

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:

- Web-enabled remote terminal unit(1)
- Protective cover(1)
- Ferrite core (ZCAT 3035-1330 TDK)(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. For detailed explanations to operate this product, please refer to Users Manual (EM-7691-B), downloadable at M-System's web site: <http://www.m-system.co.jp>

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.

■ POWER INPUT RATING & OPERATIONAL RANGE

- Locate the power input rating marked on the product and confirm its operational range as indicated below:
DC Power supply: Rated voltage 24V DC
 24V DC ± 10%, approx. 12W
 (@ internal power max. current 1.6 A)
Excitation supply (excitation for I/O module):
 24V DC ± 10%, operational current 7A
 (From power supply (excitation supply) connector, via connector for internal bus, supplied to each I/O module. Power output current consumption must be under operational current.)

■ GENERAL PRECAUTIONS

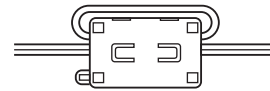
- Before you remove the unit or mount it, turn off the power supply for safety.

■ 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.
- Use a ferrite core close to the unit for communication line. Turn the cable twice (1 round) as figure below.



■ ABOUT SD CARDS

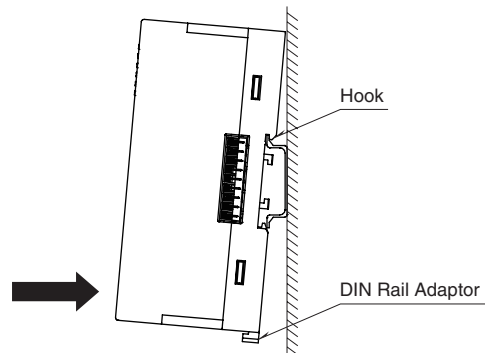
- Do NOT turn off the power of DL8 during writing data. Insert or eject SD card according to the specified procedure.
- Confirm the front and back side of the SD card.

■ AND

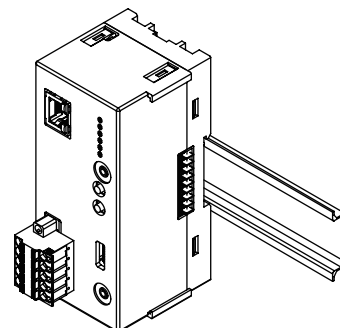
- The unit is designed to function as soon as power is supplied, however, a warm up for 10 minutes is required for satisfying complete performance described in the data sheet.

INSTALLATION

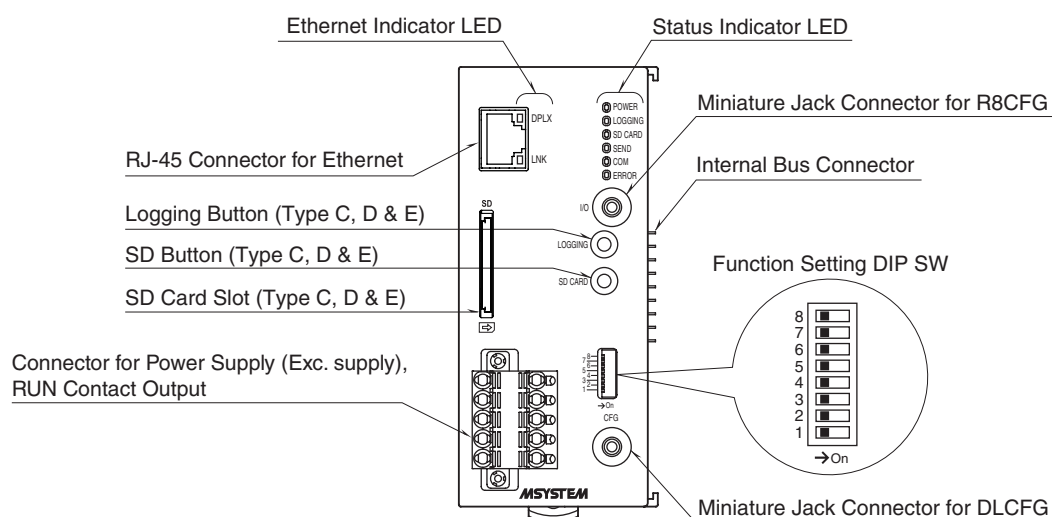
Connection between DL8 series modules is done with the connector of each module. Therefore, a base is not necessary. Since the connector between modules supplies power and transfers internal communication data, do NOT change modules during power supplied.



Position the upper hook at the rear on the DIN rail and push in the lower. When removing the module, push down the DIN rail adaptor utilizing a minus screwdriver and pull.



COMPONENT IDENTIFICATION



■ STATUS INDICATOR LED

LED	Color	Function
POWER	Green	ON at device operating normally Blinking at Ethernet LINK error Blinking before obtaining DHCP address
LOGGING	Green	ON at logging (Type C, D & E)
SD CARD	Green	ON during SD card mounted Blinking at reading/writing SD card (Type C, D & E)
SEND	Green	Blinking at e-mailing
COM	Green	Blinking at communication (except Modbus/TCP master & SLMP Client)
ERROR	Red	ON at error <ul style="list-style-type: none"> • R8 I/O module reading error • SD card access error • SD card insufficient capacity

■ ETHERNET INDICATOR LED

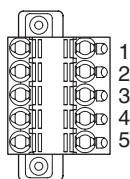
LED	Color	Function
DPLX	Amber	ON at full duplex
LNK	Green	ON at link

■ POWER SUPPLY (EXC. SUPPLY), RUN CONTACT OUTPUT CONNECTOR TERMINAL ASSIGNMENT

Printed-circuit board connector (Phoenix Contact)

Unit side connector: MSTBV2,5/5-GF-5,08AU

Cable side connector: TFKC2,5/5-STF-5,08AU



No.	ID	FUNCTION
1	24V	Power supply (exc. supply) 24 V DC
2	0V	Power supply (exc. supply) 0 V DC
3	RUN	RUN contact output
4	RUN	RUN contact output
5	FE	Power supply (exc. supply) earth

■ FRONT SWITCH

(*) Factory setting

• MINIATURE JACK for DLCFG (SW1)

SW1	FUNCTION
OFF (*)	Set with DLCFG
ON	FTP transfer and reporting e-mail reading

• REPORTING E-MAIL (SW2) *1

SW2	E-MAIL OPERATON
OFF (*)	Available
ON	Not Available

*1. Type B, C, D and E only.

Note: Be sure to set unused SW3 through 8 to OFF.

■ LOGGING BUTTON

Pressing and holding 1 second starts and stops logging.

■ SD BUTTON

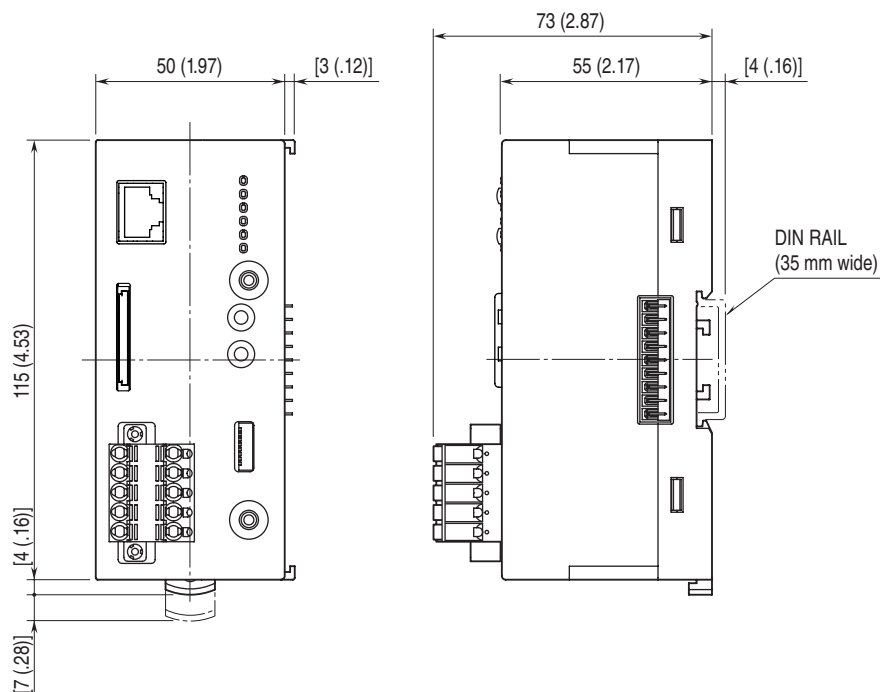
Pressing and holding for 4 seconds turns SD CARD LED off and makes the card removable.

TERMINAL CONNECTION

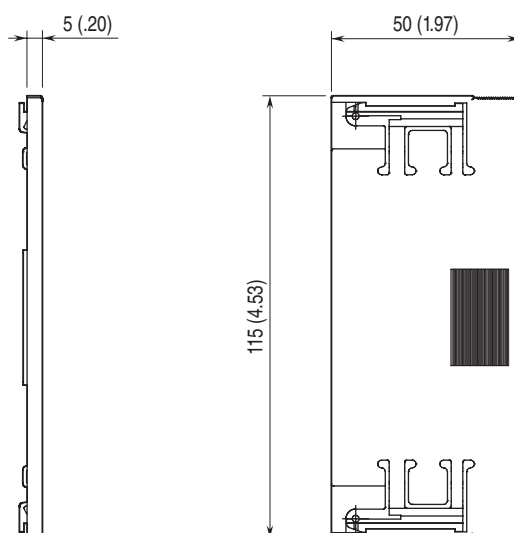
Connect the unit as in the diagram below.

■ EXTERNAL DIMENSIONS unit: mm (inch)

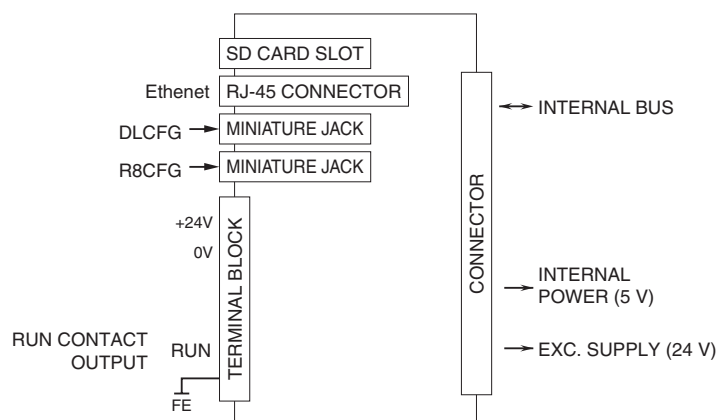
• Unit



• Protective Cover



■ CONNECTION DIAGRAM



Note: In order to improve EMC performance, bond the FE terminal to ground.

Caution: FE terminal is NOT a protective conductor terminal.

WIRING INSTRUCTIONS

■ Recommended solderless terminal

AI0,25-10YE 0.25 mm² (Phoenix Contact)

AI0,34-10TQ 0.34 mm² (Phoenix Contact)

AI0,5-10WH 0.5 mm² (Phoenix Contact)

AI0,75-10GY 0.75 mm² (Phoenix Contact)

AI1-10RD 1.0 mm² (Phoenix Contact)

AI1,5-10BK 1.5 mm² (Phoenix Contact)

AI2,5-10BU 2.5 mm² (Phoenix Contact)

Applicable wire size : 0.2 – 2.5 mm²

Stripped length : 10 mm