DENSION
LEADING IN CONNECTED ENTERTAINMENT

Blueway 500

General Installation Guide

BWY-9203-1

1. Introduction

The Dension Blueway 500 lets you connect your smartphone or iPhone to your original car radio, providing music playback, menu based control (AVRCP 1.4 is necessary) through bluetooth. The Blueway 500 offers Bluetooth connectivity for music streaming (via A2DP with full menu browsing) and handsfree mobile call handling via the original buttons and screens of your vehicle. Gives you the possibility to connect two bluetooth devices at the same time.

Package content:
- Blueway 500 interface
- Optical cable kit (MOST)
- Power harness
- Microphone (generic)
- Zip tie

Optional accessories:
- Car specific microphones
- Cigar lighter charger (BLR1CLO)
- USB extension cable (USB2000)

2. Programming

The Blueway 500 emulates the CD changer and the factory phone module of the car so it could be necessary to activate some options of the car.

Programmig the car for Blueway 500 on BMW (CCC Professional, CIC Professional):

For programming we recommend to use 3rd party solutions like Autologic or the Dension GEN enabler tool.

In case of BMW the IPOD option for media browsing and the 644 phone option for the hands free functionality are need to be activated. If these options are already active then this is not necessary.
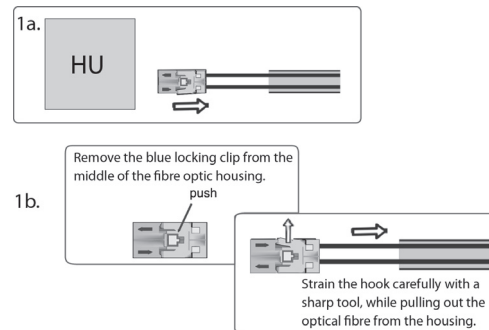
3. Device installation

The Blueway 500 can be installed anywhere on the MOST ring, however in order to avoid any compatibility or functional issues, please make sure that the Blueway 500 is the last connected device on the MOST ring or it is connected to the place of the original CD changer if it is available. The installation of the Blueway 500 is very complex, therefore please have it installed by a professional installer.

Installation of the power harness:
First of all, you need to connect the Blueway 500 to a constant 12V power source. On the power harness, you can find two wires. The black one needs to be connected to a proper ground and the red one to the 12V power.

Installation of the optical harness:
Disconnect the fiber optic male connector from the original interface (e.g. Head Unit) then remove the fiber optic housing from the male connector and finally disconnect (Fig. 1.) the fiber optic cable (the one which is marked to be the 'signal in' cable – with an arrow) as it is shown below.
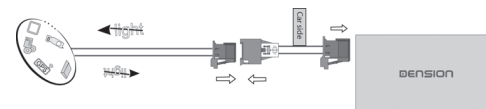

Connect that optical wire (use the optical male /male inline connector) with the 'signal in' cable of the Dension device. The 'signal out' optical fibre of the Dension device must be connected to the original housing. Finally take the male connector and connect it to the original interface. At the end of the installation please make sure that the light directions of the MOST optical ring are correct.
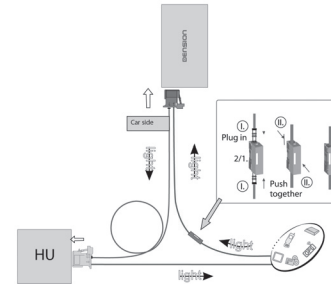
Installation types:

Type 1:
Vehicles with no existing CD-Changer.
If you are connecting Bluetway 500 to the back of the head unit use this diagram:

Type 2:
If you are installing to a free fiber optic connector in the car (CDC preparation) or into the place of the CD changer:
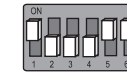

4. DIP switch settings:

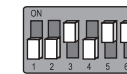Set the DIP switch settings according to your car and head unit type:

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

CIC
BMW E81/E82/E87/E88, E90/E91/E92/E93, E60/E61, E63/E64, E70, F07/F10/F11 (from September 2009 to September 2012)

5. Fitting the microphone

The microphone will work best when it is kept away from all noise sources (open windows or speaker) and close to the driver. So the best place to ensure perfect sound is to install at the central interior light or rear view mirror in the centre of the wind screen. There is a clip that helps you to do this. The optimal place for the microphone depends on many factors, so it is recommended that you try different installation places before finalize the microphone installation.

6. Phone

Compatibility requirements:

- In case of BMW the 644 phone option needs to be activated, the factory phone module needs to be disconnected from the optical circle.

7. Test and refit

Before you refit the head unit, **test** the Blueway 500 with your car audio, making sure all connections are **correct** and that you **have full functionality.**
Note: If during testing you notice any changes or inconsistencies in the way the car's electrical system operates, disconnect the Blueway 500 product immediately and consult your dealer.
When you have tested everything, refit your head unit. **Do not trap the cables, or leave them in a position where they may become trapped after refitting the head unit.** We supply cable ties to mount the Blueway 500 module. **Please mount the module away from heat or damp surfaces.**
Refit is the reversal of the removal process for your specific vehicle, as per your manufacturer's instructions.

8. Disclaimer

If your car's electrical system begins to behave in an unpredictable way please disconnect the Blueway 500 interface physically immediately and have it checked by your installer. Dension and its authorized distributors and retailers are not liable for any incidental consequential or indirect damages or loss and do not assume liability for any diagnostic fees. The use of handheld devices while driving maybe subject to government legislation. Please ensure that your use of the Dension device 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.
Dension reserves the right to modify its products or specifications without prior notice.

9. Warranty

Dension devices carry a one-year limited warranty that protects you from defects in material and workmanship of products sold by Dension or its authorized 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.

10. Update and support

If you need further assistance in using your Dension product, please contact your local supplier or visit our website at www.dension.com. You can ask for the help of our trained technicians through the channels described on our support page. Please check the download section for the latest firmware version and product documentation, as these may provide additional features or easier use of the product.

LEADING IN CONNECTED ENTERTAINMENT

Blueway 500

General User Guide

BWY-9204-2

1. Introduction

The Dension Blueway 500 lets you connect your smartphone or iPhone to your original car radio, providing music playback, menu based control (AVRCP 1.4 is necessary) through bluetooth. The Blueway 500 offers bluetooth connectivity for music streaming (via A2DP with full menu browsing) and handsfree mobile call handling via the original buttons and screens of your vehicle. Gives you the possibility to connect two bluetooth devices at the same time.

2. Supported devices

The Dension Blueway 500 has a built-in bluetooth 3.0 module which supports:
- HF (Handsfree) v1.6
- A2DP (Audio)
- AVRCP (Audio remote) v1.5
- PBAP (Phonebook access)

It means it can work with most mobile phones and Bluetooth devices which support the same standards.

3. Bluetooth pairing

You can pair up to 5 phones to the Blueway 500 and two phones can be used for hands free and Bluetooth audio at the same time.

The order of the first pairing is important because the Blueway 500 will start to connect firstly to the phone which can be found on the top of the paired phones list. Than it will continue until it has successfully connected to two devices or reached the end of the list.

The phone which will be found first will be the primary phone (marked with 1). The following connected device will be the secondary phone (marked with 2). If you would like to change the order of the devices, you need to delete the pairing history in the menu of the Blueway 500 and do the pairing again starting with the phone which you would like to use as the primary phone.

To see the feature differences between the primary and secondary phones, please check this chart:

BLUEWAY PHONE OPTIONS

	PRIMARY PHONE	SECONDARY PHONE
A2DP music streaming	✓	✓
Music control through the head unit	✓	✓
ID3 tag display	✓	✓
Media browsing	✓	✓
Caller ID display	✓	✓
Phonebook	✓	
Call history	✓	
Start hands free calls through the head unit	✓	
Start hands free calls through phone	✓	✓
Receive hands free calls through the head unit	✓	✓
Receive hands free calls through phone	✓	✓

4. DIP switches

With the DIP switches which can be found on the bottom of the Blueway 500, you can set car compatibility and you can activate or deactivate Bluetooth options. Regarding the car configuration, please check the installation guide.

Turn OFF the 5th DIP switch in order to disable the phone functionality. This is important if you would like to keep the factory phone module and would like to use it together with the Blueway 500. By switching DIP 6 into OFF position, you can turn the media functionality OFF. Do this, if you would like to keep the factory CD changer and would like to use the Blueway 500 only for hands free.

5. BMW

The menu of the Blueway 500 is displayed on the iDrive or the radio screen. The music playback and settings are controlled from the radio or iDrive controller, but it is also possible to select the next or the previous track from the steering wheel buttons (if available). You can enter the Blueway 500 main menu by selecting disc 6 where you can toggles between different sources or browse and select different music.

Browsing is possible on non-iDrive cars, by the 'next' or 'previous' track buttons. In order to select a menu item, press and hold the 'fast forward' button (about 3 seconds).

Press and hold the 'fast rewind' if you want to get back to the previous menu. On iDrive based system turn the iDrive controller left or right for browsing. Press the iDrive to select a song or enter a menu, slide the controller UP and push the iDrive controller to get back to the previous menu.

On the main menu of the device, you can find the next options:
Source: In this menu you can select which one of the connected phones you would like to use for music streaming.
Music: Here you can browse the content of your phone through the Bluetooth connection.
Paired phones: In this menu, you can see all paired devices and you can find an option to delete the pairing history of the device.

If you select the name of a connected device, you can disconnect that from the Blueway 500. If you would like to connect a phone which was out of range or its Bluetooth was turned off at the initial scanning, you can connect it by selecting the name of that device in this menu. The primary phone is marked with "1", the secondary phone is marked with "2" before the name of the device.

Settings: In this menu, you can find the following options:
- **Volume**: You can change the output volume level and can modify the sensitivity of the microphone
- **Language**: You can change the language of the menu of the Blueway 500. Supported languages are: EN, DE, FR, IT, NL, ES, PT, TR, HU, PL, CZ, SK, RO
- **Phonebook**: Allows you to turn the phonebook synchronization of your primary phone ON or OFF
- **Mobile phone ringtone**: Here you can select between the own ringtone of the phone and the three built-in ringtones of the Blueway 500. (Please note: original ringtone support depends on the connected device)
- **About:** In this menu you can check the current firmware version of the Blueway 500

When you start the car, the Blueway 500 will start to play the music content of the primary phone automatically. After connecting the primary phone, in the next 30 seconds, it will switch to the secondary phone automatically if any sound will be sent from that phone through Bluetooth.

Selecting the music source:
You can select the music source for playback in the source menu. In this menu, you see the name of the two connected bluetooth devices.
Browsing in the music menu:
You can use the music menu to list the music content of the device which is selected in the source menu. The structure and language of this menu is phone dependent. In case of Apple iPhone, the factory music player need to run in the background of the phone in order to brows the music content. If the Application is not active you can get only limited controls through the Blueway 500.
Using the phone menu:
You can enter the Phone menu of the Blueway 500 by choosing the iDrive's communication menu. After you enter here, you should see the next options:
- **Phonebook**: here you can see the phonebook of the primary phone. You can select a phone number from your address book to initiate a call. Contacts are shown in alphabetical order, grouped by the first letter of the surname. Synchronization is possible up to 1000-1500 phone numbers (head unit dependent)
- **Received / missed / dialed call**: provide access to the respective call logs
- **Disconnect**: Disconnect the paired phone

Receiving and making phone calls: When receiving an incoming call, the caller number or the corresponding contact name in your phonebook is displayed from both connected phones. You can answer the call by pressing the phone button on the steering wheel or by selecting the accept option on the screen with your iDrive controller. The music or radio gets muted and the audio of the call is directed to the speakers.

You can **reject an incoming call** by selecting the reject option with your iDrive controller.
To start a **call from the primary phone**, please select the phone number or contact from the phonebook or call logs in the phone menu and select the call option.
To make a **call from the secondary phone**, you need to use the original controls of the phone.
You can **hang up an ongoing call** in both case by selecting the hang up option or by pressing the phone button on the steering wheel.

Please note: The system can control only one active hands free call at a time (because of the limitation of the standard head units). To avoid malfunctions, if there is an ongoing call on one of the connected devices the Blueway 500 will not handle phone calls from the other connected phone. This means in case of two calls at the same time, that the second one needs to be handled by the original controls of the phone.

6. USB port functions

Non-charging version: The USB port can only be used for updating the firmware of the Blueway.
Smart charging version: It allows you to charge your phone in an adaptive (smart) way. It communicates with the phone to define the optimal charging value. This communication process takes about a minute, and the charging starts subsequently.

7. Disclaimer

If your car's electrical system begins to behave in an unpredictable way please immediately diconnect the Blueway 500 device physically and have it checked by your installer or an automotive electronics professional. Dension and its authorized distributors and retailers are not liable for any incidental consequential or indirect damages or loss 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 device complies with applicable traffic laws. Dension does not assume liability for any events resulting from the illegal or irresponsible use of handheld devices during the driving. Dension reserves the right to modify its products or specifications without prior notice.

8. Warranty

Dension devices carry a one-year limited warranty that protects you from defects in material and workmanship of products sold by Dension or its authorized 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.

9. Update and support

If you need further assistance in using your Blueway 500, please contact your local supplier or visit www.dension.com. Please check the support section for the latest firmware version and product documentation of your device.