



mObridge → MOST25 8.1.1 Amplifier → Firmware Release Notes

## Latest Firmware for mObridge MOST25 8.1.1 Amplifier:

<b>Version</b>	0.8.6
<b>Release Date</b>	28 <sup>th</sup> May 2024
<b>Changes</b>	
<ul style="list-style-type: none"> <li>• Fixing intermittent startup issue where some channels were either low in gain, or not audible at all.</li> <li>• Add better DRC support for subsonic frequencies.</li> <li>• Numerous fixes for static white noise issue, including task priority rearranging, reduction of amp base read poll time, reorder serial port initialization/deinitialization, addition of delays, remove optimizations from beep file playback, additional underflow and overflow checking for the DMA.</li> <li>• Reinstating faster SPI clocking speed for flash memory communications.</li> <li>• Additional DSP resync call on restart, for further DMA synchronization safety.</li> <li>• Ensure no biasing of amp power levels until confirmed on state.</li> <li>• Slow down power ramping to better handle longer power cabling setups.</li> <li>• Re-calibrating all speaker gain levels to ensure 0 dB throughput at 0 dB level on mObridge DSP, for stereo and mono inputs, and for woofer and subwoofer channels types.</li> <li>• Fixing incorrect channel mute status for some channels in between restarts.</li> <li>• Increase debug TX buffer length to ensure entire startup log is retained upon USB connection.</li> <li>• Fixing Porsche PCM3.1 preset switching incorrectly on headunit volume changes.</li> <li>• Fixing regression where MOST shutdown message was preventing the remote amplifier enable signal from being enabled.</li> <li>• Fixing missing LR G2 preset selection via headunit.</li> <li>• Add amplifier logging to the console by default, to ensure power events are always logged.</li> <li>• Add ability to view amplifier logged fault counts.</li> <li>• Store time alignment distances per-preset, to ensure values are remembered on re-connection to mObridge DSP.</li> <li>• Re-calibrate single ended output levels at the DAC to ensure premature clipping does not occur.</li> </ul>	

### Updating Your Firmware

Your mObridge MOST25 8.1.1 Amplifier is fully firmware updatable and can be updated in the following ways:

#### Via mObridge DSP:

Download and install mObridge DSP from [mObridge.us/mObridge-dsp-pc-application](https://mObridge.us/mObridge-dsp-pc-application)

#### Via mObridge Updater:

Download and install mObridge Updater from [mObridge.us/firmware-update/](https://mObridge.us/firmware-update/)

Refer to our website at [mObridge.us](https://mObridge.us) for further information.

## Past Firmware Versions

<b>Version</b>	0.8.1
<b>Release Date</b>	25 <sup>th</sup> January 2024
<b>Changes</b>	
<ul style="list-style-type: none"> <li>• Further fixes for turn off/on pops.</li> <li>• Prevent false OTW protection at startup.</li> </ul>	

<b>Version</b>	0.8.0
<b>Release Date</b>	16 <sup>th</sup> January 2024
<b>Changes</b>	
<ul style="list-style-type: none"> <li>• Further fixes for turn off/on pops.</li> <li>• Fixing inability to recover from over-temperature warning gain reduction.</li> <li>• Fixing center channel up-mixing occasional periodic tick.</li> </ul>	

<b>Version</b>	0.7.15
<b>Release Date</b>	4 <sup>th</sup> January 2024
<b>Changes</b>	
<ul style="list-style-type: none"> <li>• Handle MOST shutdown message for all vehicles, ensure local amplifier controller powers down.</li> </ul>	

<b>Version</b>	0.7.14
<b>Release Date</b>	2 <sup>nd</sup> January 2024
<b>Changes</b>	
<ul style="list-style-type: none"> <li>• Fix intermittent issue where post firmware update reset command fails.</li> <li>• Fixing introduced inability to live tune channel gains on some channels.</li> </ul>	

<b>Version</b>	0.7.13
<b>Release Date</b>	14 <sup>th</sup> December 2023
<b>Changes</b>	
<ul style="list-style-type: none"> <li>• Revert to 32-bit streamlined mono channels. Improves volume, reduces noise.</li> <li>• Lower input volume at which power rail voltage biasing begins.</li> </ul>	

<b>Version</b>	0.7.12
<b>Release Date</b>	11 <sup>th</sup> December 2023
<b>Fixes</b>	
<ul style="list-style-type: none"> <li>• Lower boosted voltage biasing volume to better ensure high power channels can keep up when varying voltage.</li> <li>• Reinstate center-channel up-mix algorithms, including ADP.</li> <li>• Fixing center-channel clicking artifact.</li> <li>• Fixing BMW maximum volume cut-out issue.</li> <li>• Fixing audible pops on channel mute/unmute.</li> </ul>	

<b>Version</b>	0.7.9
<b>Release Date</b>	17 <sup>th</sup> November 2023
<b>Fixes</b>	
<ul style="list-style-type: none"> <li>• Reinstate higher idle boosted rail voltage to 24V. This is needed for the pre-out remote out to work properly.</li> <li>• Fixing issue pertaining to centre channel artifacts.</li> </ul>	

<b>Version</b>	0.7.8
<b>Release Date</b>	15 <sup>th</sup> November 2023
<b>Fixes</b>	
<ul style="list-style-type: none"> <li>• Lower under-voltage protection threshold, and low-power mode setting to account for battery voltage dips during vehicle stop-start.</li> </ul>	

<b>Version</b>	0.7.7
<b>Release Date</b>	25 <sup>th</sup> September 2023
<b>Fixes</b>	
<ul style="list-style-type: none"> <li>• Minor fixes for SPI flash device flash verification.</li> </ul>	

<b>Version</b>	0.7.6
<b>Release Date</b>	20 <sup>th</sup> September 2023
<b>Fixes</b>	
<ul style="list-style-type: none"> <li>• Fixing incorrect gain offset reset to zero when reducing input volume rapidly.</li> <li>• Allow device to stay awake when only USB is plugged in (no MOST).</li> </ul>	

<b>Version</b>	0.7.5
<b>Release Date</b>	19 <sup>th</sup> September 2023
<b>Fixes</b>	
<ul style="list-style-type: none"> <li>• Update amplifier controller to tip of master branch</li> <li>• Addition of fault-state hiccup'ing</li> <li>• Correcting channel limiter (DRC) peak reference voltage to 5.6V</li> <li>• Fixing large pop when performing firmware update or factory reset.</li> <li>• Reduce gains dynamically when over-temperature warning occurs.</li> <li>• Corrections to reset the 0dB gain levels, fixes for gain scaling.</li> <li>• Fixing issue pertaining to center-channel default mixing algorithm.</li> <li>• Some DSP profiling performance improvements.</li> </ul>	

<b>Version</b>	0.7.1
<b>Release Date</b>	15 <sup>th</sup> August 2023
<b>Fixes</b>	
<ul style="list-style-type: none"> <li>• Update amplifier controller to allow power rail offset via vehicle stereo input volume.</li> <li>• Add fade-out of audio when selecting presets.</li> <li>• Remove preset switch notify to head-unit on MOST, as this interferes with audio fade-in/out on preset switching.</li> <li>• Improvements to reduce the likelihood of pops when resetting the system.</li> </ul>	

<b>Version</b>	0.7.0
<b>Release Date</b>	9 <sup>th</sup> May 2023
<b>Fixes</b>	
<ul style="list-style-type: none"> <li>• Additional boosting to stereo source.</li> <li>• Amplifier power booster has a much faster response time, reducing the potential to clip</li> <li>• Vast reduction of startup/shutdown speaker pops.</li> <li>• Fixing pops on firmware update.</li> <li>• Fixing factory default channel mapping</li> <li>• Fixing centre-channel upmix inavailability.</li> </ul>	

<b>Version</b>	0.6.4
<b>Release Date</b>	8 <sup>th</sup> August 2022
<b>Fixes</b>	

- Additional 6dB boost to input sources.
- Fixing the amplifier controller firmware booster voltage ramping.
- Performance enhancements for Mercedes-Benz NTG vehicles.

<b>Version</b>	0.6.2
<b>Release Date</b>	5 <sup>th</sup> August 2022
<b>Fixes</b>	
<ul style="list-style-type: none"> <li>• Fixing communication issues with baseboard amplifier firmware.</li> </ul>	

<b>Version</b>	0.6.0
<b>Release Date</b>	24 <sup>th</sup> June 2022
<b>Fixes</b>	
<ul style="list-style-type: none"> <li>• Fixing incorrect L/R input mismatch.</li> <li>• Experimental 16-bit streamlined processing.</li> <li>• Vastly improve the FFT resolution.</li> <li>• Major performance improvements to the DSP core.</li> </ul>	

<b>Version</b>	0.5.18
<b>Release Date</b>	25 <sup>th</sup> May 2022
<b>Fixes</b>	
<ul style="list-style-type: none"> <li>• Frequency response correction implemented.</li> <li>• Rework Jaguar, Land Rover G2 volume mapping to have more range.</li> <li>• Additional support for Jaguar vehicles requiring two MOST25 amplifier instances.</li> <li>• Fixing Audi MMI3G subwoofer regression issue.</li> </ul>	

<b>Version</b>	0.5.15
<b>Release Date</b>	7 <sup>th</sup> April 2022
<b>Fixes</b>	
<ul style="list-style-type: none"> <li>• Addition of Dynamic Range Compression (DRC).</li> <li>• Addition of per-channel user-set limits.</li> <li>• Addition of feedback channel RMS values to mObridge DSP.</li> <li>• Extend Maximum IIR Biquad points to 16.</li> </ul>	

<b>Version</b>	0.5.12
<b>Release Date</b>	31 <sup>st</sup> August 2021
<b>Fixes</b>	
<ul style="list-style-type: none"> <li>• Update amplifier controller firmware to resolve issues with voltage spikes at startup.</li> <li>• Fixing issues with MOST ConfigNok message causing no audio.</li> </ul>	

<b>Version</b>	0.5.11
<b>Release Date</b>	7 <sup>th</sup> July 2021
<b>Fixes</b>	
<ul style="list-style-type: none"> <li>• Fixing MDI null app name issue.</li> </ul>	

<b>Version</b>	0.5.10
<b>Release Date</b>	5 <sup>th</sup> July 2021
<b>Fixes</b>	
<ul style="list-style-type: none"> <li>• Fixing potential stack overflow issue regarding DSP core.</li> </ul>	

<b>Version</b>	0.5.9
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<b>Release Date</b>	16 <sup>th</sup> June 2021
<b>Fixes</b>	
<ul style="list-style-type: none"> <li>• Adding explicit Toyota Supra vehicle support for mObridge DSP and mObridge Updater</li> <li>• Fixing various BMW issues related to multichannel audio, ignition, and turn on/off time.</li> <li>• Fixing issue with corrupted NVM regarding improper boundary checks on input delay field.</li> </ul>	

<b>Version</b>	0.5.8
<b>Release Date</b>	8 <sup>th</sup> June 2021
<b>Fixes</b>	
<ul style="list-style-type: none"> <li>• Major optimizations for baseboard power control module to enable vastly lower operating temperatures.</li> <li>• 6dB boost to all mono channels to address quiet phone, nav, chimes, pdc audio.</li> </ul>	

<b>Version</b>	0.5.6
<b>Release Date</b>	24 <sup>th</sup> May 2021
<b>Fixes</b>	
<ul style="list-style-type: none"> <li>• Fixing incorrect tick time in back-end amp controller service.</li> </ul>	

<b>Version</b>	0.5.5
<b>Release Date</b>	24 <sup>th</sup> May 2021
<b>Fixes</b>	
<ul style="list-style-type: none"> <li>• Remove master, head-unit, and other EQ influences from subwoofer-assigned speakers, such that they are totally EQ'ed by their respective channel EQs.</li> </ul> <p>NOTE: This release decreases subwoofer attenuation, thereby increasing default subwoofer gain.</p>	

<b>Version</b>	0.5.4
<b>Release Date</b>	14 <sup>th</sup> May 2021
<b>Fixes</b>	
<ul style="list-style-type: none"> <li>• Removing unneeded attenuation on output codecs.</li> <li>• Fixing BMW loopback echo issue.</li> <li>• Fixing broken fade/balance controls in Aston Martin.</li> <li>• Fixing Porsche PCM3.x phone echo issue.</li> <li>• Fixing improper reset of input delay in NV.</li> </ul> <p>NOTE: This release vastly improves output gain range.</p>	

<b>Version</b>	0.5.3
<b>Release Date</b>	26 <sup>th</sup> February 2021
<b>Fixes</b>	
<ul style="list-style-type: none"> <li>• Fixing Audi MMI3G head-unit preset selection control.</li> <li>• Fixing Audi MMI3G head-unit subwoofer gain control.</li> </ul>	

<b>Version</b>	0.5.0
<b>Release Date</b>	5 <sup>th</sup> February 2021
<b>Fixes</b>	
<ul style="list-style-type: none"> <li>• Initial stable release</li> </ul>	