

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:

BCD code 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 SWAPPABLE MODULES

- Replacing the module does not affect other modules on the same base. Thus, the module can be replaced while the power is ON. However, replacing multiple modules at once may greatly change live voltage levels. We highly recommend to replace them one by one.

■ GENERAL PRECAUTIONS

- DO NOT set the switches on the module while the power is supplied. The switches are used only for maintenance without the power.

■ 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

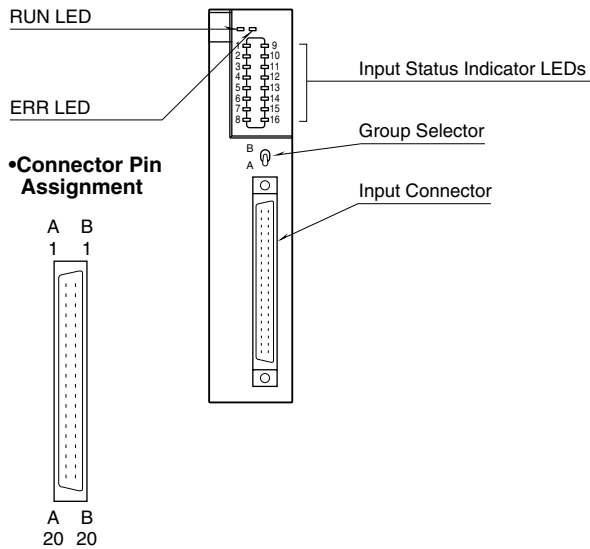
- Do not install cables close to noise sources (relay drive cable, high frequency line, etc.).
- Do not bind these cables together with those in which noises are present. Do not install them in the same duct.

INSTALLATION

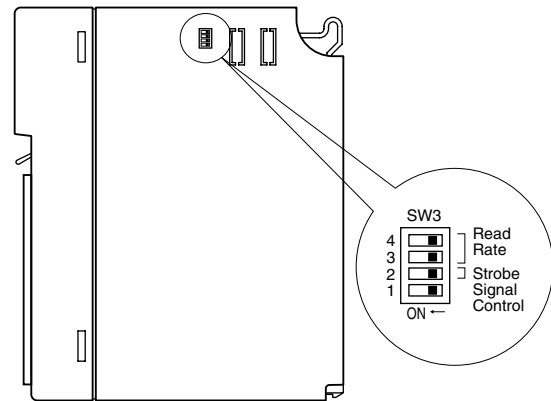
Use the Installation Base (model: R3-BSx).

COMPONENT IDENTIFICATION

FRONT VIEW



SIDE VIEW



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.

ERR indicator: Green LED turns on in normal operating conditions.

Input status indicator: Red LED; turns on with the input ON.

GROUP SELECTOR

Switches the input status indicator.

- A. 1 – 8:** Di 11 – Di 28
9 – 16: Di 31 – Di 48
B. 1 – 8: Di 51 – Di 68
9 – 16: Di 71 – Di 88

SIDE DIP SW

(*) Factory setting

Strobe Signal Control: SW3-2

SW	STROBE SIGNAL CONTROL	
	WITHOUT (*)	WITH
SW3-2	OFF	ON

Read Rate: SW3-3, 3-4

SW	READ RATE (msec.)			
	5 (*)	10	50	100
SW3-3	OFF	ON	OFF	ON
SW3-4	OFF	OFF	ON	ON

Note: Be sure to set unused SW3-1 to OFF.

PC CONFIGURATOR

With configurator software, settings shown below are available.
 Refer to the software manual of R3CON for detailed operation.

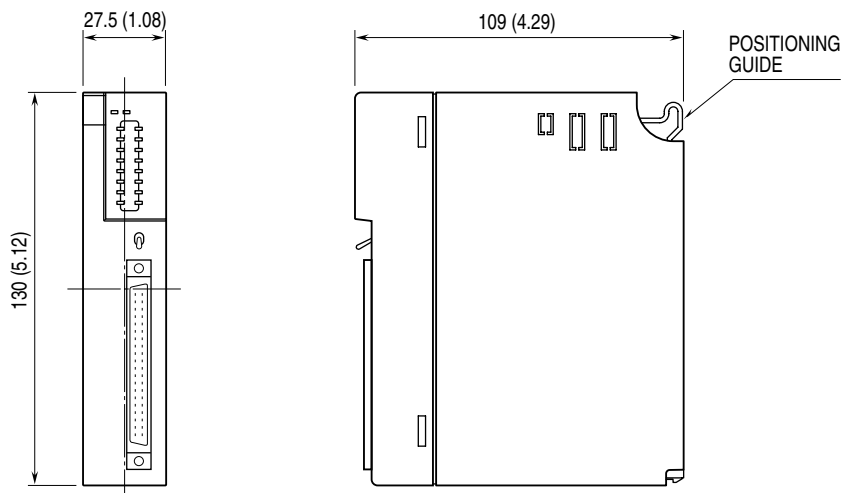
CHANNEL INDIVIDUAL SETTING

PARAMETER	AVAILABLE RANGE	DEFAULT SETTING
Data Logic	0: Close / 1: Open	0: Close
Strobe Logic	0: Close / 1: Open	0: Close
Data Exchange	0: Little-endian / 1: Big-endian	0: Little-endian

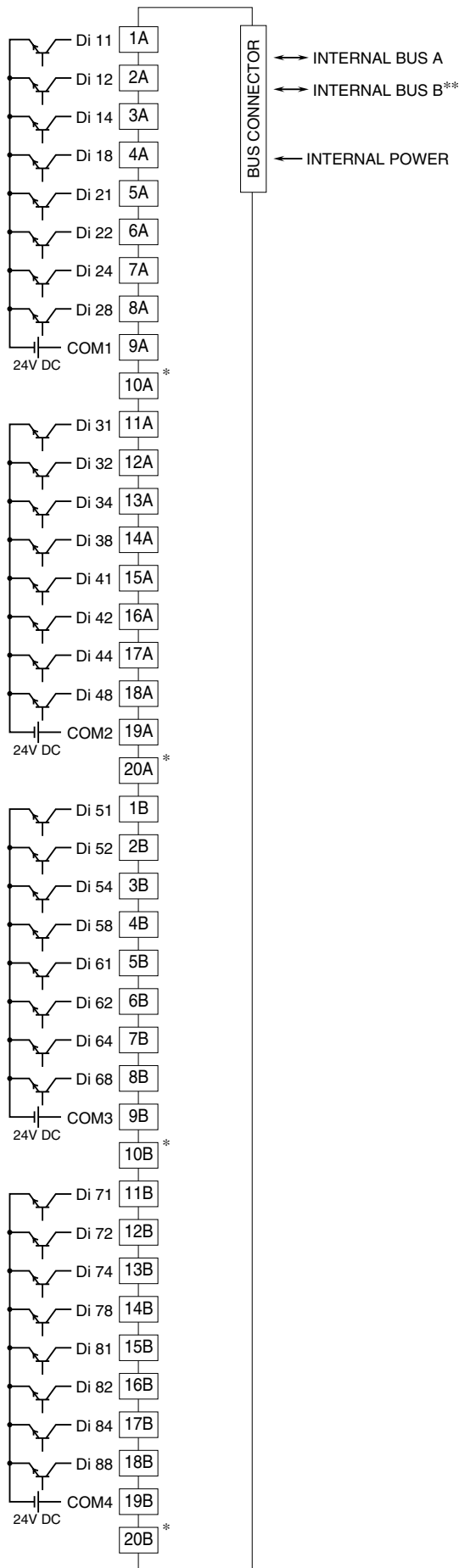
TERMINAL CONNECTIONS

Connect the unit as in the diagram below.

EXTERNAL DIMENSIONS unit: mm (inch)



■ CONNECTION DIAGRAM



* Do not use pins 10A, 20A, 10B, 20B.
**For dual redundant communication.

INPUT CONNECTOR (40 pins)

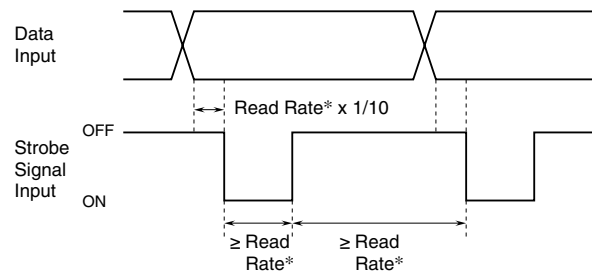
PIN NO.	ASSIGNMENT	PIN NO.	ASSIGNMENT
1A	Di 11	1B	Di 51
2A	Di 12	2B	Di 52
3A	Di 14	3B	Di 54
4A	Di 18	4B	Di 58
5A	Di 21	5B	Di 61
6A	Di 22	6B	Di 62
7A	Di 24	7B	Di 64
8A	Di 28	8B	Di 68
9A	COM1	9B	COM3
10A	No Connection	10B	No Connection
11A	Di 31	11B	Di 71
12A	Di 32	12B	Di 72
13A	Di 34	13B	Di 74
14A	Di 38	14B	Di 78
15A	Di 41	15B	Di 81
16A	Di 42	16B	Di 82
17A	Di 44	17B	Di 84
18A	Di 48	18B	Di 88 / Strobe
19A	COM2	19B	COM4
20A	No Connection	20B	No Connection

FUNCTIONS

■ STROBE SIGNAL CONTROL

Controls the timing of reading data. Data is read in when the strobe signal is ON. No data read while it is OFF, even if there is a status change.

■ STROBE SIGNAL TIMING CHART



*Read rate is selectable with SW3.