

# SPL912N2R4 (PCI version) Bluetooth 2.0 EDR and Wifi 802.11 b/g Combo Module

## **Quick Install Guide**





## A. Before installation

Requirement environments:

- Windows Vista / XP / 2000 sp3 above
- A minimum of 5 MB of available hard disk space for installing the drive

• An 802.11a, 802.11b, or 802.11g Access Point (for Infrastructure Mode) or another Wireless CardBus Adapter (for Ad-Hoc Mode)

- One empty Available PCI slot
- CD-ROM Drive

## **B. Package Contents Check**

- ✓ SPL912N2R4 PCI Adapter x 1
  - ♦ Software CD x 1 include
    - User Manual
    - IVT BlueSoleil Bluetooth software and driver
    - 3DSP WLAN windows software and driver
  - ♦ This Quick Setup Guide x 1
  - ♦ Warranty Card x 1
- # Please informs your dealer if there are any missing or damaged parts.

## 1. Install driver software for windows

1. Insert the Installation Software CD into CD-ROM drive. If the Auto-Run function of CD-ROM is disabled, you can utilize the Windows Explorer to browse CD content and run **Setup.exe** manually.

If the Auto-Run function of CD-ROM is enabled (in Windows, the default setting of this function is usually enabled), then a CD menu will appear automatically.

2. Select the Language you want to installation from the combo box, and then press the "OK" button to continue.



Choose S	Setup Language
స	Select the language for this installation from the choices below.
	English (United States)
	OK Cancel

3. The system will initial installation program. Before install 3DSP Wireless driver, the installation program require install IVT BlueSoleil first. Please press the "Install" button start install BlueSoleil first and continue.

anshe پ	IG WIZARG DSP WLAN and Bluetooth Card requires that the following requirements be installed on our computer prior to installing this application. Click Install to begin installing these
' Status	Requirement
Pending	IVT 2.7.0.9 Bluesoleil release
	Install Cancel



Status	Requirement
nstalling	LIVT 2709 Bluesoleil release
5DS	P WLAN and Bidetooth Card

4. Select the Language you want to installation from the combo box, and then press the "OK" button to continue.

tatus	Requirement
nstalling	g IVT 2.7.0.9 Bluesoleil release
1	選擇安裝語言
	(英文(美國) →
	確定 取消

Please click *Next* button several times to continue the software installation. In the *License Agreement* window, please read license agreement carefully, then click "Yes" button to continue.





Please read the following license agreement carefully.	BlueSleil
Bluesoleil End User License	Agreement
NOTICE TO USER: PLEASE READ THIS AGRE CAREFULLY. THE BLUESOLEIL END USER L AGREEMENT (AGREEMENT) IS A VALID ANI AGREEMENT BETWEEN YOU, AS A USER, AI CORPORATION (IVT). BY USING ALL OR AN SOFTWARE, YOU ACCEPT ALL THE TERMS.	EMENT JCENSE D BINDING ND IVT IV PORTION OF THE AND CONDITIONS
<ul> <li>I accept the terms in the license agreement</li> </ul>	Print
$\bigcirc$ I do not accept the terms in the license agreement	
set all Chiefed	

6. Indicate the location of where you want Bluetooth Software to be stored; if you do not change the default settings, it will be stored under C:\Program Files\IVT Corporation\IVT BlueSoleil (Recommended). Click on *Next* button to continue. Or you can select your prefers location to install.



	nstall Bluesoleil2.7.0.9 VoIP Release :\Program Files\IVT Corporation\Blu	071030 to: eSoleil\	Change
stallShield			

7. The Install Shield Wizard will begin to install the software and copy files to your hard disk. After copy all the files, the installation will try to install virtual Bluetooth device in your system. It may take a few minutes, please wait it finishes the installation.

Ready to Install the Program The wizard is ready to begin installation.	Blue S lei
Click Install to begin the installation.	
If you want to review or change any of your installation exit the wizard.	settings, click Back. Click Cancel to
stallShield	Install Cancel



岗 Bluesoleil2.7.0.9 VoIP Re	InstallShield Wizard
	The InstallShield Wizard has successfully installed Bluesoleil2.7.0.9 VoIP Release 071030. Click Finish to exit the wizard.
BlueSoleil	< Back Finish Cancel

8. After finish installation the IVT Bluesoleil, then the install system will continue install the 3DSP Wireless driver and application; press the "Next" button to continue.

InstallShield Wizard	
	Preparing to Install
-	3DSP WLAN and Bluetooth Card Setup is preparing the InstallShield Wizard, which will guide you through the program setup process. Please wait.
	Extracting: 3DSP WLAN and Bluetooth Card.msi
	Cancel

Please click *Next* button several times to continue the software installation. In the *License Agreement* window, please read license agreement carefully, then click "Yes" button to continue.



😸 3DSP WLAN and Bluetoot	h Card - InstallShield Wizard	
	Welcome to the InstallShield Wizar WLAN and Bluetooth Card	d for 3DSP
	The InstallShield(R) Wizard will install 3DSP WL/ Bluetooth Card on your computer. To continue	AN and , click Next.
	WARNING: This program is protected by copyrint international treaties.	ight law and
	< <u>B</u> ack Next >	Cancel
岁 3DSP WLAN and Bluetoot	h Card - InstallShield Wizard	
License Agreement Please read the following licer	nse agreement carefully.	
3DSP Incorporated 3DSP Wireless LAN EU 16271 Laguna Canyon Irvine, California 9	JLA Road 92618	
This 3DSP, INC. ("31 ("Agreement") sets of which you are licens means (A) all of the or other media with	OSP") End-User License Agreeme forth the terms and conditions sed to use the Software. Soft contents of the disk(s), CD- which this Agreement is provi	ent ware ROM(s), ded,
I accept the terms in the licen:	se agreement	Print
🔘 I do not accept the terms in th	ne license agreement	
InstallShield		
	< Back Next >	Cancel

10. Because the Wifi has different regulate in different place (Europe and Japan are 14 Channels, Taiwan is 13 Channels, the others are 11 Channels). So, please choose the place you are located and continue.



Regions Selection	
Select the region for which WirelessLAN is authorized to use. S incorrect region may cause violation of law.	Selecting the
IS US	
🔘 China	
🔘 Europe	
🔘 Japan	
RestOfWorld	
tallShield	
	Next > Cancel

Indicate the location of where you want 3DSP WLAN driver to be stored; if you do not change the default settings, it will be stored under C:\Program
Files\3DSP\Total Wireless\ (Recommended). Click on *Next* button to continue. Or you can select your prefers location to install.

Destinati	on Folder			A starting
Click Ne:	<t folder,="" install="" o<="" or="" th="" this="" to=""><th>lick Change to install</th><th>to a different fold</th><th>der.</th></t>	lick Change to install	to a different fold	der.
	Install 3DSP WLAN and Blue	etooth Card to:		
	C:\Program Files\3DSP\Tota	al Wireless\		Change
- Interaction			50.1	
alionielo -				

12. The Install Shield Wizard will begin to install the software and copy files to your hard disk. After copy all the files, the installation will try to install virtual Bluetooth device in your system. It may take a few minutes, please wait it finishes



the installation.

				and the second se
Ready to	Install the Program			Sec. 1
The wiza	ard is ready to begin installat	tion.		
Click Inst	tall to begin the installation.			
Click Car	ncel to exit the wizard.			
tallShield -				
		< Back	Install	Capcel
		< Back	Install	Cancel
		< Back	Install	Cancel
3DSP W	LAN and Bluetooth Carc	< Back	Install	Cancel
3DSP W	LAN and Bluetooth Carc 3D5P WLAN and Bluetoe	< Back d - InstallShield Wiz oth Card	Install	Cancel
3DSP Wi Installing The proc	LAN and Bluetooth Carc <b>3DSP WLAN and Blueto</b> gram features you selected a	< Back d - InstallShield Wiz oth Card are being installed.	Install	Cancel
3DSP Wi (nstalling The proc	LAN and Bluetooth Carc 3 <b>DSP WLAN and Blueto</b> o gram features you selected a	< Back d - InstallShield Wiz oth Card are being installed.	Install	Cancel
3DSP Wi Installing The proc	LAN and Bluetooth Carc <b>3DSP WLAN and Bluetor</b> gram features you selected a Please wait while the Insta Card. This may take sever	< Back d - InstallShield Wiz oth Card are being installed. allShield Wizard installs ral minutes.	Install ard 3DSP WLAN ar	Cancel
3DSP Wi Installing The proc	LAN and Bluetooth Caro <b>3DSP WLAN and Blueto</b> gram features you selected a Please wait while the Insta Card. This may take sever	< Back d - InstallShield Wiz oth Card are being installed. allShield Wizard installs ral minutes.	Install ard 3DSP WLAN ar	Cancel
3DSP Wi (nstalling The proc	LAN and Bluetooth Carc <b>3DSP WLAN and Bluetoo</b> gram features you selected a Please wait while the Insta Card. This may take seven Status:	< Back d - InstallShield Wiz oth Card are being installed. allShield Wizard installs ral minutes.	Install ard 3DSP WLAN ar	Cancel
3DSP Wi (nstalling The proc	LAN and Bluetooth Carc <b>3DSP WLAN and Bluetor</b> gram features you selected a Please wait while the Insta Card. This may take sever Status:	< Back d - InstallShield Wiz oth Card are being installed. allShield Wizard installs ral minutes.	Install ard 3DSP WLAN ar	Cancel
3DSP Wi Installing The proc	LAN and Bluetooth Caro <b>3DSP WLAN and Blueto</b> gram features you selected a Please wait while the Insta Card. This may take sever Status:	< Back d - InstallShield Wiz oth Card are being installed. allShield Wizard installs ral minutes.	Install ard 3DSP WLAN ar	Cancel
3DSP Wi (nstalling The proc	LAN and Bluetooth Carc <b>3DSP WLAN and Bluetou</b> gram features you selected a Please wait while the Insta Card. This may take sever Status:	< Back d - InstallShield Wiz oth Card are being installed. allShield Wizard installs ral minutes.	Install ard 3DSP WLAN ar	Cancel
3DSP Wi (nstalling The proc	LAN and Bluetooth Carc <b>3DSP WLAN and Bluetor</b> gram features you selected a Please wait while the Insta Card. This may take sever Status:	< Back	Install ard 3DSP WLAN ar	Cancel
3DSP Wi (nstalling The proc	LAN and Bluetooth Caro <b>3DSP WLAN and Bluetor</b> gram features you selected a Please wait while the Insta Card. This may take sever Status:	< Back	Install ard 3DSP WLAN ar	Cancel
3DSP Wi (nstalling The proc	LAN and Bluetooth Carc <b>3 JDSP WLAN and Bluetoo</b> gram features you selected a Please wait while the Insta Card. This may take seven Status:	< Back	Install ard 3DSP WLAN ar	Cancel
3DSP Wi (nstalling The proc	LAN and Bluetooth Carc <b>3DSP WLAN and Bluetoo</b> gram features you selected a Please wait while the Insta Card. This may take seven Status:	< Back	Install ard 3DSP WLAN ar	Cancel
3DSP Wi Installing The proc	LAN and Bluetooth Caro <b>3DSP WLAN and Bluetor</b> gram features you selected a Please wait while the Insta Card. This may take sever Status:	< Back	Install ard 3DSP WLAN ar	Cancel

13. While installation, currently the driver is not totally compatible with Microsoft Vista operation system. And will display the caution massage. Please select "still installation the driver anyway" to continue.





14. After finish installation, please select reboot your system to finish the installation. Or you can select to reboot later.

Bluetooth Card - InstallShield Wizard	<u> </u>
InstallShield Wizard Completed	
The InstallShield Wizard has successfully in and Bluetooth Card. Click Finish to exit the	stalled 3DSP WLAN wizard.
< Back Finish	Cancel
and Bluetooth Card Installer Informati Just restart your system for the configuration ges made to 3DSP WLAN and Bluetooth Card to effect. Click Yes to restart now or No if you plan start later.	
	InstallShield Wizard Completed         The InstallShield Wizard has successfully in and Bluetooth Card. Click Finish to exit the         <       Back         Finish         and Bluetooth Card Installer Informati         nust restart your system for the configuration per made to 3DSP WLAN and Bluetooth Card to effect. Click Yes to restart now or No if you plan tart later.         Yes       No

15. After shut-down your computer, Please Install the SPL912N2R4 PCI card in your



PC mother board. After install the card appropriately. Then restart your PC system.

16. There are two new Bluetooth icons appear on the desktop and the windows task bar respectively when logged in Windows operating system. For more information on the BlueSoleil, please refer to Chapter 2.



#### 9.

After shut-down your computer. Install the SPL912N2R4 802.11b/g and Bluetooth PCI Adapter into an available PCI slot on PC's motherboard. After install accomplish, and then restart your computer. After into the windows system, a "Found New Hardware" message will appear in your system tray briefly, as shown in the following image.

Found Net	w Hardware
	3DSP Multifunction card
Found Net	w Hardware
	3DSP Multifunction card
Installing	
E 1 N	
Found Nev	v Hardware
Į	3DSP Blue Tooth v.1.0
Found Net	w Hardware
	3DSP Wireless G Notebook Adapter
Installing	





The screen on the left appears. Select No, not this time, and click "Next".



Click Next.



Found New Hardware Wizard		
Please wait while the wiza	rd installs the software	
3DSP Multifuncti	on card	
6		
Setting a sys case your sy	tem restore point and backing up old files in stem needs to be restored in the future.	
	< <u>B</u> ack <u>N</u> ext > Cancel	
Found New Hardware Wiza	rd	
	Completing the Found New Hardware Wizard The wizard has finished installing the software for: 3DSP Multifunction card	
	Click Finish to close the wizard.	
	K <u>B</u> ack <b>Finish</b> Cancel	

Press "Finish" for finish the driver and programs installation.

10. Please remove the Software CD after the installation is complete.

11. After a few seconds, another "Found New Hardware" message will appear briefly, as shown on the fallowing pictures.





A Bluetooth icon will appear in your system tray

Found New Hardware Wiz	ard
	Welcome to the Found New Hardware Wizard         Windows will search for current and updated software by looking on your computer, on the hardware installation CD, or on the Windows Update Web site (with your permission).         Read our privacy policy         Can Windows connect to Windows Update to search for software?         O Yes, this time only         Yes, now and gvery time I connect a device         No, not this time
	Click Next to continue.
	< Back Next > Cancel

Found New Hardware Wizard		
Image: Non-State State		
< <u>B</u> ack <u>N</u> ext > Cancel	]	





Click Finish to close the window.



Click Finish to close the wizard.

< <u>B</u>ack

Finish

Cancel

Windows will find another new hardware (see above), and the following screen will appear. Select **No, not this time**, and click **next** several times.



Found New Hardware Wiz	ard		
	Welcome to the Found New Hardware Wizard		
	Windows will search for current and updated software by looking on your computer, on the hardware installation CD, or on the Windows Update Web site (with your permission). <u>Read our privacy policy</u>		
	Can Windows connect to Windows Update to search for software?		
	<ul> <li>Yes, this time only</li> <li>Yes, now and every time I connect a device</li> <li>No, not this time</li> </ul>		
	Click Next to continue.		
	< <u>B</u> ack <u>N</u> ext > Cancel		
Found New Hardware Wiz	ard		
	This wizard helps you install software for:		

3DSP Wireless G Notebook Adapter

	SDSF Wileless & Notebook Adapter
<u>Ind</u>	If your hardware came with an installation CD or floppy disk, insert it now.
	What do you want the wizard to do?
	<ul> <li>Install the software automatically (Recommended)</li> <li>Install from a list or specific location (Advanced)</li> </ul>
	Click Next to continue.
	< <u>B</u> ack <u>N</u> ext > Cancel



Found New Hardware Wizard				
Please wa	t while the wizard installs th	e software		
E	3DSP Wireless G Notebook Ada	apter		
	Setting a system restore poir case your system needs to b	nt and backing up old be restored in the futu	b d files in are.	
		< <u>B</u> ack	<u>N</u> ext >	Cancel

Found New Hardware Wizard			
	Completing the Found New Hardware Wizard The wizard has finished installing the software for: 3DSP Wireless G Notebook Adapter		
	< <u>B</u> ack <b>Finish</b> Cancel		

Click Finish to close the wizard.



#### 2. Start the Bluetooth Device

Start the Bluetooth service for ready to service.

1. After you install the PCI card, the system tray Icon will become available.



2. Right Click the Bluetooth service tray Icon, press the "Display".

	and the second second	
h	Exit	"The t
Į.	✓ Show Messages	Sec. Sec.
	Display	
	W L	2:04 PM

3. Give this Bluetooth service computer a name and computer type, let the other Bluetooth identify.





#### 3. Stop the Bluetooth Device

Remove the PCI card from the system. The tray bar icon will show the BlueSoleil is not available.



Figure 1-26: The Bluetooth Device is not available.

### 4. Start Bluetooth

1. Start BlueSoleil.





## **5 Establish Bluetooth Connection**

A connection is normally initiated from the client.

- On the server side, start the service.
- On the client side, initiate the connection.

#### **Start Service on Server**

If BlueSoleil provides service, please start the service:

- 1. Change to Service Window.
- 2. Right-click the service icon, select Start Service on the pop-up menu.

#### **Initiate Connection on Client**

In Main Window:

- 1. Single click my device, the center ball, to search the Bluetooth devices in range.
- 2. Search the selected Bluetooth device service by double-clicking the device icon. Service button on the top of the BlueSoleil Main Window will be highlighted if the service is supported by the device. Enter the same Bluetooth passkey on both devices if necessary to pair the two devices.
- 3. Connect.

Single-click the highlighted service button to establish the connection



A. If the other device needs pair, the Bluetooth Icon in the system tray will show a warning massage that the Bluetooth connection need input pair numbers.



Enter Bluetooth Passkey				
<b>}*</b>	A remote device r relationship for fut passkey on this de Remote Device: Address Passkey: Time Left: 25 s	eeds a Bluetooth Passkey to create Paired ure connections. Please use the same evice and on the remote device: T68i 00:80:37:7E:F6:C3	OK Cancel	

B. Input **the same pair number** as you input in the other Bluetooth device. Then click ok to finish the Bluetooth connection pair procedure.

Enter Bluetooth Passkey			
<b>?</b> ®	A remote device r relationship for fut	mote device needs a Bluetooth Passkey to create Paired ionship for future connections. Please use the same year on this device and on the remote device:	
Ť	Develo Deview	Too:	Cancel
	Remote Device:	168	
	Address	00:80:37:7E:F6:C3	
	Passkey:		
	Time Left: 25 s	$\bigcirc$	



## 6. Specifications

Standards	IEEE 802.11a, IEEE 802.11b, IEEE 802.11g	
Interface	Standard 32bit PCI	
LED Indicators	Power, Network	
Transmit Power	12 dBm to 17 dBm	
Sensitivity	-70dBm@54Mbps, -83.5dBm@11Mbps	
Channel Frequency	2.4 GHz, 11 Channel for Wifi, 79 Channel	
	for Bluetooth	
Power	DC: 3.3V@PCI	
Modulation	802.11a and 802.11g: OFDM	
	802.11b: CCK, DQPSK, DBPSK, Barker	
	Code	
	Bluetooth: DQPSK,8DPSK, GFSK	
Security Features	WEP, WPA, RADIUS, TKIP	
WEP Key Bits	64 / 128 bit	
Protocol	TCP/IP	
Dimensions	11.5 x 5.3 cm (4.53 x 2.09 in)	
Unit Weight	50 g. (4.8 oz)	
Certifications	CE, FCC, Wi-Fi Certification(802.11a,	
	802.11b, 802.11g), BQB 2.0 EDR(Bluetooth	
	Qualification Body), WHQL: Vista 32-bit,	
	Vista-64bit, XP, 2000, ME	
Bluetooth Spec Compliance, Bluetooth	Bluetooth 2.0 EDR (Enhanced Data Rate)	
Output Power Class	Class 1 (100 meter)	
Operating Temperature	32°F to 131°F (0° C to 55° C)	
Storage Temperature	04°F to 185°F (-20° C to 85° C)	
Operating Humidity	10% to 85%, Non-Condensing	
Storage Humidity	5% to 90%, Non-Condensing	
Emissions	CE, FCC Class B	

## FCC Compliance and Advisory Statement

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions:(1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, according to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try correct the interference by one or more of the following measures:

- 1.Reorient the receiving antenna.
- 2. Increase the separation between the equipment and receiver.
- 3.Connect the equipment into and outlet on a circuit different from that to which the receiver is connected.
- 4. Consult the dealer or an experienced radio/TV technician for help.

Any special accessories needed for compliance must be specified in the instruction manual.

**Warning:** A shielded-type power cord is required in order to meet FCC emission limits and also to prevent interference to the nearby radio and television reception. It is essential that only the supplied power cord be used. Use only shielded cables to connect I/O devices to this equipment.

**CAUSION:** Any changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.