

PRO-iO Installation Guide

Thank you for purchasing Pro-face's PRO-iO unit. To ensure correct use of this unit's features, be sure to read this Installation Guide and the PRO-iO Manual.

Safety Precautions

This guide contains a variety of safety markings related to the safe and correct operation of this unit. Be sure to read this guide and any related manuals carefully to fully understand how to correctly use this unit's features.

■ Safety Symbols

This guide uses the following symbols for important information related to the safe and correct operation of this unit. Please pay attention to these symbols and follow the instructions given.

Safety symbols and their meanings:



DANGER

A hazardous situation that will result in serious injury or even death if instructions are not followed.



WARNING

A potentially hazardous situation that could result in serious injury or even death if instructions are not followed.



CAUTION

A potentially hazardous situation that could result in minor injury or equipment damage if instructions are not followed.



DANGERS

- An emergency stop circuit and an interlock circuit should be constructed outside of this unit. Constructing these circuits inside this unit may cause a run-away situation, system failure, or an accident due to unit failure.
- A breakdown or malfunction in the output relay can lead to the output signal remaining ON or OFF. To prevent a unit malfunction, be sure to install an external circuit or device that will monitor the signal status and guarantee system operation safety.
- Systems using this unit should be designed so that output signals which could cause a serious accident are monitored from outside this unit.
- This unit is designed to be a general-purpose device for general industries, and is neither designed nor produced to be used with equipment or systems in potentially life-threatening situations. If you are considering using this unit for special uses, including nuclear power control devices, electric power devices, aerospace equipment, medical life support equipment, or transportation vehicles, please contact your local PRO-iO distributor.



WARNINGS

- Whenever installing, dismantling, wiring and conducting maintenance or inspections, be sure to disconnect power to this unit to prevent the possibility of electric shock or fire.
- Do not disassemble or remodel this unit, since it may lead to an electric shock or fire.
- Do not use this unit in an environment that contains flammable gases, since an explosion may occur.
- Do not use this unit in an environment that is not specified in either this guide or the PRO-iO Manual. Otherwise, an electric shock, fire, malfunction or other failure may occur.
- Because of the possibility of an electric shock or malfunction, do not touch any power terminals while the unit is operating.



CAUTIONS

- Communication cables or I/O signal lines must be wired separately from the main circuit (High-voltage, high-current line), high-frequency lines such as inverter lines and power lines. Otherwise, a malfunction may occur due to noise.
- Be sure to install this unit according to directions in this guide and the PRO-iO Manual. Improper installation may cause the unit to malfunction or fail.
- Be sure to wire this unit according to directions in this guide and the PRO-iO Manual. Improper wiring may cause a malfunction, failure or electric shock.
- Do not allow foreign substances, including chips, wire pieces, water, or liquids to enter inside this unit's case. Otherwise, a malfunction, failure, electric shock or fire may occur.
- Be sure this unit is operated only by personnel trained in control system programming and design.



CAUTIONS

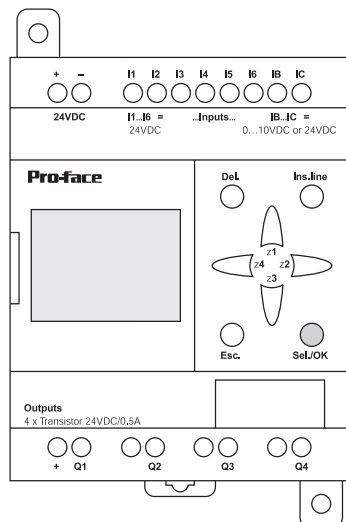
- Do not touch this unit with wet hands or wipe it with a wet cloth. Doing so may cause a fire or an electric shock.
- Be sure to install a fuse, breaker etc. in each of the power, input and output circuits. Failure to do so can lead to a fire if an overload occurs.
- Power and voltage specifications vary depending on the PRO-iO unit's model. Be sure to carefully read the directions in this guide and the PRO-iO Manual before turning ON this unit's power.
- When disposing off this unit, be sure to do so according to your country's standards for industrial waste disposal.

■ To Prevent PRO-iO unit Damage

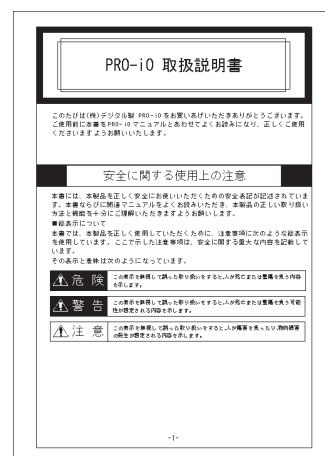
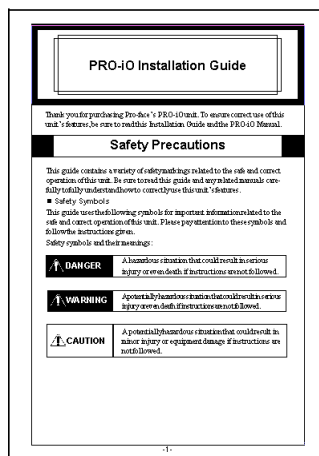
- Do not store or operate this unit in either direct sunlight or excessively dusty or dirty environments.
- Because this unit is a precision instrument, do not store or use it in locations where excessive shocks or vibration may occur.
- Do not cover this unit's ventilation holes, or operate it in an environment that may cause it to overheat.
- Do not operate this unit in locations where sudden temperature changes can cause condensation to form inside the unit.
- Do not use paint thinner or organic solvents to clean this unit.

Package Contents

■ PRO-iO Unit



■ PRO-iO Installation Guide (English and Japanese)



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

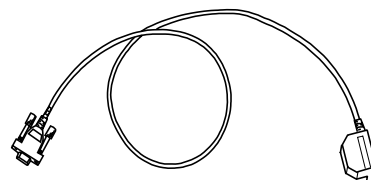
Options

■ PRO-iO Editor (DR1-SFT01J)

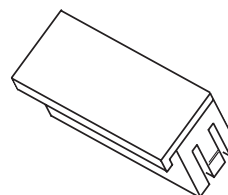


The PRO-iO Manual's PDF file is included in this CD-ROM. Refer to this manual for details regarding PRO-iO Editor Operation. This manual can also be downloaded from <http://www.pro-face.com/>

■ PRO-iO Data Transfer Cable (DR1-CBL01)



■ PRO-iO Memory Pack (DR1-MEM01)



UL/c-UL(CSA) Application Notes

The PRO-iO unit is a UL/c-UL(CSA) listed product. (UL File No. E220851)

The PRO-iO unit conforms to the following standards:

- **UL508 Electrical Control System for Industry**
- **CAN/CSA-C22.2, No.142-M1987 Electrical Control System for Industry**
 - DR1-A101BD (UL Registration Model No. : DR1-A101BD)
 - DR1-B121BD (UL Registration Model No. : DR1-B121BD)
 - DR1-A201BD (UL Registration Model No. : DR1-A201BD)
 - DR1-B201BD (UL Registration Model No. : DR1-B201BD)
 - DR1-A101FU (UL Registration Model No. : DR1-A101FU)
 - DR1-B101FU (UL Registration Model No. : DR1-B101FU)
 - DR1-A201FU (UL Registration Model No. : DR1-A201FU)
 - DR1-B201FU (UL Registration Model No. : DR1-B201FU)

<Notes>

- The PRO-iO unit is designed to be used only when installed in other equipment.
- If the unit is installed in an area with no air conditioning system, be sure to install it in a vertical panel using a DIN rail or mounting holes. Also, be sure the unit is installed so it is at least 100 mm away from any adjacent structures or devices. If these requirements are not met, the heat generated by the unit's internal components may cause the unit to fail to meet UL standard requirements.
- The power supply connected to the I/O unit must be a UL/c-UL(CSA) approved Class 2 power supply unit or Class 2 transformer^{*1}. When the PRO-iO units under load are operated with a single power supply, the amount of current consumption and full-load current of the I/O units must be within the rated load of the Class 2 power supply unit or Class 2 power supply transformer. Be aware that the number of points which can be turned ON simultaneously may be limited, depending on the amount of load and the load current value.

CE Marking Notes

The PRO-iO unit is a CE Marked unit that conforms to EMC directives EN55011 Class A and EN61000-6-2.



While this unit is officially marked as conforming to the relevant EMC directives, it is the user's final application of this unit in a larger system (i.e. the machinery, wiring, control panel, installation method, etc.) that will determine if this unit maintains or loses this conformance marking. Therefore, it is strongly advised that the user investigate and confirm whether their overall system (i.e. all related machinery and equipment) also conforms with these EMC directives.

^{*1} Class 2 power supplies and Class 2 transformers should not exceed an output of 30V, and at 8A or less, should not exceed 100VA. (National Electrical Code)

1

PRO-iO Unit Models

The features of each PRO-iO unit (No. of Input/Output Points, Calendar, Analog Comparator, REMANENZ, Online Monitoring Mode) will vary depending on the model. For how to identify your PRO-iO unit's model number,

Reference *“PRO-iO MANUAL - Preface - Model Identification”*

Model	Voltage	No. of Input / Output Points	Calendar	Analog Comparator	REMANENZ	Online Monitoring Mode
DR1-A101BD	24VDC	6/4	No	No	No	No
DR1-B121BD	24VDC	8/4	Yes	Yes	Yes	Yes
DR1-A201BD	24VDC	12/8	No	No	No	No
DR1-B201BD	24VDC	12/8	Yes	Yes	Yes	Yes
DR1-A101FU	100VAC to 240VAC	6/4	No	No	No	No
DR1-B101FU	100VAC to 240VAC	6/4	Yes	No	Yes	Yes
DR1-A201FU	100VAC to 240VAC	12/8	No	No	No	No
DR1-B201FU	100VAC to 240VAC	12/8	Yes	No	Yes	Yes



- Although circuit programming is possible using only the PRO-iO unit, the easy-to-use PRO-iO Editor software (separately sold) is recommended.
- You can test and debug logic programs via the PRO-iO Editor's simulation feature before actually downloading the program to your PRO-iO unit.

(1) **Unit attachment tab** (Retracting type)

Used to fasten the main unit to the panel.

(2) **Power terminals**(3) **LCD display screen**(4) **Input terminals***¹

Depending on the model, PRO-iO units have 6 (I1 to I6), 8 (I1 to I6, IB, IC) or 12 (I1 to IC) input terminals.

(5) **Del. key** (Delete key)

Deletes a contact or a coil.

(6) **Ins.line key** (Line insert key)

Inserts a rung (A line connecting two instructions).

(7) **Z keys**

Used to move the cursor position. It can also function as a contact's open/close button when creating/modifying a logic program.

(8) **Sel./OK key**

Registers the desired operation or selection.

(9) **Esc. key** (Escape key)

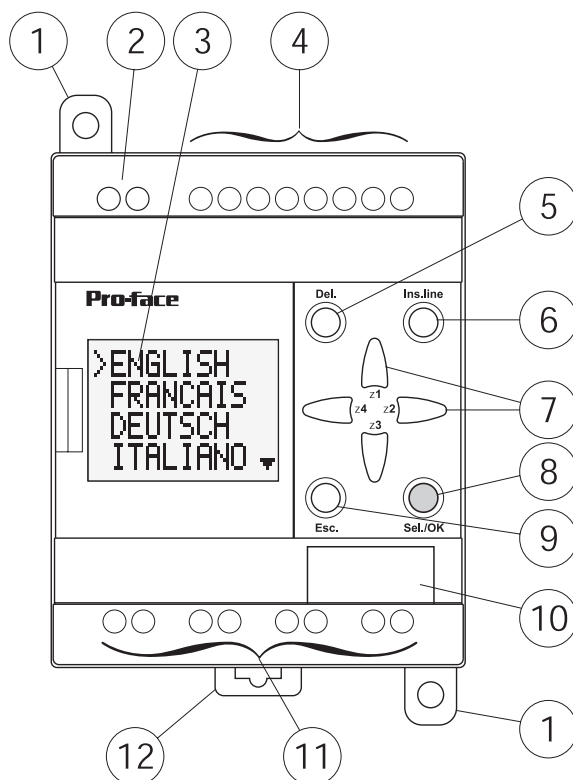
Cancels a setting selection, or returns to the next higher-level menu.

(10) **PRO-iO Data Transfer Cable and PRO-iO Memory Pack Connectors**(11) **Relay output terminals**

Depending on the model, PRO-iO units have either 4 (Q1 to Q4) or 8 (Q1 to Q8) output terminals.

(12) **DIN Rail detachment hook**

Used when detaching the main unit from a DIN Rail.



*1 IB and IC are used as input terminals in the analog comparator feature. For details,

▼ **Reference** ▲ “6 Wiring”

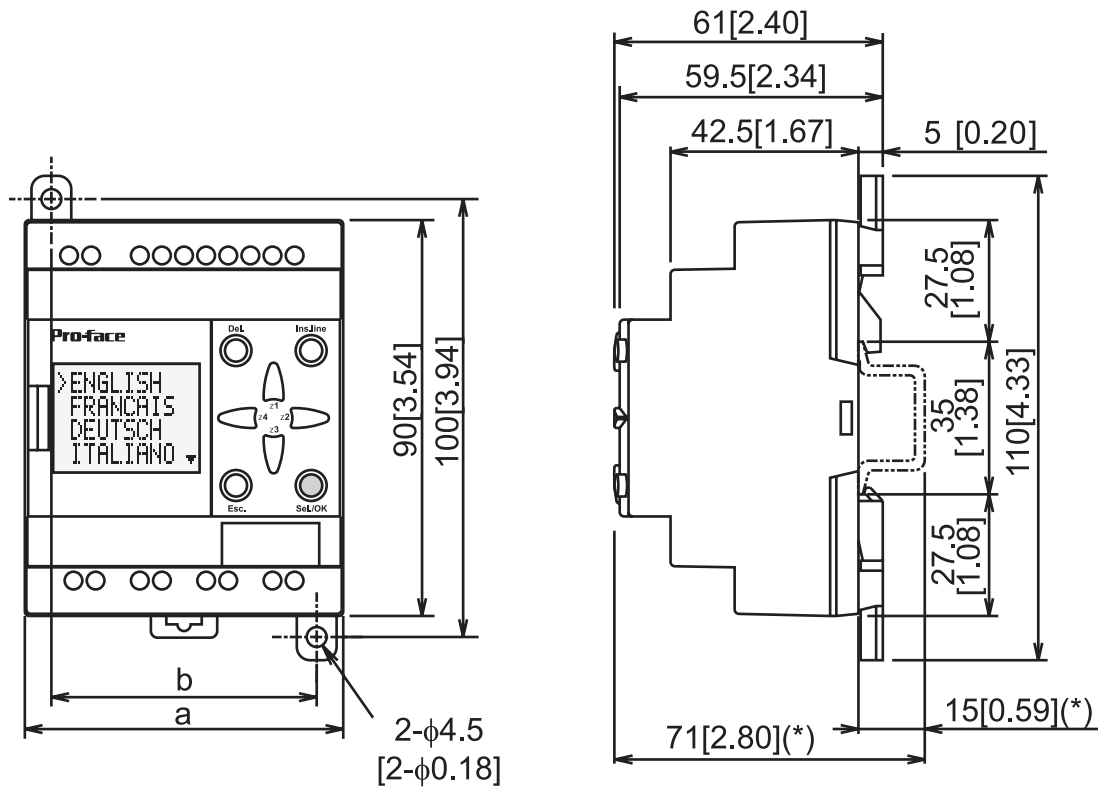
When the analog comparator feature is not used, IB and IC can be used as normal input terminals. However, their input specifications differ from terminals I1 to IA. For details,

▼ **Reference** ▲ “4 Specifications”

3

Dimensions

Unit: mm[in.]



* When using a 15 mm rail.

External dimensions for “a” and “b” vary depending on the model, as shown below:

	DR1-*1****	DR1-*2****
a	72 [2.83]	126 [4.96]
b	60 [2.36]	110 [4.33]



Note:

When attaching the PRO-iO unit to a panel, extend the unit’s attachment tabs. When attaching the PRO-iO unit to a DIN rail, retract the unit’s attachment tabs.

4

Specifications

■ General

Model	DR1-****BD	DR1-****FU
Rated Input Voltage	24VDC	100VAC to 240VAC
Rated Frequency	-	50Hz / 60Hz
Allowable Voltage Range	19.2VDC to 30VDC	85VAC to 264VAC
Allowable Frequency Range	-	47Hz to 63Hz
Allowable Voltage Drop	1ms or less	10ms or less
Current Consumption	DR1-*1**BD 83mA DR1-*201BD 130mA	DR1-*101FU 50mA (100V) 27mA (240V) DR1-*201FU 80mA (100V) 40mA (240V)
Insulation Endurance	1500VAC 5mA for 1 minute (Between output terminals and DIN rail)	
Insulation Resistance	500VDC 100MΩ or higher (Between output terminals and DIN rail)	
In-rush Current	30A or less	
Ambient Temperature	0°C to 55°C (Includes unit's display)	
Ambient Humidity	95%RH or less (No condensation) wet bulb temperature : 39°C or less	
Atmospheric Pressure (Operating Altitude)	800 to 1114hPa (At 2000m or less)	
Pollution Level	Level 2	

■ DC Input (DR1-****BD)

Model		DR1-A***BD : I1 to IC DR1-B***BD : I1 to IA	DR1-B***BD : IB, IC ^{*1}
Input Voltage		24VDC	
Rated Current		3mA (24VDC)	0.62mA (24VDC)
Input Impedance		8k Ω (At ON)	38k Ω (At ON)
No. of Input Points		6 Points (DR1-A101BD)	
		8 Points (DR1-B121BD)	
		12 Points (DR1-*201BD)	
Operating Voltage	ON Voltage	15VDC or more (1.8mA or more)	9.9VDC or more (0.16mA or more)
	OFF Voltage	5VDC or less (0.5mA or less)	5VDC or less (0.08mA or less)
Input Delay	OFF -> ON	0.3ms (Fast) / 3ms (Slow) ^{*2}	3ms (Fixed)
	ON -> OFF	0.5ms (Fast) / 5ms (Slow) ^{*2}	5ms (Fixed)
Input Signal Display		via LCD	
Insulation Method		No insulation between input points, and between input points and power supply	

**1 Terminals IB and IC can also be used as analog inputs.*

**2 This setting is common for all points.*

■ AC Input (DR1-****FU)

		DR1-*101FU	DR1-*201FU
Input Voltage		100VAC to 240VAC	
Allowable Voltage Range		85VAC to 264VAC	
Frequency Range		47Hz to 63Hz	
Rated Current		0.6mA (100VAC) 1.4mA (240VAC)	0.9mA (100VAC) 2.0mA (240VAC)
No. of Input Points		6 Points	12 Points
Operating Voltage	ON Voltage	79VAC or more (0.4mA or more)	
	OFF Voltage	40VAC or less (0.3mA or less)	
Input Delay	OFF -> ON	50ms (100VAC) / 22ms (240VAC)	
	ON -> OFF	50ms (100VAC) / 90ms (240VAC)	
Input Signal Display		via LCD	
Insulation Method		No insulation between input points, and between input points and power supply	

■ Relay Output

Rated Output Voltage		5VDC to 30VDC, 24VAC to 250VAC
No. of Output Points		4 Points (DR1-*1****)
		8 Points (DR1-*2****)
Load Current		8A/24VDC, 250VAC
Common		Independent Common
Mechanical life		20 million operations
Electrical life		100,000 operations at contact rated load
Min. Open/Close Load		17V, 5mA
Built-in Fuse		None
Voltage Endurance		2.5kV (IEC947-1)
Output Signal Display		via LCD
Short Circuit Protection		None
Over Voltage and Over Current Protection		None
Output Delay	OFF -> ON	10ms or less
	ON -> OFF	5ms or less

■ Analog Comparator Input (DR1-B121BD, DR1-B201BD)

No. of Input Channels	2 (IB and IC)
Input Voltage Range	0V to 10V
Resolution	8 bits (0V to 10V)
Accuracy	Full-scale value $\pm 1.6\%$ (at 25°C) Full-scale value $\pm 2.9\%$ (at 55°C)
Absolute Max Input	30VDC (Voltage)
Input Filter	None
Input Impedance	62.5k Ω
Insulation Method	No insulation between analog input points, and between analog input section and power supply

5

Installation

■ Direct Installation (To a panel)

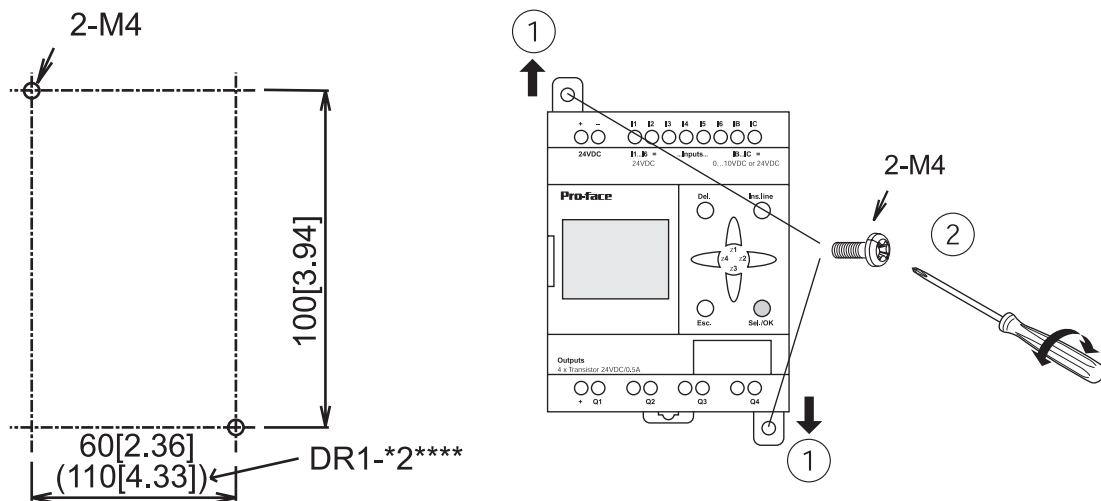
Create two attachment screw holes using the dimensions shown below, and position the unit so that its unit attachment tabs (Top and bottom) align with the attachment screw holes. Secure the unit in place using M4 attachment screws, using a torque of 1.2 N•m to 1.4 N•m.

For unit installation positioning,

Reference *“PRO-iO MANUAL - 2.1.1 Direct Installation (To a panel)”*

The value in () indicates measurements for DR1-*2**** PRO-iO units.

Unit: mm[in.]

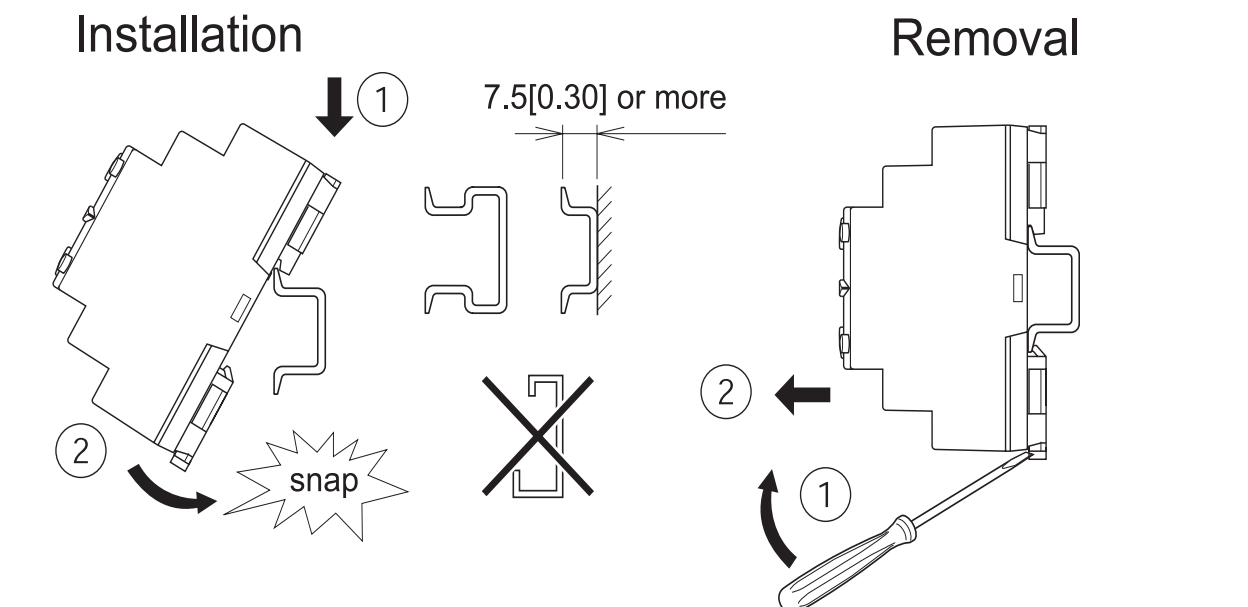


■ DIN Rail Installation

Confirm that the DIN rail fastener hook is clipped in place and the unit is held securely.

For unit installation positioning,

Reference *“PRO-iO MANUAL - 2.1.2 DIN Rail Installation”*

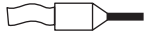


Note: When attaching the PRO-iO unit to a panel, extend the unit's attachment tabs. When attaching the PRO-iO unit to a DIN rail, retract the unit's attachment tabs.

6 Wiring

■ Wiring

The following types of wires can be used for wiring:

Wire Type	Blade-type Terminal	Lay Wire	Simple Wires	
				
mm ²	0.14 to 1.5	0.14 to 2.5	0.14 to 2.5	0.14 to 1.5
AWG ^{*1}	—	26 to 14	26 to 14	26 to 16

^{*1} AWG stands for “American Wire Gauge” and indicates conductor thickness.



- **Peel back the wire's plastic covering to expose approximately 8mm of bare wire.**
- **When using a lay wire, Pro-face recommends you install a blade-type or pin-type terminal connector.**
- **The torque required is 0.4 N·m.**

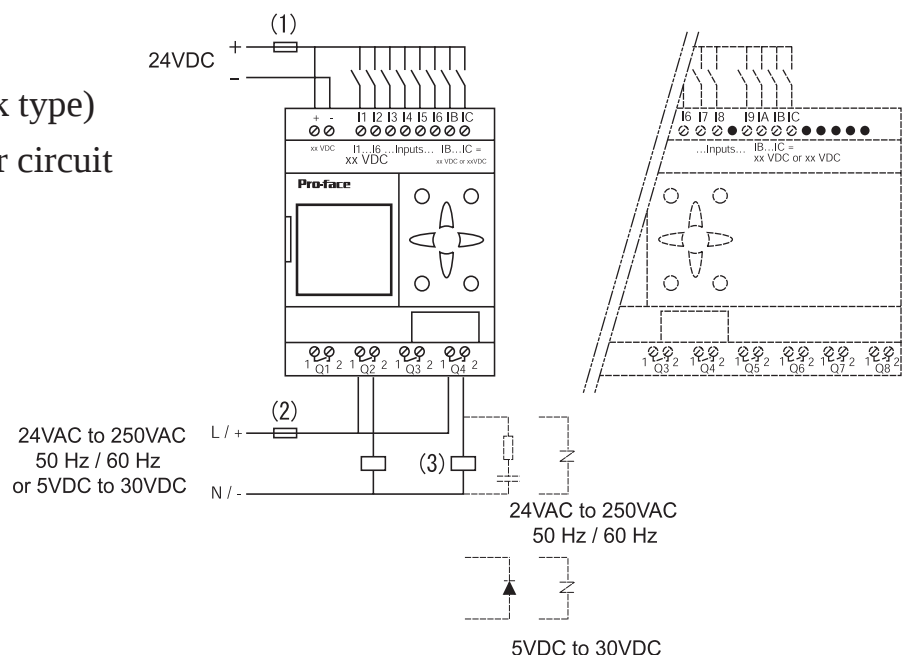


CAUTION

Power and voltage specifications may vary depending on your PRO-iO unit's model. Be sure to carefully read this Installation Guide and the PRO-iO Manual before turning ON the unit's power.

■ DC Power Type (DR1-A101BD/ DR1-B121BD/ DR1-A201BD/ DR1- B201BD)

- (1) 1A Fuse (Fast-break type)
- (2) Fuse (Up to 16A) or circuit breaker
- (3) Load^{*1}



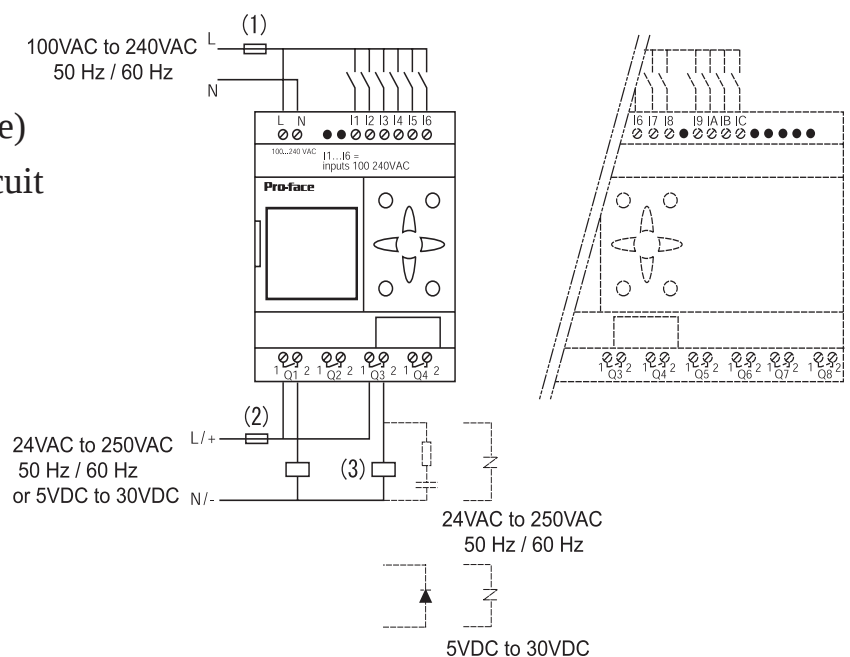
^{*1} When operating devices with inductance loads, such as magnets and valves, Pro-face recommends you use a diode, surge killer or varistor.

⚠ WARNING

There are two AC input terminals: L (Live, non-earthed), and N (Neutral, earthed). Be sure to connect the L terminal to the power supply's non-earthed terminal, and the N terminal to the power supply's earthed terminal.

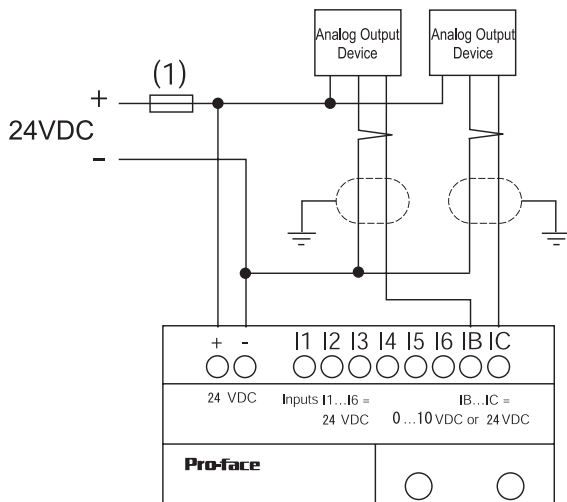
If there is a fault in the power supply (E.g., the AC line and the earth line are shorted), the fuse connected to the L terminal will break and stop the flow of power.

- (1) 1A Fuse (Fast-break type)
- (2) Fuse (Up to 16A) or circuit breaker
- (3) Load^{*1}

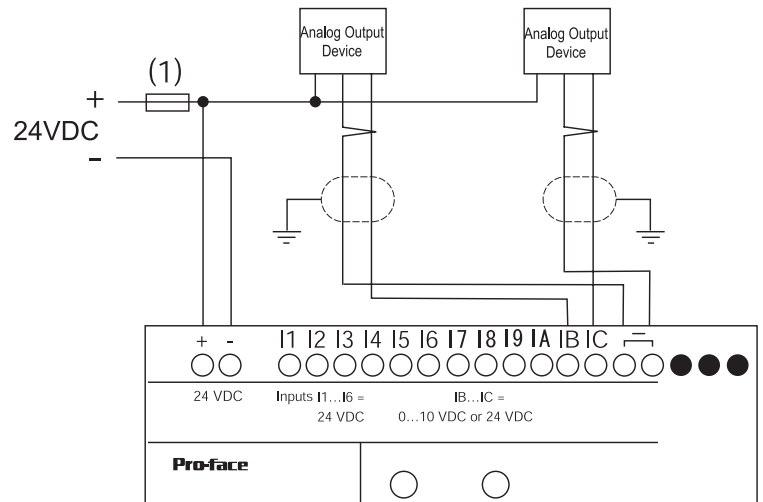


^{*1} When operating devices with inductance loads, such as magnets and valves, Pro-face recommends you use a diode, surge killer or varistor.

■ Analog Connection (DR1-B121BD)



■ Analog Connection (DR1-B201BD)



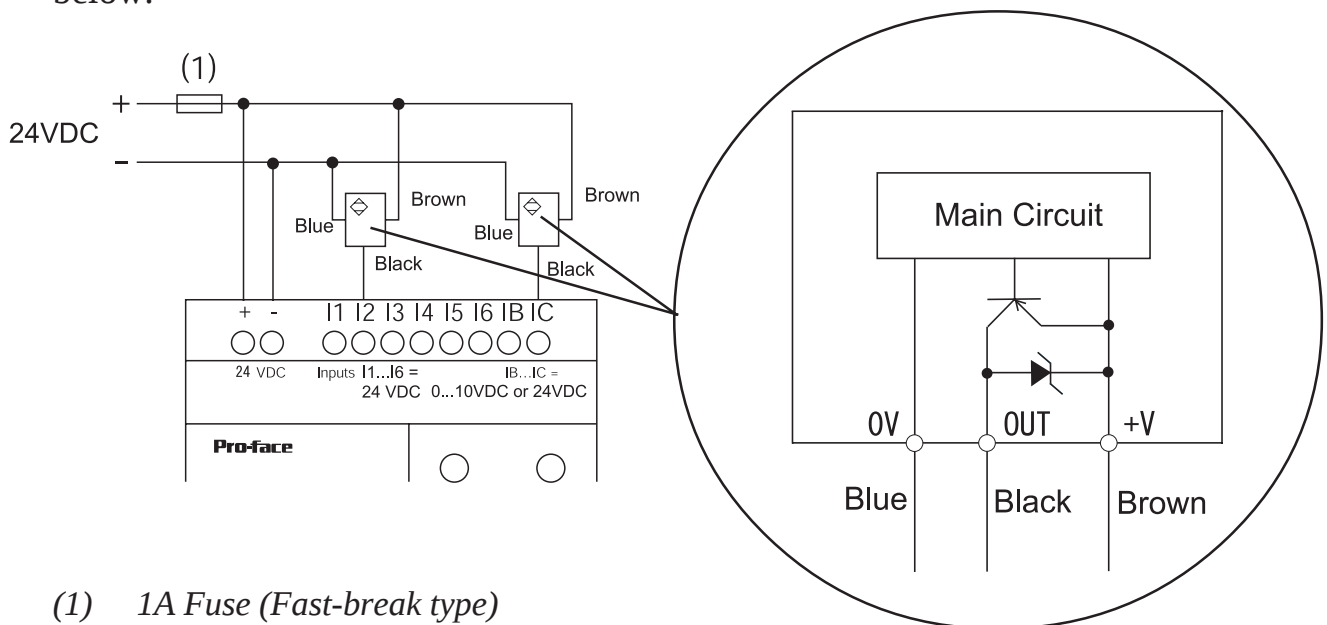
(1) 1A Fuse (Fast-break type)



Do not use negative voltages for the analog inputs (IB/ IC). Doing so can damage the internal circuit.

■ Sensor Connection (DR1-B121BD)

The DR1-B121BD PRO-iO unit's PNP output sensor connection diagram is shown below.



(1) 1A Fuse (Fast-break type)

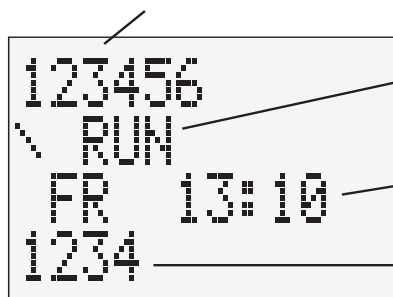


- **When connecting directly to this unit's input circuit, be sure to use a PNP output-type sensor. You cannot connect directly using a 2-Wiretype sensor or a NPN-type sensor. For details about NPN-type sensor connections, **Reference** "PRO-iO MANUAL - 2.2.6 Sensor Connection (DR1-B121BD)"**

The PRO-iO display screen displays the following RUN/STOP status and time information. Also, pressing the [Sel./OK] button displays the Menu Screen. This screen allows the following settings to be entered:

Input Terminal Indicator

(When a terminal turns ON, the number turns grey)



PRO-iO RUN/STOP Status

Day / Time etc.

(Can be changed via the Menu screen's [VISU.] feature)

Output Terminal Indicator
(When a terminal turns ON, the number turns grey)

TIME SET : Summertime, wintertime, day of the week, hour and minute settings. (Available only with DR1-B***** PRO-iO units)



Note: “SUMMER” represents summer daylight saving time and “WINTER” represents winter daylight saving time. Use this setting only in countries that have adopted daylight saving time. In countries that have not adopted daylight saving time, be sure to select either “SUMMER” or “WINTER”.

PROGRAM. : Logic program monitoring can be performed in RUN mode. Logic program creation/update can be performed in STOP mode.

PARAMET. : Timer and Counter parameters can be changed even in RUN mode.

VISU. : Designates the parameters to be displayed on the initial screen (E.g., calendar, time elapsed, etc.). Only one parameter can be selected at a time.

RUN/STOP : Select whether to run or stop the PRO-iO unit.

CONFIG. : Designates the following settings:

PASSWORD : Designates the password needed to access the logic program. Press the Sel./OK key to enable setting mode. Then, press the key again, select the password using the Z1 to Z4 keys, and press the Sel./OK key a final time to register the setting. Deleting the password will require the same password to be entered again. A valid password can be any four digit number (0000 to 9999).

LANGUAGE : Designates the language to be used. The INI feature initializes the language and time settings. (It will be necessary to restart the unit)

- FILT.** : Designates the input filter time. The unit is designed only for a DC input filter. Select either SLOW (3ms to 5ms), or FAST (0.3ms to 0.5ms). However, the input filter time is fixed as SLOW (3ms to 5ms) for IB and IC terminals.
- Zx=Keys** : Designates whether the Z1 to Z4 keys on the panel's front face will be used in the logic program. Selecting "Yes" designates these keys can be used for input.
- REMANENZ** : After turning OFF the power supply, select the data you want to retain from the following: M1 to MF, T1 to T2, and C1 to C5. (This feature is available only with DR1-B***** PRO-iO units)
- CLEAR PROG** : Select if the logic program is to be deleted or not.
- TRANSFER.** : Four types of logic program data transfer are available:
- (1) **Modul. -> PC** : From the PRO-iO unit to the PC (PRO-iO Editor).
 - (2) **PC -> Modul.** : From the PC (PRO-iO Editor) to the PRO-iO unit.



When using [Modul. -> PC] and [PC -> Modul.] features with DR1-A** PRO-iO units, you must first set the transfer status to [READY] before you can transfer a logic program.***

- (3) **Modul. -> Mem** : From the PRO-iO unit to the memory pack.
 - (4) **Mem -> Modul.** : From the memory pack to the PRO-iO unit.
- Soft:V.**** : Identifies the software's version. (Available only with DR1-B***** PRO-iO units)
- PROG. INFO** : Identifies the software's version and basic programming information. (Available only with DR1-A***** PRO-iO units)

■ Contacts

Symbol	Number	Description
I	I1 to IC ^{*1}	a contact (physical input)
i	i1 to iC ^{*1}	b contact (physical input)
Q	Q1 to Q8 ^{*2}	a contact (physical output)
q	q1 to q8 ^{*2}	b contact (physical output)
Z	Z1 to Z4	a contact (Z key)
z	z1 to z4	b contact (Z key)
M	M1 to MF	a contact (Auxiliary coil)
m	m1 to mF	b contact (Auxiliary coil)
T	T1 to TA ^{*3}	a contact (Timer)
t	t1 to tA ^{*3}	b contact (Timer)
C	C1 to CA ^{*3}	a contact (Counter)
c	c1 to cA ^{*3}	b contact (Counter)
A	A1 to A8	a contact (Analog Comparator)
a	a1 to a8	b contact (Analog Comparator)
	 1 to  4 ^{*4}	a contact (Calendar)
	 1 to  4 ^{*4}	b contact (Calendar)

^{*1} Applies to DR1-*201** PRO-iO units. The DR1-B121BD PRO-iO unit has 8 input points, and the DR1-*101** PRO-iO unit has 6.

^{*2} Applies to DR1-*201** PRO-iO Units. The DR1-*1*1** PRO-iO unit has 4 output points.

^{*3} Applies to DR1-B***** PRO-iO units. For DR1-A***** PRO-iO units, the range is 1 to 8.

^{*4} Applies to PRO-iO units equipped with the calendar function. (DR1-B***** PRO-iO units)

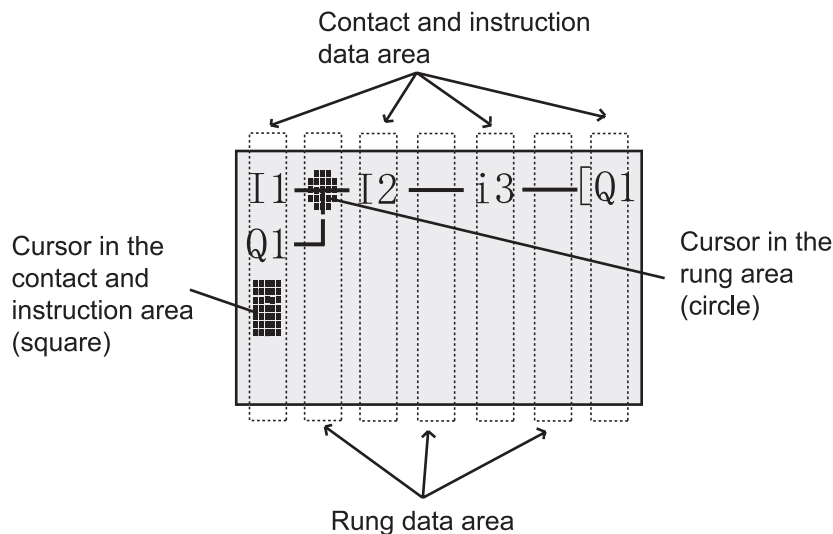
■ Coils

Symbol	Coil	Description
	Q, M	Normal coil
	Q, M	Reverse when condition is true (rising)
S	Q, M	Set coil
R	Q, M	Reset coil
TT	Timer	Timer start coil
RT	Timer	Timer reset coil
CC	Counter	Counter coil
RC	Counter	Counter reset coil
DC	Counter	Count direction designation coil
TX	Text	Text show coil
RX	Text	Text hide coil

If you press the [Sel./OK] key when a screen is displaying time data, or is displaying RUN/STOP, the menu screen will appear. Use the Z1 and Z3 keys to select [PROGRAM.], and then press [Sel./OK]. This allows (enables) you to write to the logic program.

■ Ladder Program Screen Layout

A single rung (a line connecting two instructions) can have a maximum of three contact points and one coil, as shown below:



■ Inserting instructions

1. Moving to the instruction area

Use the Z keys to move to the contact and instruction area. Pressing the [Sel./OK] key displays [I1], and the I section blinks.

2. Entering the instruction

Scroll through the set of commands using the Z1 and Z3 keys, and select the desired command by pressing the [Sel./OK] key.

3. Selecting the instruction number

When this is done, the number (e.g. I1's "1") starts to blink. Select the desired number using the Z1 and Z3 keys, and press the [Sel./OK] key to select (register) the number.

■ Deleting instructions

Position the cursor on the command you want to delete, and press the [Del.] key.

■ Inserting rungs

Use the Z keys to move the cursor to a rung area. Press the [Sel./OK] key and the cursor will change from a [●] symbol to a [+].

Use the Z keys to move to a connecting wire, and press the [Sel./OK] key again to create a branch (connecting) rung.

■ Deleting rungs

Position the cursor in the desired rung area using the Z keys and click the [Del.] key to delete the rung.

10 Memory Backup during Voltage Drop

■ DR1-B***** PRO-iO Units

When power is switched OFF, the auxiliary coil (M1 to MF), timer (T1, T2) and counter (C1 to C5) values will automatically be written to and saved on the PRO-iO unit's built-in EEPROM. For how to set up this feature,

▼ **Reference** ▲ “PRO-iO MANUAL - 3.3 Display Screen and Menu Screen”,
“PRO-iO MANUAL - 5.2 Module Configuration”



This feature is not enabled by default. Unless it is enabled (set), data will be re-initialized when power is switched OFF.



The memory backup feature is not available with DR1-A***** PRO-iO (no calendar feature) units. All data is re-initialized when power is switched OFF.

11 Calendar Backup

If a DR1-B***** model PRO-iO unit (with calendar feature) is switched OFF for a long period (approx. 150 hours, at 25°C), the date, time etc. will be re-initialized. If this happens, be sure to re-enter these values.

Also, when starting up the PRO-iO unit for the first time, be sure to provide a constant supply of electricity for at least one hour.

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 use of this product.

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