

Flex Network Teaching Loader for Single Axis Positioning Unit Installation Guide

Thank you for purchasing Digital's "Flex Network Teaching Unit" (FN-PC10LD41) for the separately sold Single Axis Positioning Unit (FN-PC10SK41).

To ensure correct use of this unit's functions and features, be sure to carefully read both this Installation Guide and the separately sold Flex Network Single Axis Positioning Unit User Manual.

Safety Precautions

DANGER

- An emergency stop circuit and an interlock circuit should be constructed outside of this unit. Constructing these circuits inside this unit may cause a runaway situation, system failure, or an accident due to unit failure.
- Systems using this unit should be designed so that output signals which could cause a serious accident are monitored from outside the 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 conditions. 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 Flex Network distributor.

WARNING

- 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 modify 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 it may cause an explosion.
- Do not use this unit in an environment with conditions outside of the ranges specified in this Installation Guide and in the User 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 the power terminals while the unit is operating.

CAUTION

- 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 the power cord. Otherwise, a malfunction may occur due to noise.
- This unit must be properly installed according to directions in the Installation Guide and User Manual. Improper installation may cause the unit to malfunction, or operate incorrectly.
- This unit must be properly wired according to directions in the Installation Guide and User Manual. Improper wiring may cause a unit 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.
- When disposing of this unit, it should be disposed of according to your country's industrial waste disposal laws.

To Prevent Unit Damage

- Do not store or operate this unit in either direct sunlight or excessively dusty or dirty environments.
- Since this unit is a precision instrument, do not store or use it in locations where excessive shocks or vibration may occur.
- 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.

Safety Standards

UL/c-UL (CSA)

The FN-PC10LD41 is a UL/c-UL (CSA) listed product. (UL file No. E220851)

These units conform to the following standard:

- UL 508 Industrial Control Equipment
- CAN/CSA C22.2 No.1010-1 MEASUREMENT AND CONTROL EQUIPMENT
(Safety requirements for electrical equipment for measurement and laboratory use)

FN-PC10LD41 (UL Registration Model: 2980051-03)

<Caution>

The power unit attached to the FN-PC10LD41 should be a UL/c-UL (CSA) approved Class 2 power unit, or a Class 2 transformer. *1

If a single power supply is used to power the GLC/LT, or multiple I/O units, design the wiring so the sum of the I/O unit's consumption current and the total load current does not exceed the Class 2 power unit or the Class 2 transformer's rating.

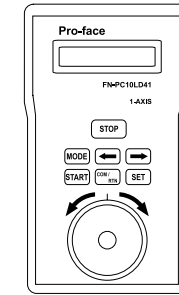
*1 A Class 2 power unit/Class 2 transformer provides 30V output at 8A or less, at 100V or less.

CE Marking

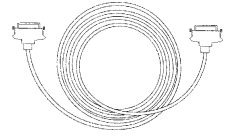
The FN-PC10LD41 is a CE marked product that conform to EMC directives EN55011 class A and EN61000-6-2. For detailed CE Marking information, please contact your Flex Network distributor.

Package Contents

- Single-Axis Positioning Unit Teaching Loader (FN-PC10LD41)



- Single-Axis Positioning Unit Teaching Loader Cable (5m) (FN-LD10CBL)

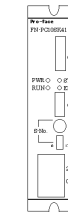


- Flex Network Single-Axis Positioning Unit Teaching Loader Installation Guide (this guide)

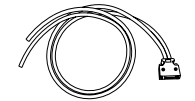


Optional Items (sold separately)

- Single-Axis Positioning Unit (FN-PC10SK41)

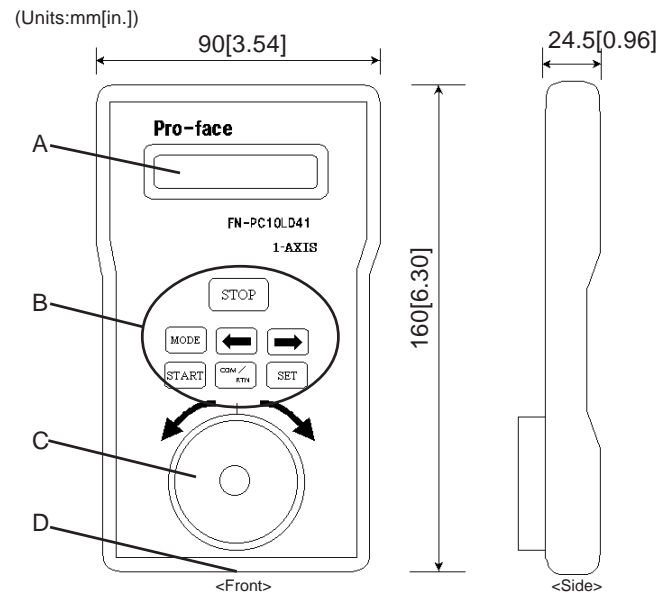


- Motor Driver Connection Cable (PC10CB10)



- Optional Maintenance Item
- Single-Axis Positioning Unit Teaching Loader Cable (5m) (FN-LD10CBL)

1 External Dimensions / Part Names



A: Display LCD; displays errors (2 rows, 16 char.)

B: Keypad

STOP	Input Cancel/Deceleration & Stop
MODE	Mode selection screen change/Error release
→	Selection Key
←	Selection Key
START	Program Start
COM/RTN	Origin Point Return/Base 10 - Base 16 changover
SET	Select/Screen change

C: JOG Dial Used for manual movement during Menu selection, Data Input and Manual mode, and Teaching.

D: Teaching Cable Connector ... Connect the Single Axis Teaching Loader Cable (FN-LD10CBL) here.

(For details, refer to the Flex Network Single Axis Positioning Unit User Guide.)

2 Specifications

Electrical

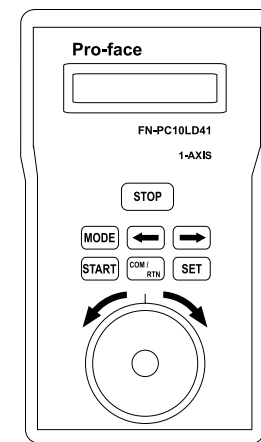
Rated Voltage	DC24V
Rated Voltage Range	DC20.4 to DC28.8V
Allowable Voltage Drop	10ms or less (power supply: DC24V)
Power Consumption	2.0W or less
In-Rush Current	20A or less
Insulation Resistance (via Noise Simulator)	100MΩ or more at DC500V

Environmental

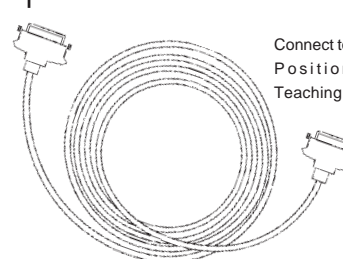
Ambient Operating Temperature	0°C to 50°C
Ambient Storage Temperature	-25°C to +70°C
Ambient Humidity	30% RH to 95% RH (non-condensation) level RH-1
Rating	IP30

3 Flex System Design

Single-Axis Positioning Unit Teaching Loader (FN-PC10LD41)

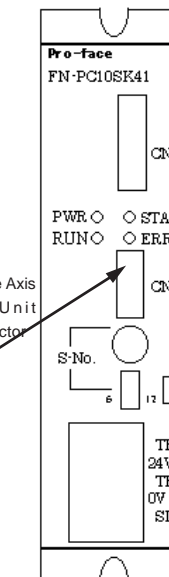


Connect to Teaching Loader Teaching Cable



Single-Axis Positioning Unit Teaching Loader Cable (5m) (FN-LD10CBL)

Single-Axis Positioning Unit (FN-PC10SK41)



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.

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