

Release Notes

Model: SE-4000 Firmware Release Info

Mar. 12, 2026

Firmware Versions

- CTL v3.0.9
- Main Unit S/W v2.0.1.6

File name: SE_HS4000_MU_v2.0.1.6_CTL_v3.0.9 Firmware Update

Issues

1. Supported for KB version B new WRGB LED White Light.

HW/SW Matching Table

KB Version	After S/W v3.0.9	Before S/W v2.0.5
Version B	Use WLED for white (uniform)	Use RGB color mixing for white (with color difference)
Version A	Use RGB color mixing for white (with color difference)	

2. Supported for old CTL version's automatic reconnection with reduced speed in the condition of disconnection due to high temperature.
 - Added Conn Mode Network Settings UI: Supported 100/10Mbps switching. The default will be 100Mbps after upgrading.
 - When CTL B1 is disconnected due to high temperature, the device will reduce the speed to 10Mbps for reconnecting to prevent the disconnection issue.
 - CTL B2 will not disconnect even in high temperature situation, it will keep the 100Mbps speed. (However, if the network cable is removed manually, the speed incorrectly reduces to 10Mbps.)

P.S. The 100Mbps will reach faster responding speed in cases where there is a large volume of information updates such as showing thumbnail or loading user memory.

CTL B1/B2 and Different CTL S/W Matching Table

Item	CTL B1	CTL B2
Network Connection Capability	10Mbps (100Mbps can work normally only in low temp. condition. The threshold temp. for the disconnection due to high temperature will vary depending on different devices.)	100Mbps
Before CTL v1.6.6 (No 10/100Mbps option)	Fixed at 10Mbps	Fixed at 10Mbps
CTL v1.6.6A to v2.0.1 (10/100Mbps available in Engineering Mode)	Fixed at 10Mbps It's possible for disconnection due to high temperature.	Fixed at 100Mbps Best user experience
After CTL v3.0.9 (Added 10/100Mbps option, the default is 100Mbps.)	It's recommended to use 10Mbps for stable connection. (The default is 100Mbps, and it can operate normally during low temperature condition, if the disconnection situation is happened due to the high temperature, the device will switch to 10Mbps automatically for stable operation.	It's recommended to use 100Mbps for the best user experience. (if the speed is set to 10Mbps, you can switch it back to 100Mbps manually.)

Jan. 07, 2026

Firmware Versions

- CTL v2.0.1
- Main Unit S/W v2.0.1.6

File name: SE_HS4000_MU_v2.0.1.6_CTL_v2.0.1 Firmware Update

Issues

1.Fixed the HS-4000 Screen Flickering & Black Screen issues when switching to different resolutions. (For SE-4000, this situation will happen only when connecting to certain Monitor models).

Dec. 24, 2025

Firmware Versions

- CTL v2.0.1
- Main Unit S/W v2.0.1.4

File name: SE_HS4000_MU_v2.0.1.4_CTL_v2.0.1 Firmware Update

Issues

1. CTL V2.0.1 fixed the FTB issue related to the Factory Default reset.

Dec. 12, 2025

Firmware Versions

- CTL v2.0.0
- Main Unit S/W v2.0.1.4

File name: SE_HS4000_MU_v2.0.1.4_CTL_v2.0.0 Firmware Update

Issues

1. Fixed the disconnection issue when pressing "SETUP".

Dec. 02, 2025

Firmware Versions

- CTL v1.9.9
- Main Unit S/W v2.0.1.4

File name: SE_HS4000_MU_v2.0.1.4_CTL_v1.9.9 Firmware Update

Issues

1. Added "Channel Mode Selection: 8CH/12CH" for the Setup Menu.
2. 12CH Mode supports 12 Channel Inputs. The maximum supported Input/Output resolution is 4K30. Inputs 1-8 are fixed at SDI and Inputs 9-12 are fixed at HDMI (For Inputs 3-4 and Inputs 7-8, there is no SDI/HDMI Output Selection function).
3. The 12CH Mode can accept some 4K60/50 inputs; however, there is a limit on the quantity. If there are too many 4K60/50 inputs, the screen may show noise and fluctuations. We recommend that the resolutions of all inputs be set to not exceed 4K30 when testing 12CH Mode.
4. The CG Mode of the 12CH Mode is supported by the HDMI Inputs 9-12. Added 9-12 options for each Input source selection. In the specification, "Input 1-8(12)" is used to represent the difference of the 8CH/12CH options. The PIP x2 is limited to be used in Key 1 to Key 2.
5. Modified MV Presets 1-6 to allow a maximum of 8 or 12 inputs for each Preview.



6. For the maximum Audio Delay limitation of the 12CH Mode: Input Delay/Analog Delay will be 170ms (Halved). PGM Output Delay will be 340ms (the same).
7. Added Anti-aliasing filter for the 12CH Mode for improving the PIP and MV qualities. Please note that this Anti-aliasing filter function is not supported by the 8CH Mode, so the video quality is kept as the original quality.
8. Added a new Output Resolution 4K24/23.98 for the 8CH(The 12CH is not supported yet).
- 9.Improved the video quality for the 1080i and supported the Stinger special effects.
- 10.Modified the 1080p/1080i HDMI Inputs/Outputs Shifting issue to prevent the abnormal left and right vertical edges.
11. Improved the issue that the HDMI IN 4K25 will be detected as 4K60.
- 12.Added the support for the SE-50T model (for DVCN only) by switching the SW settings as the table below.

Models	MB SW6 Setting Values							
	1	2	3	4	5	6	7	8
SE-4000	ON	OFF	OFF	OFF	OFF	OFF	ON	OFF
HS-4000	ON	OFF	ON	OFF	OFF	OFF	ON	OFF
SE-50T	ON	OFF	OFF	ON	OFF	OFF	ON	OFF

Note: For SE-50T Production, the CTL must be set as the “SE-50T: Yes” by entering the Engineering Mode, and then the boot screen will be fixed at SE-50T.

The SE-50T MU PID is 100C, which is different to SE-4000/HS-4000’s PID, which is 1007.

The SET-50 CTL PID is 4002, which is the same as the CTL PID of the SE-4000/HS-4000.

13. OS v2.3: Fixed an issue where there was no display output after updating the system via a USB flash drive

upon power-up, which previously required a manual reboot. (It's no need for reburning if the OS version is v2.2)

Jul. 23, 2025

Firmware Versions

- CTL v1.6.6A
- Main Unit S/W v1.2.2.4

File name: SE_HS4000_MU_v1.2.2.4_CTL_v1.6.6A Firmware Update

Issues

1. For CTL v1.6.6A: Disable the log file writing function to prevent a disconnection issue that occurs when the file becomes full after 2-4 weeks of continuous operation (depending on usage frequency).
2. For Upgrader v2.0.3: Fixed the issue that for some network environments, the PC Utility can not upgrade the firmware correctly.

Oct. 31, 2024

Firmware Versions

- CTL v1.6.6
- Main Unit S/W v1.2.1.8

File name: SE_HS4000_MU_v1.2.1.8_CTL_v1.6.6 Firmware Update

Issues

1. Added SDI Out4 1080p/1080i downconversion function at 4K resolution.
 - 4K60-50: can be downconverted to 1080p60-50/1080i60-50
 - 4K30-25: can be downconverted to 1080p30-25. (If the 1080i is selected, there is no downconversion function, the output resolution will be the original 4K resolution.
 - 1080p/1080i: Output original resolution, no downscaling
2. Added OutConv = Off/1080p/1080i for supporting SDI Out4 4K downscaling function.
When 1080p/1080i is selected, if downscaling is supported, black is displayed; if downscaling is not supported, gray is displayed
3. For CTL Setup/KeyboardUI, the "Reset" button in the lower left corner is hidden to avoid the problem of not turning the scene when pressed.
4. Added the Split function to the lower right corner of the PIP menu for CTL. After pressing, the size/position/crop of PIP1/PIP2 will be adjusted and the PIP1/PIP2 will be shown as Left/Right layout in the PVW screen.
5. CTL's PIP/Crop/Soft default value is changed from 0.2 to 0.5, so that the PIP border can not be seen when the border is off.

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6. CTL supports LED color adjustment for new and old batches.
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Oct. 04, 2024

Firmware Versions

- CTL v1.6.3
- Main Unit S/W v1.2.1.2

File name: SE_HS4000_MU_v1.2.1.2_CTL_v1.6.3 Firmware Update

Issues

1. Added the Genlock function for supporting B.B and Tri-level sync Phase-Locking, including “Genlock=Off/On” and “H/V Phase” adjustments.
 2. Added function for modifying Netmask for the “Network” function.
 3. The CTL firmware fixed the issue for displaying the wrong OS version, which can be used for checking
 4. the SD Card OS version. Moreover, this firmware modified the issue that when restoring to factory default, the resolution will become 4K/60.
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Sept. 24, 2024

Firmware Versions

- CTL v1.6.2
- Main Unit S/W v1.2.1.2

File name: SE_HS4000_MU_v1.2.1.2_CTL_v1.6.2 Firmware Update

Issues

1. Added the Genlock function for supporting B.B and Tri-level sync Phase-Locking, including “Genlock=Off/On” and “H/V Phase” adjustments.
 2. Added the function for modifying the Netmask for the “Network”.
 3. The CTL firmware fixed the issue for displaying the wrong OS version, which can be used for checking the SD Card OS version.
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Aug. 15, 2024

Firmware Versions

- CTL v1.6.1
- Main Unit S/W v1.2.0.6

File name: SE_HS4000_MU_v1.2.0.6_CTL_v1.6.1 Firmware Update

Issues

For MU s/w 1.2.0.6

1. Fixed the issue that the SDI Out2 may have no picture problem on some motherboards for 4K60-50.
2. Remove the PIP size 50% limit, which can be increased to 100%. For 4K resolution, the total horizontal width of PIP1 and PIP2 cannot exceed 100%. If it does, PIP2 will be hidden. For resolutions below

1080P, there is no PIP2 hiding limit.

3. Supports Stinger transition and uses the new Clip compression format to speed up loading time and improve the jagged edges of the old format.

HD Clip: lmin -> 44s

4K Clip: 3 min -> 1m21s

Note: The Clip acceleration effect is only available after re-burning the 32GB SD card image or updating the material with the 16GB/32GB SD card booting from USB.

4. New Stinger transition has usage restrictions: will be improved in the future
1080p Clip can be used in 4K/1080p resolution, but not 1080i 4K Clip can be used in 4K resolution, but not 1080p/1080i.
5. Enlarged logo size: original size 480x 1080, new size 960x540.
6. Improved MV layout: The InpuVPGM/PVW pane has been enlarged and the frame lines have been made thinner to improve the problem of the screen edge being obscured, and the audio indicator display has been adjusted.
7. Fixed the 4K Still jaggedness
Fixed bugs #694,756: 4K CG/DSK jaggedness
Improved bug #747: PIP black border when Border = OFF, can set Crop Soft = 0.2-0.5% soft edge elimination.

For CTL v1.61

1. PIP Size: 50% -> 100%.
2. PIP position preview adjustment correction.
3. PIP Crop default value is improved from 0 to 0.2% to solve the borderline issue when border is turned off.
4. The Stinger function is supported.
5. Added Audio Mix function into the Audio Menu.
6. The network speed is automatically negotiated from 10Mbps to 100Mbps, and the problem with the display of still thumbnails is improved.

Note: For old software MU s/w v1.1.X.X or SD card before OS v2.1, you need to upgrade to s/w v1.2.0.6 first, then use USB to upgrade the material, and load the Clip to have the acceleration effect.

se4000_new_clips_logos_for_v1206_boot_install_os2.1fix.zip

Upgrade procedure:

1. Unzip the zip file to the root directory of the FAT32 USB drive

After decompression, you will see \Datavideo in the root directory

2. Insert the USB flash drive into the USB slot of the SE-4000/HS-4000 host and then turn it on. The material will be upgraded.

3. The upgrade time is about 3m40s ~ 4m0s. After completion, you will see the MV screen output, which means the upgrade is completed.

There is no screen output from the machine during the process. Please wait patiently. Do not turn off the machine or pull out the USB flash drive before it is completed.

4. Check if the logo has increased by 14,15, or loading HD Clip 13 can be completed in 44 seconds, which means the upgrade is successful.

Note: To prevent misuse of USB flash drives, only one upgrade can be done after decompression. To upgrade again, you need to decompress again.

The microSD of OS v2.1 will add file system repairs to avoid noise in the material and increase the upgrade time by 40 seconds.

May. 10, 2024

Firmware Versions

- CTL v1.5.6
- Main Unit S/W v1.1.1.3

File name: SE_HS4000_MU_v1.1.1.3_CTL_v1.5.6 Firmware Update

Issues

1. Fixed the issue for the disconnection between CTL and host. The CTL network speed will be decreased from 100Mbps down to 10Mbps to avoid high temperature caused by disconnection.
2. Fixed the issue that the switcher can not be powered-off after being burned in for 2 days.

March. 05, 2024

Firmware Versions

- CTL v1.5.0
- Main Unit S/W v1.1.1.3

File name: SE_HS4000_MU_v1.1.1.3_CTL_v1.5.0 Firmware Update

Issues

1. Fixed the error issue for the CTL DSK button and function.
2. Fixed the error issue for the CTL Key 1-4/DSK button and function.

3. Added the function that when the power is turned on, but the MU is not powered on, the CTL will try to establish the connection automatically for every 5 seconds. Fixed the issue that for the firmware version before the CTL v1.4.4, if the CTL is powered on at first and the MU is powered on later, the CTL and MU can not establish the connection automatically, users need to do the scan manually.

Feb. 02, 2024

Firmware Versions

- CTL v1.4.4
- Main Unit S/W v1.1.1.3

File name: SE_HS4000_MU_v1.1.1.3_CTL_v1.4.4 Firmware Update

Issues

1. Added CG Mode for HDMI Input for supporting 1080p input (4K is not supported).
2. The progress information is displayed in the upper left corner when loading Still/Ani-Logo/Clip.
3. Added Audio Mixer function for mixing input 1 to input 8 and external input audio sources randomly(The audio sources for PGM1-PGM8 can be set as "Follow" or "Audio Mixer".
4. The SDI OUT4 for the HS-4000 can be set freely, and it is not necessary to be set as PGM.
5. The Preset format for MV is increased from 1 set to 6 sets.
6. The DHCP fallback IP address is changed to "192.168.100.30". When the SE-4000 or HS-4000 is set in DHCP mode and no router is detected after the system is powered-on for 30 seconds, the IP address will jump to "192.168.100.30", which shares the same domain with CTL's fallback IP address "192.168.100.31" to optimize the connection and operation. If you connect the router afterward, the DHCP IP will be configured only when you restart the SE-4000/HS-4000
7. This firmware supported the sharing for 32G micro SD card image. There is no product ID saved in the SD
8. card, the SE-4000 or HS-4000 is set by using the SW6 only. The old 16GB micro SD card is also supported by setting the SE-4000 or HS-4000 by using the product ID which is saved within the SD card.
8. Fixed bugs.
9. The updated version of the PC Ethernet Update Tool is released for the SE-4000 & HS-4000.
 - Please run the Ethernet Update Tool "sehs4000_upgrader_v1.0.5.exe" or "sehs4000_upgrader_v1.0.5_win7_8.exe" according to your operating system.
 - Please enter the MU & CTL IP address. For Static IP mode, the factory default MU IP address is "192.168.100.101" and the factory default CTL IP address is "192.168.100.102". For DHCP mode, you can get the MU and CTL DHCP IP addresses when the MU and CTL are connected successfully by SE-4000 or HS-4000's Setup>Ethernet Menu. After that, you can enter the MU and CTL IP addresses into their blank column respectively.
 - Please select the combined MU & CTL zip file such as "se4000_MU_v1.1.1.3_CTL_v1.4.4.zip".

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- Please check the MU or CTL checkbox for updating the firmware. For the factory default, the MU and CTL checkboxes will be checked, but you can also check only MU or CTL if it is necessary.
 - After that, please press the “Upgrade” button. The firmware update tool will update the MU firmware first, and then the CTL firmware will be updated.
 - After the firmware is updated successfully, the HS-4000 will reboot automatically. For the SE-4000, you need to reboot the MU and CTL manually.
 - After the system is rebooted and reconnected, please go to “Setup>Software” to check whether the MU and CTL versions are updated successfully or not.
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Oct. 12, 2023

Firmware Versions

- CTL v1.4.0
- Main Unit S/W v1.0.2.5

File name: SE-4000 & HS-4000 CTL v1.4.0 & SW v1.0.2.5 Firmware Update

Issues

1. Improved the issue that when the HDMI OUT signal is connected to the TLM-170K monitor, it is possible to cause the oil painting or no-picture issue when turning on the power of the SE-4000 or switching between different resolutions.
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Oct. 02, 2023

Firmware Versions

- CTL v1.4.0
- USB v1.0.2.3

File name: SE-4000 & HS-4000 CTL v1.4.0 & SW v1.0.2.3 Firmware Update

Issues

1. Fixed the issue for HDMI OUT HV Sync Offset and Improved the HDMI OUT compatibility. (Improved the compatibility for DAC-9P 4K & HS-4000 built-in monitor with Murideo analyzer)
 2. Improved the noise issue for Audio 4K/1080p/1080i59.94/29.97Hz.
 3. Improved the issue that the SDI IN audio will be interrupted.
 4. Supported 1080i input/output and fixed the issues for MV display, PIP and Still image loading.
 5. Supported 4K input to downscale to 1080p/1080i output and to display in PIP mode.
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Apr. 13, 2023

Firmware Versions

- S/W v1.0.0.2

Issues

1. The Still 11 to 50 are changed. 7 sets of the virtualset angle are changed.
2. The Ani-Logo 11 to 40 are changed for removing some noises for the upper left corner.
3. Solved the horizontal line noise problem that occurs when some MB+VB combinations are loaded into Still on Input 1-4
4. Improved SDI Out stability.
5. Fixed the issue that when the SDI input is changing frame rate, the moving picture may see the problem of vertical cutting or jittering of the picture.
6. Fixed the ani-logo noise problem.
7. Fixed the issue for Saving Still noise.
8. Fixed the issue that when loading User mem containing Still pictures, if Still is already loaded, it will not be reloaded.