# NPN TRANSISTOR OUTPUT EXTENSION MODULE, 8 points (LonWorks)

MODEL R7L-EC8A

# BEFORE USE ....

Thank you for choosing M-System. 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 M-System's Sales Office or representatives.

### **■ PACKAGE INCLUDES:**

Transistor output 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. 15mA 24V DC rating: 24V ±10%, approx. 10mA

### **■ GENERAL PRECAUTIONS**

• Before you remove the unit or mount it, turn off the power supply and output 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.
- $\bullet$  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.

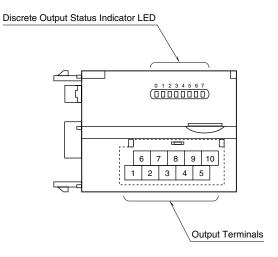
### **■ FUNCTIONAL BLOCK SETTING**

• 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 OUTPUT STATUS INDICATOR LED**

Used to show discrete output signal status.

ON : LED ON : LED OFF OFF

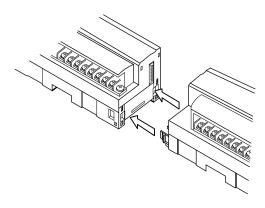
### **■ OUTPUT TERMINAL ASSIGNMENT**

6		7		8		9		10		
	+2	4V	Υ	1	Υ	3	Υ	5	Υ	7
1		2		3		4		5		
0V		Y0		Y2		Y4		Y6		

NO.	D. ID FUNCTION		NO.	ID	FUNCTION
1	0V	0V (common)	6	+24V	$24 \mathrm{V}  \mathrm{DC}$
2	Y0	Output 0	7	Y1	Output 1
3	Y2	Output 2	8	Y3	Output 3
4	Y4	Output 4	9	Y5	Output 5
5	Y6	Output 6	10	Y7	Output 7

# **CONNECTING THE EXTENSION MODULE**

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



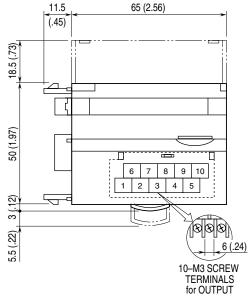
3) Mount the combined module on a DIN rail.

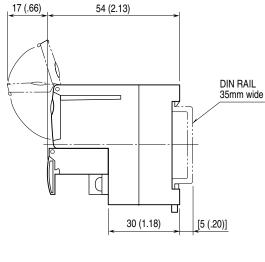


# **TERMINAL CONNECTIONS**

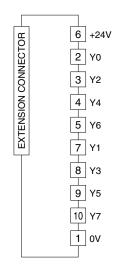
Connect the unit as in the diagram below.

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

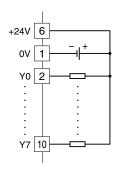




### **■ CONNECTION DIAGRAM**



### ■ Output Connection Example



# **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 mm $^2$  (AWG 22 to 16) Recommended manufacturer: Japan Solderless Terminal MFG. Co., Ltd, Nichifu Co., Ltd

