

Introduction

AVerCaster Pro series products are audio/video encoder/transcoder servers especially designed and developed by **AVerMedia Technologies, Inc.** to welcome the unstoppable trend in Internet/digital TV and broadcasting applications. **AVerCaster Pro** series products provide comprehensive all-in-one servers to demands in audio/video encoder/transcoder and streaming services. **AVerCaster Pro** series products support not only real-time video streaming but also multi-display output, bitrate and resolution configurations, and other encoding profiles, letting administrators to complete configurations from input signals to streaming tasks quickly and transmitted high quality videos to various receiving terminals such as TV sets, desktop PCs or mobile devices. Administrators can easily integrate **AVerCaster Pro** series products into currently running IPTV/OTT equipments and working processes.

AVerCaster Pro supports various and multiple input sources, multiple encoding/transcoding formats, and multiple streaming tasks of single input source too. Administrators are free to combine or create freely based on different needs easily. Moreover, **AVerCaster Pro** complies with 3GPP rules and regulations, expanding its services to a wide range of mobile device users in its service area. Reliable, high compatibility and expandability, **AVerCaster Pro** solves the problems and fits into current environment infrastructures.

Parts and Names:

Front View – RS7130 / RS7165 / RS7170 / RS7185 / RS7190

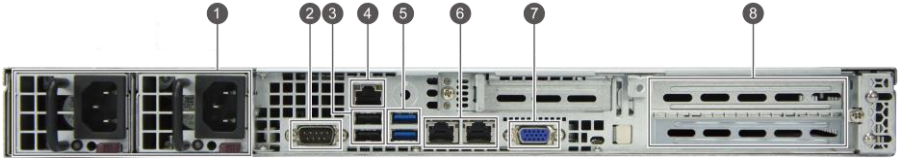


No.	Description	No.	Description
1	Unit Identifier Button (UID)	6	Power LED
2	Universal Information LED	7	Reset Button
3	LAN 1 LED	8	Power Button
4	LAN 2 LED	9	Hard Drive Signal
5	Device Activity LED	10	Hard Drive Failure

Universal Information LED Indications

Indication	Status
Fast Blinking Red (1x / 1 sec)	Fan Failure
Solid Red	CPU Overheat
Slow Blinking Red (1x / 4 sec)	Power Failure
Solid Blue	Local UID Button Depressed
Blinking Blue	IPMI-Activated UID




Back View – RS7130 / 7165 / RS7170 / RS7185 / RS7190



No.	Part Name	No.	Part Name
1	Redundant Power Supply	5	USB 3.0 x 2
2	COM 1 Port (for RS232 Controller)	6	LAN 1 & LAN 2 Ports
3	USB 2.0 x 2	7	VGA Port
4	IPMI	8	PCI-E Expansion Slots*

*Interface varies depending on different RS models.

Input Interface for Each RS Model

Model No.	Input Interface	
RS7130	HD-SDI/SD-SDI/IP/TS/File	
RS7165	4 Ch HDMI/Component/Composite/S-Video	
RS7170	4 Ch HDMI	

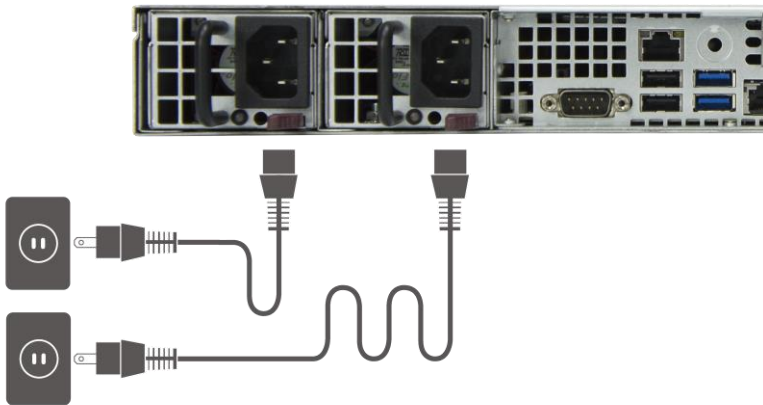
RS7185 4 Ch HD-SDI/SD-SDI or 2 Ch 3G-SDI



RS7190 4 Ch 3G-SDI/HD-SDI/SD-SDI

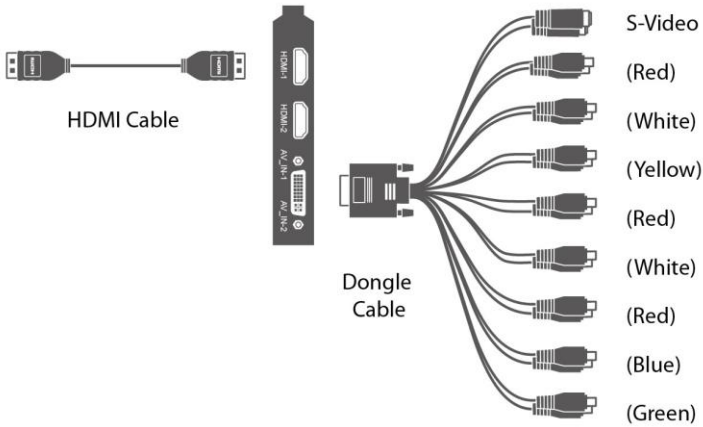


Power Supply Connection



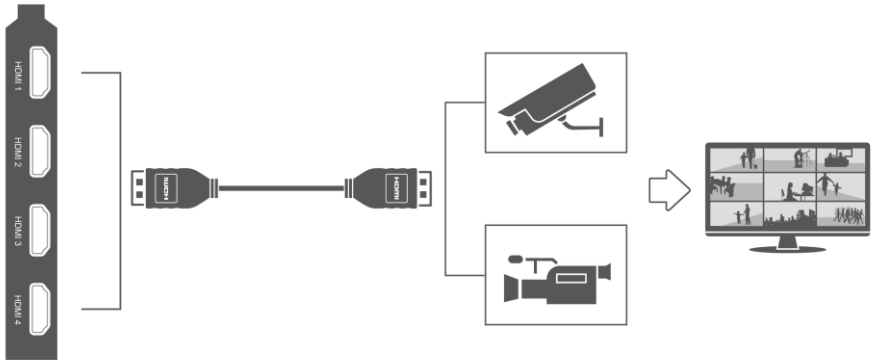
Input Source Connections – RS7165

HDMI / Component / S-Video / Composite



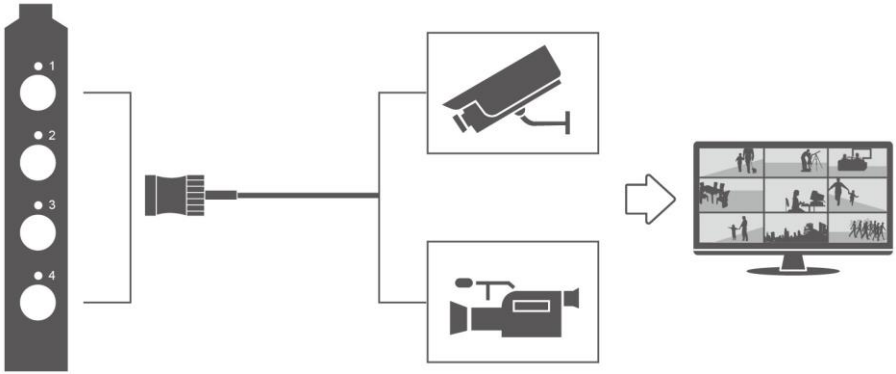
Input Source Connections – RS7170

HDMI



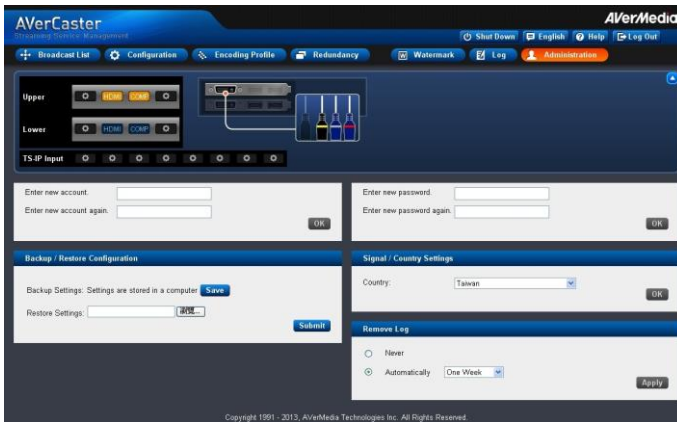
Input Source Connections – RS7185 / RS7190

HD-SDI / SD-SDI or 3G-SDI



Standard Operation Procedure for First Time Users

1. Log in to Windows with default account and password (**admin/admin**).
2. Open **AVerCaster Streaming Service Management** and log in with default account and password (**admin/admin**).
 - Access from remote desktop: type the IP address of the **AVerCaster Pro** server in the URL field and click enter, and then enter the default account and password.
3. Set up the country/region where **AVerCaster Pro** is located:
Click tab **Administration** and select the country/region where **AVerCaster Pro** is located.



4. Set up signals:
Click tab **Configuration** and set up the signal input and broadcast options.



Note: Supported signals and functions might vary depending on different models. Please refer to the Table of Contents on the next page for specific setup and operation steps.



Specifications

INPUT SIGNAL	
RS7165	HDMI / Component / S-Video / Composite
RS7170	HDMI
RS7185 / RS7190	3G-SDI / HD-SDI / SD-SDI
IP OUTPUT	
Output Interface	Dual Gb Ethernet Ports
Transmission Protocol	TS over TCP/ UDP/ UDP Multicast/ RTP/ RTP Multicast/ HTTP/ HTTP Live Streaming (HLS)/ FLV over HTTP/ RTMP Publish/ RTSP HLS PUSH/MPEG-DASH PUSH
VIDEO FORMATS	
Video Codecs	MPEG-2 / H.264 / H.263
Rate Control	CBR, ABR, VBR
Recommended Resolution	1920x1080, 1440x1080, 1760x990, 1600x900, 1280x720, 720x576, 704x576, 640x576, 544x576, 480x576, 352x576, 960x540, 864x486, 852x480, 720x480, 704x480, 640x480, 544x480, 480x480, 352x480, 640x360, 480x360, 384x288, 352x288, 480x270, 320x240, 320x180, 240x160, 176x144, 128x96, 96x96
Data Rate	H.264: 10 Kbps ~ 20 Mbps (1) MPEG-2: 10 Kbps ~ 40 Mbps
Entropy Mode	CAVLC/CABAC
Frame Rate	H.264: 10~60 fps MPEG-2: 25~60 fps
Key Frame Rate	5~300
AUDIO FORMATS	
Audio Codecs	AAC, MPEG-2 Audio, MP3, AMR
Sample Rate	8~48 KHz
Data Rate	16~320 Kbps
ADMINISTRATION & MONITORING	
Server Operation System	Windows 8 Embedded (64bit)
Administration	Build-in Web Server Browser Management
Monitoring	Support SNMP v1, SNMP v2
PHYSICAL & POWER	
Size	1RU
Dimensions	44mm (H) x 430mm (W) x 497mm (D)
Weight	10 Kg
Voltage	100~240 V, AC 60~50 Hz, 6-3 A
Power Consumption	300 W
Operation Temperature	0~40°C (32~104°F)
Storage Temperature	-20~60°C (-4~104°F)
Humidity Tolerance	10~85% at 40°C (104°F)

(1) It is highly recommended that set **10Mbps** (H.264) / **20Mbps** (MPEG-2) video data rate of HD video quality

Disclaimer

All the screen shots in this documentation are only example images. The images may vary depending on the product and software version. Information presented in this documentation has been carefully checked for reliability; however, no responsibility is assumed for inaccuracies. The information contained in this documentation is subject to change without notice.

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Made in Taiwan (except accessories).

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 **Important Safety Instructions**

1. Read these instructions.
2. Keep these instructions.
3. Follow all instructions.
4. Heed all warnings.
5. Do not use the apparatus on uneven or unstable surfaces.
6. Do not use this apparatus in a wet environment or near water.
7. Unplug the apparatus before cleaning. Clean only with a dry cloth.
8. Use in a well ventilated environment. Do not block any ventilation openings.
9. Use the apparatus in environments with ambient temperatures between 0°C (32°F) and 40°C (104°F).
10. Use power sources within the specified voltage range.
11. Do not place heavy objects on the apparatus.
12. Do not install near heat sources such as radiators or stoves.
13. Do not defeat the safety purposes of the polarized or grounding-type plug.
14. Protect the power cord from being walked on or pinched, particularly where the cord connects with plugs or adapters.
15. Only use the attachments and accessories specified by the manufacturer.
16. Unplug this apparatus during lightning storms or when unused for prolonged periods of time.
17. Do not modify or disassemble the apparatus in any way.
18. Refer all servicing to qualified personnel.
19. Do not dispose the apparatus as general household waste. Dispose in accordance with local environmental laws.

 **重要安全說明**

1. 仔細閱讀這些說明。
2. 妥善保存這些說明。
3. 遵守所有的指示。
4. 注意所有的警告。
5. 請勿將本產品安裝於不平穩的表面。
6. 請勿在潮濕或靠近水的地方使用本產品。
7. 清潔前請拔除電源。僅使用乾布清潔。
8. 請於通風的環境使用本產品。請勿堵住通風口。
9. 請在環境溫度介於 0°C (32°F) 至 40°C (104°F) 的範圍內使用本產品。
10. 請使用額定電壓範圍內的電源。
11. 請勿放置重物於本產品上。
12. 請勿安裝於熱源附近如暖器或火爐旁。
13. 請勿破壞極性或接地插頭的安全防護設計。
14. 請保護電源線，勿使其被踩踏或碾壓，特別是與插頭或變壓器的連接處。
15. 僅使用製造商指定的配件及零件。
16. 打雷或長時間不使用時請拔除電源。
17. 請勿以任何方式改造或拆解本產品。
18. 如需維修請洽合格維修人員。
19. 請勿當作家庭垃圾任意丟棄。請遵從當地環境法規妥善處理。

FCC Class A User Information

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Federal Communications Commission (FCC) Statement (Class A digital device)

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 own expense.

Changes and modifications not expressly approved by the manufacturer or registrant of the equipment could void your authority to operate the equipment under Federal Communications Commission rules.

BSMI Registration of Product Certification

R33183

VCCI Class A Mark

この装置は、クラスA情報技術装置です。この装置を家庭環境で使用すると電波妨害を引き起こすことがあります。この場合には使用者が適切な対策を講ずるよう要求されることがあります。

VCCI-A

Technical Regulations of the Customs Union

EMC Directive: TR CU 020/2011