



mObridge → A2B Ford 8.1.1 Amplifier → Firmware Release Notes

## Latest Firmware for mObridge A2B Ford 8.1.1 Amplifier:

<b>Version</b>	0.7.1
<b>Release Date</b>	2 <sup>nd</sup> April 2024
<b>Changes</b>	<ul style="list-style-type: none"><li>• Revert added support for AUTOSAR messaging, provides fix for the potential for the head unit to be held up, and intermittent parking sensors.</li></ul>

### Updating Your Firmware

Your mObridge A2B Ford 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>	0.7.0
<b>Release Date</b>	25 <sup>th</sup> March 2024
<b>Changes</b>	
<ul style="list-style-type: none"> <li>Additional fixes for occasional white static noise issue.</li> </ul>	

<b>Version</b>	0.6.19
<b>Release Date</b>	20 <sup>th</sup> March 2024
<b>Changes</b>	
<ul style="list-style-type: none"> <li>Reinstating faster SPI clocking speed for flash memory communications.</li> <li>Additional DSP resync call on restart, for further DMA synchronization safety.</li> </ul>	

<b>Version</b>	0.6.18
<b>Release Date</b>	18 <sup>th</sup> March 2024
<b>Changes</b>	
<ul style="list-style-type: none"> <li>Fixing rare issue where unit never powers off entirely.</li> <li>Possible fix for unexpected volume ramps when changing sources (stereo to reversing beeps, etc.)</li> <li>Remove streamlining as it is not required for the Ford products where full DSP and time align are present.</li> </ul>	

<b>Version</b>	0.6.17
<b>Release Date</b>	14 <sup>th</sup> March 2024
<b>Changes</b>	
<ul style="list-style-type: none"> <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>Rework sub-woofer control via head unit bass control. Now acts as an offset to current sub-woofer assigned channel gains.</li> </ul>	

<b>Version</b>	0.6.11
<b>Release Date</b>	22 <sup>nd</sup> February 2024
<b>Changes</b>	
<ul style="list-style-type: none"> <li>Added delay after releasing codec reset to ensure enough time for audio clocks to be present.</li> <li>Added failsafe to ensure that the amplifier baseboard cannot power up without A2B clocks present.</li> </ul>	

<b>Version</b>	0.6.10
<b>Release Date</b>	20 <sup>th</sup> February 2024
<b>Changes</b>	
<ul style="list-style-type: none"> <li>Correctly update the SVC level in the headunit when preset is changed via mObridge DSP</li> <li>Reallow AUTOSAR messaging to ensure volume reply message.</li> <li>Ensure no biasing of amp power levels until confirmed on state.</li> </ul>	

<b>Version</b>	0.6.8
<b>Release Date</b>	9 <sup>th</sup> February 2024
<b>Changes</b>	
<ul style="list-style-type: none"> <li>Reinstate streamline processing, performance improvements for mono stream processing.</li> <li>Fixing incorrect volume after factory reset.</li> </ul>	

<b>Version</b>	0.6.7
<b>Release Date</b>	7 <sup>th</sup> February 2024

Changes	
	<ul style="list-style-type: none"> <li>Slow down power ramping to better handle longer power cabling setups.</li> </ul>

<b>Version</b>	0.6.6
<b>Release Date</b>	6 <sup>th</sup> February 2024
Changes	
	<ul style="list-style-type: none"> <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> </ul>

<b>Version</b>	0.6.5
<b>Release Date</b>	24 <sup>th</sup> January 2024
Changes	
	<ul style="list-style-type: none"> <li>Reduce re-introduced amp power on/off pops.</li> </ul>

<b>Version</b>	0.6.4
<b>Release Date</b>	24 <sup>th</sup> January 2024
Changes	
	<ul style="list-style-type: none"> <li>Remove streamline processing from mono channels to fix rare audio distortion when switching between phone and media sources.</li> </ul>

<b>Version</b>	0.6.3
<b>Release Date</b>	18 <sup>th</sup> January 2024
Changes	
	<ul style="list-style-type: none"> <li>Fixing center channel up-mixing occasional periodic tick.</li> </ul>

<b>Version</b>	0.6.2
<b>Release Date</b>	16 <sup>th</sup> January 2024
Changes	
	<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>Adding support for R4 baseboards.</li> </ul>

<b>Version</b>	0.6.0
<b>Release Date</b>	12 <sup>th</sup> January 2024
Changes	
	<ul style="list-style-type: none"> <li>Fixing startup/shutdown pops by ensuring that the amplifier is not started until the head unit directs it to on CAN.</li> </ul>

<b>Version</b>	0.5.3
<b>Release Date</b>	28 <sup>th</sup> December 2023
Changes	
	<ul style="list-style-type: none"> <li>Fixing inability to change channel gain live with mObridge DSP.</li> <li>Fixing occasional failure to perform firmware update.</li> </ul>

<b>Version</b>	0.5.2
<b>Release Date</b>	21 <sup>st</sup> December 2023
Changes	
	<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> </ul>

- Reinstate center-channel up-mix algorithms, including ADP.
- Fixing center-channel clicking artifact.
- Fixing audible pops on channel mute/unmute.
- Reinstate higher idle boosted rail voltage to 24V. This is needed for the pre-out remote out to work properly.
- Fixing issue pertaining to centre channel artifacts.
- Making head-unit bass control the sub channels by default. An option to revert this back to regular bass control will come in a future update.

<b>Version</b>	0.5.0
<b>Release Date</b>	1 <sup>st</sup> December 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> <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>• Improvements to reduce the likelihood of pops when resetting the system.</li> <li>• Lower under-voltage protection threshold, and low-power mode setting to account for battery voltage dips during vehicle stop-start.</li> <li>• Minor fixes for SPI flash device flash verification.</li> </ul>	

<b>Version</b>	0.4.1
<b>Release Date</b>	4 <sup>th</sup> October 2023
<b>Fixes</b>	
<ul style="list-style-type: none"> <li>• Add missing amp controller power modes.</li> </ul>	

<b>Version</b>	0.4.0
<b>Release Date</b>	28 <sup>th</sup> September 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>• Improvements to reduce the likelihood of pops when resetting the system.</li> <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> <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 A2B).</li> <li>• Minor fixes for SPI flash device flash verification.</li> </ul>	

<b>Version</b>	0.3.1
<b>Release Date</b>	18 <sup>th</sup> July 2023

Fixes	
<ul style="list-style-type: none"> <li>• Fixing the bootstrap to avoid potential wake issues resulting from mishandling CAN hardware.</li> <li>• Further fixes for phone call handling to ensure phone mode never gets stuck.</li> </ul>	

<b>Version</b>	0.3.0
<b>Release Date</b>	7 <sup>th</sup> July 2023
Fixes	
<ul style="list-style-type: none"> <li>• Addition of CAN message acceptance filtering algorithm to ensure CAN messages are never missed when sent.</li> <li>• Adding amplifier power rail offset according to the input volume.</li> <li>• Fixing full power noise issue when baseboard DAC is in an unknown state.</li> <li>• Mute audio when switching presets to avoid unwanted artifacts.</li> <li>• Remap F150 output channels to correspond correctly to the plug'n'play harness.</li> <li>• Adjust volume mapping table for better DSP gain responsiveness.</li> <li>• Numerous Ford volume decoding and phone call handling improvements to better emulate the original OEM amplifier.</li> <li>• Further fixes for pops on firmware update.</li> </ul>	

<b>Version</b>	0.1.2
<b>Release Date</b>	31 <sup>st</sup> May 2023
Fixes	
<ul style="list-style-type: none"> <li>• Fixing harsh pops on firmware update, manual reset</li> <li>• Fixing slight pops on startup/shutdown</li> <li>• Fixing incorrect loud initial volume</li> <li>• Fixing incorrect default channel mapping</li> <li>• Adding initial support for Bronco Ford variant.</li> <li>• Fix unresponsive volume acknowledgement in headunit</li> <li>• Fix no reply to SVC level change (for preset selection)</li> </ul>	

<b>Version</b>	0.1.0
<b>Release Date</b>	4 <sup>th</sup> January 2023
Fixes	
<ul style="list-style-type: none"> <li>• Initial release</li> </ul>	