

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.

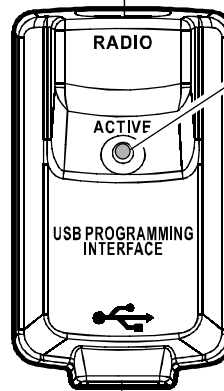
OPTIONS

- 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

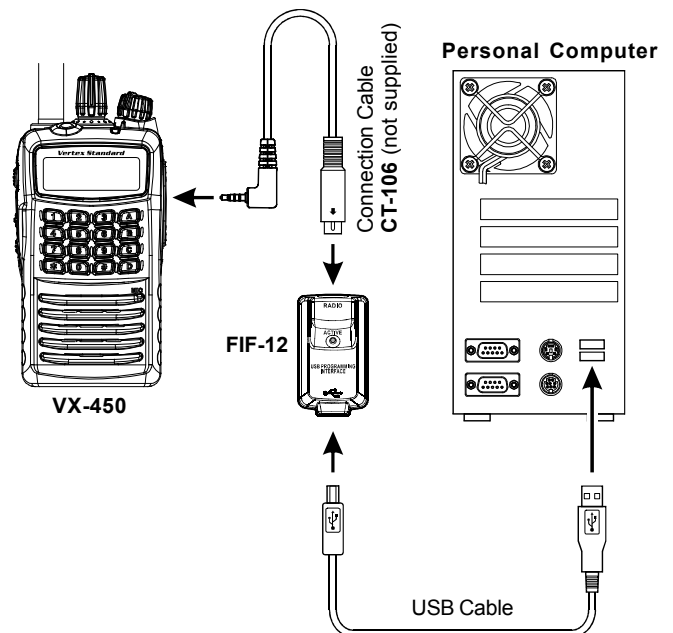
The **FIF-12** is designed to be connected directly to the computer's USB port. Devices that are made to convert a USB device to a 9 pin serial port will not work and/or may damage the **FIF-12**.

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.

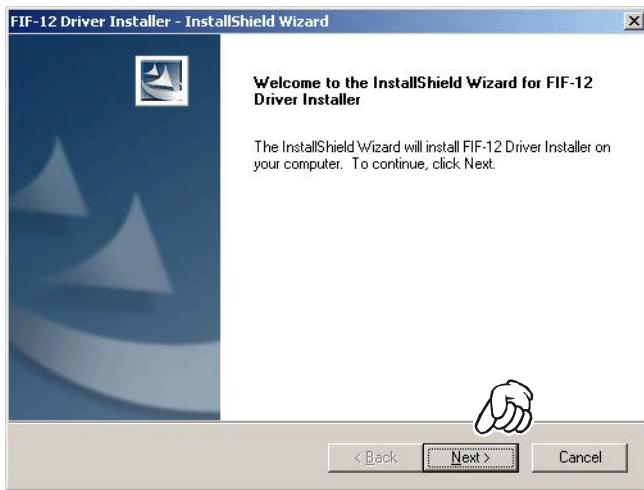
INSTALLATION PROCEDURE FOR THE FIF-12 DRIVER (Microsoft® Windows® 2000)

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

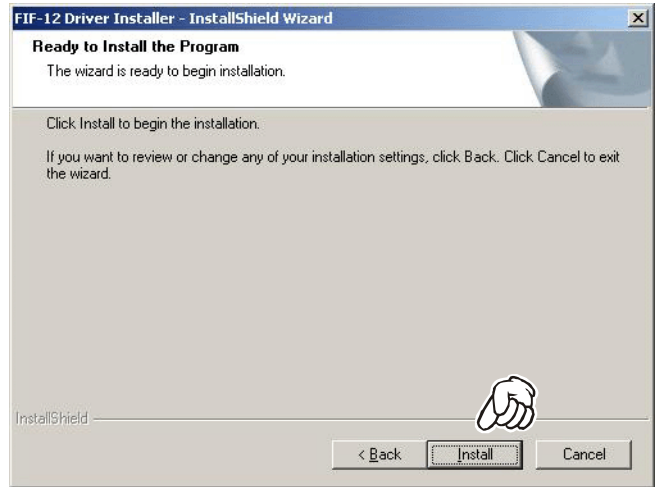
1. Set the supplied CD into your CD-ROM drive, then Click the *left* mouse button on the "setup.exe".



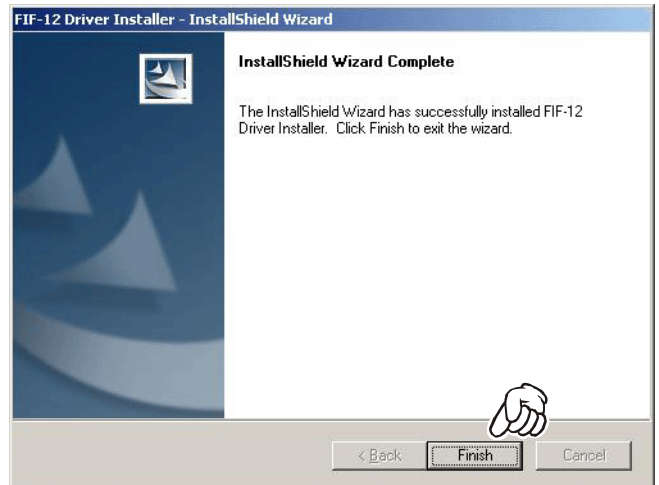
2. The following window (Install Shield Wizard) will be open. Click the left mouse button on "Next >" button.



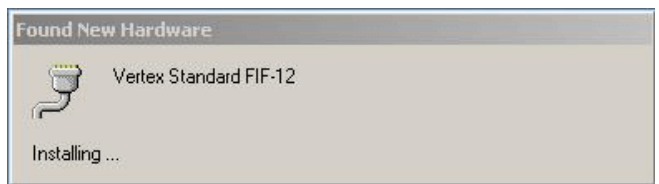
3. Click the *left* mouse button on the "Install" button.



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

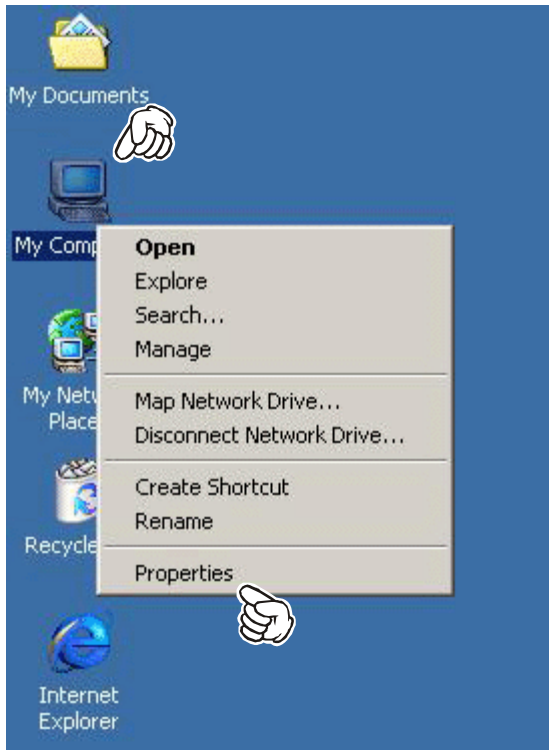


5. Connect the FIF-12 to the USB port on your computer, the Driver is recognized automatically.

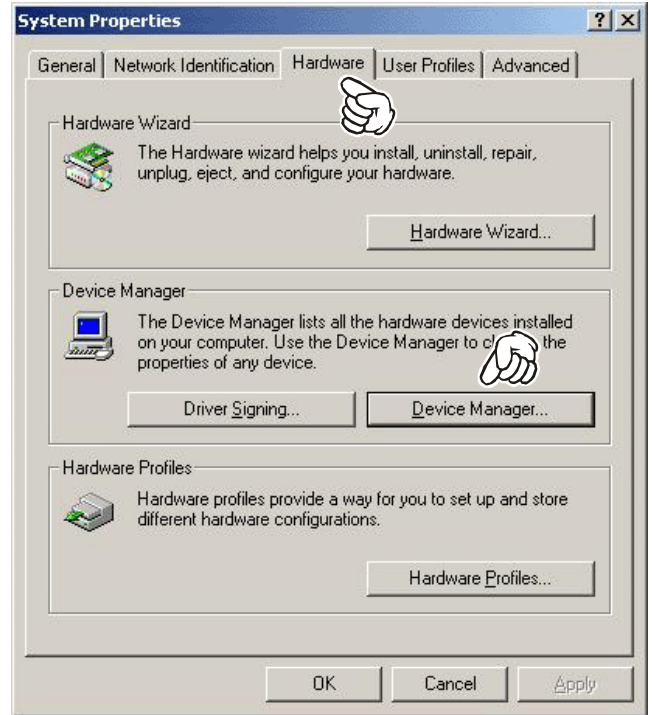


CONFIRMING THE COMPUTER'S COMMUNICATION PORT (Microsoft® Windows® 2000)

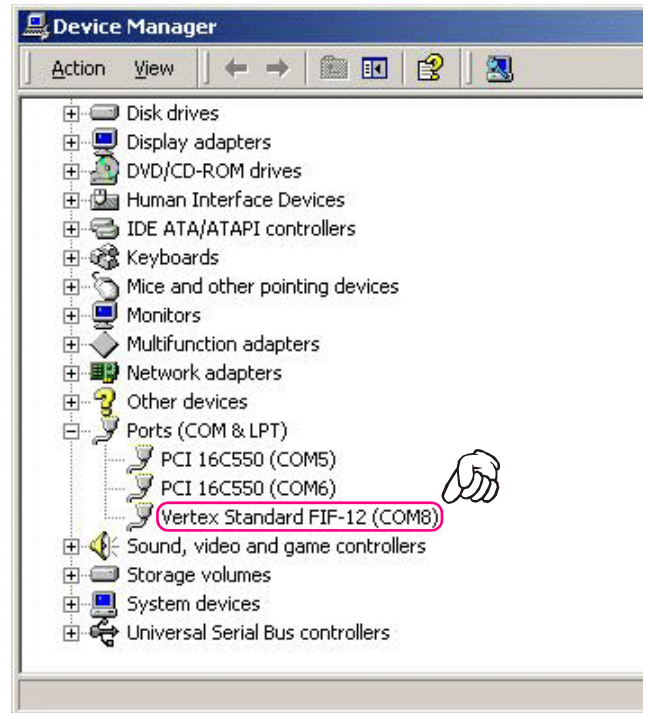
1. Click the *right* mouse button on the “My Computer” icon on the desktop, then click the left mouse button on the “Properties” item to open the “System Properties” window.



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.



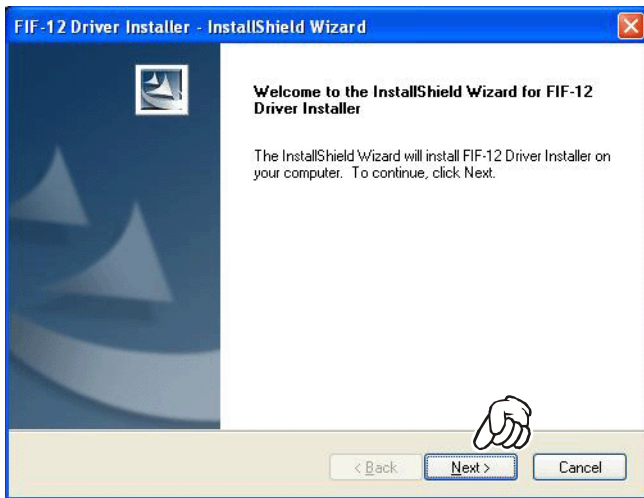
INSTALLATION PROCEDURE FOR THE FIF-12 DRIVER (Microsoft® Windows® XP)

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

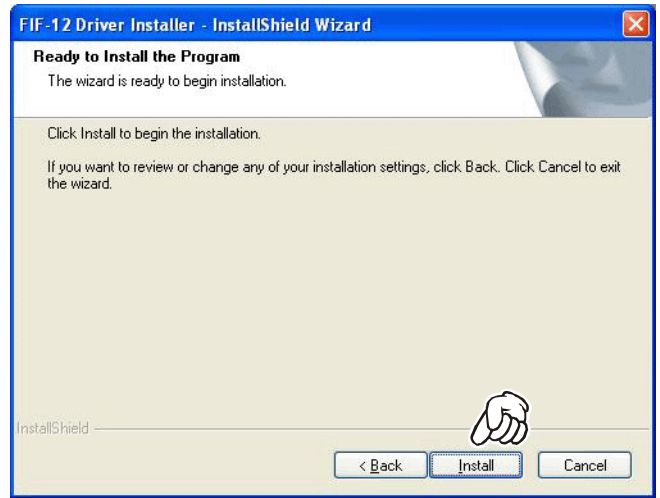
1. Set the supplied CD into your CD-ROM drive, then Click the *left* mouse button on the "setup.exe".



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



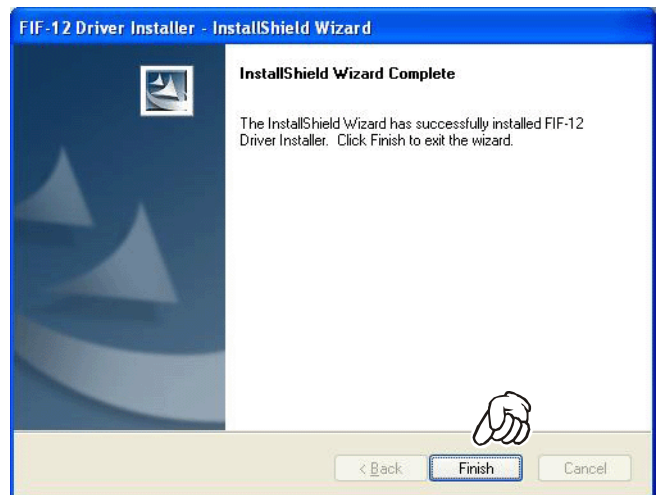
3. Click the *left* mouse button on the "Install" button.



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)

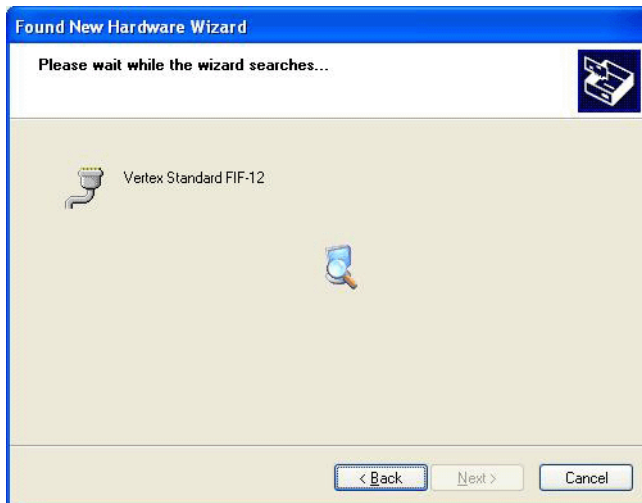
6. Connect the FIF-12 to the USB port on your computer.
7. The following window (Found New Hardware) will be open.



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.



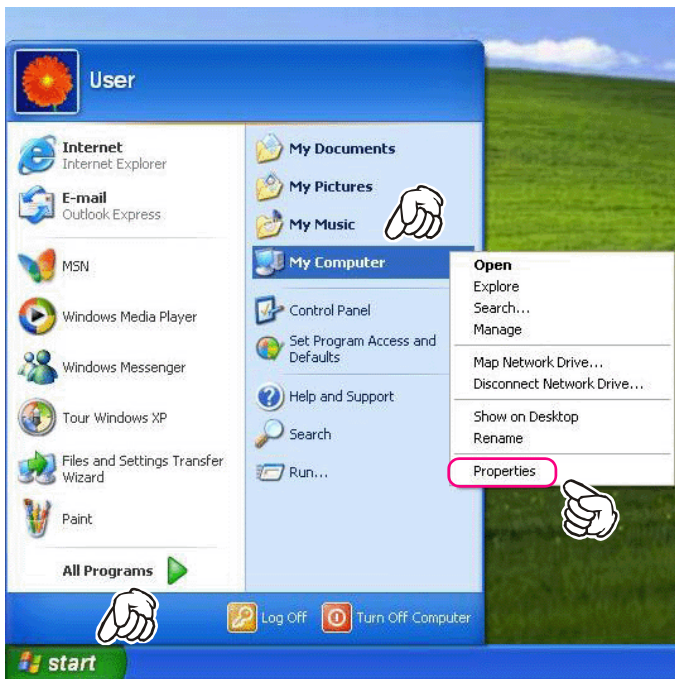
11. Click the left mouse button on the "Finish" button.



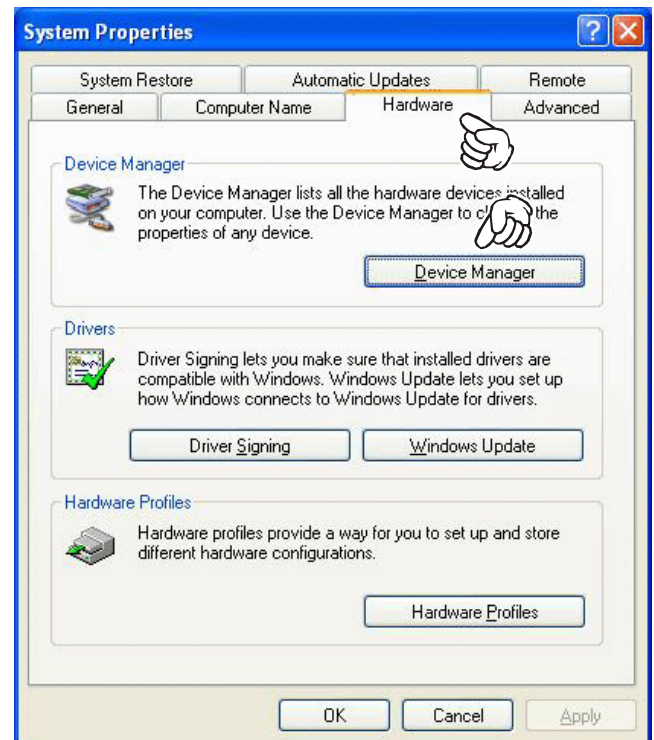
12. Repeat step 7 ~ step 11.

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

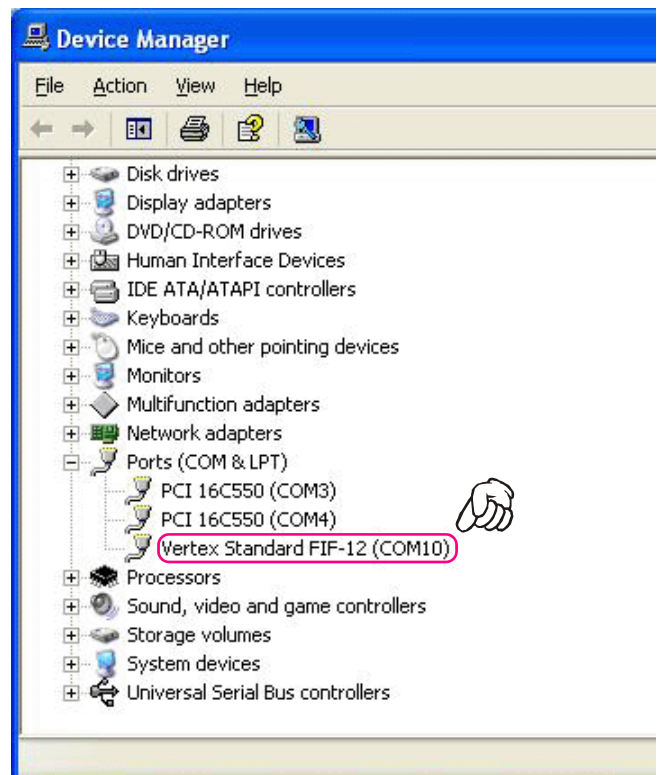
1. Click the *left* mouse button on the “start” button, then click the *right* mouse button on the “My Computer” item. Click the *left* mouse button on “Properties” to open the “System Properties” window.



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.



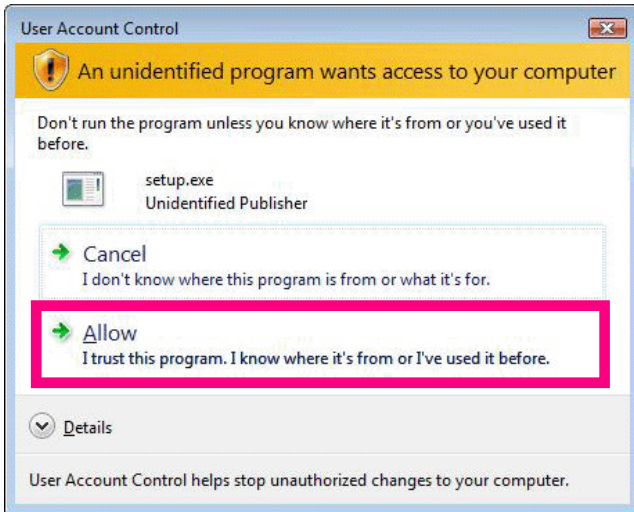
3. Confirm the computer's communication port which detects the FIF-12.



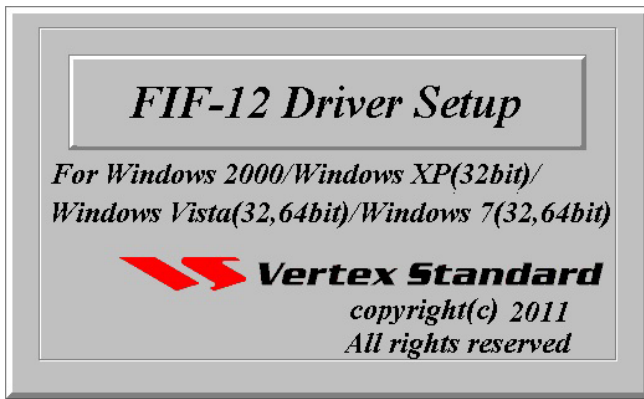
INSTALLATION PROCEDURE FOR THE FIF-12 DRIVER (Microsoft® Windows® Vista)

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

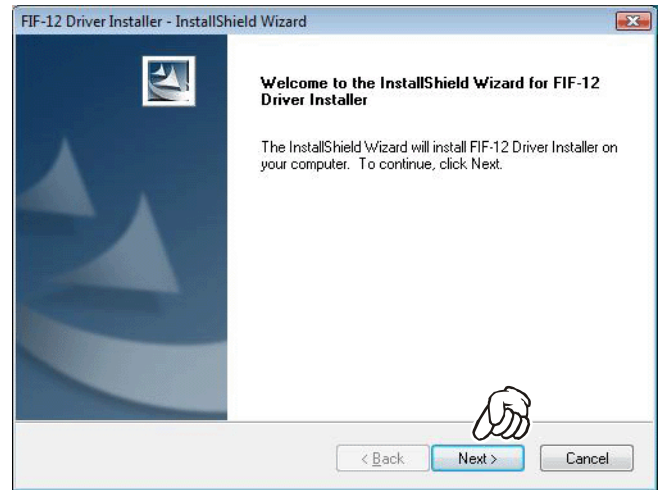
1. Set the supplied CD into your CD-ROM drive, then Click the *left mouse button* on the "setup.exe".
2. The following window (User Account Control) will be open. Click the *left mouse button* on "Allow".



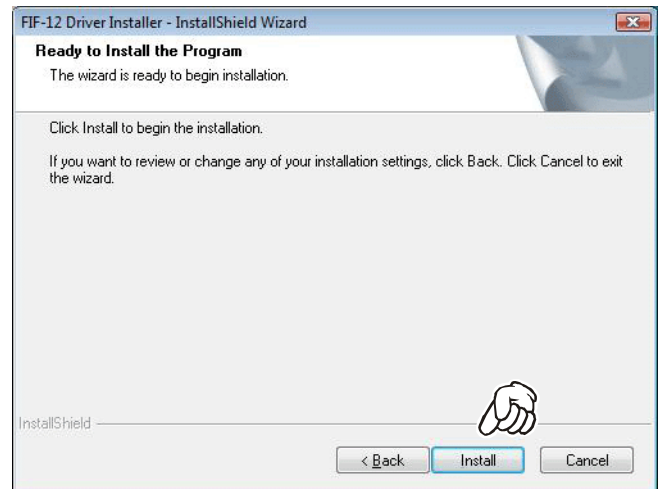
3. The following window (FIF-12 Driver Setup) will be open.



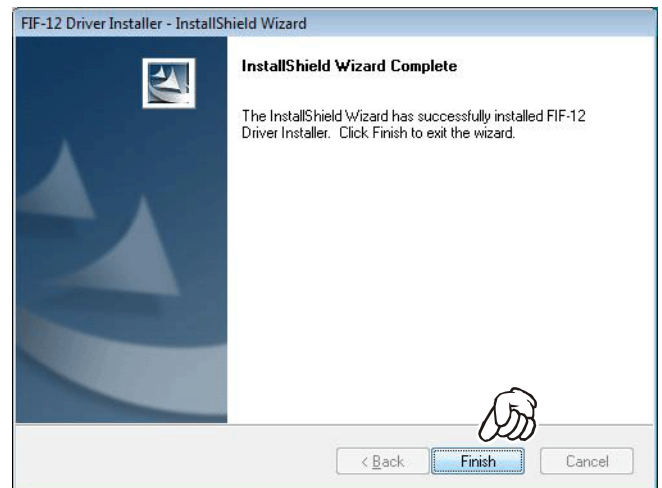
4. The following window (Install Shield Wizard) will be open. Click the left mouse button on "Next >" button.



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

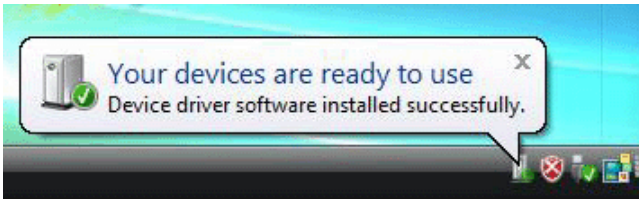


6. Click the left mouse button on the "Finish" button.



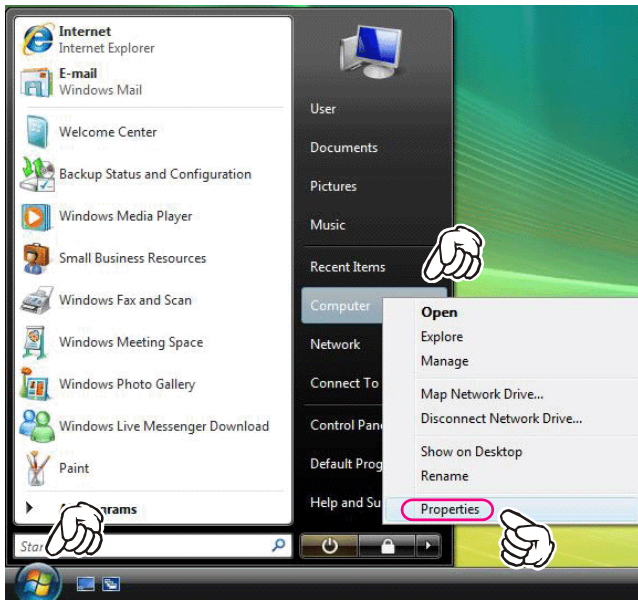
INSTALLATION PROCEDURE FOR THE FIF-12 DRIVER (Microsoft® Windows® Vista)

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

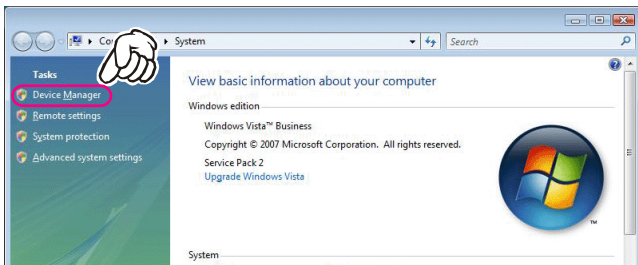


CONFIRMING THE COMPUTER'S COMMUNICATION PORT (Microsoft® Windows® Vista)

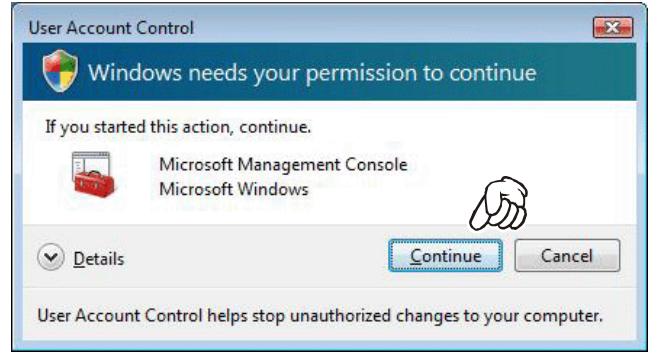
1. Click the *left* mouse button on the “start” button, then click the *right* mouse button on the “Computer” Item. Click the *left* mouse button on “Properties” to open the “System Properties” window.



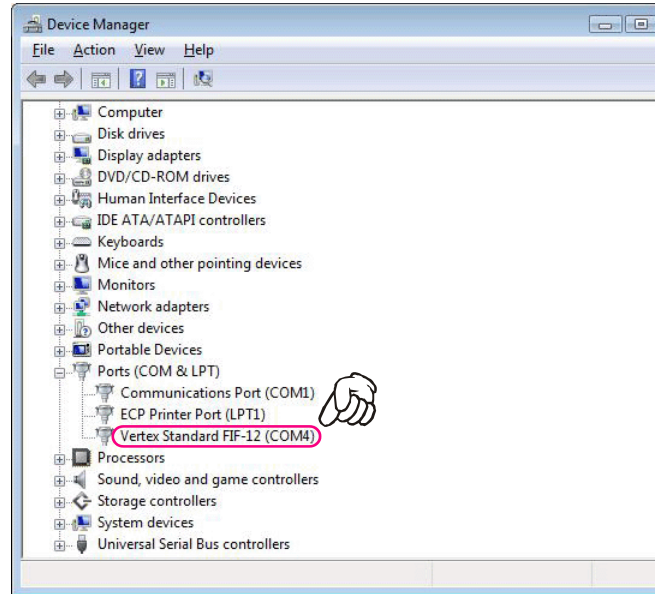
2. Click the *left* mouse button on the “Device Manager” Item, to open the “Confirmation” window.



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



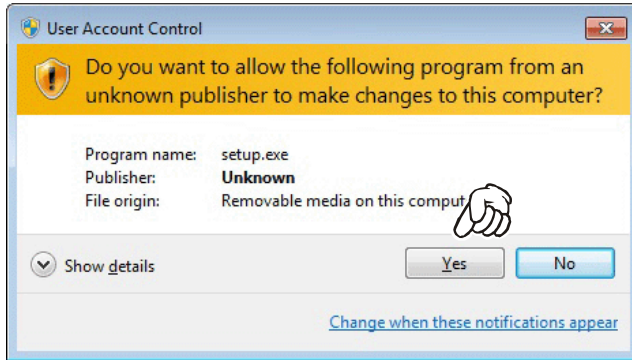
4. Confirm the computer's communication port which detects the FIF-12.



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.**

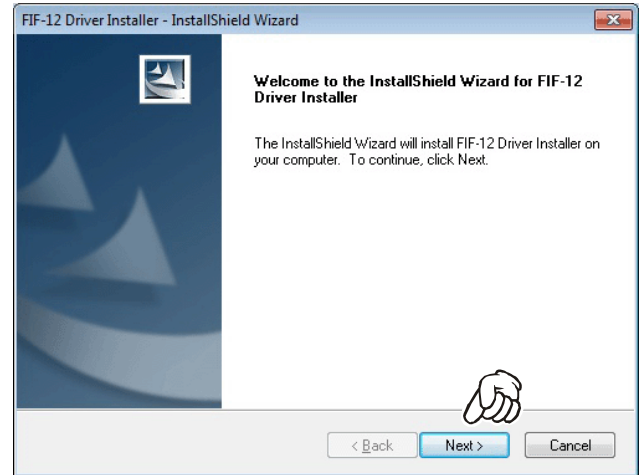
1. Set the supplied CD into your CD-ROM drive, then Click the *left* mouse button on the "setup.exe".
2. The following window (User Account Control) will be open. Click the left mouse button on "Yes" button.



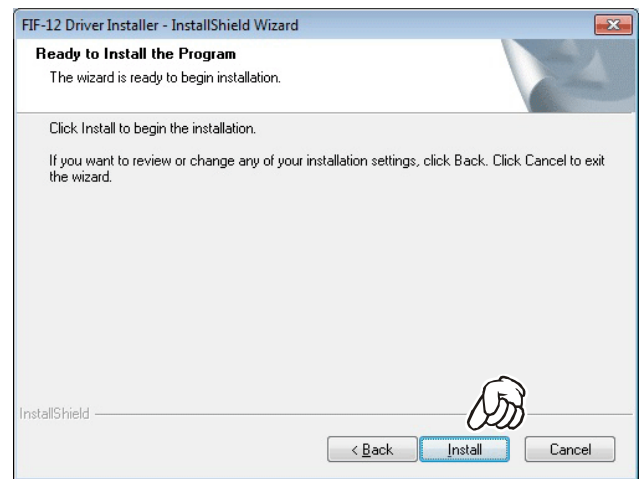
3. The following window (FIF-12 Driver Setup) will be open.



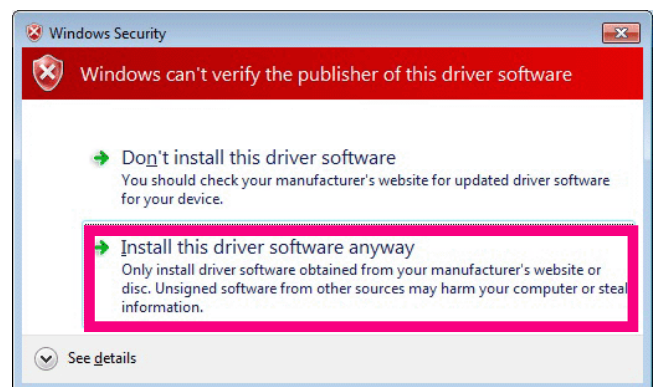
4. The following window (Install Shield Wizard) will be open. Click the left mouse button on "Next >" button.



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

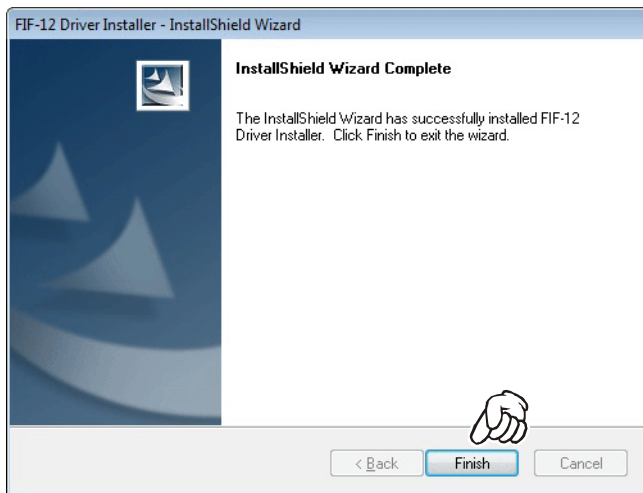


6. The "Windows Security" window will be open. Click the *left* mouse button on "Install this driver software anyway".

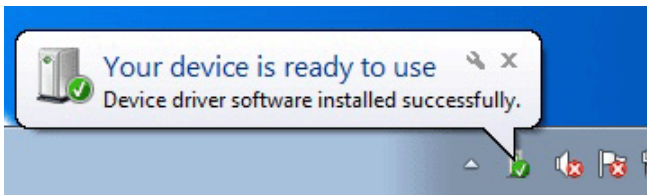


INSTALLATION PROCEDURE FOR THE FIF-12 DRIVER (Microsoft® Windows® 7)

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

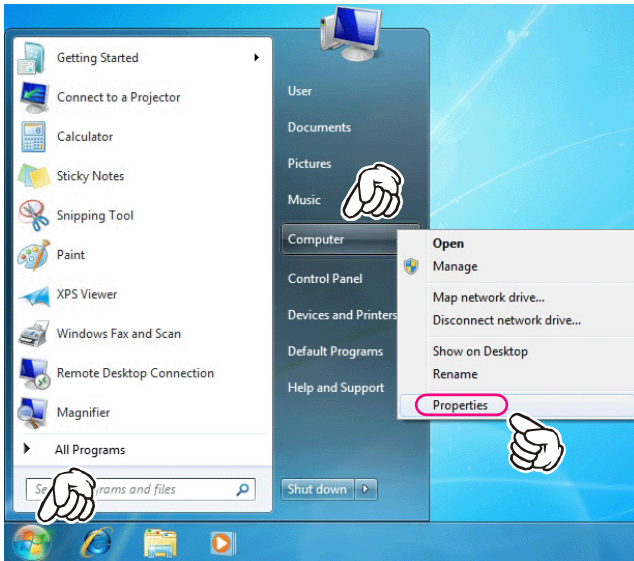


8. Connect the **FIF-12** to the USB port on your computer, the Driver is recognized automatically.

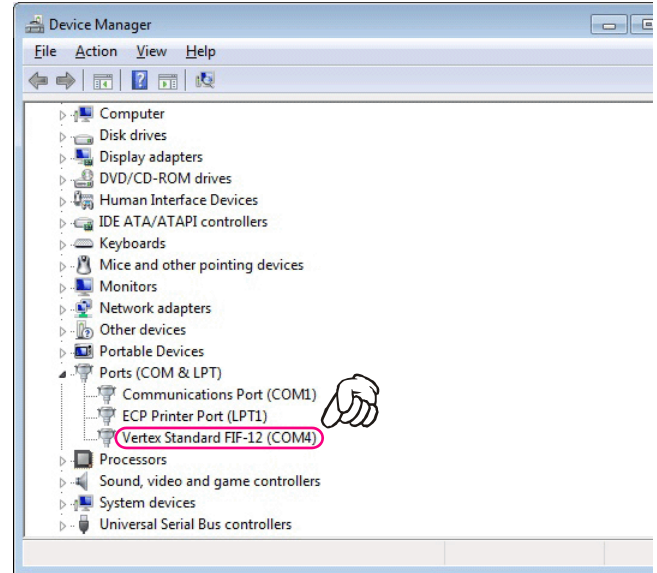


CONFIRMING THE COMPUTER'S COMMUNICATION PORT (Microsoft® Windows® 7)

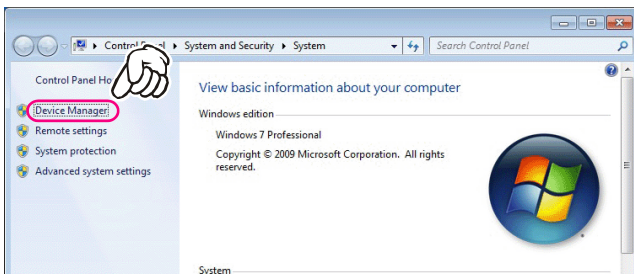
1. Click the *left* mouse button on the “**start**” button, then click the *right* mouse button on the “**Computer**” Item. Click the *left* mouse button on “**Properties**” to open the “**System Properties**” window.



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

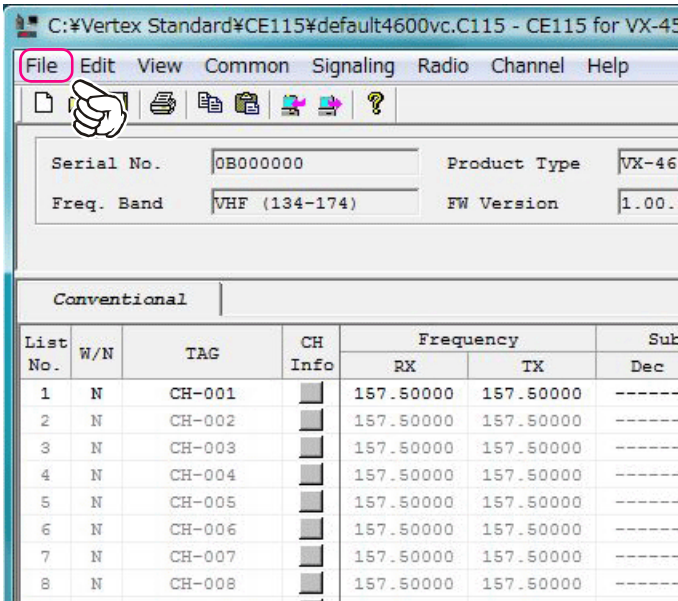


2. Click the *left* mouse button on the “**Device Manager**” Item, to open the “**Device Manager**” window.

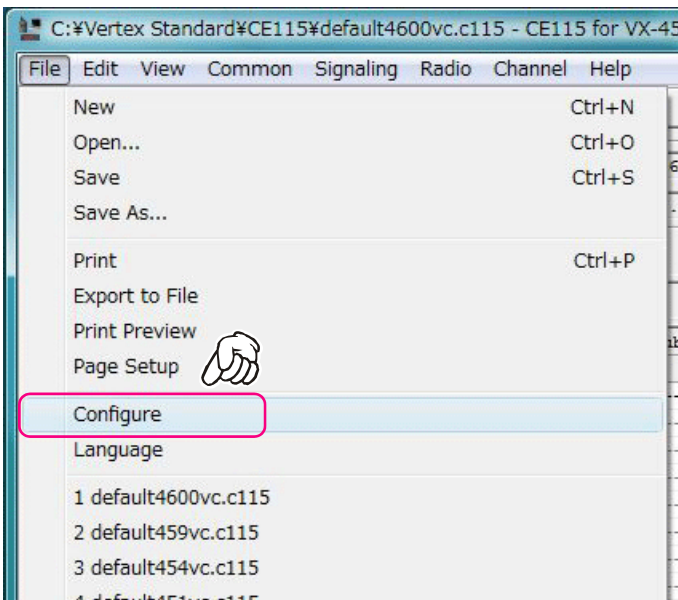


“CONFIGURE” PARAMETER SETTING PROCEDURE (EXAMPLE: “CE115”)

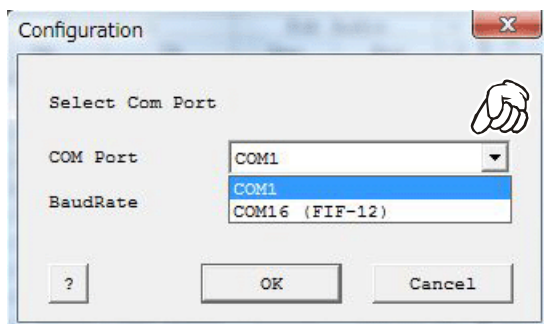
1. Click the *left* mouse button on the “File” parameter.



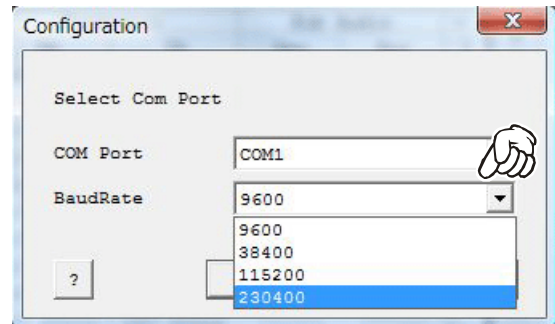
2. Click the *left* mouse button on the “Configure” item to open the “Configure” window.



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.

