# DISCRETE INPUT EXTENSION MODULE, 16 points (LonWorks)

MODEL R7L-EA16

## BEFORE USE ....

Thank you for choosing us. Before use, please check contents of the package you received as outlined below. If you have any problems or questions with the product, please contact our sales office or representatives.

#### **■ PACKAGE INCLUDES:**

Discrete input extension module.....(1)

#### ■ MODEL NO.

Confirm Model No. marking on the product to be exactly what you ordered.

#### **■ INSTRUCTION MANUAL**

This manual describes necessary points of caution when you use this product, including installation, connection and basic maintenance procedures.

## **POINTS OF CAUTION**

#### **■ POWER INPUT RATING & OPERATIONAL RANGE**

 Locate the power input rating marked on the product and confirm its operational range as indicated below:
24V AC rating: 24V ±10%, 50/60 Hz, approx. 30mA
24V DC rating: 24V ±10%, approx. 20mA

## **■ GENERAL PRECAUTIONS**

 Before you remove the unit or mount it, turn off the power supply and input signal for safety.

### **■** ENVIRONMENT

- Indoor use.
- When heavy dust or metal particles are present in the air, install the unit inside proper housing with sufficient ventilation.
- Do not install the unit where it is subjected to continuous vibration. Do not subject the unit to physical impact.
- Environmental temperature must be within -10 to +55°C (14 to 131°F) with relative humidity within 30 to 90% RH in order to ensure adequate life span and operation.

## **■** WIRING

- Do not install cables close to noise sources (relay drive cable, high frequency line, etc.).
- Do not bind these cables together with those in which noises are present. Do not install them in the same duct.

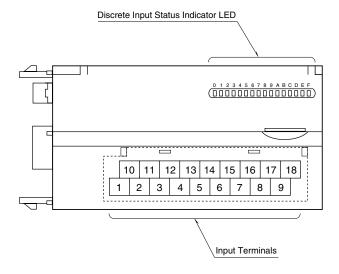
## **■ FUNCTIONAL BLOCK SETTING**

• Functional blocks regarding the extension module are set by the basic module. Refer to the instruction manual for the basic module for detailed information.

#### ■AND ....

The unit is designed to function as soon as power is supplied, however, a warm up for 10 minutes is required for satisfying complete performance described in the data sheet

## **COMPONENT IDENTIFICATION**



#### **■ DISCRETE INPUTS STATUS INDICATOR LED**

Used to show discrete input signal status.

ON: LED ON OFF: LED OFF

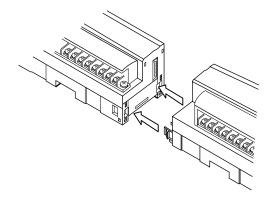
#### **■ INPUT TERMINAL ASSIGNMENT**

	10 N	С	11 X	1	12 X	3	13 X	5	14 X	7	15 X	9	16 X	В	17 X	D	18 X	F
1 CC	DM	2 X	(0	3 X		4 X	4	5 X	6	6 X	8	7 X	Α	8 X	С	9 X	E	

NO.	ID	FUNCTION	NO.	ID	FUNCTION
1	COM	Common	10	NC	No Connection
2	X0	Input 0	11	X1	Input 1
3	X2	Input 2	12	Х3	Input 3
4	X4	Input 4	13	X5	Input 5
5	X6	Input 6	14	X7	Input 7
6	X8	Input 8	15	X9	Input 9
7	XA	Input 10	16	XB	Input 11
8	XC	Input 12	17	XD	Input 13
9	XE	Input 14	18	XF	Input 15

# **CONNECTING THE EXTENSION MODULE**

- 1) Remove the extension connector cover located at the side of the basic module.
- 2) Connect the extension module.

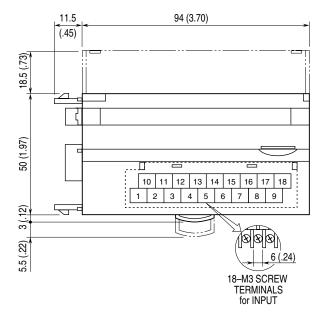


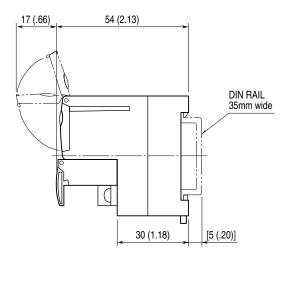
3) Mount the combined module on a DIN rail.

# **TERMINAL CONNECTIONS**

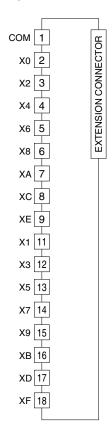
Connect the unit as in the diagram below.

## **■ EXTERNAL DIMENSIONS** unit: mm (inch)

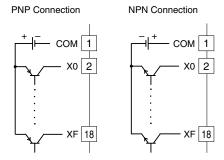




## **■ CONNECTION DIAGRAM**



## ■ Input Connection Examples



# **WIRING INSTRUCTIONS**

## ■ SCREW TERMINAL

Torque: 0.5 N·m

## **■ SOLDERLESS TERMINAL**

Refer to the drawing below for recommended ring tongue terminal size. Spade tongue type is also applicable. Applicable wire size: 0.25 to 1.65  $\rm mm^2\,(AWG~22~to~16)$  Recommended manufacturer: Japan Solderless Terminal MFG. Co., Ltd, Nichifu Co., Ltd

