“BLUE&ME”

BLUE&ME based on Windows Mobile is a personal infotainment system which allows the use of applications for communication and entertainment, specially designed for use in vehicles.
The "BLUE&ME" system is supplied in the "basic" version, with the hands-free function for "Bluetooth" mobile phones with voice commands, SMS voice player and media player with USB port
It can be matched with the standard car radio and the "RadioNav" navigator.

See descriptions 5570 ACCESSORIES
See descriptions 5580M ON-BOARD NAVIGATOR

"BLUE&ME" HANDS-FREE SYSTEM

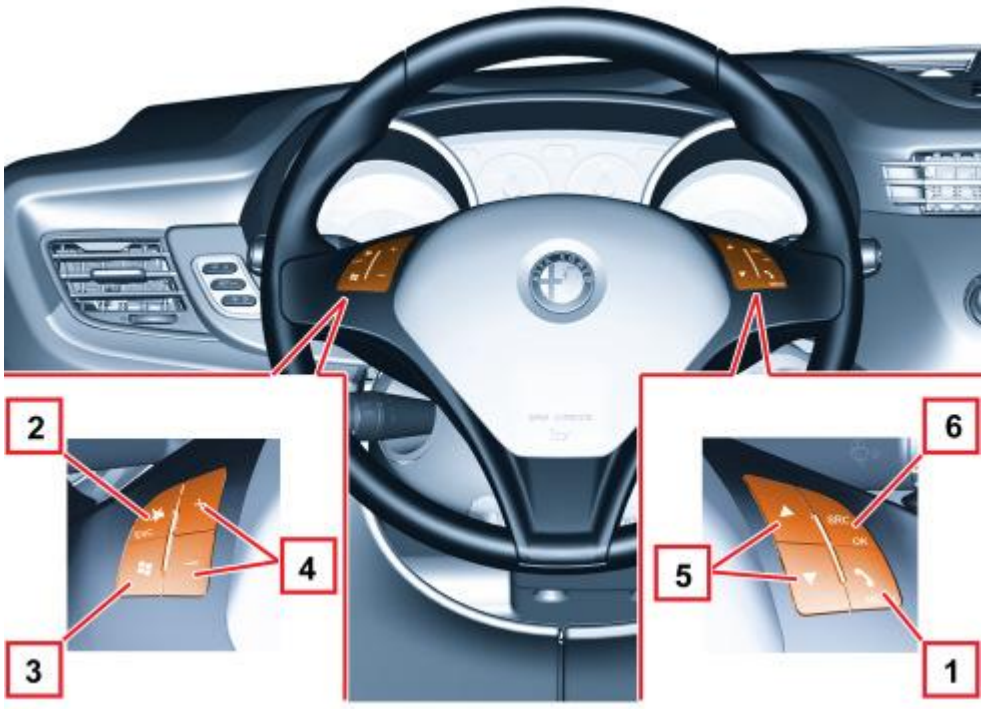
The BLUE&ME system includes the hands-free function for Bluetooth mobile phones with voice commands, SMS voice player and media player with USB port.
Thanks to its complete integration with the voice commands, the controls on the steering wheel and the on-board display information, the Blue&Me system allows customers who have a mobile phone with Bluetooth to use it even if it is in their jacket pocket or handbag without ever having to take their hands off the steering wheel.
To use the voice commands, there is no need for a voice learning stage by the voice recognition system. The system is capable of recognising the voice commands given, irrespective of gender, by the tone of voice and intonation of the person giving the instructions.
It is possible to listen to music stored on a USB device, selecting the tracks and play modes using either the controls on the steering wheel or voice commands.
The C1 v2 version control unit includes the following modules:
- Bluetooth receiver
- integrated voice recognition module
- integrated "Text to Speech" module
- USB interface
- SMS voice reader.

The alphanumerical display used for text messages is the one for the control panel.

See descriptions 5560 INSTRUMENTS

An example of a screen for the telephone input function is shown below:

The control unit is then connected to the controls on the steering wheel (in addition to the radio control buttons, there are 2 specific buttons for this function).



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List of controls on the steering wheel functions

Button	Short press (less than 1 second)	Long press (more than 1 second)
1	- Activation of Blue&Me Main Menu - Confirmation of menu option selected - Accept incoming phone call - Change from one telephone conversation to another in second call mode (call notification) - Selection of message displayed	- Refuse incoming phone call - Ending of phone call in progress
2	- Deactivation of voice recognition - Interruption of voice message - Interruption of SMS message reading - Exit from Blue&Me Main Menu - Exit from a sub menu and return to the previous menu option - Exit from the current selection with storing - Deactivation/reactivation of the microphone during a phone conversation - Resetting the volume of the call tone for the incoming phone call - Activation/Deactivation of multimedia player pause function	
3	- Activation of the voice recognition - Interruption of the voice message in order to give a new voice command	Repetition of the last voice message given by the system
4	- Adjustment of audio volume for Blue&Me functions: hands-free, SMS reader, multimedia player, voice announcements	
5	- Scrolling through Blue&Me menu items - Selection of multimedia player tracks - Scrolling through SMS messages in the list	
6	- Confirmation of menu option selected during manual interaction - Transfer of the telephone conversation in progress from the hands-free system to the mobile phone and vice versa - Audio source selection (Radio, CD, CD Changer, Multimedia Player) - Selection of SMS message displayed	

For many functions, the controls on the steering wheel 6 and 1 are interchangeable and the preferred button can be selected.
For both operating modes for the controls on the steering wheel (short or long press), the function is activated when the button is released.

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Connection with bluetooth telephone

The system is connected to a mobile phone with a Bluetooth interface and hands-free profile.
The first connection between the mobile and the device (pairing procedure) is password-controlled; the user connects by keying the password into their mobile in the Bluetooth connection menu.
It is possible to memorise up to 5 users who are connected automatically at subsequent keys on without manual intervention on behalf of the user.
In each case, only one mobile phone can be connected to the control unit via Bluetooth.
The operation of the control unit is linked to the availability of the user's mobile phone for Bluetooth hands-free profiles, in particular:
- the Bluetooth system comes on independently at the Key on and starts the search for Bluetooth (mobile) devices to connect with immediately.
- the equipment switches off independently at the Key off releasing any Bluetooth connection that may be active: there is a delay of 30 seconds (provisional figure) to suppress accidental switching off of the engine (in traffic, at traffic lights, etc.).
- if a phonecall is in progress, the conversation is kept activated (except for the display in the control panel) even after the car is switched off; the control unit and the radio finally switch off at the end of the conversation.

List of compatible mobile phones

The current hands-free system with Bluetooth technology is compatible with all mobile phones that support Bluetooth 1.1 and a 1.0 hands-free profile (refer to the Bluetooth connection specifications in the mobile phone user manual).
As a result of the different possible software versions available on the market for different models of mobile phone, some additional functions (e.g.: second call management, call transfer from hands-free system to mobile phone and vice versa, etc.) may not correspond exactly to the description in the mobile phone user manual.
In any case, the possibility of having a hands-free conversation is not compromised.

The ALFA ROMEO official website (www.alfaromeo.com), TECH section, contains an up to date list of mobile phones that are compatible with the Blue&Me system.
We wish to point out that because of the different possible software versions available on the market for the different models of mobile phones,

some functions may not correspond exactly to the description.

Operating procedures

Incoming call:

- when a signal of an incoming call reaches the phone: the radio is turned to mute, the ringing of the mobile phone is produced through the speakers and the number/name of the caller (if available) is shown on the instrument panel display
- at this point the user can accept or reject the call
- during the conversation the user listens to the other person on the radio audio system and speaks via the microphone
- when the conversation is over the radio returns to its status prior to the call (volume, mode, etc.)

When a conversation is in progress, the user can carry out the following operations:
- alter the volume of the conversation using the radio Vol + and Vol - buttons. The level set can be reset at the end of the conversation: the next one will be at the radio default volume.
- move the conversation in progress from the Bluetooth control unit to the mobile phone on (and vice versa) to speak in private (local privacy)
- momentarily interrupt the conversation with the remote user (keeping them on hold) to talk privately with any passenger in the vehicle without being overheard by the user on the line (remote privacy)
- answer another incoming call and switch from one conversation to the other
- refuse another incoming call.

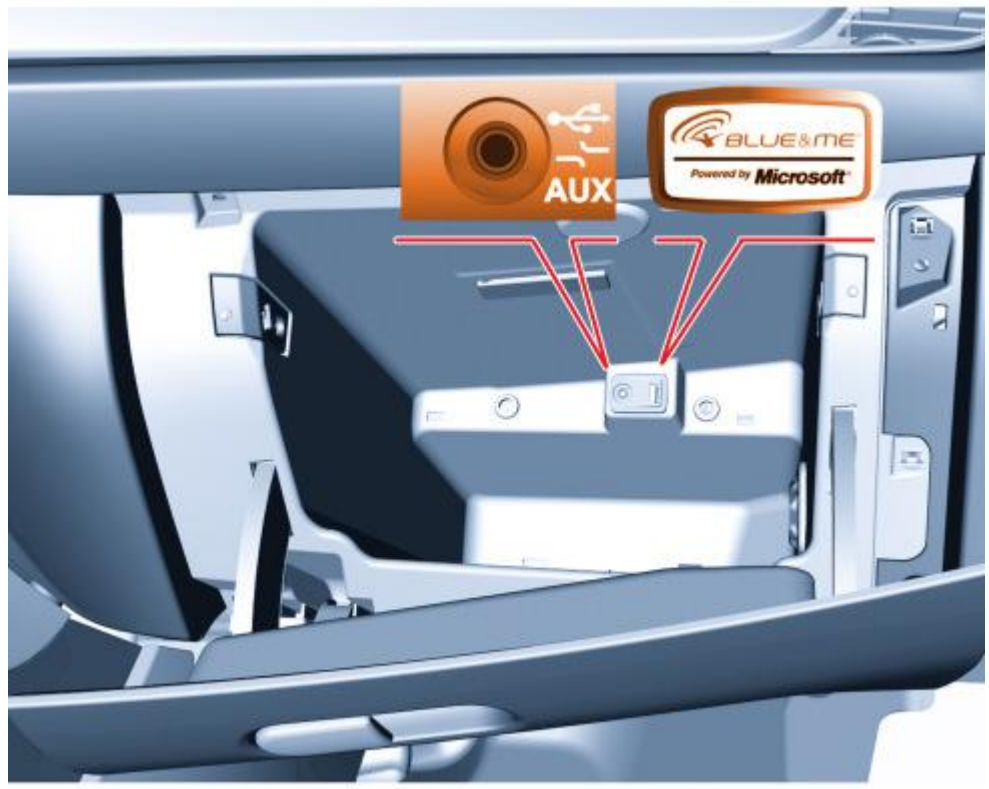
The last 2 functions in the list are linked to the presence on the GSM network, the user profile and the mobile phone of the necessary specifications and authorizations to manage 2 calls simultaneously.

Outgoing call

The user can make a call in 4 ways
- using their own mobile phone keypad
- using the list of recent calls
- using their own mobile phone list
- dictating the number they wish to call.

Media player

The Blue&Me multimedia player makes it possible to play digital audio stored on a USB device via your vehicle sound system simply by connecting it to the USB port on the vehicle in the glove compartment.



The Multimedia player allows the following operations to be performed:

- reproduction of digital audio: it is possible to play all digital audio files (.mp3 - .wma - .wav) or a personalized playlist (in .m3u or .wpl format);
- selection of audio depending on the category: it is possible to play all digital audio that belongs to a certain category, for example an album, an artist or a musical genre;
- use the reproduction functions: it is possible, whilst playing tracks, to use certain functions such as Play, Stop, Next track, Previous track, Random and Continuous play.

The multimedia player does not support audio files compressed with other formats (e.g. .aac files downloaded from itunes for ipods) and DRM protected audio files (Digital Right Management). If there are unsupported audio files on the USB device they will be ignored.

The multimedia player supports the reproduction of digital audio files in the following formats:

Extension	Audio extension
.wma	It supports WMA standard version 1 and WMA version 2.(WMA2 = 353, WMA1 = 352). It supports WMA Voice audio formats

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.mp3	MPEG–1 Layer 3 files (sampling frequencies 32 kHz, 44.1 kHz and 48 kHz) and MPEG–2 layer 3 (16 kHz, 22.05 kHz and 24 kHz). The following bit rates are supported: 16 kbps, 32 kbps, 64 kbps, 96 kbps, 128 kbps, and 192 kbps. It also supports the Fraunhofer MP2.5 extension (sampling frequencies 8 kHz, 11.025 kHz and 12 kHz).
.wav	Audio in digital format, without data compression.

Eco:drive

The Blue&Me system also allows the use of the "**eco:Drive**", a state-of-the-art system that gives drivers a better perception of their own driving style and how that influences consumption and emission of pollutants.
The software application can be downloaded free of charge to any personal computer from the website www.fiat.com/ecodrive.
In particular, "**eco:Drive**" collects in the Blue&Me control unit information on how to handle the vehicle and the driving features of the driver.
Through the Blue&Me USB port, all data are sent from a standard USB key to a computer for subsequent viewing.
The user can then take a careful look at the consumption and emissions for each journey and receive advice on how to drive to achieve lower costs and lower environmental impact.

Once the **eco:Drive** application is installed in the car, the "**eco:Drive**" item is added to the main menu and, if necessary, special messages are sent to the user.

Sms voice player

If the telephone supports it, the system includes the SMS message voice player function: it involves an application that allows the customer to listen to the automatic reading of the incoming message on their mobile phone via the vehicle audio system.

The Blue&Me SMS message reader allows the customer to:

- be informed, by means of a warning message in the instrument panel multifunction display, of the arrival of a new SMS message on their mobile phone, giving the name/number of the sender; Blue&Me can also read the message
- manage the SMS messages received list on a mobile phone connected to the Blue&Me system
- reread SMS messages already received and memorised.
- make a voice call, using the controls on the steering wheel or voice commands, to the sender of the SMS message received.
- delete individual SMS messages or the entire list of SMS messages received using the controls on the steering wheel or voice commands.

The Blue&Me system is also capable of recognising and reading any abbreviations (for example, "TVB" will be read as "Ti voglio bene" - I love you) and interpreting the most frequently used symbols (e.g. :-) will be read as "Smile") in text messages.

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System components

The main components of the C1 - v2 version system with Bluetooth mobile phone management are:

- Bluetooth electronic control unit
- microphone
- steering wheel controls
- USB port for connection of Media Player and software update

Control unit connections

The control unit, behind the glove compartment, is connected through the B-CAN to the radio node and the Body Computer which, in turn, is connected to the controls on the steering wheel.
Each piece of equipment responds to its own commands depending on the button activated and the operating mode activated at the time (in this case the Bluetooth control unit prevents the radio from carrying out commands from the CAN when the hands-free function is activated).

Bluetooth control unit pin out

CONNECTOR A

PIN	SIGNAL
3	D+ signal for USB
4	reference earth for USB
5	left AUX signal
8	-+ microphone
14	B-CAN A
15	earth
16	direct power supply
19	D- signal for USB
20	5V power supply for USB
21	AUX earth
22	right AUX signal
24	- microphone shielded earth
30	B-CAN B
31	- shielding for USB
32	ignition-operated power supply

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Service operations for the system

Fault diagnosis

The control unit is connected via the B-CAN to the radio node and the Body Computer; therefore the diagnostic activities are carried out, in the same way as for all the other CAN nodes, via the special diagnostic socket and the Examiner equipment.

For other types of system operations, a special operating system must be temporarily installed on Examiner, following the instructions given below and a USB "pen" must be inserted in the special port located in the glove compartment.
ALTERNATIVELY, THESE OPERATIONS CAN BE CARRIED OUT USING A PERSONAL COMPUTER, USING WINDOWS XP or WINDOWS 2000.

The following operations can be carried out using this method:
- language change for voice messages;
- software update.

USB drive: The USB drive to be used should have the following specifications: USB standard version 1.0, 1.1 or 2.0 with a minimum memory of 256 MB, compatible with WINDOWS XP or WINDOWS 2000.

Whilst this drive is being used for the above mentioned operations, it will be formatted and therefore all data stored on it previously will be lost!

Languages

The following languages are available, both for the text strings displayed (menu) and for voice recognition and text to speech messages:

- French
- English
- German
- Italian
- European Spanish
- Dutch
- Polish
- European Portuguese
- Brazilian Portuguese

As far as the messages shown on the display are concerned, the language selected is the one set for the control panel
See descriptions 5560 INSTRUMENTS
As far as the voice recognition and text to speech messages are concerned, the language should be set separately using the Examiner diagnostic equipment, by inserting a USB drive in the special socket.
Proceed following the instructions below.

Software update

Similarly, any control unit software updates should be entered using the Examiner diagnostic equipment with a USB drive to be inserted in the special socket.
Proceed following the instructions below

Never disconnect the battery terminals during the software updating or language updating procedure.

Control unit replacement

The battery terminals must be disconnected before removing the old control unit.
Order a new control unit from the Parts Dept. A pristine component will be sent: once fitted, the initial default data must be transferred to it by carrying out the PROXI ALIGNMENT procedure using the Examiner.
Once a new control unit is installed it is necessary to:
- update the software;
- check and, if necessary, set the voice message language correctly;
- carry out the pairing operation for the telephones to be connected.

Op. 5570T49 BLUETOOTH ELECTRONIC CONTROL UNIT - R.R.

Operations using the examiner

To carry out the language change operations for voice messages and software updating, a special operating system must be temporarily installed on the Examiner, using the special "WINDOWS MOBILE FOR AUTOMOTIVE EXAMINER CD" CD-ROM supplied together with the traditional Examiner software updates.
In addition, as already pointed out, a USB drive is required for transferring the data to the system control unit.
The drive should have the following specifications: USB standard version 1.0, 1.1 or 2.0 with a minimum memory of 256 MB, compatible with WINDOWS XP or WINDOWS 2000.

Whilst this drive is being used for the above mentioned operations, it will be formatted and therefore all data stored on it previously will be lost!

Never disconnect the vehicle battery terminals during any of the operations indicated

Always follow the sequence described below (for all of the operations):
- switch on the Examiner following the traditional operating methods
- insert the "WINDOWS MOBILE FOR AUTOMOTIVE EXAMINER CD"
- switch off the Examiner
- insert the USB drive in the special port at the back of the Examiner

Warning: the drive is NOT recognised if it is inserted with the Examiner on.

- restart the Examiner.

At this point the Examiner will work temporarily with the special operating system and it is capable of transferring the data necessary for the following operations to the USB drive:
- individual language setting
- multi lingual setting
- software update

Only one of these three operations can be carried out at a time; in order to carry out two operations on the same system (e.g. language change and software update) the instructions illustrated previously must be repeated twice separately.

- follow the instructions until the drive preparation operations are completed (the Examiner will advise you)
- remove the USB drive
- extract the WINDOWS CD
- switch off the Examiner

ALTERNATIVELY, THESE OPERATIONS CAN BE CARRIED OUT USING A PERSONAL COMPUTER USING WINDOWS XP

- take the USB drive to the vehicle
- with the ignition OFF, insert the USB drive in the special USB port in the control unit or in the external one, located at the base of the centre console next to the current socket/cigar lighter.
- turn the ignition key to ON

At this point the control unit will carry out the operation requested (language change or software update):
- at the end a display message in the control panel will advise that the operation is over
- check that the operation has been successful (e.g. check the voice message language by giving an instruction).

Never disconnect the vehicle battery terminals during any of the operations indicated

Warnings on the use of the system software

This system contains software under licence from **FIAT Group Automobiles** in accordance with a licensing contract.
Any removal, reproduction, reverse engineering, or other unauthorised use of the software for this system in violation of the license is strictly prohibited.
Tampering with the Blue&Me device or installing unauthorised software can lead to the cancellation of the warranty and adversely affect the security of the information stored.
Read all the warnings relating to the LICENCE CONTRACT on the pages at the end of the BLUE&ME appendix to the handbook very carefully.
* Microsoft is a registered make of the Microsoft Corporation.
* Sony is a registered make of the Sony Corporation.
* Ericsson is a registered make of Telefonaktiebolaget LM Ericsson.
* Motorola is a registered make of Motorola, Inc.
* Nokia is a registered make of the Nokia Corporation
* Siemens is a registered make of Siemens AG.
* Orange is a registered make of Orange Personal Communications Services Limited
* Audiovox is a registered make of the Audiovox Corporation.
* Bluetooth is a registered make of Bluetooth SIG, Inc.

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