## Trolmaster Device Module firmware updates TS-1, TS-2, ARS-1, HS-1

TrolMaster provides firmware updates for their products. Firmware is the program running inside of the controller or module. Updating the firmware provides updated features as well as to fix bugs in the programming. For best performance, when installing the controller, you should ALWAYS verify the current firmware installed in your device modules are the most recent versions. See below on how to check firmware version.

There are two different firmware types, the MAIN controller firmware and the DEVICE module firmware. The following discusses how to update the Device Module Firmware. That includes firmware for some device modules including TS-1, TS-2, ARS-1, HS-1,

## Requirements:

Requirements: You will need to have a 32GB or smaller capacity microSD memory card.

**TO CHECK CURRENT FIRMWARE VERSION:** On the Device Module Enter, unplugging the RJ12 cable and re-connecting the cable will re-boot the module, and when it restarts, the current firmware version will be shown.

## TO GET THE NEWEST FIRMWARE UPDATE FILE:

- 1) Go to https://www.trolmaster.com
- 2) Select Support Firmware Update
- 3) Scroll down the firmware list until you find the Device Module you are trying to update.
- 4) Click on the Arrow on the right to start to download the file to your computer.
- 5) Depending on your browser, the file should be saved into your download folder.
- 6) Open the download folder and locate the file you are saving.

  \*Note: THERE WILL BE TWO VERSIONS OF EACH OF THE DEVICE MODULE
  FIRMWARE LISTED... A AND B. If you have purchased the Device Module in the past 18 months, Select version A.
- 7) Click on the Arrow to download the file to your computer.
- 8) Make sure the filename does not have a number in parentheses (1), (2) etc after the filename. If so, delete the (1), (2) etc. For example, for the ARS-1 module, the filename should read ars1 update.hex
- 9) Copy the file onto the microSD card using either copy-paste or drag and drop the file on the microSD card.
- 10) Once the file is on the microSD card, you can now insert the card into the slot on the bottom of the Device Module. Insert the card with the gold colored contacts facing YOU.
- 11) On the Device Module, unplug the RJ12 cable from the Device Module.
- 12) Now press and hold the Addressing button.
- 13) Re-insert the RJ12 cable while holding the addressing button.
- 14) The controller will start the update screen.
- 15) Press the Enter button (lower right button) to start the firmware update.
- 16) When complete, the module will re-start.

- \* Note: If the LCD display goes black after installing the firmware, you have an older version of the Device module. That will require you to install the alternate Firmware Version B.
- 1) To install the Alternate "B" Firmware, repeat the process above from step #6 above, but select version B to save instead of version A.
  - \*Note: When you save version B, make sure to OVERWRITE or delete the previous version of the firmware saved on your microSD card. Saving the same file name a second time will cause your computer to place a number at the end of the file. That number must be deleted.

If the filename does not have a number in parentheses (1), (2) etc after the filename, delete the (1), (2) etc. For example, for the ARS-1 module, the filename may read **ars1\_update(1).hex** ... you must delete the (1).