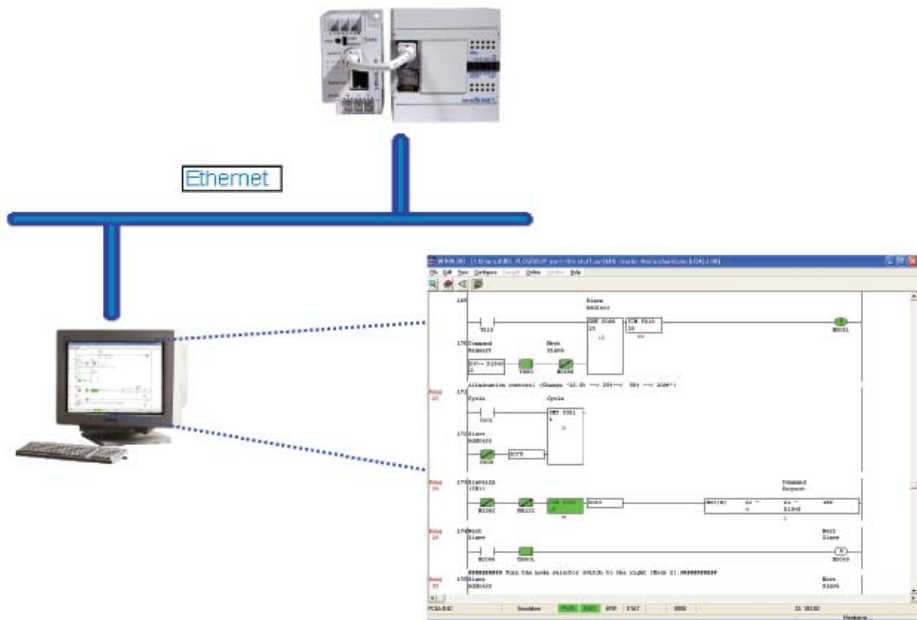




Quick Start Guide

Web Server Module for MicroSmart PLC





Thank you for choosing an IDEC Web Server Module.

This module is compatible with the IDEC Micro3C, ONC and MicroSmart PLCs, and has four major built-in functions:

- Remote monitoring and control over an Ethernet network using WindLDR or standard SCADA software
- Remote reading and writing PLC parameters over an Ethernet network using standard IE or Netscape browser
- 1:1 communication between two PLCs over an Ethernet network
- Email messaging where predefined messages can be sent to an email address or cell phone

This Quick Start Guide will lead you through the process of configuring a Web Server Module, putting it onto an Ethernet network (as illustrated above) and using it to remotely monitor and control a PLC using WindLDR software.

Parts Check List:

Please make sure the following parts are available before proceeding to the next step.

1)

Parts	Quantity	Notes	Check Box
Web Server Module	1	Comes with RS232 cable	
WindLDR Version 4.7	1	WindLDR 4.7 or above installed	
IDEC PLC	1	FC2A-()C, FC3A, FC4A, FC5A series	
24V DC Power Supply	1		
Cross-over Ethernet cable	1		
Standard Ethernet cable	2	Also known as Straight-thru cable	

2)

In addition to the items listed above, a static IP address and its Subnet Mask & Default Gateway are also required. An IP address needs to be assigned to the Web Server Module in order for it to communicate over the Ethernet network. **Please consult your Network Administrator for this information.** This IP Address and its Subnet Mask & Default Gateway will be called **IDEC Web Server Module IP Address**. You will need this information in **Step 3F** of this Quick Start Guide. Please do NOT continue if this information is not available.

IP Address: _____

Subnet Mask: _____

Default Gateway: _____

This is What You Will Be Setting Up:

Step 1: Connect the Web Server Module

This walks you through the process of connecting the Web Server Module to your PC.

Step 2: Configure the PC

This describes how your PC needs to be configured to communicate with the Web Server Module.

Step 3: Configure the Web Server Module

This takes you through the process of how to configure the Web Server Module to communicate with the WindLDR software.

Step 4: Configure the WindLDR software

This describes the Remote Monitoring & Control function of the Web Server Module using WindLDR software.

Step 1: Connect the Web Server Module

First, make sure your PC is turned ON and the Dip Switch on the Web Server Module is in REMOTE mode. It is recommended that you should not run any other applications during this process.



In order to communicate with the Web Server Module, a **Cross-over Ethernet cable** is REQUIRED. Please ask your IT personnel for this Cross-over cable or it can be purchased at any electronics store.

- A. Connect the Web Server Module to a 24V DC power supply.



- B. Using the Cross-over Ethernet cable, connect one end of the cable to the RJ-45 port of the Web Server Module.



- C. Connect the other end of the cable to your PC Ethernet port.



Proceed to Step 2: Configure the PC

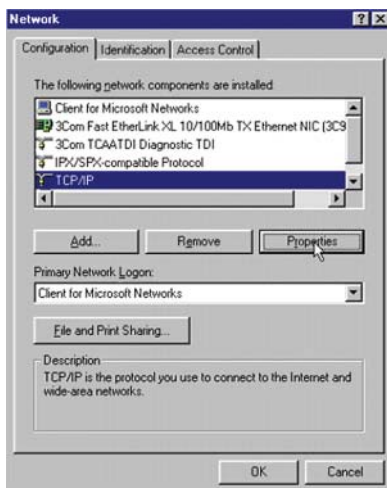
Step 2: Configure the PC

In step 2, you will configure your computer to communicate with the Web Server Module. To do this, you will need to configure your PC network settings by assigning a static IP address to your PC.

First, find out which operating system your computer is running, such as Windows 95, 98, Millennium, 2000 or XP. Once you know which Windows operating system you are running, follow the directions in this step for your particular operating system.

If you are running: **Windows 98, Windows Millennium**

- A. Click the **Start button**, click **Settings** and open the **Control Panel**. From there, double-click the **Network** icon to open the Network screen.
- B. Select the Configuration tab and highlight the **TCP/IP line** for the applicable Ethernet adapter*. If the word **TCP/IP** appears by itself, select that line. Then, click the **Properties** button.



*Note: Do not choose a TCP/IP entry whose name contains DUN, PPPoE, VPN or AOL.

Continued on page 5

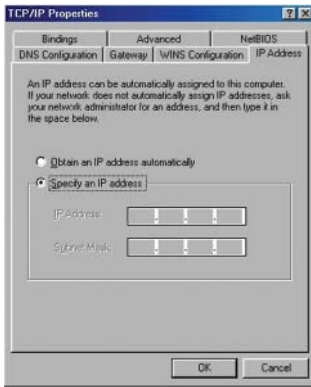
C. Click the **IP Address** tab and select **Specify an IP Address***.



* This is assuming your network is using a DHCP server. If your PC default setting is **Specify an IP Address**, where the IP address and Subnet Mask fields are already predefined, please note and write down these numbers before proceeding to the next step. We will refer to this as the **PC IP Address**.

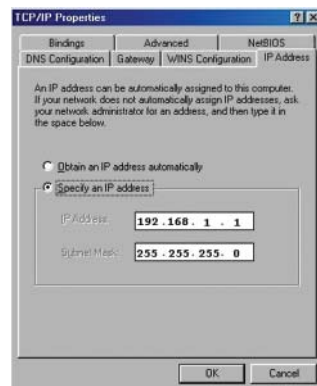
PC IP Address: _____._____._____._____
Subnet Mask: _____._____._____._____

You will need to revert your PC back to this IP address when you are done configuring the Web Server Module.



D. Enter the following information into the IP Address and Subnet Mask fields:

IP Address: **192.168.1.1**
Subnet Mask: **255.255.255.0**



- E. Click the **OK** button. Windows may ask you for the original Windows installation disk or additional files. Supply them by pointing to the correct file location, e.g., D:\win98, D:\win9x, C:\windows\options\cabs, etc. (This assumes that “D” is the letter of your CD-ROM drive).
- F. If Windows asks you to restart your PC, click the **Yes** button. If Windows does not ask you to restart, restart your computer anyway.

Proceed to Step 3: Configure the Web Server Module

If you are running: **Windows 2000**

- A. Click the **Start** button, click **Settings** and open the **Control Panel**. From there, double-click the **Network and Dial-up Connections** icon. This will display the Network screen.
- B. Double-click **Local Area Connection** and click the **Properties** button.
- C. Select **Internet Protocol (TCP/IP)** and click the **Properties** button.
- D. Select **Use the following IP address***.



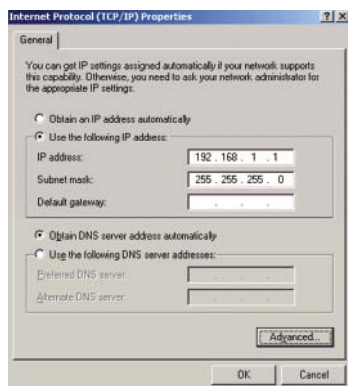
* This is assuming your network is using a DHCP server. If your PC default setting is **Use the following IP address**, where the IP address, Subnet Mask and Default Gateway fields are already predefined, please note and write down these numbers before proceeding to the next step. We will refer to this as the **PC IP Address**.

PC IP Address: _____
 Subnet Mask: _____
 Default Gateway: _____

You will need to revert your PC back to this IP address when you are done configuring the Web Server Module.

- E. Enter the following information into the IP Address and Subnet Mask fields:

IP Address: 192.168.1.1
Subnet Mask: 255.255.255.0



- F. Click the **OK** button to close the Internet Protocol (TCP/IP) Properties dialog box.
- G. Click the **OK** button again, to close the Local Area Connection Properties dialog box.

Proceed to Step 3: Configure the Web Server Module

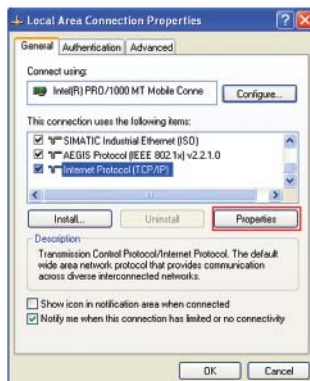
If you are running: **Windows XP**

The following instructions assume you are running Windows XP's default interface. If you are using the Classic interface (where the icons and menus look like previous Windows versions), please follow the instructions for Windows 2000.

- A. Click the **Start** button and open the **Control Panel**. Double click the **Network Connections** icon to display the Network screen.
- B. Double-click **Local Area Connection** and click the **Properties** button.



- C. Select **Internet Protocol (TCP/IP)** and click the **Properties** button.



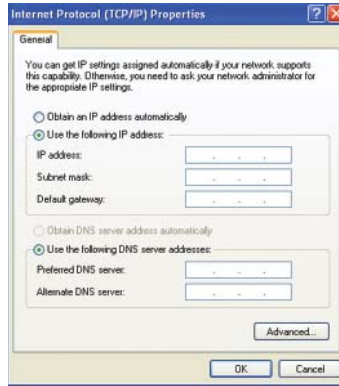
D. Select **Use the following IP address***.



* This is assuming your network is using a DHCP server. If your PC default setting is **Use the following IP address**, where the IP address, Subnet Mask and Default Gateway fields are already predefined, please note and write down these numbers before proceeding to the next step. We will refer to this as **PC IP Address**.

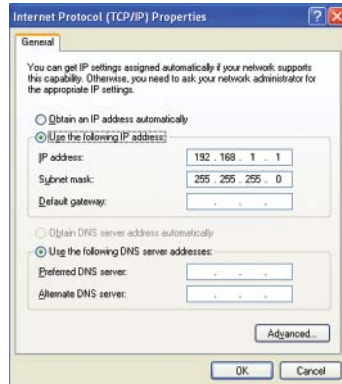
PC IP Address: ____ . ____ . ____ . ____
Subnet Mask: ____ . ____ . ____ . ____
Default Gateway: ____ . ____ . ____ . ____

You will need to revert your PC back to this IP address when you are done configuring the Web Server Module.



E. Enter the following information into the IP Address and Subnet Mask fields:

IP Address: 192.168.1.1
Subnet Mask: 255.255.255.0



E. Click the **OK** button to close the Internet Protocol (TCP/IP) Properties dialog box.

F. Click the **Close** button to close the Local Area Connection Properties dialog box.

Proceed to Step 3: Configure the Web Server Module

Step 3: Configure the Web Server Module

A. Launch your browser (**Internet Explorer or Netscape**).



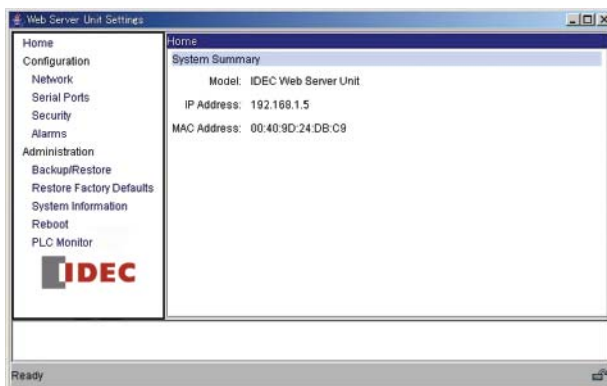
B. In the URL window, type **192.168.1.5** (this is the default factory IP settings for the Web Server Module), then hit **Enter**.



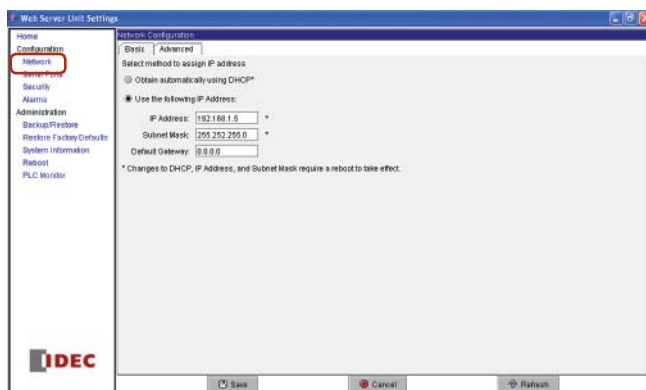
C. One of two Warning-Security dialog boxes will appear. Click **Run/Yes** to continue. (If after 30 seconds neither of these windows appear, close your browser and repeat step 3A again.)



D. The Web Server Unit Settings dialog box will appear.



E. Click the **Network** menu.

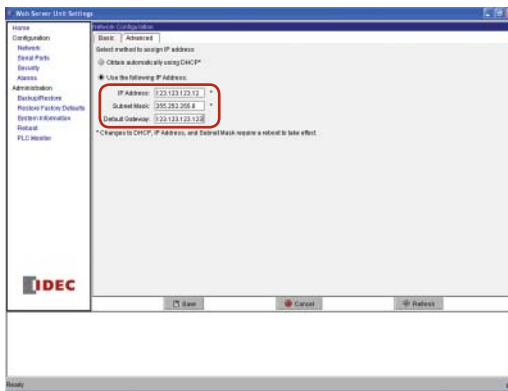


F. Enter your IDEC Web Server Module IP Address* here.

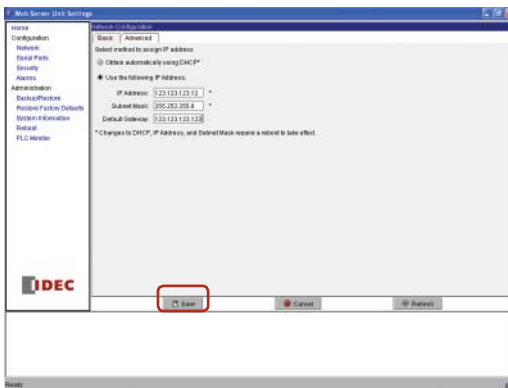


* The IDEC Web Server Module IP Address is a static IP address that was required in the Parts Check List section. This is an IP address you need to obtain from your Network Administrator. **Note: Please be sure to document this IP address for future reference. It is recommended that you record the IP address on a label and apply it to the module directly.**

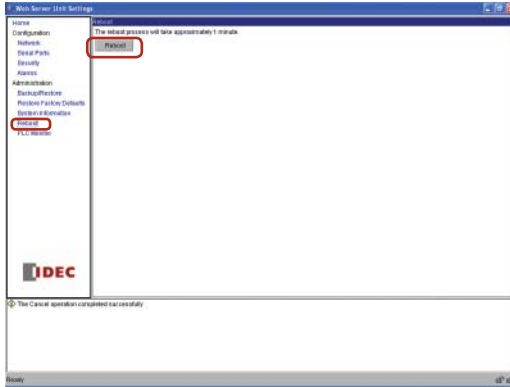
For demonstration purposes, a random number is used here but please **ONLY** enter your IDEC Web Server Module IP Address, Subnet Mask and Default Gateway (leave it as 0.0.0.0 if your network does not use Default Gateway) in these fields.



G. Click the **Save** button.



H. Select **Reboot**. Then click the **Reboot** button.



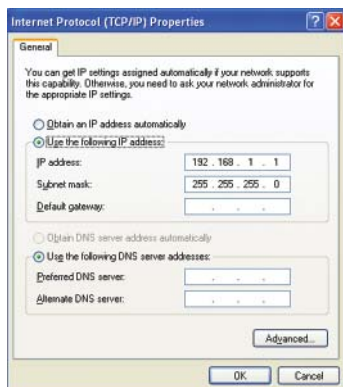
I. Close the Web Server Unit Settings dialog box and browser.

Proceed to Step 4: Configure the WindLDR software

Step 4: Configure the WindLDR software

In this step, you will revert your PC network settings to their original settings, put the Web Server Module onto the Ethernet network and configure the WindLDR software to remotely communicate with the Web Server Module.

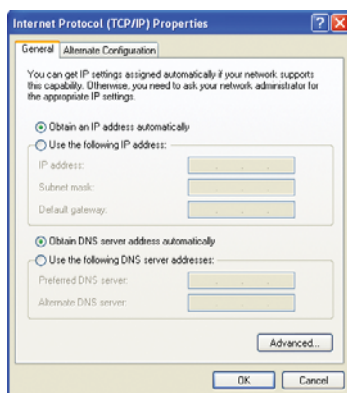
- A.** Open the Internet Protocol (TCP/IP) Properties dialog box (Please refer to Step 2 if you have forgotten how to do this).



- B.** Select **Obtain an IP address automatically***



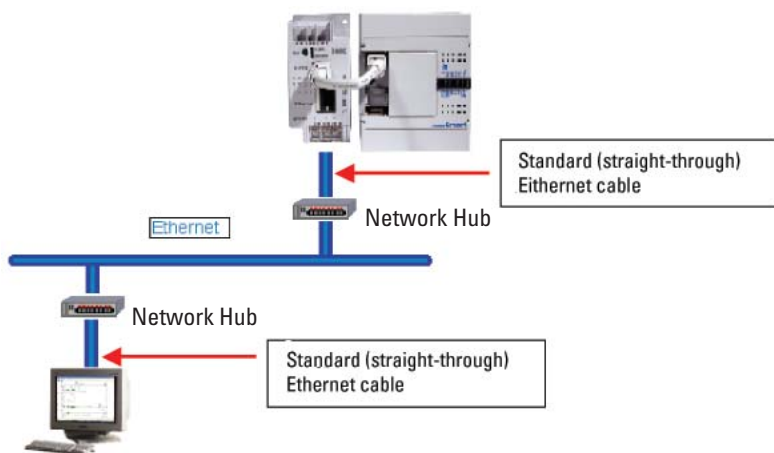
* This is assuming your network is using a DHCP server. If your PC was predefined with a static IP address (refer to Step 2), then fill-in the **PC IP Address** here.



- C.** Click the **OK** button to close the Internet Protocol (TCP/IP) Properties dialog box.
D. Click the **Close** button to close the Local Area Connection Properties dialog box.

E. Change your Web Server Module setup as below.

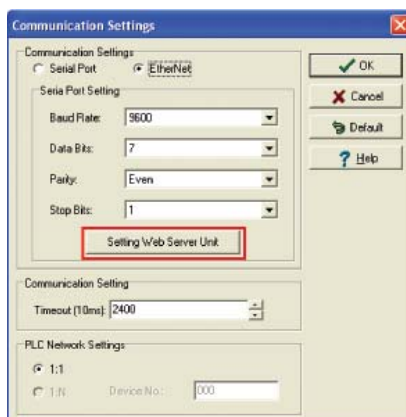
- Using a standard RJ45 Ethernet cable, connect one end to the Web Server Module and the other end to your network hub.
- Using a second standard RJ45 Ethernet cable, connect one end to the PC Ethernet port and the other end to your network hub.
- Connect one end of the interface cable to the Web Server Module and the other end to the PLC.
- Make sure both the Web Server Module and PLC are connected to power.



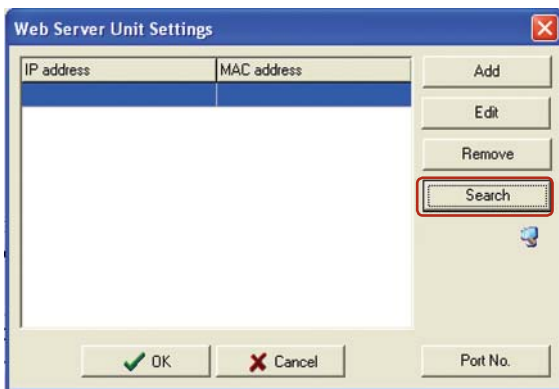
F. Launch **WindLDR** software. Make sure you are running WindLDR version 4.7 or above.

G. Select **Configure** ➔ **Communications**.


H. Select **Ethernet** and click on the **Setting Web Server Unit** button.

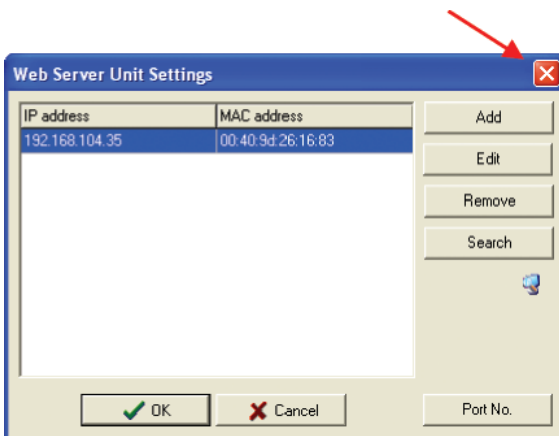


I. The Web Server Unit Settings dialog box will appear. Click the **Search** button.



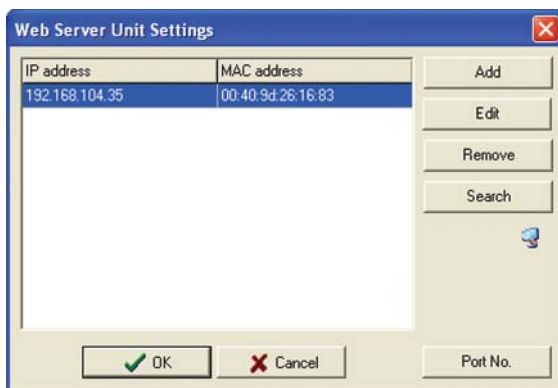
J. WindLDR will search for the Web Server Module with the IP you assigned in Step 3. After approximately 10 seconds, the Web Server Unit Settings dialog box will display the IP address of the Web Server Module.

Select the IP address and click  to close this window (Do NOT click the OK button).

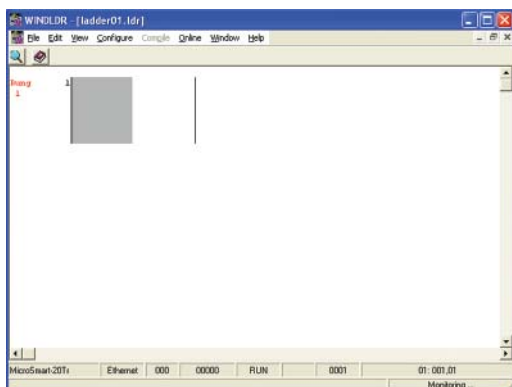


K. Click the **OK** button to close the Communication Settings dialog box.

- L.** Click **Online** → **Monitor**. The Web Server Unit Settings dialog box will appear, highlight the IP address and click the **OK** button.



- M.** WindLDR is now monitoring the connected PLC via the Ethernet network. You have successfully established remote communication with the Web Server Module. You can now monitor, download and upload ladder programs remotely via Ethernet.



Please visit our website at www.idec.com/plc for other tutorials on how to configure Web Server Module functions, such as Web Monitoring, Email and Point-to-Point PLC communication.

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International Headquarters:

707 Dayton Road - P.O. Box 1040
Ottawa, IL 61350 USA

www.bb-elec.com

815-433-5100

Fax 815-433-5104

orders@bb-elec.com

support@bb-elec.com

European Headquarters:

Westlink Commercial Park
Oranmore, Co. Galway, Ireland

www.bb-europe.com

+353 91 792444 Fax +353 91 792445

orders@bb-europe.com

support@bb-europe.com