OMRON

MODEL E58-CIFQ1

USB-Serial Conversion Cable

English	INSTRUCTION MANUAL

Thank you for purchasing this E58-CIFQ1. This INSTRUCTION MANUAL describes the information such as function, performance, and how to use the product required for using the E58-CIFQ1.

For using this product, please follow keep the precautions as shown in the following:
· Please operate this product by the qualified specialist having the electrical know how.
· Read this instruction manual with enough, and use the product correctly with enough understanding.
· Keep this instruction manual close at hand and use it for reference during operation.

OMRON Corporation

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Safety Precautions

●**Key to Warning Symbols**

⚠ **CAUTION** — Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury or in property damage.

●**Warning Symbols**

⚠ CAUTION

Do not leave the cable connected to the Temperature Controller. Malfunction may occur due to noise in the cable.	🚫
Do not use any devices or cables that show signs of damage. Minor electric shock or fire may occasionally occur.	🚫
Never disassemble, modify, or repair the product or touch any of the internal parts. Minor electric shock, fire, or malfunction may occasionally occur.	🚫
Do not allow metal particles or wires to enter the connector. Minor electric shock, fire, or malfunction may occasionally occur.	❗
Keep the connector pins free of dust and dirt. Fire may occasionally occur.	

Precautions for Safety Use

1) Be sure to check the orientation of the connector before connecting it. Do not force the connector if it cannot be inserted easily. Doing so may result in damage.
2) Do not place objects on top of the cables, pull on the cables, or bend the cables beyond their natural bending limit.
3) Do not connect or disconnect cables during communications. Doing so will cause malfunction or failure.
4) Allow as much space as possible between the controller and devices that generate a powerful high-frequency or surge.
5) Use this product within the rated load and power supply.
6) Make sure that the device's metal components are not touching the external power terminals.
7) Do not touch the connectors with wet hands. Electric shock may occur.

Precautions for Correct Use

1) Do not use this product in the following places.
   Places directly subject to heat radiated from heating equipment.
   Places subject to splashing liquid or oil atmosphere.
   Places subject to direct sunlight.
   Places subject to dust or corrosive gas (in particular, sulfide gas and ammonia gas).
   Places subject to intense temperature change.
   Places subject to icing and condensation.
   Places subject to vibration and large shocks.
2) Use/store within the rated temperature and humidity ranges.
3) Do not connect or disconnect the USB connectors repeatedly over a short period of time. The personal computer may malfunction.
4) After connecting the USB connector to the personal computer, check the COM port number before starting communications. The personal computer requires time to recognize the cable connection. This delay does not indicate failure.
5) Do not connect the USB cable through a USB hub. Doing so may damage the cable.
6) Do not use an extension cord to extend the USB cable length when connecting to the personal computer. Doing so may damage the cable.
7) Do not use paint thinner or similar chemical to clean with. Use standard grade alcohol.

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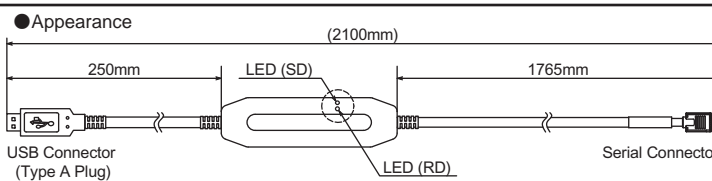
Specifications

●Compatible Operating Systems	Windows XP/Vista/7/8
●Compatible Software Applications	CX-Thermo ThermoMini
●Compatible models	The following OMRON Digital Temperture Controllers, which support the compatible software : E5CN/E5CN-U/E5EN/E5AN -series
●USB Interface rating	Conforms to USB Specification 2.0
●DTE speed	38400 bps
●Connector specifications	Personal computer : USB (type A plug) Temperature Controller : Serial
●Power supply	Bus power (supplied from USB host controller)
●Power supply voltage	DC 5V
●Current consumption	70 mA
●Ambient temperature	0 to 55 ℃ (Avoid freezing or condensation)
●Ambient humidity	RH10 to 80 %
●Storage temperature	-20 to 60 ℃ (Avoid freezing or condensation)
●Storage humidity	RH10 to 80 %
●Altitude	Max.2,000 m
●Weight	Approx.100 g

System Requirements

The personal computer must have the following requirements.
· USB Port   · Windows XP/Vista/7/8

■Appearance and Component Names

●Appearance

(2100mm)
250mm — LED (SD) — 1765mm

USB Connector (Type A Plug)   LED (RD)   Serial Connector

●LED Indicators

Indicators	Color	Status	Description
SD	Yellow	Flashing	Data is being sent from the USB-Serial Conversion Cable.
		OFF	Data is not being sent from the USB-Serial Conversion Cable.
RD	Yellow	Flashing	The USB-Serial Conversion Cable is receiving data.
		OFF	The USB-Serial Conversion Cable is not receiving data.

●In the pack.
· Main unit   · Instruction manual

■Usage Methods

Use the following procedure to connect the Temperature Controller to the personal computer using the E58-CIFQ1 USB-Serial Conversion Cable. The E58-CIFQ1 is used for communications with the COM port of the personal computer.
To perform communications using the E58-CIFQ1, set the communications port (COM port) number used by the software to the communications port (COM port) number that has been assigned to the E58-CIFQ1 USB-Serial Conversion Cable.
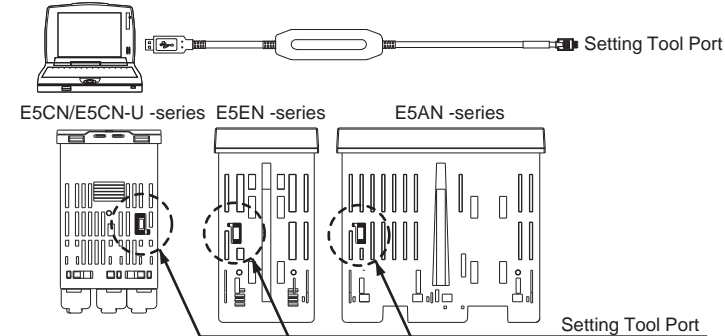
1. Firstly, turn ON the power to the Temperature Controller.
Note : When connecting the product with the temperature controller while its power turned off, power supply is supplied from personal computer, which may give excessive load to the internal circuit of temperature controller.

2. Connecting the USB-Serial Conversion Cable
Connect one end of the cable to the personal computer's USB port and the other end to the Setting Tool port on the Temperature Controller.
●Connecting to the Temperature Controller
Personal computer USB port   Setting Tool Port

E5CN/E5CN-U -series   E5EN -series   E5AN -series

Setting Tool Port

※Bottom View of E5CN/E5CN-U/E5EN/E5AN -series Temperature Controller
Note : Hold the connector securely when connecting or disconnecting the cable.

3. Obtaining the Driver
When the CX-Thermo or ThermoMini Support Software for the Temperature Controller is installed, the driver for the USB-Serial Conversion Cable will be copied to the following folder.
C:\Program Files\OMRON\Drivers\USB\E58-CIF
Note : ThermoMini can also be downloaded from the following OMRON website. The driver is included in ThermoMini.
http://www.omron-compo.com/tm2/

4. Installing the Driver
Install the driver to enable using the E58-CIFQ1 USB-Serial Conversion Cable with the personal computer.
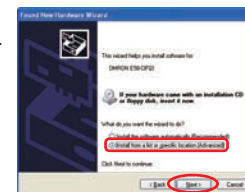
●Installation
When the cable is connected to the personal computer, the operating system will detect the E58-CIFQ1 as a new device. Install the driver according to the prompts from the installation wizard.
Note1 : OMRON recommends installing the driver separately for each USB port when using the E58-CIFQ1 for the first time. The E58-CIFQ1 will be assigned a COM port number for each USB port of the personal computer. The same COM port number can be used even if a different cable is connected to the USB port.
Note2 : If installation is cancelled before it has been completed, the driver will not be completely installed, which will result in abnormal communications. If this occurs, uninstall the driver and then reinstall the driver correctly
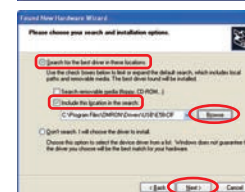
Using Windows XP

1) Insert the E58-CIFQ1 USB-Serial Conversion Cable into the USB port of the personal computer. The "Welcome to the Found New Hardware Wizard" will start. Select **Install from a list or specific location (Advanced)** and click the **Next** Button.
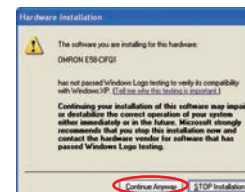
   If you are using Windows XP Service Pack 2 or Windows XP Service Pack 3, please select **No, not this time** and click the **Next** Button.

2) Select the **Search for the best driver in these locations** Option, select the **Include this location in the search** Check Box, and click the **Browse** Button.
   Select **C:\Program Files\OMRON\Drivers\USB\E58-CIF** and then click the **Next** Button.
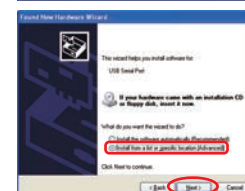
3) If the message "The software you are installing for this hardware has not passed Windows Logo testing to verify its compatibility with Windows XP" is displayed, ignore it and click the **Continue Anyway** Button.
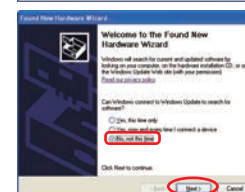
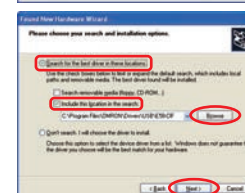4) The "Completing the Found New Hardware Wizard" Dialog Box will be displayed. Click the **Finish** Button.

5) The "Welcome to the Found New Hardware Wizard" Dialog Box will be displayed. Select the **Install from a list or specific location (Advanced)** Option and then click the **Next** Button.
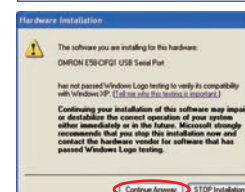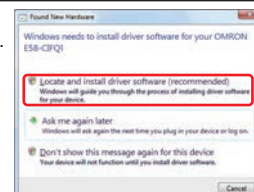
   If you are using Windows XP Service Pack 2 or Windows XP Service Pack 3, please select **No, not this time** and click the **Next** Button.

6) Select the **Search for the best driver in these locations** Option, select the **Include this location in the search** Check Box, and click the **Browse** Button.
   Select **C:\Program Files\OMRON\Drivers\USB\E58-CIF** and click the **Next** Button.

7) If the message "The software you are installing for this hardware has not passed Windows Logo testing to verify its compatibility with Windows XP" is displayed, ignore it and click the **Continue Anyway** Button.

8) The "Completing the Found New Hardware Wizard" Dialog Box will be displayed. Click the **Finish** Button to complete installation.

9) When the installation is finished, a COM port number will be allocated automatically. To see that COM port number has been allocated, use **Confirming Automatically Assigned COM Port Number.**
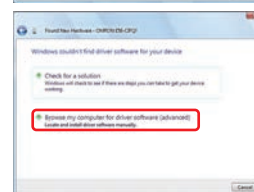
Using Windows Vista

1) Insert the E58-CIFQ1 USB-Serial Conversion Cable into the USB port of the personal computer. The "Found New Hardware" Dialog Box will be displayed. Select **Locate and install driver software (recommended)**.
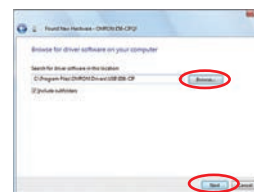
2) In the "Found New Hardware" Dialog Box, select **I don't have the disc. Show me other options**.
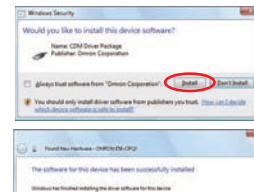
3) Select **Browse my computer for driver software (advanced)**.

4) Click the **Browse** Button, select **C:\Program Files\OMRON\Drivers\USB\E58-CIF**, and then click the **Next** Button.

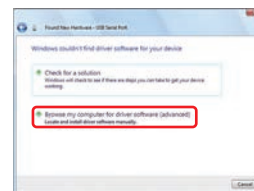5) The "Windows Security" Dialog Box will be displayed. Click the **Install** Button.

6) When a message is displayed stating that "Windows has finished installing the driver software for this device" in the "Found New Hardware" Dialog Box, click the **Close** Button.
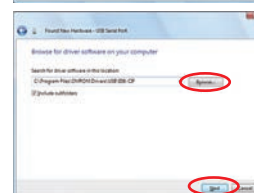
7) In the "Found New Hardware" Dialog Box, select **I don't have the disc. Show me other options**.
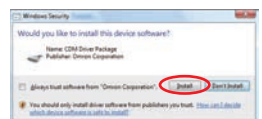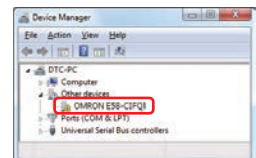
8) Select **Browse my computer for driver software (advanced)**.

9) Click the **Browse** Button, select **C:\Program Files\OMRON\Drivers\USB\E58-CIF**, and then click the **Next** Button.

10) The "Windows Security" Dialog Box will be displayed. Click the **Install** Button.

11) When a message is displayed stating that "Windows has finished installing the driver software for this device" in the "Found New Hardware" Dialog Box, click the **Close** Button to complete installation.

12) After installation has been completed, the COM port number will be automatically assigned. For details on checking the assigned COM port number, refer to **Confirming Automatically Assigned COM Port Number**.

Using Windows 7

1) Connect the USB-Serial Conversion Cable to the USB port on the personal computer.

2) Select **My Computer** - **System Properties** - **Device Manager**.

3) Right-click **E58-CIFQ1** in Other Devices and select **Update Driver Software**.

4) In the "Update Driver Software" Dialog Box, select **Browse my computer for driver software**.
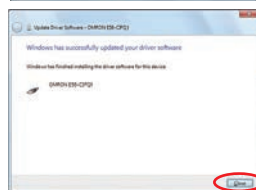
5) Click the **Browse** Button, select **C:\Program Files\OMRON\Drivers\USB\E58-CIF**, and then click the **Next** Button.
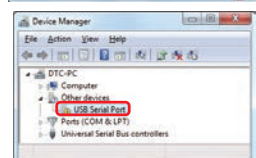
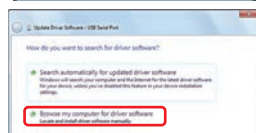6) The "Windows Security" Dialog Box will be displayed. Click the **Install** Button.

7) When a message in the "Update Driver Software" Dialog Box says "Windows has successfully updated your driver software", click the **Close** Button.

8) Right-click **USB Serial Port** in Other Devices in the "Device Manager" Dialog Box and select **Update Driver Software**.
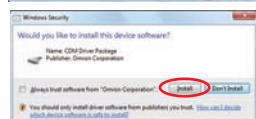
9) In the "Update Driver Software" Dialog Box, select **Browse my computer for driver software**.

10) Click the **Browse** Button, select **C:\Program Files\OMRON\Drivers\USB\E58-CIF**, and then click the **Next** Button.

11) The "Windows Security" Dialog Box will be displayed. Click the **Install** Button.
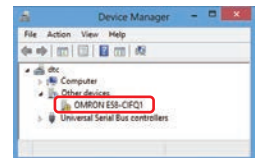
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12) When a message in the "Update Driver Software" Dialog Box says "Windows has successfully updated your driver software", click the **Close** Button.
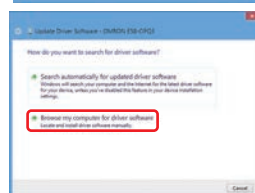
13) When the installation is finished, a COM port number will be allocated automatically. To see that COM port number has been allocated, use **Confirming Automatically Assigned COM Port Numbers**.

Using Windows 8

1) Connect the USB-Serial Conversion Cable to the USB port on the personal computer.

2) Click the folder icon on the bottom left of screen under the all folders closed. Select **Computer** - **System Properties** to start up the **Device Manager**.
Note : If using keyboard, the menu is displayed by pressing **X** key while holding down **Windows** key.

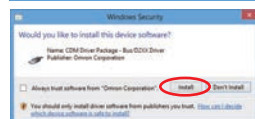3) Right-click **E58-CIFQ1** in Other Devices and select **Update Driver Software**.

4) In the "Update Driver Software" Dialog Box, select **Browse my computer for driver software**.

5) Click the **Browse** Button, select **C:\Program Files\OMRON\Drivers\USB\E58-CIF**, and then click the **Next** Button.
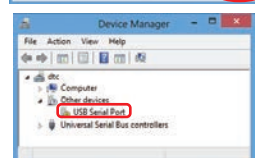
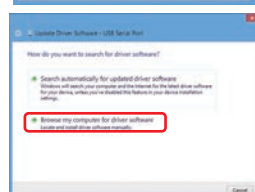6) The "Windows Security" Dialog Box will be displayed. Click the **Install** Button.

7) When a message in the "Update Driver Software" Dialog Box says "Windows has successfully updated your driver software", click the **Close** Button.
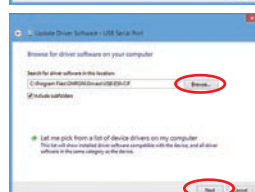
8) Right-click **USB Serial Port** in Other Devices in the "Device Manager" Dialog Box and select **Update Driver Software**.
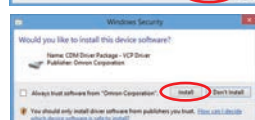
9) In the "Update Driver Software" Dialog Box, select **Browse my computer for driver software**.

10) Click the **Browse** Button, select **C:\Program Files\OMRON\Drivers\USB\E58-CIF**, and then click the **Next** Button.

11) The "Windows Security" Dialog Box will be displayed. Click the **Install** Button.

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12) When a message in the "Update Driver Software" Dialog Box says "Windows has successfully updated your driver software", click the **Close** Button.
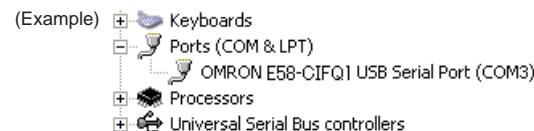
13) When the installation is finished, a COM port number will be allocated automatically. To see that COM port number has been allocated, use **Confirming Automatically Assigned COM Port Numbers**.

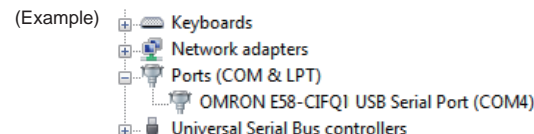## 5. Confirming Automatically Assigned COM Port Numbers

Using Windows XP

Select **My Computer** - **View System Information** to display the System Properties Window. Click the **Hardware** Tab and then click the **Device Manager** Button.
Select **Devices by Type** from the View Menu.
For example, if "OMRON E58-CIFQ1 USB Serial Port (COM3)" is displayed under the "Ports (COM & LPT)" heading in the directory tree, the device is assigned to COM port 3.

(Example) ⊞ 🖮 Keyboards
　　　　　⊟ 🖳 Ports (COM & LPT)
　　　　　　　　🖵 OMRON E58-CIFQ1 USB Serial Port (COM3)
　　　　　⊞ 🖳 Processors
　　　　　⊞ 🖴 Universal Serial Bus controllers
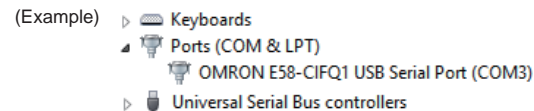
Using Windows Vista / 7

Select **Computer** - **System Properties** to display the Device Manager.
For example, if "OMRON E58-CIFQ1 USB Serial Port (COM4)" is displayed under the "Ports (COM & LPT)" heading in the directory tree, the device is assigned to COM port 4.

(Example) ⊞ 🖮 Keyboards
　　　　　⊞ 🖴 Network adapters
　　　　　⊟ 🖵 Ports (COM & LPT)
　　　　　　　　🖵 OMRON E58-CIFQ1 USB Serial Port (COM4)
　　　　　⊞ 🖴 Universal Serial Bus controllers

Using Windows 8

Click the folder icon on the bottom left of screen under the all folders closed Select **Computer** - **System Properties** to start up the **Device Manager**.
Note : If using keyboard, the menu is displayed by pressing **X** key while holding down **Windows** key.
For example, if "OMRON E58-CIFQ1 USB Serial Port (COM3)" is displayed under the "Ports (COM & LPT)" heading in the directory tree, the device is assigned to COM port 3.

(Example) ▷ 🖮 Keyboards
　　　　　◢ 🖵 Ports (COM & LPT)
　　　　　　　　🖵 OMRON E58-CIFQ1 USB Serial Port (COM3)
　　　　　▷ 🖴 Universal Serial Bus controllers

6. In the software communications settings, select the COM port number that was confirmed in the device manager and then start communications.

■Uninstalling the Driver

Using Windows XP

1) Double-click **FTClean.exe** to start "FTDI Clean Utility V1.0".
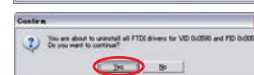**FTClean.exe** is included in the E58-CIF driver.

2) "FTDI Clean Utility V1.0" has started, set the "VID (HEX) Field to **Other** and enter **0590** in the field onthe right, and **0051** in the "PID (HEX) Field. Click the **Clean System** Button.
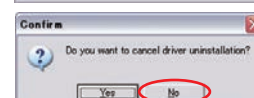
3) When the "Information" Dialog Box is displayed, disconnect the E58-CIFQ1 USB-Serial Conversion Cable from the computer and click the **OK** Button.
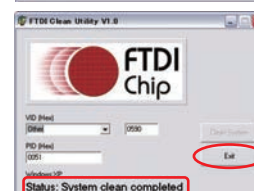
4) When the "Confirm" Dialog Box is displayed with a message "You are about to uninstall all FTDI drivers...", click the **Yes** Button.

5) When the "Confirm" Dialog Box is displayed with a message "Do you want to cancel driver uninstallation?", click the **No** Button.

6) Check that the "FTDI Clean Utility V1.0" displays "Status: System clean completed"**.** Click the **Exit** Button to complete uninstallation.

Using Windows Vista / 7 / 8

1) Insert the E58-CIFQ1 USB-Infrared Conversion Cable into the USB port of the personal computer.

2) Start up **Device Manager**.

3) Right-click the **OMRON E58-CIFQ1 USB Serial Port (COM□)** under the "Ports (COM & LPT)", and select **Uninstall**.

4) The "Comfirm Device Uninstall" Dialog Box will start. Select **Delete the driver software for this device**, and click the **OK** Button.

5) Right-click **OMRON E58-CIFQ1** in the Universal Serial Bus Controllers, and select **Uninstall**.

6) The "Comfirm Device Uninstall" Dialog Box will start. Select **Delete the driver software for this device**, and click the **OK** Button.

Suitability for Use

OMRON shall not be responsible for conformity with any standards, codes, or regulations that apply to the combination of the products in the customer's application or use of the product.
Take all necessary steps to determine the suitability of the product for the systems, machines, and equipment with which it will be used.
Know and observe all prohibitions of use applicable to this product.
NEVER USE THE PRODUCTS FOR AN APPLICATION INVOLVING SERIOUS RISK TO LIFE OR PROPERTY WITHOUT ENSURING THAT THE SYSTEM AS A WHOLE HAS BEEN DESIGNED TO ADDRESS THE RISKS, AND THAT THE OMRON PRODUCT IS PROPERLY RATED AND INSTALLED FOR THE INTENDED USE WITHIN THE OVERALL EQUIPMENT OR SYSTEM.
See also Product catalog for Warranty and Limitation of Liability.