INSTRUCTION MANUAL

PNP TRANSISTOR OUTPUT EXTENSION MODULE, 16 points (MECHATROLINK-I / -II, short circuit protection)

MODEL R7ML-EC16D

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

■ CONFORMITY WITH EU DIRECTIVE

• The actual installation environments such as panel configurations, connected devices and connected wires may affect the protection level of this unit when it is integrated in a panel system. The user may have to review the CE requirements in regard to the whole system and employ additional protective measures to ensure CE conformity.

■ 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 $\pm 10\%$, approx. 20mA

■ 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.
- 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°C (32 to 131°F) with relative humidity within 30 to 90% RH in order to ensure adequate life span and operation.

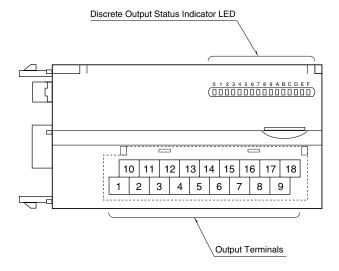
■ WIRING

- 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.

■ 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

COMPONENT IDENTIFICATION



■ DISCRETE OUTPUT STATUS INDICATOR LED

Discrete output extension modules have LED indicators showing output signal status.

Contact ON: LED ON Contact OFF: LED OFF

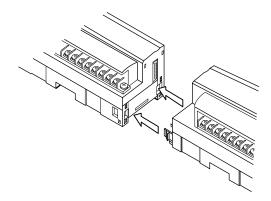
■ OUTPUT TERMINAL ASSIGNMENT

	10		11		12		13		14		15		16		17		18	
	+2	4V	Υ	1	Υ	3	Υ	5	Υ	7	Υ	9	Υ	В	Υ	D	Υ	F
1		2		3	3		4 5		6		7			8		9		
0V		Y0		Y2		Y4		Y6		Y8		YA		YC		Υ	Ε	

NO.	ID	FUNCTION	NO.	ID	FUNTION		
1	0V	0V	10	+24V	24V DC (common)		
2	Y0	Output 0	11	Y1	Output 1		
3	Y2	Output 2	12	Y3	Output 3		
4	Y4	Output 4	13	Y5	Output 5		
5	Y6	Output 6	14	Y7	Output 7		
6	Y8	Output 8	15	Y9	Output 9		
7	YA	Output 10	16	YB	Output 11		
8	YC	Output 12	17	YD	Output 13		
9	YE	Output 14	18	YF	Output 15		

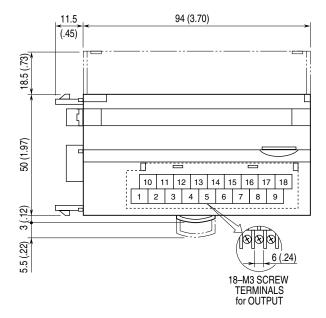
CONNECTING THE EXTENSION MODULE

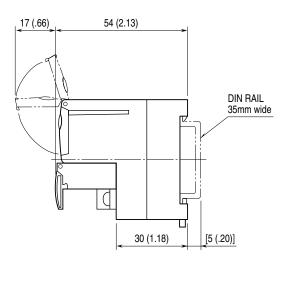
- 1) Remove the extension connector cover located at the side of the basic module.
- 2) Connect the extension module.



3) Mount the combined module on a DIN rail.

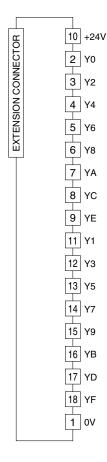
EXTERNAL DIMENSIONS unit: mm (inch)



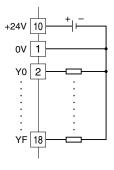


CONNECTION DIAGRAM

Connect the unit as in the diagram below.



■ Output Connection Example



WIRING INSTRUCTIONS

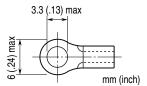
■ SCREW TERMINAL

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 mm² (AWG 22 to 16) Recommended manufacturer: Japan Solderless Terminal MFG. Co., Ltd, Nichifu Co., Ltd



I/O DATA DESCRIPTION

■ DISCRETE OUTPUT

