

# FIF-12 USB PROGRAMMING INTERFACE

The **FIF-12** is the Interface Unit which allows cloning of channel data to Vertex Standard transceivers,\* and/or re-writing of the firmware on some Vertex Standard transceivers,\* using the USB port of a personal computer.

\*: Check with your Vertex Standard Dealer for applicable models.

## OPERATING SYSTEM REQUIREMENTS

Microsoft® Windows® 2000, Windows® XP (32 bit Ver. only), Windows® Vista (32 / 64 bit Ver.), or Windows® 7 (32 / 64 bit Ver.)

## PACKING LIST

FIF-12 Interface Unit  
USB Cable  
CD-ROM (Includes the Driver File and Operating Manual)

## OPERATION

- Log on to the computer using the "Administrator" account.** If you do not know how to change the account to "Administrator," please consult your computer system administrator.
- Install the **FIF-12** driver.
- When the driver installation is finished, connect the supplied USB Cable between the **FIF-12** and your computer, then connect the appropriate Connection Cable (option) between the **FIF-12** and the transceiver.
- Confirm the computer's communication port which detects the **FIF-12**.
- Execute the cloning/writing software.  
If this is the first time you have executed the programming/writing software on this computer after installing the **FIF-12** USB Interface, check the programming/writing software's "CONFIGURE" parameter, to be sure that the communication port of the programming/writing software matches that set for the **FIF-12**. See page 13.

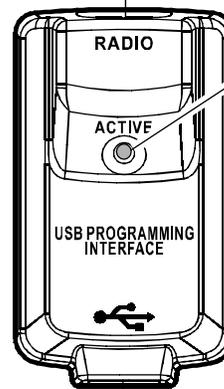
## OPTIONS

- CT-171** Connection Cable with 8-pin Modular Jack (for the **VX-4500/-4600/-2100/-2200/-4100/-4200/VX-7100/-7200, VXR-9000/-7000/-1000** etc.)
- CT-105** Connection Cable with 14-pin Universal Connector (for the **VX-800/-537/-5500/-6000** etc.)
- CT-106** Connection Cable 4-conductor Mini-phone Jack (for the **VX-450/-230/-350/-410/-420/-160/-180** etc.)
- CT-108** Connection Cable with 14-pin Universal Connector (for the **VX-820/-920** etc.)

### NOTE

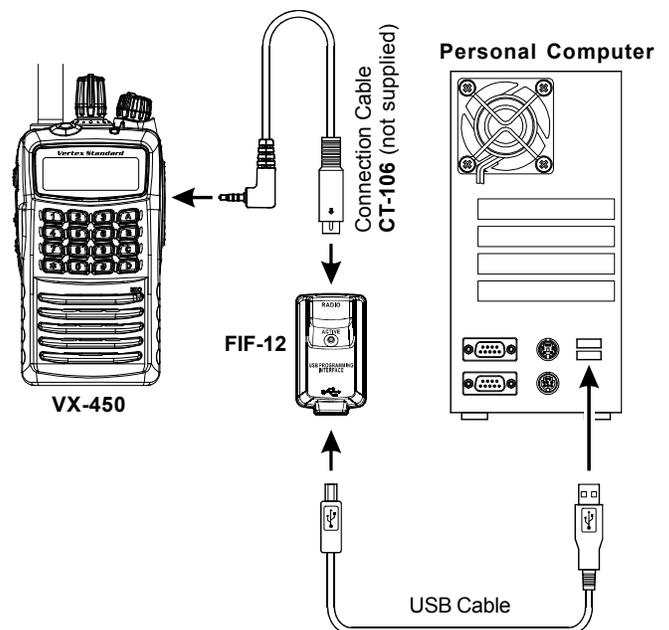
The **FIF-12** is designed to be connected directly to the computer's USB port. Devices that are made to convert a USB device to a 9 pin serial port will not work and/or may damage the **FIF-12**.

Connect the Transceiver to this jack using the appropriate (optional) Connection Cable.



Status Indicator  
GREEN: Normal Condition  
RED: Uploading/Downloading  
ORANGE: Firmware Writing

Connect your Computer to this jack using the supplied USB Cable.



TYPICAL SETUP FOR THE FIF-12



VERTEX STANDARD CO., LTD.

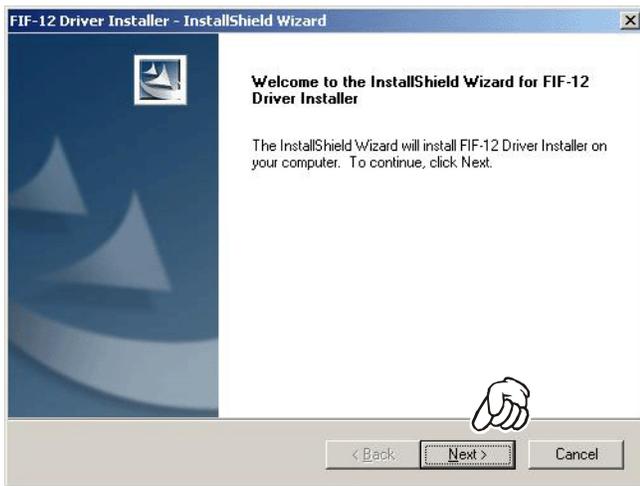
# INSTALLATION PROCEDURE FOR THE FIF-12 DRIVER (Microsoft® Windows® 2000)

**Note:** Please perform this operation after changing user account to an "Administrator". **DO NOT INSTALL ANY HARDWARE BEFORE INSTALLING FIF-12 DRIVER.**

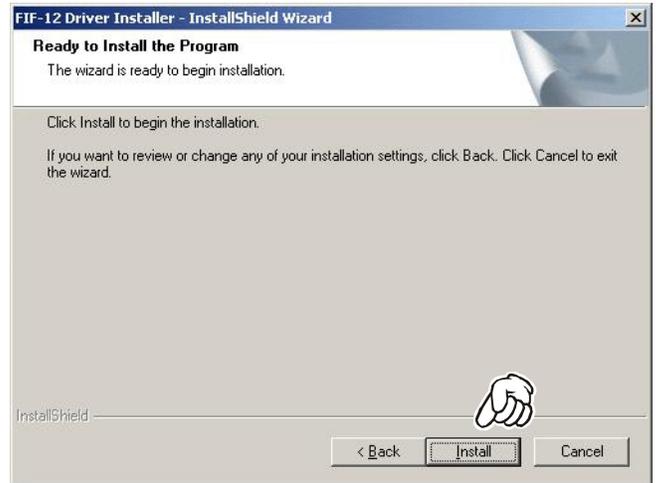
1. Set the supplied CD into your CD-ROM drive, then Click the *left* mouse button on the "setup.exe".



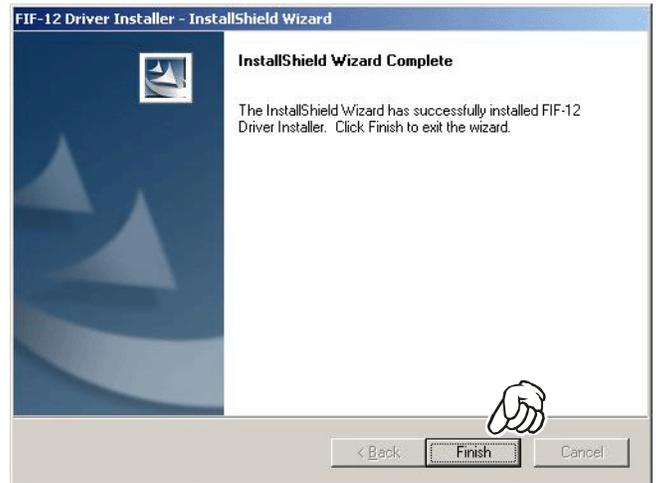
2. The following window (Install Shield Wizard) will be open. Click the left mouse button on "Next >" button.



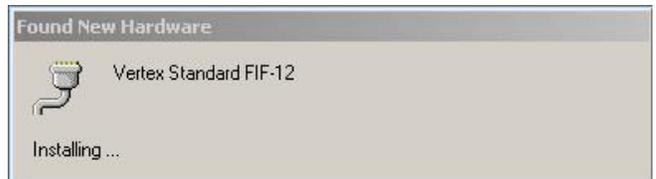
3. Click the *left* mouse button on the "Install" button.



4. Click the *left* mouse button on the "Finish" button.



5. Connect the FIF-12 to the USB port on your computer, the Driver is recognized automatically.

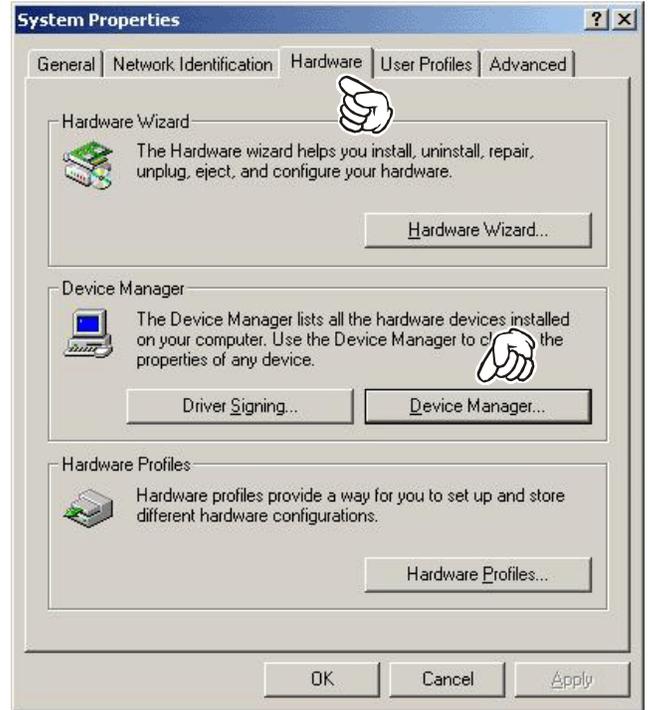


## CONFIRMING THE COMPUTER'S COMMUNICATION PORT (Microsoft® Windows® 2000)

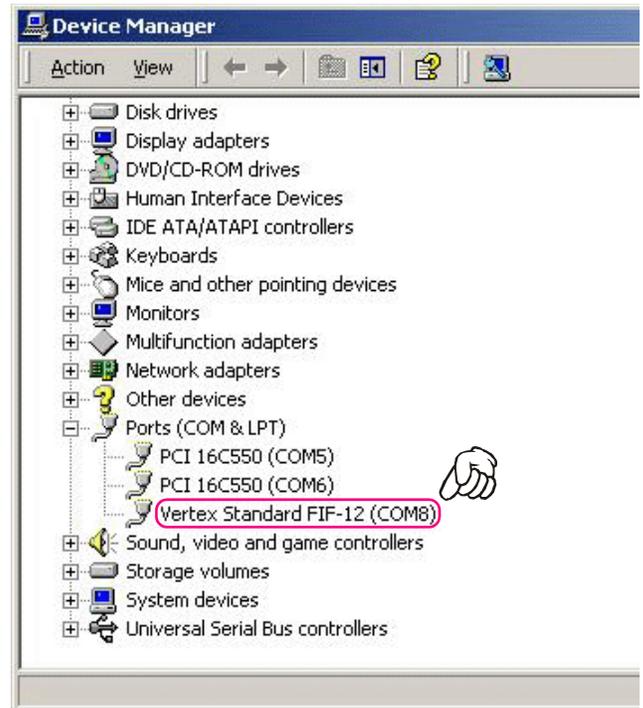
1. Click the *right* mouse button on the “My Computer” icon on the desktop, then click the left mouse button on the “Properties” item to open the “System Properties” window.



2. Click the *left* mouse button on the “Hardware” Folder, then click the *left* mouse button on the “Device Manager” Button to open the “Device Manager” window.



3. Confirm the computer's communication port which detects the FIF-12.



# INSTALLATION PROCEDURE FOR THE FIF-12 DRIVER (Microsoft® Windows® XP)

**Note:** Please perform this operation after changing user account to an "Administrator". **DO NOT INSTALL ANY HARDWARE BEFORE INSTALLING FIF-12 DRIVER.**

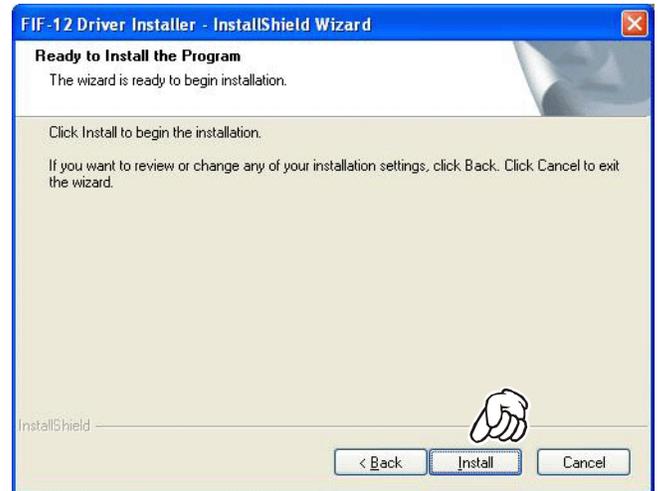
1. Set the supplied CD into your CD-ROM drive, then Click the *left* mouse button on the "setup.exe".



2. The following window (Install Shield Wizard) will be open. Click the left mouse button on "Next >" button.



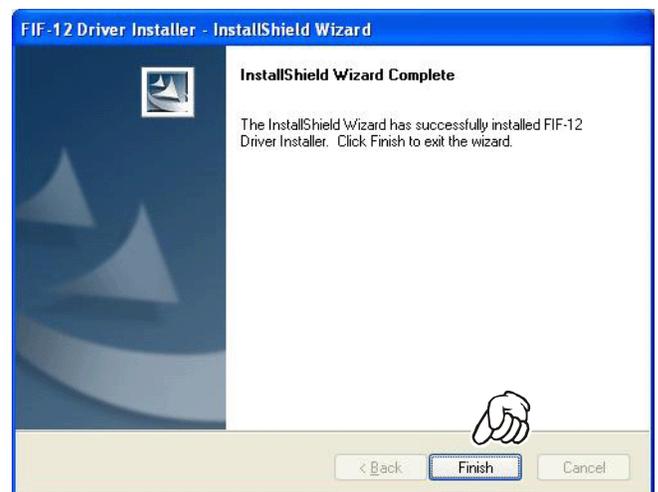
3. Click the *left* mouse button on the "Install" button.



4. Click the *left* mouse button on the "Continue Anyway" button.



5. Click the *left* mouse button on the "Finish" button.



## INSTALLATION PROCEDURE FOR THE FIF-12 DRIVER (Microsoft® Windows® XP)

6. Connect the FIF-12 to the USB port on your computer.
7. The following window (Found New Hardware) will be open.



8. The following window (Found New Hardware Wizard) will be open. Select **“Install the software automatically (Recommended)”**, then click the *left* mouse button on the **“Next>”** button.



9. The Driver is recognized automatically.



10. Click the *left* mouse button on the **“Continue Anyway”** button.



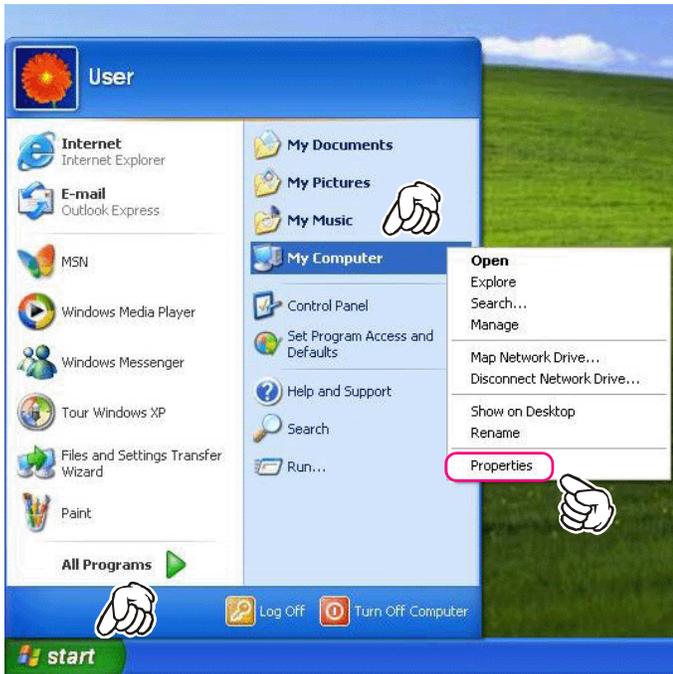
11. Click the *left* mouse button on the **“Finish”** button.



12. Repeat step 7 ~ step 11.

## CONFIRMING THE COMPUTER'S COMMUNICATION PORT (Microsoft® Windows® XP)

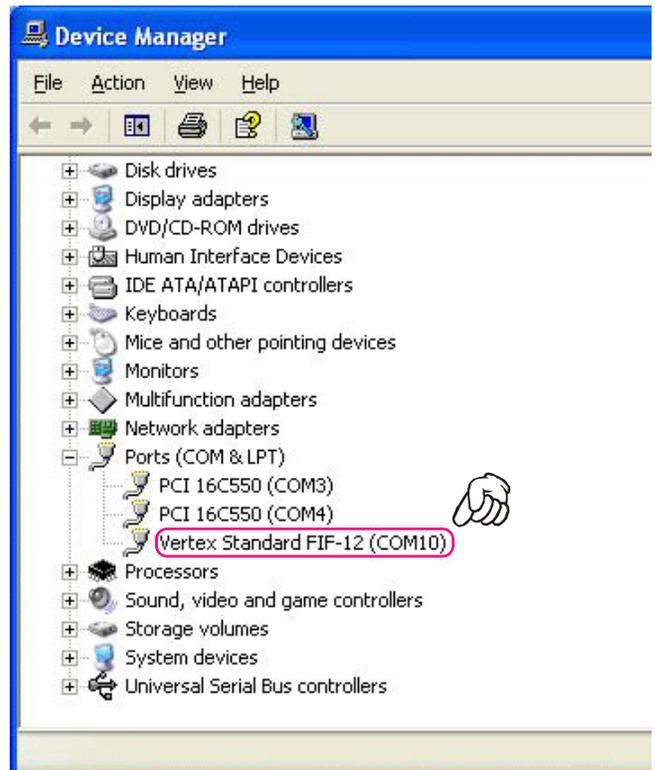
1. Click the *left* mouse button on the “start” button, then click the *right* mouse button on the “My Computer” item. Click the *left* mouse button on “Properties” to open the “System Properties” window.



2. Click the *left* mouse button on the “Hardware” Folder, then click the *left* mouse button on the “Device Manager” button to open the “Device Manager” window.



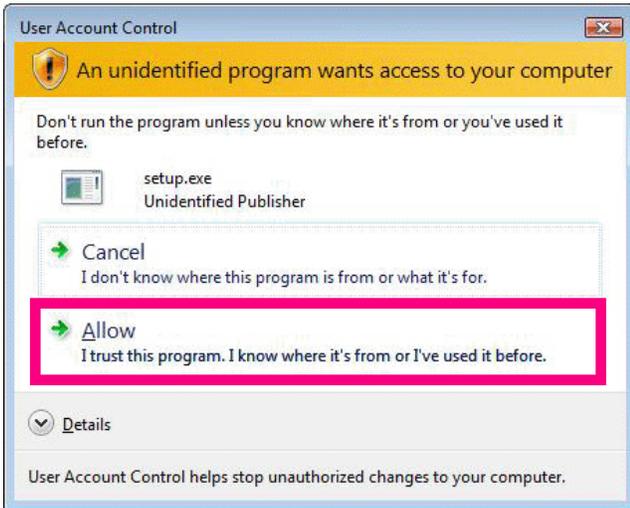
3. Confirm the computer's communication port which detects the FIF-12.



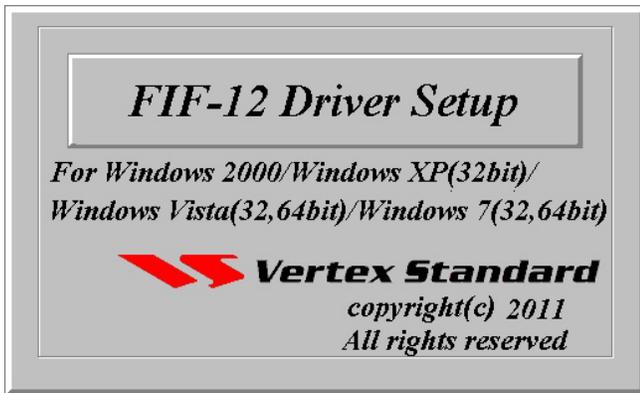
# INSTALLATION PROCEDURE FOR THE FIF-12 DRIVER (Microsoft® Windows® Vista)

**Note:** Please perform this operation after changing user account to an "Administrator". **DO NOT INSTALL ANY HARDWARE BEFORE INSTALLING FIF-12 DRIVER.**

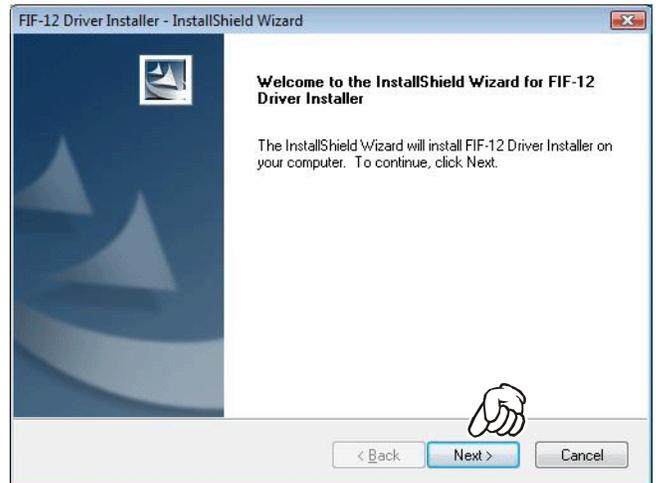
1. Set the supplied CD into your CD-ROM drive, then Click the *left mouse button* on the "setup.exe".
2. The following window (User Account Control) will be open. Click the *left mouse button* on "Allow".



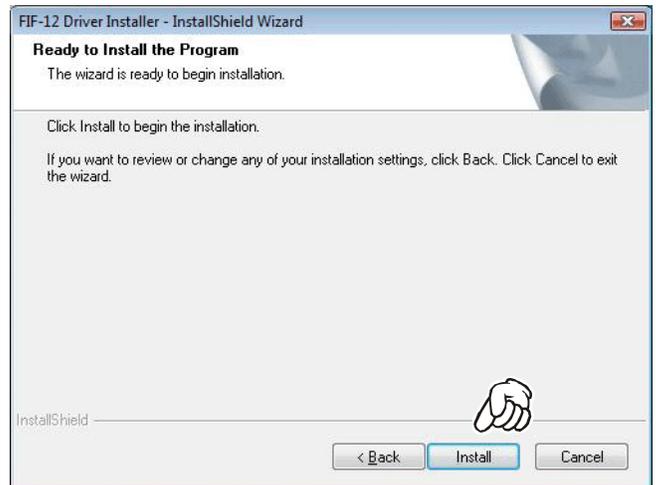
3. The following window (FIF-12 Driver Setup) will be open.



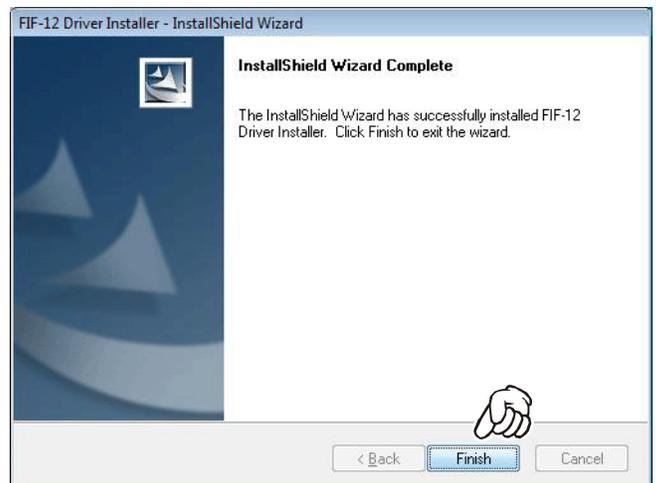
4. The following window (Install Shield Wizard) will be open. Click the left mouse button on "Next >" button.



5. Click the left mouse button on the "Install" button.

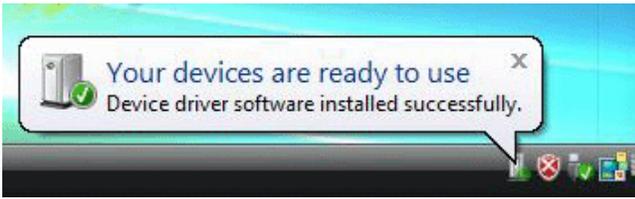


6. Click the left mouse button on the "Finish" button.



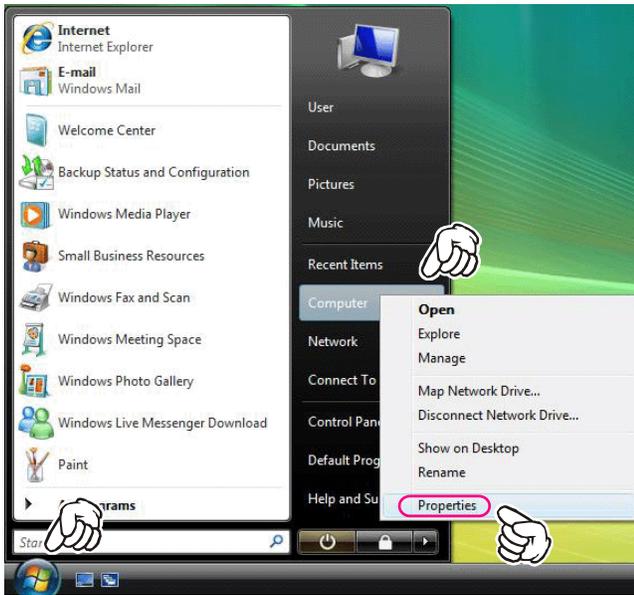
## INSTALLATION PROCEDURE FOR THE FIF-12 DRIVER (Microsoft® Windows® Vista)

7. Connect the **FIF-12** to the USB port on your computer, the Driver is recognized automatically.

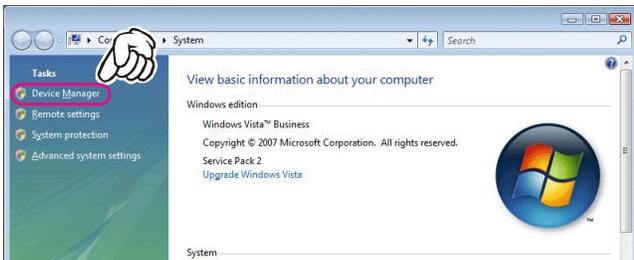


# CONFIRMING THE COMPUTER'S COMMUNICATION PORT (Microsoft® Windows® Vista)

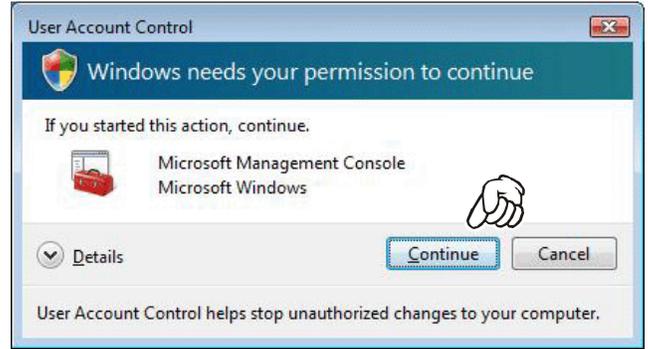
1. Click the *left* mouse button on the “start” button, then click the *right* mouse button on the “Computer” Item. Click the *left* mouse button on “Properties” to open the “System Properties” window.



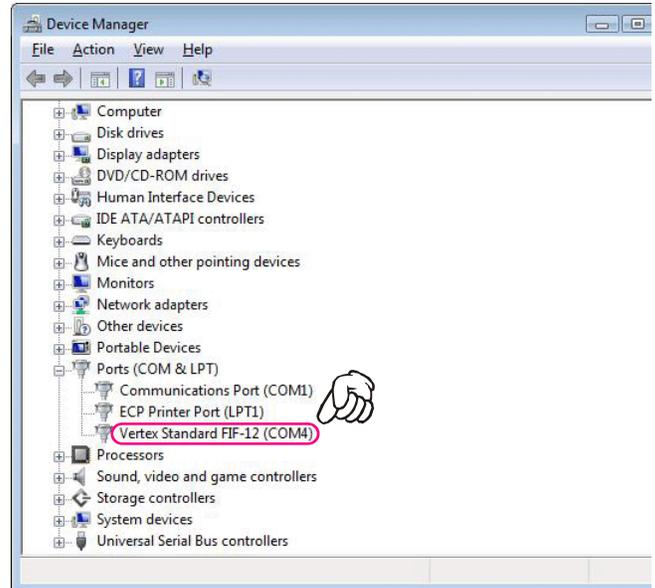
2. Click the *left* mouse button on the “Device Manager” Item, to open the “Confirmation” window.



3. Click the *left* mouse button on the “Continue” button to open the “Device Manager” window.



4. Confirm the computer's communication port which detects the FIF-12.



## INSTALLATION PROCEDURE FOR THE FIF-12 DRIVER (Microsoft® Windows® 7)

**Note:** Please perform this operation after changing user account to an "Administrator". **DO NOT INSTALL ANY HARDWARE BEFORE INSTALLING FIF-12 DRIVER.**

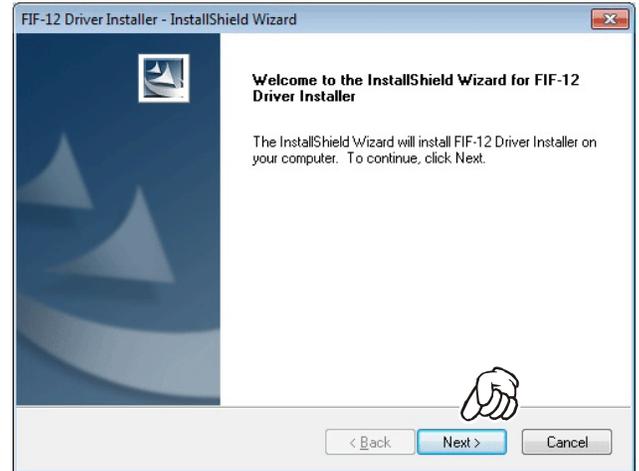
1. Set the supplied CD into your CD-ROM drive, then Click the *left* mouse button on the "setup.exe".
2. The following window (User Account Control) will be open. Click the left mouse button on "Yes" button.



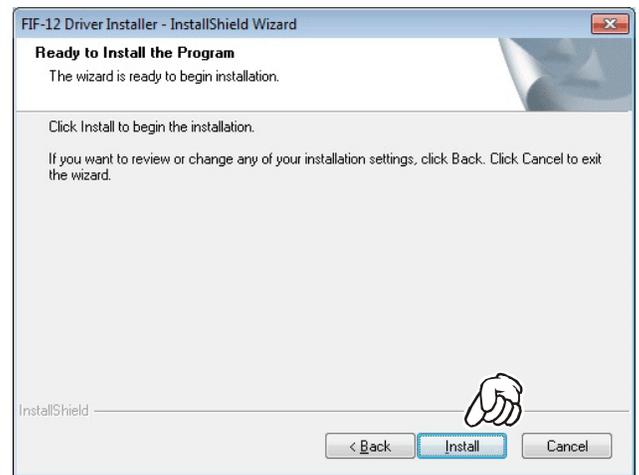
3. The following window (FIF-12 Driver Setup) will be open.



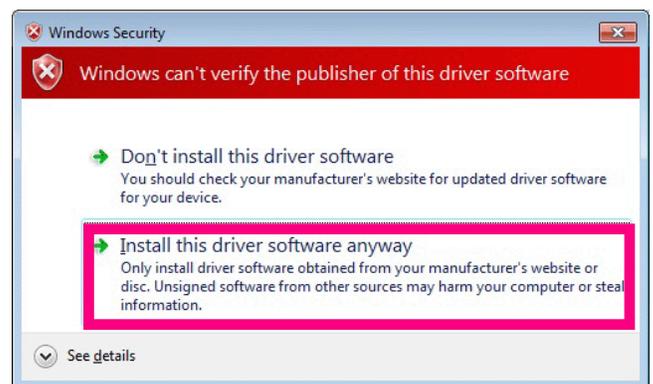
4. The following window (Install Shield Wizard) will be open. Click the left mouse button on "Next >" button.



5. Click the *left* mouse button on the "Install" button.

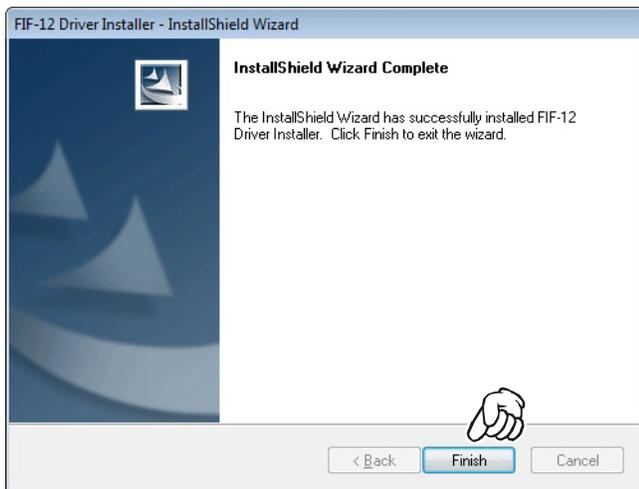


6. The "Windows Security" window will be open. Click the *left* mouse button on "Install this driver software anyway".

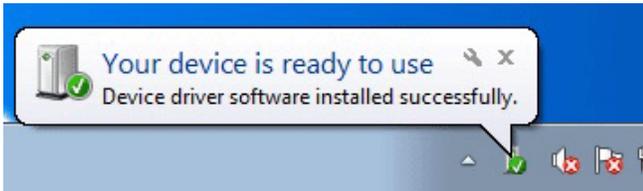


## INSTALLATION PROCEDURE FOR THE FIF-12 DRIVER (Microsoft® Windows® 7)

7. Click the *left* mouse button on the “Finish” button.

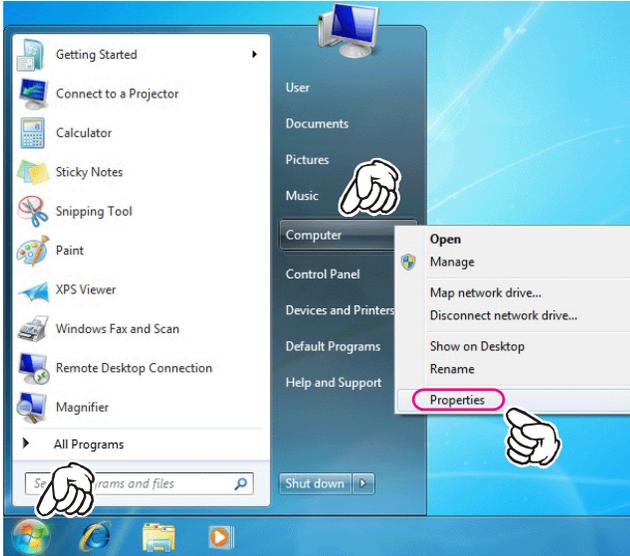


8. Connect the **FIF-12** to the USB port on your computer, the Driver is recognized automatically.

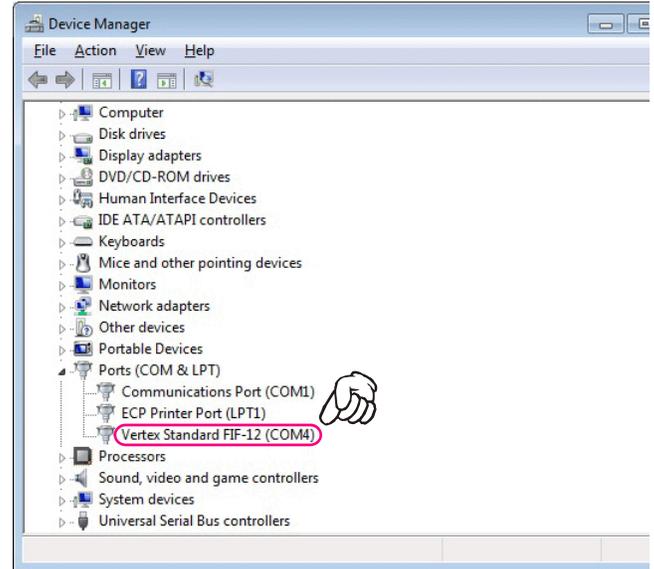


## CONFIRMING THE COMPUTER'S COMMUNICATION PORT (Microsoft® Windows® 7)

1. Click the *left* mouse button on the “**start**” button, then click the *right* mouse button on the “**Computer**” Item. Click the *left* mouse button on “**Properties**” to open the “**System Properties**” window.



3. Confirm the computer's communication port which detects the **FIF-12**.

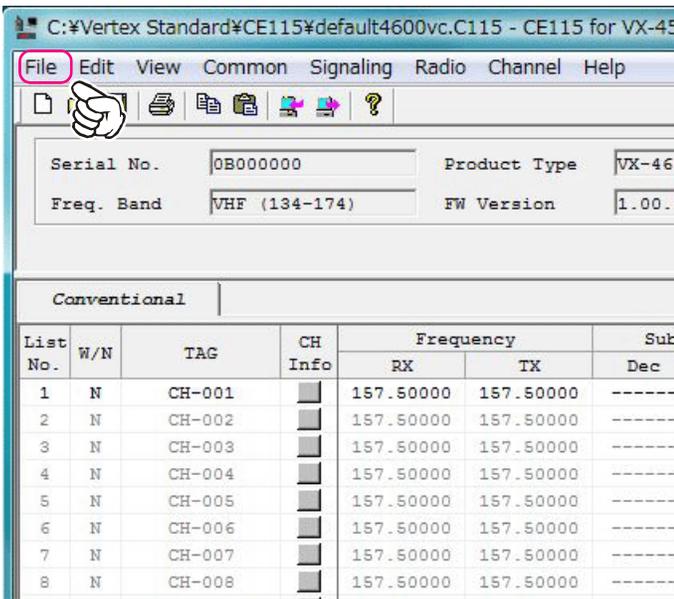


2. Click the *left* mouse button on the “**Device Manager**” Item, to open the “**Device Manager**” window.

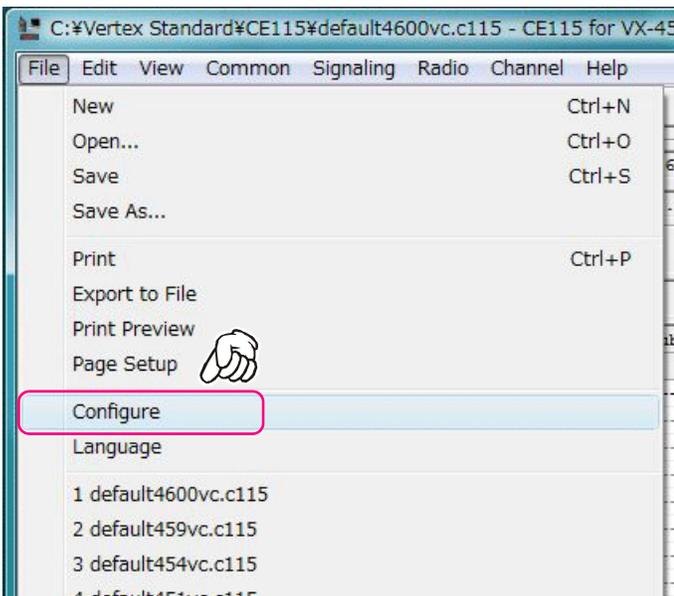


## “CONFIGURE” PARAMETER SETTING PROCEDURE (EXAMPLE: “CE115”)

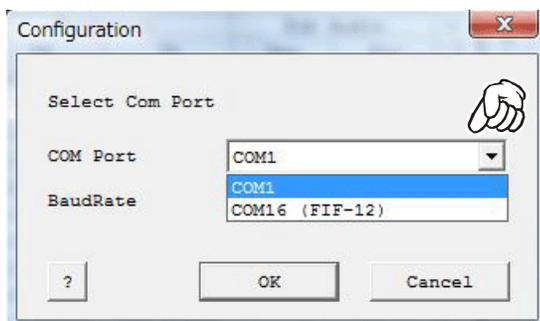
1. Click the *left* mouse button on the “File” parameter.



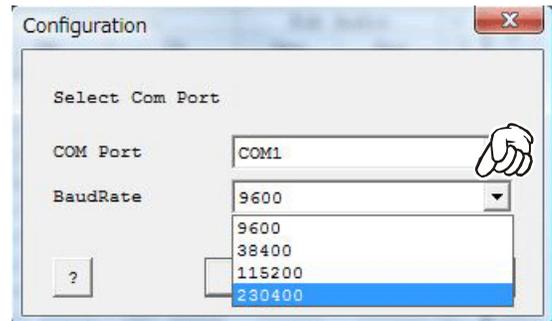
2. Click the *left* mouse button on the “Configure” item to open the “Configure” window.



3. Select the communication port which is detecting the FIF-12.



4. Select the Baud Rate for the transceiver’s computer interface circuitry.



5. Click the *left* mouse button on the “OK” button.

