Pro-face

by Schneider Electric

GP-4100 Series Color Model Installation Guide

English

Please read the "Warning/Caution Information" on the attached sheet before using the product.

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Important Information

Notice

Read these instructions carefully, and look at the equipment to become familiar with the device before trying to install, operate, or maintain it. The following special messages may appear throughout this documentation or on the equipment to warn of potential hazards or to call attention to information that clarifies or simplifies a procedure.

The addition of this symbol to a “Danger” or “Warning” safety label indicates that an electrical hazard exists which will result in personal injury if the instructions are not followed.

This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

⚠ DANGER

DANGER indicates a hazardous situation which, if not avoided, **will result in** death or serious injury.

⚠ WARNING

WARNING indicates a hazardous situation which, if not avoided, **could result in** death or serious injury.

⚠ CAUTION

CAUTION indicates a hazardous situation which, if not avoided, **could result** in minor or moderate injury.

NOTICE

NOTICE is used to address practices not related to physical injury.

PLEASE NOTE

Electrical equipment should be installed, operated, serviced, and maintained only by qualified personnel. No responsibility is assumed by Pro-face for any consequences arising out of the use of this material.
A qualified person is one who has skills and knowledge related to the construction and operation of electrical equipment and its installation, and has received safety training to recognize and avoid the hazards involved.
If the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.

Model Numbers

Series		Model name	Model number *1
GP-4100 Series Color Model	Ethernet type	GP-4114T	PFXGP4114T1D PFXGP4114T2D
	RS-232C type	GP-4115T	PFXGP4115T1D PFXGP4115T2D
	RS-422/485 type	GP-4116T	PFXGP4116T1D PFXGP4116T2D

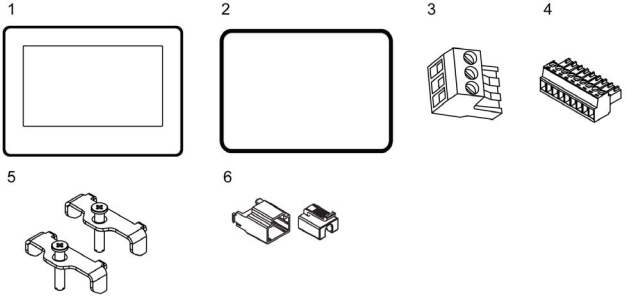
*1 Includes models with additional alphanumeric characters at the end of the model number.

Global Code

A global code is assigned to every Pro-face product as a universal model number.
For more information on product models and their matching global codes, please refer to the following URL.
http://www.pro-face.com/trans/en/manual/1003.html

Package Contents

The following items are included in the package. Before using this product, please confirm that all items listed here are present.



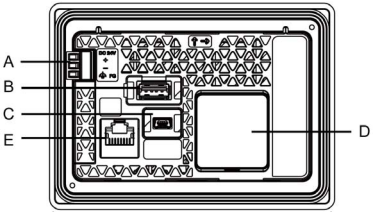
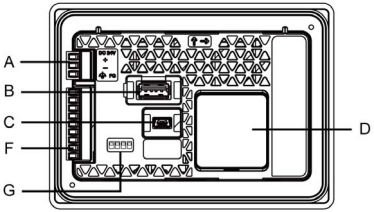
1 GP-4100 Series Color Model: 1
2 Installation Gasket: 1 (attached to this product)
3 DC Power Supply Connector: 1 (attached to this product)
4 COM I/F Connector: 1 (for RS-232C and RS-422/485 types)
5 Installation Fastener: 2 pieces/set
6 USB Clamp Type A (1 port): 1
7 GP-4100 Series Color Model Installation Guide (this guide): 1
8 Warning/Caution Information: 1

This product has been carefully packed, with special attention to quality. However, should you find anything damaged or missing, please contact your local distributor immediately.

About the Manual

This manual describes wiring and installation procedures. For more detailed information, refer to the GP-4100 Series Color Model Hardware Manual. You can download the manual from our website at *http://www.pro-face.com/trans/en/manual/1001.html.*

Part Numbers and Functions

Ethernet type (Rear view)	
RS-232C type, RS-422/485 type (Rear view)	

A: Power Connector
B: USB (Type A) Interface
C: USB (mini-B) Interface
D: RTC Battery Set Cover
E: Ethernet Interface
F: Serial Interface
G: DIP Switch (see page 12)
Only on RS-422/485 type.

Electrical Specifications

			GP-4114T	GP-4115T	GP-4116T
Power Supply	Rated input voltage		12...24 Vdc		
	Input voltage limits		10.2...28.8 Vdc		
	Voltage drop		12 Vdc: 1 ms or less 24 Vdc: 3 ms or less		
	Power consumption	When power is not supplied to USB devices	3.9 W or less	3.4 W or less	3.6 W or less
		When power is supplied to USB devices	8.1 W or less	7.5 W or less	7.7 W or less
	In-rush current		12 Vdc: 20 A or less 24 Vdc: 40 A or less		
Voltage endurance			1,000 Vac, 20 mA for 1 minute (between charging and FG terminals)		
Insulation resistance			500 Vdc, 10 MΩ or more (between charging and FG terminals)		

Environmental Specifications

Physical environment	Surrounding air temperature	0...50 °C (32...122 °F)*1
	Storage temperature	-20...60 °C (-4...140 °F)
	Surrounding air and storage humidity	10...90% RH (non-condensing, wet bulb temperature 39 °C [102.2 °F] or less)
	Dust	0.1 mg/m^3 (10^{-7} oz/ft^3) or less (non-conductive levels)
	Pollution degree	For use in Pollution Degree 2 environment
	Atmospheric pressure (operating altitude)	800...1,114 hPa (2,000 m [6,561 ft] or lower)

*1 The designated range for the surrounding air temperature is 0 to 45 °C (32 to 113 °F) when the output current of USB (Type A) Interface is from 0.25 A to 0.5 A.

Interface Caution

Use only the SELV (Safety Extra-Low Voltage) circuit to connect the COM, USB, and LAN interfaces.

⚠⚠ DANGER

ELECTRIC SHOCK AND FIRE

When using the SG terminal to connect an external device to this product:

- Verify that a short-circuit loop is not created when you set up the system.
- Connect the SG terminal to remote equipment when the external device is not isolated.
- Connect the SG terminal to a known reliable ground connection to reduce the risk of damaging the circuit.

Failure to follow these instructions will result in death or serious injury.

Serial Interface

For information on how to connect controllers and other types of equipment, refer to the corresponding device driver manual of your screen editing software.
The serial interface is not isolated. The SG (signal ground) and the FG (functional ground) terminals are connected inside this product.

⚠ CAUTION

LOSS OF COMMUNICATION

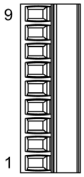
- All connections to the communication ports must not put excessive stress on the ports.
- Securely attach communication cables to the panel wall or cabinet.

Failure to follow these instructions can result in injury or equipment damage.

NOTE : Use within the rated current.

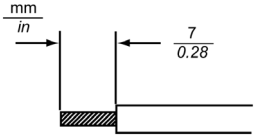
RS-232C and RS-422/485

COM I/F Connector (9-pin, 2-piece terminal block)

Cable connection side	Pin No.	RS-232C	RS-422/485
		Signal name	Signal name
	1	CI(RI)	CSB
	2	CD	CSA
	3	CS(CTS)	ERB
	4	RS(RTS)	ERA
	5	SG	SG
	6	DR(DSR)	RDB
	7	ER(DTR)	RDA
	8	RD(RXD)	SDB
	9	SD(TXD)	SDA

NOTE : You can set a termination resistor using the DIP Switch (4-bit) on the rear of the RS-422/485 type. Factory default settings are “OFF” (no termination resistor). Check the termination resistor requirement for connection to the connected device (PLC) and set up if necessary.

Communication Cable Specifications

Communication cable diameter*1	0.14...1.5 mm^2 (AWG 28...16)
Conductor type	Simple or stranded wire*2
Conductor length	

*1 When inserting two wires into one terminal connector, the simple wire diameter is 0.08 to 0.5 mm^2 (AWG 28 to 22), and the stranded wire diameter is 0.08 to 0.75 mm^2 (AWG 28 to 20).

*2 If the conductor's stranded wires are not twisted correctly, the ends of the wires may either short against each other, or against an electrode.

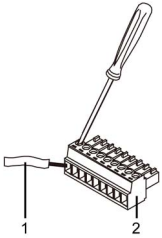
Wiring the COM Interface Connector

⚠⚠ DANGER

ELECTRIC SHOCK

Always disconnect the connector from this product before wiring the connector.

Failure to follow these instructions will result in death or serious injury.

Step	Action
1	Use a flat-blade screwdriver (Size 0.4 X 2.5) to loosen the terminal screws.
2	Strip the communications cable, and attach it to the terminal connector.  1 Communication cable 2 COM I/F Connector
3	Use a flat-blade screwdriver to tighten the terminal screws on the terminal connector from step 2. **NOTE :** The torque required to tighten these screws is 0.196 N•m (1.735 lb-in).
4	Insert the connector to this product's serial interface.

NOTICE

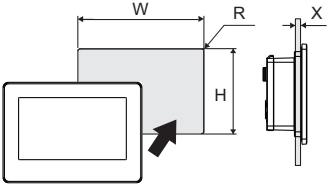
BROKEN ENCLOSURE

Do not exert more than 0.196 N•m (1.735 lb-in) of torque when tightening the screws.

Failure to follow these instructions can result in equipment damage.

Panel Cutout Dimensions

Based on the panel cutout dimensions, open a mount hole on the panel.



Panel cutout dimensions for color model

W	H	X	R
112.5 $^{+1}_{-0}$ mm (4.43 $^{+0.04}_{-0}$ in)	77.5 $^{+1}_{-0}$ mm (3.05 $^{+0.04}_{-0}$ in)	1.5...6 mm (0.06...0.24 in)	2...3 mm (0.08...0.12 in)

When installing to panel cutout for monochrome model (GP-410*)

NOTE : The panel cutout adapter (model number: PFXZCFAD31) is required for this type of installation.

W	H	X	R
105 $^{+1}_{-0}$ mm (4.13 $^{+0.04}_{-0}$ in)	66 $^{+1}_{-0}$ mm (2.6 $^{+0.04}_{-0}$ in)	1.5...6 mm (0.06...0.24 in)	2...3 mm (0.08...0.12 in)

Installation Requirements

This product is designed for use on flat surfaces of Type 1, Type 4X (Indoor Use Only), Type 13 Enclosure or IP65F.

Be aware of the following when building this product into an end-use product:

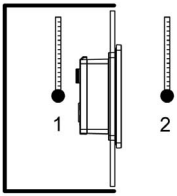
- The rear face of this product is not approved as an enclosure. When building this product into an end-use product, be sure to use an enclosure that satisfies standards as the end-use product's overall enclosure.
- Install this product in an enclosure with mechanical rigidity.
- This product is not designed for outdoor use. UL certification obtained is for indoor use only.
- Install and operate this product with its front panel facing outward.

NOTE :

- IP65F is not part of the UL certification.
- The necessary torque to fasten the screw of the enclosed installation fasteners is 0.35 N•m (3.1 lb-in).

Check that the installation wall or cabinet surface is flat, in good condition and has no jagged edges. Metal reinforcing strips may be attached to the inside of the wall, near the panel cutout, to increase its rigidity.
Decide on the thickness of the enclosure wall, based on the level of strength required: 1.5...6 mm (0.06...0.24 in). Even if the installation wall thickness is within the recommended range for the panel cutout dimensions, depending on wall's material, size, and installation location of this product and other devices, the installation wall could warp. To prevent warping, the installation surface may need to be strengthened.

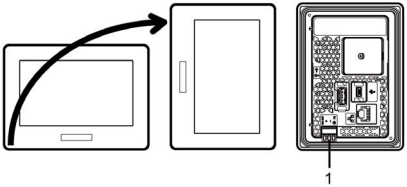
Be sure that the surrounding air temperature and the ambient humidity are within their designated ranges. Surrounding air temperature: 0 to 50 °C (32 to 122 °F); ambient humidity: 10 to 90% RH; wet bulb temperature: maximum 39 °C (102 °F) (see page 10). When installing this product in a cabinet or enclosure, the surrounding air temperature is the cabinet's or enclosure's internal temperature.



1 Cabinet interior
2 Panel face

Be sure that heat from surrounding equipment does not cause this product to exceed its standard operating temperature.

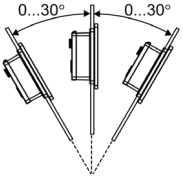
When mounting this product vertically, ensure that the left side of this product faces up. In other words, the DC power connector should be at the bottom.



1 Power connector

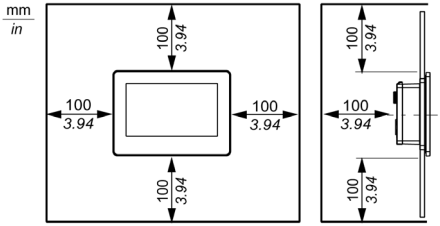
NOTE : For a vertical mounting, make sure your screen editing software supports the function.

When installing this product in a slanted position, the product face should not incline more than 30°.



When installing this product in a slanted position with an incline more than 30°, the ambient temperature must not exceed 40 °C (104 °F). You may need to use forced air cooling (fan, A/C) to ensure the ambient operating temperature is 40 °C or less (104 °F or less).

For easier maintenance, operation and improved ventilation, install this product at least 100 mm (3.94 in) away from adjacent structures and other equipment as shown in the following illustration:



Installation Procedure

⚠⚠ DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION OR ARC FLASH

- Remove all power from the device before removing any covers or elements of the system, and prior to installing or removing any accessories, hardware, or cables.
- Unplug the power cable from both this product and the power supply.
- Always use a properly rated voltage sensing device to confirm power is off.
- Replace and secure all covers or elements of the system before applying power to this product.

Failure to follow these instructions will result in death or serious injury.

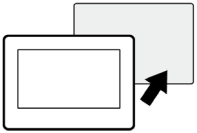
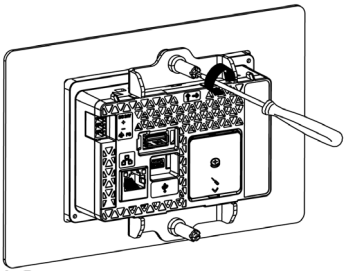
NOTICE

EQUIPMENT DAMAGE

Keep this product stabilized in the panel cutout while you are installing or removing the screw fasteners.

Failure to follow these instructions can result in equipment damage.

Installing to panel cutout for Color Model

Step	Action
1	Place this product on a clean and level surface with the screen facing down.
2	Check that this product's gasket is seated securely into the bezel's groove, which runs around the perimeter of the display panel frame. **NOTE :** Always use the installation gasket, since it absorbs vibration in addition to repelling water. For the procedure on replacing the installation gasket, refer to the GP-4100 Series Color Model Hardware Manual.
3	Based on this product's panel cutout dimensions (see page 15), open a mount hole on the panel and attach this product to the panel from the front side. 
4	Insert the installation fastener hooks into the insertion slots on this product. Tighten the installation fastener's screws with a screwdriver. There are two insertion slots on both the top and bottom of this product. The necessary torque is 0.35 N•m (3.1 lb-in)  **NOTE :** If you exceed the recommended torque when tightening the installation fastener's screws, the front of this product may become distorted.

NOTICE

BROKEN ENCLOSURE

Do not exert more than 0.35 N•m (3.1 lb-in) of torque when tightening the fastener's screws.

Failure to follow these instructions can result in equipment damage.

⚠ CAUTION

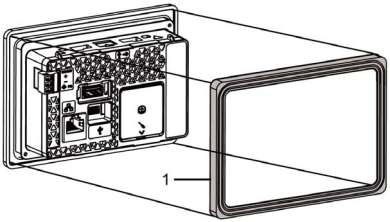
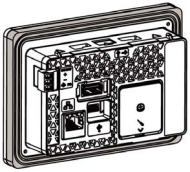
RISK OF INJURY

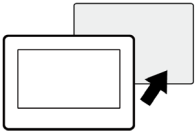
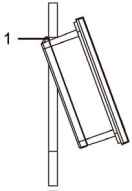
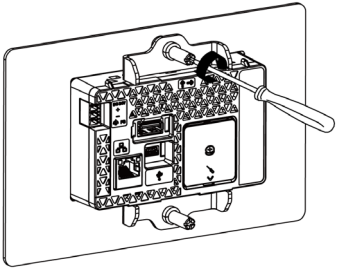
Do not drop this product when you remove it from the panel.

- Hold this product in place after removing the fasteners.
- Use both hands.

Failure to follow these instructions can result in injury or equipment damage.

Installing to panel cutout for Monochrome Model (GP-410*)

Step	Action
1	Place this product on a clean and level surface with the screen facing down.
2	Remove the gasket from this product.
3	Attach the panel cutout adapter (model number: PFXZCFAD31) to this product. Check that the panel cutout adapter is seated securely into the bezel's groove, which runs around the perimeter of the display panel frame.  1 Panel cutout adapter  **NOTE :** Always use the panel cutout adapter, since it absorbs vibration in addition to repelling water.

4	From the front of the panel, attach this product to the mount hole for the monochrome model (see page 15).  **NOTE :** This product has two projections on the top to prevent falling during installation. Please insert this product into the panel at an angle to avoid hitting the projections.  1 Projections
5	Insert the installation fastener hooks into the insertion slots on this product. Tighten the installation fastener's screws with a screwdriver. There are two insertion slots on both the top and bottom of this product. The necessary torque is 0.35 N•m (3.1 lb-in).  **NOTE :** If you exceed the recommended torque when tightening the installation fastener's screws, the front of this product may become distorted.

NOTICE

BROKEN ENCLOSURE

Do not exert more than 0.35 N•m (3.1 lb-in) of torque when tightening the fastener's screws.

Failure to follow these instructions can result in equipment damage.

Wiring

⚠ ⚠ DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION OR ARC FLASH

- Remove all power from the device before removing any covers or elements of the system, and prior to installing or removing any accessories, hardware, or cables.
- Remove power before wiring this product's power terminals.
- Always use a properly rated voltage sensing device to confirm power is off.
- Replace and secure all covers or elements of the system before applying power to this product.
- This product uses only 12 to 24 Vdc power. Using any other level of power can damage both the power supply and this product.
- Since this product is not equipped with a power switch, be sure to connect a power switch to the power supply.
- Be sure to ground this product's FG terminal.

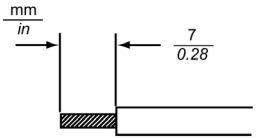
Failure to follow these instructions will result in death or serious injury.

NOTE :

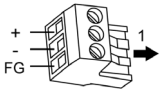
- The SG (signal ground) and FG (functional ground) terminals are connected internally in this product.
- When the FG terminal is connected, be sure the wire is grounded. Not grounding this product can result in excessive electromagnetic interference (EMI).

DC Power Cord Preparation

- Make sure the ground wire is either the same or heavier gauge than the power wires.
- Do not use aluminum wires in the power supply's power cord.
- To prevent the possibility of a terminal short, use a pin terminal that has an insulating sleeve.
- If the ends of the individual wires are not twisted correctly, the wires may create a short circuit.
- The conductor type is solid or stranded wire.
- Use copper wire rated for 75 °C (167°F).

Power cord diameter	0.75...1.5 mm^2 (AWG 18...16)
Conductor type	Solid or stranded wire
Conductor length	

Power Connector Specifications

	Connection	Wire
 1 Insertion direction	+	12...24 Vdc
	–	0 Vdc
	FG	Grounded terminal connected to the panel chassis.

How to Connect the DC Power Cord

Step	Action
1	Confirm the power cord is not connected to the power supply.
2	Check the rated voltage, and remove the “DC24V” sticker on the DC power supply connector.
3	Remove the power connector (plug) from this product.
4	Strip the membrane of the power cord, and connect them to the Power Connector. **NOTE :** • Use a flat-blade screwdriver (Size 0.4 x 2.5) to tighten the terminal screws. The torque require to tighten these screws is 0.22 to 0.25 N•m (1.95 to 2.2 lb-in). • Do not solder the cable connection. Doing so may either damage this product due to abnormal heat or cause a fire.
5	Reattach the power connector (plug).

Wiring Precautions

Excessive stress on the power connection or attempting to install this product with the power cables connected may disconnect or cause damage to the power connections. This can cause short circuits, fire or unintended equipment operation.

⚠ ⚠ DANGER

SHORT CIRCUIT, FIRE, OR UNINTENDED EQUIPMENT OPERATION

Avoid excessive force on the power cable to prevent accidental disconnection

- Securely attach power cables to an installation panel or cabinet.
- Use the necessary torque to tighten this product terminal block screws.
- Install and fasten this product on installation panel or cabinet prior to connecting power supply and communication lines.

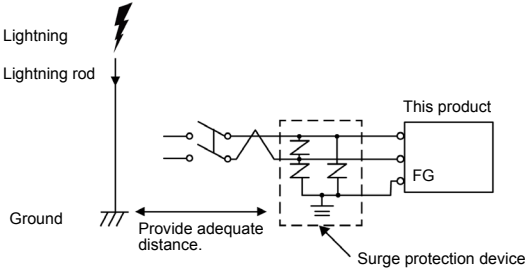
Failure to follow these instructions will result in death or serious injury.

Improving Noise/Surge Resistance

- This product's power supply cord should not be bundled with or kept close to main circuit lines (high voltage, high current), power lines, or input/output lines, and their various systems should be kept separate. When power lines cannot be wired via a separate system, use shielded cables for input/output lines.
- Make the power cord as short as possible, and be sure to twist the ends of the wires together (i.e. twisted pair cabling) from close to the power supply unit.
- If there is an excess amount of noise on the power supply line, connect a noise reducing transistor before turning on the power.
- Connect a surge protection device to handle power surges.
- To increase noise resistance, attach a ferrite core to the power cable.

Power Supply Connections

- Use SELV (Safety Extra-Low Voltage) circuit and LIM (Limited Energy) circuit for DC input.
- The following shows a surge protection device connection.



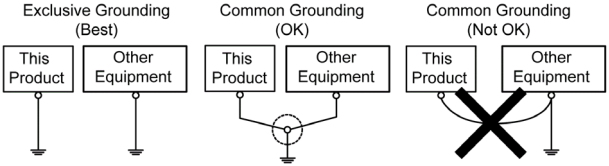
Attach a surge protection device to prevent damage to this product as a result of a lightning-induced power surge from a large electromagnetic field generated from a direct lightning strike. We also strongly recommend to connect the crossover grounding wire of this product to a position close to the ground terminal of the surge protection device.

It is expected that there will be an effect on this product due to fluctuations in grounding potential when there is a large surge flow of electrical energy to the lightning rod ground at the time of a lightning strike. Provide adequate distance between the lightning rod grounding point and the surge protection device grounding point.

Grounding

- Check that the grounding resistance is 100 Ω or less.*1
- The FG wire should have a cross sectional area greater than 2 mm^2 (AWG 14)*1. Create the connection point as close to this product as possible, and make the wire as short as possible. When using a long grounding wire, replace the thin wire with a thicker wire, and place it in a duct.

*1 Observe local codes and standards.



Short Circuit Prevention

- The SG (signal ground) and FG (functional ground) terminals are connected internally in this product. When connecting the SG line to another device, be sure that no shorting loops are formed.

USB Clamp

When using a USB device, attach a USB clamp to the USB interface to prevent the USB cable from being disconnected.

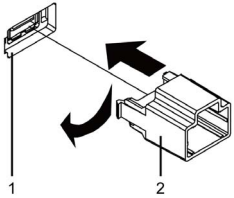
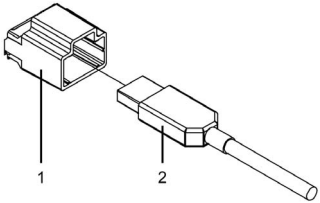
⚠ DANGER

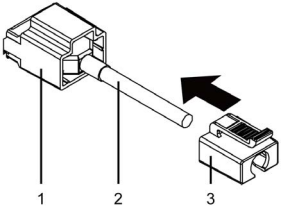
POTENTIAL FOR EXPLOSION

- Verify that the power, input and output (I/O) wiring are in accordance with Class I, Division 2 wiring methods.
- Substitution of any component may impair suitability for Class I, Division 2.
- Do not disconnect equipment while the circuit is live or unless the area is known to be free of ignitable concentrations.
- Remove power before attaching or detaching any connectors to or from this product.
- Ensure that power, communication, and accessory connections do not place excessive stress on the ports. Consider the vibration in the environment when making this determination.
- Securely attach power, communication, and external accessory cables to the panel or cabinet.
- Use only commercially available USB cables.
- Use only non-incendive USB configurations.
- Suitable for use in Class I, Division 2, Groups A, B, C, D Hazardous Locations.
- Confirm that the USB cable has been attached with the USB clamp before using the USB interface.
- Use the USB (mini-B) interface for temporary connection only during maintenance and setup of the device.

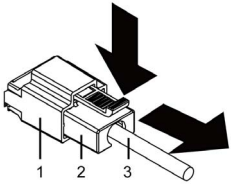
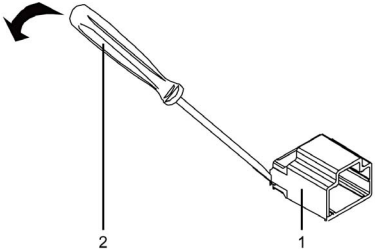
Failure to follow these instructions will result in death or serious injury.

Attaching the USB Holder

Step	Action
1	Attach the USB holder to the USB (Type A) Interface on this product. Hook the clip on the right-side of the USB holder into the slot beside the interface, then insert the left clip to attach.  1 USB (Type A) interface 2 USB holder
2	Insert the USB cable into the USB (Type A) interface.  1 USB holder 2 USB cable

3	Attach the USB cover to fix the USB cable in place. Insert the USB cover into the USB holder.  1 USB holder 2 USB cable 3 USB cover

Removing the USB Holder

Step	Action
1	Push down the tab of the USB cover and then remove the USB cover.  1 USB holder 2 USB cover 3 USB cable
2	Remove the USB cable from the USB (Type A) interface.
3	As shown in the following illustration, insert a screwdriver between this product and the USB holder to pry out the USB holder.  1 USB holder 2 Flat-blade screwdriver less than 6 mm (0.23 in)
4	Remove the holder.

Overview

RTC Battery Set (model number: PFXZGPRTC1) provides system date and time information and supports related functions requiring a real-time clock. To keep time continuity when power is off, use a non-rechargeable but replaceable battery provided with the RTC Battery Set. Replacing the battery initializes the clock data.

⚠⚠ DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION OR ARC FLASH

- Remove all power from the device before removing any covers or elements of the system, and prior to installing or removing any accessories, hardware, or cables.
- Unplug the power cable from both this product and the power supply.
- Always use a properly rated voltage sensing device to confirm power is off.
- Replace and secure all covers or elements of the system before applying power to this product
- Use only the specified voltage when operating this product. This product is designed to use 12 to 24 Vdc. Always check whether your device is DC powered before applying power.

Failure to follow these instructions will result in death or serious injury.

NOTICE

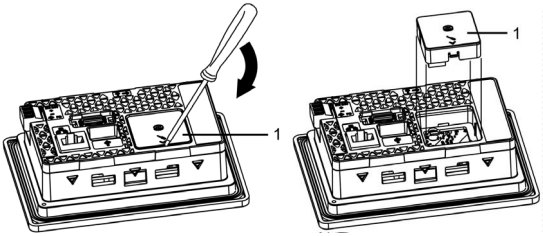
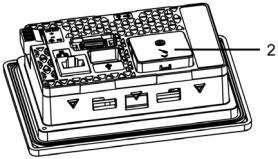
LOSS OF DATA

- Replace the battery regularly every five years after you purchase the RTC Battery Set.
- Allow only qualified personnel to change the battery.

Failure to follow these instructions can result in equipment damage.

Attaching the RTC Battery Set

Step	Action
1	Disconnect the power supply from this product.
2	Touch the housing or ground connection to discharge any electrostatic charge from your body.
3	Place this product on a flat, level surface, with the rear side pointing up.

4	Open the RTC Battery Set Cover on this product using the flat-blade screwdriver:  1 RTC Battery Set Cover
5	Insert the top of the RTC Battery Set first, then press the bottom until it clicks to affix the RTC Battery Set onto this product.  2 RTC Battery Set
6	Reconnect the power supply to this product. **NOTE :** After reconnecting the power supply, set up the clock again. Refer to your screen editing software manual on how to set up the clock.

Replacing the Battery

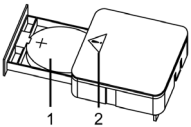
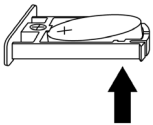
Use only the replacement battery (model number: PFXZGEBT1).

⚠ DANGER

EXPLOSION, FIRE, OR CHEMICAL HAZARD

Follow these instructions for the lithium batteries:
- Use this product's replacement battery only.
- Protect battery from any potential short circuit.
- Recycle or properly dispose of used batteries.
- Do not recharge, disassemble or heat above 80 °C (176 °F).
- Use your hands or insulated tools to remove or replace the battery.
- Maintain proper polarity when inserting and connecting a new battery.

Failure to follow these instructions will result in death or serious injury.

Step	Action
1	Pull out the tray of the RTC Battery Set.  1 Battery 2 Safety alert symbol (see the safety messages above)
2	Remove the spent battery from the tray by touching the battery from the bottom. 
3	Put the new battery on the tray in accordance with the polarity markings in the tray and on the battery.
4	Close the tray. **NOTE :** Refer to “Attaching the RTC Battery Set (see page 34)” before you attach the RTC Battery Set to this product.

Cleaning this product

NOTICE

EQUIPMENT DAMAGE

- Power off this product before cleaning it.
- Do not use hard or pointed objects to operate the touch panel as you may damage the panel surface.
- Do not use paint thinner, organic solvents, or a strong acid compound to clean the unit.

Failure to follow these instructions can result in equipment damage.

When this product gets dirty, soak a soft cloth in water with a neutral detergent, wring the cloth tightly and wipe this product.

Standards

For information on certifications and standards, such as certified models and certificates, see the product markings or the following URL:
http://www.pro-face.com/trans/en/manual/1002.html

⚠ DANGER

POTENTIAL FOR EXPLOSION

- Suitable for use in Class I, Division 2, Groups A, B, C, and D Hazardous Locations.
- Substitution of any component may impair suitability for Class I, Division 2.
- Do not disconnect equipment while the circuit is live or unless the area is known to be free of ignitable concentrations.
- Always confirm that this product is suitable for use in hazardous locations by checking that the ANSI/ISA 12.12.01 and CSA C22.2 N°213 certification appears on the product label.
- Do not attempt to install, operate, modify, maintain, service, or otherwise alter this product except as permitted in this manual. Unpermitted actions may impair the suitability of this product for Class I, Division 2 operation.
- To power on or power off this product installed in a Class I, Division 2 hazardous location, you must either:
  - Use a switch located outside the hazardous environment, or
  - Use a switch certified for Class I, Division 1 operation inside the hazardous area.
- Do not disconnect equipment unless power has been switched off or the area is known to be non-hazardous. This applies to all connections including power, ground, serial, parallel, and network connections.
- Never use unshielded / ungrounded cables in hazardous locations.
- When enclosed, keep enclosure doors and openings closed at all times to avoid the accumulation of foreign matter inside the workstation.

Failure to follow these instructions will result in death or serious injury.

The following is for UL Hazardous Locations.

⚠ DANGER

RISQUE D'EXPLOSION

- Le remplacement de n'importe quel composant peut nuire à la conformité à la Classe I, Division 2.
- Avant de déconnecter l'équipement, couper le courant ou s'assurer que l'emplacement est désigné non dangereux.

Le non-respect de ces instructions provoquera la mort ou des blessures graves.

Inquiry
Do you have any questions about difficulties with your unit? Please access our site any time that you need help with a solution. ***http://www.pro-face.com/trans/en/manual/1001.html***

Note

Please be aware that Digital Electronics Corporation shall not be held liable by the user for any damages, losses, or third party claims arising from the uses of this product.

中国 RoHS 相关资料

（本资料是中国 RoHS 的必备资料。）(This information is essential for China RoHS.)

部件名称 Part Name	有害物质 Hazardous Substances					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr (VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
金属部件 Metal parts	○	○	○	○	○	○
塑料部件 Plastic parts	○	○	○	○	○	○
电子件 Electronic	×	○	○	○	○	○
触点 Contacts	×	○	○	○	○	○
线缆和线缆附件 Cables & cabling accessories	○	○	○	○	○	○

本表格依据 SJ/T 11364 的规定编制。

○：表示该有害物质在该部件所有均质材料中的含量均在 GB/T 26572 规定的限量要求以下。

×：表示该有害物质至少在该部件的某一均质材料中的含量超出 GB/T 26572 规定的限量要求。

This table is made according to SJ/T 11364.

○：Indicates that the concentration of hazardous substance in all of the homogeneous materials for this part is below the limit as stipulated in GB/T 26572.

×：Indicates that concentration of hazardous substance in at least one of the homogeneous materials used for this part is above the limit as stipulated in GB/T 26572.