Project Malone

Hisense-Hisense

Release Notes for

FW 9.0.0.1661  
**MP** (50R6+ 2020 Model)

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Files Contained in This Release

|  |  |  |
| --- | --- | --- |
| **File name** | **Function** | **SHA1 Checksum** |
| 7551000204\_14\_malone\_9.0.0.1661-release-notes-hisense-hisense.docx | Release Notes | N/A |
| 7551000204\_14\_malone\_9.0.0.1661-hisense-hisense-X000-update.roku | USB Update for X000 | b803f61d2b80e4b1f2be8185edfa72f130d488d1 |
| 7551000204\_14\_malone\_9.0.0.1661-hisense-hisense-X001-update.roku | USB Update for X001 | 871415f98b8bda44a0598ae213db5a0e0261662a |
| 7551000204\_14\_malone-hisense-hisense-9.0001661A-MXIC\_MX30LF4G28A-FW-manufacturing-ecc.bin.gpg | Macronix NAND Image | e075a7480d76f2b0ef4be8b3ebce77d5e57cc2a9 |
| 7551000204\_14\_malone-hisense-hisense-9.0001661A-MXIC\_MX30LF4G28A-FW\_HisensePOSVideo2019\_UHD\_Demo-manufacturing-ecc.bin.gpg | Macronix NAND Image with POS | 7068391648c354e31e5483295a027cf651b05e97 |
| 7551000204\_14\_malone-hisense-hisense-9.0001661A-TSH\_TC58NVG2S0H-FW-manufacturing-ecc.bin.gpg | Toshiba NAND Image | 949c131534e151424bd05419adaf0a42f5076540 |
| 7551000204\_14\_malone-hisense-hisense-9.0001661A-TSH\_TC58NVG2S0H-FW\_HisensePOSVideo2019\_UHD\_Demo-manufacturing-ecc.bin.gpg | Toshiba NAND Image with POS | d0c8b9f6cde5c627efbae784eafe7e6e1599d749 |

Important Release Information

**Firmware version: 9.0.0.16****61**

This FW release has been qualified for the following Hisense Malone RokuTV models:

**MP Hisense Hisense** (50R6+ 2020 Model)

**Related changes FW 9.0.0.16****61**

* [MALONE-3372](https://jira.portal.roku.com:8443/browse/MALONE-3372) Upgrade PM, Gamma and PMGamma IC's binaries using single i2c command
* [HISMA-1985](https://jira.portal.roku.com:8443/browse/HISMA-1985): [Hiesnse Malone] Improve panel timing for 43/55R6
* [MSTAR-4940](https://jira.portal.roku.com:8443/browse/MSTAR-4940): [Malone] - Jagged image shows on game mode after reboot in AV input

**Known Issue in FW 9.0.0.1661**

* [HISMA-1](https://jira.portal.roku.com:8443/browse/HISMA-1620)620: [Hisense-Malone]When the network cable(网线) is pulled out, the TV crashes.
* [MALONE-3620](https://jira.portal.roku.com:8443/browse/MALONE-3620): Malone His His - Green artifact flashes when changing Tuner channels (only appears on MFG apps)

Models Targeted in this Release

The following table details the models for **MP** FW version 9.0.0.1661 release

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **ID** | **S** | **Panel Model** | **PCBA ID** | **Roku PID** | **Roku Model** | **Available Regions** | **Model Name** | **OEM Model Name** | **Hisense Chassis Model** |
| 63 | A | CHOT: CV500U2-T01 | 9221 | S073 | C222X | Gilmer | 50R6+ | 50R6E3 | [X1] HU50A6109FUWR |
| 64 | A | CHOT: CV500U2-T01 | 9221 | S074 | C223X | CA | 50R6+ | 50R610 | [X1] HU50A6109FUWR |

Functional Features

* HDMI Ports – ARC / CEC / EDID / HDCP1.4/2.2
* Composite – Video / Audio
* USB Player - Video / Audio / Photos
* Audio Out – Speakers / Headphone / Lineout / SPDIF
* Advance Video - Dolby Vision / HDR
* Advance Audio – DTS
* Remote – IR / RF
* Coaxial – NTSC / ATSC / QAM
* Networking – Ethernet / Wi-Fi
* Fast Boot – Display off / Suspend to RAM

HDCP1.4 and 2.2 Key Flashing Instructions

Both HDCP 1.4 and 2.2 keys must now be programmed on factory line for HDMI to function. As MFG app is still in development, clear text HDCP1.4 and Hisense HDCP2.2 can be programmed using steps below.

1. Prepare USB key with HDCP1.4 binary renamed to “hdcp14rxkey.bin”(304 Bytes) and HDCP2.2 binary renamed to “hdcp22rxkey.bin”(1,044 Bytes).
2. When TV boots up and at Roku Home Screen, then insert USB Key.
3. Go to HDMI Secret Screen by pressing Roku RC Home X5, Down, Left, Up, Up, Up.
4. Once in HDMI Secret Screen, select “Program HDCP 1.4 Rx Key”.
5. Window prompt should show success. (If failed to detect file, unplug USB, reboot TV and attempt again)
6. Next, select “Program HDCP 2.2 Rx Key”.
7. Window prompt should show success. (If failed to detect file, unplug USB, reboot TV and attempt again)
8. Reboot TV and verify same HDMI Secret Screen indicates keys were programmed.

Roku FW Partition Flashing Instructions

These instructions can be used to update firmware on existing TV’s with LLAT.

1. Prepare USB key with acramfs and romboot files. (decrypt gpg firstly)
2. Rename “malone-9.0.0.1XXX-hisense-hisense-acramfs.bin” to acramfs.bin
3. Rename “malone-9.0.0.1XXX-romboot.bin” to romboot.bin
4. Transfer both acramfs and romboot binary to USB drive and connect to TV.
5. Press and hold TV back panel reset button for 10 seconds or until LED indicator starts blinking.
6. Wait for TV to reboot and confirm correct FW version in about screen.(TV should not factory reset if performed correctly)

**Note: On whitelisted HW, the following command can be used to update FW.**

* # rokuflash usb boot romboot.bin
* # rokuflash usb Update acramfs.bin

Update Firmware via USB update.roku Instruction

**CAUTION:** Depending on MSTAR T22 ESN, the corresponding X000 or X001 update.roku file must be used. Note that Hisense EVT and DVT1 HW may still show Y4 or Y5 ESN and will need to perform incremental update first.

1. Navigate to TV about screen and review if ESN starts with X000 or X001.
2. Download only the corresponding malone-9.0.0.1303-X00#-update.roku for the unit to be updated onto a USB thumb drive.
3. Insert USB drive into TV and launch Hisense Factory App. (HOMEx5, RWDx2, FFx2, PLAY)
4. Bring up factory menu and select USB update (Use Netflix key on Roku Remote).
5. TV should start updating from 0% - 100% and then reboot to new FW.(Check About Screen)
6. If update fail to start, recheck network can reach outside internet. (Need for authentication)

Setting Project ID via USB drive

Steps below are to set RokuTV project ID via USB. Firmware **MUST be in MFG** mode for this to function. It will not take affect if in APP mode.

1. Create an empty file called “project\_id.roku”
2. Add the following line to the file in example below.

Ex. project\_id.roku

|  |
| --- |
| { "project\_id":7} |

1. Above example will set TV to project ID “7”(55R6E1) but can be modified to Hisense needs.
2. Place project\_id.roku into root of USB drive and insert it into RokuTV.
3. Reboot TV and confirm panel correctly comes up.

Setting Project ID via UART Serial Com

During initial system bootup in MFG mode, FW will ping PC over serial UART. If no valid message is replied, TV will continue with normal boot sequence and to project ID 0 in Vx1(58”R6). If serial handshake on PC follows [HISMA-35](https://jira.portal.roku.com:8443/browse/HISMA-35), project ID can be set on factory line. Once a valid project ID is set, FW will proceed to boot with corresponding Gamma and PMU IC binary programmed (For P2P unit only). Firmware **MUST be in MFG** mode for this feature to be enabled.

General Release Statement

This firmware release is only approved for **MP** of the Hisense Hisense (50R6+ 2020 Model)

**End of Release Notes**