Panasonic®   **Installation Instructions**

FP-Industry 4.0 Communicator (FP-I4C)
AFP4C

Read these instructions carefully and carry out the installation in the prescribed manner. After installation, keep the instructions in a safe place for reference when required.

1   Safety precautions

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

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

⚠ WARNING

- Always take precautions to ensure the overall safety of your system so that the whole system remains safe in the event of failure of this product or other external factor.
- Do not use this product in areas with inflammable gas. It could lead to an explosion.
- Exposing this product to excessive heat or open flames could cause damage to electronic parts.

⚠ CAUTION

- To prevent abnormal exothermic heat or smoke generation, do not use this product continuously at the maximum performance values listed in the specifications.
- Do not disassemble or modify the product. It could lead to abnormal exothermic heat or smoke generation.
- Do not touch the terminals while the electricity is turned on. It could lead to an electric shock.
- Use external devices to ensure safety related functions such as the emergency stop and interlock circuit.
- Connect the wires and connectors securely. A loose connection might pose an electrical hazard, which could result in a short-circuit, exothermic heat or smoke generation.

2   Before using the FP-I4C unit

Included accessories

- 1 x power supply cable (AFPG805)

Operating environment

- Operating temperature: 0 to +55°C
- Operating humidity: 10-95% RH (at 25°C, non-condensing)

Do not use the unit in the following environments:

- Flammable or corrosive gases
- Excessive ariborne dust, metal particles or salts
- Vibration, shock or direct drop of water
- Influence from power transmission lines, high voltage equipment, power cables, power equipment, radio transmitters, or any other equipment that would generate high switching surges. Maintain at least 100mm of space between these devices and the unit.

Proper handling

- Do not touch connector pins directly to prevent static electricity from damaging the unit.
- Be sure you are free of any static electricity before handling this product.

Software

This product incorporates the following software:

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(2) the software owned by third party and licensed to Panasonic Industry Europe GmbH,

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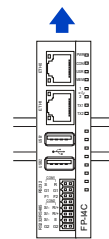
Please refer to the detailed terms and conditions thereof shown in the device settings menu.

At least three (3) years from delivery of this product, Panasonic will give to any third party who contacts us at the contact information provided below, for a charge no more than our cost of physically performing source code distribution, a complete machine-readable copy of the corresponding source code covered under GPL V2.0, LGPL V2.1 or the other licenses with the obligation to do so, as well as the respective copyright notice thereof.

Contact Information: plc.peweu@eu.panasonic.com

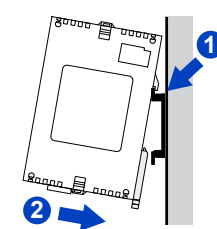## 3   Installing the unit

Installation direction

Install the unit in a vertical position.
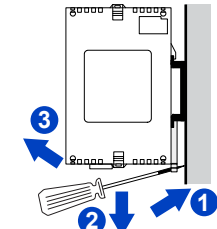
⚠ CAUTION

Perform the installation with the power turned off.

DIN rail installation and removal
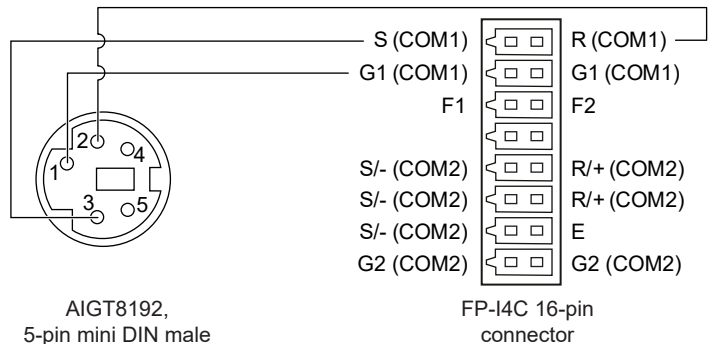
Installing   Removing

4   Wiring examples

TOOL port FP0R, FPΣ, FP-X, FP2SH, using cable AIGT8192
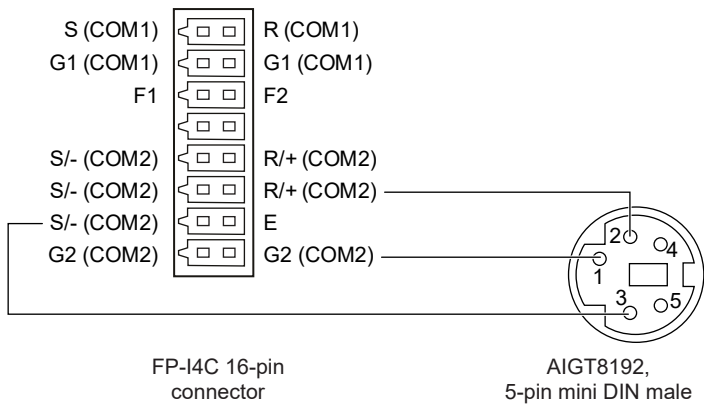
Use either COM1 or COM2 depending on your setting for "Service control interface" in the Web interface of the FP-I4C unit.

The cable AIGT8192 can be ordered as an accessory. Please remove the ferrules of the cable AIGT8192 before inserting the wires into the connector.

S (COM1)	R (COM1)
G1 (COM1)	G1 (COM1)
F1	F2
S/- (COM2)	R/+ (COM2)
S/- (COM2)	R/+ (COM2)
S/- (COM2)	E
G2 (COM2)	G2 (COM2)

AIGT8192,
5-pin mini DIN male

FP-I4C 16-pin
connector

S (COM1) R (COM1)
G1 (COM1) G1 (COM1)
F1 F2

S/- (COM2) R/+ (COM2)
S/- (COM2) R/+ (COM2)
S/- (COM2) E
G2 (COM2) G2 (COM2)

```
      2○   ○4
      1○   □
         3○  ○5
```

FP-I4C 16-pin
connector

AIGT8192,
5-pin mini DIN male
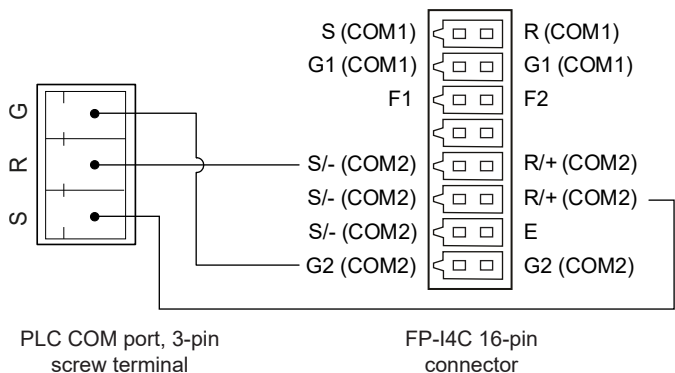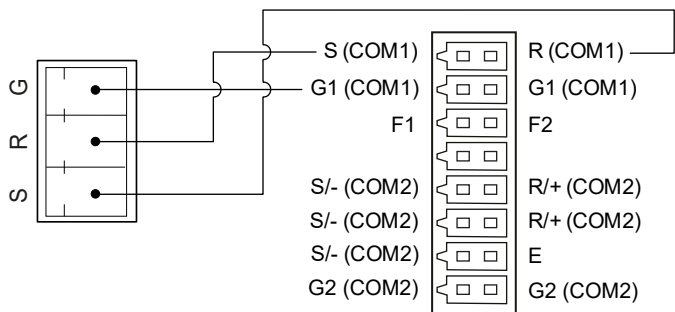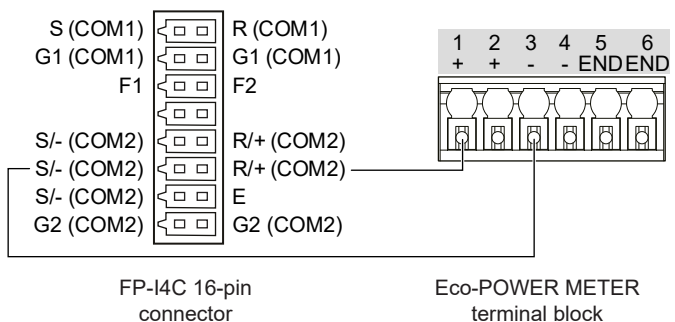
COM port FP0R, FP-X, FPΣ, FP0H, FP7

Use either COM1 or COM2 depending on your setting for "Service control interface" in the Web interface of the FP-I4C unit.

Suitable wire: AWG26-24

G
R
S

S (COM1) R (COM1)
G1 (COM1) G1 (COM1)
F1 F2

S/- (COM2) R/+ (COM2)
S/- (COM2) R/+ (COM2)
S/- (COM2) E
G2 (COM2) G2 (COM2)

G
R
S

S (COM1) R (COM1)
G1 (COM1) G1 (COM1)
F1 F2

S/- (COM2) R/+ (COM2)
S/- (COM2) R/+ (COM2)
S/- (COM2) E
G2 (COM2) G2 (COM2)

PLC COM port, 3-pin
screw terminal

FP-I4C 16-pin
connector

RS485 connection to Eco-POWER METER

Suitable wire: AWG26-24

S (COM1) R (COM1)
G1 (COM1) G1 (COM1)
F1 F2

S/- (COM2) R/+ (COM2)
S/- (COM2) R/+ (COM2)
S/- (COM2) E
G2 (COM2) G2 (COM2)

1	2	3	4	5	6
+	+	-	-	END	END

FP-I4C 16-pin
connector

Eco-POWER METER
terminal block

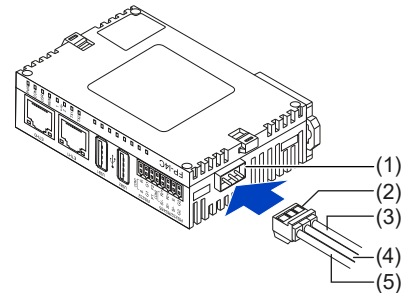## 5 | Connecting the power supply

Use the power supply cable (AFPG805) that comes with the unit to connect the power supply.

Rated input voltage: 24V DC

Rated input current: 110mA (at 24V DC)

Operating voltage range: 21.6 to 26.4V DC

(1) Power supply connector
(2) Power supply cable
(3) Brown: 24V DC
(4) Blue: 0V
(5) Green: must be connected to frame ground

(1)
(2)
(3)
(4)
(5)

The FP-I4C unit will turn on as soon as the power supply has been connected. The green power LED PWR will turn on after self-test.

When connecting the power supply (class 2 circuit), make sure the polarity (+/-) is correct.

If you connect an FP0/FP0R expansion unit, this unit and the FP-I4C unit must be supplied by the same power supply.

6 | Pre-startup checklist

⚠ CAUTION

Perform the pre-startup checks with the power turned off.

Check the following items:

- Is the unit securely fixed to the control panel?
- Are all wires firmly secured to the terminals?
- Are the connectors properly wired with respect to voltage and polarity?
- Is the green wire connected to FG?

7 | Disposal

Disposal of old equipment

Only for the European Union and countries with recycling systems

This symbol on the products, packaging, and/or accompanying documents means that used electrical and electronic products must not be mixed with general household waste.

For proper treatment, recovery and recycling of old products, please take them to applicable collection points in accordance with your national legislation. By disposing of them correctly, you will help to save valuable resources and prevent any potential negative effects on human health and the environment. For more information about collection and recycling, please contact your local municipality. Penalties may be applicable for incorrect disposal of this waste, in accordance with national legislation.