

INSTALL GUIDE

ice▶Link Gateway 500 MOST



State of the art car integration for media players, USB and Bluetooth devices

GW5-9210-8



Introduction

Gateway 500 emulates a CD changer and uses CD changer controls to access offboard audio sources including iPod, USB devices and Dension Gateway accessories. If your car is not already equipped with a CD changer, it may be necessary to have the car programmed by your dealer in order to use the GW500 with it.

Programming the car for GW500

Audi

No programming required

BMW non iDrive-4

If original CD changer fitted and MP3 capability is available: no programming is required.

If original CD changer fitted and no MP3 capability is available:

- a) Retrofit "KMP3" option with service computer
- b) Used in non text capable BMW mode

If original CD changer not fitted or E60 M-ASK used: install GW500 and retrofit "IPOD" option with service computer

BMW with iDrive-4

If original CD changer fitted: no programming is required

If original CD changer not fitted: install an original BMW CD changer and retrofit "CD Changer" temporarily option with service computer

Mercedes

Generally no programming is required but in some cases (e.g. no device was connected onto the optical ring) it is needed to enable a CD changer with the service computer.

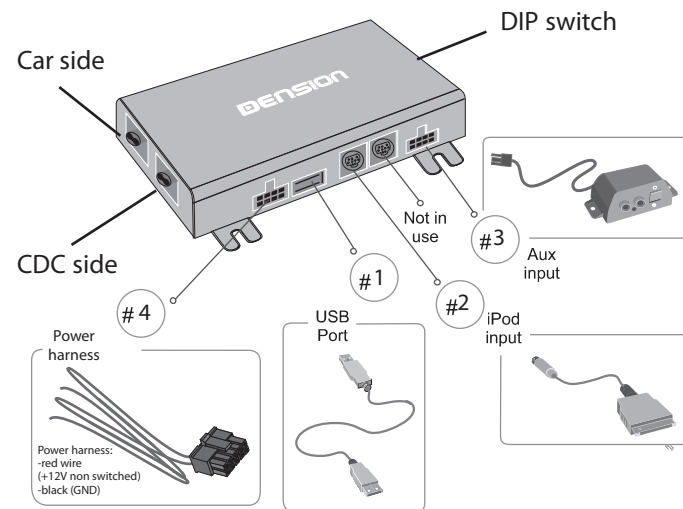
Porsche

Generally it is needed to enable a CD changer with the service computer but in rare cases the PCM accept the GW500 without this enabling process.

Saab 9-3

It is needed to enable a CD changer with the service computer using an original CD changer.

Package Content & Electrical Installation



1

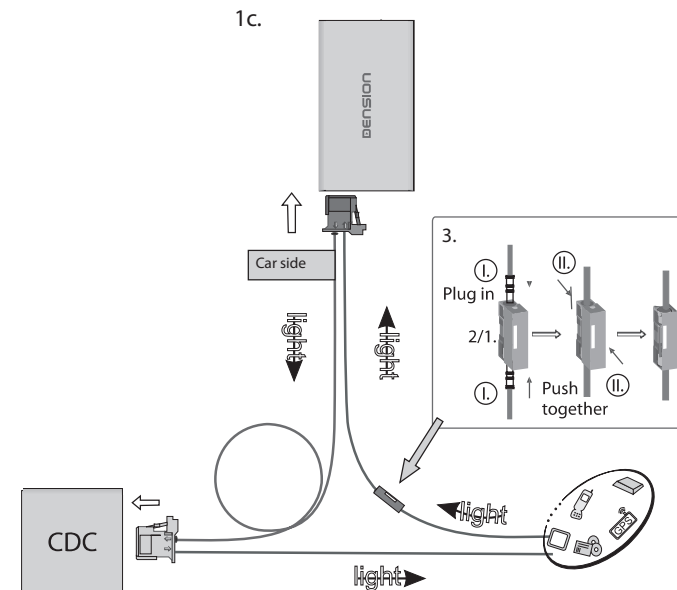
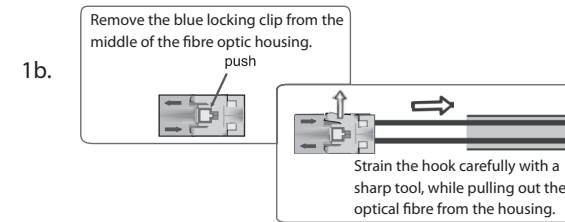
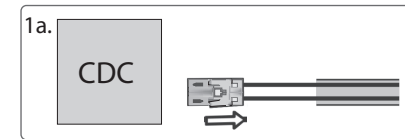
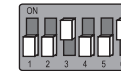
Installation Type 1:

Vehicles supporting multiple CD changers and equipped with a CD changer

- Audi A4/S4/RS4/A5/A6/S6/RS6/A8/Q7 with MMI-2 High (colour)

These vehicles allow selection of Gateway audio sources and the original CD changer through the existing car audio controls.

Set the DIP switches to the following position and install the Gateway 500 as illustrated below:

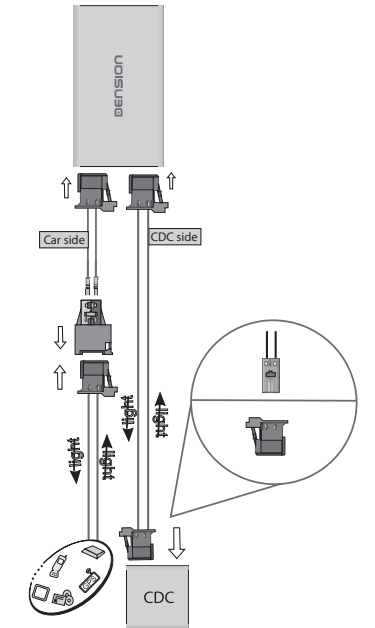


2

Installation Type 2a:

Vehicles with an existing CD changer

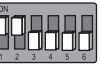
These vehicles allow selection of Gateway audio sources and the original CD changer by switching the mode between CD Changer and Gateway mode.



Audi (MMI-2 Basic Monochrome)



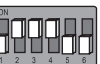
Text capable BMW E87, E90, E91, E92, E93, E60/61, E63/E64, E65/E66 (03/2005-), E70 and Mini (non iDrive-4)



Non text capable BMW E65/E66 (-03/2005) (non iDrive-4)



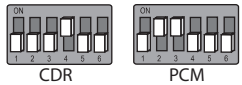
BMW E90, E91, E92, E93 with iDrive-4



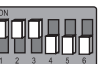
Mercedes (NTG1-, NTG2- Audio 20/50 and Comand)



Porsche (CDR 23/24 and PCM I/II/2.1) for longer CDC and car side cable use FOA1PO1

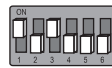


Saab 9-3 (Rear CDC)

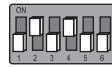


3

Saab 9-3 (Front CDC)

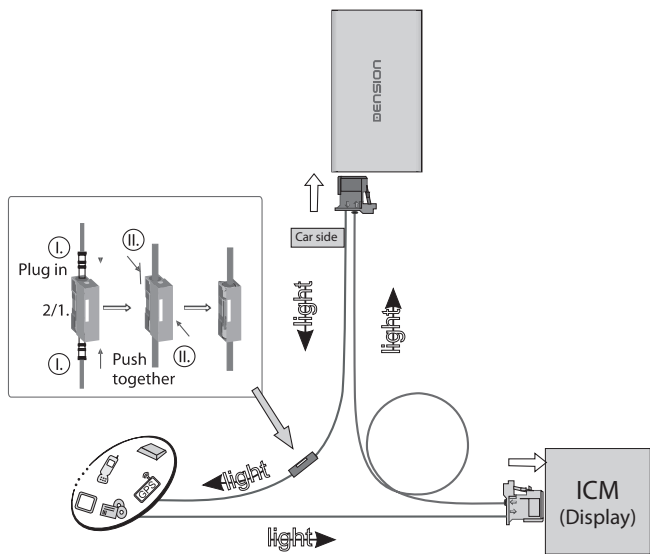
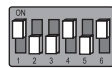


Volvo XC90 - MY 2002-2006, with High Performance and Premium sound system, without AUX input, with CDC



Installation Type 2b:

Volvo S40/V50 - MY 2004-2007 with Basic and High Performance sound system, without AUX input, with CDC

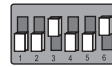


Installation Type 3a:

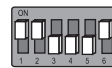
Vehicles with no existing CD changer

Set the DIP switches as shown below.

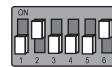
Audi (MMI-2 Basic Monochrome)



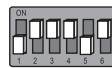
Text capable BMW E87, E90, E91, E92, E93, E60/61, E63/E64, E65/E66 (03/2005-), E70 and Mini (non iDrive-4)



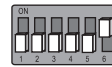
Non text capable BMW E65/E66 (-03/2005) (non iDrive-4)



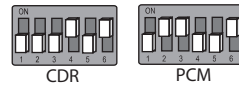
BMW E90, E91, E92, E93 with iDrive-4
Use a CDC for enabling



Mercedes (NTG1-, NTG2- Audio 20/50 and Comand)



Porsche (CDR 23/24 and PCM I/II/2.1)



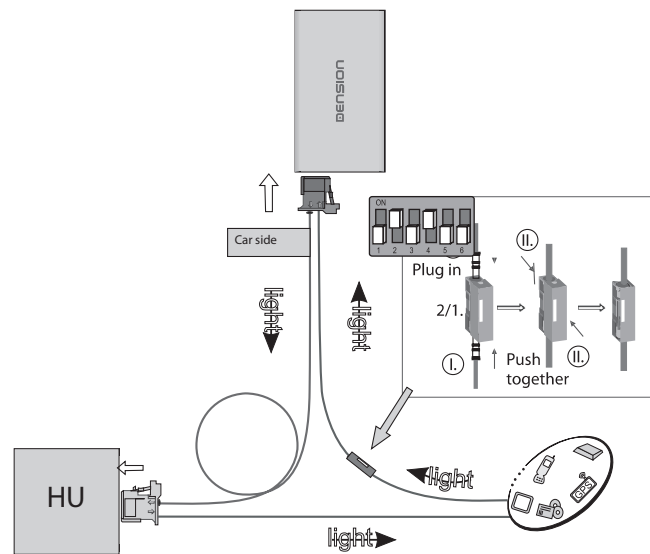
Saab 9-3 (Rear CDC)



Saab 9-3 (Front CDC)

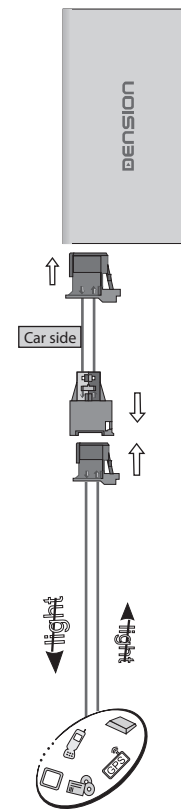


If you are connecting Gateway 500 to the back of the head unit, use this diagram:



Installation Type 3b:

If you are installing to a free fibre optic connector in the car (CDC preparation) use this method:



Text Configuration

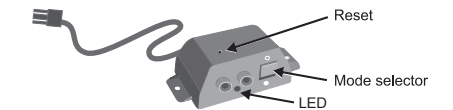


Saab & Mercedes vehicles require final configuration of the Gateway as not all of the radios in these vehicles support text display. After Gateway 500 has been installed, toggle the mode selector switch six times (three times on/off) and a configuration menu will appear on the radio display. Select the configuration mode according to your head unit listed in the configuration table. To confirm the selection press and hold **▶▶**; to discard the selection press and hold **◀◀**

Track #	Config	Mercedes Command	Saab Text
# 1	NO TEXT	D	D
# 2	Timeout	-	-
# 3	Text	-	-
# 4	+Cache	-	-
# 5	+Paging	R	R
# 6	+Select	-	R

D: Default, R: Recommended

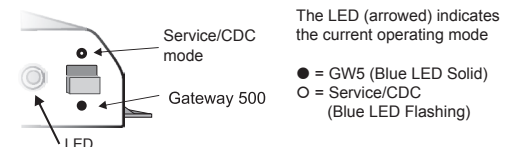
For detailed information visit:
<http://support.dension.com>



When servicing your vehicle



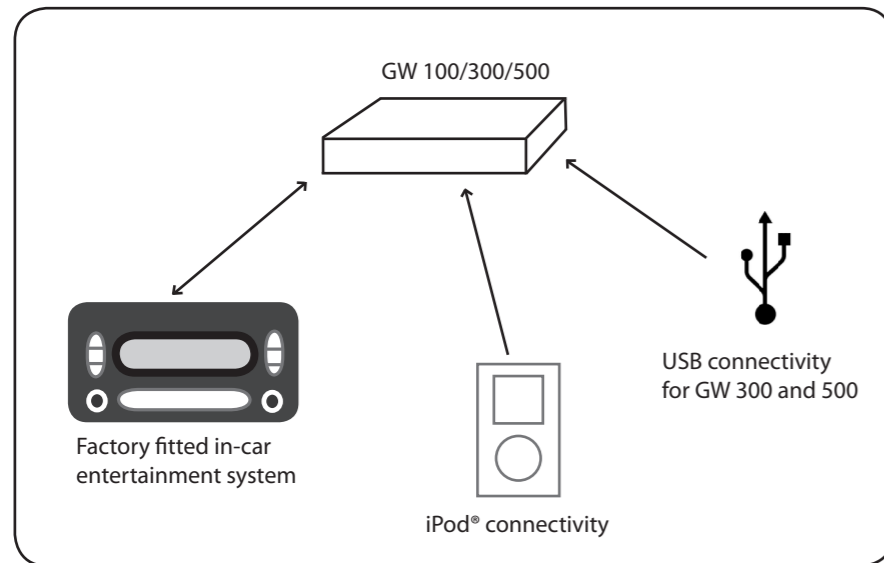
You must set the mode selector switch to service mode (bypass, CD Changer) position otherwise the service computer may detect an unknown device in the fibre optic system which can lead to errors reported.



1. Introduction

This user guide provides you with information on how to control and play your external audio device through a car entertainment system using a Dension Gateway (GW) interface.

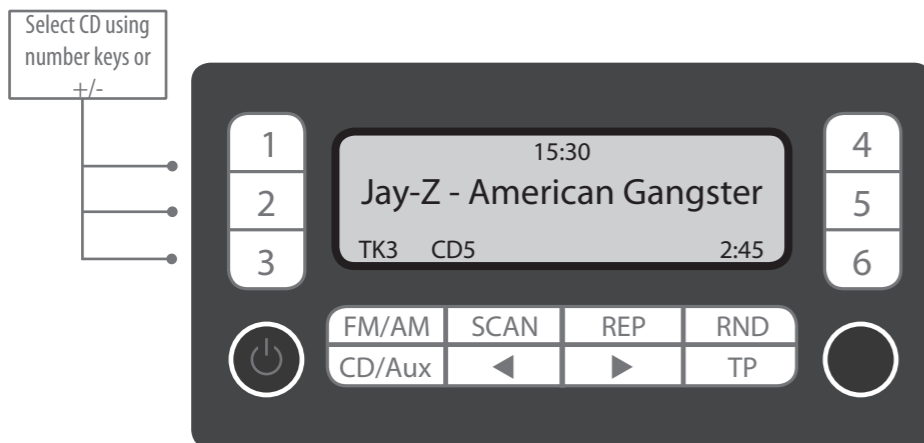
It is assumed that the GW interface is already installed and correctly configured for your vehicle. For assistance with installation, please refer to the *Dension Gateway Installation and Configuration Guide*.



2. Car entertainment system requirements

This user guide does not provide information regarding operation with any specific car entertainment system. Please note the following:

- Dension Gateway (GW) devices generally connect to the CD changer or auxiliary input on the car entertainment system. Please check www.dension.com for specific compatibility details.
- If the vehicle has an existing CD changer it will be disabled by GW 100 and 300 unless an optional Dension CD Changer Retention module is also installed.
- We use the conventions listed below to describe control of the GW from your car entertainment system. Please refer to your car entertainment system's owner's manual for specific details of its operation.



Next Track:	NEXT>	Note: Some systems trigger <RW/FF> by a long press of <PREV/NEXT>
Previous Track:	<PREV	
Fast Forward:	FF>	
Rewind:	<RW	
Repeat:	REP	CD/Aux
Random:	RND	
Scan:	SCN	

3. Text, browsing and song information

Even if your car entertainment system is unable to display text, you can control your external audio device with a Dension Gateway (GW).

If your car entertainment system has text capabilities, details of how to enable them are provided in the *Dension Gateway Installation & Configuration Guide*.

We refer to the different types of car entertainment system as follows:

<p>1. Browsing and playback: full music browsing capabilities and song information displayed onscreen.</p>	
<p>2. Playback and text: name of the artist, album or track that is playing. The number of characters will be defined by your display type.</p>	
<p>3. No text: only CD and track numbers displayed, for example, CD6-08. Please refer to Section 6 for details on how CD numbers relate to operating modes.</p>	

4. External audio devices

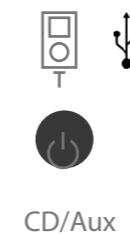
The following external audio devices are supported:

iPod®	Dock cable ™ (IPO4DC9)™ Mini, 4G, 4G Photo, Nano, Nano 2G, Nano 3G, Nano 4G, 5G video, Classic, touch, touch 2G, iPhone 1G and iPhone 3G Active Cradle ™ (IP34CR9)™ iPod 4G, 4G Photo, Nano 2G, Nano 3G, 5G video, Classic, iPhone 1G, touch 1G
USB	Flash memory or hard disk drives (USB mass storage) Music formats: MP3/WMA/Ogg/WAV File systems: FAT16/ FAT32
Auxiliary Audio	GW 100 and 300 feature a 3.5mm stereo line input GW 500 features an RCA stereo line input
Bluetooth (requires optional Dension BTA series accessory)	A2DP/AVRCP profiles for audio playback HFP profile for handsfree telephony Refer to your car's user manual and the BTA 1500 user manual for telephone and telephone book operation
CD Changer (requires optional Dension CD retention kit)	Vehicle's existing original equipment if installed. This is a standard feature for GW 500 in certain vehicles

5. Using the Dension Gateway

Before you start, please check that your iPod is up to date. You can get iPod firmware updates from www.apple.com/support/iPod

- Connect your external audio device
- Switch on your car entertainment system
- Select external CD changer or auxiliary audio (note: In some vehicles (Opel and certain Fords), connection to the GW is made through the Aux port. It will therefore be necessary to select Aux rather than CDC Playback starts from the last selected Dension Gateway audio source.



6. Operating modes

For iPod and USB device control, the following operating modes can be used by selecting the corresponding CD. Use <PREV/NEXT> to select and play the playlist, artist, album or track. Dension GW returns to CD5 after 30 seconds of inactivity in any other CD mode.

Select CD1:	Playlists/Folders	Text-capable display	Non-text display
	This is an alphabetical list of playlists (or folders) on your device. On USB devices, M3U and PLS playlists are selected <i>before</i> folders. Select and play the playlist/folder you wish to hear using your car entertainment system's <PREV/NEXT> controls. Press FF> to play whole playlist/folder.		
Select CD2:	Scan Artists	This is an alphabetical list of artists on your device. Select and play the artist using your car entertainment system's <PREV/NEXT> controls. Press FF> to play all songs by selected artist. Note: this mode is not available with the iPod UI audio source.	
	This is an alphabetical list of artists on your device. Select and play the artist using your car entertainment system's <PREV/NEXT> controls. Press FF> to play all songs by selected artist. Note: this mode is not available with the iPod UI audio source.		
Select CD3:	Scan Albums	This is an alphabetical list of albums on your device. Select and play an album using your car entertainment system's <PREV/NEXT> controls. Press FF> to play the whole album. Note: for CD1/2/3 if you do not press FF> within 30 seconds of making your selection, audio player reverts to original source.	
	This is an alphabetical list of albums on your device. Select and play an album using your car entertainment system's <PREV/NEXT> controls. Press FF> to play the whole album. Note: for CD1/2/3 if you do not press FF> within 30 seconds of making your selection, audio player reverts to original source.		
Select CD4:	Playback Options	If your system does not have REP , RND or SCN functions, use CD4 for the following options: Repeat (select REP mode), Random (select RND mode) and Scan (set SCN mode - 10 second intro play of each track). For more CD4 functions please see Section 8.	
	If your system does not have REP , RND or SCN functions, use CD4 for the following options: Repeat (select REP mode), Random (select RND mode) and Scan (set SCN mode - 10 second intro play of each track). For more CD4 functions please see Section 8.		
Select CD5:	Scan Tracks	The 'normal' use of your car entertainment system's <PREV/NEXT> controls, i.e. these keys select and play tracks. Note: Dension GW returns to this mode after 30 seconds of inactivity in any other CD mode.	
	The 'normal' use of your car entertainment system's <PREV/NEXT> controls, i.e. these keys select and play tracks. Note: Dension GW returns to this mode after 30 seconds of inactivity in any other CD mode.		
Select CD6:	Source/Menu	The 'Source/Menu' mode shows selected audio devices connected to the Dension GW. Car entertainment systems with Browsing & Playback text capability also provide music browser functions.	
	The 'Source/Menu' mode shows selected audio devices connected to the Dension GW. Car entertainment systems with Browsing & Playback text capability also provide music browser functions.		

if your car's system only supports five CDs, CD4 functions are removed. CD5 and CD6 functions move to CD4 and CD5.

7. Source table

Note: if your vehicle does **not** have text capability, select CD6 on the changer to access the following source modes.

Track	Source	Description
1	Auxilliary Input	Plays audio from the device connected to the Dension Gateway (GW) auxilliary input
2	iPod UI	Enables you to use the iPod click wheel for audio selection (recommend for vehicles without Browsing and Playback capabilities)
3	ipod GW	Audio selection for the iPod is via the car entertainment system controls (recommended for vehicles with Browsing and Playback capabilities)
4	USB	Plays music from the USB device connected to the Dension Gateway (not GW100)
5	BT Audio	Streams music from the Bluetooth audio device paired with the GW
6	BT Phone	Provides handsfree telephone functions from the Bluetooth phone paired with the GW
7		<i>Reserved for future use</i>
8		<i>Reserved for future use</i>
9	CDC	<p>GW100/300: Plays CDs from the vehicle's original CD changer. To return to CD operation press either REW, RPT or SCN twice. Some vehicles may require power to the entertainment system to be turned off and then back on again (reboot) after the double-press. Note: at least one CD must be loaded into the magazine otherwise it is not possible to return to Gateway Dension operation.</p> <p>GW 500: Vehicles which support multiple CD changers will list the Gateway operating modes in sequence with the CDs loaded in the vehicle's CD changer. To switch between GW 500 and CD changer on vehicles which do not support multiple CD changers, use the bypass switch on the GW 500 auxilliary input box (some vehicles require a shutdown and cold start for this mode change).</p>

8. More information

CD4 functions (continued from Section 6)

PlayAll

Start playback of all content on your device.

For USB mass storage devices:

Build database

When using USB content, the Dension Gateway (GW) generates a database for easy Folder/Artist/Album navigation. Normally this will only take a few seconds, but for large capacity drives like a 100GB Hard Drive (HD), it can take up to one hour or more.

If the GW finds tracks have been deleted from the HD or USB content, it will automatically regenerate the database. However, if tracks have been added, this will have to be done manually. Dension are working on software to assist with manual database regeneration (Gateway Utility). Please check www.dension.com for availability.

Set bookmark

Bookmark a position within a track, album or playlist to restart playback from.

Resume bookmark (USB)

Playback returns to the position set by the bookmark.

Help and support

If you need further assistance in using the Dension Gateway, please contact your local supplier or visit www.dension.com and click on 'support'.

Disclaimer

If your car's electrical system begins to behave erratically, please disconnect your Dension Gateway interface immediately and have it checked by your installer. Dension and its authorised distributors and retailers are not liable for any incidental consequential or indirect damages and do not assume liability for any diagnostic fees.

The use of handheld devices while driving may be subject to government legislation. Please ensure that your use of the Dension Gateway complies with applicable traffic laws. Dension does not assume liability for any events resulting from the illegal or irresponsible use of handheld devices while driving.

Warranty

The Dension Gateway interface carries a one-year limited warranty that protects you from defects in material and workmanship of products sold by Dension or its authorised distributors and retailers. Dension does not warrant any installation work or assume liability for any damage caused due to negligence, improper installation or operation. For warranty claims, proof of purchase is required.

DENSION
Audio Systems

Gateway

100 / 300 / 500



User Guide



USER MANUAL

Dension BTA1500 Bluetooth Module

DEBTA-9201-2

USER MANUAL - BTA1500

Contents

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6.1 Porsche	
6.2 BMW	
6.3 Audi	

1. Introduction

BTA1500 is an optional Bluetooth Accessory kit for the Gateway 500 devices. It supports Advanced Audio Distribution Profile (A2DP) / Audio/Video Remote Control Profile (AVRCP) profiles for audio playback and Hands-Free Profile (HFP) / Handset Profile (HSP) for handsfree telephony.

BTA1500 is compatible with most Bluetooth-equipped mobile phones, PDAs, media players and other devices. However, Bluetooth compatibility varies by manufacturer and you might find that some functions are not supported with your specific device. For more information, please visit <http://support.dension.com>.

2. Useful Information

- Up to three phones can be paired with the BTA1500, one after the other. If a fourth phone is paired, the pairing data from the last mobile phone on the list is deleted.
- If the system is playing A2DP music from the connected Bluetooth device (PDA, laptop, mobile phone) you can still use it or another device in handsfree mode, to answer phonecalls for example. Whilst the call is active, the music will stop. After the

call, the music will continue. Some mobile phone models will restart the song from the beginning.

- If a phone is connected to the system as a handsfree device, the other phone can connect only as an A2DP source. In this case, the device which is playing music can be used as a phone but without the handsfree function. Some phones give you the option to choose the connection type.
 - If an iPhone is connected to the GW500 via the dock cable and the music is being played from it, the iPhone can manage handsfree calls through Bluetooth. Whilst a call is active the music will be stopped. After the call, the music will continue.
-

3. Package contents

- BTA1500 device
 - Microphone with clip
 - Jack fixture
 - User guide
-

4. Car compatibility

- Porsche with PCM 2/2.1 head units, where the 'Phone' button exists
- Audi with MMI-2 head unit
- BMW 1/3/5/6/X5 (non iDrive-4 system)
- Mercedes (NTG1 and NTG2)
 - with Audio 20 head unit
 - with Comand head unit

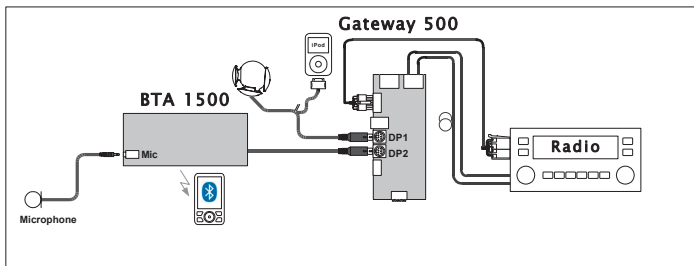
Note: The original Phone module and the BTA1500 cannot be used at the same time. If you want to use the BTA1500 you have to disconnect the original / factory phone module.

Check www.dension.com for updates.

5. Basic installation

5.1 Installing the BTA1500

For best performance, mount the BTA1500 to a plastic part of the vehicle, or tie it to a cable harness away from the car radio chassis or other electronic equipment. Avoid installing the BTA1500 near large metal objects.



1. Make sure the phone module functionality is enabled on the car and remove any pre-installed phone module
2. Connect the iPod dock cable to device port 1 (DP1) on the Gateway 500 (if you are using the BTA1000, you'll need to disconnect it from device port 1 first)
3. Download the latest Gateway 500 firmware (FW) from www.dension.com
4. Connect the BTA1500 to the device port 2 (DP2)
5. If you want to use the BTA1500 for handsfree telephony, connect the microphone to the BTA1500 mic port (3.5mm connection). Refer to 3.2 for positioning the microphone
6. Do **not** connect any mute cables between BTA1500 and the audio system of the car
7. When you switch on the BTA1500 for the first time, turn ignition/car off until the blue LED on the AUX box stops lighting so the MOST ring shuts down. Then turn the system on again.

5.2 Positioning the microphone

Fix the Microphone jack plug with the included piece of plastic.



- For optimum handsfree performance, position the microphone as close to the driver's mouth as possible, but at the same time in a central location, i.e. an equal distance from the left and right speakers. Ideally, clip the microphone to an overhead panel at the top of the windscreen, for example, near the interior light.
- When using BTA1500 for hands-free operation, ideally set the volume to a moderate level to avoid feedback.
- We recommend setting your phone volume to a similar volume as the other audio sources connected to the Gateway. Do this on your phone.

Before using your Bluetooth hands free functions, you need to pair your phone to the BTA 1500. This only needs to be done once after installation.

6. Pairing

6.1. Porsche

1. If it is needed, enable the factory Bluetooth module with a diagnostic computer.
2. Every time you turn on the system, the following warning message will be displayed: 'System error: Phone not available.' Press 'Confirm'. You can now proceed.
3. At first startup the Bluetooth handsfree communication will be turned off. Press the 'TEL' button on the radio and select 'Phone On' from the menu
4. In the place of the network operator name, 'Pairing' will be displayed. The Gateway will be in pairing mode for one minute
5. Enable Bluetooth on your phone and search for audio devices (refer to your phone's user manual for details)
6. Select 'DENSION-BTA' and connect using the default PIN '0000'
7. After successful connection, the phone's name will appear on the car audio system display. It is now ready to use via the car radio controls

Please note that the following phone menu items are displayed by the Porsche car audio device and **cannot** be updated by the Gateway:

- Important no.
- Dialed calls
- Received calls
- Missed calls

8. To call a number from the phonebook or to navigate inside the phonebook structure, (ABC-Search function) use the green button on the top-left corner of the PCM
9. 'Phone Off' will disable Bluetooth
10. If 'Phone On' is selected the Gateway will go into pairing mode. In the phonebook menu you can reach the list of the connected phones:
 - New phone can be added with a new pairing/connection procedure
 - Any device can be deleted by choosing the 'Delete' item on the PCM. Any phone on the list can be connected if the green button is pressed on the name of the device.

Please note that the Phonebook (or the list of paired devices) is not valid until the 'Synchronising Phone Book...' text is shown on the bottom of the PCM display

6.2. BMW

When fitted in a BMW, the BTA1500 provides all of the same functions as the factory-fitted version. Please refer to your car's owner's manual for a full list.

1. If it is needed, enable the factory Bluetooth module with a diagnostic computer.
2. When you turn on the system at the first time, the Bluetooth handsfree communication is switched off. In order to enable it and carry out the pairing process follow the owners manual of your car. The Gateway500 will be in pairing mode for one minute
3. Enable Bluetooth on your phone and search for audio devices (refer to your phone's user manual for details)
4. Select 'DENSION-BTA' and connect using the default PIN '0000'

5. After successful connection, the phone's name will appear on the car audio system display. It is now ready to use via the car audio system

6.3. Audi

The BTA1500 module fitted in AUDI car models can give you a limited set of functions compared to the factory fitted module. In order to carry out the pairing process do the following:

1. Choose the CDC menu and 'Disc 6' on the Audi car audio system, then enter the '>Source' folder
 2. Choose 'BT Audio' and select the pairing item. The Gateway 500 will be in pairing mode for one minute
 3. Enable Bluetooth on your phone and search for audio devices (refer to your phone's user manual for details)
 4. Select 'DENSSION-BTA' and connect using the default PIN '0000'
 5. After successful connection, the phone's name will appear on the car audio system display. It is now ready to use via the car audio system
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Please visit www.dension.com for further product information.

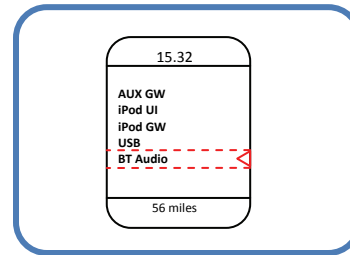
BT Audio playback from A2DP/AVRCP source.

BTA1500 supports Advanced Audio Distribution Profile (A2DP) / Audio/Video Remote Control Profile (AVRCP) for audio playback. Due to limitations of these standards no song information is provided by the Bluetooth device and only Next/Back/Pause/Play functions are available from the car radio or the steering wheel.

Using the 'BT Audio' function

1. After you have paired successfully, select 'BT Audio' from the 'Source' menu option. You can refer back to the Gateway user manual to access the 'Source' menu.

Selecting CD6 on your audio system should select the 'Source' menu as shown in example.



Possible cluster display

2. Then using your devices (mobile phone, laptop, PDA) media player, you should then select the desired track and press play. The audio track will playback through the cars speakers.

Refer back to your device manual for operation regarding audio playback & Bluetooth pairing.

3. You can also use the car audio controls to select tracks where possible.

Note, that with certain Bluetooth devices:

- Playback remote control may not be available
- The media player may have to be started/stopped manually