

Products: SVC100 / SVC500

Firmware Version: v00.20.08.01

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Revision History and System Requirement

Firmware Version	Alias	Region	Date	Model
00.20.08.01		WW	Jan 8 th , 2021	SVC100 / SVC500
00.20.06.48		WW	Feb 7 th , 2020	SVC100 / SVC500
00.20.06.45		WW	Oct 4 th , 2019	SVC100 / SVC500
00.20.06.40		WW	Aug 16 th , 2019	SVC100 / SVC500
00.20.06.31		WW	Jan 19 th , 2019	SVC100 / SVC500
00.20.06.22		WW	Sep 19 th , 2018	SVC100 / SVC500
00.20.06.11		WW	Jun 21 st , 2018	SVC100 / SVC500
00.20.04.29		WW	Apr 29 th , 2018	SVC100 / SVC500



Important Notice

1. Both camera and codec have their own applications, and we will upgrade all or part of them each system upgrade, so please connect the default camera to your AVer VC system before upgrading it.
2. During system upgrade, please DON'T turn off the power or unplug the USB flash drive for any reasons.
3. WebTool doesn't support IE8 and older versions.
4. Downgrading firmware to older version is prohibited. (For Example: 02.xx -> 00.xx, 04.xx -> 02.xx, 06.xx -> 04)
5. In a video conferencing, we can't transmit both H.264 baseline and high profile videos at the same time. If a user only allows receiving H.264 high profile video but others choose H.264 baseline video, that user will receive no videos because our AVer VC system will only send H.264 baseline videos. To avoid such kind of embarrassment, we highly suggest users to enable H.264 baseline and high profile supports simultaneously.
6. In a video conferencing, we can't transmit both H.263 and H.263⁺ videos at the same time. If a user only allows receiving H.263⁺ videos but others choose H.263 videos, that user will receive no videos because our AVer VC system will only send H.263 videos. To avoid such kind of embarrassment, we highly suggest users to enable H.263 and H.263⁺ supports simultaneously.
7. Playback is not supported on SVC series when users try to play a video recorded by HVC series.
8. To improve WebRTC stability and compatibility, we change some fundamental encoding blocks, so any firmware older than 20.00.59 MUST upgrade to 20.00.99, and then latter firmware.
9. H.264 SVC will be applicable ONLY by bandwidth lower than 2Mbps and illuminance higher than 10lux.
10. Through Google Drive backup, AVer VC system can upload screenshots and recordings automatically when system is idle after one hour. File uploading could be interrupted by incoming video calls, and would not retransmit again.
11. Please refer the updated compatible list via the following link: <http://communication.aver.com/page/compatibility>
12. When Microsoft publishes a new version of MS-SIP, the source program material for Lync/Skype for Business, AVer will update the products' development components to support the new version. AVer will indicate which versions of Lync/Skype for Business are supported in this release note of known issue, according to system compatibility with MIS-SIP. AVer cannot guarantee functionality and compatibility for software versions not listed in this release note of known issue.
13. Upgrade new firmware to increase new feature, it's possible need to clear your browser's cookie temporary internal files for the Webtool feature fully displayed.



Upgrade Instructions

Before upgrade:

1. Prepare one USB flash drive with available spaces over 200MB.
2. Download the ZIP file from AVer website, unzip it and save the DAT file in the USB flash drive.

Tips: 1 files are included in the ZIP file – firmware. You can check the MD5 checksum of firmware (.dat) to make sure file integrity before you save it in the flash drive.*


File name	MD5 checksum
00.20.08.01.dat	55dca1d1555d7b5598f9f41099e60c83

Upgrade instructions:

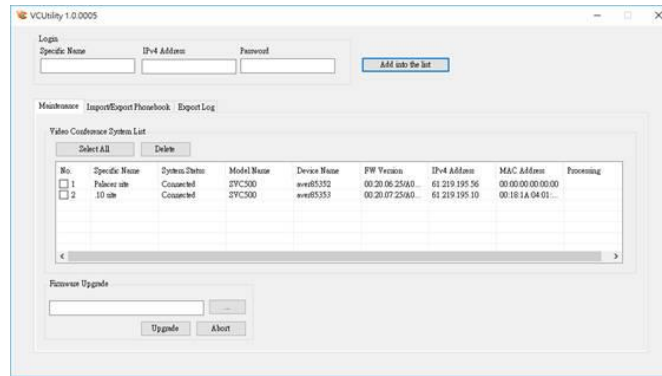
1. Turn on your AVer VC system and wait for system startup completion.
Tips: it will take 2 minutes to complete the whole startup process.
2. Insert the USB Flash drive into a USB Port of AVer VC System.
Tips: Inserting an USB flash drive into AVer VC system before completion of the startup process will result in startup failure, so please DON'T do it.
3. AVer VC system will detect and install the firmware from the USB flash drive automatically.
4. AVer VC system will restart itself to finalize firmware upgrade.
Tips: Before rebooting system, AVer VC system will delete firmware (.dat) in the USB flash drive.*
5. If the previous Firmware version is older than v00.20.00.59, please update firmware v00.20.00.99 before update the latest firmware.



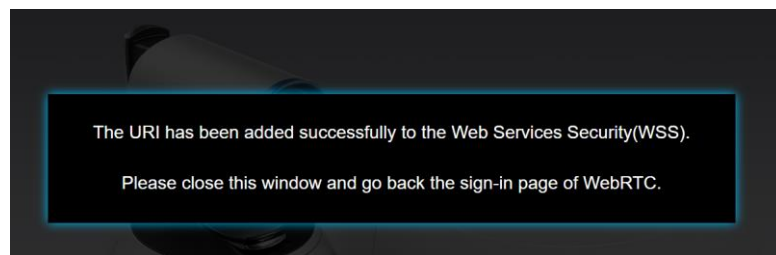
New Features

Firmware Version	New Features
00.20.06.48	1. Support RTMPS live streaming format: RTMPS live streaming on Facebook. 2. RTMP Layout Change v.2: The layout view of RTMP's live streaming will refer to the local monitor view.
00.20.06.45	1. Support recording format with .MP4: The default value is .vc Please go to General Setting -> System Settings -> Record Format-> .vc / .mp4 2. Quickly Switch Preset View Mode: You can short press the remote control number 0~9 for the call camera PTZ preset function quickly between SVC camera and 2nd HDMI camera (VISCA protocol). Please go to General Setting -> Camera -> Quickly Switch Preset View Mode.
00.20.06.40	1. Import SSL certificate function: It can authenticate the safety identity of WebRTC for your SVC, so SVC will not need to process a WSS authentication at the PC site. Please go to Network -> LAN Configuration -> Import SSL certificate .key file => Please import your SSLCertificateKeyFile (a private certificate key) .crt file => Please import your SSLCertificateFile (a digital certificate file)  2. [Applications] Network Condition Message: go to Settings -> General Setting -> System Settings. You can turn on/off the message of "Network condition is bad. Please adjust your bandwidth, and reconnect again."
00.20.06.31	1. Support VCUtility software: Please download this software from below link, or find this link from the AVer download center of EVC and SVC series. This app will allow you to <ol style="list-style-type: none"> a. Upgrade firmware on multiple units at once b. Import/export phonebook c. Export system logs http://communication.aver.com/DownloadFile.aspx?n=4710 95E67986-77E3-4F9E-ADD5-E84B0285193B&t=ServiceDownload

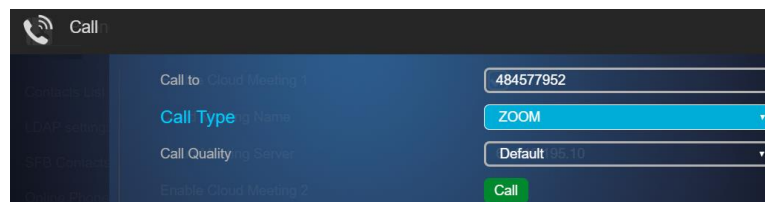




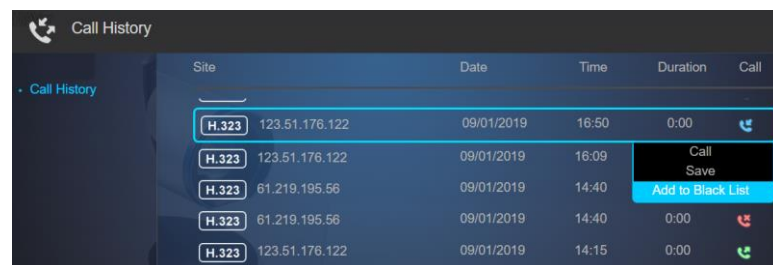
2. WebRTC WSS authentication: Add a page for WSS authentication confirmation, this page will judge whether to obtain the WebRTC URI authentication again due to the network environment changed.



3. 3rd-Party Cloud Meetings: For H.323 3rd-party cloud call function, after enabling this function, you can select 3rd-party cloud meeting from the call type list, and enter the "Meeting ID" at "Call to" column to connect the H.323 3rd-party cloud meeting. For example Zoom, Bluejeans, Trueconf... Please go to Phonebook > 3rd-Party Cloud Meetings


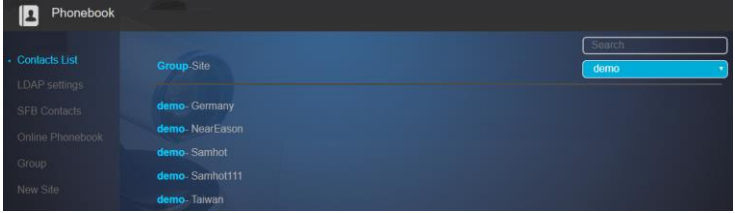



4. Blacklist management: To filter out specific IP and annoying Spam calls, you can add in blacklist list from the call history page. Please go to Phonebook > Blacklist management



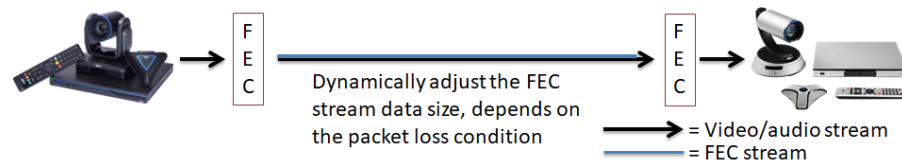
5. Favorite list: Six lists can be list show in OSD, you can easy view and hold down the number to make a quick call. Please go to Phonebook > Favorite > Show the notice on screen(0~5)



	 <p>You can setup this display time in General Setting > Monitor > PIP Display Time.</p> <p>6. Group search: Select your Group to filter the accounts of Group sites. Please go to Phonebook > Contacts List > Select Group</p>  <p>7. Add a hotkey of Call History in Dial page.</p> <p>8. Improve the LED light feedback time of microphone's mute/unmute.</p> <p><u>For more function info, please download User manual from the AVer download center.</u></p>
00.20.06.22	<p>1. [System] SVC main unit support IR signal control by the remote controller.</p> <p>2. [System] Support AVer VCAssist software (Android & iOS), VCAssist is the intelligent meeting mobile assistant for your AVer SVC100 and 500 series conferencing systems. For more information of AVer VCAssist, please visit the add-on software website http://communication.aver.com/Model/VCAssist</p>  <p>3. Improve the smoothness of UI operations.</p> <p>4. Support the quality and performance adjustment of Presentation / Video, you can set up "Quality First" or "Smoothness First". Please go to Settings > Video/Audio > Presentation/Video Quality settings.</p> <p>5. Support the user log-in in different devices with the same SFB account to connect with SVC.</p> <p>6. When the user VC connection with "Client to Client Call", AVer EZMeetup supports content sharing under behind of NAT network environment.</p>
00.20.06.11	<p>1. [System] Enhance the audio performance for superior voice clear and Acoustic Echo Cancellation (AEC).</p>
00.20.04.29	<p>1. [System] Update the latest version of OpenSSH.</p> <p>2. Support FEC (Forward Error Correction): To recover from commonly occurring bit-error</p>



cases and thus reduce the effective packet loss rate between AVer SVC / EVC series. Adds redundancy (FEC steam) to the transmitted data to allow the receiver to detect and correct errors (within some limits) without the need to resend any data. Please go to Settings > General Setting > System Setting > Enter FEC (Forward Error Correction)

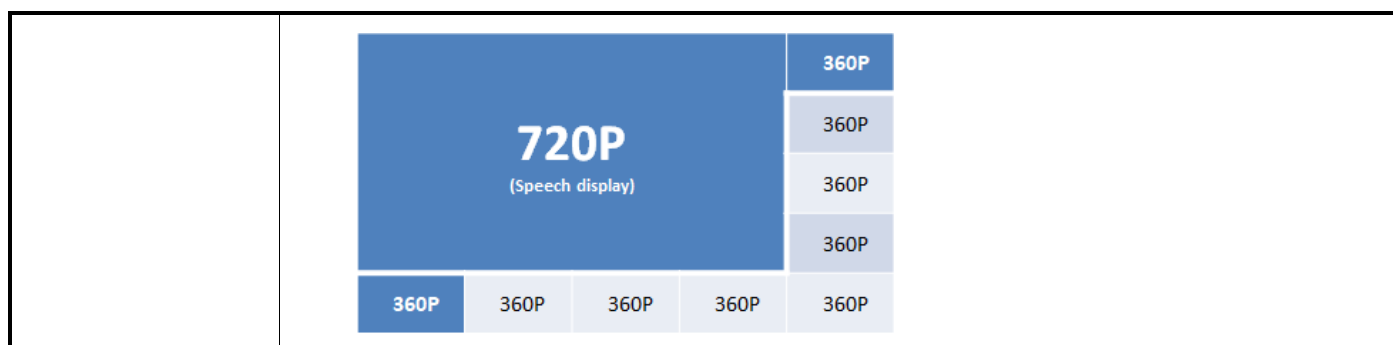


3. New WebRTC UI & Change a new WebRTC URI: More friendly use of interface, the admin can also change WebRTC URI. Please go to Network > WebRTC > Create a new WebRTC URI (Only in WebTool)



4. Support G.729 audio codecs: Because of its low bandwidth requirements, G.729 is mostly used in voice over Internet Protocol (VoIP) applications when bandwidth must be conserved, such as for conference call. Standard G.729 operates at a bit rate of 8k bit/s. Please go to Video/Audio > Audio codec > G.729
5. Support Google Drive auto-backup: Enter users' google account, SVC series can automatically upload recordings and screenshots to it. This feature is combined with group calling, and each group can have its google account. Please go to Phonebook > Group > New Group / Edit Group
6. Switching Layout display mode: The user can choose the layout display switch mode is Menu mode (Follow the menu content change the layout) or Rotation mode (Press the layout button change to next one layout).
7. Speech mode enhancement (disable Voice Activated Layout Adjustment): When SVC multipoint meeting over 4 sites, and also the connection site is AVer endpoint (EVC130 / EVC150 / SVC series) with H.323, the Speech display will support 720p resolution.





Problems Fixed

Firmware Version	Problem Fixed
00.20.08.01	<ol style="list-style-type: none"> 1. Preset hotkey function doesn't work in the far side mode 2. Compatibility with Cisco SX20 for BFCP Content Sharing 3. Improve DTMF Tone mechanism for Tandberg/4130 with H323 and SIP
00.20.06.48	<ol style="list-style-type: none"> 1. Support H323 name format with Chinese text for Polycom. 2. Compatibility with Tandberg 4136 for Content Sharing 3. Fixed: Send resolution 4CIF or 4SIF, the picture is on the top 4. Fixed: WebRTC URL cannot be displayed as a domain name
00.20.06.45	<ol style="list-style-type: none"> 1. Add a message of WebRTC Wait for Accepting Call at the WebRTC call site, to be informed that the SVC side is waiting for the answer. 2. Enhance the switching speed of MIC LED light of Mute / Unmute. 3. Add 360P resolution transmit the ability at SVC client site to improve the poor image which connecting 12 site~15 sites at SVC MCU site.
00.20.06.40	<ol style="list-style-type: none"> 1. Enable Standby mode at "client to client call". 2. Users can power-on the system through the SVC camera receiver.
00.20.06.31	<ol style="list-style-type: none"> 1. Improve the stability of Group call connection. 2. Improve the HDMI output screen of a specific system device with red highlights.
00.20.06.22	<ol style="list-style-type: none"> 1. The process of exporting the recording files to the USB flash drive is adjusted to avoid the failure of the export.
00.20.06.11	<ol style="list-style-type: none"> 1. When connecting content with HDMI input source, then unplug the HDMI source, the content display of SVC does not turn blue. 2. EVC130 connect to SVC with H.323/512kbps, EVC130 send out the content, and the content is only 3fps. 3. Voice Activated Layout Switch display function fail, to cause the display screen of the local sites or the speaker sites turns to black image. 4. The SVC with SIP protocol send the Broadcasting Messages by every 30 seconds.
00.20.04.29	<ol style="list-style-type: none"> 1. WebRTC system more stable.



	<ol style="list-style-type: none"> Compatibility SIP call connection with Cisco Expressway. Modify the path of the LDAP temporary file, to prevent the function failure when the file system is changed to Read Only.
00.20.00.99	<ol style="list-style-type: none"> The SVC SfB will automatically disconnect when SVC didn't get the video can audio from the far end SfB client. The SVC actual image was like as only 1fps when using H.264 SVC connection SfB. The SVC was set up in multiple server environment, once the user change the IP mode (ex. WAN<->LAN) will cause SIP dial call failed. When over 10 sites video conferencing plus RTMP features enable over 30 min, there will possible cause for SVC system restarting.
00.20.00.93	<ol style="list-style-type: none"> Camera blinking in Auto and 50Hz. Regularly detect SfB login status, to prevent automatic logout caused by the network problems.
00.20.00.85	<ol style="list-style-type: none"> The SVC cannot hear the AAC-LD audio codec from Cisco SX20 side. Max. 15 sites call list for the Group call feature. The content capture an image fail from AVer EZdraw collaboration software. The .VC recording file cannot change layout mode.
00.20.00.66	<ol style="list-style-type: none"> The number of frames is not stable, to cause in the screen is not smooth when camera doing PTZ function moving. During video conference, remove then plug DVI / VGA-in source, the other party to send content, SVC received content to the blue screen. Dual mode, the connection after the transfer content, open RTMP, RTMP screen no the content of the screen.
00.20.00.60	<ol style="list-style-type: none"> Content output black screen.

Known Issues

Firmware Version	Known Issues
00.20.08.01	<ol style="list-style-type: none"> Due to the hardware implement a new UART component, so this version firmware can't downgrade to the older version. (For Example: 08.01 -> 06.48) AES (Advanced Encryption Standard) and FEC (forward error correction) function can't work at the same time. Use WebRTC in Firefox browser (the latest version) connect to the SVC, when the SVC receive 720P 60Fps, turn off the camera screen of WebRTC and turn it on again, the camera screen will be frozen.
00.20.06.11	<ol style="list-style-type: none"> Due to SVC series implement new audio component, so this version firmware cannot downgrade to older version. (For Example: 06.11 -> 04.20) Please do not use the same SfB account log-in in SVC and other device



	<p>simultaneously.</p> <p>3. SVC Sfb log-in do not support Http-proxy, ADFS, SSO method. Please customer to set the SFB server to be independent at the outside of Http-proxy, ADFS, and SSO environment.</p>
00.20.04.29	<p>1. Due to SVC series implement new Nand-Flash component, so this version firmware cannot downgrade firmware to older version. (For Example: 04.29 -> 02.xx)</p>
00.20.02.08	<p>2. If the previous Firmware version is older than v00.20.00.59, please update firmware v00.20.00.99 before update the latest firmware.</p>
00.20.00.85	<p>1. Please don't upload SVC series phonebook file to EVC series, there will cause EVC series phonebook display abnormal error occurred.</p> <p>2. Only Skype for Business side can invite SVC side join the conference call meeting. SVC side cannot initiative request to join.</p> <p>3. In SVC side can see the skype for Business schematic diagram shows in the screen and hear the voice from Skype for Business side, in Skype for Business side can see SVC live video or content sharing streaming.</p>
00.20.00.59	<p>1. Can't support the presentation from SFB side.</p> <p>2. Can't support join to SFB group call (conference call) and be invited to enter SFB group call (conference call).</p> <p>3. Don't support ceiling mount application.</p>
-	<p>1. The following versions are tested functionality and compatibility for Skype for Business (Lync).</p> <p>Server : Lync 2013, Skype for business 2015</p> <p>Windows client : 15.0.4420 , 16.0.4417</p>

