



OPERATING INSTRUCTIONS

IMAGE PROCESSING SYSTEM

IS-mini



For the customers in the U.S.A.

CAUTION:

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE:

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his or her own expense.

For the customers in Canada

This Class A digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

For the European customers only

The crossed out wheeled bin label that can be found on your product indicates that this product should not be disposed of via the normal household waste stream. To prevent possible harm to the environment or human health please separate this product from other waste streams to ensure that it can be recycled in an environmentally sound manner. For more details on available collection facilities please contact your local government office or the retailer where you purchased this product.

This information only applies to customers in the European Union, according to Directive 2002/96/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL OF 27 January 2003 on waste electrical and electronic equipment (WEEE) and legislation transposing and implementing it into the various national legal systems. For other countries, please contact your local government to investigate the possibility of recycling your product.



This product does not connect to an antenna. This product is not a receiver. This product is purpose for video data transformation. This product has HDMI , but audio data does not output.

HDMI, the HDMI Logo, and High-Definition Multimedia Interface are either trademarks or registered trademarks of HDMI Licensing, LLC.

WOWOW Entertainment does not guarantee the operation of this product used in the network configurations other than those specified in this manual.

- 1 The product and product specifications described in this document are subject to change without notice due to reliability, function, and improvements in design.
- 2 This document, in whole or in part, may not be reprinted or copied without direct permission from WOWOW Entertainment
- 3 WOWOW Entertainment does not assume responsibility for any damage, direct or indirect, caused by the use of this product.
- 4 This document does not authorize the use of patent or any other rights of WOWOW Entertainment or any third party.
- 5 Proper names mentioned in this document, such as the name of products, are registered trademarks of each manufacturer.

Introduction

Before using this product, carefully read this manual to thoroughly understand how to set up and use IS-mini. Follow the Safety Precautions during use. After reading this manual, keep it in location where it can be easily accessed when needed.

For Safe Use

This product has been manufactured with special attention to safety. However, since this is an electrical product, misuse may result in fire or electric shock, which may lead to death or severe injury. Please follow the precautions in this manual and use the product as directed.

In Case of Failure, Discontinue Use

In case of a failure with the product, discontinue use, and contact the service center or a sales staff.

In Case of Abnormality

In Case of Smoke, Abnormal Smell, or Abnormal Noise

Immediately unplug the AC adapter and disconnect the AC adapter from the electrical outlet. Disconnect any other electrical cables connected to the electrical outlet, and contact the service center.

In Case of Fire

Immediately unplug the AC adapter and disconnect the AC adapter from the electrical outlet, or trip the breaker, and quickly extinguish the fire. Then, contact the service center promptly.

Warranty of This Product

A written warranty containing information regarding repair service and warranty regulations are attached to this product. Thoroughly read and verify the contents, and keep this warranty in a secure place. In the event of an accident within the terms of this warranty, repairs will be made according to the warranty regulations.

Application to Radio Frequency Regulation

This product is for business purposes, and is not subject to radio frequency regulations. Radio frequency regulations do not apply.

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1

Safety Precautions

This user manual uses the following warning and caution signs for the safe use of this product. Please thoroughly understand the signs before reading this manual.

1.1

Meaning of the Warning Signs



Warning

Ignoring this warning or the misuse of this product may result in death or severe injury.



Caution

Ignoring this warning or the misuse of this product may result in injury or property damage.



Fire Hazard

Ignoring this warning may result in fire.



Electrical Hazard

Ignoring this warning or the misuse of this product may result in electrical shock.



Do not Disassemble

Disassembly of the product is prohibited in order to avoid electrical shock or failure of the product.



Specific Actions

Actions are specified to ensure safety.



Prohibited Actions

Specific actions are prohibited in order to avoid an electrical shock, failure of the product, or injury.

1.2

Precautions during Use



Do not Disassemble or Modify

Do not disassemble or modify the product, unless directed in this manual. To do so may result in injury, electrical shock, fire, or failure of the product.



Do not insert or drop objects into the ports

Do not insert or drop any metal or flammable objects into the intake or exhaust ports. This may result in electrical shock, fire, or failure of the product.



Use under normal conditions

In the event a foreign object or liquid such as water gets inside the product, or internal condensation builds up, stop using it. This may result in electrical shock, fire, or failure of the product.



Follow the instructions

Only use this product in the manner directed in this manual. Misuse may result in electrical shock, fire, or failure of the product.

**Use under the correct AC adapter and voltage**

Do not use an AC adapter and voltage other than those specified for the product.

Otherwise, an electrical shock, fire, or failure of the product may result.

**Do not damage the AC adapter**

Avoid the following when handling the AC adapter as they may result in electrical shock, fire, or failure of the product.

- Modify or damage the AC adapter.
 - Place heavy objects on the AC adapter.
 - Forcefully bend, twist, or pull the AC adapter.
 - Heat, or place the AC adapter near a heating source.
 - Handle the AC adapter with wet hands.
 - Use a damaged AC adapter.
-

Do not install under conditions which may result in failure of the product

This product is manufactured with precision electronic components. Do not install or store in the following places, as these may result in malfunction or failure of the product. Also, if the product is not to be used for a long period, store it in the original package after use.



- In direct sunlight
- In a dusty place
- In a place with highly variable temperature or humidity
- Near fires
- In a wet place
- Near volatile materials
- Near an air conditioner or heater
- In a place exposed to shock, vibration, magnets or static electricity

**Install in a stable area**

If the product is installed in an unstable area, it may fall, resulting in injury or failure of the product.

**Need the air ventilation**

This product does not have a fan for cooling. Air should be well ventilated around the product and temperature should remain within operating temperature range.

**If the product is not to be used for a long period, disconnect the electrical plug from the electrical outlet**

If the product is not to be used for a long period, disconnect the electrical plug from the electrical outlet for safety.

**Disconnect all the cables and the electrical plug before moving**

Before moving this product, be sure to turn off the power, and disconnect the electrical plug from the outlet as well as all cables.

Otherwise, the cable may entangle a person's feet, resulting in injury.

**Use care when transporting**

This product is heavy. Carry with great care, firmly holding it from the bottom. Do not carry alone, as this may result in backache or dropping of the product, causing injury.

Also, turning the product upside down or on its side during transport may result in failure.

**Disconnect the AC adapter before wiring or cleaning**

Wiring or cleaning without disconnecting the AC adapter may result in electrical shock.

1.5

Precautions during Cleaning



Regularly disconnect the AC adapter from the outlet and clean

Regularly disconnect the AC adapter from the outlet and clean the base pins and the space between them.

If the AC adapter is left connected to the outlet for a long period, dust may accumulate at the base pins and may result in fire due to short circuit.



Turn off the power before wiring or cleaning

Wiring or cleaning with the power on may result in electrical shock.

**Caution**

Pay special attention to the installation conditions. Installation and long-term use of the product in highly variable temperatures, dusty, or high humidity may result in failure of the product.

1) Temperature

Operating Temperature: 0 to 40°C (No condensation)

Storage Temperature: -20 to 70°C (No condensation)

2) Humidity

Operating Humidity: 0 to 80% RH (No condensation)

Storage Humidity: 0 to 95% RH (No condensation)

3) Installation Conditions

Install this product on a stable area.

Leave a space 15cm or more at top and side for the air ventilation.

Air should be well ventilated around the product and temperature should remain within operating temperature range.

Do not jolt the product while in operation.

Especially, do not install under the following conditions.

- In direct sunlight
- In a dusty place
- In a place with highly variable temperature or humidity
- Near fires
- In a location where it is likely to get wet
- Near volatile materials
- Near an air conditioner or heater
- In a place exposed to shock, vibration, magnets, or static electricity

4) AC adapter

Please use this product with blow listed AC adapter.

- Jentec Technology Co.,Ltd Model No.:CF0605-B (Package include)

2.2

Unpacking



Specific Actions

Use the packing materials for the product or those with equivalent or higher quality, while transporting.



Warning

Do not put heavy materials on this product, as this may result in failure or damage.

Transport the product still packed, and unpack on a level place near the installation site.

1) Check the contents

Before installation, confirm that a complete set of the following items have been packed. In the event any item is missing, contact a member of the sales staff.

[Contents]

- 1) IS-mini: main unit×1
Size: 103 × 81 × 29 mm (W × D × H) (not including projections)
Weight: 260g (excluding cables)
- 2) AC adapter × 1
- 3)USB Cable × 1
- 4)Ferrite core × 1 (For HDMI cable)
※Please attach this ferrite core to the HDMI cable which for using.

Note: Do not throw away the packing material.

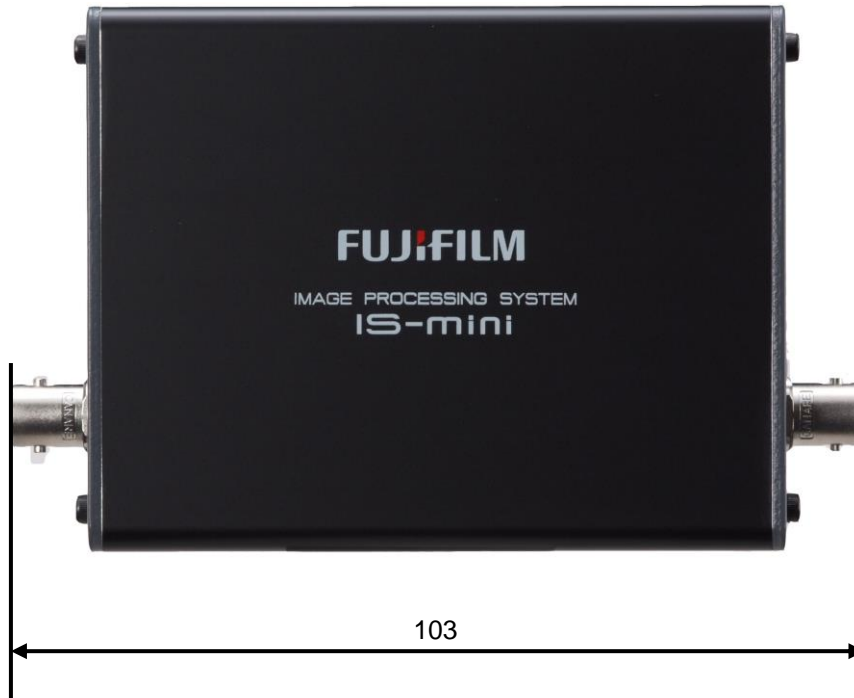
When transporting IS-mini, packing cartons and cushioning materials are required.
Keep the original material for future use.

2.3

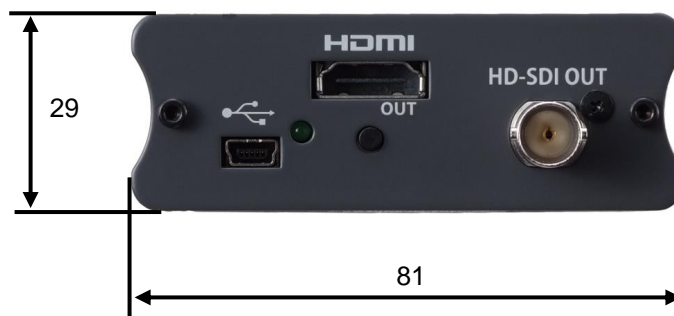
Main Unit

External Dimensions (Unit: mm)

Top



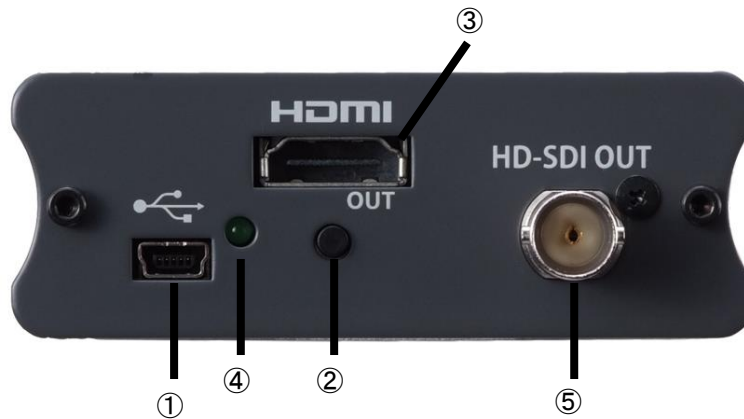
Side



2.4

Name and Function of Each Part

Left Side



Function of each part

- ① USB mini Port
- ② Bypass button
Note: Video Output will be bypassed while the button pushed.
- ③ HDMI Video Output Connector
Note: No audio data will be outputted.
- ④ Video Status Indicator
Flashing: Bypass Lighting: Transformed
- ⑤ HD-SDI Video Output Connector

Right side



Function of each part

- ① HD-SDI Video Input Connector
- ② Ethernet Interface Connector
- ③ Main Power Source Connector

2.5

Connecting and Disconnecting Cables

2.5.1 Connecting Cables



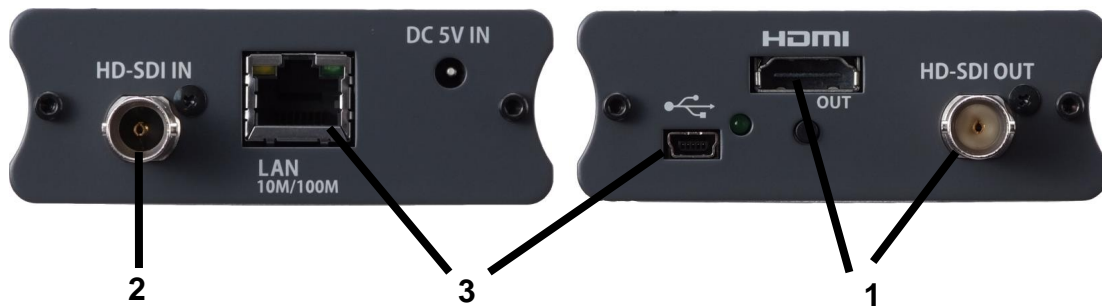
Caution

Before operation, be sure that the AC adapter is unplugged. Not doing so may result in electrical shock or injury.



Electrical Hazard

Do not operate with wet hands, as this may result in electrical shock or failure of the product.



1 Output of HD-SDI Video Output Cable or HDMI Video Output Cable(Depends on use)

Connect the HD-SDI Video Output Connector or HD-SDI Supported Monitor with a BNC75Ω coaxial cable.

Connect the HDMI Video Output Connector or HDMI Supported Monitor with HDMI cable.

2 Input of HD-SDI Cable

Connect devices such as cameras or HD-SDI Video Input Connector with a BNC75Ω coaxial cable.

3 Connecting the USB Cable or the Ethernet Cable (Depends on use)

Connect PC with the USB Cable.

Connect networking devices with an RJ45 type LAN cable.

2.5.2 Connecting the Electrical Cable



Electrical Hazard Never touch the power supply unit with wet hands, as this may result in electric shock.



Fire Hazard Converting the power supply voltage with the electrical plug connected to the outlet may result in fire.



1

- 1 Connect the AC adapter to the DC-IN connector.

2.5.3 Disconnecting Cables



Warning Before operation, be sure that the main power source switch on the back is OFF. Not doing so may result in electrical shock or injury.



Electrical Hazard Do not operate with wet hands, as this may result in electrical shock or failure of the product.

- 1 Unplug the AC adapter.
- 2 Disconnect the LAN cables or USB cables, if connected.
- 3 Disconnect the HD-SDI Input / Output Cable or HDMI cables, if connected.

3

Using IS-mini

3.1

Starting

- 1 Be sure that AC adapter is correctly connected.
- 2 Be sure that the video status indicator is lit.
- 3 Be sure that the all cables are correctly connected.

3.2

Shutdown



Caution

If the product is not to be used for a long period, unplug the AC adapter and disconnect all cables, if connected.

- 1 Disconnect the video cables, if connected.
- 2 Disconnect AC adapter.
- 3 Confirm that the video status indicator is off.

4

Maintenance

4.1

Cleaning

Regularly wipe any dust off the product with a piece of soft cloth.



Caution

Do not use organic solvents (benzene, acetone, etc.), which may deform plastic.
Also, be sure that no liquid such as solvent gets inside the product.

4.2

Regular Checking

Check the following every six months.

- Remove any dirt or dust in the connectors.
- Check for any damage at the connectors.



Caution

Before checking, unplug the AC adapter and confirm that the product is not in operation.

4.3

Warranty period

Warranty period is 2 years.

5

Specifications

5.1

Product Specifications

Item	Specifications
Type	Image Processing System IS-mini
Model	IS-10
Interface	USB2.0 LAN 10/100 Base-T
HD-SDI Input	BNC Connector x1 1 system input Supported Standard SMPTE292
HD-SDI Output	BNC Connector x1 1 system output Supported Standard SMPTE292
HDMI Output	HDMI Connector × 1 (No audio signal output) ※Notice YCC output only
External Dimensions	103 mm(W) × 81 mm(D) × 29 mm(H)
Device Weight	260g (excluding cables)
Power Supply Voltage	DC 5V
Power Consumption	5W

5.2 Supported Formats

Interface	Video Standard	Sampling Structure / Bit Depth	Frame	line samples	Field Rate(Hz)
HD-SDI SMPTE 292	SMPTE 274	4:2:2 Y'C _B 'C _R ' 10-bit	1080p	1920	23.98, 24, 25 29.97, 30
			1080i		50, 59.94, 60
			1080PsF		23.98, 24, 25 29.97, 30
	SMPTE 2048-2	4:2:2 Y'C _B 'C _R ' 10-bit	1080p	2048	23.98, 24, 25 29.97, 30
3G-SDI Level A SMPTE 425-A	SMPTE 274	4:2:2 Y'C _B 'C _R ' 10-bit	1080p	1920	50, 59.94, 60
			1080p		23.98, 24, 25 29.97, 30
		1080i	50, 59.94, 60		
		1080PsF	23.98, 24, 25 29.97, 30		
		RGB 10bit	1080p		23.98, 24, 25 29.97, 30
			1080i		50, 59.94, 60
	SMPTE 2048-2	4:2:2 Y'C _B 'C _R ' 10-bit	1080p	2048	47.95, 48, 50 59.94, 60
			1080p		23.98, 24, 25 29.97, 30
		4:4:4 Y'C _B 'C _R ' 10-bit or RGB 10bit	1080PsF		23.98, 24, 25 29.97, 30
			1080PsF		23.98, 24, 25 29.97, 30
Dual Link HD-SDI SMPTE 372 3G-SDI Level B-DL SMPTE 425 B-DL 3G-SDI Level B-DL SMPTE 425 B-DL	SMPTE 274	4:2:2 Y'C _B 'C _R ' 10-bit	1080p	1920	50, 59.94, 60
			1080p		23.98, 24, 25 29.97, 30
		1080i	50, 59.94, 60		
		1080PsF	23.98, 24, 25 29.97, 30		
		RGB 10bit	1080p		23.98, 24, 25 29.97, 30
			1080i		50, 59.94, 60
	SMPTE 2048-2	4:2:2 Y'C _B 'C _R ' 10-bit	1080p	2048	47.95, 48, 50 59.94, 60
			1080p		23.98, 24, 25 29.97, 30
		4:4:4 Y'C _B 'C _R ' 10-bit or RGB 10bit	1080PsF		23.98, 24, 25 29.97, 30
			1080PsF		23.98, 24, 25 29.97, 30

- **If no image is displayed on the connected monitor, check the following.**

- 1: Is the IS-mini turned on and operating?
- 2: Is the HD-SDI input/output cable connected to the IS-mini properly?

- **If the operation of the IS-mini is abnormal, perform the following.**

- 1: Unplug the AC adapter of the IS-mini and reconnect it.

- **If the IS-mini cannot be turned on, check the following.**

- 1: Is the AC adapter connected properly?
- 2: Is electricity supplied to the outlet?



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