User's Manual

DR130/DR231/DR241 Hybrid Recorder (Stand-alone model)

Notice of Alterations

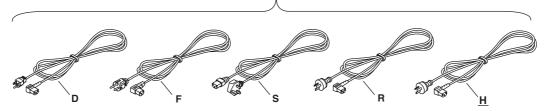
Please note the following(underlined) alterations to the IMDR231-01E.

Page 3 "Main Unit DR130/DR231/DR241"

Model	Suffix Code Description
Power Cord	D········ 3-pin inlet w/UL, CSA cable* (Part No. <u>A1074WD)</u> F······· 3-pin inlet w/VDE cable* (Part No. A1009WD)
	R 3-pin inlet w/VDE cable* (Part No. A1009WD)
	S 3-pin inlet w/BS cable* (Part No. A1023WD)
	H········ 3-pin inlet w/GB cable* (complies with the CCC)(Part No. A1064WD) W·······3-pin inlet with screw conversion terminal**
	Y······· 3-pin inlet with screw conversion terminal**

Page 5 "Standard Accessories"

1.One of these power cord types is supplied according to the instrument's suffix code



Page 3-16 "WARNING"

- When 30 VAC or 60 VDC and more is applied to the output terminal of the alarm output module or the output terminal of the DI/DO module, use double-insulated wires (withstand voltage performance: more than 2300 VAC) for those wires which apply 30 VAC or 60 VDC and more. All other wires can be basic-insulated (withstand voltage performance: more than 1390 VAC). Furthermore, use "crimp-on" lugs (for 4-mm screws) with insulation sleeves for connecting to the screw terminal. Make sure that the crimp-on tool must be one specified by the crimp-on lugs manufacture, and that the crimp-on lugs and tool must be matched to the wire size. To prevent from electric shock, do not touch the terminal after wiring and make sure to re-apply the cover.
- To prevent fire, use signal wires having a temperature rating of 75°C or more.

Page 3-16 "CAUTION"

• The overvoltage category of each input module is CAT II (<u>CSA</u>1010-1).

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- The measurement category of each input module is CAT II (IEC61010-1).
- · When connecting to a clamp terminal, use a signal conductor with the following cross-sectional width:

Page 3-18 "CAUTION"

- The power monitor module is a product belonging to Installation (Over-voltage) Category CAT II (CSA1010-1).
- The power monitor module is a product belonging to Measurement Category CAT II (IEC61010-1).



Page 3-22 "WARNING"

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- · To prevent electric shock, do not touch the terminals after wiring.
- Furnish a switch (double-pole type) to separate the instrument from the main power supply in the power supply line. In addition, make sure to indicate that the switch is a power control for the instrument on the switch and the ON/OFF positions of the switch.

Switch Specifications

Steady-state current rating: 3 A or more, inrush current rating: 90 A or more (AC power supply) Steady-state current rating: 8 A or more, inrush current rating: 90 A or more (DC power supply) Use a switch complied with IEC60947-1, -3.

• Do not add a switch or fuse to the ground line.

Page 14-9 "Standard Computation Functions"

Scaling

Measurement accuracy for scaling: +/-(((0.05/100) \times 5000) + 2) \times (2000/4000) + 2 = +/-4.25 Measurement accuracy = +/-5 digits = +/-0.005 V

Page 14-14 "Normal Operation Conditions"

Installation category based on CSA1010-1

 II^{*1}

Pollution degree based on IEC61010-1, CSA1010-1

2*2

Warm-up time

At least 30 minutes after power switch-on.

- *1 Describes a number which defines a transient overvoltage condition. It implies the regulation for impulse withstand voltage. "II" applies to electrical equipment which is supplied from fixed installations like distribution boards.
- *2 Describes the degree to which a solid, liquid, or gas which deteriorates dielectric strength or surface resistivity is adhering. "2" applies to normal indoor atmosphere. Normally, only non-conductive pollution occurs.

Page 14-15 "EMC Eonformity Standards"

Please refer to these specifications instead of the one printed in the user's manual.

The specification apply to products having the CE Mark.

EMC Emission: EN55011, Class A

EN61000-3-2 EN61000-3-3

Immunity: EN61326

Low voltage EN61010-1, Measurement category II*, Pollution degree 2

* Applies to measurement of electrical equipment which is supplied from fixed installations such as a wall outlet wired from a distribution board, or of the wires themselves.