### INSTRUCTION MANUAL

#### PNP TRANSISTOR OUTPUT EXTENSION MODULE, 8 points (MECHATROLINK-I / -II)

# MODEL R7ML-EC8B

### 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:

Discrete 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 DC rating: 24V ±10%, approx. 10mA

#### ■ 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 0 to  $55^{\circ}C$  (32 to  $131^{\circ}F$ ) with relative humidity within 30 to 90% RH in order to ensure adequate life span and operation.

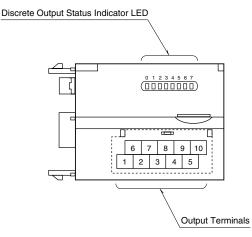
#### ■ WIRING

- 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.

#### ■ 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

Discrete output modules including those for extensions have LED indicators showing output signal status.

- Contact ON : LED ON
- Contact OFF : LED OFF

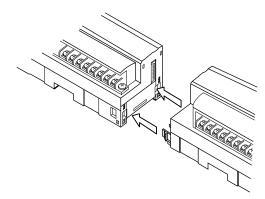
#### OUTPUT TERMINAL ASSIGNMENT

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

NO.	ID	FUNCTION	NO.	ID	FUNTION
1	0V	0V	6	+24V	24V DC (common)
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**

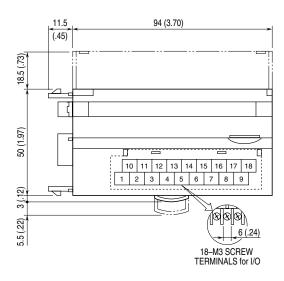
- 1) Remove the extension connector cover located at the side of the basic module.
- 2) Connect the extension module.

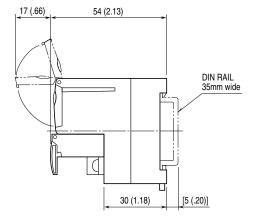


3) Mount the combined module on a DIN rail.

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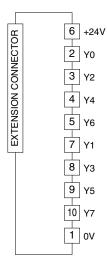
# EXTERNAL DIMENSIONS unit: mm (inch)



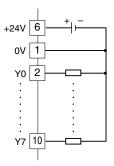


# **CONNECTION DIAGRAM**

Connect the unit as in the diagram below.



#### ■ Output Connection Example



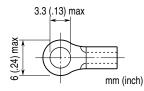
# WIRING INSTRUCTIONS

■ SCREW TERMINAL Torque: 0.5 N·m

#### SOLDERLESS TERMINAL mm (inch)

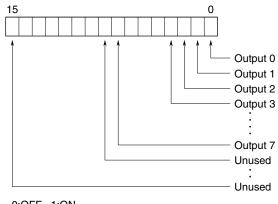
Refer to the drawing below for recommended ring tongue terminal size. Spade tongue type is also applicable. Solderless terminal:

Applicable wire size: 0.25 to 1.65 mm<sup>2</sup> (AWG 22 to 16) Recommended manufacturer: Japan Solderless Terminal MFG. Co., Ltd, Nichifu Co., Ltd



# **I/O DATA DESCRIPTION**

#### ■ DISCRETE OUTPUT



0:OFF 1:ON

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