DENSION
Installer Training 2013

Budapest, the Central-European HUB of Innovation

About Dension

Dension HQ, Divisions & Factory

Aftermarket - Gateway division

- A fully-integrated car entertainment system
- Devices integrated into the car's entertainment system without making any changes to the interior.
- Ensures excellent sound quality, invisibility and improved control through the original car audio.

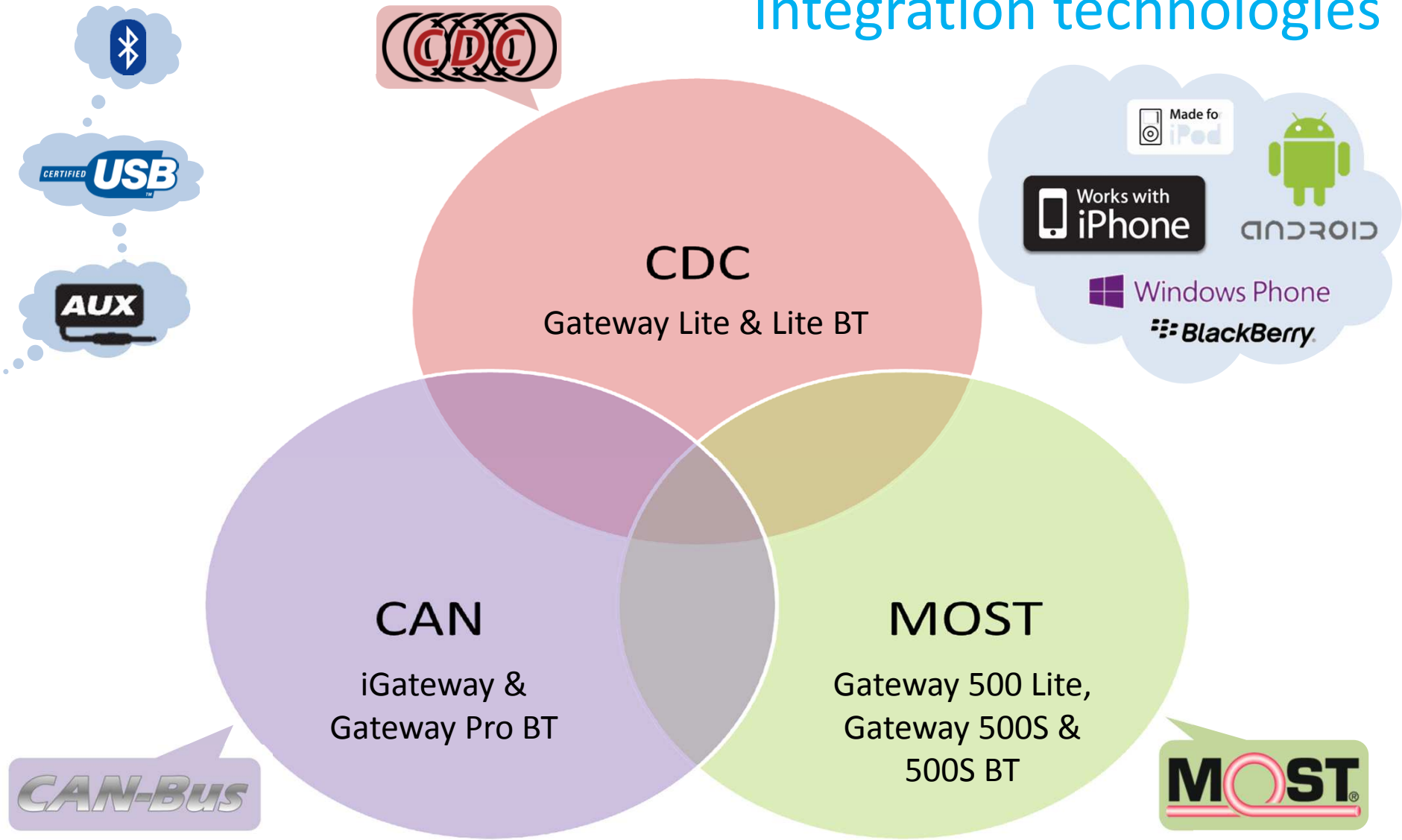
Plug & Play – smart solution division

- These products provide a plug & play solution so no installation is required.
- Turning your device into a control center of all you in car entertainment and communication needs.

OEM solutions

- Dension provides consumer electronics and IT connectivity products to the OEM Automotive sector.
- The OEM Division combines the know-how of the connectivity experience and the automotive quality process.

Integration technologies



Dension Product Portfolio overview

Product Name	iPod, iPhone	AuxIN	USB	Control	Song info (text, ID3 tag)	Bluetooth
Gateway Lite	▶	▶	▶	▶		
Gateway Lite BT	▶	▶	▶	▶		▶
iGateway	▶	▶		▶	▶	
Gateway 300	▶	▶	▶	▶	▶	
Gateway Pro BT	▶	▶	▶	▶	▶	▶
Gateway 500 Lite	▶		▶	▶		
Gateway 500	▶	▶	▶	▶	▶	▶
Gateway 500S BT	▶	▶	▶	▶	▶	▶
iCon Drive	▶			▶	▶	▶
Gateway MMI 3	▶		▶	▶	▶	▶

Multifuncionality - Key selling points

- Retain original dashboard aesthetic
- **Charging** provided
- Device can be updated with the latest firmware via USB
- Music playback from **iPod/iPhone, AUX-in and USB*** through original car speakers
- Song information **(text) is displayed***
- Control through the original buttons of the Head Unit or steering wheel*
- **Bluetooth** handsfree (phonebook)*
- **A2DP** music streaming (AVRCP 1.3)*

*Note: Dension product and compatibility dependent

Installer benefits

Product benefits

- Highly competitive product – developed and produced in Europe
- The newest developments are included and further improved by the day
- High level of technical and product support

Damage free installation (as always)

- Much less damage is made to the cockpit and the dashboard compared to other brands
- Seamless installation and operation
- Device can be installed in glove box with the new longer harness

Return on Sales

- Earnings on the product and on the installation too
- A higher margin can be obtained with Dension products than with the competitors'
- The workload/profit ratio is better than the industry average

Compatible devices

iPod & iPhone

- iPod (4th generation)
- iPod nano (1st, 2nd, 3rd, 4th, 5th, 6th and **7th generation**)
- iPod mini
- iPod Photo 4G
- iPod Video 5G
- iPod Classic (80 GB, 120 GB and 160 GB)
- iPod Touch (1st, 2nd, 3rd, 4th and **5th generation**)
- iPhone, iPhone 3G, iPhone 3GS, iPhone 4 and 4S
- **iPhone 5!!!**

Windows Phone

BlackBerry

android

Smartphones

- a huge variety of Bluetooth handsets
- music playback through A2DP (AVRCP 1.3)
- Android support (A2DP or 'Mass Storage')*

http://www.dension.com/downloads

USB

- Flash Memory, Hard Disk Drive
- File System: FAT16 or FAT32
- Storage capacity: up to 320 GB*
- Music format: MP3, WMA and WAV
- Branded USB drives are recommended

*Use Gateway Indexer for large USB storage (http://www.dension.com/windows-utility/gateway-indexer-software-for-large-usb-storage)

iPhone 5 compatibility

Charging and control via „Lightning to USB cable”

- Gateway Pro BT
- Gateway 500S and Gateway 500S BT

Note: We charge and control iPhone 5 via the USB port with the original factory „Lightning cable”

Charging and control through „Lightning to 30pin adapter”

- Gateway Lite and Gateway Lite BT
- iGateway
- Gateway 300
- Gateway 500

Note: The „Lightning to 30-pin adapter” (not in the package) connects to a dock cable

Gateway Lite (GWL3xxx) and Gateway Lite BT (GBL3xxx)

Positioning

Features

- iPod, iPhone, Smartphone, USB music playback
- **Bluetooth** handsfree
- A2DP music streaming
- Receive a call by pressing only **one button**
- charging
- 3.5mm auxiliary input jack (optional with extra cable)
- **ID3 tags/text display on BMW and some Toyota**

Package content

- Hardware
- Car side harness
- Microphone kit (Gateway Lite BT)
- Installation and user guide

Optional accessories

- 3G cradle (IP44CR9)
- single iPod dock cable (IPDC1GW)
- Bluetooth iPhone holder for Gateway (IPH1GW0)
- Aux cable (CABL-AUX)

Gateway Lite (GWL3xxx) and Gateway Lite BT (GBL3xxx)

Installation

- Glovebox installation : due to longer car side harness device can be installed in the glovebox department

Operation

One button phone handling: use the next track or CDC source button for managing phone calls

Gateway Lite & Lite BT Troubleshooting

- Is there any track limit? How to organize my music content?
- Where does the brown cable go?
- What is the free black lead in the Gateway harness?
- Volume issues (volume too low or distorted)→ volume configuration files
- USB drive does not work (USB compatibility)
- iPod/iPhone is not recognized

iGateway (GW17xxx)

Positioning

Features

- iPod, iPhone music playback
- ID3 tags/text display
- use the car radio controls to browse and select items from your device
- charging
- 3.5mm auxiliary input jack (optional with extra cable)

Package content

- Hardware
- Car side harness
- single iPod dock cable
- Installation and user guide

Optional accessories

- 3G cradle (IP44CR9)
- Bluetooth iPhone holder for Gateway (IPH1GW0)
- Aux cable (EXT1AU1)

Gateway 300 (GW33xxx)

Positioning

Features

- iPod, iPhone and USB music playback
- ID3 tags/text
- use the car radio controls to browse and select items from your device
- charging
- 3.5mm auxiliary input jack (optional with extra cable)

Package content

- Hardware
- Car side harness
- USB cable
- Installation and user guide

Optional accessories

- 3G cradle (IP44CR9)
- single iPod dock cable (IPDC1GW)
- Bluetooth iPhone holder for Gateway (IPH1GW0)
- Aux cable (EXT1AU1)

Gateway Pro BT (GWP1xxx)

Positioning

Features

- **Bluetooth handsfree calls** with noise and echo cancellation
- **A2DP** music streaming (AVRCP 1.3)
- Music playback from iPod/iPhone and USB
- Charging
- **ID3 tags/text display** and menu browsing
- Control via the radio buttons or the steering wheel

Package content

- Hardware
- Car side harness
- Microphone
- Installation and user guide

Optional accessories

- 3G cradle (IP44CR9)
- single iPod dock cable (IPDC1GW)
- Connector Port (EXT1CP2)
- DAB interface

Gateway 500 Lite (GWL1MO1) and D2B (GWL1DB1)

Positioning: A cost effective solution for vehicles without text capability

Features

- Music playback from iPod/iPhone and USB through car radio
- Charges iPod/iPhone
- Control via the radio buttons or the steering wheel

Package content

- Hardware
- Power harness
- Optical connection kit
- USB cable
- Installation and user guide

Optional accessories

- Single iPod dock cable (IPDC1GW)
- 3G cradle (IP44CR9)
- Aux Box (UCP-9801-15)
- iPhone cradle extension kit (IPH1GW0) for bluetooth handsfree

Gateway 500 (GW51MO2)

Positioning: Dension's ever flagship product, designed for vehicles for MOST optical systems

Features

- Music playback from iPod/iPhone and USB through car radio
- Charges iPod/iPhone
- ID3 tags/text display and menu browsing
- Control via the radio buttons or the steering wheel
- Wide range of compatibility: Aston Martin, Audi, BMW, Mercedes, Porsche, Saab and Volvo
- One hardware for more compatibilities (DIP switch settings)

Package content

- Hardware
- Power harness
- Optical connection kit
- Single dock cable
- Aux/Bypass box
- USB cable
- Installation and user guide

Optional accessories

- 3G cradle (IP44CR9)
- iPhone cradle extension kit (IPH1GW0) for bluetooth handsfree

Gateway 500S BT (GW52MO1/2)

Positioning: Dension's ultimate integration designed for MOST™ fiber optic systems

Features

- **Bluetooth handsfree calls** with noise and echo cancellation
- **A2DP** music streaming (AVRCP 1.3)
- Music playback from iPod/iPhone, Bluetooth capable phone and USB through the original car stereo
- Device charging
- **ID3 tags/text display** and menu and phonebook browsing
- Control via the radio buttons or the steering wheel
- Wide range of compatibility: Audi, BMW, Mercedes, Porsche
- One hardware for many compatibilities (DIP switch settings)
- Both single FOT and dual FOT versions are available

Optional accessories

- 3G cradle (IP44CR9)
- DAB interface

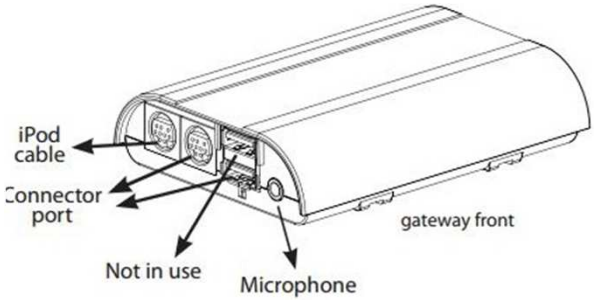
Gateway 500S BT (GW52MO1/2) and Gateway 500S (GW53MO1/2)

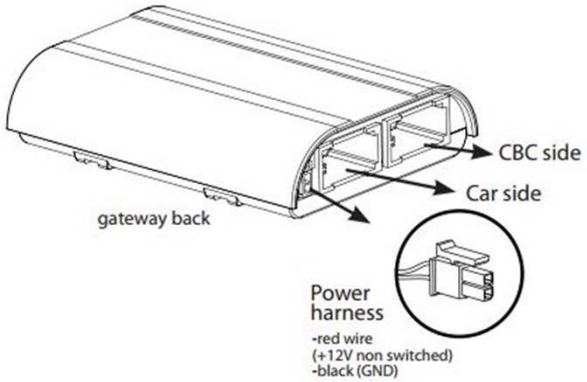
Versions

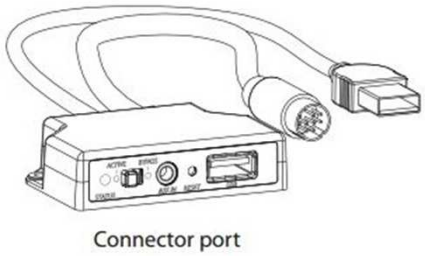
Gateway 500S	BT	Non BT
Single FOT	GW52MO1	GW53MO1
Dual FOT	GW52MO2	GW53MO2

Package content

- Hardware
- Power harness
- Optical connection kit
- Microphone (GW52MOx)
- Single dock cable
- Connector Port
- Installation and user guide







Installation notes by GW500 series

- Gateway must be the last connected device on the MOST ring
- If factory CD-Changer is available it has to be installed before the CD-Changer
- Dual FOT version is required for keeping the CD-changer option
- Optical cable extension kit (FOA1PO1) is recommended if CD-changer is located in the rear of the vehicle or in the boot (Mercedes and Porsche)

Comparing Gateway 500 series

Part number	Product Name	Bluetooth	iPod, iPhone	USB*	Control	Song info** (text, ID3 tag)	AuxIN	Capability to keep the CD-changer	Dock cable included
GW51MO2	Gateway 500		✓	✓	✓	✓	✓	✓	✓
GW52MO1	Gateway 500S BT	✓	✓	✓	✓	✓	✓		✓
GW52MO2	Gateway 500S BT	✓	✓	✓	✓	✓	✓	✓	✓
GW53MO1	Gateway 500S		✓	✓	✓	✓	✓		✓
GW53MO2	Gateway 500S		✓	✓	✓	✓	✓	✓	✓

*Lightning based Apple devices are supported via USB (except iPad)

**Radio dependent

Gateway 500S BT (GW52xxx) and Gateway 500S (GW53xxx) covers all compatibility of the current Gateway 500 (GW51MO2) excluding the following cars and headunits:

- BMW 7 series 2002 – 03. 2005
- Mercedes with Audio 20, 50
- Rolls-Royce Phantom
- Forfour with Audio 20, 50
- Porsche with CDR23-24
- Aston Martin DB9
- Volvo S40, V50, XC90
- Saab 9-3, 9-5

Installation time interval

Product category	Installation time	Note
Gateway Lite	30 mins	Easy to fit, almost Plug & Play
Gateway Lite BT	~1 hour	Easy to fit, microphone installation takes a bit of time
iGateway	30 mins	Easy to fit
Gateway 300	45 mins	BMW with Navigation Head Unit takes 1-1,5 hours
Gateway Pro BT	1 hour	Setting & microphone installation takes a bit of time
Gateway 500, 500S, 500S BT	1,5 hours	Including enabling
iCon Drive	2 hours	Due to video type of product

Package content

Product category	Device	Car side harness	Microphone	Dock cable	Connector Port	Optical harness	Power cable	USB cable	User & install manual
GW Lite	X	X							X
GW Lite BT	X	X	X						X
iGateway	X	X		X					X
GW 300	X	X						X	X
GW Pro BT	X	X	X						X
GW 500 Lite (D2B&MOST)	X					X	X	X	X
GW500, GW500S, 500S BT	X		X*(only by GW500S BT)	X	X	X	X	X*(only by GW500)	X

Structure of products

Gateway Lite and Gateway Lite BT

- 2 hardwares for Gateway Lite (black device) and 2 hardwares for Gateway Lite BT (blue device)
- 13 different car-side harnesses
- Gateway Lite and Lite BT product category covers more than 300 compatibilities

2 x black & 2 x blue device *& 13 car-side harness*

iGateway

- 3 different hardwares
- 10 different car-side harnesses
- Gateway Pro BT covers more than 200 different compatibilities

3 x black device *&* *10 car-side harness*

Gateway Pro BT

- 3 different hardwares
- 10 different car-side harnesses
- Gateway Pro BT covers more than 150 different compatibilities

3 x black device *&* *10 car-side harness*

Structure of products

Gateway 500

- Only one hardware
- Compatibility has to be set by DIP switches according to car type

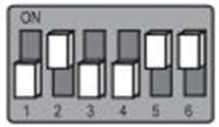
Gateway 500S & Gateway 500S BT

- One hardware for single FOT*
- One hardware for dual FOT*
- Compatibility has to be set by DIP switches according to car type

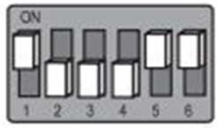
*FOT: Fiber Optic Transceiver

Set the DIP switches according to you car type:

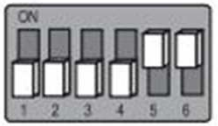
Audi (MMI-2 High colour & Basic monochrome)



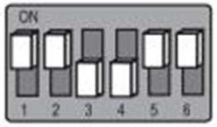
Text capable BMW E87, E90, E91, E92, E93, E60/61, E63/E64, E65/E66 (03/2005-) & E70 (non CIC)



Mercedes (NTG1-, NTG2- Comand)



Porsche (PCM I/II/2.1)



PCM

DENSION

Technical information

Software update

- All products can be updated with a flash drive (USB stick)* - except iGateway
- Dension softwares can be downloaded from http://www.dension.com/downloads
- Software update has to be processed in „Gateway mode”

Step-by-step:

1. Upload the software into the root of a USB stick with at least one MP3 music file
2. Connect the USB stick to the Gateway device
3. Turn the ignition on (by PSA engine must run)
4. Wait for at least 1 minute (by iGateway it is recommended to wait 2 minutes)

How do you know the that the update was succesful?

- If you were in Gateway mode Head Unit will show no CDC and it will switch to FM radio
- Update file will be deleted from the USB stick

Important notes:

- Do not use a winchester or a hard drive for software updates
- USB stick has to be formated to FAT32

What is EES.BIN file and how to get/generate it?

Why is it useful?

- Contains exact software version
- Basic settings (text, car config)
- Device connection

What do you need?

- USB thumb drive formatted to FAT16/32
- only one partition
- at least one playable music content in the root

What is the process?

- Turn the ignition and the radio ON
- Connect the Usb into the Gateway
- Select the Gateway as a source
- Turn OFF the system and remove car key
- Wait about 1 or max. 2 mins
- Turn the system ON again
- Wait 10 secs and disconnect the Usb thumb drive and the the content on a PC

Enabling

Enabling

- Device operation (phone, MDI)
- Device funtions (text)

What kind of tool/equipments is needed for enabling?

- Official car brand specific service computer
- VAG com / VW VAS factory diagnostics system
- Autologic
- VCDS (aftermarket equipment)

Note: These devices are normally available in services and are connected via OBD (diagnostic interface)

Autologic device

Which Gateway products needs enabling for operation?

- iGateway (MDI needs to be enabled)
- Gateway Pro BT (MDI and phone needs to be enabled)
- Gateway 500 series

VW BAP (iGateway – GW17V21, Gateway Pro BT – GWP1V21)

„**2E**" code for MDI and „**77**" code for phone enabling

- Skoda from model year 2008
- VW group model year 2011
- Seat from model year 2010 (Technisat radio)

Note: If factory MDI exists it must be removed
MFA Highline must exist to active phone functionality on cluster display .

Volkswagen: MFA Highline cluster display

Enabling MOST-system based cars

Enabling is <u>not</u> needed by the following cars:

- Audi
- Aston Martin (Note: CD-changer must exist)
- Volvo (Note: CD-changer must exist)

Enabling is <u>needed</u> by the following cars:

- BMW
- Mercedes
- Porsche
- SAAB

Notes:

1. **„iPod retrofit"** means that CD-changer option will be recognized
2. **„KMP3 option"** means that CD text funcion will be activated

BMW non CIC (non iDrive Professional, M-ASK , CCC Professional, iDrive Business)

Factory phone modul is available or coded

Options	E60[2] M-ASK	All other models (except E65[1])
original CD changer fitted and MP3 capability[3] is already available	convert CD Changer option to „IPOD" retrofit	no programming required
original CD changer fitted and no MP3 capability is available,		retrofit "KMP3" option with service computer
original CD changer not fitted	retrofit "IPOD" option with service computer	

Factory phone modul is not available or coded

Options	E60[2] M-ASK	All other models (except E65[1])
original CD changer fitted and MP3 capability[3] is already available	convert CD Changer option to „IPOD" retrofit & program the phone option	program the phone option
original CD changer fitted and no MP3 capability is available,		retrofit "KMP3" option and program the phone option with service computer
original CD changer not fitted	retrofit "IPOD" option and program the phone option with service computer	

Text enabling

Text enabling (iGateway, Gateway Lite and Gateway Lite BT)

Text is disabled by BMW by default so it needs to be activated (Text Selector)

1. **Turn** the **Radio ON** and disconnect all devices from the Gateway (AUX GW)
2. Keep the **FFW** (Fast Forward) **button pressed** for longer than **10 seconds**, then **release**.
3. **CD1/Track 01** appears on the screen (Text selector mode)
4. By pressing the **Next track** button, you can toggles between **Track 02-04** which set different screen modes (e.g. MID, Radio). **Please note:** Track 01 is the non-Text Mode
5. When you have moved the text to the position you prefer, **press FF** (Fast Forward) **to confirm**. Or, by pressing the REW (Rewind) you can exit Text selector without making any changes
6. If the text selection procedure was correct **AUX GW** will appear on the display

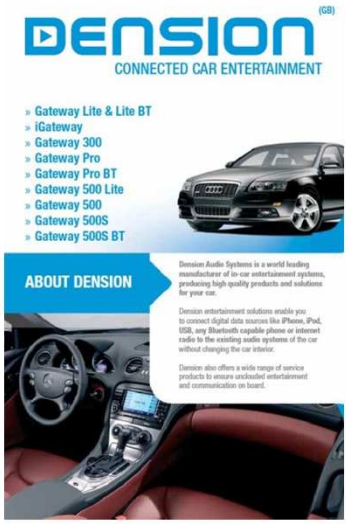
Generic Questions & Troubleshooting

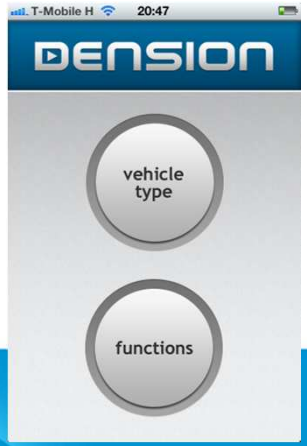
- iPod/iPhone/iPad compatibility
- iPod/iPhone not recognized
- USB compatibility
- USB does not work
- Phone issues
- Phone compatibility
- Volume issues

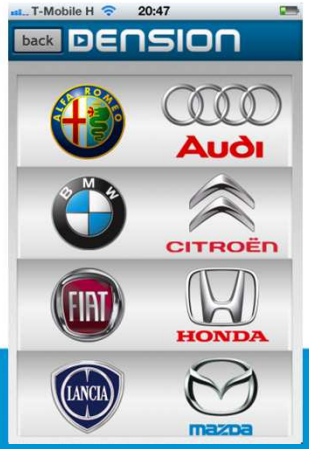
Dension Support

Sales & Technical and Marketing Support

- Online Product Selector
- Product Selector booklet
- Brochures
- Demo displays
- App for iPhone







Thank you for your attention!