

# STM6000 Series Handheld Display Module

## User Guide

STM64TPH-MM01-EN\_00  
09/2023

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As part of a group of responsible, inclusive companies, we are updating our communications that contain non-inclusive terminology. Until we complete this process, however, our content may still contain standardized industry terms that may be deemed inappropriate by our customers.

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# Table of Contents

|  |    |
|--|----|
| Safety Information .....                                   | 4  |
| About This Manual.....                                     | 5  |
| Document Scope .....                                       | 5  |
| Validity Note .....  | 5  |
| Registered Trademarks .....                                | 5  |
| Related Documents .....                                    | 5  |
| Product Related Information .....                          | 5  |
| Overview .....   | 9  |
| Model Numbers .....  | 9  |
| Package Contents .....                                     | 9  |
| Certifications and Standards .....                         | 10 |
| Device Connectivity .....                                  | 11 |
| System Design .....  | 11 |
| Accessories.....   | 11 |
| Parts Identification and Functions .....                   | 13 |
| Parts Identification .....                                 | 13 |
| LED Indications .....                                      | 14 |
| Specifications.....  | 15 |
| General Specifications .....                               | 15 |
| Electrical Specifications .....                            | 15 |
| Environmental Specifications .....                         | 15 |
| Structural Specifications .....                            | 16 |
| Functional Specifications.....                             | 17 |
| Display Specifications.....                                | 17 |
| Touch Panel.....   | 17 |
| Interface Specifications .....                             | 17 |
| Switch Specifications.....                                 | 17 |
| Interface Connection .....                                 | 18 |
| Emergency Stop Switch.....                                 | 19 |
| Enable Switch .....  | 20 |
| Dimensions .....   | 21 |
| External Dimensions .....                                  | 21 |
| Rear Module Installation Adapter External Dimensions ..... | 22 |
| Cable Dimensions.....                                      | 22 |
| Installing and Wiring .....                                | 23 |
| Installation.....  | 23 |
| Installation Requirements for Rear Module.....             | 23 |
| Installation Procedure.....                                | 24 |
| Removal Procedure.....                                     | 25 |
| Attaching the Hand Strap .....                             | 27 |
| Hanging on the Wall .....                                  | 28 |
| Maintenance .....  | 30 |
| Regular Cleaning .....                                     | 30 |
| Periodic Check Points .....                                | 30 |
| Replacing the Backlight.....                               | 31 |

# Safety Information

## Important Information

Read these instructions carefully, and look at the equipment to become familiar with the device before trying to install, operate, service, 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 Schneider Electric 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.

# About This Manual

## Document Scope

This manual describes how to use this product.

## Validity Note

This documentation is valid for this product.

## Registered Trademarks

Microsoft® and Windows® are registered trademarks of Microsoft Corporation in the United States and/or other countries.

Product names used in this manual may be the registered trademarks owned by the respective proprietors.

## Related Documents

You can download the manuals related to this product, such as the STM6000 Series Hardware Manual and the software manual, from our website.

<https://www.pro-face.com/trans/en/manual/1085.html>

## Product Related Information

If the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.

This product is used in combination with the STM6000 series rear module (sold separately).

### **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 prior to installing or removing the product.
- Always use a properly rated voltage sensing device to confirm power is off where and when indicated.
- 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 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.**

Critical alarm indicators and system functions require independent and redundant protection hardware and/or mechanical interlocks.

When you cycle power, wait at least 10 seconds after it has been turned off. If this product is restarted too quickly, it may not operate correctly.

In the event the screen cannot be properly read, for example, if the backlight is not functioning, it may be difficult or impossible to identify a function. Functions that may present a hazard if not immediately executed, such as a fuel shut-off, must be provided independently of this product. The machine's control system design must take into account the possibility of the backlight no longer functioning and the operator being unable to control the machine or making mistakes in the control of the machine.

## **⚠ WARNING**

### **LOSS OF CONTROL**

- The designer of any control scheme must consider the potential failure modes of control paths and, for certain critical control functions, provide a means to achieve a safe state during and after a path failure. Examples of critical control functions are emergency stop and overtravel stop, power outage and restart.
- Separate or redundant control paths must be provided for critical control functions.
- System control paths may include communication links. Consideration must be given to the implications of unanticipated transmission delays or failures of the link.
- Observe all accident prevention regulations and local safety guidelines.
- Each implementation of this product must be individually and thoroughly tested for proper operation before being placed into service.
- The machine control system design must take into account the possibility of the backlight no longer functioning and the operator being unable to control the machine, or making errors in the control of the machine. Do not touch the screen when the backlight is no longer functioning.

**Failure to follow these instructions can result in death, serious injury, or equipment damage.**

For additional information, refer to NEMA ICS 1.1 (latest edition), "Safety Guidelines for the Application, Installation, and Maintenance of Solid State Control" and to NEMA ICS 7.1 (latest edition), "Safety Standards for Construction and Guide for Selection, Installation and Operation of Adjustable-Speed Drive Systems" or their equivalent governing your particular location.

## **⚠ WARNING**

### **UNINTENDED EQUIPMENT OPERATION**

- The application of this product requires expertise in the design and programming of control systems. Only persons with such expertise should be allowed to program, install, alter, and apply this product.
- Follow all applicable safety standard and local regulations and directives.

**Failure to follow these instructions can result in death, serious injury, or equipment damage.**

**⚠ WARNING****UNINTENDED EQUIPMENT OPERATION**

- Do not use this product as the only means of control for critical system functions such as motor start/stop or power control.
- Do not use this equipment as the only notification device for critical alarms, such as device overheating or overcurrent.
- Use only the software provided with this product. If you use other software, please confirm the operation and safety before use.

**Failure to follow these instructions can result in death, serious injury, or equipment damage.**

**⚠ WARNING****UNINTENDED EQUIPMENT OPERATION**

Do not step on or pull the cable.

**Failure to follow these instructions can result in death, serious injury, or equipment damage.**

**⚠ CAUTION****RISK OF INJURY, EQUIPMENT DAMAGE**

- Do not trip over the cable.
- Always use the hand strap during operation to avoid dropping the product.

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

The following characteristics are specific to the LCD panel and are considered normal behavior:

- LCD screen may show unevenness in the brightness of certain images or may appear different when seen from outside the specified viewing angle. Extended shadows, or crosstalk may also appear on the sides of screen images.
- LCD screen pixels may contain black and white colored spots and color display may seem to have changed.
- When experiencing vibrations within a certain frequency range and vibration acceleration is above what is acceptable, the LCD screen may partially turn white. Once the vibration condition ends, the whitening of the screen is resolved.
- When the same image is displayed on the screen for a long period, an afterimage may appear when the image is changed.
- The panel brightness may decrease when used for a long time in an environment continuously filled with inert gas. To prevent deterioration of panel brightness, regularly ventilate the panel. For more information, please contact customer support.

<https://www.pro-face.com/trans/en/manual/1015.html>

## **⚠ WARNING**

### **SERIOUS EYE AND SKIN INJURY**

The liquid in the LCD panel contains an irritant:

- Avoid direct skin contact with the liquid.
- Wear gloves when you handle a broken or leaking unit.
- Do not use sharp objects or tools in the vicinity of the LCD panel.
- Handle the LCD panel carefully to prevent puncture, bursting, or cracking of the panel material.
- If the panel is damaged and any liquid comes in contact with your skin, immediately rinse the area with running water for at least 15 minutes. If the liquid gets in your eyes, immediately rinse your eyes with running water for at least 15 minutes and consult a doctor.

**Failure to follow these instructions can result in death, serious injury, or equipment damage.**

## ***NOTICE***

### **REDUCTION OF SERVICE LIFE OF PANEL**

Change the screen image periodically and try not to display the same image for a long period of time.

**Failure to follow these instructions can result in equipment damage.**



# Overview

## What's in This Chapter

|                                    |    |
|------------------------------------|----|
| Model Numbers.....                 | 9  |
| Package Contents.....              | 9  |
| Certifications and Standards ..... | 10 |

## Model Numbers

### Model List

| Model name              | Model number  | Description                                  |
|-------------------------|---------------|--|
| Handheld display module | PFXSTM64TPH5  | Handheld type display module with 5 m cable  |
|                         | PFXSTM64TPH10 | Handheld type display module with 10 m cable |

## Package Contents

Verify all items listed here are present in your package.

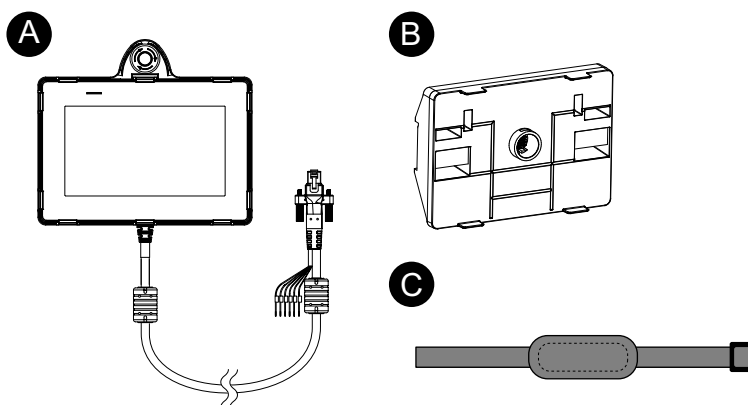
Please contact customer support immediately if you find anything damaged or missing.

### ⚠ WARNING

#### UNINTENDED EQUIPMENT OPERATION

Do not use damaged products or accessories.

**Failure to follow these instructions can result in death, serious injury, or equipment damage.**



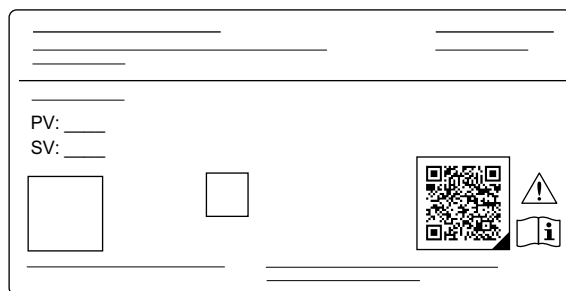
- A. Handheld display module (with cable\*1) x 1
- B. Rear module installation adapter x 1
- C. Hand strap x 1
- D. Instruction sheet x 1
- E. Warning/Caution information x 1

\*1 Cable is non-removable

**NOTE:** Use this product in combination with the STM6000 series rear module (sold separately). The rear module (PFXSTM6BE01) is not included in this package, and must be prepared separately.

## Product Revision

You can identify the product version (PV) and the software version (SV) from the product label.



## Certifications and Standards

The certifications and standards listed below may include those that are not yet acquired. Please check the product marking for the latest acquisition status.

### Compliance Standards

Europe:

CE

- Directive 2014/30/EU (EMC: EN 61131-2)

### Hazardous Substances

This product is designed to be compliant with the following environmental regulations, even if the product may not fall directly in the scope of the regulation:

- RoHS, Directive 2011/65/EU and 2015/863/EU
- RoHS China, Standard GB/T 26572
- REACH regulation EC 1907/2006

### End of Life (WEEE)

The product contains electronic boards. It must be disposed of in specific treatment channels. The product contains cells and/or storage batteries which must be collected and processed separately when they have run out and at the end of product life (Directive 2012/19/EU).

Refer to [Maintenance](#), page 30 when extracting cells and batteries from the product. These batteries do not contain a weight percentage of heavy metals over the threshold notified by European Directive 2006/66/EC.

# Device Connectivity

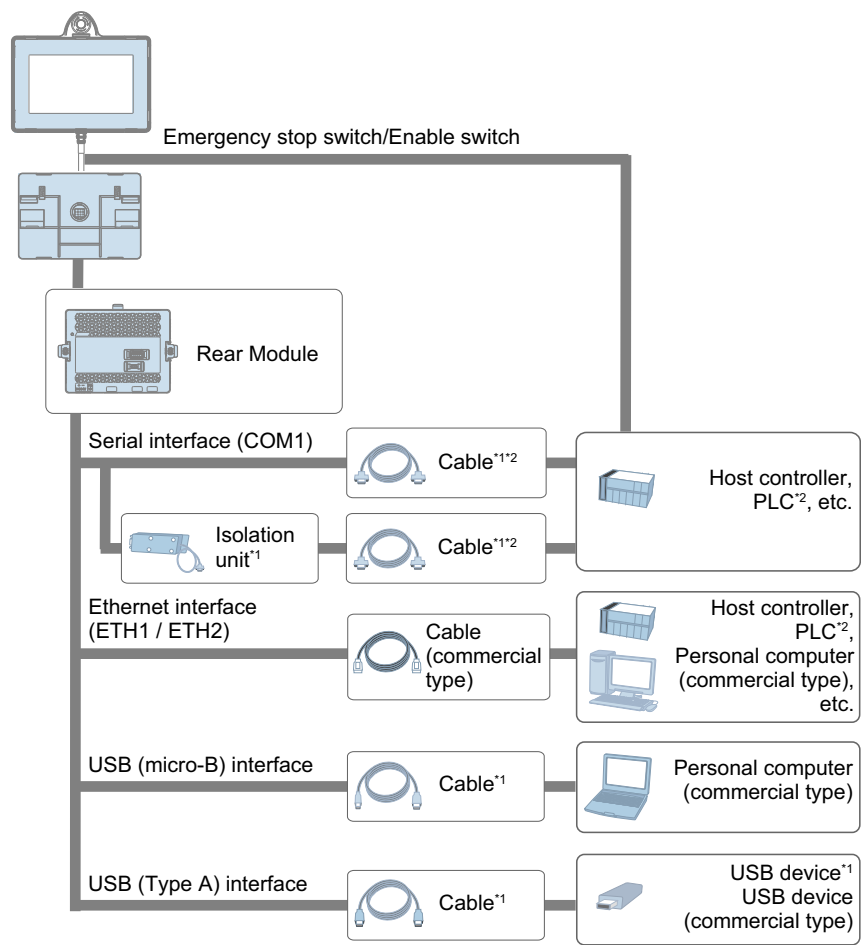
## What's in This Chapter

|                    |    |
|--------------------|----|
| System Design..... | 11 |
| Accessories .....  | 11 |

## System Design

This section describes the system configuration with this product and peripheral equipment.

**NOTE:** Use this product in combination with the STM6000 series rear module (sold separately).



\*1 For peripheral equipment that can be connected to the interface on the rear module, refer to the "Accessories" topic in the STM6000 Series Hardware Manual.

\*2 For information on how to connect controllers and other types of equipment, refer to the corresponding device driver manual of your screen editing software.

## Accessories

This section introduces optional items that are sold separately.

Products may change or be discontinued without notice. Please check our website for the latest information.

<https://www.pro-face.com>

**NOTE:** For the peripheral equipment that you can connect to the interface of the rear module, refer to the "Accessories" topic in the STM6000 Series Hardware Manual.

| Product name                              | Product number | Description   |
|---|----------------|---|
| Rear Module                               | PFXSTM6BE01    | Rear module for PFXSTM6200WADE/ PFXSTM6400WADE  |
| Screen Protection Sheet with UV Protected | PFXZCIDS72     | Disposable, dirt-resistant and ultraviolet protection sheet for 7-inch Wide screen (1 sheet/set). |

## Maintenance Accessories

This section lists replacement parts.

| Product name                     | Product number | Description   |
|----------------------------------|----------------|---|
| Rear Module Installation Adapter | PFXZCM6DSA     | Adapter for installing the rear module on a DIN rail. |

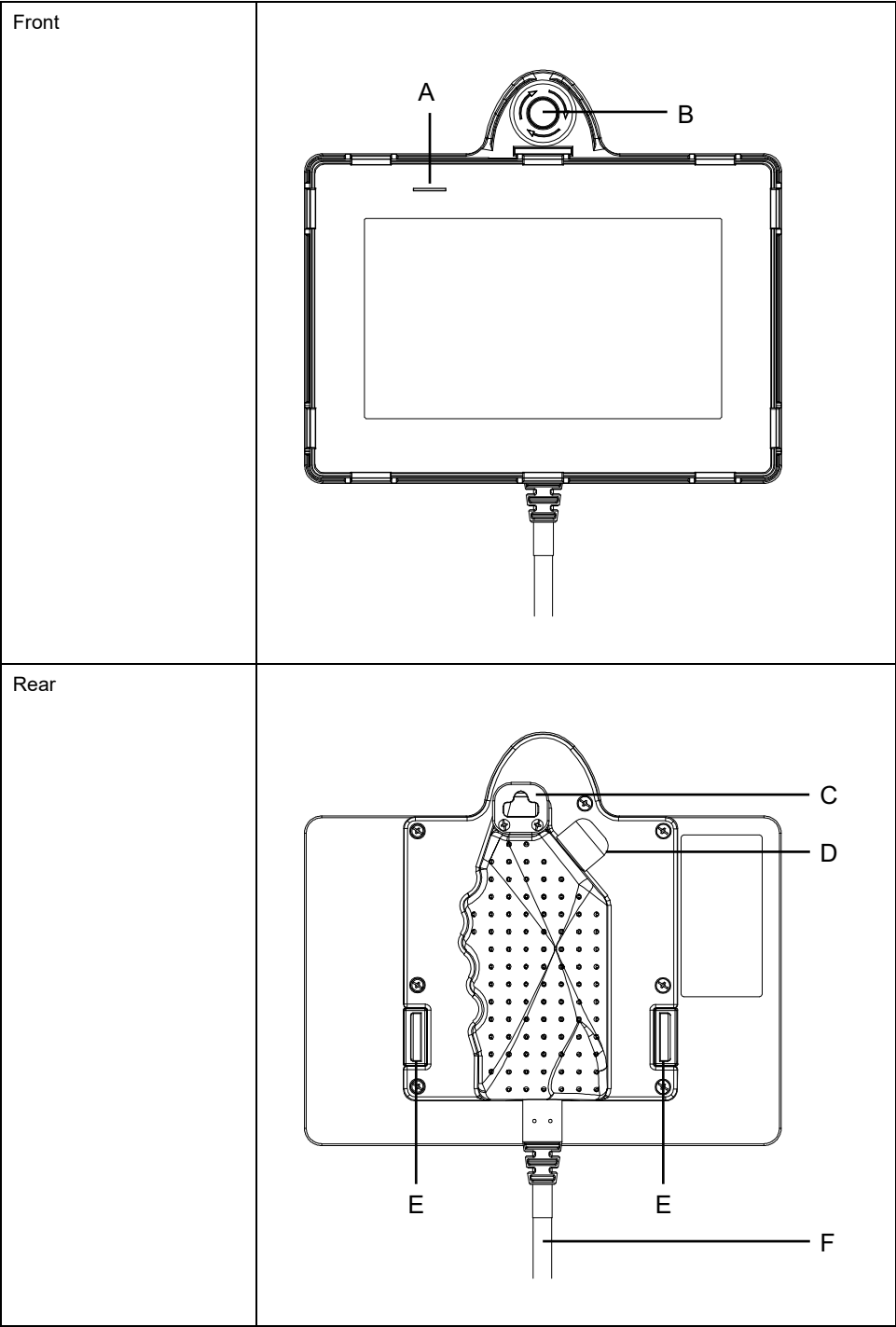
# Parts Identification and Functions

## What’s in This Chapter

|                           |    |
|---------------------------|----|
| Parts Identification..... | 13 |
| LED Indications.....      | 14 |

## Parts Identification

### Parts Identification



- A. Status LED
- B. Emergency stop switch

- C. Hook
- D. Enable switch
- E. Strap attachment latch
- F. Cable

## LED Indications

### Status LED

After power is turned on, normal status indication by the LED is: red light > flashing orange > green light.

| Color  | Indicator | HMI operation        |
|--------|-----------|----------------------|
| Green  | ON        | In operation         |
| Orange | Flashing  | Software starting up |
| Red    | ON        | Power is ON.         |
| -      | OFF       | Power is OFF.        |

**NOTE:** The LED light remains green even if the product's backlight is off (Standby Mode).

For other LED indications, refer to the manual of your screen editing software.

# Specifications

## What's in This Chapter

|                                 |    |
|---------------------------------|----|
| General Specifications.....     | 15 |
| Functional Specifications ..... | 17 |
| Interface Specifications.....   | 17 |

## General Specifications

### Electrical Specifications

| Specification       |  | PFXSTM64TPH5 | PFXSTM64TPH10 |
|---------------------|--|--------------|---------------|
| Rated input voltage |  | 24 Vdc       |               |
| Power consumption   | Max  | 3.6 W        |               |
|                     | When screen turns off the backlight (standby mode) | 1.3 W        |               |

#### NOTE:

- Use this product in combination with the STM6000 series rear module (sold separately). For the electrical specifications of the rear module, please refer to the STM6000 Series Hardware Manual.
- The power consumption for the combined unit of the rear module and the display module equals the sum of power consumption of the two modules.

## Environmental Specifications

Use and store this product in areas that conform to the specified conditions.

**NOTE:** When using any of the options for this product, check the specifications for special conditions or cautions that may apply to this product.

| Physical environment                      |   |
|---|---|
| Ambient air temperature                   | 0...50 °C (32...122 °F)<br>(For rear module only: 0...60 °C [32...140 °F])  |
| Storage temperature                       | -20...60 °C (-4...140 °F)   |
| Ambient air and storage humidity          | 10...90% RH (non-condensing, wet bulb temperature 39 °C [102.2 °F] or less)   |
| Dust                                      | 0.1 mg/m <sup>3</sup> (10 <sup>-7</sup> oz/ft <sup>3</sup> ) or less (non-conductive levels)  |
| Pollution degree                          | For use in Pollution Degree 2 environment   |
| Corrosive gases                           | Free of corrosive gases   |
| Atmospheric pressure (operating altitude) | 800...1,114 hPa (2,000 m [6,561 ft] or lower)   |
| Mechanical environment                    |   |
| Vibration resistance                      | IEC/EN 61131-2 compliant<br>5...9 Hz Single amplitude 3.5 mm (0.14 in)<br>9...150 Hz Fixed acceleration: 9.8 m/s <sup>2</sup><br>X, Y, Z directions for 10 cycles (approximately 100 minutes) |
| Shock resistance                          | IEC/EN 61131-2 compliant<br>147 m/s <sup>2</sup> , X, Y, Z directions for 3 times   |
| Drop resistance                           | Free fall 1.2 m (3.94 ft)   |
| Electrical environment                    |   |

|  |  |
|--|--|
| Electrical fast transient/burst immunity | IEC 61000-4-4<br>2 kV: Power port<br>1 kV: Signal ports                                    |
| Electrostatic discharge immunity         | Contact discharge method: 6 kV<br>Air discharge method: 8 kV<br>(IEC/EN 61000-4-2 Level 3) |

## ⚠ CAUTION

### INOPERATIVE EQUIPMENT

- Do not operate or store the product where chemicals evaporate, or where chemicals are present in the air. Chemicals refer to the following: A) Corrosive chemicals: Acids, alkalines, liquids containing salt, B) Flammable chemicals: Organic solvents.
- Do not allow water, liquids, metal, and wiring fragments to enter the panel case.

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

## Structural Specifications

|                                 | PFXSTM64TPH5  | PFXSTM64TPH10                                     |
|---------------------------------|---|---|
| Cooling method                  | Natural air circulation   |   |
| Structure                       | IP20  |   |
| External dimensions (W x H x D) | 207 x 179 x 92 mm (8.15 x 7.05 x 3.62 in) (excluding the cable) |   |
| Weight                          | 2.3 kg (5.07 lb) or less<br>(including the cable)               | 2.7 kg (5.95 lb) or less<br>(including the cable) |

**NOTE:** Use this product in combination with the STM6000 series rear module (sold separately). Before installing the rear module and connecting this product, confirm the conditions that will be present in the operating environment of both the modules. For structural specifications of the rear module, please refer to the STM6000 Series Hardware Manual.

## NOTICE

### EQUIPMENT DAMAGE

- Do not press on the display of this product with excessive force or with a hard object.
- Do not press on the touch panel with a pointed object, such as the tip of a mechanical pencil or a screwdriver.
- Do not expose the device to direct sunlight.
- Store this product in areas where temperatures are within the product's specifications.

**Failure to follow these instructions can result in equipment damage.**



# Functional Specifications

## Display Specifications

|                                |   |
|--------------------------------|---|
| Display type                   | TFT Color LCD   |
| Display size                   | 7" wide   |
| Resolution                     | 800 x 480 pixels (WVGA)   |
| Effective display area (W x H) | 154.08 x 85.92 mm (6.07 x 3.38 in)  |
| Display colors                 | 16 million colors<br>For details about display colors, refer to the manual of your screen editing software. |
| Backlight                      | White LED (Not replaceable.)  |
| Backlight service life         | 50,000 hours or more (continuous operation at 25 °C [77 °F] before backlight brightness decreases to 25%)   |
| Brightness control             | 16 levels (Adjusted with touch panel or software)   |

## Touch Panel

|                          |                         |
|--------------------------|-------------------------|
| Touch panel type         | Resistive film (analog) |
| Touch points             | Single touch            |
| Touch panel resolution   | 1,024 x 1,024           |
| Touch panel service life | 1 million times or more |

The touch panel does not support multi-touch (two-point touch / multiple-point touch). If you touch multiple points on the touch panel, it may operate as if you touched the center-point of the multiple touches. For example, if you touch two or more points on the touch panel and at the center of the touches is a switch for a drive system, even though you did not directly touch that switch, it may function as if you did.

| <b>⚠ WARNING</b>  |  |
|---|--|
| <b>UNINTENDED EQUIPMENT OPERATION</b>   |  |
| Do not touch two or more points on the touch panel.   |  |
| <b>Failure to follow these instructions can result in death, serious injury, or equipment damage.</b> |  |

## Interface Specifications

### Switch Specifications

|                       |                           |   |
|-----------------------|---------------------------|---|
| Emergency stop switch | Contacts                  | b-contact (normally closed): 2                                |
|                       | Rated operational voltage | 30 Vdc  |
|                       | Rated operating current   | 1 A<br>Minimum applicable load: 5 Vdc, 5 mA (reference value) |
|                       | Contact resistance        | 50 mΩ or less (initial value)                                 |
|                       | Applicable standards      | IEC/EN 60947-5-1, 60947-5-5                                   |

|               |                           |  |
|---------------|---------------------------|--|
|               | Mechanical life*1         | 250,000 operations or more   |
|               | Electrical life*1         | 100,000 operations or more (rating operating voltage-current)<br>250,000 operations (24 Vdc, 100 mA)         |
|               | B10d*1                    | 100,000 operations<br>(EN ISO 13849-1 Annex C Table C.1)   |
| Enable switch | Contacts                  | a-contact (normally open): 1<br>3-position switch  |
|               | Rated operational voltage | 30 Vdc   |
|               | Rated operating current   | 0.7 A<br>Minimum applicable load: 5 Vdc, 5 mA<br>(reference value)   |
|               | Contact resistance        | 50 mΩ or less (initial value)  |
|               | Applicable standards      | IEC/EN 60947-5-8, IEC/EN 60947-5-1,<br>IEC/EN 60204-1  |
|               | Mechanical life*2         | Position 1 → 2 → 1: 1,000,000<br>operations or more<br>Position 1 → 2 → 3 → 1: 100,000<br>operations or more |
|               | Electrical life*2         | 100,000 operations or more   |

\*1 Operation frequency: 900 operations/hour.

\*2 Operation frequency: 1,200 operations/hour (rating operating voltage-current).  
The actual number of operations varies based upon environment, duty cycle and load.

## Interface Connection

### Wiring for Each Switch

#### **⚠ DANGER**

##### **SHORT CIRCUIT, FIRE HAZARD**

- Remove all power from the device prior to wiring or removal.
- Isolate all unused wires.

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

#### **⚠ WARNING**

##### **UNINTENDED EQUIPMENT OPERATION**

Do not make any mistakes in wiring the device.

**Failure to follow these instructions can result in death, serious injury, or equipment damage.**

Size of conductor: AWG 24 (cross sectional area: 0.2 mm<sup>2</sup>)

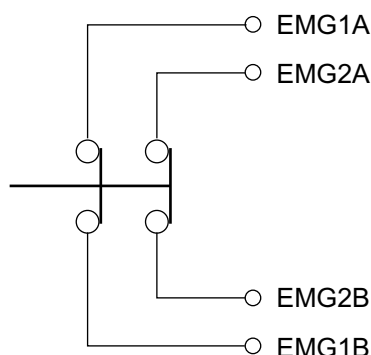
| Wire color | Signal name | Description  |
|------------|-------------|--|
| Grey       | EMG1A       | Emergency stop switch output signal,<br>b-contact (normally closed)<br>Rating: 30 Vdc, 1 A |
| Blue       | EMG1B       | Emergency stop switch output signal,<br>b-contact (normally closed)                        |
| Yellow     | EMG2A       | Emergency stop switch output signal,<br>b-contact (normally closed)<br>Rating: 30 Vdc, 1 A |

| Wire color  | Signal name | Description   |
|-------------|-------------|---|
| Purple      | EMG2B       | Emergency stop switch output signal, b-contact (normally closed)                |
| Pink        | ENB1A       | Enable switch output signal, a-contact (normally open)<br>Rating: 30 Vdc, 0.7 A |
| Black/White | ENB1B       | Enable switch output signal, a-contact (normally open)                          |

## Emergency Stop Switch

Pressing this switch stops (locks) the operation of the connected device. To unlock, pull this switch toward you or turn it in the direction of the arrow.

| Signal name | Lock    | Unlock |
|-------------|---------|--------|
| EMG1        | 0 (OFF) | 1 (ON) |
| EMG2        | 0 (OFF) | 1 (ON) |



### **⚠ WARNING**

#### **UNINTENDED EQUIPMENT OPERATION**

- The suitability of using the emergency stop switch should be determined by a risk assessment of the system.
- Before operating this product on the actual system, as well as periodically, check its operation (proof test).
- Perform testing under controlled conditions. For example, when testing the emergency stop switch, the operator must be outside the working range of the moving machine.
- Unlock after confirming safety.

**Failure to follow these instructions can result in death, serious injury, or equipment damage.**

### **NOTICE**

#### **EQUIPMENT DAMAGE**

Do not expose the switch to excessive shock or vibration.

**Failure to follow these instructions can result in equipment damage.**

## Enable Switch

3 position enabling switch. Operate the connected device only when this switch is in the middle position.

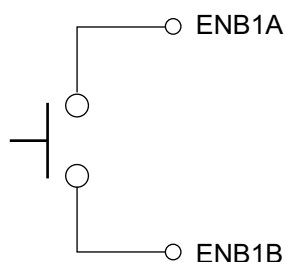
The switch is ON when the switch is lightly pressed (position 2).

The switch is OFF when the switch is not pressed (position 1) or when the switch is fully depressed (position 3).

| Signal name | Position 1 | Position 2 | Position 3 |
|-------------|------------|------------|------------|
| ENB1        | 0 (OFF)    | 1 (ON)     | 0 (OFF)    |

**NOTE:**

- When returning to position 1 from position 3, the contacts remain OFF.
- Do not use tape, strings, or other method to keep the enable switch in position 2 all the time.



### ***NOTICE***

**EQUIPMENT DAMAGE**

- Do not expose the switch to excessive shock or vibration.
- Do not apply an operating force over 250 N to the enable switch.

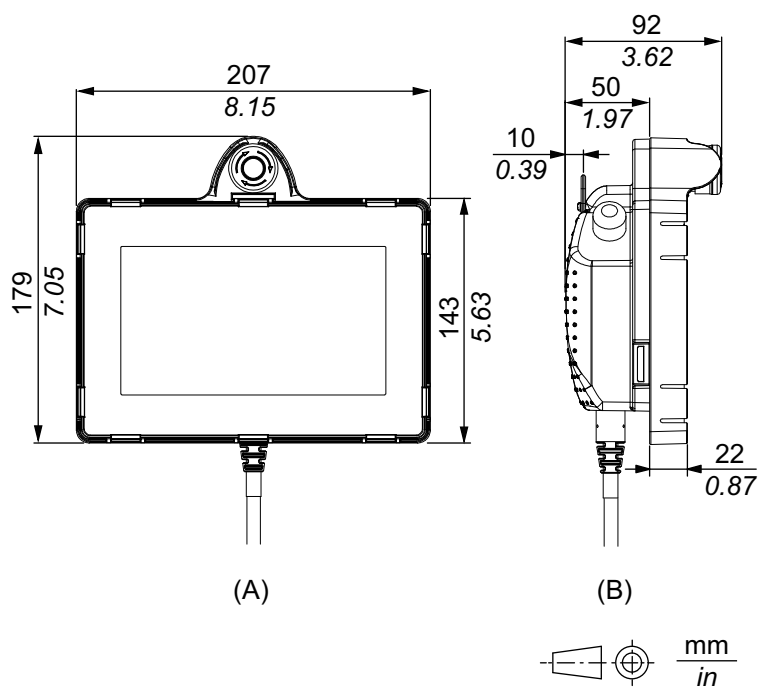
**Failure to follow these instructions can result in equipment damage.**

# Dimensions

## What's in This Chapter

|  |    |
|--|----|
| External Dimensions.....                                   | 21 |
| Rear Module Installation Adapter External Dimensions ..... | 22 |
| Cable Dimensions .....                                     | 22 |

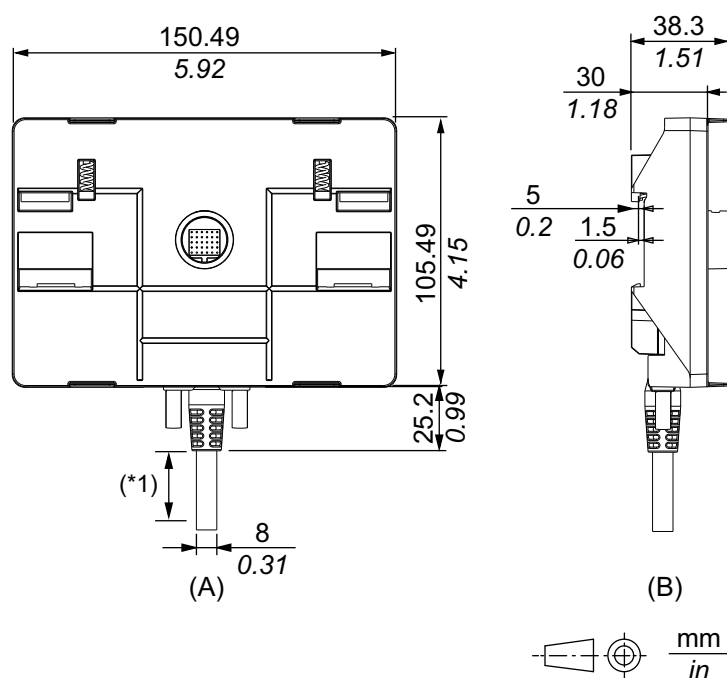
## External Dimensions



A. Front

B. Left

## Rear Module Installation Adapter External Dimensions



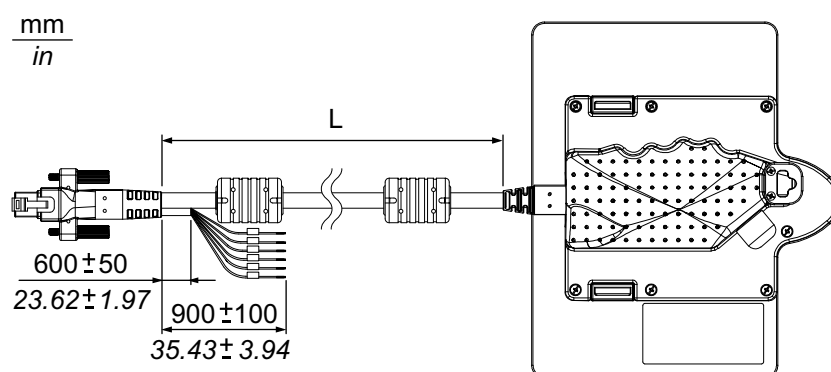
A. Front

B. Right

\*1 To assemble this product, you need 20 mm (0.78 in) or more space to bend the rubber portion at the end of the cable.

**NOTE:** For the external dimensions with the rear module installed, refer to the STM6000 Series Hardware Manual.

## Cable Dimensions



PFXSTM64TPH5: L = 5000 ± 100 mm (196.85 ± 3.94 in)

PFXSTM64TPH10: L = 10000 ± 100 mm (393.70 ± 3.94 in)

# Installing and Wiring

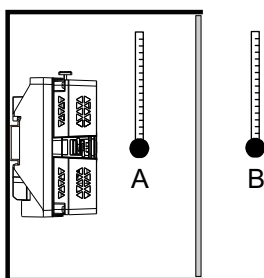
## What's in This Chapter

|                    |    |
|--------------------|----|
| Installation ..... | 23 |
|--------------------|----|

## Installation

### Installation Requirements for Rear Module

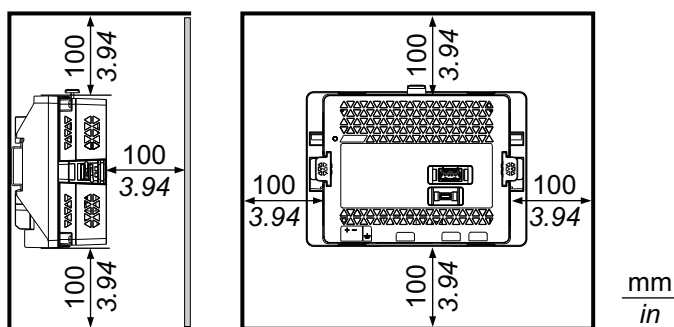
- Check that the installation wall or cabinet surface is flat, in good condition and has no jagged edges. Metal reinforcing strips may be attached to the inside of the wall, near the installation location, to increase its rigidity.
- Depending on wall's material, size, and installation location of the rear module and other devices, the installation wall could warp. To prevent warping, the installation surface may need to be strengthened.
- Check that the ambient air temperature and the ambient humidity are within their specified ranges in [Environmental Specifications](#). When installing the rear module in a cabinet or enclosure, the ambient air temperature is the cabinet's or enclosure's internal and external temperature.



A. Internal temperature

B. External temperature

- Be sure that heat from surrounding equipment does not cause the rear module to exceed its standard operating temperature.
- For easier maintenance, operation and improved ventilation, install the rear module at least 100 mm (3.94 in) away from adjacent structures and other equipment as shown in the following illustration:



- The panel must be designed to avoid any induced vibration resonance on the rear module exceeding an amplitude factor of 10 and to avoid any induced permanent vibration resonance.

# Installation Procedure

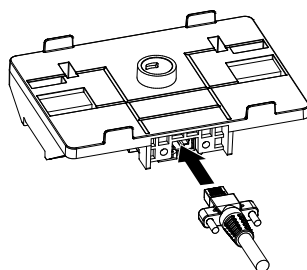
## ⚡⚠ DANGER

### 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.
- Before connecting this product, unplug the power cable from both the rear module and the power supply.
- Always use a properly rated voltage sensing device to confirm power is off where and when indicated.
- Replace and secure all covers or elements of the system before applying power to the rear module.
- Use only the specified voltage when operating this product. This product is designed to use 24 Vdc. Always check whether the rear module is DC powered before applying power.

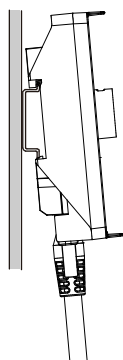
**Failure to follow these instructions will result in death or serious injury.**

1. Connect the cable of this product to the rear module installation adapter. Affix the screws on both sides of the cable connector to secure the cable to the adapter.



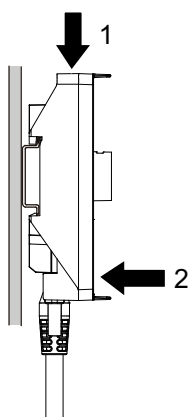
2. Position the top groove of the rear module installation adapter on the top edge of the DIN rail.

**NOTE:** Install the adapter on a DIN rail compatible with IEC 60715 TH35-7.5.

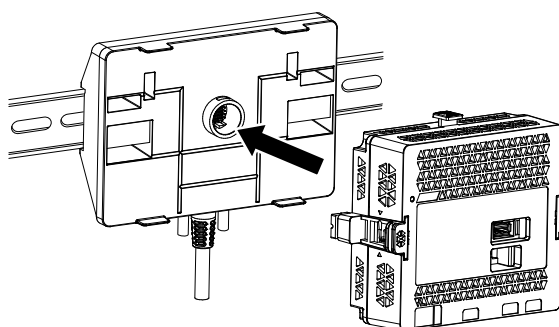




3. Push down on the adapter until the bottom groove of the installation adapter fits under the DIN rail.



4. Insert and push the rear module (sold separately) straight in to the adapter, until they lock into place.



## Removal Procedure

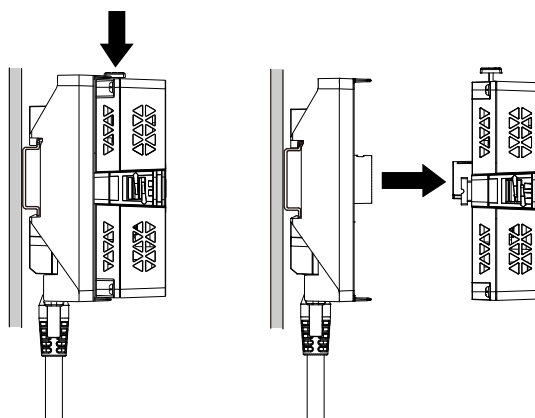
### **⚡⚠ DANGER**

#### **HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH**

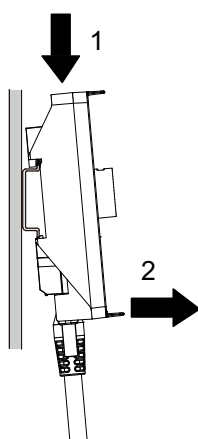
- Remove all power from the device before removing any covers or elements of the system, and prior to installing or removing any accessories, hardware, or cables.
- Unplug the power cable from both the rear module and the power supply prior to removing the rear module.
- Always use a properly rated voltage sensing device to confirm power is off where and when indicated.

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

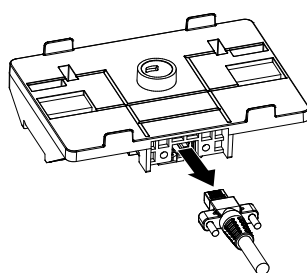
1. Push and hold the button at the top of the rear module, and pull the rear module straight out.



2. Push down on the rear module installation adapter and unhook the bottom part of the adapter from the DIN rail.



3. Loosen the screws on both sides of the cable connector and remove the cable.



## Attaching the Hand Strap

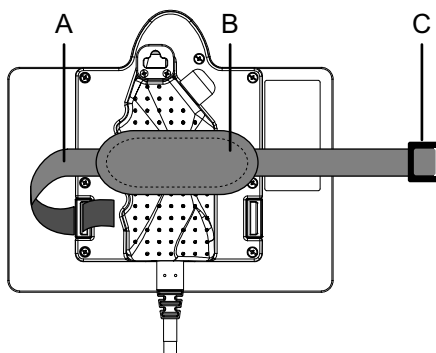
### ⚠ CAUTION

#### RISK OF INJURY, EQUIPMENT DAMAGE

- Always use the hand strap during operation.
- Do not drop the product.

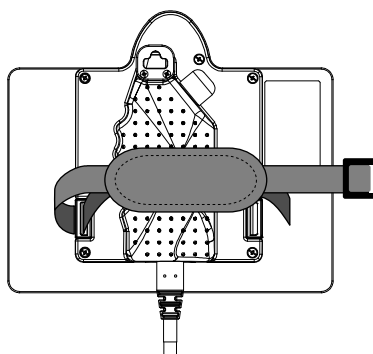
**Failure to follow these instructions can result in injury or equipment damage.**

1. Place this product on a flat, level surface, with the display face pointing down.
2. Thread the end of the band (the side that does not have the adjuster) through a strap attachment latch on the product.

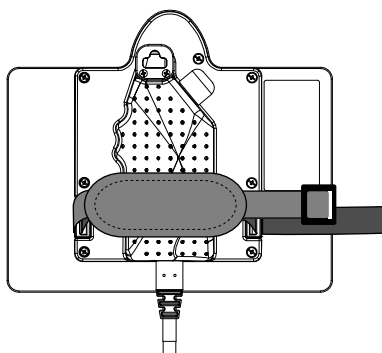


- A. Band
- B. Pad
- C. Adjuster

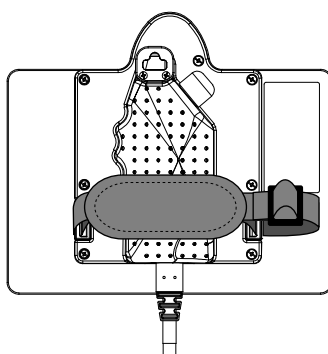
3. Thread the band through the pad.



4. Thread the band through the other strap attachment latch.



5. Thread the band through the adjuster.



Adjust the length of the band to fit the operator's arm.

## Hanging on the Wall

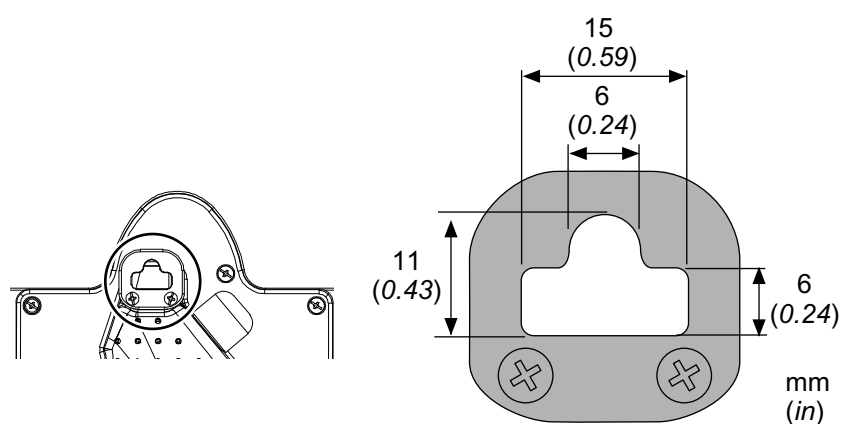
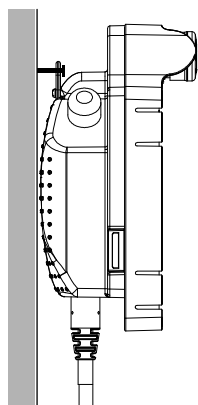
When the product is not in use, it can be hung on the wall.

### **⚠ CAUTION**

#### **RISK OF INJURY, EQUIPMENT DAMAGE**

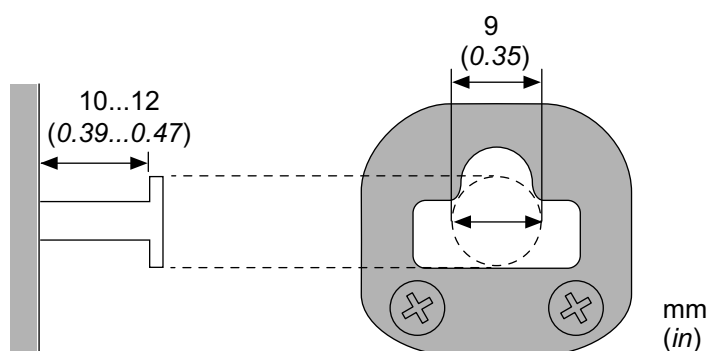
- Do not operate or wire the product while it is hung on the wall.
- Confirm the wall and wall hanging bracket are strong enough (thickness of the wall, material, and so on) to withstand the weight of this product.

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



The wall and wall hanging bracket must be able to withstand loads of 20 kg (44.1 lb) or more.

Example: Using a stainless steel screw



Screw thickness: 3...6 mm (0.12...0.23 in)

Screw head diameter: 8...10 mm (0.31...0.39 in)

**NOTE:** These dimensions are intended for reference only. Check the material and strength of the wall hanging bracket (screws, bolts, and so on) that will be used and the wall on which it will be installed.

# Maintenance

## What's in This Chapter

|                               |    |
|-------------------------------|----|
| Regular Cleaning .....        | 30 |
| Periodic Check Points.....    | 30 |
| Replacing the Backlight ..... | 31 |

## Regular Cleaning

### Cleaning the Product

#### ***NOTICE***

##### **EQUIPMENT DAMAGE**

- Power off this product before cleaning it.
- Do not use hard or pointed objects to operate the touch panel.
- 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, wipe this product with a soft, dry cloth or a soft cloth soaked in only water and wrung tightly.

**NOTE:** When the product is very dirty, soak the soft cloth in water with a neutral detergent, wring the cloth tightly and wipe the product while avoiding the product label.

## Periodic Check Points

### Operation Environment

- Is the ambient air temperature within the allowable range? Refer to Environmental Specifications, page 15.
- Is the ambient air humidity within the specified range? Refer to Environmental Specifications, page 15.

When this product is inside a panel, the ambient environment refers to the interior of the panel.

## Electrical Specifications

- Is the input voltage appropriate? Refer to Electrical Specifications, page 15.
- Are all power cords and cables connected properly? Are there any loose cables?

## Unit Disposal

When disposing this product, dispose it in a manner appropriate to, and in accordance with, your country's industrial machinery disposal/recycling standards.

## Replacing the Backlight

Not replaceable.

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please ask for confirmation of the information given in this publication.

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