



## NiTRO X and NiTRO DVR Software Update Procedure

### IMPORTANT:

- When Updating firmware on a NiTRO-X™ system ONLY firmware developed specifically for a NiTRO-X™ system will appear as an available menu item within the System menu. Conversely, When Updating firmware on a NiTRO™ system ONLY firmware developed specifically for a NiTRO™ system will appear as an available menu item within the System menu.
- It is essential that the correct firmware be applied to the appropriate system. For example, firmware for a 404 MUST only be applied to a 404 system. Similarly Firmware for a 401 MUST only be applied to a 401 system. Failure to follow this procedure will result in device failure and void the warranty.
- Once the firmware has been updated on a NiTRO-X™ system the unit will automatically restart. It is essential for this restart to take place. Once this restart has completed a second restart must be completed immediately for a successful firmware upgrade. To restart go to the System Menu and select OS Reboot. This second restart only applies to a NiTRO-X™ 400 series.
- Once a firmware update and configuration has been loaded into the DVR the configuration must be checked for correctness. If discrepancies are found then the necessary changes must be manually made to the configuration.

1. Log In to The Gate section of [www.gatekeeper-systems.com](http://www.gatekeeper-systems.com) and download the correct firmware for the N40X system to be updated. Please refer to the appropriate firmware "[Release Notes](#)" for specific file information.
2. Save this file to the [SD Card](#) which is to be used for the update. This file must be saved directly to the root of the SD Card and NOT placed in any folder on the SD Card. This file is in a .tar format and should not be changed in anyway, including un-zipping.
3. Double check that the file name of the .tar file has not been changed. Some web browsers will insert additional characters into the file name if the file is downloaded more than once to the same destination folder on a PC. If additional characters have been added by the browser manually delete the additional characters.
4. Go to the recorder on the vehicle. Connect a portable monitor to the DVR and then power up the system (turn on bus ignition).
5. Using the remote control, navigate to Menu -> System -> Config Set Up -> Export Config -> Are You Sure You Want to Export Local Config (select yes). If this is successful then a window stating Export Success will be displayed.
6. Press the stop button next to the SD card slot on the DVR and replace the Recording card with the [firmware updated SD Card](#).
7. After inserting the SD card with the new firmware wait for the Disk Found message to appear on the portable monitor.
8. Once the Disk Found message appears on the screen press the STOP button on the Remote control and respond YES to stop all recordings.
9. Use the Remote control and navigate to the System Menu, press Menu on the Remote control.
10. In the System sub-menu highlight System Info -- Version Update and press the Menu button on the Remote control.
11. Make a note of the Version listed under APP VERSION.
12. In this screen the option for APP UPDATE – UPDATE THE APPLICATION, should already be highlighted, press the Menu button on the Remote control.



TB00060 N40X Firmware Update Procedure V1.6 December 15<sup>th</sup>, 2011



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13. A message window will appear “Are you sure to exit for upgrade?”, select YES.
14. In the window which appears the updated file should already be highlighted and will take the format of: /media/sdcard/FIRMWAREUPDATENAME.tar press the Menu button on the Remote control to confirm.
15. During the update process DO NOT use the Remote control OR remove power from the N40X system as this will cause system failure.
16. Once complete a dialog window stating “Update Success” will appear. Press the Menu Button on the Remote control.
17. Return to the System Menu and select OS REBOOT – REBOOT FROM OS and press the Menu button on the Remote control. This will restart the system and apply the firmware update.
18. Once the Disk Found message appears on the screen, immediately press the STOP button on the Remote control and respond YES to stop all recordings.
19. Use the Remote control and navigate to the System Menu, press Menu on the Remote control.
20. In the System sub-menu highlight -> System Info -> Version Update and press the Menu button on the Remote control.
21. Ensure that the Version shown is different to that noted in Step 8 of this Firmware Update Procedure.
22. Escape from this menu.
23. Press the stop button next to the SD card slot on the DVR and remove SD card with the updated Firmware that was removed in Step 6 and insert the original SD card
24. Wait for the SD card to be detected by the system.
25. Navigate to Menu -> System -> Config Set Up -> Config Import -> answer yes to “Are You Sure You Want To Cover Local Config” -> observe window “Import Success and Reset”
26. Manually check to see that the configuration is correct. If not, modify the configuration setting as desired.
27. Press the menu button on the remote control and navigate to the Storage icon, press OK. Now navigate to the Format option and press MENU. Select Yes, then press OK. This will format the card. This will erase the config file (ez\_config) from the SD card. Please note the following:
  - Reformating the SD card will cause all the recorded video on the SD card to be lost. The user is urged to back up the video that is to be retained before formatting the SD card.
  - Note: An SDHC card (up to 32GB) can be reformatted in a PC by right clicking on the SD card and selecting Format. The SD card should only be formatted with the FAT32 file system.
  - Note: An SDXC card (Greater than 32GB) MUST only be reformatted in a NiTRO-X recorder. Window PC's will not format a SDXC correctly for use in a NiTRO-X recorder.
28. It is very important that any SD card that has been previously used in a N40X system with the 0409 release of firmware be formatted before being used again in a N40X series recorder with firmware released after October 2010. Failure to format the SD card will result in video NOT being recorded.



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