

## 232-Amp and Amp+ Firmware History

### 2012

- July 26 - v1.6 - Raised Thresholds <2 by 2 internally (0,1=2, 2=2, 3=3, etc)  
Widened POT adjust sensitivity (dead-band) to 4
- Aug 5 v1.7 - Fixed 'V01,254' and 'V01,255' BUMP COMMANDs
- Dec 14 v1.8 - Implemented MAX VOL parameter

### 2013

- Nov 18 v1.9 - Added Vref conversion after POT conv. - requires jumper on PCB  
Added flags3, doswitch now 100Hz

### 2015

- Feb 4 v2.0 - Includes Vref conversion after POT conv. - requires jumper on PCB.  
Fixed MUTE commands (VM,VX,VT).  
VM, VX, VT now operate but affect ALL 3 Channels together.
- Feb 12 v2.1 - Includes Vref conversion after POT conv. - requires jumper on PCB  
Stereo Input now ignores MUTE if MaxVol=00 (Limit becomes 63).  
Mono1 now obeys MUTE if MaxVol1=00 (Limit becomes 63).  
Mono2 now obeys MUTE if MaxVol2=00 (Limit becomes 63)  
Updated Bootloader to BAMP13 for Kapersky Anti-Virus delays with S12Load

### 2016

- Feb 15 2016 v2.2 Adds DIP switch settings to preset amp as a mixer, use of level pot for amp gain
- May 16, 2016 v2.3 Added response to Sharp IR commands for Volume Up, Down and Mute

### Summary

To update older 232-AMP products with V 1.8 firmware, send the unit in for service, we will add a jumper to the board, and normally update to V 2.1. In this version, the VM, VT, and VX commands only affect the Stereo input, you would use the MaxVol command to mute or unmute Mono inputs.

In the past the VM, VT, and VX commands muted and unmuted all input; we've kept that version in the product's **Download** list for those who prefer this option.