

TROUBLE SHOOTING

If it appears that your HDBase-T matrix is faulty, first consult this checklist. It may be that something simple has been overlooked.

Under no circumstances should you try to repair the HDBase-T matrix yourself; as this will invalidate the warranty. Only qualified service personnel can remove the cover or service this HDBase-T matrix.

NO POWER

- Check if the on/off button on the front of the HDBase-T matrix is on.
- Check if power plug of the mains cord is properly connected.
- Check if there is power at the AC outlet by plugging in another appliance.

NO PICTURE

- Check if the TV is turned on.
- Select the correct HDMI input on the TV.
- Check the HDMI source input connection.
- Check if the HDMI source device is playing.
- Check HDBase-T receiver RJ45 connection
- Check if power adaptor of HDBase-T receiver is properly connected.
- Check if your video source resolution setting match your TV.

NO ETHERNET

- Check if RJ45 of the HDBase-T matrix's LAN port is properly connected.
- if internet mode connect the HDBase-T receiver LAN port, check the HDBase-T RJ45 is properly connected.
- Check if the internet mode or router are properly connected.
- Reset the internet mode or router and HDBase-T MATRIX.

THE HDBase-T MATRIX DOES NOT RESPOND TO THE REMOTE CONTROL

Aim the remote control directly at the sensor on the front of the HDBase-T matrix.

Avoid all obstacles which may interfere with the signal path.

Inspect or replace the batteries.

THE IR RECEIVER OR IR Transmitter DOES NOT WORK

check if the IR receiver or transmitter is properly Connected.

Aim the remote control directly at the sensor on the front of the IR receiver.

Avoid all obstacles which may interfere with the IR transmitter's signal path. IR transmitter must be aim at the sensor on the front of the HDMI source or your player.

check which source's remote control channel you are using.

In some situation, if there are two or more equipment

Used within 10 feet at the same time, the equipment may not function so well.

The IR Kit only support the carrier frequency range from 38khz to 60KHZ, When your STB or another

BD player does not receive the remote control signal via IR kit. Please contact your STB or BD player service for help and ask them what is the carrier frequency of their remote control.

Notice: About the IR Forward function, You'd better pay attention as follows, IR channel and HDMI switch are synchronized. So When switch the HDMI input Source, IR channel will be switched also. Please make sure you use the remote control is the current player remote control.

NO SOUND

Check your amplifier's HDMI connection.

If using a Hi-Fi amplifier, try another sound source.

Check that your BD palyer is selected in the Audio

Menu if a Dolby true HD or DTS HD disc is played.

Ensure there is a Dolby true HD or DTS HD decoder connected when selecting Dolby true HD or DTS HD.

Check the HDMI audio output menu to make sure that the HDMI output is correctly set

Clean the disc.

Check if the disc is defective by trying another disc

FUNCTION DISTURBED

The normal function of the product may be disturbed by external interference. Just reset the product or disconnect and reconnect the power adaptor.

User Manual

SM-8X8-C6HDR-HDBT

Super Matrix over HDBase-T/Receiver of HDBase-T



SAFETY



CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNINGS:

To reduce the risk of fire or electric shock, do not expose this appliance to rain or moisture.

DO NOT REMOVE COVER or OPEN THE CABINET.
Dangerous high voltages are present inside the enclosure. No user serviceable parts inside. Refer servicing to qualified personnel only.

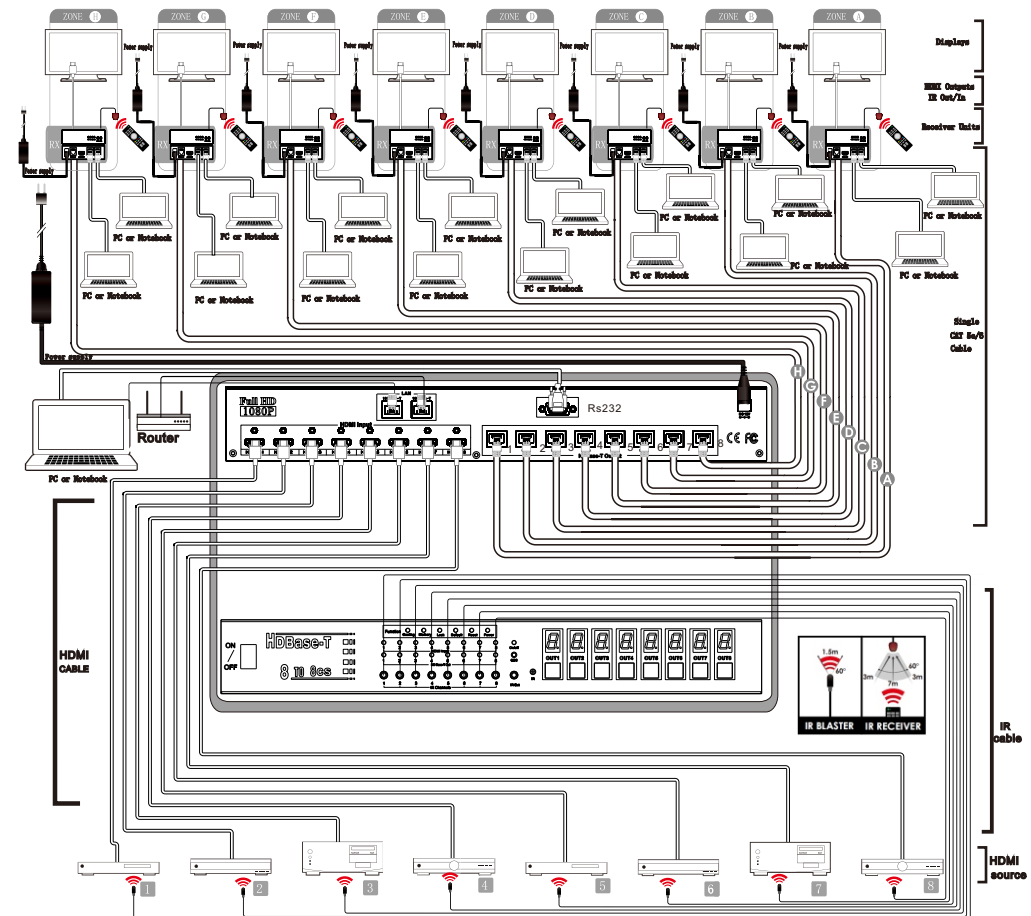
Use of controls or adjustments or performance of procedures other than those specified may result in hazardous radiation exposure.

To ensure proper use of this product, please read this Instruction Manual carefully and retain for future reference. Should the unit require maintenance, contact an authorized service center.

System Application Connection Diagram

Operation:

1. Connect the signal source (such as HD-DVD, PS3, STB) to HDMI input interfaces;
2. Connect the display devices (such as HD-LCD, DH-DLP) to HDBase-T receiver's HDMI output interfaces;
3. Connect the EIA/TIA 568B one long CAT5e/6 cable to the sender output socket;
4. Connect the EIA/TIA 568B one long CAT5e/6 cable to the receiver input socket;
5. This device is powered by an external power supply.



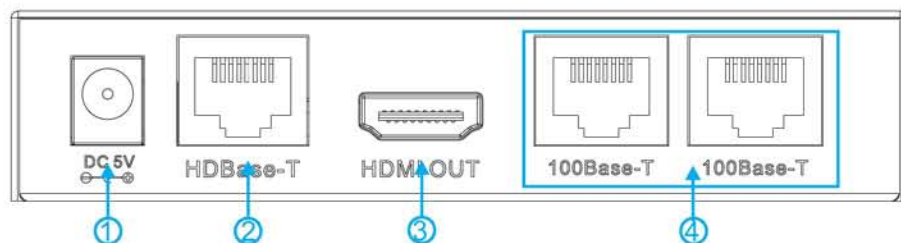
HDBase-T Receiver front panel



LED indicators and IR channel

1. HDCP (Left LED in this picture) – when ON, indicates that video content with HDCP protection is being transferred. When BLINKING, indicates video content without HDCP. When OFF, indicates that no video is being transferred.
2. LINK (the second LED from the left in this picture) – when ON indicates that an HD Base-T TM link connection has been established between the two boards over the CAT5e cable;
3. MODE (the third LED from the left in this picture) – when blinking indicates that the device is active;
4. The Green LED near the IR jack indicates that power is available to the unit;
5. IR RX Jacket, connect a IR receiver to receive remote control signal of HDMI source ;
6. IR TX Jacket.(Reserve, HKHB0808BC does not support backward IR function, HKHB0100SC support backward and forward IR);

HDBase-T Receiver Rear panel



Connectors

1. The 5VDC is the power input to the units. It is recommended to use the same specifications as the power adaptor only.
2. HDBase-T – connect to HDBase-T matrix output interface.
3. HDMI –connect to HD display device .
4. Ethernet ports – There are 2 standard Ethernet ports with switching capabilities on each board. There is no difference between the 2 100 base-T and any type of connection topology is permitted

IMPORTANT SAFETY INSTRUCTIONS

CAUTION: RETAIN THIS BOOKLET FOR FUTURE REFERENCE.

This set has been designed and manufactured to assure personal safety. Improper use can result in electric shock or fire hazard. The safeguards incorporated in this unit will protect you if you observe the following procedures for installation, use and servicing. This unit does not contain any parts that can be repaired by the user.

- Read these instructions.
- Keep these instructions.
- Heed all warnings.
- Follow all instructions.
- Do not use this apparatus near water.
- Clean only with dry cloth.

- Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- Do not install near any heat sources such as radiators, heat

registers, stoves, or other apparatus (including amplifiers) that produce heat.

- Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades, one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

- Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles and the point where they exit from the apparatus.

- Only use attachments/ accessories specified by the manufacturer.
- Unplug this apparatus during lightning storms or when unused for long periods of time.

- Use only with a cart, stand, tripod, bracket or table specified by the manufacturer, or sold with the

apparatus. When a cart is used, use caution when moving the cart apparatus combination to avoid injury from tip-over.



PORTABLE
CART
WARNING

S3125A

- Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as when the power supply cord or plug is damaged, liquid has been spilled or objects have fallen in to the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

- Apparatus shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus.

- **Burden**
Do not place a heavy objection, or step on the product. The object may fall, causing serious personal injury and serious damage to the product.

- **Damage Requiring Service**
Unplug this product from the wall outlet and refer servicing to

qualified service personnel under the following conditions:

- a) When the power-supply cord or plug is damaged,
- b) If liquid has been spilled, or objects have fallen into the product,
- c) If the product has been exposed to rain or water,
- d) If the product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions. Improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to its normal operation.
- e) If the product has been dropped or damaged in any way.
- f) When the product exhibits a distinct change in performance - this indicates a need for service.

• Servicing

Do not attempt to service this product yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

• Replacement Parts

When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.

• Safety Check

Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.







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Rs232 command

Function keys

“Power”		Sending data	Hexadecimal	0xBA 0xBA 0xBF 0xC6 0x38 0x31
“Reset”		Sending data	Hexadecimal	0xBA 0xBA 0xBF 0xC6 0x38 0x32
“Default”		Sending data	Hexadecimal	0xBA 0xBA 0xBF 0xC6 0x38 0x33
“Lock”		Sending data	Hexadecimal	0xBA 0xBA 0xBF 0xC6 0x38 0x34
“Memory”		Sending data	Hexadecimal	0xBA 0xBA 0xBF 0xC6 0x38 0x35
“Cooling”		Sending data	Hexadecimal	0xBA 0xBA 0xBF 0xC6 0x38 0x36

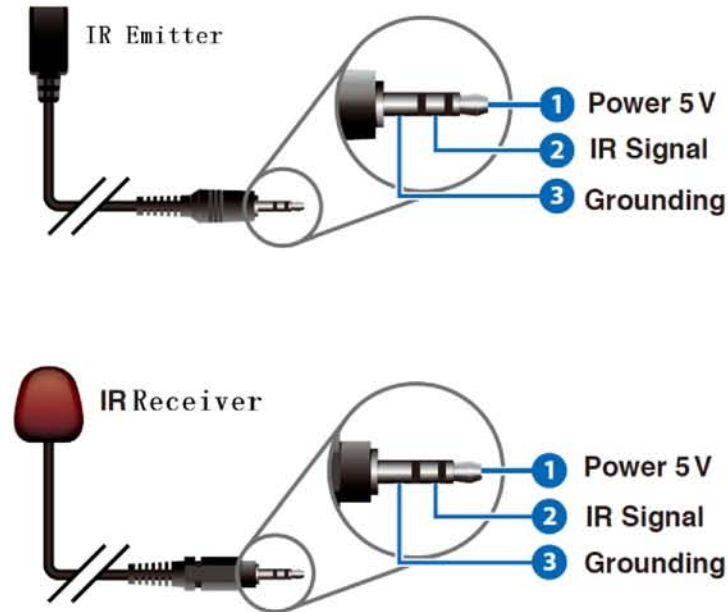
Output keys

Output1 “1”		Sending data	Hexadecimal	0xBA 0xBA 0xBF 0xC6 0x38 0x37
Output2 “2”		Sending data	Hexadecimal	0xBA 0xBA 0xBF 0xC6 0x38 0x39
Output3 “3”		Sending data	Hexadecimal	0xBA 0xBA 0xBF 0xC6 0x38 0x31 0x31
Output4 “4”		Sending data	Hexadecimal	0xBA 0xBA 0xBF 0xC6 0x38 0x31 0x33
Output5 “5”		Sending data	Hexadecimal	0xBA 0xBA 0xBF 0xC6 0x38 0x31 0x35
Output6 “6”		Sending data	Hexadecimal	0xBA 0xBA 0xBF 0xC6 0x38 0x31 0x37
Output7 “7”		Sending data	Hexadecimal	0xBA 0xBA 0xBF 0xC6 0x38 0x31 0x39
Output8 “8”		Sending data	Hexadecimal	0xBA 0xBA 0xBF 0xC6 0x38 0x32 0x31

Input keys

INPUT1“1”		Sending data	Hexadecimal	0xBA 0xBA 0xBF 0xC6 0x38 0x38
INPUT2“2”		Sending data	Hexadecimal	0xBA 0xBA 0xBF 0xC6 0x38 0x31 0x30
INPUT3“3”		Sending data	Hexadecimal	0xBA 0xBA 0xBF 0xC6 0x38 0x31 0x32
INPUT4“4”		Sending data	Hexadecimal	0xBA 0xBA 0xBF 0xC6 0x38 0x31 0x34
INPUT5“5”		Sending data	Hexadecimal	0xBA 0xBA 0xBF 0xC6 0x38 0x31 0x36
INPUT6“6”		Sending data	Hexadecimal	0xBA 0xBA 0xBF 0xC6 0x38 0x31 0x38
INPUT7“7”		Sending data	Hexadecimal	0xBA 0xBA 0xBF 0xC6 0x38 0x32 0x30
INPUT8“8”		Sending data	Hexadecimal	0xBA 0xBA 0xBF 0xC6 0x38 0x32 0x32

Pins assignment of IR RX and TX



Pins assignment of RS232 connector

Pin Assignment

Matrix Switch RS232 port			PC RS232 port	
PIN	Assignment		PIN	Assignment
1	NC		1	NC
2	Tx	→	2	Rx
3	Rx	←	3	Tx
4	NC		4	NC
5	GND	—	5	GND
6	NC		6	NC
7	NC		7	NC
8	NC		8	NC
9	NC		9	NC

Baud Rate: 600bps, Data bit: 8 bits, Parity: None, Stop Bit: 1, Flow Control: None

Product brief description

SM-8X8-C6HDR-HDBT is the eight into the eight, HDMI over CAT5e/6 matrix. Multiple HDMI signal through CAT5e/6/7 wire receiver, transmission to multiple HDMI display or HDTV, input and output matching can freely selected. Provide a variety of actions, via panel buttons, via RS-232 control, via IR remote control. Audio or Video transmission up to 100 meters in length.

Product Application

HDMI system control.
Display wall control.
Security monitoring system control.
Business and advertising applications.
Lecture halls and teaching environment applications.
Pluralistic media display and control applications

System Requirements

HDMI signal source device,
HDMI display or HDTV,
CAT6 receiver,
HDMI cable
HDMI / CAT5e/6/7 transmission line

Basic function:

Full Matrix switch 8x8 over HD Base-T, Any to Any.
100m or 70m for option over cat5e/6, with remote receiver before HD TV,
19 inch rack or desk or wall mounting.
HDCP V 1.2, 3D support.
Super IR & RS232 control system, IR transport channel can be forward per your installation.
Support resolution VGA ~ WUXGA and 480i to 1080p (depending on the connected display's EDID).
Deep color 24/36bit support X.V. color.
Audio support 7.1 channel Dolby TrueHD, DTS-HD Master audio
Support high-definition audio transmission rate 192kHz
DC power 12V/10A, 5V/2A

Specification

HDMI version..... High speed with 3D
HDCP version.....HDCP 1.2
Support video color bit.....deep color 24bit/36bit
Support HDMI resolution.....1080p/1080i/720p/576p/576i/480p/480i
Support audio format.....LPCM/Dolby-AC3/Dolby True HD./DTS/DTS HD master audio
Input video signal..... 600-1000mV (p-p)
Input cable distance.....≤5m
HD BASE-T cable distance.....≤100m
Data transfer speed.....6.75Gbps
Operating temperature range.....-15 to +55°C
Operating Humidity range.....5% to 90%RH
Power adapter format.....AC Input (50-60HZ) 100-240V
DC voltage and current.....12V/10A for main unit and 5V/2A for HD BASE-T Receiver.

Package Included

When first unpacking your HDMI matrix please check to see if the following items are included.
HDMI matrix main unit
Remote Receiver of HD base-T (8pcs)
Instruction Manual
Power adapter: DC :12V /10A; 8X 5V /2A
IR kit (1 pairs of IR receiver and IR Transmitter)
optical disc for RS232 control interface setup
Remote control for HDMI Matrix.

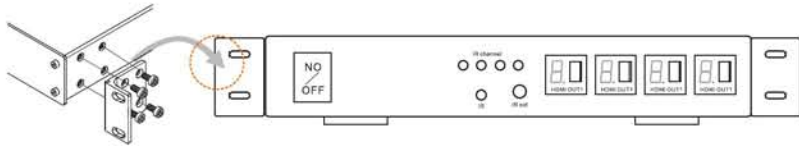
Installation

Install your unit on a stable flat surface . There must be sufficient room in front of the unit for the drawer to be opened and the unit should be positioned so that it can see the remote control. Otherwise ,you must add an external IR receive. Do not expose your unit to extremes of temperature or humidity. Avoid standing it on a hot surface such as on top of other hot running equipment and ensure that there is adequate ventilation to the unit.
*Caution : Do not install this equipment in confined space such as a book case or similar unit!



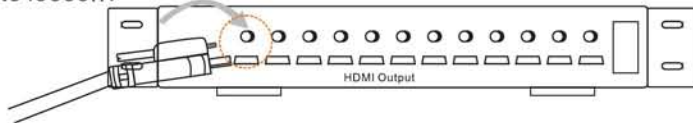
Rack mounting or fixed

1. Fix the ear bracket to the machine through 4 screws;
2. Place the ears or the machine against the rack rails and insert the proper screws(not provided) Through each of the four holes in the rack ears.



Plug Locking

Not easy to loosen!

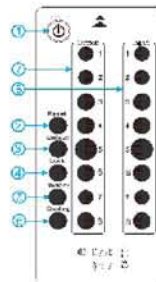


Remote control

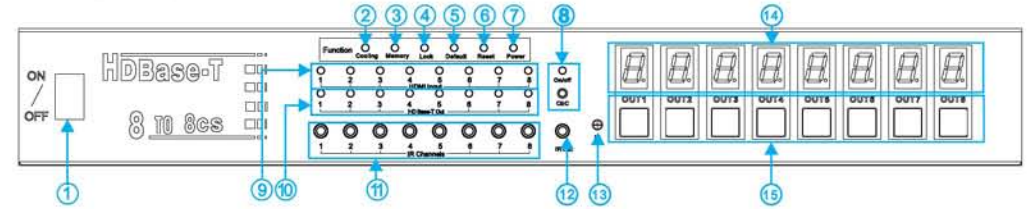
- 1.Power: For control HDBase-T matrix unit to lower power consumption
- 2.Reset: Click this button for the system reset when the unit is abnormal
- 3.Default: Click this button, the system will be default
- 4.LOCK: Click the button to lock all the buttons on the remote control, correspondingly LED will show Blue, indicate in a locked state
Click this button again to unlock;
- 5.Memory: Reserve, No function now.
- 6.Cooling: Manually start the HDMI matrix cooling system when the temperature rises
- 7.Output 1-8: Select the output port 1 to 8;

How to switch the input source to output by remote control:
First,click the Output button which you want to control, followed by clicking input button to switch the input source you want to display to the output port .

For example, you wish the LCD TV2 showing the picture of input source 8.Firststep, you must click the output 2 button. Then followed by clicking the input 8 button .

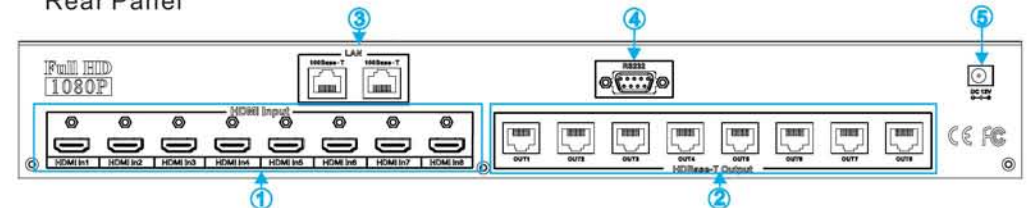


Front Panel



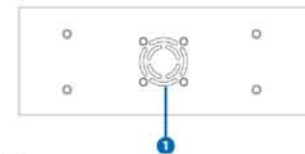
- 1.ON/OFF :Switch on and indicate red light is for power on.
- 2.Cooling : cooling LED light , Indicate fan is working now.
- 3.Memory : Reserve LED, No function now.
- 4.Lock : Click LOCK button to lock all the buttons on the remote control panel and RS232 interface; correspondingly LED will show Blue, indicate in a locked state. Click lock button again to unlock;
- 5.Default : when set the system to default , correspondingly led will flash;
- 6.Reset : when set system to reset . correspondingly blue LED will flash;
- 7.Power : POWER LED ,Indicate the power supply is working now;
- 8.CEC ON/OFF: Disable or enable the CEC bypass function , when the CEC bypass active . correspondingly LED will show Blue;
- 9.HDMI INPUT led: 8X LEDs respectively indicate the corresponding input signal; when no input ,the LED will be turned off.
- 10.HDBase-T output : 8 XLEDs respectively indicate the corresponding output signal; when no output ,the LED will be turned off.
- 11.IR channels: Connected to the IR transmitter, can be connected up to eight.
- 12.IR EXT Jacket: When mounting in a cabinet. You need add an external IR receive for Matrix control;
- 13.IR sensor: 8x8 Matrix IR sensor
- 14.Output LED numerical code tube: TheLED nixie tube indicate that output channel signal comes from which input port.
- 15.Output button : Switch the input source you want to display to the output port .

Rear Panel



- 1.HDMI input port: Connected to the HDMI input source device, can be connected to up to eight.
- 2.HDBase-T output port: To connect CAT5e/6/7 cable to HDBase-T receiver.
- 3.LAN port: Connect one RJ45 via CAT5E/6 cable to internet mode or router, the other RJ45 port for PC or Notebook ;
- 4.RS232 port: D-Sub 9-pin transmission line connected to a PC or RS-232 control device;
- 5.DC input: Connected to a 12V DC power adapter, and then connect to a power outlet.

Side View



1. Fan hole:

Do not blocked the fan holes on the side version by any object or cover, so as not to affect the cooling effect. At the same time, the fan holes surrounding, Please reserve space for air circulation. When the system exceeds the expected temperature ,The fan will be active. Also you can manual control to let the fan work by remote control or RS232 control.