

USB Interface (IF-USB-P01 / IF-USB-P02) **Operation Manual**

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1. Introduction

This document provides the instruction for installing the driver for CBM Printer with USB interface. Be sure to read this manual before use.

2. Precautions

- Read through the precautions of the user's manual of the printer beforehand.
- Any damage to data or program while using this product is beyond our warranty. Take backup data or program before using the device.

3. Type Classifications

IF-USB-P01: USB interface board for CBM1000II

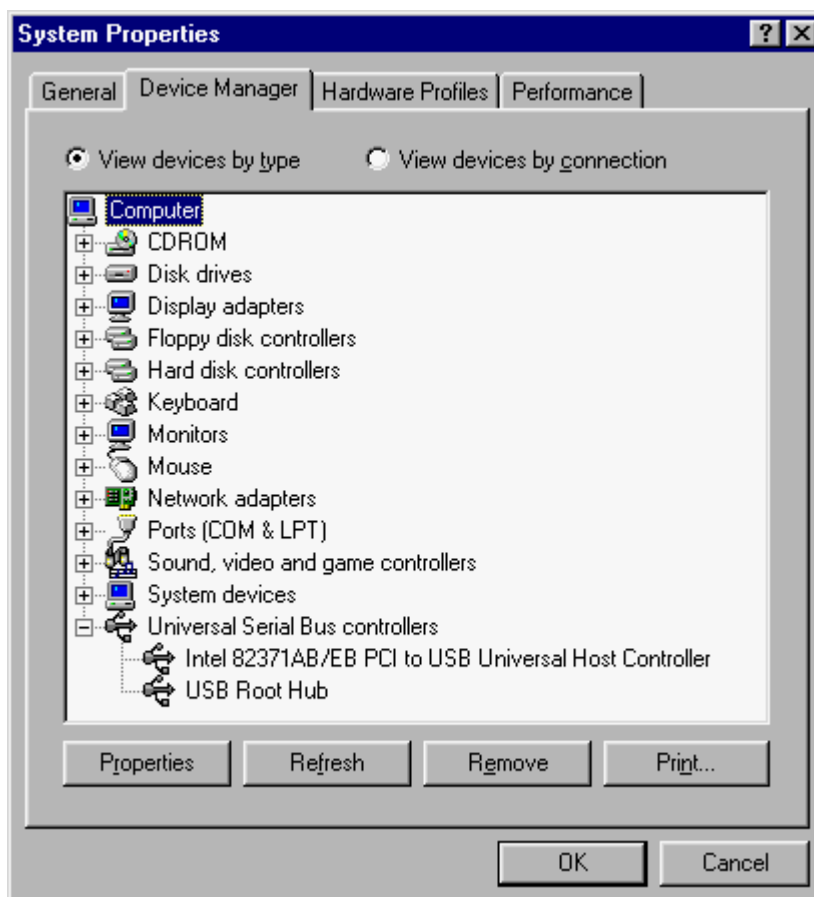
IF-USB-P02: USB interface board for newer models

4. Operating Environment

- USB-supported PC operating on any of the following operating system.
Microsoft Windows XP, 2000, Me, 98SE, 98
- USB is operating normally.

As shown in the following figure, "Universal Serial Bus controller" must be displayed. If it is not displayed, the USB is not active.

Also if "x" or "?" is shown on the Host Controller or USB root hub shown under the display, the USB is not active and printing through USB is not possible.



5. Cable Connection

Connect USB series type A connector to the PC.

Connect USB series type B connector to the printer.



Type A connector

Type B connector

6. Setting up the Driver

To allow the USB printer to print on Windows, it is necessary to install the USB driver and printer driver. Installation may differ in some degree depending on the OS used.

Here, only installation of the USB driver is explained. For installation of printer driver, read the description supplied with the driver.

Before installation, prepare both drivers.

6.1 Installation on Windows XP

Connect the PC and the printer together using the USB cable while Windows XP is operating. (All other programs shall be terminated to secure normal installation.)

The printer USB interface is automatically identified and a message “Installing new hardware.” is displayed at the right bottom of the screen. Then the Windows XP standard USB driver is installed automatically.

Following the USB driver installation, installation of the printer driver starts.

Install the printer driver.

After installation, confirm the following.

- If “USB Printing Support” is displayed on Device Manager, the USB driver is installed correctly.
- When you see the port from the property of the printer driver installed, the printer port is given as USB00x or the like.

Note: If the USB cable is disconnected and reconnected here, it is recognized as a new USB device and the number 00x may be increased. The combination available for actual printing is one USB00x for one USB port. Confirm the correct combination before use.

6.2 Installing on Windows 2000

Connect the USB cable and the PC using the USB cable while Windows 2000 is operating. Turn the printer on. (All other programs shall be terminated to secure normal installation.)

The printer USB interface is automatically identified and a message “Installing new hardware.” is displayed. Then the Windows 2000 standard USB driver is installed automatically.

Following the USB driver installation, installation of the printer driver starts.

Install the printer driver.

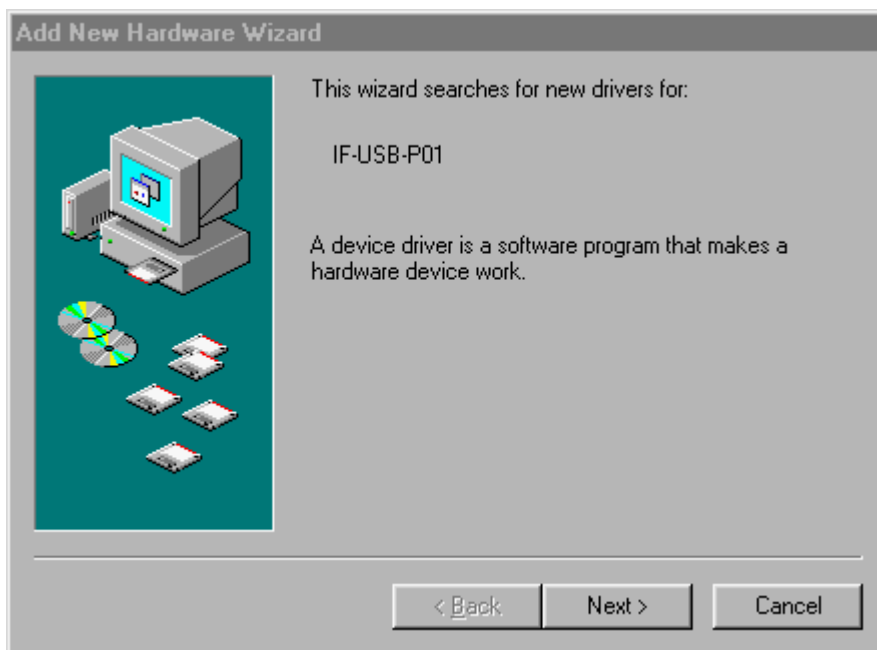
After installation, confirm the following.

- If “USB Printing Support” is displayed on Device Manager, the USB driver is installed correctly.
- When you see the port from the property of the printer driver installed, the printer port is given as USB00x or the like.

Note: If the USB cable is disconnected and reconnected here, it is recognized as a new USB device and the number 00x may be increased. The combination available for actual printing is one USB00x for one USB port. Confirm the correct combination before use.
If the USB cable is connected to another USB connector, a USB port is added. Also in this case, confirm the normal combination before use.

6.3 Installing on Windows 98/ME

(Installation on Windows ME can be executed almost in the same procedure with some difference in window.)
Connect the USB cable and the PC using the USB cable while Windows 98 is operating. Turn the printer on.
(All other programs shall be terminated to secure normal installation.)
The printer USB interface is automatically identified and “Add New Hardware Wizard” is displayed. Here, click [Next].



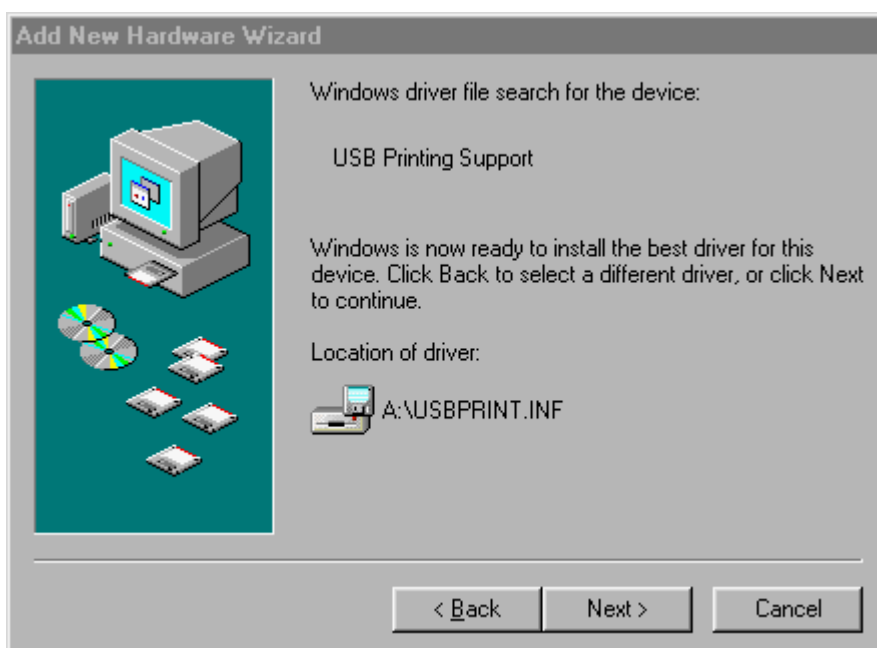
The following window is displayed. Check “Search for the best driver for your device [Recommended].” and then click [Next].



The following window is displayed. Check “Floppy disk drives”. Set the floppy disk containing the driver and then click [Next].



The following window is displayed. Click [Next].



Click [Finish] on the following window to complete the USB driver installation.



Then installation of the printer driver starts. Install the printer driver.

About USB port

If more than one USB connector is present on the PC, replacing the USB cable of the same printer to another USB connector may allow the port to be recognized as another USB port. If the combination of the connector connected to the cable and the USB port selected by the printer driver is not correct, printing is not possible.

7. Precautions on Sequence of Power ON

Always turn on the PC and then the printer.

If more than one USB printer is connected to one PC, the USB port number is assigned in the order of connection. If you want to use the same USB port number assigned to the printer, it is necessary to make the order of turning on the printers same at all times.

8. Specifications

USB rating: Complies with 1.1 specification.

USB printer device class: Complies with 1.0 specification.

USB bus power consumption: 40 mA max. (No consumption when printer power is off.)

Interface with main board: Complies with our parallel board (USB--IEEE1284 conversion)

Transmission speed: Full speed mode (12 Mbps)

Communication system: Bidirectional bulk transmission


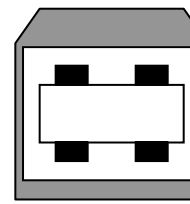
Buffer memory: 512 bytes (data amount of up stream and down stream in all)

Dimensions: 70 × 40 mm (Excluding protruded part of connector)

Operating environment: 5 to 40°C, 35 to 85% RH (without condensation)

Storage environment: -10 to 50°C, 10 to 90% RH (without condensation)

Connector: Pin assignment of USB connector is shown in the following table.

<div><div>Pin 4Pin 3Pin 2Pin 1</div></div> <div>Series A plug</div>	<div><div>Pin 1Pin 2Pin 3Pin 4</div></div> <div>Series B plug</div>	<table><tr><th>Pin No.</th><th>Name</th></tr><tr><td>1</td><td>VBus (+5V)</td></tr><tr><td>2</td><td>–Data (D–)</td></tr><tr><td>3</td><td>+Data (D+)</td></tr><tr><td>4</td><td>GND</td></tr></table>	Pin No.	Name	1	VBus (+5V)	2	–Data (D–)	3	+Data (D+)	4	GND
Pin No.	Name											
1	VBus (+5V)											
2	–Data (D–)											
3	+Data (D+)											
4	GND											
<div>[Table 1-1 Pin assignment]</div>												

8. About Copyright of USB Driver on Windows 98, 98SE, and ME

Microsoft Corporation has a copyright for USBPRINT.SYS and USBMON.DLL supplied by us. We are licensed and approved by Microsoft Corporation of the redistribution of them for our USB printer.