

CONNECTION INSTRUCTION AND CONFIGURATION



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

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1. Technical specification

Supply voltage	12V ± 25%
Working temperature	-40°C ÷ +85°C
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 <u>the table</u> 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.



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 \rightarrow Bluetooth Device Discovery.





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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* \rightarrow *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 <u>the table</u> – chapter 7) and click OK.

Enter Bl	uetooth Passkey		×
?	A remote device n relationship for futu passkey on this de Remote Device: Address <u>P</u> asskey: Time Left: 6 s	eeds a Bluetooth Passkey to create Paired ire connections. Please use the same evice and on the remote device: Bluetooth Interface 00:80:98:C4:FE:33	<u>D</u> K <u>C</u> ancel

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** \rightarrow **Configurations** \rightarrow **Quick Connect**.



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

Qı	uick Connect			×
	Assign remote de applications oper	vices for automatic connect the ports.	ctions when Windows	
	Port	Device Name	Device Address	Assign
	COM17 (HC			- Province -
	COM18 (SPP)			Hemove
	CUM19 (SPP)			
	COM22 (SPP)			ΠΚ
	COM26 (DUN)			
	COM27 (FAX)			Cancel
	,			

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.

S	elect Device			×
	<u>B</u> luetooth Devices:			
	Device Name	Device Address	Device Cl	OK
	Bluetooth Interface	00:80:98:C4:FE:33	Unknown	Cancel



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5.2. Microsoft Windows XP SP2/Vista integrated software

1. Click "Add" and start to search the Bluetooth Interface.

Bluetooth D	evices		×
Share Devices	PIM Interface Options	Audio COM Ports	Dial-up Hardware
	,,		
<u>Ad</u> d	<u>R</u> emove		Properties
	ОК	Cancel	Apply

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

Add Bluetooth Device Wi	zard	×
	Welcome to the Add Bluetooth Device Wizard	
X	Before proceeding, refer to the "Bluetooth" section of the device documentation. Then set up your device so that your computer can find it:	
	 Turn it on Make it discoverable (visible) Give it a name (optional) Press the button on the bottom of the device (keyboards and mice only) 	
	My device is set up and ready to be found.	
	Add only Bluetooth devices that you trust.	
	< <u>B</u> ack <u>N</u> ext > Cancel	



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".**

* Add Bluetooth Device Wizard	×
Select the Bluetooth device that you want to add.	*
Bluetooth Interface New device	
If you don't see the device that you want to add, make sure that it is turned on. Follow the setup instructions that came with the device, and then click Search Again.	<u>S</u> earch Again
< <u>B</u> ack <u>N</u> ext >	Cancel

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

Add Bluetooth Device Wizard			×
Do you need a passkey to add your devi	ce?		*
To answer this question, refer to the "Bluetooth" your device. If the documentation specifies a pas	section of the skey, use tha	documentation that t one.	at came with
C Choose a passkey for me			
Use the passkey found in the documentation	on: bt		
C Let me choose my own passkey:			
O Don't use a passkey			
You should always use a <u>passkey</u> , unless you recommend using a passkey that is 8 to 16 di more secure it will be.	ur device doe gits long. The	s not support one. longer the passke	We y, the
	< <u>B</u> ack	<u>N</u> ext >	Cancel



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

Add Bluetooth Device Wi	zard	×
	Completing the Add Bluetooth Device Wizard	
	The Bluetooth device was successfully connected to your computer. Your computer and the device can communicate whenever they are near each other.	
	These are the COM (serial) ports assigned to your device. Outgoing COM port: COM5 Incoming COM port: COM6	
	Learn more about Bluetooth COM ports)	
	To close this wizard, click Finish.	
	< <u>B</u> ack. Finish Cancel	

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.

Bluetooth De	vices		
Share Devices	PIM Interface Options	Audio COM Ports	Dial-up Hardware
All other d	evices		
Blueto Passki	oth Interface ey enabled		
Add	<u>H</u> emove		<u>P</u> roperties
	ОК	Cancel	Apply



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.

🔮 My Bluetooth Places\Entire Bluetoot	h Neighborhood
<u>Plik E</u> dycja <u>W</u> idok <u>B</u> luetooth <u>U</u> lubio	one <u>N</u> arzędzia Pomo <u>c</u> 🥂
Ġ Wstecz 👻 🕥 - 🏂 🔎 Wyst	zukaj 🍺 Foldery 🛛 🔢 👻
Adres 🧕 My Bluetooth Places\Entire Blueto	oth Neighborhood 💽 🄁 Przejdź
Bluetooth Tasks 🎗	
Add a Bluetooth Device	
View My Bluetooth services	
Search for devices in range	
View or modify configuration	
Other Places	
🕑 Desktop	
S My Computer	
Bluetooth Exchange Folder	
My Bluetooth Places	
My Network Places	
Printers and Faxes	
Details 🚷	
Bluetooth Devices	

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

Bluetooth Setup				
Filler	Welcome to the Bluetooth Setup Wizard			
11-1-1	This Wizard will help you set up your Bluetooth environment.			
~	Remote devices must be in Discoverable mode for this computer to find them.			
	For assistance in making a remote device discoverable, refer to the device's documentation.			
	< <u>∭</u> stecz [Dalej>] Anuluj			

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".**

Bluetooth Device Selection					
Select a device Remote devices must be in Discoverable mode for this computer to find them. For assistance in making a remote device discoverable, refer to the remote device's documentation.					
Bluetooth Interface					
Show all devices					
If the device you are looking for is not in the list, verify that the device has power and is operational. On some devices, you must press the Connect button to make the device discoverable.					
< <u>₩</u> stecz <u>D</u> alej> Anuluj					

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

Bluetooth Security Setup
Bluetooth Pairing Paired devices exchange a secret key each time they connect. This key is unique for each pair of devices; it is used to verify identity and to encrypt the data that the devices exchange.
To pair with the selected device you must know that device's More Info security code.
Pair Now Enter the security code and then click Pair Now. Bluetooth security code: ••
< <u>W</u> stecz Skip Anuluj



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

Bluetooth Service Selection					
Select the services you are interested in. The following services are available through the selected Bluetooth Device.					
Select the service that you want to access on the selected device. (Connect to this service).					
🖬 📎 SPP 🔤					
Establish a virtual serial port connection with a remote Bluetooth device. The connection can then be used by any application that supports the COM port number assigned.					
<u>R</u> efresh					
< <u>W</u> stecz <u>D</u> alej> Anuluj					

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





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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".





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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".

Bluetooth Interface Properties	? ×				
General Authorization					
This screen is accessible because this computer has a paired relationship with the selected remote device.					
When the remote device attempts to use a service on this comp a prompt may appear on this computer to request authorization.	uter,				
To skip the prompt and automatically authorize this remote device to use a service on this computer, check the box next to that service in the list below.					
Remote devices may be accessible to unauthorized users. When in doubt about the security of a remote device, do not grant automatic authorization to that device.					
✓Bluetooth Serial Port					
Network Access					
Dial-up Networking	Dial-up Networking				
PIM Item Transfer					
File Transfer					
PIM Synchronization					
Audio Gateway					
Bluetooth Imaging					
Printer	-				
OK Anuluj Zast	osuj				

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.





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

Bluetooth Properties
General
Bluetooth Interface SPP
Secure Connection
COM Port: COM4
OK Cancel Apply

5.4. Software integrated with Microsoft Windows 7

1. Click: Start -> Control Panel

CodeWarrior IDE	•					
	Com	Doile				
Deinstalacja programu AC STAG	GIZE	дога вајко				
ST Visual Develop	Dok	umenty				
City of Visual Develop	Obra	17V				
Notepad++	•					
Anaile Thursdashind	Muz	yka				
Wozina munderbird	Kom	puter				
AC STAG 0.14.7	-					
	C Pane	l sterowania				
ST Visual Programmer	Urzą	dzenia i drukarki				
AC STAG 0.12.37						
	Prog	ramy domyślne				
DXP.EXE — skrót	Porr	oc i obsługa technicz	na			
AC STAG 0.12.35						
Anilant Massurament Managar						
AC STAG 0.13.7						
G	_					
 Wszystkie programy 						
Wyszukaj programy i pliki	2 Zar	nknij 🕨				
Google - Opera	0	📑 🔄 Ode	brane - Mozilla T	🏭 win 7		



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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**".

🕞 🗗 Dodawanie urządzenia
Wybierz urządzenie do dodania do tego komputera System Windows będzie nadal szukał nowych urządzeń i wyświetlał je tutaj.
Bluetooth Interface Bluetooth Inne
<u>Co zrobić, jeśli system Windows nie znalazł mojego urządzenia?</u>
Dalej Anuluj



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

\bigcirc	🚰 Dodawanie urządzenia	
	Wprowadź kod parowania urządzenia Nastąpi sprawdzenie, czy nawiązywane jest połączenie z właściwym urządzeniem. bt	0
	nim informacjach.	Bluetooth Interface
		blactooth interface
	Co zrobić, ješli nie można znaleźć kodu parowania urzadzenia?	
		\frown
		Dalej Anuluj

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

		x
\bigcirc	🖉 Dodawanie urządzenia	
	To urządzenie zostało pomyślnie dodane do tego komputera System Windows sprawdza teraz sterowniki i zainstaluje je, jeśli będzie to konieczne. Prawdopodobnie musisz poczekać na zakończenie tego procesu zanim urządzenie będzie gotowe do użytku. Aby sprawd ić poprownićć instalacji tego urządzenia, poszukaj go w aplene Urzadzenia i drukarki.	Bluetooth Interface
		Zamknij

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

Start — Control Panel — Show devices and printers.

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.

🚱 🖉 🗣 📩 🕨 Panel sterowania 🔸 Sprzęt i dźwięk 🔸 Urządzenia i drukarki 🕨 🗸 😽 🖉 Przeszuka	aj: Urządzenia i drukarki 🔎
Dodaj urządzenie Dodaj drukarkę Usuń urządzenie	E • 0
 Drukarki i faksy (4) 	
Fax KONCA KONCA GoosenersPS Document Witer PFCreator Document Witer	
Biluetochh Inteface Bozviązywanie problemów	
Usuń urządzenie Właśchwości	
THESHYOST	
Bluetooth Interface	
Kategoria: Inne	

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.

	Właściwości: Bluetooth Interface				
	Ogólne Sprzęt Usługi Bluetooth				
l	To urządzenie Bluetooth oferuje następujące usługi. Zaznacz pole wyboru, aby użyć usługi.				
1	Usługi Bluetooth				
	Port szeregowy (SPP) 'SPP'				
	OK Anuluj Zastosuj				



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.

	🔒 li 💽 📮 😌 li		(hereefer)	(deservice)	Newy (G)	(ARC)	• • •	
0	(Herealistic globaria	e (assagemente (a	666 (incest	HIND			× 🖲	
	(i) (i) = 9 k · H	iny/6i88			+ E	Pressing/Newy/Kills	e	
860.013.2	· ·	Hanno 2		(hatermody/files)	39	Reserve		
	Contenso magnesi Robrani Calap	2 9		216-21-21-25-46	Sig-Balk	107038		
Programy i funkcje Centrum mobilności Opojej zasłania Prolgłąd starzeń System Meestze urządzeń Połaczenia sieciowe Zarzędzanie dykami Zarzędzanie dykami Zarzędzanie dykami Wierzędocenia Wierzędocenia Wierzędocenia Menaferwanki Powartemanaki	 Tax itempate Sac 							
Eksplorator plików Wyszukaj Uruchom	Rokenesel Roseneccomy	damanii (1898)				1	<u>H</u> e	

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.



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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"





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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".

င်္လ Komputer i urządzenia န	Zarządzaj urządzeniami Bluetooth
Ekran blokady	Wiączone
Ekran	Komputer szuka urządzeń Bluetooth i może być przez nie odnajdowany.
Bluetooth	Bluetooth Interface + Brak polączenia
Urządzenia	Bluetooth Interface
Mysz i płytka dotykowa	
Pisanie	Paruj
Narożniki i krawędzie	Gotowe do sparowania
Zasilanie i uśpienie	
Autoodtwarzanie	
Informacje o komputerze	

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

Ekran blokady Ekran	Bluetooth Wiączone Komputer szuka urządzeń Bluetooth i może być przez nie odnajdowany:
	Warawadé kad dastany dia urządzania
	wprowadz kod dostępu dla urządzenie
	kod dostępu można znaleźć na urządzeniu Bluetooth Interface lub w informacjach do niego dołączonych.
Informacje o komputerze	

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.



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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.

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



Next step choose icon "Devices"

旦	System Wyświetlacz, dźwięk; powiadomienia, zasilanie		Urządzenia Bluetooth, drukarki, mysz		Telefon Połącz swój telefon z systemem Android lub iPhone		Sieć i Internet Wi-Fi, tryb samolotowy, VPN
¥	Personalizacja Tło, ekran blokady, kolory		Aplikacje Odinstalowanie, domyślne, funkcje opcjonalne	8	Konta Twoje konta, poczta e-mail, synchronizacja, praca, inne	色 A字	Czas i język Mowa, region, data
8	Granie Pasek gry, DVR, transmisja, tryb gry	ሁ	Ułatwienia dostępu Narrator, lupa, duży kontrast	₿	Prywatność Lokalizacja, kamera	C	Aktualizacja i zabezpieczenia Windows Update, odzyskiwanie,
Q	Wyszukiwanie Język, uprawnienia i historia						

The "Devices" view is nearly identical with that in Windows 8 from the <u>second way</u>, so perform the next steps in an analogous way using the relevant system instructions.



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 <u>the table</u> – 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_2 LED_1
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 e	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.



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. CI	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		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	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.			
 controller but the program's tabs and properties are displayed with a long delay. 2. A message is displayed: "Connection with the controller is 	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.			
lost".	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			