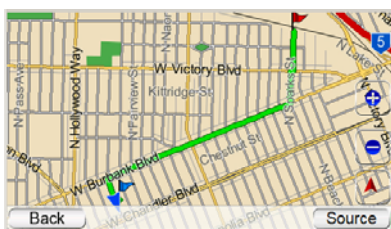
Moving the Map Position



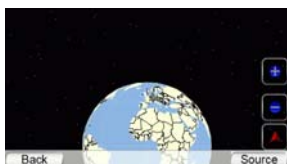
2D Map View



Zoom In (Closest View)



2D (North-Oriented) Map View



Zoom Out (Farthest View)



3D Map View

AUTO-ZOOM

The GPS-410/510 offers different auto-zoom modes for improved route visibility.

Junction zoom: When approaching a turn the map will automatically zoom in and switch to 2D mode in order to give a better view on the upcoming maneuver. Thereafter it will return to the default zoom settings.

Overview mode: When the distance to the next maneuver is longer than 5km the map will automatically zoom out. Please click on the map view button to disable overview mode temporarily.

Navigation Options

Touching the MENU button on the MAP screen (see page 13) displays the NAVIGATION screen (below, right).

MAP BUTTON: Takes you back to the MAP screen.

PLAN A TRIP BUTTON: Lets you select a navigation destination. (See *Planning a Trip*, on page 8.)

STOP NAVIGATION BUTTON: Stops the current GPS-410/510 navigation session.

NAVIGATION SETTINGS BUTTON: Lets you change the GPS-410/510's navigation settings. (See *Changing Navigation Settings*, on page 17.)

ROUTE OPTIONS BUTTON: Displays the ROUTE OPTIONS screen (right).

ROUTE OPTIONS SCREEN

VIEW ROUTE BUTTON: Shows a map view of the entire navigation route. (See *2D Map View* illustration on page 14.)

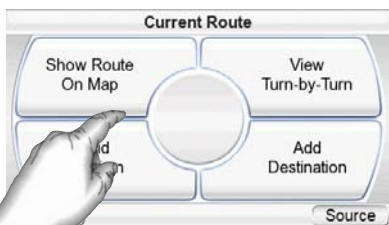
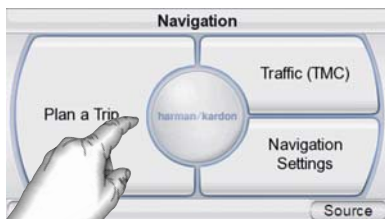
VIEW TURN-BY-TURN BUTTON: Displays a detailed list of each turn for the entire trip (right). The list shows the direction of each turn and how far to drive on each leg of the journey. Touching the button for one leg of the journey will display a map showing that particular leg of the trip.

Touching the button for a particular turn or leg on the detailed list screen will open a new screen showing the route detail on the map. You can avoid a maneuver by touching "Change route by avoiding...". This will display a new screen where you decide if you want to avoid just this single turn, the entire road or a specific road segment. This screen lets the GPS-410/510 recalculate a new route that avoids a particular segment of the selected road.

NOTE: Voice guidance continues when the GPS-410/510's screen is in the Turn-By-Turn view.

DETOUR NEXT TURN BUTTON: Recalculates your route, avoiding the next turn. Use this to avoid construction sites, traffic jams, etc.

ADD DESTINATION BUTTON: Lets you add another destination at the end of your trip. See *Planning a Trip*, on page 8.

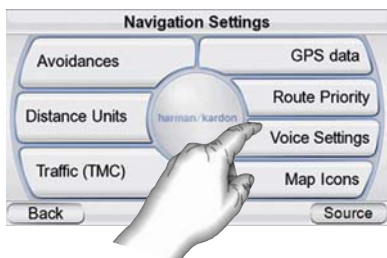


Changing Navigation Settings

Touching the **NAVIGATION SETTINGS** button displays the **NAVIGATION SETTINGS** screen (right).

VOICE SETTINGS: Opens the "Voices" screen where you can choose your preferred voice (only available in selected languages).

MAP ICONS: Opens a screen where you can enable or disable visibility of POI icons on the map by category.



AVOIDANCES: When the GPS-410/510 calculates navigation routes, you can set it to always avoid the following:

- U-turns
- Unpaved roads
- Toll roads
- Roads requiring permits
- Highways
- Border crossings
- Ferries
- Traffic (TMC)

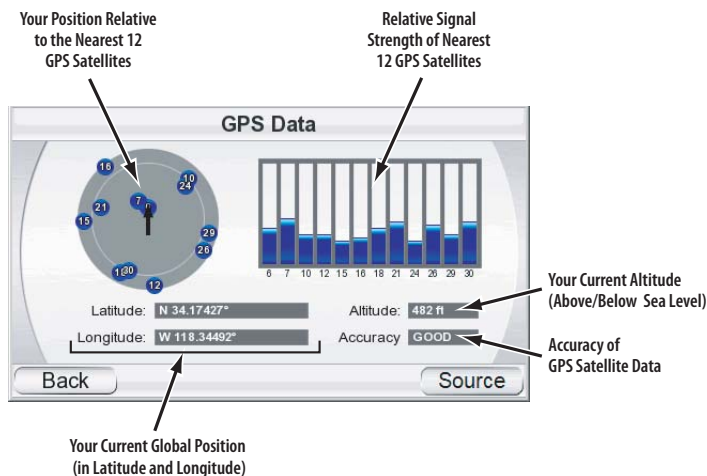


NOTE: The GPS-410/510 comes from the factory with the **UNPAVED ROADS** avoidance set to ON.

DISTANCE UNITS: You can set the GPS-410/510's distance units to kilometers/meters, miles/feet or miles/yards. This affects the units shown on the screen, and the units given during voice navigation prompts.

ROUTE PRIORITY: When the GPS-410/510 calculates navigation routes, you can set it to give priority to either the **SHORTEST DISTANCE** or the **SHORTEST TIME**.

GPS DATA: This screen displays the following information:



NOTE: Your GPS-410/510 will lose contact with the GPS satellites whenever you turn its power off. After turning the power back on, you will need to go outside to receive the GPS signal again before the navigation functions will operate.

Traffic Message Channel "TMC"

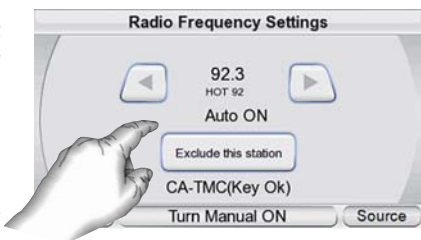
The GPS-410/510 is equipped with a built-in FM receiver to process TMC (Traffic Message Channel) messages. The TMC is a free system to send out free traffic information via RDS (Radio Data System). TMC might or might not be available in your country. Please note that the GPS-410/510 does not support subscription-based TMC services which are available in some countries as an alternative to freely distributed TMC services. In case there is traffic jams along your route the GPS-410/510 will show the traffic information on the map and automatically recalculate the route. If the anticipated delay is too long, the system will put you on an alternative route. You enter the TMC menu by pressing the "Traffic (TMC)" button on the "Navigation" screen. You will get a detailed overview of the traffic situation around your current GPS position.

The "Traffic Events" Menu

You can access the "Traffic Events" screen by touching "Traffic event list" on the traffic map screen. The event screen displays all incoming traffic messages sorted by road number. You can either view all current traffic or the events of a particular road. The traffic information contains the type of traffic, the road number and the length of event. You can have a look at each individual traffic event on the map by touching it. Simply hit "Back" on the map view to go back to this screen.

The "TMC Settings" Menu

Normally the GPS-410/510 will automatically tune to the best FM station. If you experience problems with proper TMC reception you can make manual adjustments by touching "Radio Frequency Settings". On the following screen you can make all kinds of adjustments. If the display shows "no TMC" and there is no FM frequency



scanning please first check if the FM antenna is plugged in correctly (see chapter "Installation and Use in a Vehicle"). If this is the case then simply hit "Turn Manual ON" and then again "Turn Automatic ON". This initiates automatic scanning of the FM band. You should see the FM frequency changing while the TMC receiver scans the FM band for a valid TMC station. If FM reception quality is sufficient and there is available free TMC in your country it should lock onto a valid station shortly.

If you would like to manually tune to a preferred FM station, please select "Turn Manual ON" in the Radio Frequency Settings screen under the Traffic (TMC) function and use the "<" and ">" Buttons. This allows you to select an FM station which broadcasts TMC messages, but may be too weak to be found automatically. "Exclude this station" will deny the FM station which is currently in use. This feature allows you to avoid FM stations submitting poor TMC data.

Thereafter the device will search for an alternative FM station. Press on the main TMC Settings screen to enable denied stations. The system will again include them in its searching process.

The Source Screen

Touching the **SOURCE** button on any of the GPS-410/510's screens displays the **SOURCE** screen (right).

The **SOURCE** screen lets you select the GPS-410/510's navigation, music player or video player functions. (Video function only GPS-510). The **SOURCE** screen lets you change the GPS-410/510's settings, as well. (See *Changing Settings*, on page 23.)



The **SOURCE** screen also displays the strength of the GPS signal the GPS-410/510 is receiving, the local time and the GPS-410/510 battery's charge level.

Playing Music and Video Files (Video only GPS-510)

In addition to its navigation functions, your GPS-410/510 can play your music and video files. These files must be loaded onto an SD media card (not included). SD memory cards are available that can hold up to 4GB of audio/video media. The GPS-410/510 supports regular SD and SDHC cards up to 32GB (formatted with FAT32).

Compatible A/V File Types

In order to play on your GPS-410/510, audio and video files must be in one of the following formats:

AUDIO (SUPPORTS ID3 TAGS V1 AND V2.1 – 2.3)

MP3: 16-bit (VBR/CBR), 44kHz, 64kbps up to 320kbps, 2-channel

WMA: 16-bit, 44kHz, stereo, 32kbps up to 160kbps (VBR) and 32kbps up to 256kbps (CBR, 2-channel) (GPS-510 only)

VIDEO

MPEG-4: ASP up to 624x352 @ 24fps (does not support GMC or Opel) with MP3 audio VBR/CBR to 192kbps, 16-bit, 48kHz, 2-channel

WMV9: Up to 320x240 @ 24fps SP @ ML

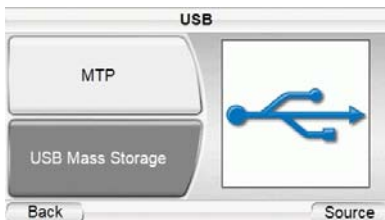
Loading Media on Your SD Card

There are two ways to transfer media from your computer to an SD card inserted into your GPS-410/510: via USB Mass Storage or via MTP (Media Transfer Protocol). Touch the **SETTINGS** button on the **SOURCE** screen, then touch the **USB** button. The **USB** screen (right) will appear, with buttons for **MTP** and **USB MASS STORAGE** modes.

MTP (MEDIA TRANSFER PROTOCOL)

MTP mode transfers files using the **SYNC** mode of Windows

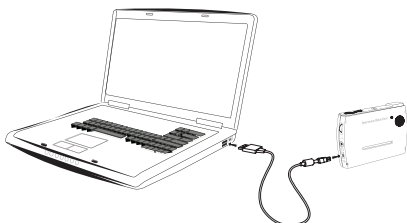
Media® Player (ver. 10 or higher). If necessary, Windows Media Player will automatically transcode video files to a format supported by GPS-410/510. To allow for proper transcoding please ensure that your Windows PC is able to playback the media file.



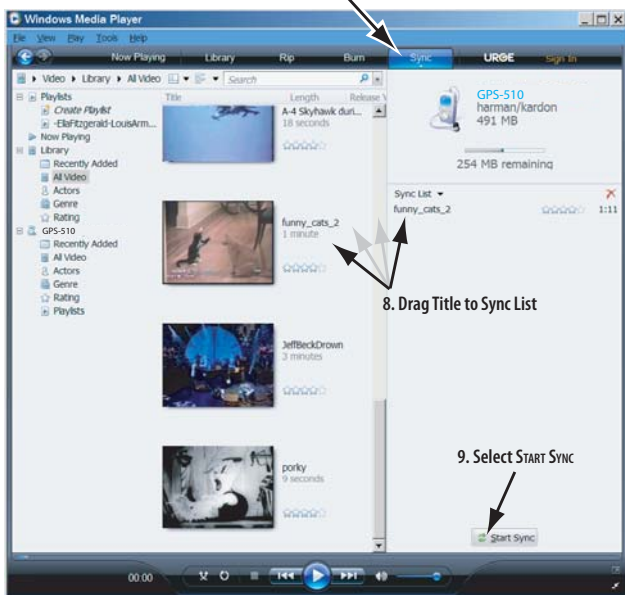
To use the MTP mode, you must have a PC that is running the Windows® XP operating system (Service Pack 2 or higher) and has Windows Media Player 10 or higher installed.

TO TRANSFER FILES TO THE GPS-410/510 IN MTP MODE:

1. Insert a regular SD card into the GPS-410/510's SD card slot (see page 4).
2. Make sure the USB cable is *disconnected* from the GPS-410/510.
3. Set the GPS-410/510's USB mode to MTP (see page 19).
4. Connect the GPS-410/510 to your computer's USB hub (*right*).
5. Launch Windows Media Player.
6. Locate the files you want to transfer.
7. Select Windows Media Player's SYNC mode (see below).
8. Drag the files you want to transfer into the Windows Media Player SYNC LIST (see below).
9. Select START SYNC and wait for the process to finish (see below).



7. Select Sync Mode



8. Drag Title to Sync List

9. Select START SYNC

NOTE: Your Windows Media Player screen may look different from the example.

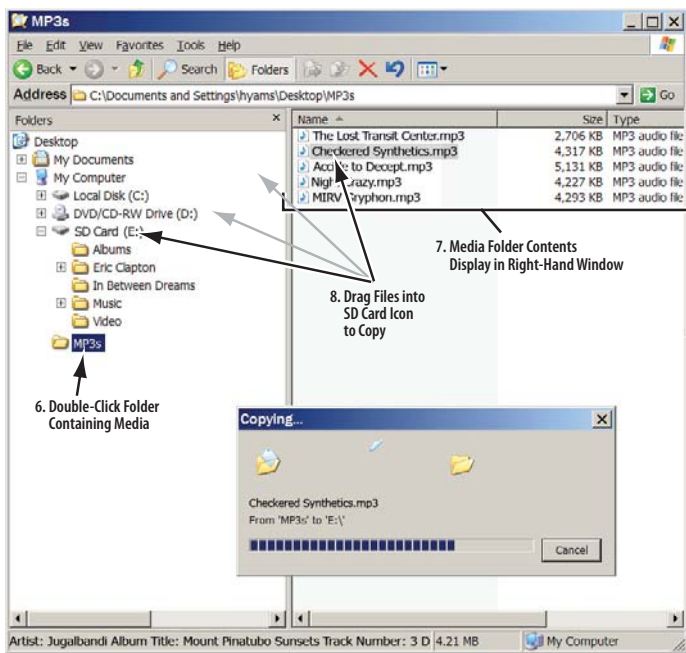
Once the Sync is finished, you can unplug the GPS-410/510 from your computer and watch or listen to the files on it. (See *Listening to Music*, on page 22, and *Watching Videos*, on page 23).

USB MASS STORAGE

The USB Mass Storage mode lets you transfer files the using drag-and-drop method on your computer – the same method you use to transfer files from one folder or drive to another. However, when transferring files in the USB Mass Storage mode, video files that are in formats not supported by GPS-410/510 will be transferred without transcoding. These files won't be playable on your GPS-410/510 but will take up space on your SD card.

TO TRANSFER FILES TO THE GPS-410/510 IN THE USB MASS STORAGE MODE:

1. Insert an SD card into the GPS-410/510's SD card slot (see page 4).
2. Make sure the USB cable is *disconnected* from the GPS-410/510.
3. Set the GPS-410/510's USB mode to USB MASS STORAGE (see page 19).
4. Connect the GPS-410/510 to your computer's USB hub (see page 20).
5. Launch Windows Explorer (*not* Internet Explorer) on your computer.
 - Find it at *Start > Programs > Accessories > Windows Explorer*
6. Find the folder with your media in Windows Explorer's left-hand window.
7. Double-click the folder. Its contents will appear in the right-hand window.
8. Drag the files you want to transfer from the right-hand window into the SD card icon in the left-hand window. (The SD card will appear in the left-hand window as one of your computer drives.)



NOTE: Your Windows Explorer screen may look different from the example.

When you're finished, you can unplug the GPS-410/510 from your computer and watch or listen to the files on it. (See *Listening to Music*, on page 22 and *Watching Videos*, on page 23).

Listening to Music

Touch the MUSIC button on the SOURCE screen. The Music menu (*below*) will appear.



You can sort and display your music by touching the ARTIST, ALBUM, GENRE, PLAYLIST or SONG File Display Option buttons.

SELECTING MUSIC

BY ARTIST: Touching the ARTIST button displays an alphabetical list of all of the artists with songs stored on the SD card. Touch the button for the artist you want, then touch the button for the song you want to hear. The GPS-410/510 will play the song, then play through the rest of the songs by that artist.

BY ALBUM: Touching the ALBUM button displays an alphabetical list of all of the albums with songs stored on the SD card. Touch the button for the album you want, then touch the button for the song you want to hear. The GPS-410/510 will play the song, then play through the rest of the songs on the album.

BY GENRE: Touching the GENRE button displays an alphabetical list of all the music genres stored on the SD card. Touch the button for the genre you want, then touch the button for the song you want to hear. The GPS-410/510 will play the song, then play through the rest of the songs in that genre.

NOTE: Genre classifications are predetermined and cannot be changed by the GPS-410/510.

BY PLAYLIST: Touching the PLAYLIST button displays an alphabetical list of all the playlists stored on the SD card. Touch the button for the playlist you want, then touch the button for the song you want to hear. The GPS-410/510 will play the song, then play through the rest of the songs in that playlist.

NOTE: Playlist contents are predetermined and cannot be changed by the GPS-410/510.

BY SONG: Touching the SONG button displays all of the songs stored on the SD card, in alphabetical order. Touch the button for the song you want to hear and the GPS-410/510 will play it. When that song is finished, the GPS-410/510 will play the next song on the alphabetical song list.

REPEAT PLAY

Touching the REPEAT PLAY button cycles the music player between the following repeat modes: OFF, TRACK (repeats the song), ALL (repeats all songs in the current category).

SHUFFLE PLAY

Touching the **SHUFFLE PLAY** button plays all the songs currently displayed in random order.

THE NOW PLAYING SCREEN

The GPS-410/510 will display the **NOW PLAYING** screen (*right*) while songs are playing. This screen shows the elapsed time of the song, and provides buttons for skipping to the next or previous song, and for pausing the song.



NOTE: During navigation, guidance prompts appear at the bottom of the **NOW PLAYING** screen (above) and the **MUSIC** menu screen (see page 22).

Watching Videos (GPS-510 only)



For safety reasons, this device will cease navigation functions when the video mode is enabled. Do not attempt to disable any safety function incorporated in this device. Any alteration of this device may cause serious injury and shall void the warranty.

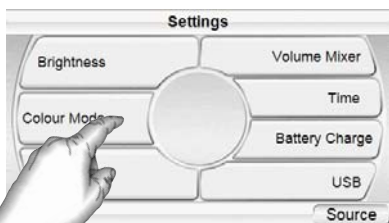
Touch the **VIDEO** button on the **SOURCE** screen. The **MY VIDEOS** screen (*below*) will appear. All of the videos stored on your SD card will be displayed, in the order in which they were put on the SD card, with the first one at the top.



To view a video, use the **SCROLL UP/DOWN** buttons to find it, then touch its button. When the video is finished playing, the **MY VIDEOS** screen will reappear. During playback you can browse within the video by hitting the screen. The video will pause and a window with a scroll bar will appear. Simply drag the scroll button to your preferred position and continue playback.

Changing Settings

Touching the **SETTINGS** button on the **SOURCE** screen displays the **SETTINGS** screen (right). This lets you change any of these GPS-410/510 settings:



Brightness

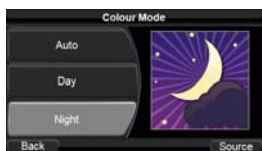
The **BRIGHTNESS** button lets you adjust the GPS-410/510's screen brightness so you can clearly see it in various lighting conditions.

NOTE: You can adjust the screen brightness at any time by pressing the Volume Control knob in. The **BRIGHTNESS** indicator will be superimposed on the screen and you can change the screen's brightness by rotating the volume knob.



Color Mode

The GPS-410/510 has two color modes: **DAY** (optimized for viewing in brighter light) and **NIGHT** (optimized for viewing in lower light). There is also an **AUTO** button, which automatically changes the color mode according to the time of day.

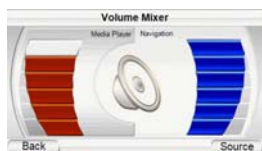


Language

The **LANGUAGE** button lets you set the GPS-410/510's screen and voice-guidance languages to one out of 17 available languages.

Volume Mixer

The **Volume Mixer** lets you adjust the relative volume levels of the music and the navigation voice guidance. Touch the shaded volume bars on the screen to adjust the volume levels up and down.



Time

The **TIME** button lets you adjust the GPS-410/510's time settings:

TIME ZONE: The **TIME ZONE** button lets you reset the GPS-410/510's time zone to match the local time. This is especially useful if you are traveling through different time zones.

FORMAT: Switches between 12-hour and 24-hour time formats.

DAYLIGHT SAVINGS: Selecting **ON** adds an hour to the current time.



Battery Charge

The BATTERY CHARGE screen shows the GPS-410/510 battery's charge level. It also lists your unit's current software version and serial number.

Note: The orange battery/lightning bolt symbol indicates that the GPS-410/510 is being powered through its charger port.

USB

Lets you switch the GPS-410/510 between the MTP and USB Mass Storage modes. See *Loading Media on Your SD Card*, on page 19, for details.

Installation and Use in a Vehicle



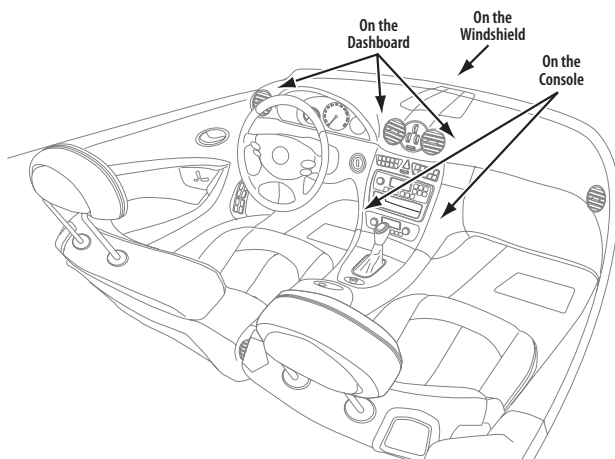
Do not install this device in any manner that impairs the safe operation of the vehicle. Do not install this device on any airbag panels or in the deployment field of any airbags. Do not place the device on the vehicle's dashboard unsecured. Failure to observe the installation or usage instructions may result in traffic accidents or personal injury.



The installation of this device on the windshield, between the driver and the windshield, or otherwise in any manner that obstructs the driver's clear view of the road or traffic conditions is dangerous and may be prohibited by law.

Select a Mounting Location

Find a suitable mounting location for the Fold-Flat Mounting Bracket:

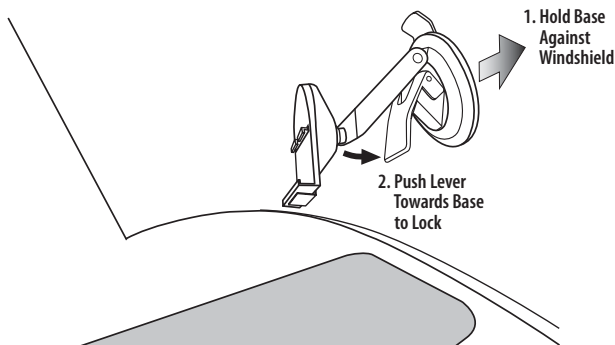


NOTE: Do not mount the bracket in such a way that the GPS-410/510 will interfere with your driving or your view of the road.

Install the Mounting Bracket

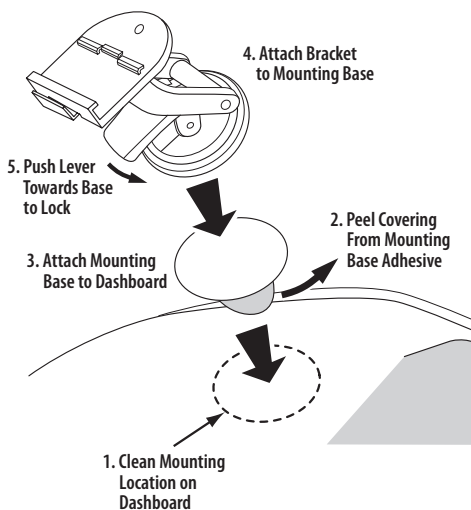
FOR WINDSHIELD-MOUNTING:

1. Hold the mounting bracket's base against the windshield.
2. Push the mounting bracket lever towards the base to lock the bracket to the windshield.



FOR DASHBOARD-MOUNTING:

1. Clean the dashboard mounting location with the supplied alcohol pad.
2. Peel the mounting base adhesive covering.
3. Attach the mounting base to the mounting location.
4. Hold the mounting bracket's base against the mounting base.
5. Push the mounting bracket lever towards the base to lock the bracket to the dashboard.



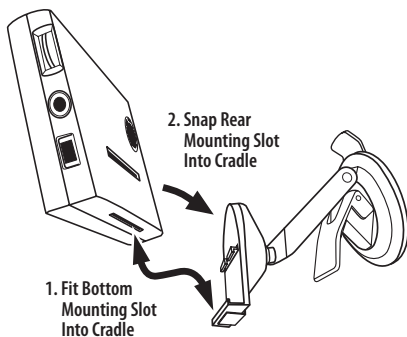
ATTACHING THE GPS-410/510 TO THE BRACKET

1. Fit the bottom mounting slot into the bracket cradle.
2. Snap the rear mounting slot into the bracket cradle.

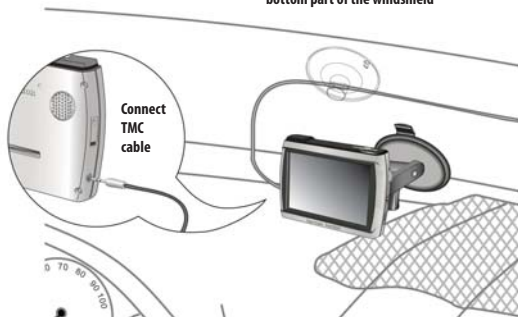
To unlock and remove the unit, press the lever on the bottom of the cradle up.

LISTENING TO AUDIO IN YOUR VEHICLE

1. Plug the supplied car charger into your vehicle's 12V power outlet and into the GPS-410/510's mini USB connector. This will charge your GPS-410/510's battery while you drive.
2. Use the GPS-410/510's built-in speaker or connect its headphone jack to your vehicle's audio system (connecting cable not supplied).



Route TMC cable alongside bottom part of the windshield



Installation of TMC antenna cable to receive traffic information



The installation and use suggestions provided by the manufacturer may be subject to restrictions or limitations by federal, state or local laws. The user should determine whether the installation and use of this device is governed by any law, prior to installation or use.

Troubleshooting

Problem	Solution
GPS-410/510 does not turn on at all	Check the LOCK switch (see <i>Controls and Features</i> , on pages 4 – 5); charge the battery for 6 hours (see <i>Before You Begin</i> , on page 6)
GPS-410/510 does not have a good GPS signal	Make sure GPS-410/510 has a clear, unobstructed “view” of sky (see <i>Before You Begin</i> , on page 6)
GPS-410/510 will not play music or videos	Insert an SD card that has media loaded on it (see <i>Loading Media on Your SD Card</i> , on pages 19 – 21)
Unable to load media onto SD card	Make sure GPS-410/510 is set in the desired USB mode (see <i>Loading Media on Your SD Card</i> , on pages 19 – 21)
Screen is too bright or too dim	Adjust the screen brightness using the volume control (see <i>Volume/Brightness Control</i> , on page 5), or adjust the screen brightness in the SETTINGS menu (see <i>Changing Settings</i> , on page 24)
Volume is too low for navigation voice-guidance prompts	Adjust the volume control (see <i>Volume/Brightness Control</i> , on page 5); adjust the VOLUME MIXER (see <i>Changing Settings</i> , on page 24)
Suction cup mount is loose	Reposition the mounting bracket, using moderate force
GPS-410/510 is loose on the bracket mount	Make sure the GPS-410/510 is securely attached to the mounting bracket (see <i>Attaching the GPS-410/510 to the Bracket</i> , on page 27)
GPS-410/510 is unresponsive to the touchscreen or won't power off	Reset the GPS-410/510 using a paper clip or similar item (see <i>Reset Button</i> , on page 5)

Troubleshooting (continued)

Problem	Solution
Screen color unexpectedly changes mode (DAY > NIGHT or NIGHT > DAY)	Color Mode is set to AUTO. Change the Color Mode to desired mode in the SETTINGS menu (see <i>Color Mode</i> , on page 29)
No sound from built-in speaker	Unplug headphones (speaker mutes when headphones are connected); turn volume control up (see <i>Volume/Brightness control</i> , on page 5)
Unit does not power on, even if it was switched off with a full battery a while back	Charge the battery. The unit has a constant, small power consumption, which empties the battery even when not in use.

Specifications

GPS:	High-sensitivity Atlas™ II receiver
CPU:	400MHz ARM9 core
RAM Memory::	GPS-510: 128MB, GPS-410. 64MB
Maps:	Full Europe (38 countries), preloaded in internal memory (no need for external SD card)
Screen:	4.0"(diagonal) WQVGA screen, 65k colors, 480 x 272 pixels
Media Player (Audio):	Plays MP3, WMA and AAC (AAC: GPS-510 only) audio formats
Media Player (Video):	Plays MPEG-4 and WMV9 video formats (GPS-510 only)
Battery:	Rechargeable internal lithium-polymer battery (allows up to 4 hours of use without recharging)
Dimensions (HxWxD):	(75mm x 118mm x 20mm)
Flash Memory :	2 GB

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Due to continuous product improvement, all features and specifications are subject to change without notice.

Declaration of Conformity



We, Harman Consumer Group, Inc.
8500 Balboa Boulevard, Northridge, CA 91329, USA

declare in own responsibility that the product described in
this manual is in compliance with technical standards:

EN 55022 : 2006 , Class B

EN 55024:1998+A1:2001+A2:2003

EN 61000-4-2 : 1995+A1 : 1998+A2 :2000

EN 61000-4-3 : 2002+A1 : 2002

EN 61000-4-4 : 2004

EN 61000-4-6 : 1996+A1 : 2000

EN 61000-4-8 : 1993+A1 : 2000

A handwritten signature in black ink, appearing to read 'Klaus Lebherz', is written over the text of the EN 61000-4-6 and EN 61000-4-8 standards.

Klaus Lebherz
Harman Consumer Group, Inc.
Heilbronn, Germany 05/08

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guide + play™

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