



Multimedia Matrix Control System

User Manual

TS-9507SH

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.
- 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.
- 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°C~ 60°C.

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-9507SH SDI to HDMI convertor

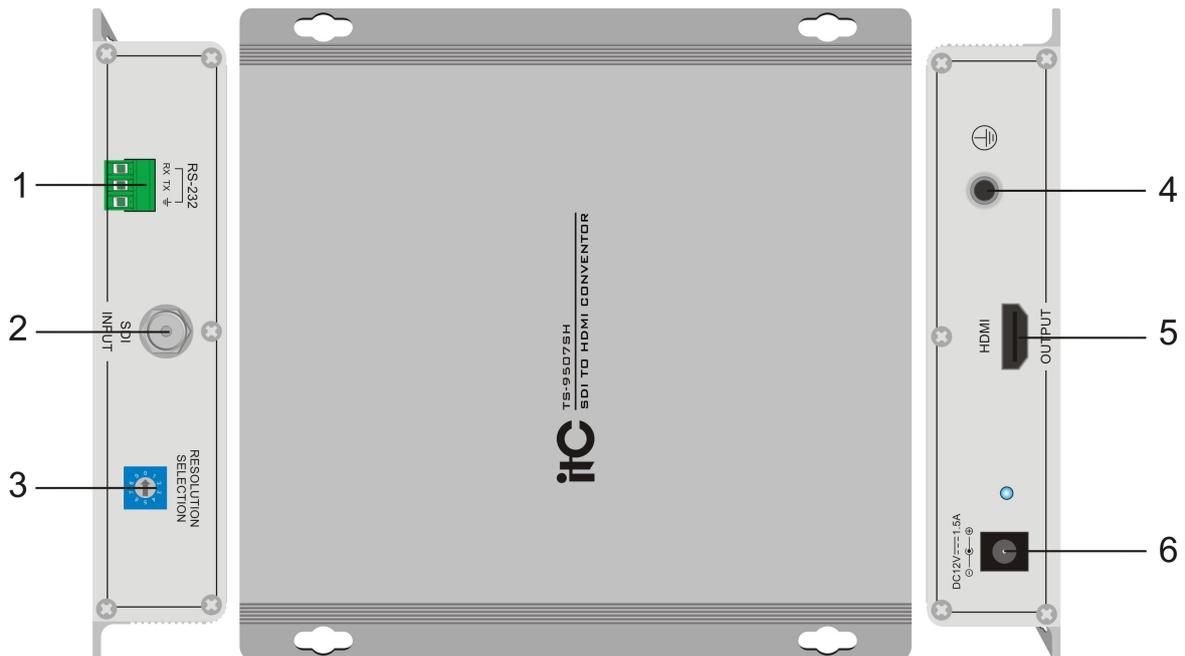
Product Description

TS-9507SH SDI to HDMI convertor is a device that is dedicated to convert single-channel HD digital component serial interface signal to HDMI signal. Integrated SDI receiver and HDMI modulator, It can convert the SDI signal to HDMI signal and separate the SDI audio signal to embed in the HDMI signal to achieve sound and image synchronous transmission. The working principle is to convert the single-channel digital component serial interface (SDI) signals to TMDS signal and then connect the high-definition cameras to display terminals with HDMI interface. With advanced structure, strong combination, it is easy to make expansion. The 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 dialing switch selection resolution.
2. HD digital component serial interface (HD-SDI, 3G-SDI and SD-SDI) signal input.
3. HDMI video signal output.
4. Input resolution up to 1920*1080P@60Hz.
5. output resolution up to 1920*1080P@60Hz.

Panel function introduction

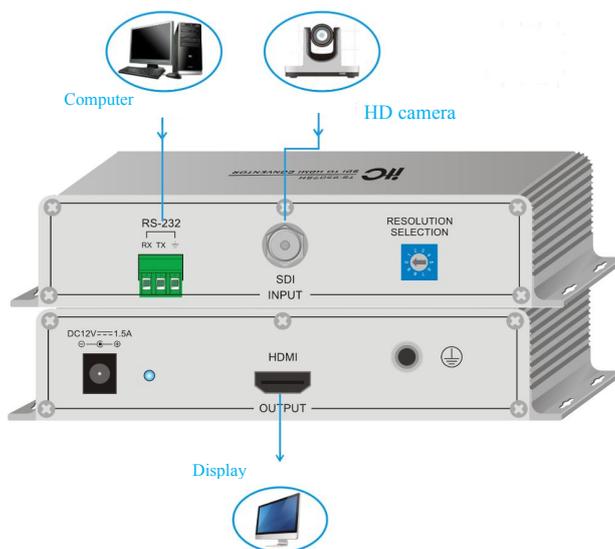


- ① RS-232——RS-232 serial port control, for remote control, can connect PC computer, etc.
- ② SDI——SDI video signal input.
Adopt standard SDI video interface, connect SDI HD video signal source, such as SDI camera and other equipments.
- ③ RESOLUTION SELECTION——Resolution selection, used to set the output resolution.
- ④ Grounding column.
- ⑤ HDMI——HDMI AV output port;
The HDMI interface is used to connect the output devices of HDMI interface, such as display, LCD TV, etc
- ⑥ DC 12V——power input port, Support DC 12V input. with an electric indicator next to it.

Operation introduction

- 1) Please install the converter host on the rack carefully.
- 2) Insert the HDMI video signal cable into the HDMI video output interface of the converter.
- 3) Connect the SDI signal source to the converter SDI video input interface via SDI cables.
- 4) Connect power adapter plugs into the converter's power interface.
- 5) Connect the power adapter to power supply.

Machine connection diagram



Attention

1. When install the converter, you should be careful not to hit the main controller so as to avoid the deformation of the matrix rack or damage to the internal circuit.
2. Before starting power supply, pls check whether the electric voltage met requirements or not. If the voltage is too high, it will damage the internal circuit. If the voltage is too low, the converter will not work properly.
3. Input ports and output ports cannot have high pressure access, otherwise the input or output ports may be corrupted. The output port cannot short-circuit with the earth or the power.

2. Technical Parameters

Model	TS-9507SH
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 commands (From computer to device)	Command function	Return (from device to computer)	Illustraton
800x600p60.	Adjust the output resolution to: 800x600@60Hz	outRes=800x600p60.	800x600p60.
1024x768p60.	Adjust the output resolution to: 1024x768p60Hz	outRes=1024x768p60.	1024x768p60.
1280x720p60.	Adjust the output resolution to: 1280x720@60Hz	outRes=1280x720p60.	1280x720p60.
1280x1024p60.	Adjust the output resolution to: 1280x1024@60Hz	outRes=1280x1024p60.	1280x1024p60.
1400x1050p60.	Adjust the output resolution to: 1400x1050@60Hz	outRes=1400x1050p60.	1400x1050p60.
1440x900p60.	Adjust the output resolution to: 1440x900@60Hz	outRes=1440x900p60.	1440x900p60.
1680x1050p60.	Adjust the output resolution to: 1680x1050@60Hz	outRes=1680x1050p60.	1680x1050p60
1920x1080p60.	Adjust the output resolution to: 1920x1080@60Hz	outRes=1920x1080p60.	1920x1080p60.

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