

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:

DC voltage output 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.

■ GENERAL PRECAUTIONS

- DO NOT set the switches 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.

■ AND

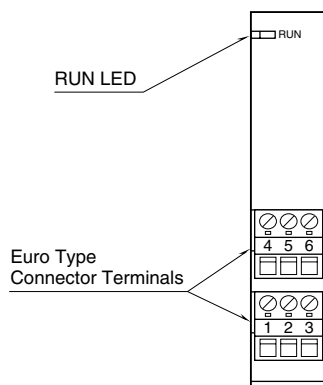
- The unit is designed to function as soon as power is supplied, however, a warm up for 10 minutes is required for satisfying complete performance described in the data sheet.

INSTALLATION

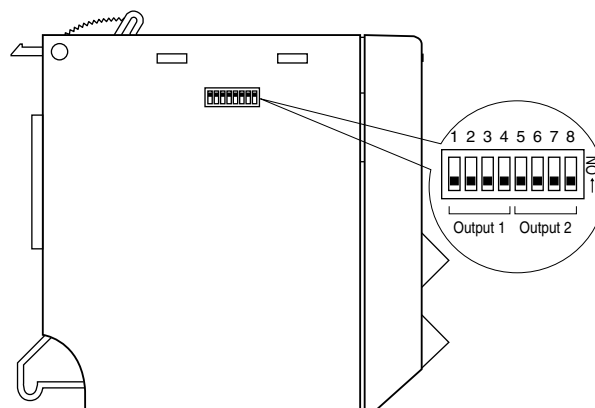
Use the Installation Base (model: R5-BS).

COMPONENT IDENTIFICATION

■ 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.

■ SIDE DIP SW

• Output Range: SW1 through 8

Each channel independent

SW								RANGE
OUTPUT 1				OUTPUT 2				
1	2	3	4	5	6	7	8	
OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	-10 – +10V (*)
ON	OFF	OFF	OFF	ON	OFF	OFF	OFF	-5 – +5V
OFF	ON	OFF	OFF	OFF	ON	OFF	OFF	-1 – +1V
ON	ON	OFF	OFF	ON	ON	OFF	OFF	0 – 10V
OFF	OFF	ON	OFF	OFF	OFF	ON	OFF	0 – 5V
ON	OFF	ON	OFF	ON	OFF	ON	OFF	1 – 5V
OFF	ON	ON	OFF	OFF	ON	ON	OFF	0 – 1V

(*) Factory setting

PC CONFIGURATOR

With configurator software, settings shown below are available.

Refer to the software manual of R5CON for detailed operation.

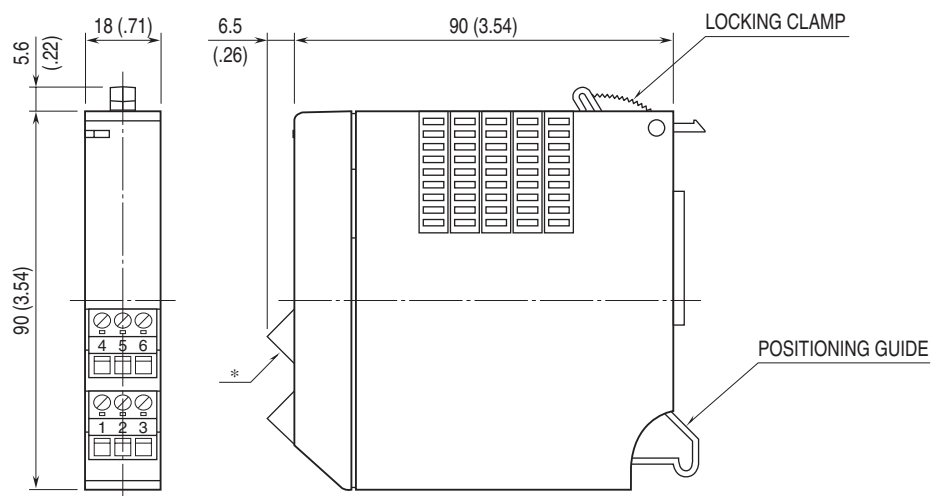
■ CHANNEL INDIVIDUAL SETTING

PARAMETER	AVAILABLE RANGE	DEFAULT SETTING
Zero Scale	-32000 to +32000	0
Full Scale	-32000 to +32000	10000
Bias [Zero Adj.]	-320.00 to +320.00	0.00
Gain [Span Adj.]	-32000 to +32000	1.0000

TERMINAL CONNECTIONS

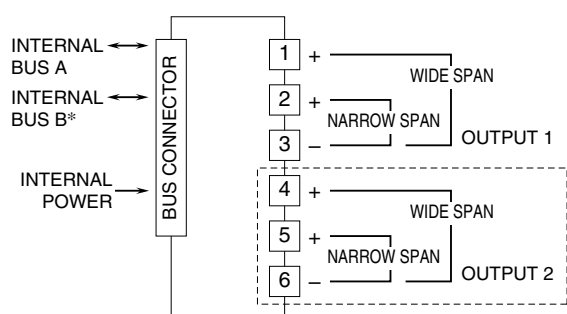
Connect the unit as in the diagram below.

EXTERNAL DIMENSIONS unit: mm (inch)



* Euro type connector terminals (4, 5 and 6) provided only with 2-ch. option.

CONNECTION DIAGRAM



*For dual redundant communication.

Note: Connect either wide or narrow span terminals for each channel.
The section enclosed by broken line is with 2-ch. option.

- **Wide span:** -10 – +10 V DC, -5 – +5 V DC, 0 – 10 V DC, 0 – 5 V DC, 1 – 5 V DC
- **Narrow span:** -1 – +1 V DC, 0 – 1 V DC

WIRING INSTRUCTIONS

EURO TYPE CONNECTOR TERMINAL

Applicable wire size: 0.2 to 2.5 mm²

Stripped length: 7 mm

FUNCTIONS

Output hold function

In normal conditions, the module outputs the signal from the preferred bus A.

When an error is detected, the output is switched to the data from the bus B.

If both are in error, the module holds the signal and stands by until one of the communications recovers.

At the startup, it outputs -15 % (or approx. -11.5 V) of the selected range until the communication is established and normal data is received.