

HARMAN KARDON® AVR 630/AVR 430

FIRMWARE/SOFTWARE UPGRADE INSTRUCTIONS

Harman Kardon is pleased to offer a major upgrade to the DSP software that powers the units' digital processing modes, as well as an equally important upgrade to the units' internal operating system. Unlike many consumer audio products, which are designed with "fixed" memory, these Harman Kardon products feature upgradeable flash memory and two-way bi-directional communications through an industry standard RS-232 port. To install the software, please follow the instructions on this sheet. If you have any questions, consult our Web site at www.harmankardon.com.

This software upgrade provides the following benefits:

- The addition of Dolby® Pro Logic® IIx processing that enables systems with 7.1 speaker configurations to enjoy the benefits of Dolby Laboratory's latest innovation in surround processing.
- The addition of switchable auto-polling for digital inputs that allows you to control whether the unit reverts to an analog audio input when a digital stream stops. This capability is particularly valuable when using digital television set top boxes or tuners that may switch back and forth between analog and digital audio outputs when channels are changed.
- Significantly reduced acquisition time when the digital audio stream starts and stops, or when the mode is changed. This will make your listening experience more seamless than ever.
- Additional minor updates to increase system functionality.

IMPORTANT NOTE: This software is specially designed for use with Harman Kardon's AVR 630 and AVR 430 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 630 OR AVR 430.**

System requirements:

In order to install the software upgrade, you will need to purchase a standard male-to-female RS-232 cable with D-Sub 9 connectors on each end. The cable should be long enough to safely reach from your computer to the RS-232 port on the rear of your receiver, but we do

not recommend cable lengths longer than 25 feet. This cable is available at most electronics and computer stores. It is important to purchase a "standard" serial cable; so called "null modem" cables will not operate properly for the upgrade process.

You will also need to have access to a computer that is close enough to be connected to the AVR being upgraded. This connection must be made to a physical RS-232 port on the computer; USB to RS-232 adapters will not operate properly.

The minimum system requirements for the computer are:

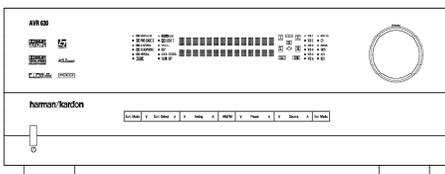
- Processor: Intel® Pentium® II processor or equivalent, or higher
- Operating System: Microsoft® Windows® 98SE, Windows ME, Windows 2000 or Windows XP
- Hard Drive Space: 10MB available
- System RAM: 128MB
- CD-ROM drive
- Physical RS-232 port

IMPORTANT NOTE: After you have downloaded the upgrade files to your computer, an Internet connection is not necessary to perform the upgrades.

Installation instructions:

Upgrading your AVR 630 or AVR 430 is easy, but in order for the upgrade to work properly it is important that you follow the instructions below precisely. **PLEASE READ THIS INSTRUCTIONS CAREFULLY BEFORE PROCEEDING.**

- Upgrading your unit 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 reestablish the settings after completing the upgrade, you may wish to write down your current system configuration using the worksheets that are part of this software package. To print those worksheets, use Windows Explorer or another file manager 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 the Adobe Acrobat Reader and 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 male end of the RS-232 connecting cable to the RS-232 port on the back of your AVR.
- Connect the female end of the RS-232 connecting cable to the RS-232 port on your computer.
- Press in the Main Power switch on your AVR but leave the receiver in the Standby mode.
- If you are using files downloaded from the Harman Kardon Web site to upgrade the computer, 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 computer.
- If you are loading the upgrade from a CD-ROM, insert the disc in your computer's drive.
- Locate the directory for the CD-ROM or the downloaded files and click on the file named "HK_Updater.exe". It is easy to recognize because there will be a small Harman Kardon logo near the file name, depending on the display mode for your file manager.
- When you click on the file, the receiver's "Operating Console" will appear on the screen. You will see a representation of the receiver's front-panel display, along with buttons that simulate the remote control. You may use this console at any time to operate the AVR from your computer.
 - If a **WAIT DATA** message flashes in the simulated front-panel display, please check the RS-232 cable to make sure the plugs are securely connected at both ends.
- Feel free to experiment with the operating console by moving the cursor over any of the buttons and then clicking with your mouse to run the receiver just as you would from the remote. However, before proceeding with the upgrade, make sure the receiver is in the Standby mode.
- Click on the **PASSWORD** icon above the display and a dialog box will open.
- Enter the serial number of your receiver in the spaces provided, being certain to enter any capital letters exactly as you see them on the serial number label. Do not 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. Press **ENTER** when the serial number has been entered.
- If the number is correct, the CPU Upgrade and DSP Upgrade icons above the display will become active. Click on the CPU Upgrade icon button.
- At the next screen, enter the file name and location for the ".CPU" file that is part of the disc or download. You may find it easier to click on the **BROWSE** button and navigate to the file.
- When the correct file name and location have been entered, click on the **START** button to begin the upgrade.



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- The upgrade will begin automatically, with its status and progress being displayed on the screen.

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

- When the CPU Upgrade is complete, you will see an on-screen message instructing you to reset the receiver to complete the upgrade. Follow those steps (as shown below), making certain to check 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 ten 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 the Standby mode.
- Reset the receiver's processor by pressing and holding the Surround Mode and Tune Mode switches on the front panel, and releasing 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 the Standby mode. Press the ► Button at the far right side of the row of buttons behind the front-panel door. Release it when the unit turns on, and check the front-panel display to make sure that "Version 5.02" is displayed for the AVR 630 and "Version 5.03" is shown for the AVR 430. After a few seconds, the unit will return to the Standby mode.

- When you have verified the correct software version, click on the RETURN TO CONSOLE button. You may now proceed to upgrade the DSP software, or exit the Operating Console by clicking on the "X" in the upper right corner of the Console and returning later to complete the Upgrade.

- The CPU Upgrade contains the data used to operate your AVR. After completing that upgrade, you'll need to upgrade the unit's digital signal processing, or DSP, memory to load the software that delivers the Dolby Pro Logic IIx modes. The instructions for that upgrade are almost identical to those for the CPU Upgrade.

IMPORTANT NOTE: The DSP software upgrade process may take as long as an hour. Before beginning the upgrade, please make certain that you will not need to use the AVR while the upgrade is in process. Once the upgrade starts, you must be able to leave both the AVR and the computer on and uninterrupted.

- If you have already entered a serial number as the password, the "DSP Upgrade" icon button should already be active. Click on that icon button, or first follow the instructions shown above for entering a password, if needed.

- At the next screen, enter the file name and location for the ".DSP" file that is part of the disc or download. You may find it easier to click on the BROWSE button and navigate to the file.

- When the correct file name and location have been entered, click on the START button to begin the upgrade.

- The upgrade will begin automatically, with its status and progress being displayed on the screen. You will also see DSP UPGRADE shown in the receiver's front-panel display. **Please be patient! The upgrade may take as long as an hour. Once it starts, it is important that you do not interrupt it by turning your AVR off or exiting the upgrade program on your computer. Doing so may cause the upgrade to fail and may possibly damage your receiver.**

- When the DSP Upgrade is complete, you will see an on-screen message instructing you to reset the receiver to complete the upgrade. Follow those steps (as shown below), making certain to check 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 ten 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 the Standby mode.
- Reset the receiver's processor by pressing and holding the Surround Mode and Tune Mode switches on the front panel, and releasing them when the unit turns on and the word **RESET** appears in the front-panel display.

- After you have reset the receiver, click on the **RETURN TO CONSOLE** button.

You have now completed an upgrade of the operating system and DSP software in your AVR. Exit the Console program by clicking on the "X" in the upper right corner of the console window. After disconnecting the serial cable, you are almost ready to enjoy the benefits of improved performance and experience the latest surround sound technology.

Harman Kardon AVR 630/430 revised Owner's Manual:

As part of the software upgrade, some of your AVR's menus have been changed. To obtain the maximum benefit from the upgrade, we strongly suggest that you print out a copy of the manual and take a few minutes to read it before using your receiver.

To print the updated Owner's Manual for your receiver, use Windows Explorer or another file manager program to locate the AVRxxxOM.pdf file in the directory where the upgrade files have been saved, noting that the "xxx" will be replaced by the model number of your receiver. Click on the file to open it with the Adobe Acrobat Reader and print copies as needed.

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 the Operations, Advanced Settings and Multiroom sections of the new owner's manual printed out as explained at left, using the data copied to the worksheet files supplied with this upgrade package, or enter new settings.

In order to maximize the performance of your receiver, we strongly recommend that you take advantage of EzSet to properly set the output levels quickly and easily.

CONGRATULATIONS! With the completion of the upgrade process, your Harman Kardon AVR is not only as good as new, it now has features that were not available when you first bought it. We wish you many years of happy listening!

