

INSTRUCTION MANUAL

1G2W adapter
ADP-12S-120

Thank you for purchasing this KYOWA's product.

Read this document and instruction manual carefully in order to make full use of the high-performance capabilities of the product. Do not use the product in methods other than described in this document and instruction manual.

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The contents of this instruction manual are subject to change without notice.
For the latest information, refer to the KYOWA website.
Be sure to abide by the safety precautions and other notes provided in this document and instruction manual.

Standard Accessories

The following standard accessories are packed with the ADP-12S-120.

When unpacking, check the contents to ensure that all accessories are packed.

Name	Quantity
JCIS10-70 Miniature Screw (M2x4)	1

Information Service

On our website, you can check the catalogs, Instruction manuals, CAD data and update information etc.

The detailed handling method is described in the instruction manual, so please use it after reading the latest instruction manual carefully.

https://www.kyowa-ei.com/eng/product/category/acquisition/s_mrs-100_series/index.html

Safety Precautions (Be sure to read the safety precautions before use.)

This product complies with the specifications listed in "Product Specifications" on instruction manual. Avoid using the product in environments that depart from the applicable specifications. Failure to observe this precaution may result in malfunctions.

• Prior to use

To ensure safe use of this product, be sure to read the safety precautions before use. Kyowa Electronic Instruments Co., Ltd., assumes no liability for any damage resulting from the user's failure to comply with the safety precautions.

The following symbol is used to help ensure safe use of the product:

	Indicates the operator must refer to an explanation in the INSTRUCTION MANUAL in order to avoid the risk of injury or death of personnel or damage to the instrument.
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• Warning and Caution indicators

The following symbols are used to draw attention to important issues and to help ensure safe use of the product:

 WARNING	Improper use of the system may result in death or severe injury.
 CAUTION	Improper use of the system may result in injury and/or damage to the system.

WARNING

• Power supply.

- To prevent fire hazards, before turning on the product, make sure the power supply voltage specified for the product matches the local line voltage.
- Connecting the power polarity in reverse may cause accidents or malfunctions. Be sure not to do this

• Environments containing inflammable substances.

To prevent the risk of fire and/or explosion, do not use the product in environments containing inflammable gas, vapor, or dust.

• In the event of problems.

If abnormalities such as smoke, abnormal odor, or abnormal noise occur, immediately turn off the power, disconnect the power cable from the main unit, and stop using it. Also, do not install the instrument on or near flammable materials to prevent a fire when an abnormality occurs.

• Connecting and disconnecting adapter

Before connecting/disconnecting adapter, turn off the power to the transmitter and connected devices. Failure to do so may cause an electric shock, performance degradation, or malfunctions.

• Connecting and disconnecting cables

Before connecting/disconnecting cables, turn off the power to the Transmitter and connected devices. Failure to do so may cause an electric shock, performance degradation, or malfunctions.

WARNING

• Concomitant use of conservation measures

If there is a possibility that a secondary disaster may occur in the system due to a failure of the instrument, be sure to use another technical conservation measure.

• Do not disassemble or modify the product.

Failure to observe this precaution can result in electric shock or malfunctions. Attempting to disassemble or modify the product will invalidate the warranty.

• Handling of Batteries

- If use primary batteries, do not recharge the primary batteries.
- If use secondary batteries, If use secondary batteries, charge the battery with the charger specified for the battery to be used.
- Connect positive (+) and negative (-) terminals of the batteries correctly. It may cause Liquid leakage, fever, ignite or explosion.
- Do not heat the batteries or throw the batteries into fire. It may cause Liquid leakage, fever, ignite or explosion.
- Do not short-circuit positive (+) and negative (-) terminals of the batteries. It may cause fever or ignite due to a rush current.
- If connecting batteries in parallel, use diodes or other means to prevent the batteries from being inadvertently charged.

• Installation

- If installing this product on a rotating body, install a safety cover to secure safety from blown parts.
- If installing this product with screws, install the transmitter with the specified screws and torque.

CAUTION

• Use the product in a temperature range of -25 °C to 75 °C.

Using the product at temperatures outside of the specified range, may lower product performance or result in malfunctions. If the product must be used under direct sunlight or in a cold place, protect the product with a screen or take proper measures to keep it warm.

• Use the product in a relative humidity range of 20% to 85 %.

Using the product in environments in which the relative humidity falls outside the specified range, may degrade product performance or result in malfunctions.

• Take care of condensation after an abrupt change in the environment.

Abrupt changes in ambient temperature, such as during transportation, may cause condensation, which can degrade performance or cause malfunctions. Make sure that there is no condensation before using the instrument.

• Avoid exposing the product to liquid.

The product is not waterproof or drip-proof. Make sure no liquids come into contact the product; otherwise, electrical leakage or malfunctions may result.

• Take care when operating the product in locations where the product may be subject to severe impact or vibration.

Continuous vibration or severe impact may result in performance degradation or malfunctions. Also, when using in an environment with impact or vibration, please fix the chassis and connection cable.

• Avoid using the product in the presence of strong electromagnetic fields.

Use the product only in environments in which magnetic fields will not disrupt computer operations. Performance degradation, erratic operation, or malfunctions may occur if the product is used near radio equipment, microwave ovens, electric furnaces, or other equipment generating strong electromagnetic fields.

• Pay attention to static electricity.

It may cause damage due to static electricity. Before touching the equipment, touch a metal object to discharge static electricity.

• Avoid using the product under poor power supply conditions.

Failure to observe this precaution may result in performance degradation, erratic operations, or malfunctions. Be sure to use a power supply that does not emit noise or produce risk of instantaneous power outages.

• Avoid installing sensors near a welding machine or performing measurements near a welding machine.

Failure to observe this precaution may result in output abnormalities, erratic operations, or malfunctions.

• When using or storing in an environment exposed to dust or corrosive gas, protect the opening with a connector cap.

It may cause performance degradation or malfunctions. If dust gets inside, performance decreases. Make sure that dust does not enter during use as well as during storage.

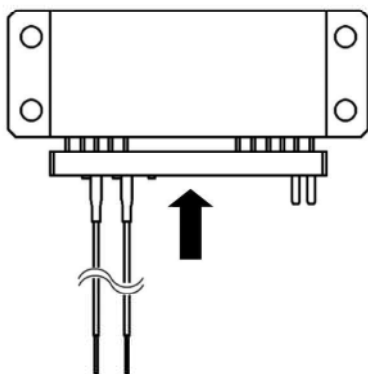
• If the product is used or stored in a place near the sea, take appropriate measures to protect the product from exposure to outside air.

Failure to observe this precaution may result in performance degradation or malfunctions.

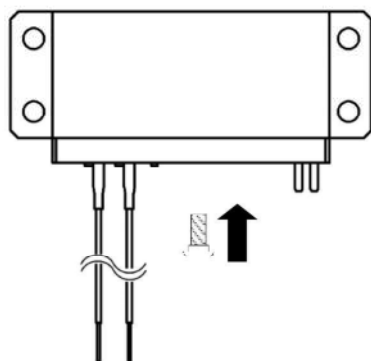
• Take care when operating this product in high or low pressure environments.

Failure to observe this precaution may result in malfunction, performance degradation, or failure.
This product is designed to be used under pressure of the standard atmosphere.

- Attach this product to the transmitter. When attaching this product to the transmitter, insert it straight into the transmitter body.

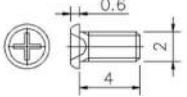


- fix the transmitter by using the JCIS10-70 Miniature Screw(Standard accessory).



NOTE

Use the screws shown in the following table for fixing the transmitter and adapter. Install the transmitter with the specified torque.

Mounting object		1 G2W adapter
Screw	Type	JCIS10-70 Miniature Screw (M2)
	Material	SWCH
	Size	 [mm]
Torque to the Transmitter Main Body		0.1 N·m



CAUTION

- If exceeding the maximum torque, it may cause damage or cracks in the body of the transmitter.
- The catalog value of centrifugal acceleration resistance is the value when fixed with the above screws and torque. If fixed in any other way, this value may not be guaranteed. Please contact our sales representative for more information.

Specifications

- Compatible transmitter : MRS-101B-S
- Compatible strain gage : Quarter-bridge 2-wire system (120 ohm)
- Cable length for strain gage connection : Approx. 60 mm
- Operating Temperature, Humidity : -25 to 75 °C, 20 to 85 % (Non condensing).
- Vibration Resistance : 294.2 m/s² (30 G) , 10 to 500 Hz
- Shock Resistance : 980.7 m/s² (100 G) , 11 ms or less, Half-sine
- Centrifugal Acceleration Resistance : 29420 m/s² (3000 G)
 - * The figures are when installed with our specified screws and torque.
 - * Use a shatterproof cover for safety.
- Dimensions : 36 (W) x 5 (H) x 3.2 (D) mm (Excluding protrusions)
- Weight : Approx. 2 g

This product does not contain the 10 restricted substances beyond the maximum concentration limit under RoHS Directive (2011/65/EU, (EU) 2015/863).
 * Excluding exemptions allowed under RoHS Directive (2011/65/EU, (EU) 2015/863).

Outside drawing

