

# **MM300-C**

**Bluetooth 2.0+ EDR Module**

## **User Manual**

**Rev 0.1**



## National Communications Commission Interference Statement

This equipment includes wireless RF module, and must be labeled in a visible area with the following:

Contains NCC ID:  XXXyyyLPDzzzz-x

## Table of contents

<b>Introduction.....</b>	<b>1</b>
<b>Install Bluetooth.....</b>	<b>2</b>

# **Chapter 1**

## **Introduction**

Thank you for using the Bluetooth Module. The MM300-C is a Bluetooth adapter that works on Bluetooth operation everywhere in the world. It is Bluetooth 2.0+ EDR. MM300-C can give users of laptops, notebooks, tablet PCs, and other mobile computing devices access anywhere in the world through any Bluetooth network devices.

Able to provide Bluetooth real world throughput. The MM300-C provides the freedom to work as you wish, wherever you wish, using whatever kind of Bluetooth application you wish to use. It is ready to work “out of the box” in any embedded device or in any computer running Microsoft® Windows Vista, or XP. The MM300-C Module is truly a “must-have” for every productivity-sensitive laptop, notebook, or tablet PC user and any bandwidth-sensitive embedded design.

## **Features and Benefits**

- **Seamless Wireless Connectivity**

Bluetooth v2.0+EDR supports the use of most recent user-end devices.

## Chapter 2

# Install Bluetooth

MM300-C also support Bluetooth function. Below shows how to install Bluetooth device.

## 4.1 How to install Bluetooth device

BlueSoleil (Standard) Edition Quick Installation Guide

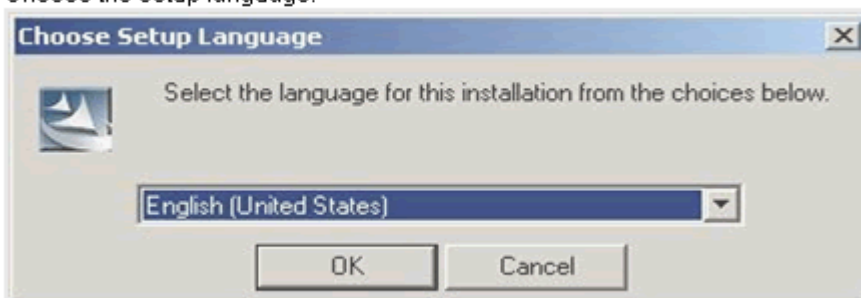
### System Requirement

A PC running Windows 2000 or Xp:

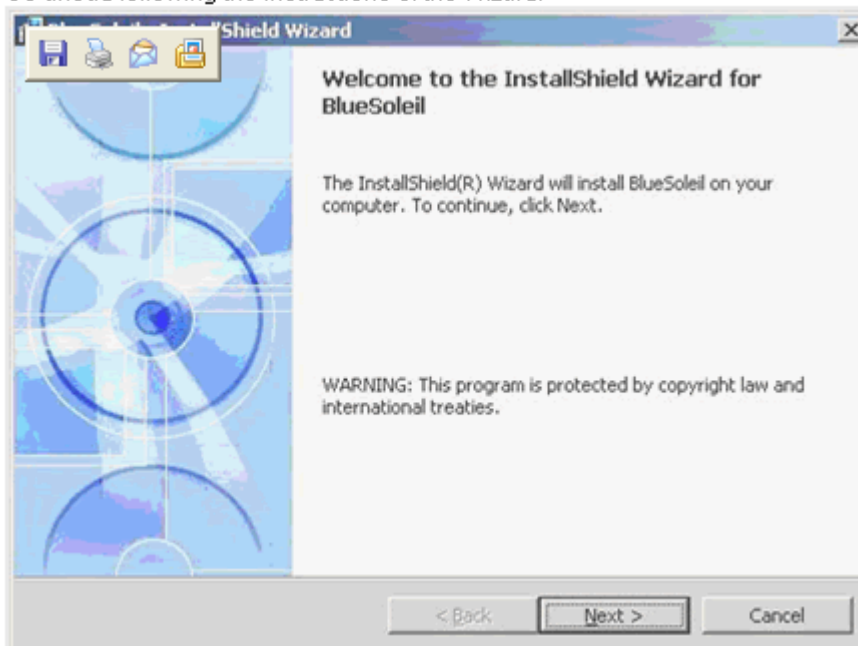
- Processor - Minimum: 266 MHz;  
Recommend: 1GHz
- Memory - Minimum: 64 MB RAM;  
Recommend: 256 MB RAM
- 12 MB free space on hard disk

### 1. Install BlueSoleil

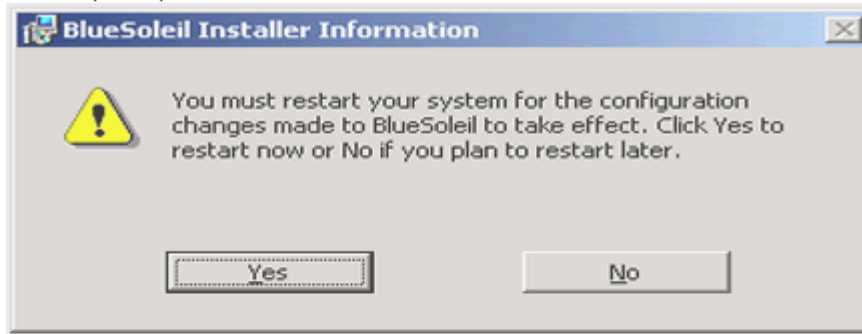
- 1.1 Click setup.exe to start installation.
- 1.2 Choose the setup language.



- 1.3 Go ahead following the instructions of the Wizard.



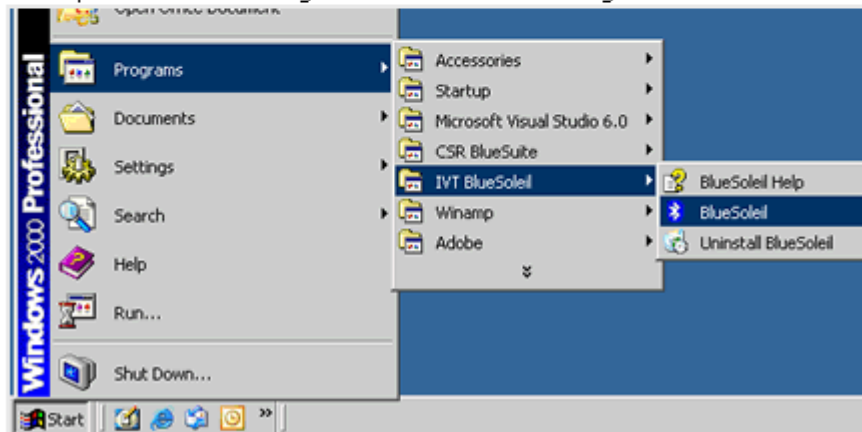
1.4 Restart your system.



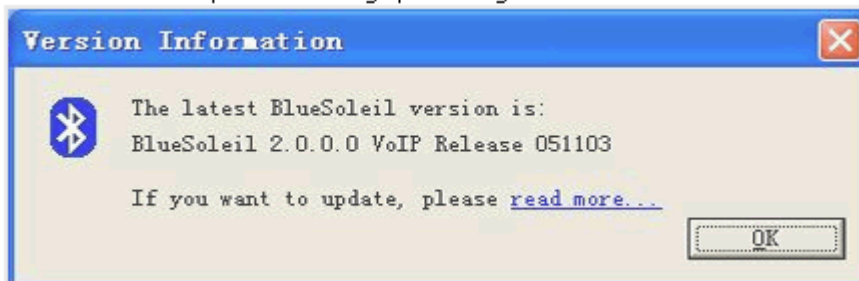
1.5 Insert your *Bluetooth* device into USB/other port.

## 2. Start up BlueSoleil

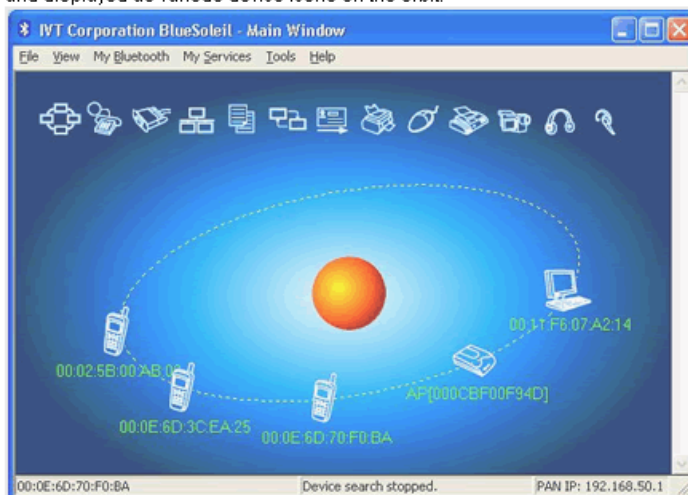
2.1 Start up BlueSoleil following the instructions in the image.



2.2 Click OK to close update-checking tip message.

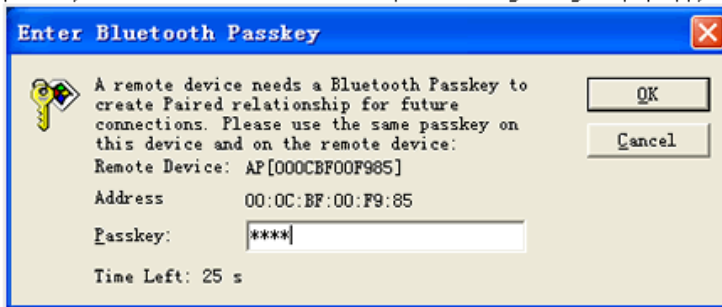


2.3 On the BlueSoleil main window, single-click the red central ball to start searching the *Bluetooth* devices in range. They'll be found and displayed as various device icons on the orbit.

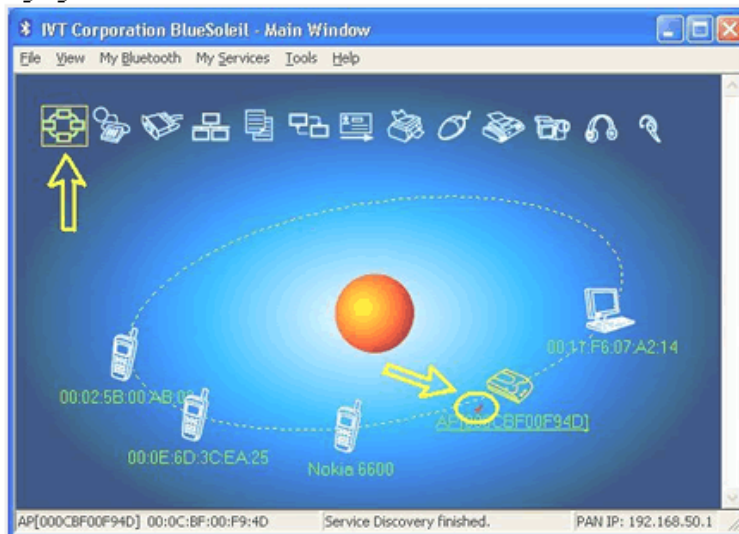


2.4 Double click one device icon to browse its service.

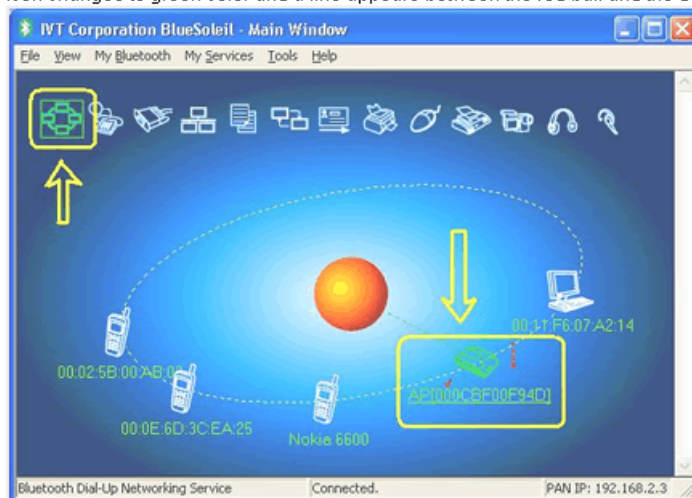
Note: In some cases, you need to make the trusted relationship between BlueSoleil and the remote device by inputting the same passkey on both sides. On BlueSoleil side, the following dialog will pop up, you can enter the passkey here.



2.5 After the pairing procedure succeeds, a tick sign will appear beside the device icon. The available services icons will be highlighted.



2.6 Single click one of the highlighted service icons, BlueSoleil will establish a *Bluetooth* connection to the remote device. The device icon changes to green color and a line appears between the red ball and the device icon.





---

### 3. Notice for Windows 2000/XP

Expected outcome:

- 3.1 Installed Files & Directories (by default):
  - <Windows program files>\VVT Corporation\BlueSoleil  
BlueSoleil execution and support files.
  - <Current user>\My Documents\*Bluetooth*  
Support directory. This is the directory for Object Push and Synchronization. Received cards and other objects will be put here.
- 3.2 Installed devices:
  - 11 *Bluetooth* Serial ports(e.g. COM3-COM13)
  - *Bluetooth* PAN Network Adapter
  - 4 *Bluetooth* virtual Modem
  - *Bluetooth* AV Audio Device
  - *Bluetooth* SCO Audio Device
  - *Bluetooth* HID Enum device
  - *Bluetooth* Vcomm Manager
  - *Bluetooth* HID Manager

**1. Common Physical Layer Specifications****Table 1: Common Physical Layer Specifications**

Operating Frequency	2402MHz to 2480MHz
Bluetooth Tx Power (Typical)	2±2dBm
Bluetooth Rx Sensitivity (typical)	-42dBm
Carrier Spacing	1.0MHz
Channel	79
Duplexing	TDD
Symbol Rate	1Mbps (GFSK) 2Mbps ( $\pi/4$ -DQPSK) 3Mbps (8DPSK)
Modulation Method	GFSK BT = 0.5 $\pi/4$ DQPSK 8DPSK
Reference Oscillator	26MHz (built in)
RF input and output impedance	Nominal 50 ohm
Main Chip	CSR BC41B143A
Dimensions	25.0 x 12.0 x 2.6 mm (typical)
GP Compliance	Yes

# FCC Notices

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.

CAUTION: Change or modification not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant 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 to correct the interference by one or more of the following measures:

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

CAUTION:

Any changes or modifications not expressly approved by the grantee of this device could void the user's authority to operate the equipment.

RF exposure warning:

This equipment must be installed and operated in accordance with provided instructions and the antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter. End-users and installers must be provide with antenna installation instructions and transmitter operating conditions for satisfying RF exposure compliance."