

**DISCRETE INPUT MODULE**  
(Di 16 points)

MODEL **R5-DA16**

**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 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 DIRECTIVES**

- The equipment must be mounted inside the instrument panel of a metal enclosure.
- The actual installation environments such as panel configurations, connected devices, 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 the CE conformity.

**■ HOT INSERTION/REMOVAL OF MODULES**

- Removing or replacing modules does not affect other modules on the same backplane. It is possible to replace them without removing the power supply. However, replacing multiple modules at once may greatly change line voltage levels. We recommend that you replace them one by one.

**■ 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.

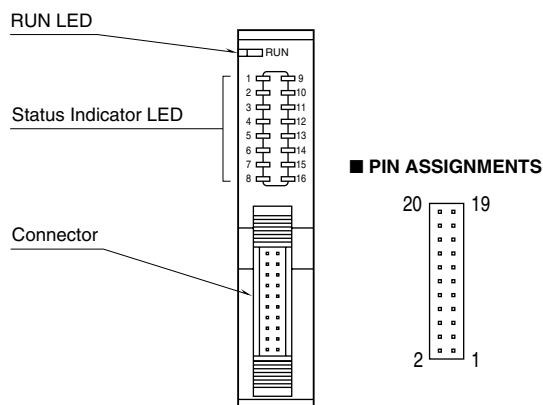
**■ AND ....**

- 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.

**INSTALLATION**

Use the Installation Base (model: R5-BS).

**COMPONENT IDENTIFICATION**



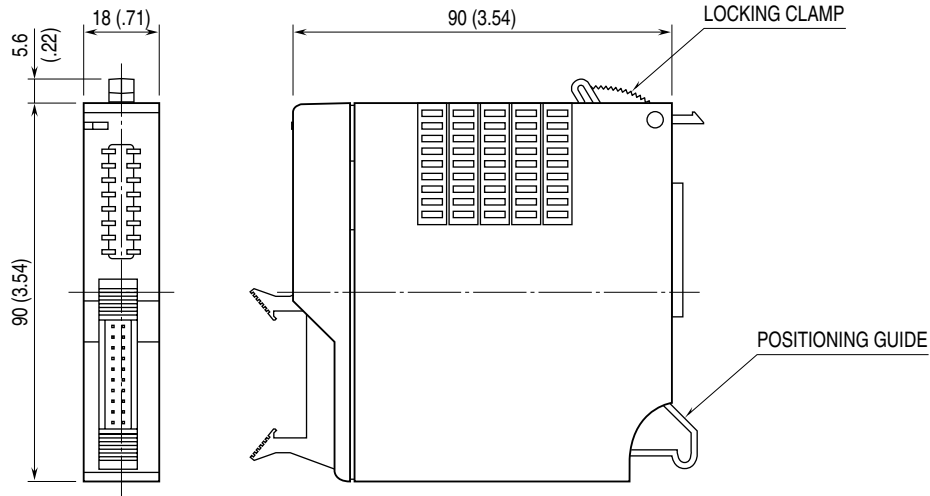
**■ STATUS INDICATOR LED**

**RUN indicator:** Bi-color (red/green) LED;  
 Red when the bus A operates normally;  
 Green when the bus B operates normally;  
 Amber when both buses operate normally.  
**Input status indicator:** Red LED; turns on with the inputs supplied.

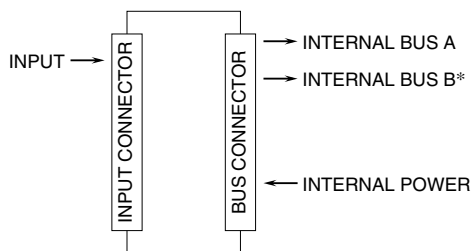
# TERMINAL CONNECTIONS

Connect the unit as in the diagram below.

## EXTERNAL DIMENSIONS unit: mm (inch)

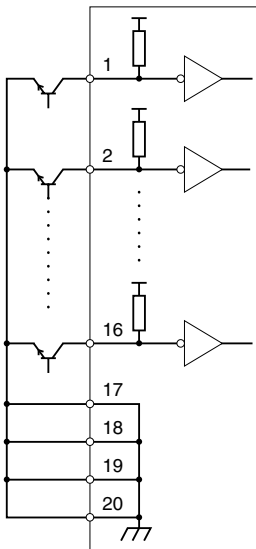


## CONNECTION DIAGRAM

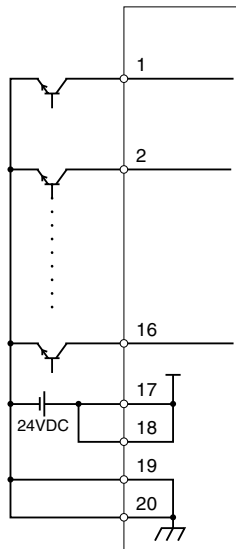


\*For dual redundant communication.

### R5-DA16x



### R5-DA16x/A



## INPUT CONNECTOR PIN ASSIGNMENT (20-pin)

### R5-DA16x (internal excitation)

PIN NO.	ASSIGNMENT	PIN NO.	ASSIGNMENT
1	ch. 1	11	ch. 11
2	ch. 2	12	ch. 12
3	ch. 3	13	ch. 13
4	ch. 4	14	ch. 14
5	ch. 5	15	ch. 15
6	ch. 6	16	ch. 16
7	ch. 7	17	COM
8	ch. 8	18	COM
9	ch. 9	19	COM
10	ch. 10	20	COM

### R5-DA16x/A (external excitation)

PIN NO.	ASSIGNMENT	PIN NO.	ASSIGNMENT
1	ch. 1	11	ch. 11
2	ch. 2	12	ch. 12
3	ch. 3	13	ch. 13
4	ch. 4	14	ch. 14
5	ch. 5	15	ch. 15
6	ch. 6	16	ch. 16
7	ch. 7	17	24V DC
8	ch. 8	18	24V DC
9	ch. 9	19	0V
10	ch. 10	20	0V