

HARMAN KARDON® AVR 445/AVR 645 SOFTWARE UPGRADE INSTRUCTIONS

Harman Kardon is pleased to offer this software upgrade to improve the audio and video performance of your AVR 445 or AVR 645. Unlike many consumer audio products that are designed with “fixed” memory, these Harman Kardon® products feature flash memory, which makes it possible to upgrade their internal software through a standard USB port. To install the upgrade, please follow the instructions on this sheet. If you have any questions, consult our Web site at www.harmankardon.com.

Important Note:

This software is specially designed for use with Harman Kardon's AVR 445 and AVR 645 receivers. Use with any other models or brands may cause damage to the product. DO NOT USE THIS SOFTWARE WITH ANY PRODUCTS OTHER THAN THE HARMAN KARDON AVR 445 OR AVR 645.

System Requirements

To install the upgrade, you will need a standard USB “Type A to Mini Type B” cable (you may already have this type of cable for connecting your computer to a digital still camera or cell phone). The cable may be obtained at most computer or electronics stores.

You will also need access to a computer that is close enough to be connected to the AVR being upgraded. The minimum system requirements for the computer are:

- Processor: Intel® Pentium® II processor or equivalent, or higher
- Operating system: Windows® 2000 SP4 or higher, Windows XP or Windows Vista™ system
- Hard-drive space: 10MB available
- System RAM: 128MB
- CD-ROM drive (when using upgrade disc only)
- USB port

Installation Instructions

Upgrading your AVR 445 or AVR 645 is easy, but for the upgrade to work properly, it is important to precisely follow the instructions below. PLEASE READ THESE INSTRUCTIONS CAREFULLY BEFORE PROCEEDING.

- If you are using files downloaded from the Harman Kardon Web site to upgrade the AVR 445 or AVR 645, use Windows Explorer or any other file management program to locate the folder where you have downloaded the upgrade file. Click on the zip file named “AVRxxxUpgrade.zip,” noting that the “xxx” will be replaced by the model number of your receiver. When you do this, the file will automatically unpack all of the files needed to upgrade your AVR 445 or AVR 645.
- If you are installing the upgrade from a CD-ROM, insert the disc in your computer's CD-ROM drive.

- Upgrading your AVR 445 or AVR 645 will erase all system memories. This means that any configuration settings or tuner presets that you have entered will be lost. To make it easier to re-establish the settings after completing the upgrade, you may wish to write down your current system configurations using the worksheets that are included with this software package. To print those worksheets, use Windows Explorer or another file management program to locate the **Worksheets.pdf** file in the directory where the upgrade files have been saved. Click on the file to open it with Adobe® Reader® software and then print copies as needed.
- Make certain that the **Main Power** switch (behind the front-panel door) on your AVR is turned off, and then connect the USB cable to your computer and to the jack on the rear panel of your AVR.
- Press in the **Main Power** switch on your AVR, but leave the receiver in Standby mode.
- Locate the directory for the downloaded files or CD-ROM and click on the file named “HK_Updater.exe.” It should be easy to recognize, as there will be a small Harman Kardon logo near the file name, depending on the display mode for your file manager.
- A new window will open on your computer screen when the Loader program starts. Click **NEXT** to proceed.
- The next screen contains the End User License Agreement that covers the software upgrade. Please read this important document, using the scroll bar on the right side of the window to move down through the copy. If you agree to the terms of the agreement, click **I ACCEPT** to proceed; otherwise, click **I DECLINE** to cancel the upgrade and exit the Loader program.
- Enter the serial number of your receiver in the spaces provided on the next screen, making sure to enter any capital letters exactly as you see them on the serial number label. Do not



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enter the dash between the two parts of the serial number, but do divide the number to the left and right of the dash provided in the on-screen box. Click **NEXT** after the serial number has been entered.

- If the serial number is correct, the program will proceed to a screen where you select the type of upgrade. Click **CPU** and a confirmation screen will appear with the model number of your AVR and the upgrade type shown at the top of the message window. Click **NEXT** to continue.
- On the next screen, click **BROWSE** to open a file finder window so that you may select the “.CPU” file to use for this upgrade. Click on the file so that it is highlighted and then click **Open**. When the file finder window closes and the file name appears, click **NEXT** to continue.
- Read the important instructions at the top of the next screen, noting that the upgrade process takes up to 10 minutes. You should not turn off either the AVR or the computer while the upgrade is in progress. Click **NEXT** when you are ready to start the upgrade.

Important Note:

Once the upgrade starts, it is important that you do not interrupt it by turning your AVR off or by exiting the upgrade program on your computer. Doing so may cause the upgrade to fail and possibly damage your receiver.

- The upgrade will begin immediately; as it proceeds, you will see messages in the window describing the upgrade steps. A progress bar will also appear to give you an indication of the upgrade's status.
- When the CPU upgrade is complete, the system will automatically move to the next screen. Follow the steps shown below to reset your AVR to complete the upgrade and verify that the proper software version has been loaded.
 - Turn off the **Master Power** switch, located behind the front-panel door, by pressing it in and then releasing it so that it pops out.
 - Wait 10 seconds and then turn the **Master Power** switch back on by pressing it in so that it latches. The lighting around the **Standby/On** switch will turn amber to remind you that the unit is in Standby mode.
 - Reset the receiver's processor by pressing and holding the **Surr Mode** and **Tun Mode** buttons at the far left and right on the front panel; release them when the unit turns on and the word **RESET** appears in the front-panel display.
 - Check the version number for the software by pressing the **Standby/On** switch to put the unit in Standby mode. Press the ► button at the far right side of the row of buttons behind the front-panel door. Release the button when the unit turns on, and check the front-panel display

to make sure that VERSION 4.06 is displayed. After a few seconds, the unit will return to Standby mode.

- When you have verified the correct software version, the upgrade is complete and you may click **EXIT** to close the Loader program.
- At this time, you may disconnect the USB cable from your computer and the AVR. The AVR is now ready for normal operation.

Restoring Settings and Recalibrating Your Receiver

Since the upgrade and reset process erases any of the system configuration data and tuner presets stored in your receiver, it is important that you reenter that data. Follow the instructions shown in your owner's manual to reenter the data copied to the worksheet files supplied with this upgrade package, or to enter new settings. You should also rerun the EzSet/EQ™ process to recalibrate the system for speaker settings and room equalization.

CONGRATULATIONS! With the completion of the upgrade process, your Harman Kardon AVR is now not only as good as new – it will perform even better than it did when you first bought it. We wish you many years of happy listening!



harman/kardon®

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Part No. AVR445/645V4.06INSERT

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