

**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 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. 15mA  
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 -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.

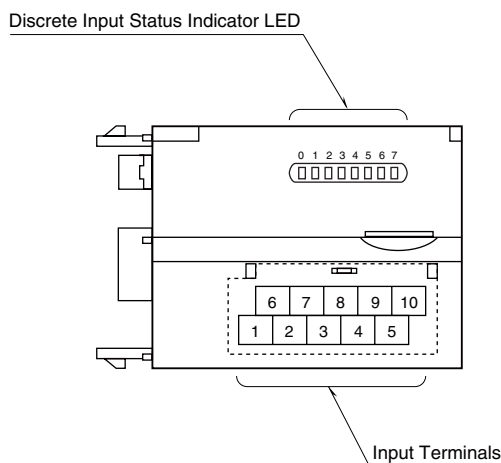
**FUNCTIONAL BLOCK SETTING**

- 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 INPUT STATUS INDICATOR LED**

Used to show discrete input signal status.  
ON : LED ON  
OFF : LED OFF

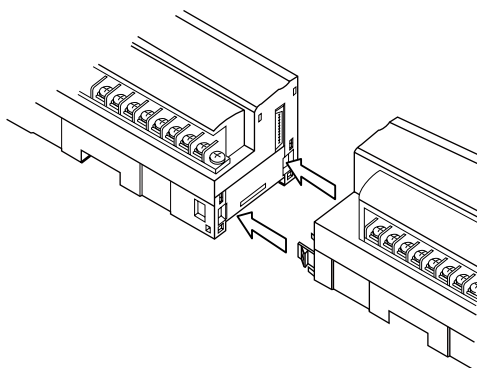
**INPUT TERMINAL ASSIGNMENT**

6	7	8	9	10
NC	X1	X3	X5	X7
1	2	3	4	5
COM	X0	X2	X4	X6

NO.	ID	FUNCTION	NO.	ID	FUNCTION
1	COM	Common	6	NC	No Connection
2	X0	Input 0	7	X1	Input 1
3	X2	Input 2	8	X3	Input 3
4	X4	Input 4	9	X5	Input 5
5	X6	Input 6	10	X7	Input 7

**CONNECTING THE EXTENSION MODULE**

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

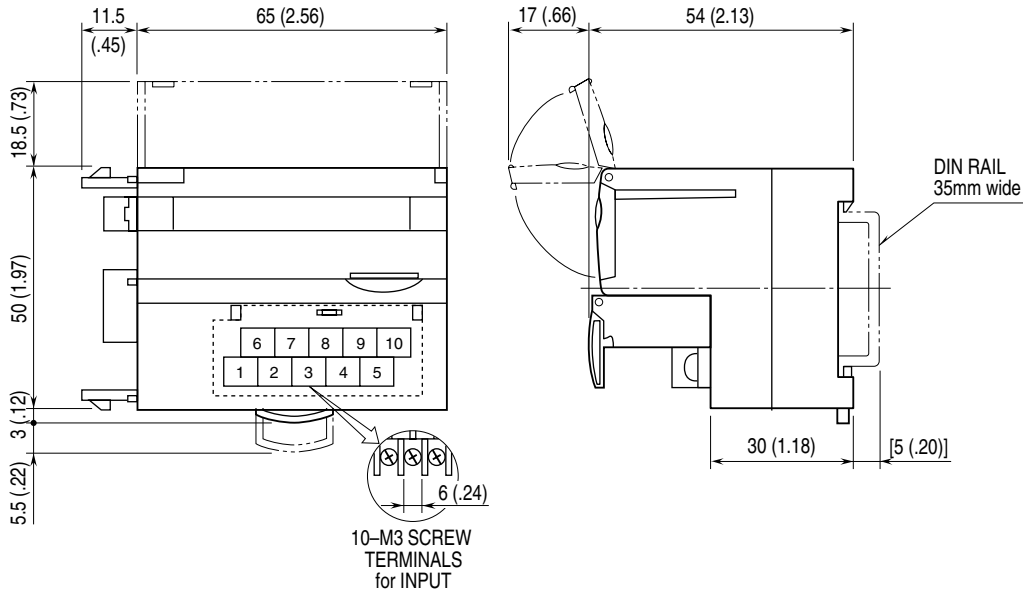


- 3) Mount the combined module on a DIN rail.

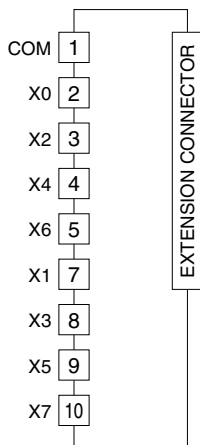
# TERMINAL CONNECTIONS

Connect the unit as in the diagram below.

## EXTERNAL DIMENSIONS unit: mm (inch)



## CONNECTION DIAGRAM



## WIRING INSTRUCTIONS

### SCREW TERMINAL

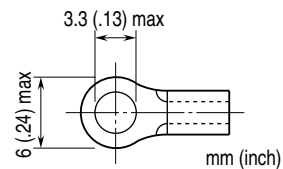
Torque: 0.5 N·m

### SOLDERLESS TERMINAL

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

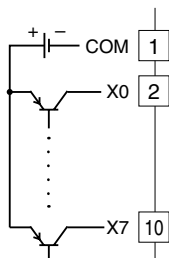
Applicable wire size: 0.25 to 1.65 mm<sup>2</sup> (AWG 22 to 16)

Recommended manufacturer: Japan Solderless Terminal MFG. Co., Ltd, Nichifu Co., Ltd



## Input Connection Examples

### PNP Connection



### NPN Connection

