Multimedia Matrix Control System

User Manual

TS-9507HS

Before using the system, please read this manual carefully

Notification

WARNING

To ensure the reliability of the equipment and the safety of personnel, please observe the following when installing, using and maintaining:

● If any of the following conditions are found, please immediately turn off the power, plug out and quickly contact your nearest dealer. Do not continue using this unit, which may cause a fire or electric shock.

- If you find smoke or have a strange taste from the machine.
- If water or metal falls into the machine.
- If the unit is dropped or the case is damaged.
- If the wire is damaged (wire core exposure, broken wire, etc.).

● If the machine contains high-pressure parts, in order to avoid the fire or electric shock, absolutely don't open the case, if any questions please inform your nearest dealer.

● Do not place cups, bowls, vases or metal and other water-filled substances on the unit. Serious spilled liquid may cause a fire or electric shock.

● Never expose the unit to rain and any moisture or water, which may cause electric shock or fire.

● Do not place metal objects or flammable materials from the vents on the machine cover, nor place coins, which may cause fire or electric shock.

● Do not place heavy objects on the unit to avoid personal injury or property damage when the unit is slipping.

● Make sure that the volume is turned on at the beginning of the boot, and the high volume of the boot may cause hearing problems.

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● For long-term accumulation of dust to be cleaned, please inform your dealer to regularly clean the machine, so as to avoid damage to the machine or cause a fire.

● The battery must be replaced with the same type of product and the correct installation should be made in order to avoid electrical damage and explosion hazard.

● The product is a Class I device. The device must be well connected to ground. The power plug must be connected to a power outlet with a grounding device to ensure that the equipment is fully grounded.

● This product uses a power plug or appliance input socket as a disconnecting device with the power supply, and must be disconnected if necessary for safety reasons.

●

This equipment is only suitable for safe use at altitudes above 2000 meters.

Precautions

1. The installation environment

When installing the unit, in order to ensure the normal cooling of the host, should avoid the poor ventilation of the place or high temperature environment, to avoid direct sunlight.

Recommend to install cabinet or other well-ventilated place indoor. If you use the machine in the outdoors, please pay attention to waterproof, moisture, lightning protection measures.

Avoid installing in a violent place of vibration; do not place other equipment on the machine.

Working temperature : -10℃~ 60℃.

Humidity is limited to 5% to 90% (non-condensing).

2. To avoid electric shock and fire

Do not touch the hands and the source with wet hands

Do not spill liquid on the machine, so as to avoid short-circuit or fire inside the machine.

Do not place other equipment directly on the top of the unit.

Non-professional service personnel Do not disassemble the unit yourself to avoid damage and electric shock.

3. Transport and handling

The packaging of the machine is designed and tested to ensure that the host will not be accidentally damaged during transport. It is best to use the original packaging when handling the unit.

Do not move the host device between the place or cold or over hot to avoid condensation inside the machine, affecting equipment life.

4. Please follow the warning instructions on this product, the warning signs on behalf of:

	Applicable to 2000 meters above sea level and below safe use
	Safe use only in non-tropical climates

5. Agreement

Please strictly follow the instructions in this manual. The software, hardware and appearance of this product will be upgraded and updated continually. The above changes will be made without notice.

Non-professional maintenance personnel, do not remove the product, to avoid damage and electric shock.

1. TS-9507HS HDMI to SDI converter

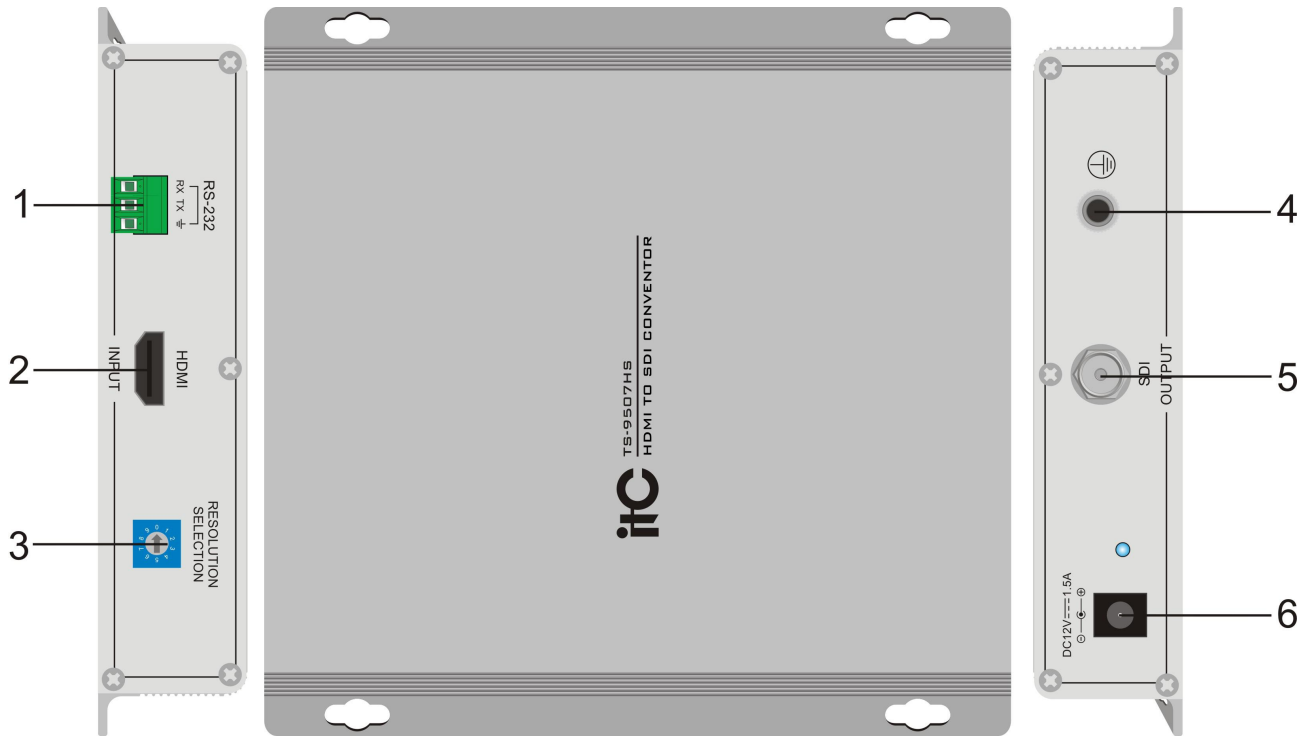
Product Description

TS-9507HS HD HDMI to SDI converter is a dedicated device covert HD or SD HDMI signal to SDI signal, the device integrated SDI receiver and HDMI modulator, HDMI signal can be easily converted to SDI signal. Internal circuits adopts imported high-quality components, with advanced technology, high integration, high reliability, cost-effective, flexible and so on advantages.

Features

1. Serial port control or external pull switch to select the resolution.
2. HDMI input support HDMI1.3, compatible with HDMI1.2 and HDMI1.1 version.
3. 1.485G SDI HD video signal output.
4. Input resolution up to 1920 * 1080P @ 60Hz.
5. Output resolution up to 1920 * 1080P @ 30Hz.

Panel function introduction



① RS-232——RS-232 Serial port control, for remote control, can be connected to a PC.

② HDMI——HDMI - HDMI audio and video input port
Using HDMI port, connect the output device with HDMI port, such as PC, Blu-ray DVD and so on.

③ RESOLUTION SELECTION – resolution selection, for setting the output resolution.

④ Grounding column.

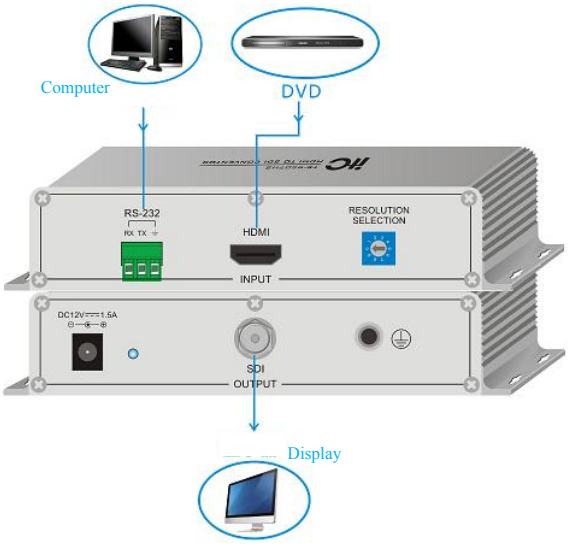
⑤ SDI——SDI video signal output
Using standard SDI video port, connect to high-definition display and other equipment with SDI port.

⑥ DC 12V——Power input port
Supports DC 12V input. with a power indicator.

Instructions

1) Please carefully install the converter host to the rack.
2) Insert the HDMI video cable into the HDMI video input port of the converter.
3) Insert the SDI video cable into the SDI video output port of the converter.
4) Insert the supplied power adapter into the power port of the converter.
5) Connect the supplied power adapter to the power supply.

Machine connection diagram



Precautions

1. Please be careful when installing the converter, can not be forced to beat the host, so as to avoid matrix shell deformation or damage to the internal circuit.
2. Before the power is turned on, should check whether the mains voltage meets the requirements. If the voltage is too high, it will damage the internal circuit. If the voltage is too low, the converter will not work normally.
3. The input and output ports can not be entered high voltage, otherwise the input or output port may be damaged. The output port can not be short-circuited or with ground for long term.

2. Technical Parameters

Model	TS-9507HS
HDMI video input	
Port	HDMI-A port
Supported protocols	HDMI1.3
Pixel bandwidth	225MHz, Fully Digital
Port bandwidth	3.25Gbps, Fully Digital(A total of 6.75Gbps, each color is 2.25Gbps)
Maximum support resolution	1920x1080P@60Hz
Signal type	T.M.D.S． Full digital signal
Signal strength	T.M.D.S．+/- 0.4Vpp
Minimum / maximum level	T.M.D.S．2.9V/3.3V
Impedance	50Ω
Serial port control	
Port	Phoenix socket
Electrical Level	RS-232
Baud rate	9600bps
SDI output	
Port	BNC
Signal type	SD-SDI、HD-SDI、3G-SDI
Signal rate	1.485G b/s
Specification	
Power	DC 12V/1.5A
Maximum power consumption	5W

3. Instruction Set

Version ITC 1.0

Serial port debugging assistant

Protol of serial port

Baud rate: 9600bps.

Data bits: 8 bits

Stop bit: 1bit

Parity: None

Flow control: none

ASCII instruction (Computer to device)	Instruction Function	Return (device to computer)	Example
1280x720p30.	Adjust the output resolution to：1280x720@30Hz	outRes=1280x720p30.	1280x720p30.
1280x720p50.	Adjust the output resolution to: 1280x720@50Hz	outRes=1280x720p50.	1280x720p50.
1280x720p59.	Adjust the output resolution to: 1280x720@59Hz	outRes=1280x720p59.	1280x720p59.
1280x720p60.	Adjust the output resolution to: 1280x720@60Hz	outRes=1280x720p60.	1280x720p60.
1920x1080i50.	Adjust the output resolution to: 1920x1080i50Hz	outRes=1920x1080i50.	1920x1080i50.
1920x1080i60.	Adjust the output resolution to: 1920x1080i60Hz	outRes=1920x1080i60.	1920x1080i60.
1920x1080p30.	Adjust the output resolution to: 1920x1080@30Hz	outRes=1920x1080p30.	1920x1080p30.

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