CONNECTION INSTRUCTION AND CONFIGURATION

Bluetooth Next II

(instruction available also at www.ac.com.pl)

ver. 1.2 2025-09-25

AC S.A.
15-181 Białystok, ul. 42 Pułku Piechoty 50
tel. +48 85 743 81 00
www.ac.com.pl I biuro@ac.com.pl

Contents

1. Technical specification ... 3
2. Application ... 3
3. Operation principle ... 3
4. Establishing Bluetooth wireless connection ... 3
5. Examples of Bluetooth application configuration in PCs ... 4
5.1. BlueSoleil software by IVT ... 4
5.2. Microsoft Windows XP SP2/Vista integrated software ... 8
5.3. Broadcom licensed software ... 11
5.4. Software integrated with Microsoft Windows 7 ... 16
5.5. Software integrated with Microsoft Windows 8 ... 20
5.6. Software integrated with Microsoft Windows 10. ... 23
6. Authorization procedure ... 25
7. Passwords ... 25
8. Operating modes ... 25
9. Troubleshooting ... 26

AC S.A. - All rights reserved. It is forbidden to copy, distribute, disclose and/or use in any other way all or any part of information presented herein, particularly photographs, drawings, illustrations, trademarks, etc., under pain of civil and criminal liability.

1. Technical specification

Supply voltage	12V ± 25%
Working temperature	-40ºC ÷ +85ºC
Protection class	IP 40

2. Application

The interface allows for making wireless connection between gas injection control and a PC equipped with (internal or external) Bluetooth adapter.

3. Operation principle

In order to enable connection and exchange of data between the two devices via the wireless Bluetooth technology, both devices must support the same Bluetooth profile. Wireless connection via the interface between a gas injection controller and a PC is serviced by the serial port profile*. Correctly configured software, which serves the Bluetooth adapter in a PC, provides access to a virtual serial port, allowing wireless transmission between the devices.

*The interface is based on a qualified Bluetooth device which number is in the table:

MANUFACTURE	*Declaration ID*
Bluetooth NEXT #2	**B021281**
Bluetooth NEXT #2.1	**D039156**

4. Establishing Bluetooth wireless connection

1. Make sure that the PC Bluetooth device is connected and works properly. Connect **Bluetooth Interface NEXT II** to the cable connector and turn the ignition key. Make sure that the gas injection controller is switched on and powered.
2. Find the device „**Bluetooth Interface NEXT II**" with the use of the Bluetooth software in your PC.
3. Pair the devices using the passkey (see the table – chapter 7).
4. Find the serial port service provided by **Bluetooth Interface NEXT II.**
5. Install the virtual serial port (COM) and/or assign the virtual serial port to **Bluetooth Interface NEXT II.**
6. Specify the number of the serial port. Establish connection with gas injection controller via the virtual serial port.

The configuration method of Bluetooth wireless connection between a PC application and a gas injection controller may vary, depending on the PC operating system, the Bluetooth device manufacturer and the applied software.

AC S.A. - All rights reserved. It is forbidden to copy, distribute, disclose and/or use in any other way all or any part of information presented herein, particularly photographs, drawings, illustrations, trademarks, etc., under pain of civil and criminal liability.

5. Examples of Bluetooth application configuration in PCs

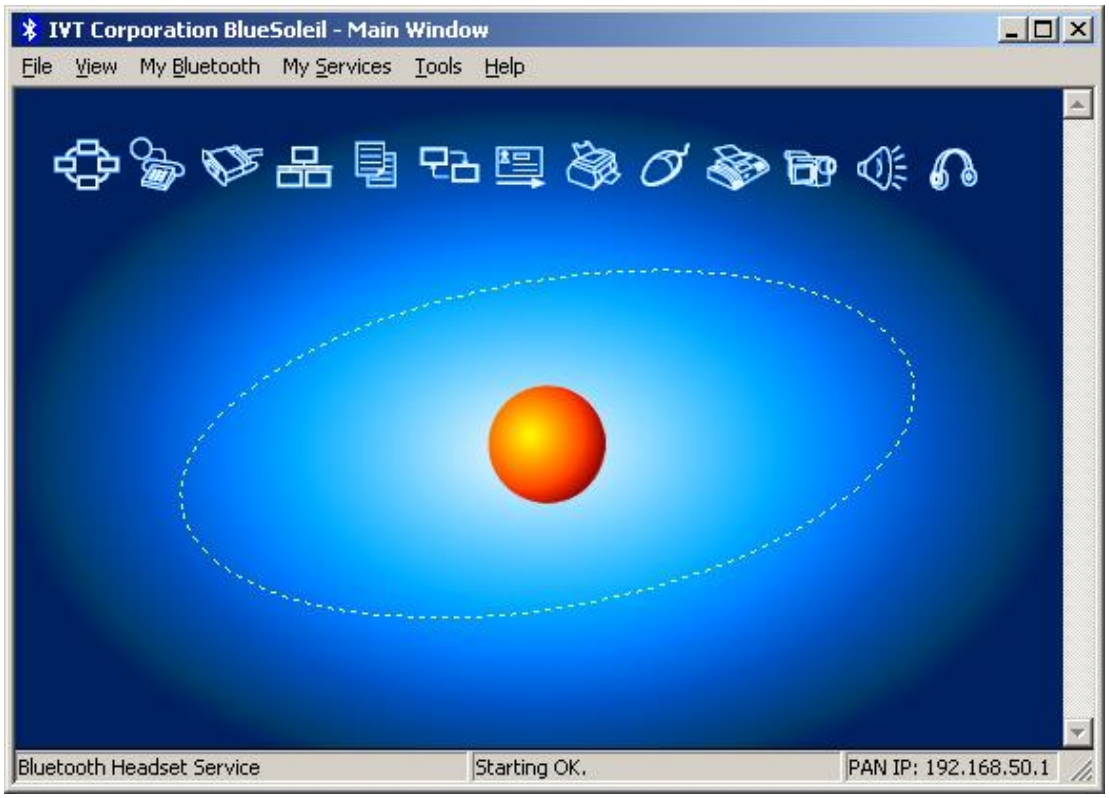
The manual includes examples of configuration methods for wireless connection of a gas injection controller with a PC via **Bluetooth Interface NEXT II** for the three most popular types of software, servicing Bluetooth technology in PCs.

- BlueSoleil software by IVT
- Mircosoft Windows integrated software (available in Windows XP SP2 and Windows Vista)
- BroadCom licensed software
- Microsoft Windows 7 integrated softwere
- Microsoft Windows 8 integrated softwere
- Microsoft Windows 10 integrated softwere

Pictures for the examples may differ, depending on the software version and a PC operating system.

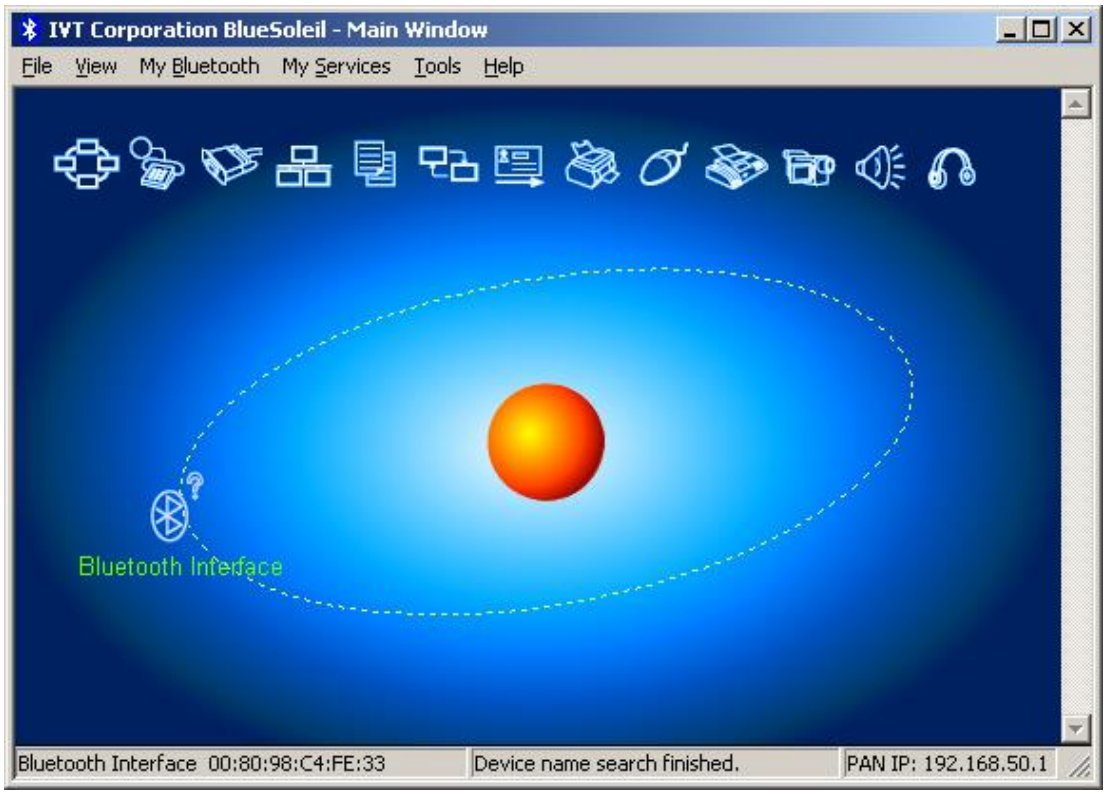
5.1. BlueSoleil software by IVT

1. Start a device searching application by clicking the sphere in the main screen of the application. An alternative method via the menu My Bluetooth → Bluetooth Device Discovery.

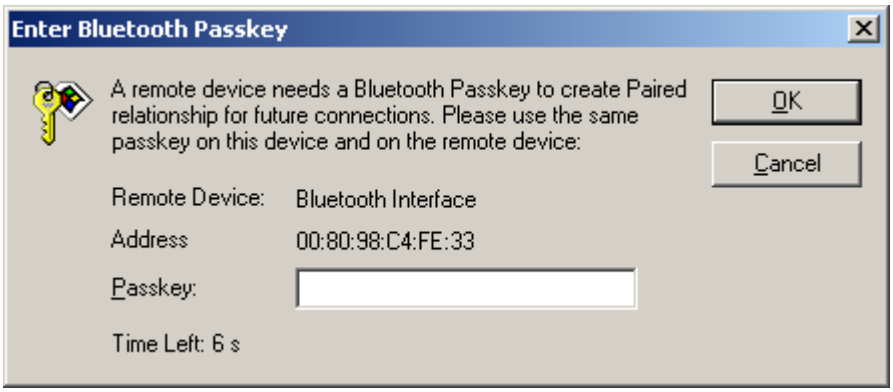


AC S.A. - All rights reserved. It is forbidden to copy, distribute, disclose and/or use in any other way all or any part of information presented herein, particularly photographs, drawings, illustrations, trademarks, etc., under pain of civil and criminal liability.

2. After a few seconds. an icon of the selected Bluetooth interface device will appear; click it twice to find the serial port service. An alternative method via the menu *My Bluetooth* → *Bluetooth Device Discovery*.

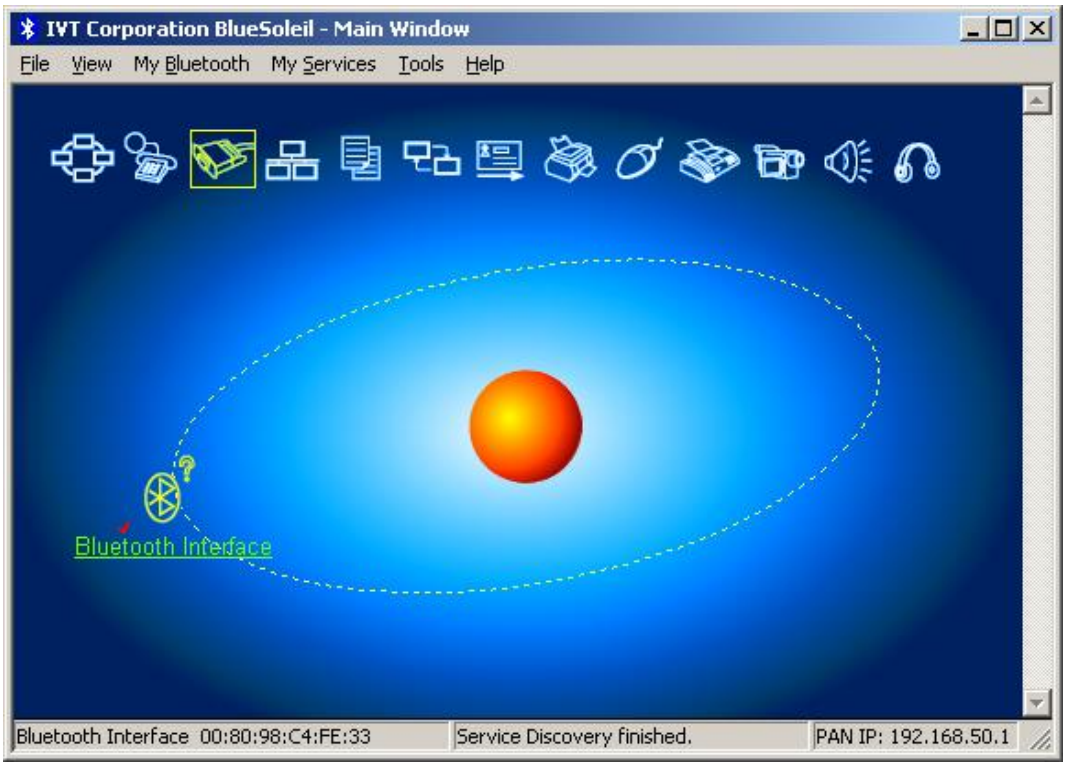


3. If the device is coordinated for the first time, a message asking for the **passkey** will be displayed. Enter passkey (see the table – chapter 7) and click OK.

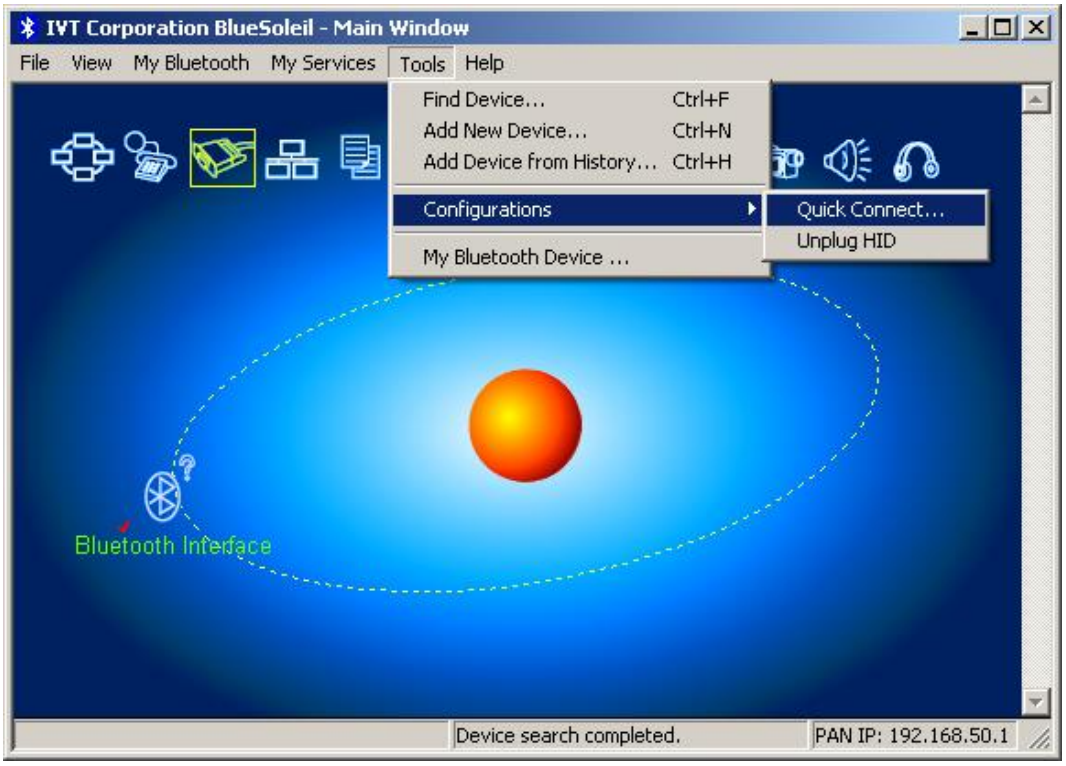


AC S.A. - All rights reserved. It is forbidden to copy, distribute, disclose and/or use in any other way all or any part of information presented herein, particularly photographs, drawings, illustrations, trademarks, etc., under pain of civil and criminal liability.

4. After entering the correct passkey, a connector symbol will be highlighted in the upper part of the application screen, which signals that Bluetooth Interface Next II services the serial port profile.

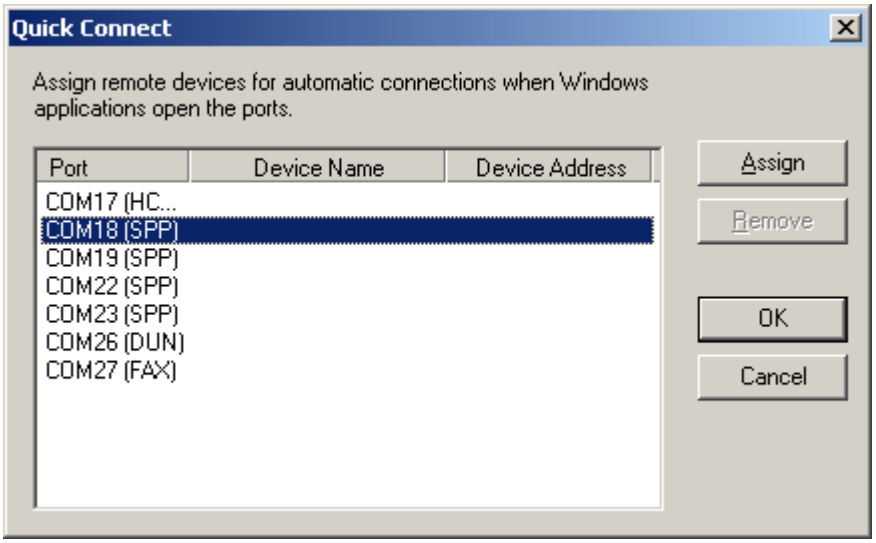


5. Next, select the following option from the menu ***Tools*** → ***Configurations*** → ***Quick Connect***.

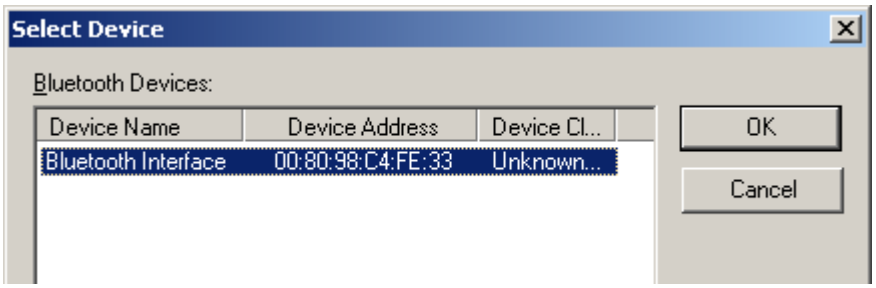


AC S.A. - All rights reserved. It is forbidden to copy, distribute, disclose and/or use in any other way all or any part of information presented herein, particularly photographs, drawings, illustrations, trademarks, etc., under pain of civil and criminal liability.

6. The application will display a screen with a list of virtual COM ports. Select the one marked SPP and click „Assign”.



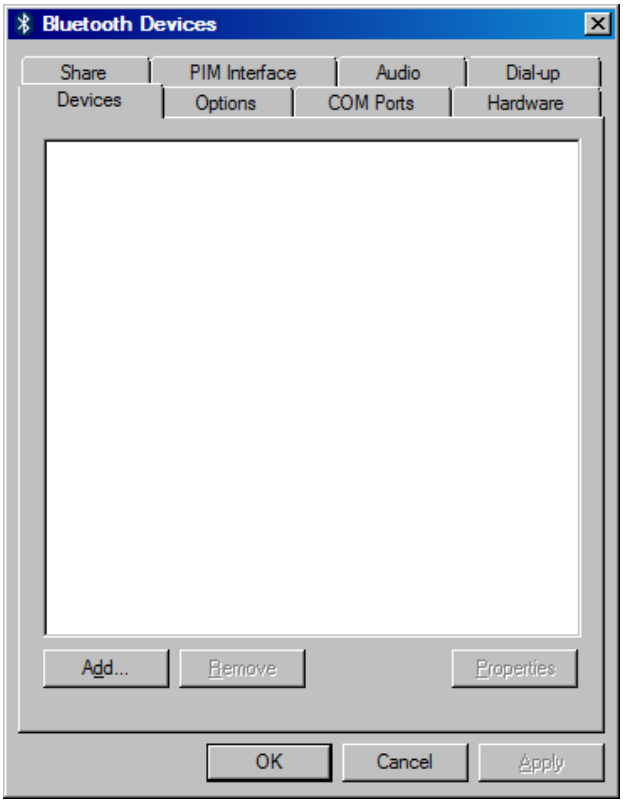
7. A list of Bluetooth devices will be displayed; select the **„Bluetooth Interface NEXT II**” and click „OK”. From this moment, wireless communication with a gas injection controller via the previously selected virtual COM port is possible.



AC S.A. - All rights reserved. It is forbidden to copy, distribute, disclose and/or use in any other way all or any part of information presented herein, particularly photographs, drawings, illustrations, trademarks, etc., under pain of civil and criminal liability.

5.2. Microsoft Windows XP SP2/Vista integrated software

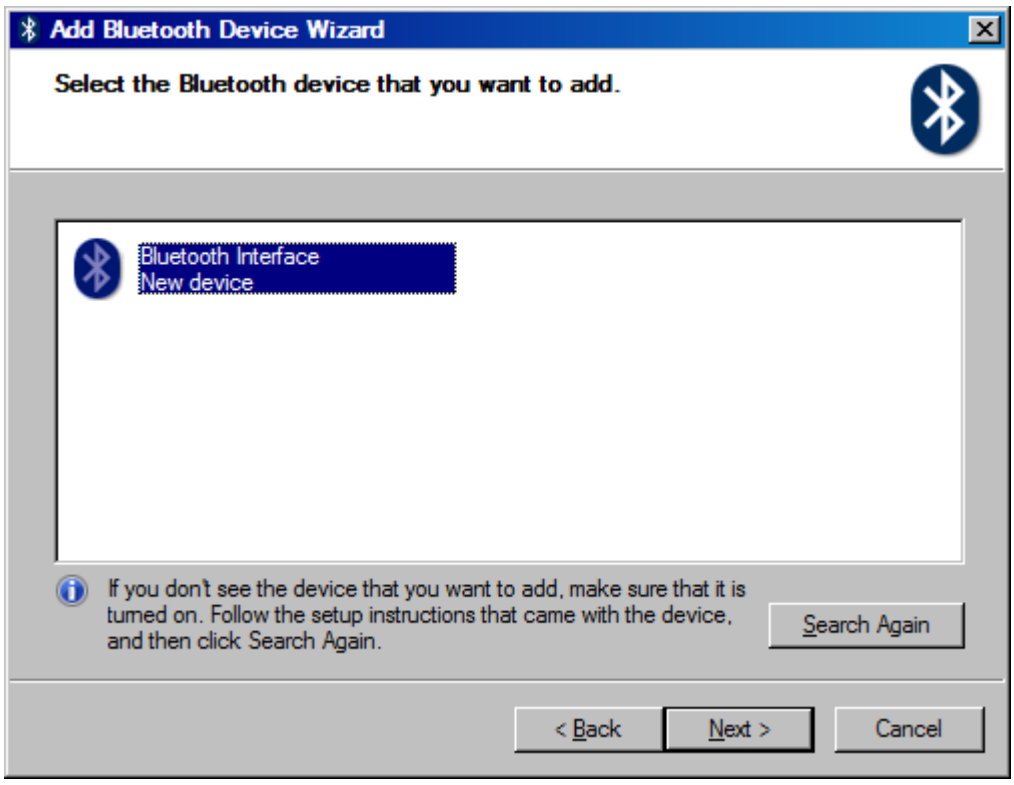
1. Click „Add” and start to search the Bluetooth Interface.



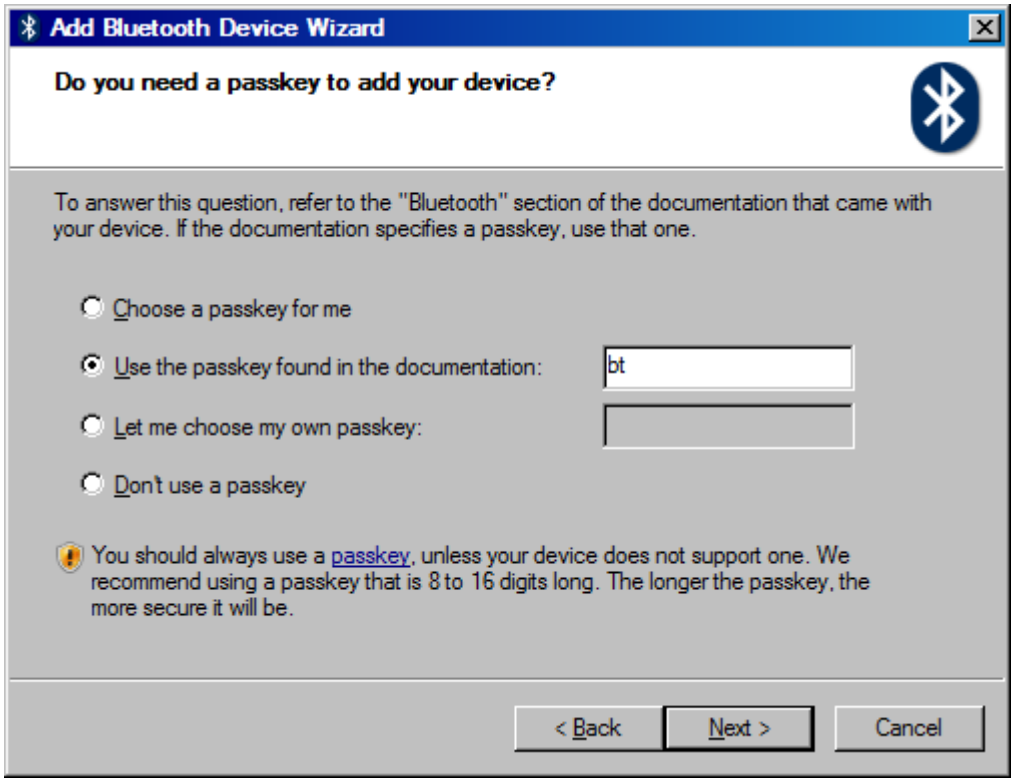
2. In the displayed dialogue box mark the option **„My device is setup and ready to be found”.** Click **„Next”.**

AC S.A. - All rights reserved. It is forbidden to copy, distribute, disclose and/or use in any other way all or any part of information presented herein, particularly photographs, drawings, illustrations, trademarks, etc., under pain of civil and criminal liability.

3. Once Bluetooth interface Next II is found, an icon named „**Bluetooth Interface Next II**" will be displayed in a new screen. Click the device to highlight it and click **„Next".**



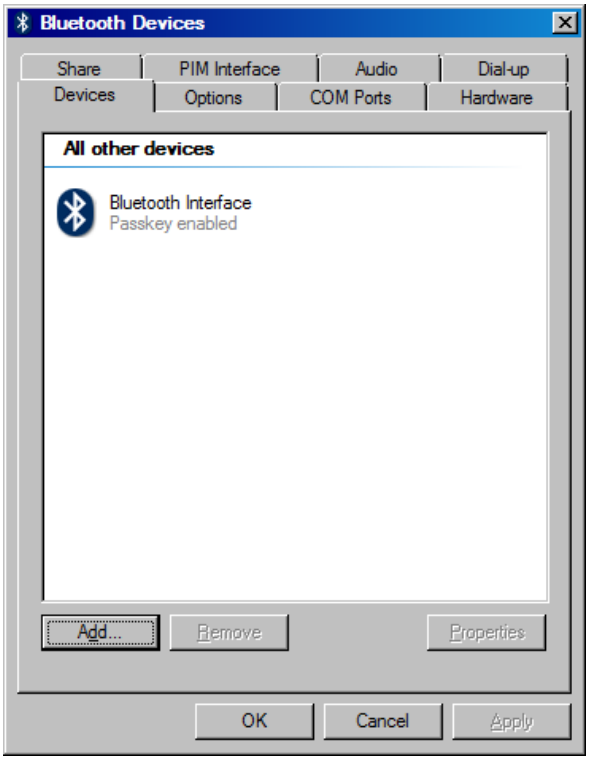
4. In the next dialogue box select the option **„Use the passkey found in the documentation"** and enter passkey (see the table – chapter 7) in the field. Click **„Next".**



AC S.A. - All rights reserved. It is forbidden to copy, distribute, disclose and/or use in any other way all or any part of information presented herein, particularly photographs, drawings, illustrations, trademarks, etc., under pain of civil and criminal liability.

5. Information on configuration of virtual COM ports will be displayed. Click „Finish”.

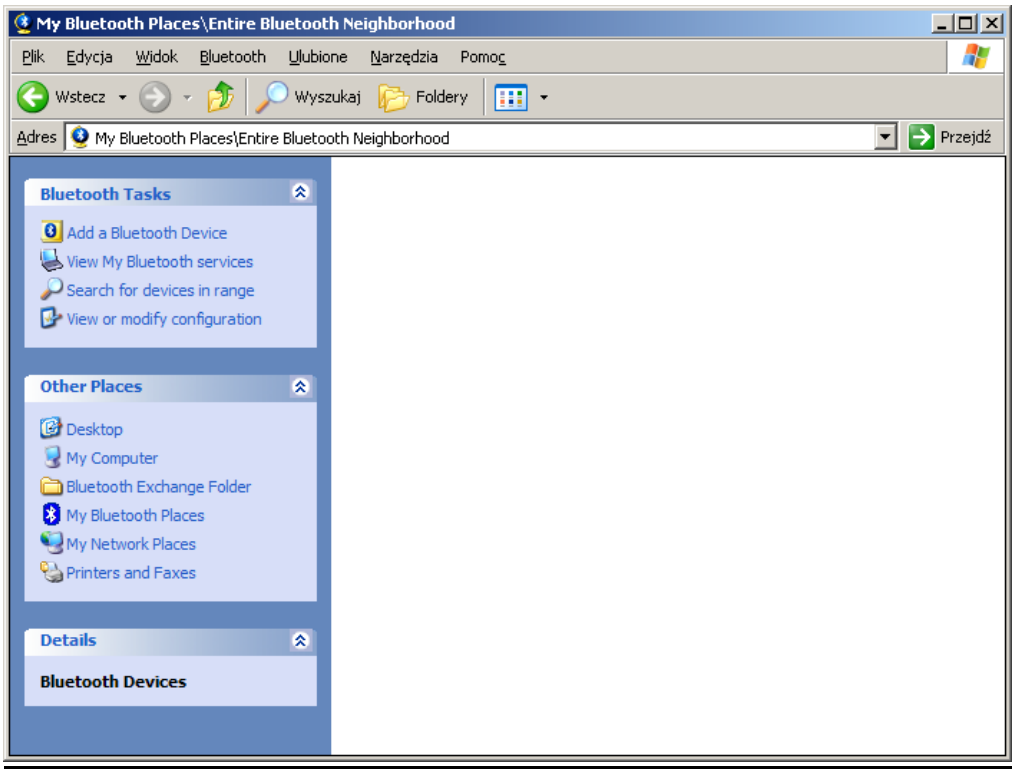
6. The Bluetooth interface device is configured. From this moment, wireless communication with a gas injection controller via virtual COM port, marked as „Outgoing Port COM” (as in the picture in the previous step) is possible.



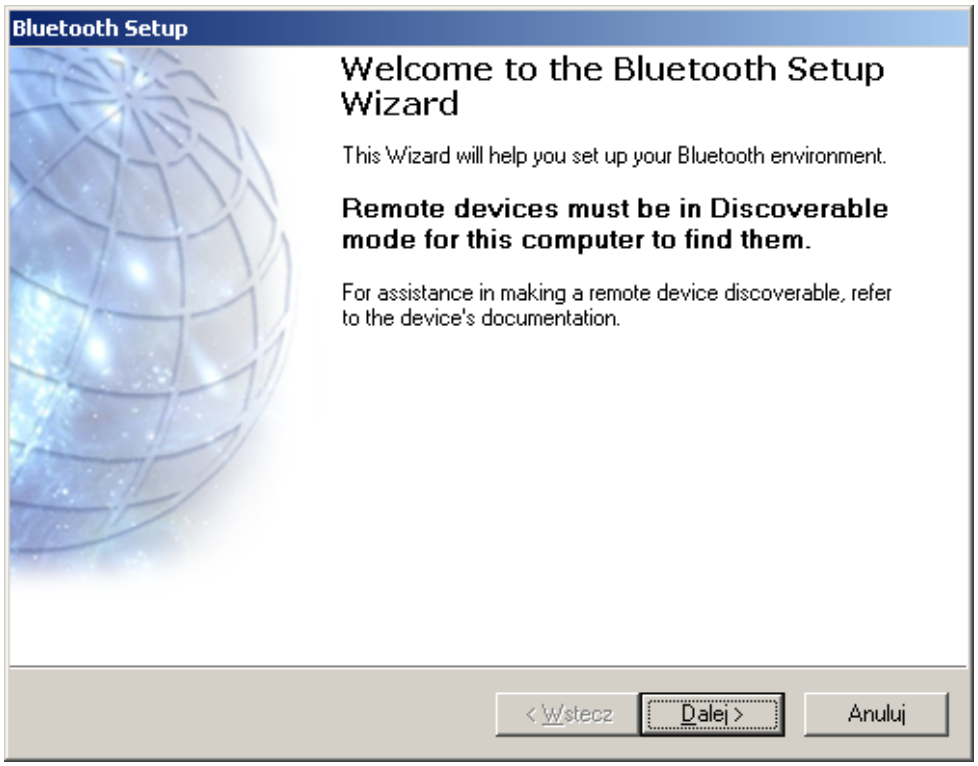
AC S.A. - All rights reserved. It is forbidden to copy, distribute, disclose and/or use in any other way all or any part of information presented herein, particularly photographs, drawings, illustrations, trademarks, etc., under pain of civil and criminal liability.

5.3. Broadcom licensed software

1. In the window „My Bluetooth places” click the option „Add a Bluetooth device” to activate the Bluetooth installation creator.

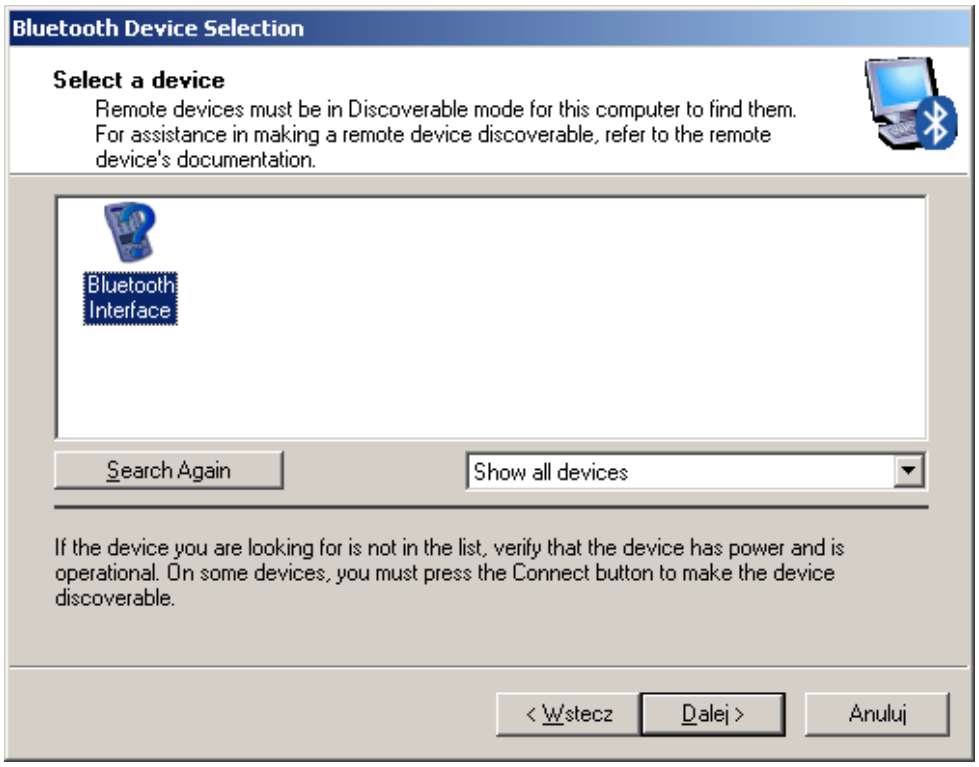


2. The activated wizard will display a welcome screen. To continue, click „Next”.

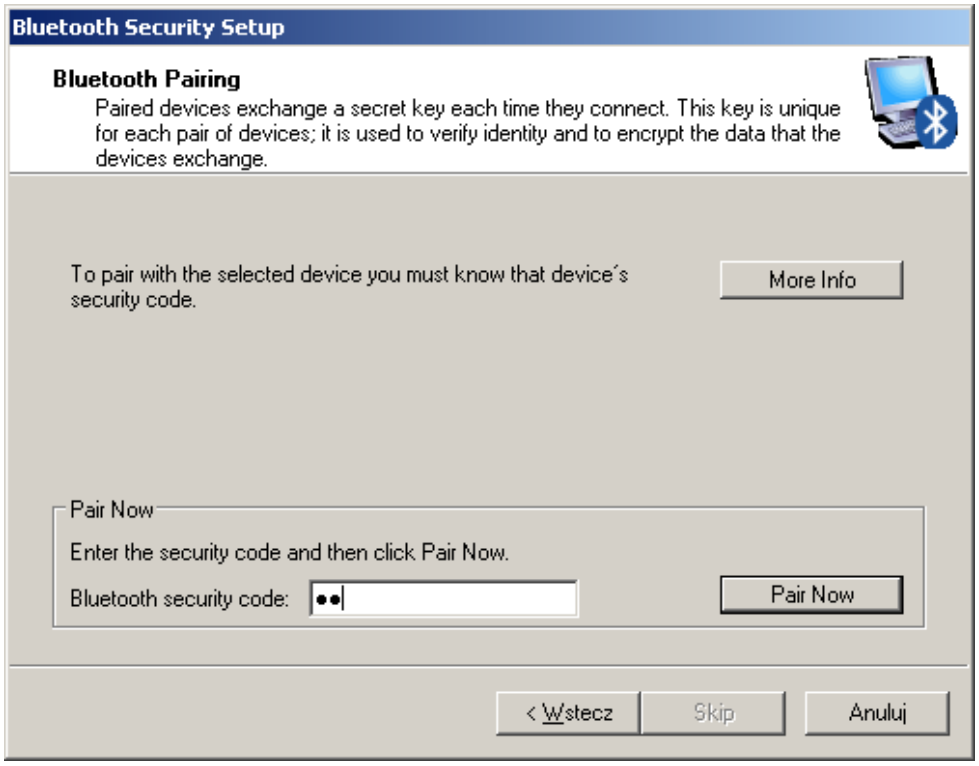


AC S.A. - All rights reserved. It is forbidden to copy, distribute, disclose and/or use in any other way all or any part of information presented herein, particularly photographs, drawings, illustrations, trademarks, etc., under pain of civil and criminal liability.

3. The application will start searching for the devices within the range. If a Bluetooth Interface NEXT II device is fund, a relevant icon will be displayed in a new window. Select the device by clicking the Bluetooth Interface NEXT II icon and click **„Next".**

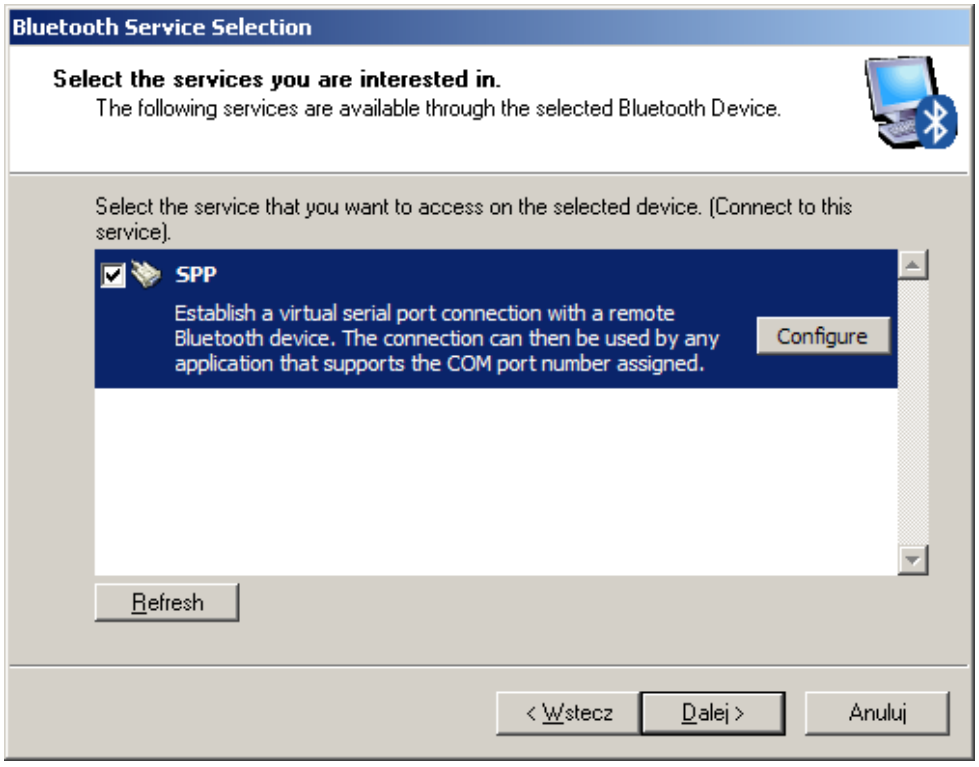


4. The application will display a dialogue box with a field in which the passkey must be entered (see the table – chapter 7). After entering the passkey, click **„Pair Now".**



AC S.A. - All rights reserved. It is forbidden to copy, distribute, disclose and/or use in any other way all or any part of information presented herein, particularly photographs, drawings, illustrations, trademarks, etc., under pain of civil and criminal liability.

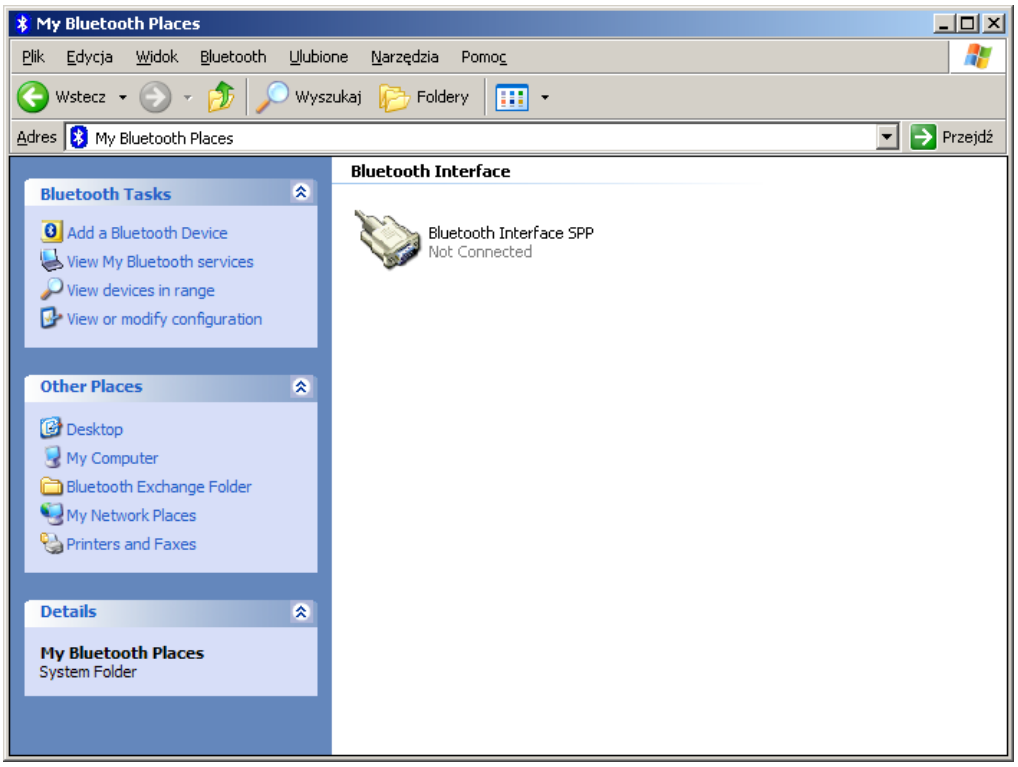
5. In the next window mark **„SPP”** service and click **„Next”.** Virtual serial port will be automatically installed.



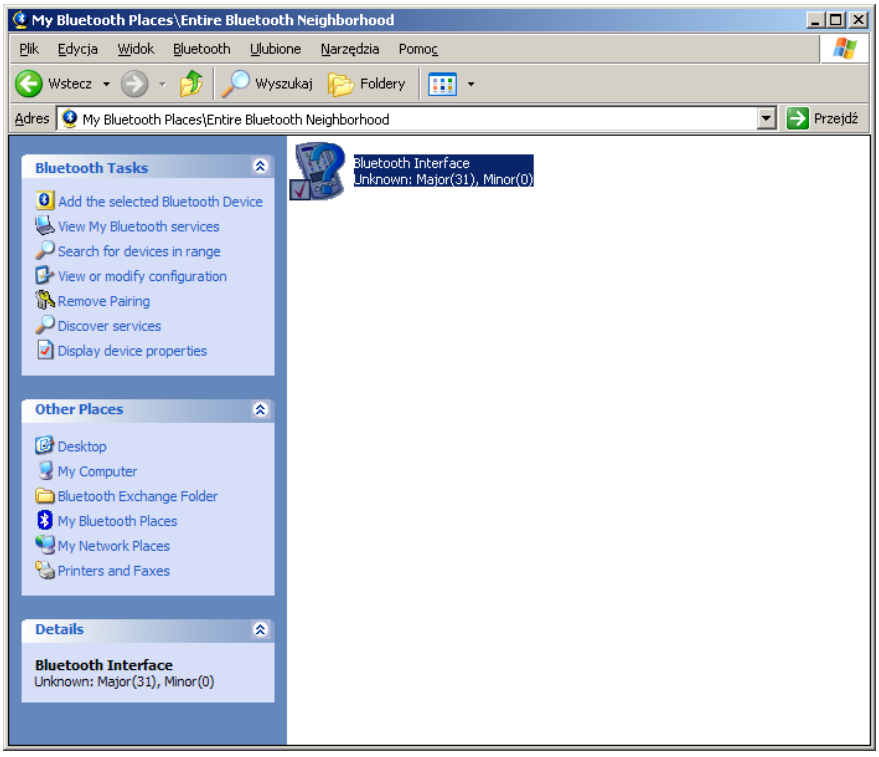
6. After successful installation, a window with summary of the creator operation will be displayed. Click **„Finish”.**

AC S.A. - All rights reserved. It is forbidden to copy, distribute, disclose and/or use in any other way all or any part of information presented herein, particularly photographs, drawings, illustrations, trademarks, etc., under pain of civil and criminal liability.

7. In the folder „My Bluetooth places” an icon will be displayed representing wireless connection via the Bluetooth Interface NEXT II. In order to configure access level, click option „View devices in range”.

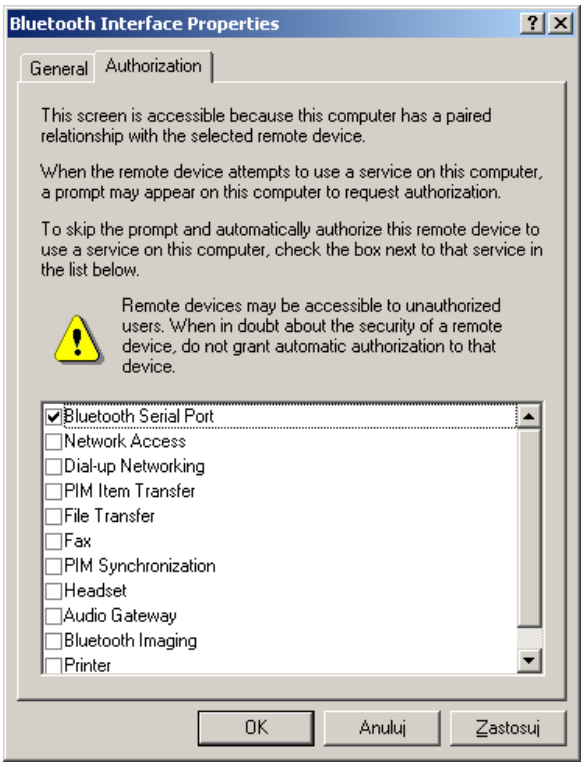


8. In the window „Entire Bluetooth Neighborhood” mark the „Bluetooth Interface NEXT II” icon and click „Display device properties”.

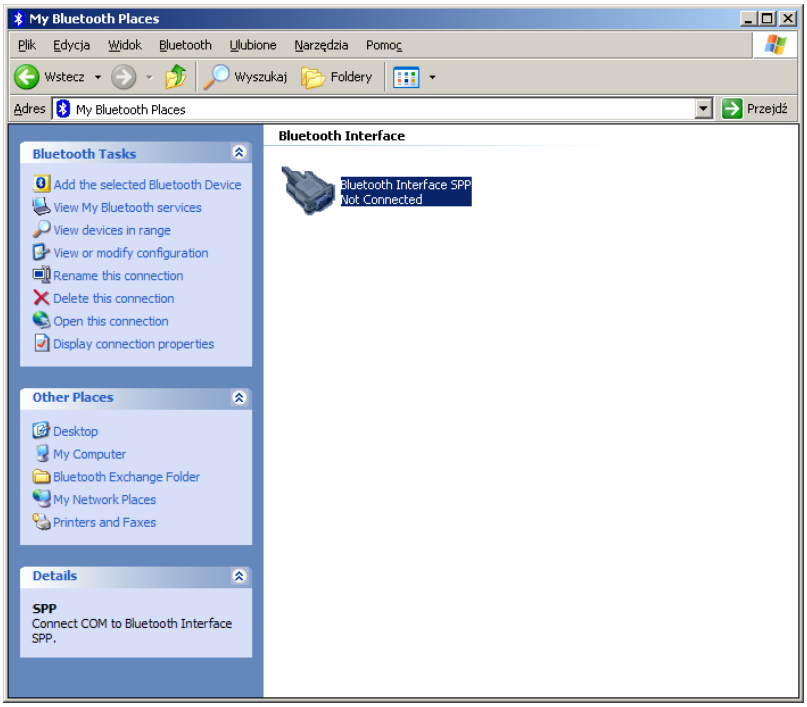


AC S.A. - All rights reserved. It is forbidden to copy, distribute, disclose and/or use in any other way all or any part of information presented herein, particularly photographs, drawings, illustrations, trademarks, etc., under pain of civil and criminal liability.

9. In the dialogue box „Bluetooth Interface NEXT II properties” select bookmark „Authorization” and mark ”Bluetooth Serial Port” in the list. Approve the changes by clicking „Apply” and „OK”. Return to „My Bluetooth places”.

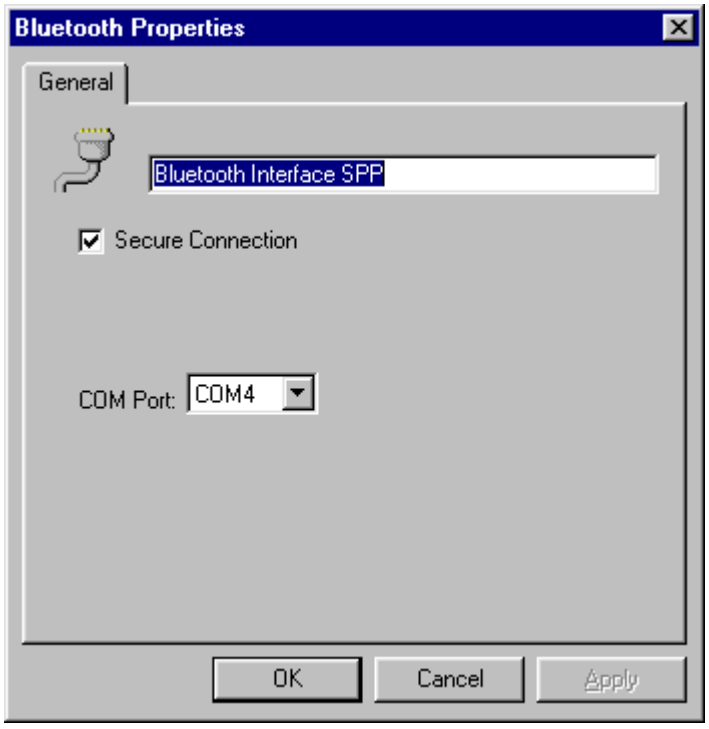


10. By clicking once, mark the icon of Bluetooth Interface NEXT II connection and then select the option „Display connection properties” in order to specify the COM port number, which is used by the connection.



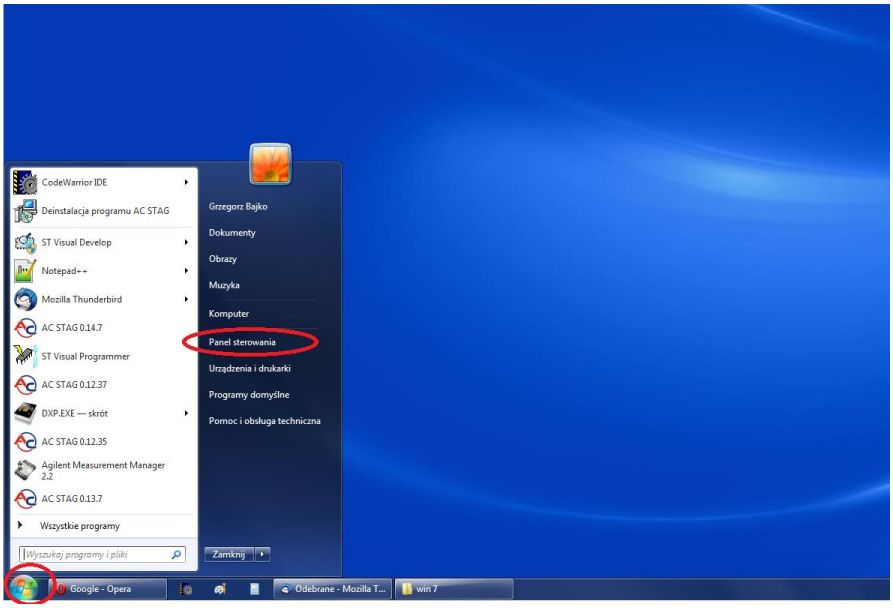
AC S.A. - All rights reserved. It is forbidden to copy, distribute, disclose and/or use in any other way all or any part of information presented herein, particularly photographs, drawings, illustrations, trademarks, etc., under pain of civil and criminal liability.

11. Read the COM port number from the displayed window, which can be now used for wireless communication with a gas injection controller.



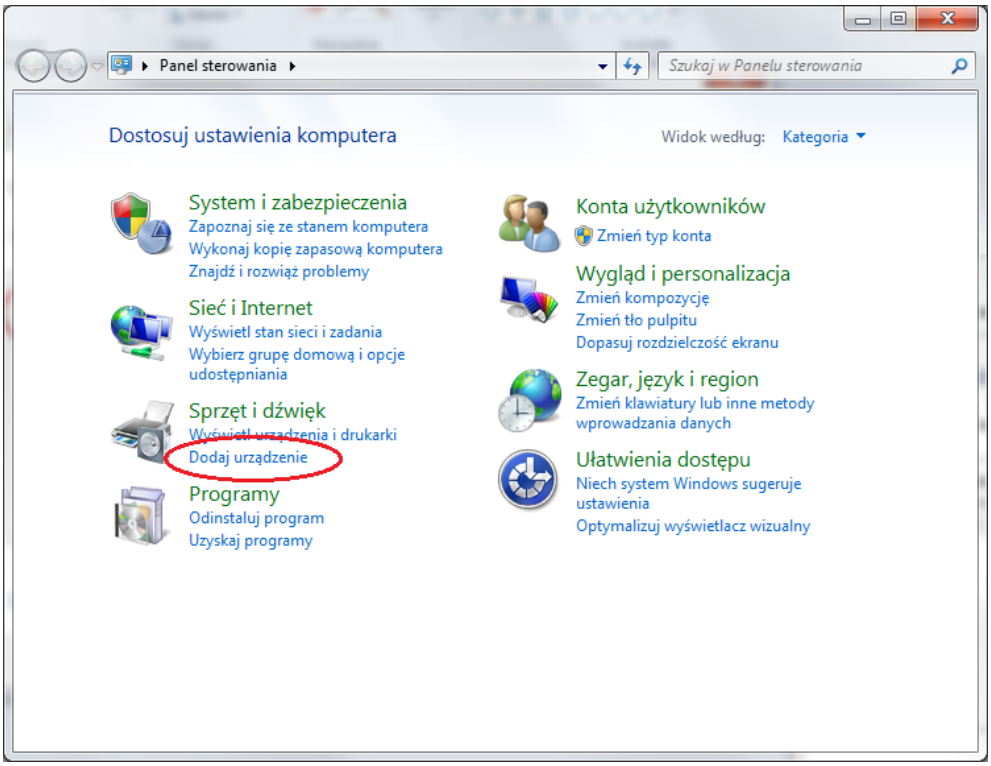
5.4. Software integrated with Microsoft Windows 7

1. Click: Start -> Control Panel

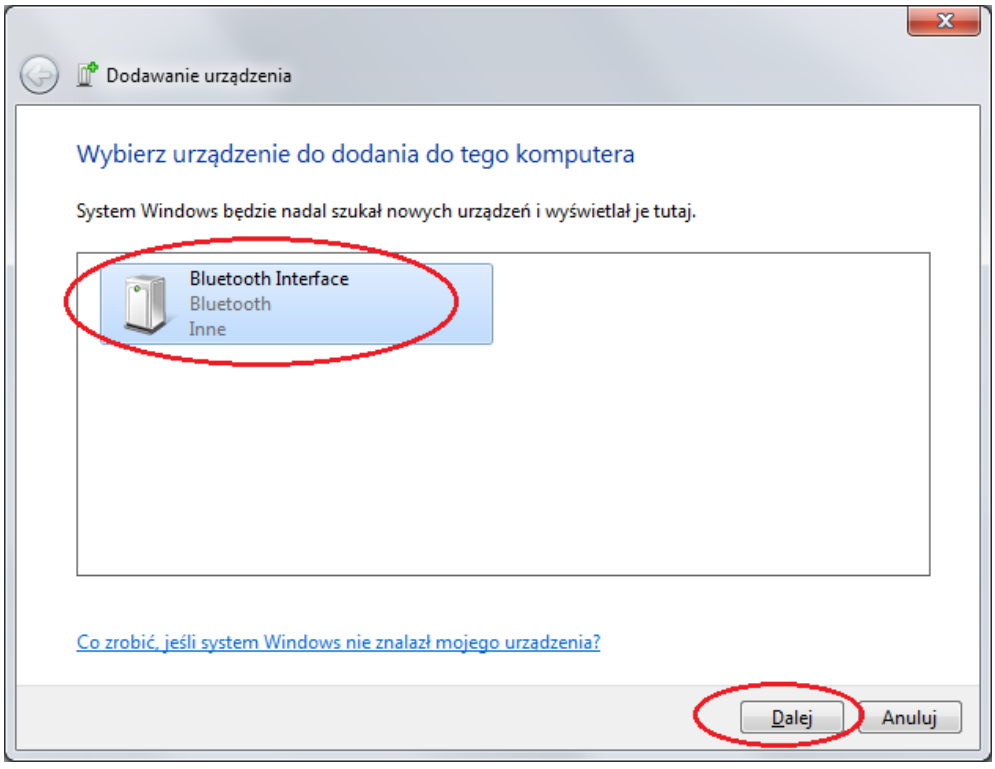


AC S.A. - All rights reserved. It is forbidden to copy, distribute, disclose and/or use in any other way all or any part of information presented herein, particularly photographs, drawings, illustrations, trademarks, etc., under pain of civil and criminal liability.

2. Choose: **"Add device".**

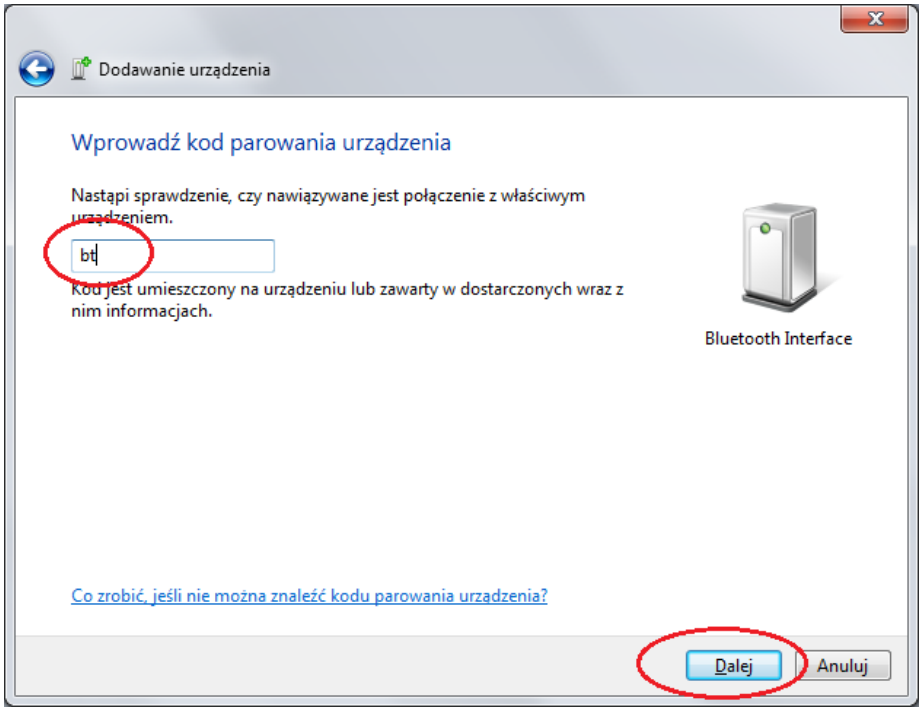


3. The system will start searching for new devices. When "Bluetooth Interface NEXT II" is found, select the device and click **“Next”.**

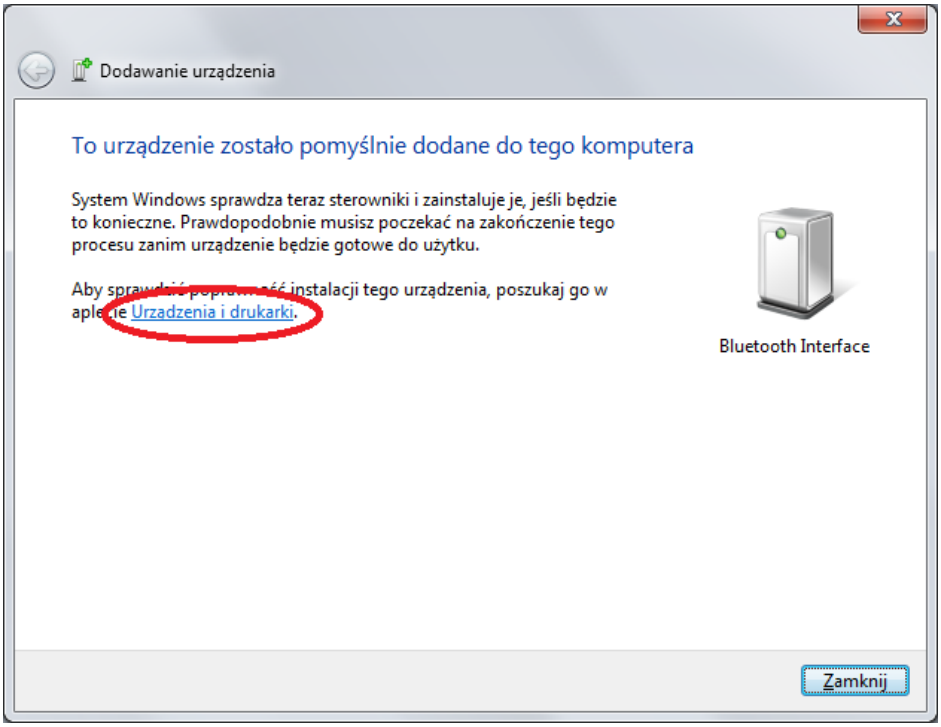


AC S.A. - All rights reserved. It is forbidden to copy, distribute, disclose and/or use in any other way all or any part of information presented herein, particularly photographs, drawings, illustrations, trademarks, etc., under pain of civil and criminal liability.

4. On this screen enter the device pairing code (see the table – chapter 7) in a box displayed and click **"Next".**



5. You should see the following screen after the code is correctly entered.

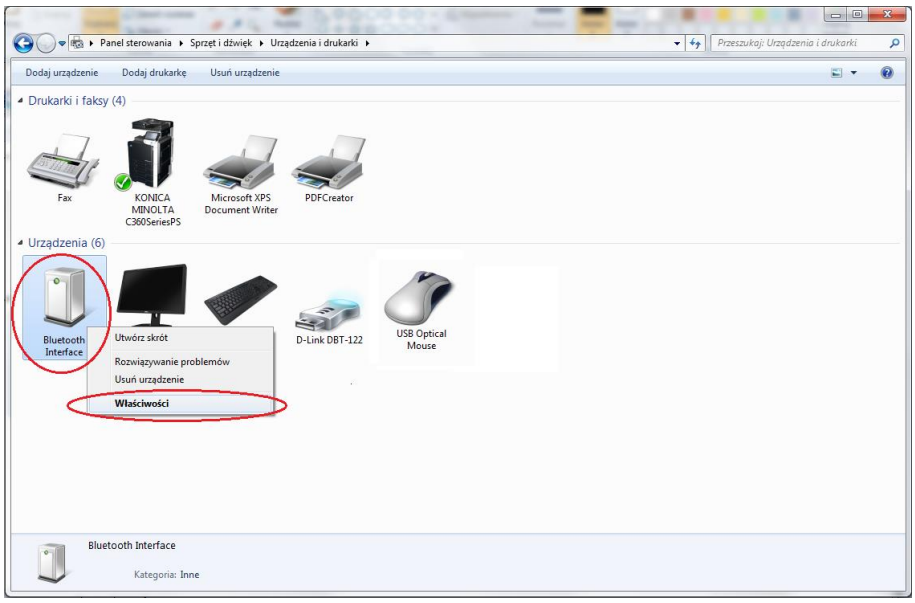


Go to "Devices and Printers" screen by clicking on the highlighted link or:

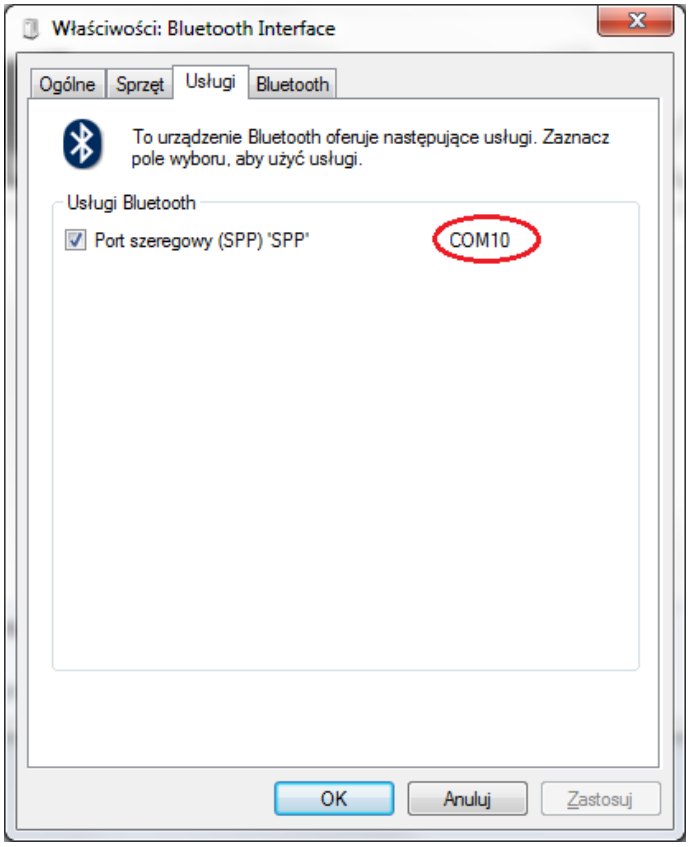
Start ⟶ Control Panel ⟶ Show devices and printers.

AC S.A. - All rights reserved. It is forbidden to copy, distribute, disclose and/or use in any other way all or any part of information presented herein, particularly photographs, drawings, illustrations, trademarks, etc., under pain of civil and criminal liability.

6. After that double-click or click with the right mouse button on "Bluetooth Interface NEXT II" and choose “Properties” on “Devices and Printers” screen.



7. The “Services” tab contains COM port number which was assigned to the connection that from now on enables wireless communication with gas injection controller.

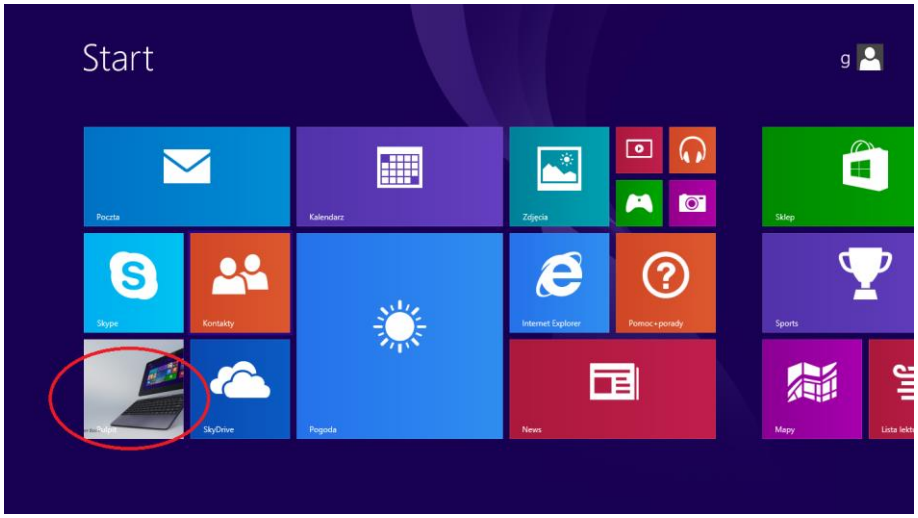


AC S.A. - All rights reserved. It is forbidden to copy, distribute, disclose and/or use in any other way all or any part of information presented herein, particularly photographs, drawings, illustrations, trademarks, etc., under pain of civil and criminal liability.

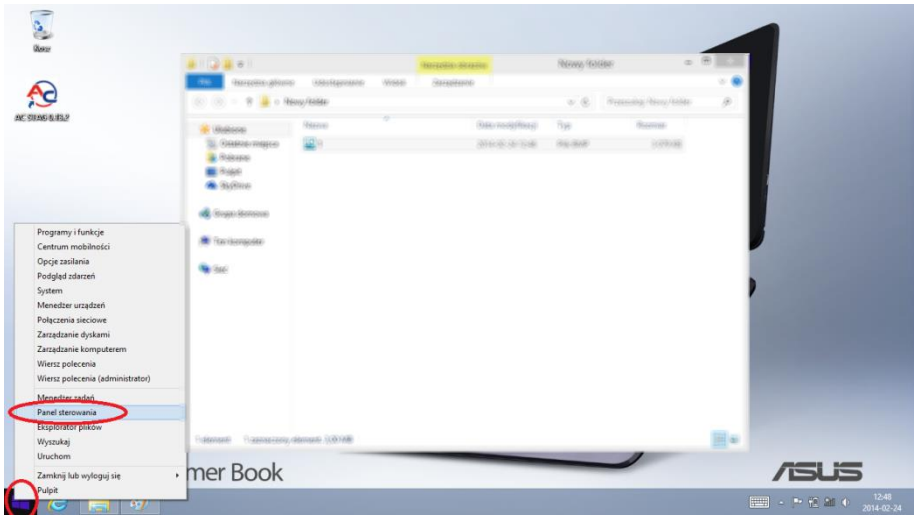
5.5. Software integrated with Microsoft Windows 8

Adding a device in Windows 8 can be done in two ways:

1) After the system start-up clicking on “Desktop” tile on the main screen will open a classic desktop.



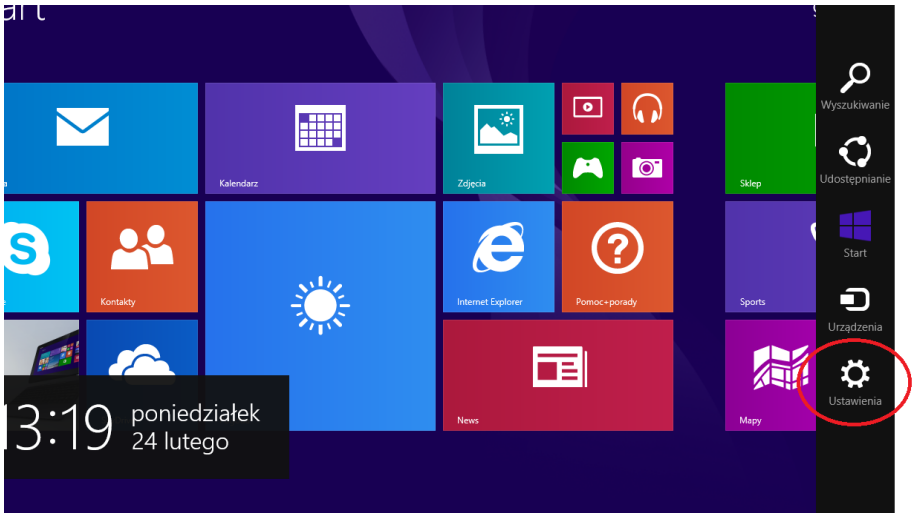
Next, move the mouse pointer to the bottom left corner and click with the right button to choose Control Panel.



The control panel view is nearly identical with that in Windows 7, so perform the next steps in an analogous way using the relevant system instructions.

AC S.A. - All rights reserved. It is forbidden to copy, distribute, disclose and/or use in any other way all or any part of information presented herein, particularly photographs, drawings, illustrations, trademarks, etc., under pain of civil and criminal liability.

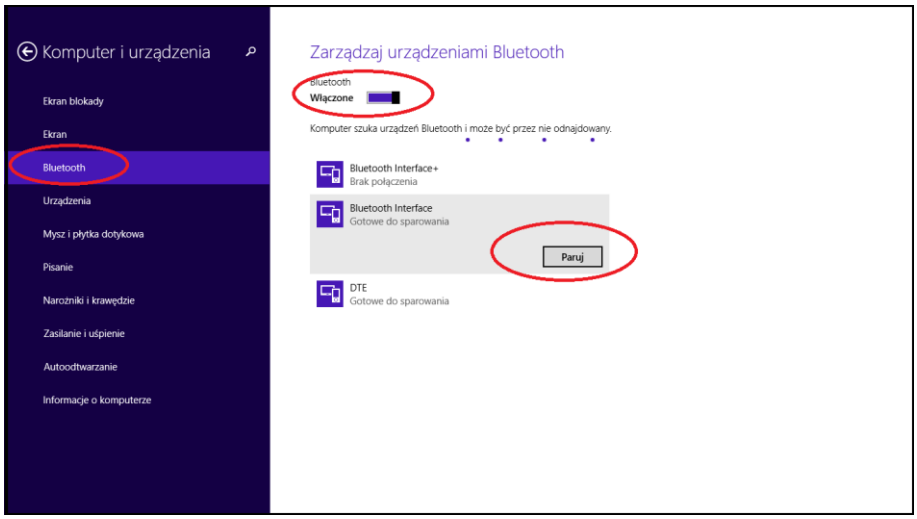
2) An alternative way to add a device in Windows 8 is by clicking “Settings” icon in the side bar in the main screen.



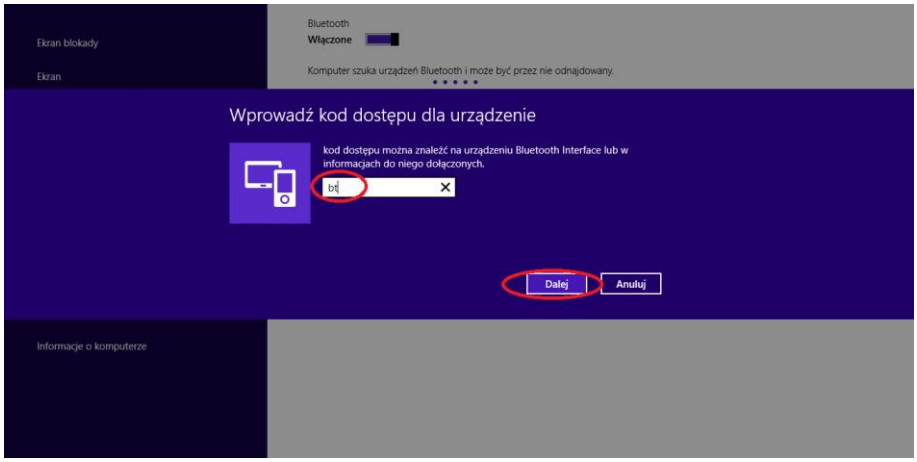
Then select "Change computer’s settings"

AC S.A. - All rights reserved. It is forbidden to copy, distribute, disclose and/or use in any other way all or any part of information presented herein, particularly photographs, drawings, illustrations, trademarks, etc., under pain of civil and criminal liability.

After selecting “**Bluetooth**” from the “Computer and device” menu make sure the interface is enabled (check the message by the slider at the top of the screen). If the interface is enabled, Bluetooth devices will be automatically searched for. After "Bluetooth Interface Next II" device icon with “Ready to pair” text is displayed, click on it with the right mouse button and select “Pair”.



Enter access code of the device (see the table – chapter 7) and click on “Next”.



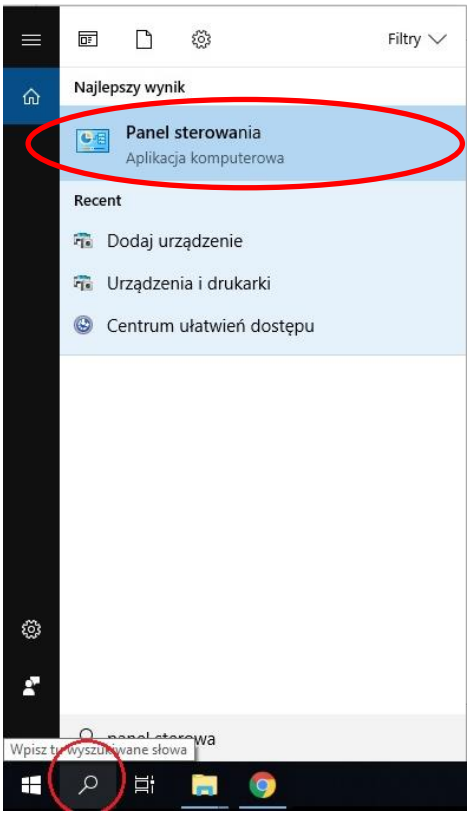
After successful pairing of the device which is analogous to that of Windows 7, COM port number assigned to the new device must be checked by accessing the Control Panel ⟶ Show devices Bluetooth Interface NEXT II ⟶ Properties ⟶ Services.

AC S.A. - All rights reserved. It is forbidden to copy, distribute, disclose and/or use in any other way all or any part of information presented herein, particularly photographs, drawings, illustrations, trademarks, etc., under pain of civil and criminal liability.

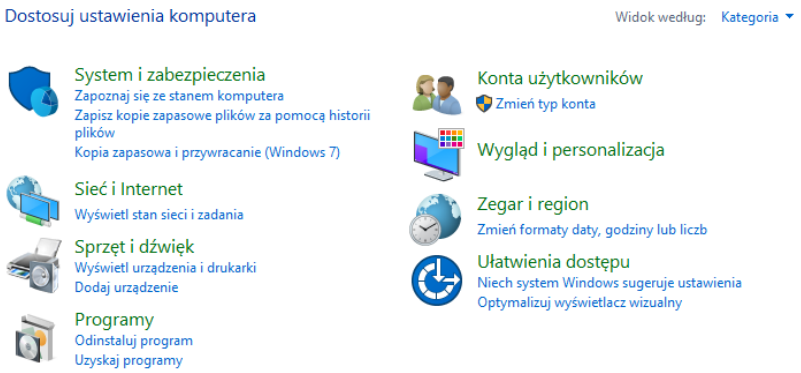
5.6. Software integrated with Microsoft Windows 10.

Adding a device in Windows 10 can be done in two ways:

1. Find „Panel Control“.



Next, move the mouse pointer to the Panel control icon and click with the left a window will open.

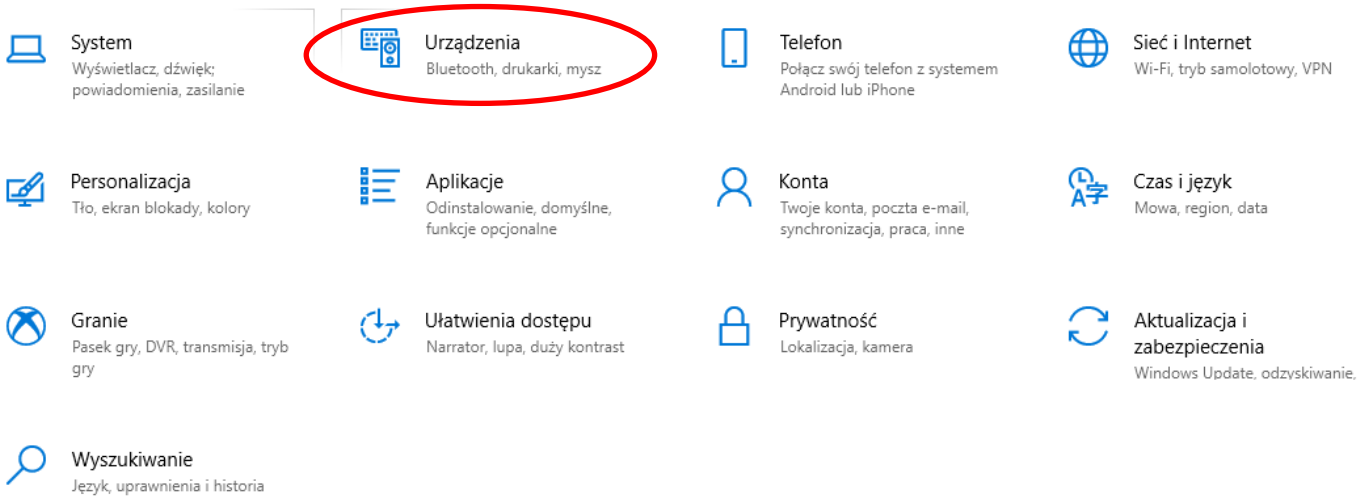


The control panel view is nearly identical with that in Windows 7, so perform the next steps in an analogous way using the relevant system instructions.

AC S.A. - All rights reserved. It is forbidden to copy, distribute, disclose and/or use in any other way all or any part of information presented herein, particularly photographs, drawings, illustrations, trademarks, etc., under pain of civil and criminal liability.

2. Second way to add a device in Windows 10 is by clicking “Settings” icon in "Menu Start"

Next step choose icon „Devices“



The “Devices” view is nearly identical with that in Windows 8 from the second way, so perform the next steps in an analogous way using the relevant system instructions.

AC S.A. - All rights reserved. It is forbidden to copy, distribute, disclose and/or use in any other way all or any part of information presented herein, particularly photographs, drawings, illustrations, trademarks, etc., under pain of civil and criminal liability.

6. Authorization procedure

The first connection of the computer with the autogas controller via **Bluetooth Interface Next II** module requires an authorization procedure. Input of the correct password (see the table – chapter 7) will store the unique ID of the computer Bluetooth module and it will not be required for connections in future. If devices that do not meet Bluetooth standard requirements are used, the password may be required each time.

7. Passwords

MANUFACTURE	*PIN number*	*Default password for authorization*
Bluetooth NEXT #2	**bt**	**stag**
Bluetooth NEXT #2.1	**1234**	**stag**

8. Operating modes

Directly after connection of the **Interface Next II** module to the harness of autogas controller, LEDs of the device will start to indicate the operating mode.

LED_1	LED_2	DESCRIPTION	NOTES
Off	Off	No power supply	- Ignition switch is off, controller in "stand-by" mode. - Faulty harness, connector, controller, etc.
Pulsing every 1s	On	Detected controller: - QBox, QNext, QMax - Diesel - 400 DPI - TAP	- Bluetooth NEXT II module ready for connection with ACStag.
On	On	Detected controller: - STAG 4 - STAG 300	- Bluetooth NEXT II module ready for connection with AcGasSynchro application
Pulsing every 1s		BLUETOOTH module requires firmware update	- The last update of the Bluetooth module firmware has been unsuccessful. Starting ACStag should result in automatic popup of the window with a message on required update.

AC S.A. - All rights reserved. It is forbidden to copy, distribute, disclose and/or use in any other way all or any part of information presented herein, particularly photographs, drawings, illustrations, trademarks, etc., under pain of civil and criminal liability.

9. Troubleshooting

Computer does not detect Bluetooth Interface Next NEXT II device		
1. Make sure that Bluetooth Interface NEXT II is located in the connector on the controller's line.		
2. Check the status of the blue LED in the interface.		
2.1	LED is not on	Make sure the key is turned on in the switch.
2.2	LED does not flash, is on all the time	Continuously lit LED means interface connection with another user is active. To interrupt it remove and re-insert the interface in the connector on the controller's line.
2.3	LED flashes	Make sure the computer's Bluetooth module is enabled.
		Disable and enable the computer's Bluetooth adapter.

Pairing of Bluetooth Interface Next NEXT II device with computer failed
1. Make sure CAPS LOCK button is not pressed and correct key has been entered. The code is case sensitive.
2. Try to remove a device from the list of paired devices. Some portable computer manufacturers put a software limit on the number of paired devices.

Unstable data transmission or missed connection	
1. The application connects to the controller but the program's tabs and properties are displayed with a long delay. 2. A message is displayed: "Connection with the controller is lost".	With some portable computers WiFi and Bluetooth modules are shared and their simultaneous operation can result in slowing down of the Bluetooth transmission. Try disabling WiFi card.
	Try shortening the distance between the computer and Bluetooth Interface Next NEXT II. Note that the signal strength also depends on the quality of computer's Bluetooth. If the distance is small with the stable connection, try using an external USB-connected Bluetooth module.
	For portable computers check in the supply settings in energy-saving mode that the system does not disable or reduce the power consumption by a built-in Bluetooth module

AC S.A. - All rights reserved. It is forbidden to copy, distribute, disclose and/or use in any other way all or any part of information presented herein, particularly photographs, drawings, illustrations, trademarks, etc., under pain of civil and criminal liability.