

Smart NVR: USB Drive Automated Firmware Upgrade

I. Preparation

1. **Format the Drive:** Ensure the **USB flash drive** is formatted to the **FAT32** file system.
2. **Create Recovery Folder:** In the root directory of the drive, create a new folder named exactly **recover**.
3. **Add Firmware File:** Copy the firmware file (typically named **Program.bin**) and paste it directly into the **recover** folder.
4. **Install Software (Optional):** If you intend to verify the update via a networked computer, ensure the **Smart Utilities** application is installed.

II. Upgrade Procedure

1. **Insert USB Drive:** Plug the **USB flash drive** into any available USB port on the NVR.
 - **Critical:** The drive must be inserted while the NVR is **powered off**.
2. **Network Connection (Optional):** If using a PC for verification, ensure the NVR and the PC are connected to the same network switch.
3. **Power On:** Plug in the power cord and switch the NVR on. The system will automatically detect the **USB flash drive** during the boot process and initiate the upgrade.
4. **Upgrade Duration:** The process typically takes **2 to 5 minutes**.
5. **Completion Signal:** Once the upgrade is finished, the NVR will emit a series of **steady beeps**.
6. **Cleanup:** Remove the **USB flash drive** from the NVR.
7. **Reboot:** Power cycle the NVR (turn it off and then back on) to finalize the process.

III. Verification

After the system reboots, verify the firmware revision using one of the following methods:

- **Option A (Local GUI):** Log in to the NVR directly using a monitor and mouse. Navigate to the **Maintenance** menu to check the current firmware version.
- **Option B (PC Software):** Open **Smart Utilities** on your PC. Locate the device and click the **"Detail"** button under the *Operation* column to confirm the firmware revision.