English Language User Manual

AV400 SERIES



ARCHOS POCKET VIDEO RECORDER

- MPEG-4 Video Player & Recorder
- MP3 & WMA Music Player
- Photo Viewer
- USB 2.0 Hard Disk
- Digital Audio Recorder

User Manual for ARCHOS Pocket AV400 Manual version 2.0 pn: 103090V2



Please visit our website to download the most recent manual and software for this product.

Table of Contents

1	INTR	O - Ports, Buttons and Connections		6
2	INTR	lO - First Time Usage		8
	2.1	Plugging in the AC Adapter	8	
	2.2	Turning on the AV400	8	
	2.3	Shutting off the AV400 and Battery saving features	8	
	2.4	Changing the Language	9	
	2.5	Foreign Character Sets	9	
	2.6	Charging the Batteries	9	
	2.7	Caring for the AV400	10	
	2.8	Hardware Reset	10	
3	MUS	IC - Playing Music Files		11
	3.1	Button Control	11	
	3.2	Playing Through your Stereo System	12	
	3.3	Artist, Album, Title ID3 Tags	13	
	3.4	The ARCLibrary (Browsing by Album, Artist, or Song name)	13	
	3.5	Setting a Bookmark	14	
	3.6	The Resume Function	15	
4	MUS	IC - Playlists		16
	4.1	Playing a Playlist	16	
	4.2	Creating a Playlist	17	
	4.3	Saving a Playlist	17	
	4.4	Adding songs to a Playlist while listening to Music	18	
5	MUS	IC - Recording Music		19
	5.1	Cable Connections for Audio Recording	19	
	5.2	Recording Procedure	19	
		Microphone 20		
		Analog Line-In 20		
		Incremental Recording 21		
	5.3	Where is the Recording Saved?	21	
	5.4	Audio Editing	21	
6	MUS	IC - Using Windows™ Media Player 9		23
	6.1	Installing Windows Media Player 9	23	
	6.2	Installing the WMP9 Service Provider Plug-in	23	
	6.3	Copying Music to your AV400	24	
7	MUS	IC - Using iTunes™ with your AV400		25
8	VIDE	:O - Playing Video		26
-	8.1	Setting a Bookmark	27	
	8.2	The Resume Function	27	
	8.3	Display Format Settings	28	
	8.4	Playing Video Files from the Internet	28	

9	VIDEO - Recording MPEG4 Video Files			29	17 SETTINGS
	9.1 Setting the Recording Parameters		30		17.1 Sound Settings
	9.2 Where is the Recording Saved?		32		17.2 Play Mode Settings
	9.3 Copy Protection		32		17.3 Clock Settings
	9.4 Manually Setting the Scheduler		32		17.4 Display Settings
10	Automated Yahoo!® TV Recording Scheduler			35	17.5 Power Settings
	_				17.6 System Settings
11	VIDEO – Setting the Infrared Emitter Code			37	17.7 TV control
	11.1 Part 1: Choose your Device, Brand and Model		37		18 Updating the AV400 Firmware Operating System (OS)
	11.2 Part 2: Testing the Emitter codes		38		
12	VIDEO - Editing Video Files			40	Download the Update_AV4UU.AUS file 66 Read the History.txt File 66
	VIDEO - Creating MPEG4 video files with your com	mutor		42	Copy to AV400 root and Update 66
13		-		42	
	How to create an MPEG-4 video file	<i>42</i>			19 Technical Support
	PC Tools	<i>42</i>			20 Troubleshooting
	Macintosh Users	42	42		20.1 USB Connection issues
	13.1 Installing the PC Software	42	43		20.2 Charging and Power issues
	DivX™ Codec	<i>43</i>			20.3 AV400 locks up (freezes operation) or Stops
	Virtual Dub™	<i>43</i>			20.4 The Computer locks-up (freezes operation) or Stops
	MPEGA Translator	43			20.5 File issues, corrupted data, formatting, and partitioning
	MP3 Sound Codec	44	45		Windows® 98SE & ME Running Scan-Disk (Error Checking) 73
	13.2 Using MPEG4 Translator	45	45		Windows® XP & 2000 Running Check Disk Utility (ChkDsk) 73
	Select Source & Destination Files	<i>45</i>			- , , , ,
	Change Settings	<i>45</i>			21 Technical Specifications
	Target & Priority	46			22 Legal
	Start	46			
14	PHOTO - Viewing Photos			47	
	14.1 Viewing Photos		47		
	Magnifying Photos	48			
	14.2 Viewing a slideshow		48		
	14.3 Transferring photos to your AV400		49		
15	BROWSER - Using the Browser			50	
	15.1 Navigating the Directory Structure		50		
	15.2 Navigating the Directory Structure		51		
	File Operations	51	-		
	Folder Operations	<i>51</i>			
	Copying and Moving Files and Folders	<i>52</i>			
	15.3 Using the Virtual Keyboard	32	53		
16		WOUR DC		54	
10	Connecting/Disconnecting the AV400 to/from	your PC	Ε4	54	
	16.1 Connecting the AV400	F4	54		
	Windows™ ME, 2000, XP (Home/professional)	<i>54</i>			
	Macintosh™ OS 9.X	<i>55</i>			
	Macintosh™ OS X	<i>55</i>			
	Macintosh™ OS X (10.2 Jaguar and 10.3 Panther)	<i>55</i>			
	Windows® 98SE	<i>55</i>			
	16.2 Disconnecting the AV400 from your Computer		57		
	Windows®	<i>57</i>			
	<i>Macintosh</i> ®	<i>58</i>			

76

Dear Customer,

ARCHOS thanks you for your choice of this exciting AV400 product. Never before has one been able to carry with him or her so much information, be it MP3 digital music, MPEG-4 digital videos or digital photos, and be able to enjoy these without a computer. We are sure that your AV400 will give you years of listening and viewing enjoyment. Of course you can always use it as a regular portable hard disk too.

This guide will explain to you the functions of the AV400. Our engineers have packed this product with many functions and capabilities. The better you know how to use it, the more enjoyment you will get from it. Remember, with the AV400, you can...

- Play MPEG-4 video files on the built-in screen, a television or video projector
- Record and edit MPEG-4 video files from a television or other video device
- View JPEG and BMP images and slide shows
- Listen to MP3, WMA, or WAV music files
- Record music files into digital format directly from your hi-fi without a computer
- Use it as a voice recorder
- Store .DOC, .TXT, or any type of data file it's a portable hard drive too!
- Create music Playlists
- Copy Pictures or data from CompactFlash™ cards directly to the AV400

We wish you many years of enjoyment from your AV400 product. Please do register your product at our website www.archos.com/register/products. html to ensure that you get access to our help line and to be informed of free software updates for your product.

Wishing you the best Video, Music, and Photo experience,

The ARCHOS TEAM

INTRO - Ports, Buttons and Connections



- **a** Hard disk activity indicator (red)
- **b** On indicator (green)
- **c** Battery charger indicator (green)
- **d** Move UP (also increases volume during media playback)
- **e** Move DOWN (also decreases volume during media playback)
- **f** Move LEFT (also plays previous song or fast reverse through song or video)
- **g** Move RIGHT (also plays next song or fast forward through song or video)
- h On/Enter/Play/Go **⊙** Hold for 4 seconds to turn on
- i Escape/Stop/Off **★** Hold for 4 seconds to turn off device
- **j** Left function button Activates the left on-screen menu item (p) Also buttons lock.
- **k** Center function button Activates the center on-screen menu item (q) Also speaker on/off
- I Right function button Activates the right on-screen menu item (r)
- m LCD/TV button Hold down for 3 seconds to switch between LCD and external TV display
- **n** TFT LCD screen 320 x 240 pixels
- **o** Built-in loud speaker (hold down on button **k** for three seconds to turn speaker on and off)
- **p,q,r** Screen function buttons which correspond to j, k, l



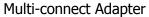
- LCD/TV button Hold down for 3 seconds to switch between LCD and external TV display
- **b** Microphone for making digital voice recordings
- **c** CompactFlash™ Type I slot



- **a** USB 2.0 port (USB 1.1 compatible) to connect the AV400 to your computer
- **b** Power Connector (use only the supplied Archos power charger/adapter)
- **c** Multi-connect jack* for headphones, TV Cradle, and AV in/out connections

*The optional multi-connect adapter and AV cable allow for audio and video playing/recording without the TV Cradle.







AV Cable

2

INTRO - First Time Usage

Please take the time to read though this manual. There are many things that this device can do that you may not be aware of.

2.1 Plugging in the AC Adapter

- Use only the included ARCHOS charger/adapter.
- Before using for the first time, charge the batteries for a full four hours.
- You may use the Archos Video AV400 while its battery is charging, but it will then take longer before the battery is completely charged.

2.2 Turning on the AV400

- **Hold the PLAY/ON button • for 4 seconds**. The green "On" indicator light will turn on. Be patient, it will take about 8 seconds for the operating system to boot up.
- If the unit shuts off after holding the ON button for several seconds, plug in the Archos adapter/charger to make sure the batteries get charged.

2.3 Shutting off the AV400 and Battery saving features

To shut off the unit, press and hold the STOP/ESC/OFF button **★** for 3 seconds.

In the Power menu [Setup --> Power: Battery Operation] there is a Power Off parameter. It is factory set to 2 minutes. Thus, if your AV400 is idle for 2 minutes, it will shut off. This setting can be changed from one to nine minutes or to 'never'.



In the Power menu [Setup --- Power: Battery Operation] there is a Backlight Off parameter to save battery power (the lighting of the screen consumes a lot of the battery

power). It is factory set to 30 seconds. That is, if there are no buttons pressed, the screen will shut off in order to save battery life. To turn the screen back on, just click once on any button. See section 17.5 for a complete explanation.

2.4 Changing the Language

The AV400 interface can be set to English (default), French, or German.

- To change the language, move the joystick to Setup and then click PLAY/ENTER ●.
- Then move with the joystick to **Display** and click PLAY/ENTER **O**.
- Using the joystick to highlight the **Language** parameter.
- Now move the joystick to the Right or Left to choose the desired language.
- Choose French, German, or English.
- The language displayed will change immediately.
- Click on the STOP/ESC button * to exit this screen.





Setup



2.5 Foreign Character Sets

You have the possibility to display your file names, folder names, and MP3 ID3 tags in various character sets (ex: Korean, Japanese, Simplified Chinese, etc.). You can find the language files CodePage_name.4FZ in the font folder under /Data on the AV400 hard disk or on the Archos website under the heading Software. If, for example, you would like to have the Korean language display, then you would copy the file CP949.4FZ into the folder /system on the AV400 and shut down and restart the AV400. File names, folder names, and ID3 tags written using the Microsoft® codepage for the language will now be displayed in that character set. Only one .4FZ can be used at a time, thus you should only put one .AFZ file into the /system folder. When an .4FZ language file is used, the interface language will be set to English.

2.6 Charging the Batteries

Use ONLY an Archos charger/adapter that is specified for the AV400. Other chargers or adapters may damage the AV400. The green CHARGE indicator lights up to indicate that the external adapter is connected. The batteries will charge automatically when the AC adapter/charger is plugged in. Once the batteries are fully charged, this light will blink, indicating that you can disconnect the charger/adapter. Once charged, you can get up to 12 hours* of MP3 music playback time and up to

4 hours* of AVI video playback time (on the built-in screen) from the batteries. Some AV400 models are made with integrated batteries which are designed to last for the life of the AV400. This means that you will not have to change them. If, in the exceptional case, the batteries need changing, this should only be done by an Archos technician.

2.7 Caring for the AV400

The Archos Video AV400 is an electronic product that needs to be treated with more care than typical consumer electronic products.

- Do not subject it to shock.
- Do not subject it to heat. Keep it ventilated (especially when connected to a computer).
- Keep the AV400 away from water and excessively humid areas.
- Keep the AV400 away from high electromagnetic fields.
- Keep any connected cords to the AV400 neatly arranged. This light product could fall if a cord is accidentally pulled by a child.
- Do not open up the AV400. There are no user serviceable parts inside. Opening will void your warranty.

2.8 Hardware Reset

In the event that your AV400 freezes operation (due to electrostatic phenomena for example), you can actuate a hardware reset by holding down on the STOP/ESC button ***** for 10 seconds. In normal operation, the STOP/ESC button ***** will shut down the AV400 after being held down for 3 seconds.

^{*} depending on how you use it (start/stop/writing, etc.)

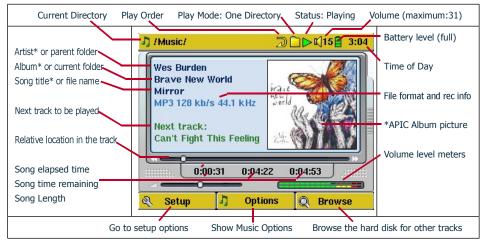


MUSIC - Playing Music Files



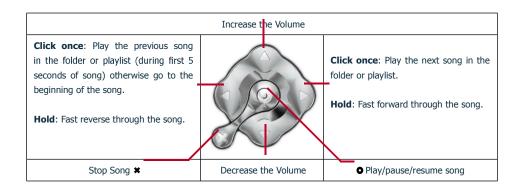
When you click on this icon in the main screen, you will be sent directly to the **Music** folder. Use the direction buttons to highlight one of the factory installed music selections and then Click on PLAY **①**. If you hear nothing at first, make sure

you have adjusted the volume control on the headphone cord. By clicking on the Music icon in the main menu screen, you will enter into a 'music only' mode. Other playable file types that may be in this folder are only listed if you enter the folder via the Browser.



*If the MP3 file contains these ID3 tag data

3.1 Button Control





To lock the AV400 buttons, press and hold the left function button for three seconds. The AV400 will display the message "Buttons locked!" on the bottom of the screen. Press this again for three seconds to unlock the buttons.

What the Icons indicate

Status	Play Order	Play Mode	
Stopped	- no icon - Play once	See section 17.2	
Blinks while playing a track	Repeat playing		
Pause	Shuffle (random) track selection		
Recording a track	Playlist		

3.2 Playing Through your Stereo System

On your HiFi there are two RCA type connectors that are labeled Aux in, CD in, or Line-in. Typically they are color coded white and red for



left and right stereo channels respectively. Just take a stereo mini jack plug to RCA cable (not included) and connect the mini plug to the AV400 headphone iack and the other end to the Aux in, CD

Aux in, CD in, or line-

in of your stereo system. Or better, connect the Archos TV cradle's AV Out red and white connectors directly to your stereo auxiliary inputs and place AV400 into the TV Cradle.

On the front of your stereo, select the

corresponding auxiliary input or CD input that you plugged into on the back of your HiFi system. Press Play and then adjust the AV400 volume (UP/DOWN buttons) in order to supply your stereo system with a signal that is neither too weak nor too strong. If the sound is distorted, you will need to reduce the AV400's volume. You can turn on and off the built-in speaker by holding the center function button for three seconds.

Artist, Album, Title ... ID3 Tags

ID3 Tags are information about the recording which found inside of an MP3 music file. When someone creates an MP3 music file, he or she has the option of adding information to it. This information can include, among other things, the name of the artist (Wes Burden), the album name (Brave New World), the title of the song (Mirror), and a small image of the album cover (only jpeq images not progressive jpeq). If these data are present, the AV400 will display them on the screen when it plays the file. If they are not present, then the AV400 will display in order, the name of the parent folder, the name of the current folder, and then the name of the file.

As of the writing of this manual, there are two versions of ID3 tags that are firmly established standards, ID3 version 1 and ID3 version 2. Your AV400 can read either version of tags, and display the information. If both sets of tags have information, the data from the ID3 version 2 tag will be displayed. Other tag information may include year and genre of music. These other tag data are not displayed by the AV400, but are used to index your music in the ARCLibrary (see next section).

The ARCLibrary (Browsing by Album, Artist, or Song name)

The ARCLibrary is a system for choosing your music by its characteristics. It can be turned On or Off in the settings from **Setup > Playmode**. As shown in this screen capture, you can select your music by Artist,



Album, Song Title, Genre, or Year. MP3 and WMA music files have internal data tags to hold information about the song. For MP3 files, these are known as ID3 tags. Not all MP3 files have all this information filled in. If you purchase a song from a music download service, the songs will have this information. If you have an MP3 or WMA file without this tag information, then you can add or change it by going

to the properties of the file in Windows® Explorer. Once you re-index into the ARCLibrary, you will access to this track with the ARCLibrary. Audio files created with the microphone will be indexed as Artist = ARCHOS and Album = Audio Recording. The ARCLibrary indexes all the music on



your AV400's hard drive regardless of which folder you placed it in, by using the ID3 information in each song. When you transfer music to your AV400 from your computer, it goes directly to the AV400 hard disk without the ARCLibrary knowing about the new song. Thus, in order for your new songs to be indexed into the ARCLibrary, you must update

it with the **Update** button as shown here in the **Setup > Playmode** screen. You have the following options to set the ARCLibrary.

Off – From the Music icon, you will just browse music files in the folder Music.

On – You can browse music by its characteristics (ID3 tags) but you will have to manually update the ARCLibrary each time you add new music from your computer to your AV400.

Automatic – The ARCLibrary will be set to **On** and it will automatically update the library each time it notices that you have disconnected from a computer. A message screen will appear indicating that it is updating the ARCLibrary contents.

Setting a Bookmark

If you are listening to a song, or perhaps a long recording, and would like to place a bookmark in it in order to pick up from this point at another time, you can use the Bookmark function. You simply click on the center function button labeled Options, then



choose Set Bookmark. This will set a bookmark in the audio file at the current position. You can only set one bookmark per file.

When you look at the file in your browser, it will have a yellow check mark on its icon indicating that this file has a bookmark set within it. You can have a maximum of 16 files bookmarked. Setting more bookmarks



will then start to erase the oldest bookmarks. The next time you play the audio file, you will be presented with three options:

Resume: Start playing from the bookmarked position.

Ignore: Keep the bookmark but start playing from the very beginning. **Clear**: Clear the bookmark from this file and start playing from the very beginning.

3.6 The Resume Function



When you turn on your AV400 you will sometimes notice that the icon which is highlighted on the main screen is not the Browser but rather the Resume icon. This icon is highlighted when the AV400 can resume the last played audio or video file.

4

MUSIC - Playlists



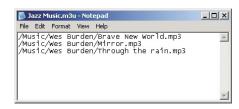
A Playlist is a list of songs that the AV400 will automatically play one after the other. The AV400 can load one playlist at a time into its internal memory. You can create new playlists, add or delete songs from a playlist, or Save a playlist as a file (file type .m3u) to be used another time. There is no limit to the number of playlists you can save on the

AV400 hard disk. Playlists are indicated by a special list icon (circled icon to the left).

4.1 Playing a Playlist



To play a Playlist, you simply scroll to the Playlist, such as 'Jazz Music' shown to the left, and click on PLAY •. The list of songs will be loaded into the internal memory of the AV400 and then be displayed in a separate panel.

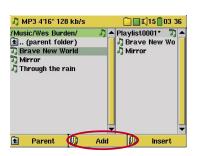


Click on PLAY • and the songs will be played in the order shown. To shuffle the music entries in a random order, you can click on **Playlist**, then choose **Shuffle**. You can open a Playlist file (*Playlistname.m3u*) on your computer with a text editor such

as Notepad, and you will see that it is merely a list of files to be played along with the hard disk path to find them. If you delete a Playlist from your AV400, you are only deleting the list and not the music itself.

Example of the contents of the .m3u Playlist file 'Jazz Music'.

Creating a Playlist



To create a Playlist, press the RIGHT ▶ button while you are in the Music browser. A second window will open on the right side to display the Playlist contents. You can now start adding songs to the current Playlist. In the left window, search for the songs you would like to add to your Playlist. Once the song is highlighted, click on the Add function button to add it to the Playlist.

The song will be added to the Playlist and a small mark next to the music icon will be made to indicate that it is in the Playlist. Continue searching and adding songs in this manner until you are satisfied. You can also click the **Add** or **Insert** button when highlighting a folder. All the contents of the folder and its subfolders will be added or inserted into the current playlist.

You can jump back and forth between the browser and the playlist by clicking on the LEFT ◀ and RIGHT ▶ buttons. A Playlist can have a maximum of 5000 songs. We recommend that you save your Playlists.

Saving a Playlist



It is recommended that each time you create a Playlist, you save it to a separate folder called *Playlists*. These lists take very little space on your hard disk and if well named, give you easy access to your favorite songs. Go to the Playlist by selecting **Music** from the main menu and then click on the RIGHT ▶ button. You will then see the list of songs in the current Playlist. Click the LEFT function button then choose Save.

ATTENTION: Make sure that your left window is the **Playlists** folder, because the open window on the left is the location the AV400 will be saving your Playlist to.

Save – Saves the current playlist to the folder open in the left window. The * next to the playlist name indicates that this playlist has not been saved.

Close – Closes the windows and returns to the main menu screen.

Rename – Renames the current playlist.

Shuffle – Randomly shuffles the order of the songs in the current playlist.

Clear – Clears the contents of the current playlist.

Button Move – Allows you to change the place in the list of the highlighted song. Click on **Move** and then click on UP or DOWN to move the song up or down the list. Click OK when finished.

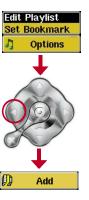
Button Delete – Will delete the highlighted song from the Playlist. It will not delete the actual song itself from your hard disk, just from the current Playlist.

Important: Once you save a Playlist it is important that you do not move or rename the actual MP3 files as the Playlist searches in the original file location. If you need to move your MP3 files to a different folder, you'll have to recreate your Playlist.

Adding songs to a Playlist while listening to Music

This can only be done if you have entered your Music folder via the Music icon and not by the general browser. To add the song you are listening to or any other song to the current Playlist, do the following:

- While playing a song, click on Options and choose Edit Playlist. A browser window and the Playlist will open.
- browser window.
- Select the song or folder of songs to add, then click the button Add.
- Click ESC * to return to the playing screen.



18

5

MUSIC - Recording Music

With the AV400 series, you do not need a computer to create digital music files. It is capable of recording from the built-in microphone or an analog line source (ex: HiFi system, Boombox, CD Player, etc) into a standard Windows® WAV format, either PCM (uncompressed) or ADPCM (compressed).

5.1 Cable Connections for Audio Recording

If you are using the Archos TV cradle, then you will have to plug the Red and White connectors of the AV IN cables to the output of your Hifi or other audio device that you are recording from. If you are using the optional multi-connect adapter and AV cable, you should plug the AV cable into the AV IN side of the adapter, and then plug the adapter into the AV400. Now connect the Red and White connectors of the AV cable to the output of your Hifi or other audio device that you are recording from.

5.2 Recording Procedure

Before the actual audio recording begins, there is a pre-recording screen which will allow you to adjust your recording settings.



1. From the home screen, select Audio-Corder then click on ENTER/GO ●.



2. In the pre-recording screen, adjust the **recording level*** by clicking on the LEFT and RIGHT buttons. Click on the right function button to start recording. Attention, the first time recording you should adjust your **Settings**.





3. Click on **Settings** to reveal the recording parameters screen as shown above. Be sure to set the correct **Source**. You will hear silence during recording and playback if the incorrect source is chosen.

4. Once you have clicked on the **Start** button, you can pause the recording by clicking the same function button (now labelled **Pause**), or stop the recording by clicking on the STOP * button.

Microphone

The built-in microphone is located on the top of the AV400 unit. Make sure that you have selected **Microphone** as the input source in the pre-recording Settings screen.

Analog Line-In

You can record from any line-level audio source to the AV400. Make sure that you select the **Analog Line-In** as the input source in the pre-recording Setup screen. If you have the TV cradle unit, you can plug the Red and White connectors of the AV In cables to the output of you home stereo system or the audio device you are recording from. If you have the optional multi-connect adapter plug, you can enter a stereo audio signal into the AV400 directly. Be careful that the source audio is supplying a line level and not an amplified signal (turning down the volume on the player will work if you are using the headphone out signal of your audio device). An amplified signal will make for a terribly distorted recording. You can also use a high quality pre-amplified microphone, such as the one Archos sells as an option.

^{*} You should try some test recordings before deciding on which recording level gives the best sound quality. Don't be tricked by the volume of the headphones which can be adjusted independently with the UP and DOWN buttons.

Incremental Recording

Next

While recording, you will notice the center function button labeled Next. This allows you to create incremental recordings. That is, the current recording stops and a new recording

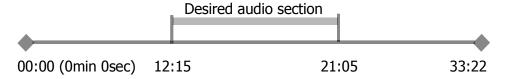
instantly begins. The next recording has an additional number appended to its name. Thus if you create multiple incremental recordings, you might, for example, have files names of REC0000_01, REC0000_02, etc. This is good for recording old cassettes and old vinyl records. You can click on the **Next** button during the blank space between each song. That way, each song of the vinyl disk or audio cassette will be one single MP3 file.

5.3 Where is the Recording Saved?

The default location for audio recordings is the folder called **Music**. If you click on the Music icon in the main menu, you will go to this folder. Notice that the right function button is labeled **Record**. Each time you use this button to record audio instead of the AudioCorder button on the main menu, you set the recording default location to the current folder. For example, let's say you have a folder called <code>/Music/Voice/Lectures</code>. If you go to this folder and then make a recording using the right function button **Record**, you will set the default record location to this folder. Now, each time you use the AudioCorder icon to start a recording, your recording will be saved in the folder <code>/Music/Voice/Lectures</code>.

5.4 Audio Editing

Audio files (microphone recordings / analog recordings / FM Remote Control (optional)) can be modified by deleting the sections you do not wish included. If you would like to edit an audio recording, you have the possibility to "crop out" the exact section of the recording you would like to save. For example, you have recorded a lecture of 33 minutes and 22 seconds in length. You would like to cut out and save just one particular important section from 12 minutes and 15 seconds to 21 minutes and 5 seconds. The diagram below illustrates the situation.



To keep just this section (cropping it), you will:

- locate this file from the Browser mode
- Select **Edit** from the **File** menu in order to enter the edit mode
- In the edit mode, set the cut-IN point (12:15 in our example)
- Next, set the cut-OUT point (21:05 in our example)
- Save the edit





Highlight the file to edit and select Edit from the file menu. Only files which have been created with the AV400 recording function will show Edit in the file menu. Files created from CDs or downloaded cannot be edited. Once you enter the edit mode, the audio file will play in a continuous loop so that you will be able to hear how your edit sounds.

Use the fast-reverse and fast-forward buttons (LEFT/RIGHT buttons) to locate the points you want the new file to start and end. These are the cut-IN and cut-OUT points. Once you have set these points, you can save the edit. In this example, a new file VOICE_01_Edit. mp3 will be made. Your original file is left untouched. You will notice that your Cut-IN and Cut-OUT times are marked just above the file name.

6

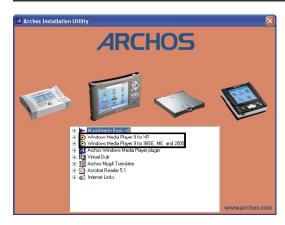
MUSIC - Using Windows™ Media Player 9



The AV400 is designed to work seamlessly with Version 9 of Windows® Media Player (WMP9). By installing the Archos Service Provider plugin, WMP9 will recognize your AV400 as a connected music device. You can then easily copy your CD collection to your AV400. WMP9

will encode each song into the WMA format (preferred compressed format of Windows $^{\text{TM}}$) and then store them on your connected Archos device. This Service Provider plug-in will also allow you to play purchased music from on-line music services such as Napster.com, MusicNow.com, BuyMusic.com, and Liquid.com.

6.1 Installing Windows Media Player 9



If you do not already have Windows Media Player version 9 running on your computer, you can install it from the Archos Installation Utility. Connect your AV400 to your computer. In Windows Explorer, open up the hard drive labeled JUKEBOX. It may be called JUKEBOX (E:) or with another letter. Open the folder Data, then the folder PC Installation,

then double-click on the file Setup.exe. In other words, follow the path E:\Data\PC Installation\setup.exe. Click on the icon according to your operating system. Follow the on screen instructions.

6.2 Installing the WMP9 Service Provider Plug-in

You should first make sure you have properly installed Windows Media Player 9 as explained above. To install the Service Provider Plug-in to Windows Media player, run the Archos Installation Utility as explained above, and then chose Archos Media Player Service Provider Plug-in. Follow the on screen instructions. If you have accidentally deleted it,



you can download it from the Archos website 'software' category (www.archos.com). With your AV400 still connected to your computer, start Windows Media Player. Normally, you will connect your AV400 to your computer before you run the WMP9

program. If you connect it after WMP9 has been started, you will have to click on View > Refresh in order for WMP9 to go check and find the connected AV400.

6.3 Copying Music to your AV400

Run Windows Media Player.



1. Choose Copy to CD or Device and then check the songs from your Music Library that you want to copy to your device.



2. Choose the AV400 device then select the folder you want to copy your songs to. Now click on Copy.

6.4 Copy Protected Downloads

With music download services such as Napster.com, MusicNow.com, BuyMusic.com, and Liquid.com, you can purchase music on-line and then store it on your AV400. These music files are protected with the Microsoft® copy protection system. When they are downloaded to your computer then transferred to your AV400, they will play only on your devices. These files will not play on other people's computers nor on other people's portable music players.

MUSIC - Using iTunes™ with your AV400



The easiest way to transfer music files between a Macintosh® computer and your AV400 is to use the Macintosh Finder TM to drag and drop the files to and from your Macintosh®.

However, for Macintosh® users who do want to use the AV400 with iTunes®, Archos has developed a special i-Tunes® plug-in. You will find it in the folder **/Data/i-Tunes Plug-in** on the AV400 hard disk or from the Archos website. In this folder you will find a plug-in for Mac OS 9.x and another folder for Mac OS 10.x. You will also find a JPEG image illustrating where you need to copy the plug-in to. Once this is done, iTunes™ will recognize the AV400 as a 'Device'. To make your user experience easy as possible, please keep in mind the following.

- 1) When you create your Playlists with iTunes® (you can only create Playlists from songs that have been copied to your AV400), your Macintosh® will save these Playlists to the root directory of your AV400. It will not save them to the AV400 Playlists directory. It would be best to use the AV400 itself to make Playlists (section 4.2) and then save these Playlists in your Playlists folder.
- 2) When you drag and drop MP3 files from your iTunes® library to your AV400, the i-Tunes® program will look at the ID3 tag information (See section 3.3 of this manual for an explanation of ID3 tags) of the MP3 file, and create a folder on the root of your AV400 using the name of the Artist as the folder name. Then it will take the Album name ID3 tag, and create a subfolder with that album as its name. Finally, it will take the MP3 song itself and place it into that album subfolder. Thus, although it is a clean structure of artists and albums, i-Tunes® does not follow the AV400 convention of placing the music into the **Music** folder first.

8

VIDEO - Playing Video



Like a music file, you simply highlight the video file and then click on PLAY/GO •. The thumbnail images on the right side will show you a frame from the highlighted video file (center) as well as a frame from the file above and the file below the highlighted one. By clicking on the Video icon in the main menu, you will enter into a 'video only' mode.

Other playable file types that may be in this folder are only listed if you enter the folder via the Browser.



To watch your videos on a television, you must hold down the LCD/TV button for three second. The AV400 screen will go black and the video will be sent out to your connected television. Switch your television to auxiliary video input (often found just below channel 1 – sometimes called L1 or L2). If you don't see a clear color image, you may have to set your

AV400 to your local television standard (NTSC or PAL) in the **Setup > Display** settings menu.



- Use the PLAY/GO button to pause/unpause the video.
 Long press to switch between built-in video and external video.
- Use the UP/DOWN buttons to control the volume.
- Hold down the RIGHT/LEFT buttons to fast forward or fast reverse through the video.
- Click the right function button to Hide/Show the overlaid video time information.
- Click the Options function button to set a bookmark, change the screen presentation. Press and hold for three seconds to turn the built-in speaker on and off.

 Click on the left function button to put the video into slow-motion view. You can cycle through the values Normal, ½, ¼, and 1/8 speed. The sound is muted when in slow motion. While in slow mode and paused, you



can step image per image with the LEFT button.

8.1 Setting a Bookmark

If you are watching a video and would like to place a bookmark in it in order to continue from this point at another time, you can use the Bookmark function. You simply click on the center function button labeled Options, then choose Set Bookmark. This will set a bookmark in the video file at the current position. You can only set one bookmark per file. When you look at the file in your browser, it will have a yellow check mark on its icon indicating that this file has a bookmark set within it. You can have a maximum of 16 files bookmarked. Setting more bookmarks will then start to erase the oldest bookmarks. The next time you play this video file, you will be presented with three options:

Resume: Start playing from the bookmarked position.

Ignore: Keep the bookmark but start playing from the very

beginning.

Clear: Clear the bookmark from this file and start playing from the

very beginning.

8.2 The Resume Function

When you turn on your AV400 you will sometimes notice that the icon which is highlighted on the main screen is not the **Browser** but rather the **Resume** icon. This icon is highlighted when the AV400 can resume the last played audio or video file.

8.3 Display Format Settings

You will notice in the **Options** button (center function button), that you have a number of display format options. In certain cases, depending on how the original video was recorded, you may want to use these adjustments.

(AUTO)	Default mode: Adjusts the video size to best adapt to the LCD screen.
4:3	4/3 aspect: Enlarge the image to fill the screen (usually a vertical fill) and then cut the sides to completely fill a television screen.
16:9	16/9 aspect: Send out a TV signal without the black horizontal bars. Will not be cropped on the LCD.
+‡+	No Overscan: Picture will not pass into the overscan area. Entire picture will always be seen on all televisions.

8.4 Playing Video Files from the Internet

The number of encoding and compression schemes currently used to create video files is very extensive and seems to change on a weekly basis. There are so many standards and formats that it is very possible that the video file you download from the Internet will not play right away on your device. Due to certain "variations", even when video files are formatted in "MPEG4" they may not play right away. The AV400 series can play video files of type MPEG4 Simple Profile which have an MP3 or IMA-ADPCM audio sound track. It can play such video files at a maximum size of 720 by 576 pixels (25 frames/second). The AV400 will not directly play files of type .mov, .mpg, .mpeg, or .avi files created with codecs (compression/decompression) other than the XviD and DivX[™] MPEG4 codecs. If you have video files of these other types that you would like to view on your AV400, they will have to be converted first. You will have to use the software Mp4SP included on the AV400 hard disk to re-encode them into the proper XviD or DivX™ MPEG4 format with an MP3 or IMA-ADPCM sound track. See chapter 13 for more details.

VIDEO - Recording MPEG4 Video Files



1. Select VideoCorder on the main menu screen. In the pre-record screen, you should see movement on the sound level bar indicating that sound will be recorded. Adjust the sound level by clicking the LEFT/RIGHT buttons. Before starting the recording, you can adjust the recording parameters via the middle function button Settings. Click on Hide Bar to hide the video recording overlay information.

Pre-record Screen



2. In most situations, the video recording will work fine without your having to adjust the settings. However, by clicking on the middle function button, you have access to a number of parameters that you can change before you start the recording. See the table below for descriptions. Click any function button to return to the prerecord screen.

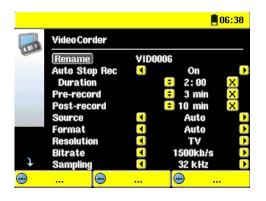
Setup Parameters



During Recording

3. Click on the PLAY/PAUSE ● button to start the recording. While recording, you will see the length of time of the recording in the top left of the screen as well as a red "record" indicator. Click on the PLAY/PAUSE ● button again to pause the recording. Click on the STOP/ESC ★ button to stop the recording. The AV300 will take a few seconds to complete the proper saving of the .AVI video file.

9.1 Setting the Recording Parameters



You can set the recording parameters manually to suit your specific needs. Click the center Settings button while in the pre-recording screen.

Rename	Allows you to change the filename before the recording begins.
Auto Stop Rec	On, Off. If set to On , the AV400 will stop recording after the duration set in the next line. For example, you want to record a television show for two hours but do not want to stay around for the two hours to stop the recording. In the screen above, a recording that you start manually will last for 2 hours. If set to Off, the recording will continue until you click on the stop button or until the entire hard disk fills up.
Duration	This is the duration of time your recording will last if Auto Stop Rec above is set to On .
Pre-record	This is a safety margin added to the beginning of a scheduled recording which was set via the My Yahoo!® TV scheduler of your personal calendar. It affects ONLY those recordings. This is just in case the clocks between your AV400 and the broadcast station are different or if the broadcast station starts earlier than expected.
Post-record	This is a safety margin added to the end of a scheduled recording which was set via the My Yahoo!® TV scheduler of your personal calendar. It affects ONLY those recordings. This is just in case the clocks between your AV400 and the broadcast station are different or if the broadcast station runs overtime.
Source	Composite, S-Video, Auto . You can choose which video input you want the AV400 to use. Normally, with a good video signal, you can set it to Auto , and the AV400 will scan the two inputs to see which one is receiving video.
Format	Auto, 4:3, 5:3, 16:9, 2.35 . This is the aspect ratio of the screen that the AV400 will record. You can set this manually, but in most cases you can just leave it on Auto .

Resolution	TV, LCD . Use this to set the resolution of the recorded image. If you plan on playing the video most of the time on the built-in screen, then set it to LCD to record at the screen resolution of 320x240 pixels. Set to TV, it will record at the highest resolution possible. (Actual resolution depends on 4:3, 5:3, 16:9, or 2.35 recording format).
Bitrate	500 kb/s, 1000 kb/s, 1500kb/s, 2000 kb/s, 2500kb/s . Use this to set the encoding quality (similar to the idea of JPEG image quality settings). The higher the encoding rate, the higher the image quality but also the more hard drive space is used.
Sampling	32kHz, 48kHz . The sound sampling rate. The higher value gives a higher quality sound but will take up more space on the hard drive.
Brightness	Use this to increase or decrease the recorded image brightness
Contrast	
Contrast	Use this to increase or decrease the recorded image contrast
Saturation	Use this to increase or decrease the recorded image contrast Use this to de-emphasize or saturate the colors in the recorded image

- Once you have finished changing the parameters, click any function button to return to the pre-record screen.
- Concerning the video standard, the AV400 will automatically recognize if the incoming video signal is NTSC (American), SECAM, or PAL (European). There is no need to set anything. You will see the signal type, as well as the selected aspect ratio on the top left of the pre-record screen.
- Click the LEFT/RIGHT buttons to adjust the sound input level. Too far
 to the right will often give an overdriven distorted quality. Too far to the
 left may make for a very soft sound. Try a few recordings to get a sense
 of what is the best sound level. Do not let the headphone volume fool
 you. That can be adjusted independently with the UP/DOWN buttons.
- If you would like to make a recording in another folder instead of the default "Video" folder, go to the desired folder via the main **Video** icon, then click on the right function button **Record**.

9.2 Where is the Recording Saved?

The default location for video recordings is the folder called Video. If you click on the Video icon in the main menu, you will go to this folder. Notice that the right function button is labeled Record. Each time you use this button to record video instead of the VideoCorder button on the main menu, you set the recording default location to the current folder. For example, you have a folder called /Video/Television/Documentaries. If you go to this folder and then make a recording using the right function button Record, you will set the default record location to this folder. Now, each time you use the VideoCorder icon to start a recording, your recording will be saved in the folder /Video/Television/Documentaries.

9.3 Copy Protection

The AV400 video recording system is designed to respect the copyright protection system. If the source of your video is copy protected, the AV400 will record in protected mode. You will see a "P" icon on the recording screen (not playback) indicating that the file will be a protected file. Protected files can only be played back on the AV400 that created it. The file will not play on a computer. Further, the playback of protected files will be limited to the built-in LCD screen and not to an external television.

9.4 Manually Setting the Scheduler

If you would like to make a video recording for a future date or time, you can use the scheduler. You can find it by going to **VideoCorder** and then clicking on the right function button Scheduler. You can program up to twenty different recordings up to one month in advance. Once you program your dates and times of recording, press the left function button **SAVE**. You can now put your AV400 into standby mode by pressing on the red Standby/ Off button on your Archos remote control. Once the scheduler is set, you will see an icon on the top Videocorder status bar indicating that it is set to make a timed recording.

- Click on the right function button **Scheduler**.
- Set each line to the desired date and time (and channel if you are using the InfraRed emitter to control your VCR, cable box, or satellite receiver). Click on the center function button Title to set the file name of the scheduled recording. Click on **Save**.
- The scheduler icon ^{SQ} indicates that a scheduled recording is set. You can set the AV400 to Standby.





05 53

Empty Scheduler, ready to be programmed. Once a valid record time is entered, and the Enter button pressed, the empty box will get a green checkmark.

be Scheduler after having been set. The ord "--- Current" means that the AV400 will record the current video signal (no channel changing). This is for people who do not use the stick-on Infrared Emitter system.

Notes about setting the Scheduler.

- The scheduler automatically reorganizes the recording events chronologically.
- In order for a scheduled recording to start, you must leave the AV400 in the main menu screen or set it to standby mode (press Standby/On button on remote control). That is, if you are listening to music, watching a video, or looking at photos on your AV400, it will not interrupt you in order to go make the scheduled recording.
- If you have connected and will be using the IR Emitter system (see the TV Cradle manual as well as section 11 below) with a video cassette recorder (VCR) please note that in order for the IR Emitter to properly control the VCR:

- 1. Your VCR should not be left in sleep mode.
- 2. Some VCRs will shut off automatically after a few minutes when left on. See your VCR user manual for instructions on how to force it to stay on continuously.
- When the user interface is in English, the Date format is set to Month/ Day.
- If the end time is earlier than the start time, then it is assumed that you start recording on the start date, and the recording ends on the following day at the end time. For example, the first scheduled item in the screen above will start recording on the 16th day of June, and end on the 17th at 2am.
- Once a scheduled recording has been made, or the date of a recording has been passed, without the recording having been made (the Archos unit was not in the TV Cradle or not in Standby mode), the schedule entry will be erased from the scheduler.
- Long recording times (2 hours and more) can create files that are greater than 2GB each. The AV400 will create multiple files in order to make long recordings. Thus a long scheduled recording may produce video files called VID0000, VID0001, and VID0002. This is only in the case of recordings that are over 2GB in size. This 2GB file size constraint is due to the Windows™ FAT32 AVI file type specification.
- When you set the scheduler, the AV400 will create a text file its System folder called DVRTimer.txt. You should not erase this file.

34

10

Automated Yahoo!® TV Recording Scheduler

For those who have a My Yahoo!® account and use the calendar feature, the AV400 can read the TV programs scheduled into your personal calendar and thus make scheduled recordings this way. You can sign up for an account and learn how to use the My Yahoo!® TV and calendar functions at the Yahoo!® Website (www.yahoo.com).

You must do the following:

- 1. Connect your AV400 to your computer.
- 2. Go to your personal Yahoo!® calendar which has your TV programs scheduled.
- 3. Choose the **Week** view starting with the current day as the beginning of the week.
- 4. Click on **Printable View** to show a cleaner printable version.
- 5. From your browser menu click on **File > Save As...** to save the file.
- 6. Do not change the **File Name**, but do change the **Save as Type** to **Web page**, **html only**. Now save the file to the folder **System** on your AV400.
- 7. Once you disconnect the AV400 from your computer, the AV400 will automatically update its scheduler with the newly saved TV programs from your My Yahoo!® Calendar. If the AV400 encounters a television station name that it does not know the channel number for (was never set), it will indicate so, and direct you to go to the scheduler to manually assign a channel to the station name.

Notes:

- If the TV programs from your personal calendar do not seem to be correctly copied to the AV400 scheduler, go to the Archos web site to make sure that have the very latest version of the AV400 firmware. Update your firmware (Operating System) as explained in the chapter "Updating the AV400 firmware".
- If you change your Yahoo!® personal calendar by deleting some TV programs and adding new ones, only the new programs will be added to the AV400 scheduler when you save the html file to the AV400. If you want to delete scheduled items, you must do this in the AV400 scheduler itself.
- Missed recordings (because you did not have the AV400 in the TV Cradle connected to your Television at the record time) will be deleted from the scheduler.

• If a personal calendar recording event does not find the station name in your list of channels, it will put the event into the scheduler and mark it with a ?, indicating that you must assign a channel number to the name. Move the cursor to the line containing the ?, and click on the center function button "Set Channel". You can now scroll through the channel numbers and assign a number to the station name for that event. You only have to do this once.



VIDEO - Setting the Infrared Emitter Code

This is a one time step to set your AV400 to send the correct infrared codes to your video cassette recorder, cable box, or satellite receiver in order that the AV400, via its TV cradle, can turn on and off your video device and also change its channels. If you do not plan on making **scheduled** recordings, then you do not need to install the IR emitter or set the infrared emitter code.

Before beginning this procedure of setting the emitter code, your AV400 must be connected in the TV Cradle, the IR emitter cable plugged in and securely stuck in place on your tuner's (VCR, cable box, satellite receiver) infrared receiver window. See the TV Cradle instructions for the exact placement of the emitter.

11.1 Part 1: Choose your Device, Brand and Model

On the main screen, go to Setup then click on TV Control.





- Select the type of device that you have stuck your IR Emitter to. You
 have the choice of either a VCR (video cassette recorder), Cable
 Box, or Satellite Receiver.
- 2. Select the brand of your device.
- 3. Click on **Tune IR Emitter** button.
- 4. The TV channels button allows you to give names to each channel. For example, if channel 6 is CNN then you can name it in this screen. You can fill these in by hand. Or, if you use the My Yahoo!® personal

calendar to set your recording scheduler, any unknown station name will be indicated in the scheduler with a ?. You then have the possibility to assign a channel number to the station name by clicking on the center function button Set Channel. This avoids having to fill in all the station names and channel numbers by hand.

11.2 Part 2: Testing the Emitter codes

1. **Tune channel select**: These four parameters usually do not need to be set. Keep the default values to start with. See the table below for an explanation of each.



2. **Tune device code (one code available)**: Some manufacturers use only one set of codes for all of their

products. Their codes do not change from one model to another or from one year to another. In this case, there will only be one single code. You can now test the **channel select.**

- 3. Tune device code (multiple codes available): Some makers of video equipment don't use the same set of control codes for all of their products. They have various code sets for various models and various years. You will have to try each of the codes to find out which code works with your device. In the example screen, you see the code C109. If this code does not work when doing the Test: channel select, advance it to the next code and then test to see if that next code works.
- 4. Test channel select: When you press the Test channel select button (Highlight test channel select and press ENTER button on AV400), the AV400 will send a signal through the cradle to the Infrared Emitter stuck to your device and changes the channel. If the Number of digits parameter is set to three, it will try to select channel 123. If that parameter is set to 2 or 1, it will send the code for channel 12 and channel 1 respectively.
- Test ON/OFF: When you click on the Test On/Off button, the AV400 will send a signal to the TV Cradle, which will then send a signal out to the Infrared Emitter stuck to your device and turn your device on and

off. Click this test button again and your device should change from on to off or off to on. If pressing this button does not turn on and off your device, try the next code for your device (step 3 above). If none of the codes work, check that the infrared emitter is directly over the infrared sensor on your tuner device.

Note: In some rare cases the ON/OFF functionality may not work.

Parameter	Description
Key: -/	Set this to On if normally, you have to press this same key on your device's remote control in order to select a channel.
Number of digits	Set the number of digits that your device can recognize for a channel. Example: Set to 3 if you need to choose a channel greater than channel 99.
Key: Enter	Set this to On if normally, you have to press the Enter key on your device's remote control after you enter the channel number. Example: If you normally press 1 , 3 , Enter for channel 13, then you would need to set this parameter to On.
Key Delay	Change the delay between the emission of each digit of a channel. You may need to adjust this if the AV400 seems to send only half the digits of a channel or more digits of a channel. Example: Adjust the key delay and retest channel select if it sends channel 1 instead of 12 or sends 112 instead of 12.



Video files recorded by the AV400 can be modified by deleting the sections you do not wish included. The editing you can do is either cropping or cutting of particular segments of the video file. You will mark a segment of your video file, and then you will tell the AV400 to CROP it out (delete everything except the marked segment) or to CUT it out (delete the marked segment from the video file). These operations can be done multiple times on the same video file. Once finished, you will have the option to save the edit marks with the video or to write a new video file. If you save your file with edit marks, you can always go back and change your edits at another time. The actual video information is not deleted. On the other hand, you can write a new file which will only include the video parts that you specified in the edit session. This file will be smaller but you can never un-edit it.



Example 1: You have recorded a music video program and would like to keep one single music presentation. The rest of the television recording you do not care to keep. In this case, you would set a Start mark (a) at the beginning of the desired segment, and an End mark (b) at the end of the desired segment. You would then choose CROP which would then delete everything except the designated section.



Example 2: You have recorded a television program but would like to remove certain sections before the program started, parts during the program, and the program afterwards because you had recorded a little extra. In this case, you would make a Start mark (a) at time 00:00 and then forward to the end of what you want to delete and make your End mark (b), and choose CUT. This part of the video recording will now be cut out. Fast-forward to the

center of the recording and make a Start Mark (c) where the section that you want to suppress begins, and make an End mark (d) when it finishes. Again, choose the CUT option and this section will be cut out. Do the same for the final section that you want to cut out.

IMPORTANT NOTE: When you pause at a given point to make a Start or End Mark, the actual point of the cut will be the nearest I-Frame. I-Frames are special frames in the video file which come about every one to four seconds. The editor can cut ONLY at an I-Frame. It is thus recommended that when you pause at the point you want to make your Start or End mark, that you click the LEFT button once (will jump to the previous I-frame) and then click the RIGHT button (shows the next I-frame) so that you can see your choice of I-Frames to cut at. Go to the I-Frame you desire and then set your Mark. Trying to set a mark between I-Frames is ineffective since the AV400 will just choose the closest I-Frame.







1. Play the file and pause at the spot you want to make your Start mark. Click the RIGHT button once, then LEFT once, and choose the I-frame you want for the mark. Click on the **Edit** function button and select **Start Mark**.

2. Let the video play. Now click on Pause at the location you want to mark the end of your segment. Choose your I-frame and then select **End Mark** from the **Edit** menu. You can now click on the **Edit** button again and choose to **Cut** or **Crop** the specified segment (blue portion in the time line.)

3. Continue to mark other segments that you would like to delete and use the edit Cut function. Once satisfied with your edits, you can **Save Edit** which keeps the edit points and allows you to re-edit another time, or you can **Write to new File** which will create a new edited file named (old-name_Edit0000).



VIDEO - Creating MPEG4 video files with your computer

How to create an MPEG-4 video file

Please understand that video re-encoding is not always a simple one button process. Video segments that come from your digital camcorder or which are freely available on the Internet are encoded in many different ways. If not already in the proper MPEG4 Simple Profile format, transforming these videos into this format readable by the AV400 requires use of the below mentioned software tools. This is due to the relatively new nature of the ISO (International Standards Organization) MPEG4 video format. Unlike its predecessors MPEG1 and MPEG2, there are a number of levels in this format and thus not all MPEG4 video files will work on all MPEG4 players, and older MPEG1 and MPEG2 files must be re-encoded into this format. Although you may have a bit of a learning curve in the initial re-encoding of video files, once you have the process down, it is just a matter of letting your PC or Mac qo to work and create video files for playing on your AV400.

PC Tools

The AV400 is delivered with two Windows® based programs that allow you to create MPEG4 Simple Profile .AVI video files. They are the *MP4 Translator and Virtual Dub™*. The MP4 Translator will call the Virtual Dub program and give it the correct parameters to encode your video from its original format, .avi or .mpg (mpeg 1), and then encode it into a DivX™ based MPEG4 .AVI file. The file will be scaled in order to be played back properly. Only MP4 files encoded with DivX™ or XviD can be played on the AV400. If the DivX™ codec is not on the included CD-ROM, please visit the website of DivXNetworks, Inc (www.divx.com) to download this codec. This is a free codec. This will allow your PC to create DivX™ type videos which play on your AV400. You will also need an MP3 audio codec (available freely on the Internet) in order to create the proper sound track for the movie.

Macintosh Users

Until recently, the Macintosh user community did not have any tools to create DivX[™] simple profile MPEG4 video files. There are now tools available for purchase at the DivX[™]Networks web site which will allow you to create DivX[™] simple profile files with your Macintosh that are playable on the AV400.

13.1 Installing the PC Software

If your video file is not an MPEG4 Simple Profile .avi file of the proper size, you will need to re-encode it using the following utilities. For the AV400, you will need to create an AVI file that is MPEG4 Simple Profile with a resolution up to 720 x 576 (depending on frame rate) and a sound track that is stereo MP3 or WAV. In actuality, in all cases, a resolution beyond 640x480 does not add any advantage.

Run the program SETUP.EXE (the Archos Installation Utility) found on the AV400 hard drive in **/Data/PC Installation**. Please install the programs in the following order.

DivX™ Codec

This software will install the DivX[™] **Co**mpression/**De**compression onto your PC. You should shut off any anti-virus programs when installing this or other codec software. This is not a program that is run by itself. Rather, it installs background software which allows your computer to do high quality video compression. This is the MPEG4 compressed video type that the AV400 knows how to play. You can find this codec software, as well as an application that allows you to play DivX[™] videos on your PC, at the website www.divx.com. The standard version is one best suited for your AV400.

Virtual Dub™

A utility for transcoding one video file into another. This is a general purpose transfer and cleanup utility which has many options allowing for even the most difficult video translations. When you install it with the Archos Installation Utility, it will automatically unzip. It will prompt you to save it to C:\Program Files\VirtualDub. You should use this default directory location. Otherwise you will have to instruct the Mpeg4 translator program where to find it.

MPEG4 Translator

This program, developed by Archos, is a "Front-end" for the Virtual Dub program. It has a simple interface which you use and it then tells Virtual Dub how to process the video file. It sets all the parameters for Virtual Dub specifically to create a video file in the right size and format to be read by the AV400. When you run it for the first time, the MPEG4 Translator will need to locate the Virtual Dub program. If you did not install Virtual Dub

in the default location, you will have to show the program where Virtual Dub is.

MP3 Sound Codec

If MP4SP detects a suitable MP3 codec on your PC, it will use it, and your video file sound track will be MP3. Otherwise, it will use the standard IMA ADPCM codec. There are MP3 encoders (usually packaged together as an encoder and decoder) available on the Web for you to download. If you choose to use the LAME codec, make sure that you have a version built with the ACM front-end. You can find other MP3 codecs on the web by using the search terms ACM, MP3 and CODEC in your favorite web search engine. Once this MP3 codec is installed into your system, Mpeg4 Translator will be able to create final video files with MP3 sound, even if the source video file does not have an MP3 sound track.

If you are unsure what codecs (audio and/or video) have been installed on your computer, you can see the list by going to the following location. For Windows XP, click on **Start > Settings > Control Panel > Sounds**



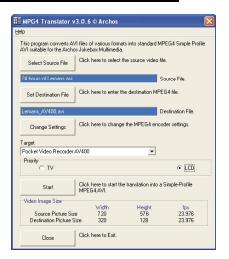
and Audio Devices Properties > Hardware > choose Audio Codecs, then click on Properties. You will find a list here of all the audio codecs that are installed on your computer. Decoding of MPEG 2 video files is currently not supported by MPG4 Translator. These are usually .mpg or .mpeg format files, not the required AVI file. There are other tools found on the Internet (FlaskMPEG, Rippack, etc.) that may be downloaded in order to help you with these file types. A good starting place is the website www.digital-digest.com.

13.2 Using MPEG4 Translator

To the left you see the image of the main MPEG4 Translator program. When you first run the program, if the DivX[™] codec has not been installed yet, you will be notified. You should download the codec and install it on your computer. If the Virtual dub program has not been installed, you will also be

notified, and you should install it (either with the Archos Installation Utility or the Virtual Dub website). If you have placed the Virtual Dub program in a folder other than the default, it will ask you to locate the file.

Select Source & Destination Files



In the example above, a source file 24 hours of Lemans.avi has been selected as the source video. You can see on the bottom of the window its original characteristics (width 720, height 576, frame rate 30). Next, you must then tell the program where to place (Set Destination file) the newly recoded version of the file (don't worry, it will not erase the original). You should give it a new descriptive name, such as shown above Lemans_AV400.avi. Make sure you add the .avi extension.

Change Settings



Next, you can change the parameters (Change Settings) of the $DivX^{TM}$ encoder to adjust the level of quality of the final image.

Like MP3 music, the higher the bit rate setting is made, the higher the quality of the music, or video in this case, that you will get. However, this will also take up more space on your hard disk. A setting of 900 kbps will give you a nice looking image for viewing on a television. For near DVD quality, you can set it up to 1200 kbps.

Target & Priority

You should select the target as AV400. You will see a Priority box appear. This control is to allow you to select which feature of the video to be guarded. If for example you are re-encoding a video file that is 800x600



in resolution and 30 frames per second, this is beyond the maximum resolution that the AV400 can play. Thus, the MPG4 Translator program will have to decrease the resolution. Choosing **LCD** optimizes the final video format for viewing on the built in LCD screen. Choosing the **TV** option will optimize the movie to keep the highest possible frame rate. You can see what the size and frame rate will be by looking at the **Video Image Size: Destination** parameters. When choosing **TV**, it is understood that the output will be optimized for a television, and not the built-in screen.

<u>Start</u>

Click on *Start* and the program will call Virtual Dub to start processing the video. Depending on the power and speed of your computer, this could take real time (a 60 minute long video re-encoded in about 60 minutes) or much longer. As shown to the left, you will see the progress as it processes the video file. If the *Start* button is grayed out, it would be for one of two reasons. 1) The source file is not a true AVI file. Even if the



file name ends with .avi, the internal file data determines if it is truly an AVI file. 2) The Virtual Dub program was not located when Mpeg4 Translator was started up. Close the program, restart it, and make sure you locate the Virtual Dub program.



PHOTO - Viewing Photos



The AV400 series support the viewing of JPEG (.jpg) and Bitmap (.bmp) image formats. Progressive JPEG images are not supported. The AV400 will resize the image to fit on the built-in screen or on a television screen if you choose the

television output. The yellow bar above the list of files indicates that you are in the 'Photo Only' mode, meaning that only files of type JPEG or BMP will be visible in the directory. The three images on the right are



thumbnail sized pictures of the highlighted file (center) and the picture just before and just after the highlighted file.

If you are viewing photos on a television, it is recommended that you set the **Image Display** setting to **Progressive** to eliminate any possible screen flicker. You will find this in the menu **Setup > Display**.

14.1 Viewing Photos

When you click Enter ● on a highlighted image file, the AV400 will display the image in the carrousel, either alone, within a group of 4 images, or within a group of 9 images. A red rectangle will surround the selected photo. Click on Enter ● again to display the image in full screen. Once it is displayed as a full screen image, you can rotate it, magnify it, or set it as the AV400 screen background (Wallpaper).



G0007

9-Pic Picture ...



1 x 1 image

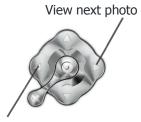
2 x 2 images

3 x 3 images



Rotate picture 90° left





Rotate picture 90° right

View previous photo

- Click the left function button #-Pic to change the number of photos in the carrousel view.
- Click the center function button **Picture** to display the picture options.
- Click on the right function button **Hide** to hide the picture name and function buttons.

Magnifying Photos

Once the picture is displayed in full screen, clicking the PLAY/GO button • will magnify the image up to three levels. Each successive click of the PLAY/GO button will magnify the picture one more level. You can use your direction buttons to move the picture around in order to see the desired magnified area. The small + signs on the bottom left of the screen indicate the level of magnification, either +, ++, or +++. Click on STOP/ESC * to go back to an unmagnified view.

14.2 Viewing a slideshow



By clicking on Slideshow, the AV400 will present each picture in the current folder for a set amount of time and then go on to the next picture. You can set the amount of time that each picture stays on the screen under **Setup > PlayMode** > **Picture Pause**. This parameter is the number of seconds each picture displays on the screen.

14.3 Transferring photos to your AV400

To transfer pictures from your digital camera directly into the AV400, you will insert your digital camera's Compact Flash™ card* into the slot on the left side of the AV400. Insert the card when the main menu screen is displayed.



When you insert the card, the AV400 will recognize it and open up two browser windows. The left window will show the contents of your CompactFlash[™] (CF) card* and the right window will show the contents of your AV400's hard drive. Navigate to the folder on your CF card which contains your photos (in this example /DCIM/ 113CANON). Move to the right window (click right button) and navigate to the folder you would like

to save your photos to (you can create a new folder if you need to by clicking on the center file button).





Photos from CompactFlash™ on the left, and your AV400 hard disk on the right. Choose destination folder then can now pull out the CF card from the choose File > Copy All.

Your files will be copied to the folder on the right side of the screen. You AV400.

If your image files are not seen in the left screen, you may have to go the **Setup** > System > Show all files parameter and set it to On. Once set to on, all file types, regardless of their extention (.txt, .raw, .pdf, etc.) which are on your CF card will be visible in the left browser screen. You cannot copy files to your CF cards from your AV400.

*If your camera uses SmartMedia™, Memory Stick® (MS), MultiMedia Card (MMC), or Secure Digital™ (SD) memory cards, you can purchase the optional Archos 4-1 CompactFlash™ adapter which will allow these card types to be read by the AV400.

BROWSER - Using the Browser



The browser is used to navigate the file system on the AV400. The file system is FAT32, the same type of file system that is found on Windows® based computers. That is, it is a hierarchical system which includes folders and subfolders. Because you will be putting hundreds of files on your AV400,

it is STRONGLY ADVISED that keep a neat and orderly file structure. Otherwise, you will be spending time searching for files and not listening or watching them. We suggest that on the first level of your file structure, you include the folders: Data, Music, Playlists, Photo, Video, and Voice.







The folders **Music**, **Photo** and **Video** are special folders in that the icons on the main screen lead to these folders and then places you directly in that folder. If these folders are deleted, you will be placed at the root level (highest level) of the directory hierarchy.

15.1 Navigating the Directory Structure



1

<u>⊃</u>________Just below the top status bar, you can see the path to the directory you are currently viewing.

To navigate the directory structure you will use:



ENTER • Open the highlighted folder (directory) or Play the highlighted file.

ESC/STOP * Go back to the main menu.



Parent Go to the parent directory (go back up one level).

Example: Go from folder / Music/Wes Burden/ to / Music.

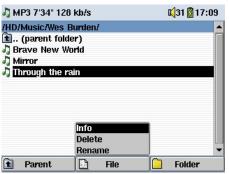


Move the cursor up and down to the previous or next file or folder.

15.2 Navigating the Directory Structure

Depending on where you are in the directory system, you will have the option to manipulate files and folders. From the main menu, click on **Browser**. Attention, there is a setting in the Setup > System menu called **Show all files**. If this is set to **Off**, the AV400 will only display file types .mp3, .jpg, .avi, etc. That is, it displays only the file types that it knows how to play. To see all your files, including ones it cannot play, change the **Show all files** system setting to **On**. Files that it cannot play will be preceded by the unknown file type icon ...

File Operations



Folder Operations



Info: Show file information such as song length, video length, photo

size, number of kilobytes used of hard disk space, date file was

made, etc.

Delete: Delete the file permanently from the AV400. (Before it is deleted, the AV400 will ask "Delete file: xxxxx ?". Use the function keys to reply Yes or No. For folder, it will delete the entire contents of the folder. It will ask "Delete folder: xxxxx and all files therein?" Use the function keys to reply

Yes or No.

Rename: Change the name of the file or folder to something new. You

will be sent to the virtual keyboard (see section 15.3) to enter

the new file or folder name.

Create: Create a new folder in the current level of the directory. You

will be sent to the virtual keyboard (see section 15.3) to enter

the new folder name.

Copying and Moving Files and Folders

By using the unique Archos double browser system, you can copy or move files from one location in the file structure to another (1000 files per folder maximum). You simply click on the RIGHT button, and a second browser window will open. The double browser can be used in:

Photo View: Left browser is an inserted memory card and right

browser the AV400 hard disk.

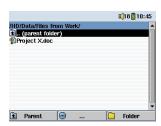
Music View: Left browser is the AV400 hard disk and right browser

the music Playlist.

Browser View: Two browser windows to browse two different parts of

the AV400 hard disk.

In the Browser mode, you can jump between the two windows using the LEFT and RIGHT buttons. Where the cursor is highlighting a file or folder, that window is the source for the copy. The destination folder will be the other window. For example, we want to copy the file **Project X.doc** from the **HD/Data/Files from Work** folder to the **HD/Data/Backed up Files** folder. We must start from the main screen Browser mode.



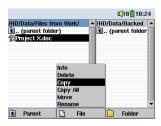
1) Locate the file to copy.



2) Click the RIGHT button to open a new browser window.



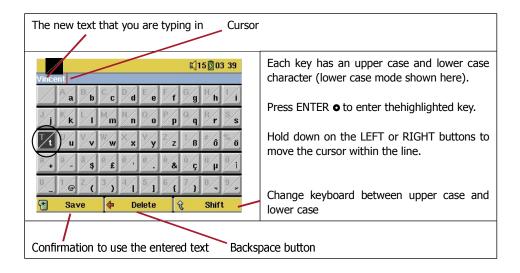
3) Click the RIGHT button again to move the cursor to the right browser and find the desired destination folder.



4) Move back to the left browser (LEFT button), highlight the file to copy, and select copy from the file menu. The file will be copied to the folder in the right browser. Entire folders can also be copied or moved in this same manner.

15.3 Using the Virtual Keyboard

It is recommended that you create folders and rename files or folders from your computer when it is connected to the AV400. The computer keyboard is much easier. Often times, however, you are not near your computer and you must enter the text directly with the AV400. For this, the virtual keyboard screen will appear.



16

Connecting/Disconnecting the AV400 to/from your PC

Note that when the AV400 is connected to a computer, it will use more energy than usual. Your battery power will be consumed at a higher rate than normal. If the AV400 looses power while connected to your computer you could damage your directory structure and/or loose data. Thus, you should **always use the AC adapter** when connected to your computer. Be careful to understand the disconnection procedure also since disconnecting incorrectly can lead to data loss or computer/AV400 freeze up. The AV400 is not compatible with Windows® NT, Windows® 95, or Windows® 98 (first edition). Windows 98SE® (second edition) users must download the USB driver from the Archos web site. While connected as a hard disk to your computer, the AV400 buttons are blocked and are no longer functional.

16.1 Connecting the AV400

- 1) Use the power adapter to prevent the AV400 from shutting off due to low power. (This could cause damage to the contents of the hard disk if not done.)
- 2) Plug the USB cable into your running computer.
- 3) Turn on the AV400 wait until it completely boots up.
- 4) Plug the other end of cable into your now running AV400.

Windows™ ME, 2000, XP (Home/professional)



When connected, the AV400 will be recognized as a Mass Storage Device and display automatically within a few seconds of being connected. You will see a new drive letter, such as E: in My Computer called JUKEBOX. You can now use the hard disk called JUKEBOX like any other external hard disk. Simply access it using Windows™ Explorer to drag and drop files to and from the AV400's hard disk. If it is not automatically recognized, please refer

to the troubleshooting section at the back of this manual.

Macintosh™ OS 9.X



You must update your operating system to a minimum of version 9.2. Once done, you will not need any special drivers or extensions. You simply plug the AV400 into your Macintosh as enumerated above, and within a few seconds, the AV400 will be recognized as a mass storage device (Hard Disk) and mount on the desktop. You can now use the Hard disk called JUKEBOX like any other external hard disk.

Macintosh™ OS X

We highly recommend that you update to Macintosh OS 10.2.4 or later. If you have Mac OS X before the 10.2 upgrade, you will find that version 10.1 may mount the AV400 as a hard disk on your desktop, but ONLY after a very long wait, up to 10 minutes. Version 10.0 of OS X does not have the ability to properly recognize a mass storage device such as the AV400.

Macintosh™ OS X (10.2 Jaguar and 10.3 Panther)

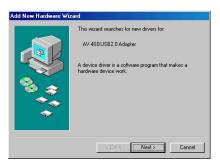
If you have OS 10.2, you must update to version 10.2.4 or newer. This is a



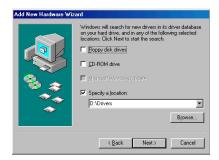
(1) © (0:14) Fri 10:46 free update from Apple® Computer. You will not require any special installation of software drivers or extensions. You simply plug the AV400 into your Macintosh as enumerated above, and within a few seconds, the AV400 will be recognized as a mass storage device (Hard Disk) and mount on the desktop. You can now use the Hard disk called JUKEBOX like any other external hard disk.

Windows® 98SE

You will first need to go to the Archos website (www.archos.com) to download the driver for this old version of Windows. Go to the section Download > Drivers and download the 'All USB Drivers' package. When you first plug an AV400 into a computer running Windows™ 98SE, it will recognize the hardware and ask to have drivers installed. Carefully follow the instructions below. After installation of the drivers and restarting the computer, you will be able to drag and drops file between your computer and the AV400 using Windows® Explorer. Be careful also to understand the correct disconnection procedure in section 16.2. Incorrect disconnection can cause your computer to freeze or you may loose data.



1. Windows 98SE has recognized a new piece of hardware (the AV400) and starts its wizard. Click on Next.



Uncheck all of the checked boxes, and then check the box **Specify** a **location.** Type in the location that you had downloaded the driver to. Click on driver. Next and Windows will then load the correct drivers.



2. Click on the button **Search for the** best driver. Now click on Next.



4. Windows is now ready to install the driver into its operating system. Click on Next to tell Windows to install the

56



5. Windows will indicate when it has finished copying the drivers. Click on Finish. Do not unplug the AV400 from the computer yet.



Once finished, you should restart your computer. Upon restart, it will automatically recognize the connected device (the AV400). It will be seen as another hard disk in Windows® Explorer.

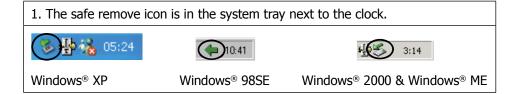
16.2 Disconnecting the AV400 from your Computer

WARNING: You must properly remove (unmount) your AV400 from the computer **before** disconnecting the USB cable to avoid loss of data or freezing the computer and/or the AV400.

DO NOT SIMPLY PULL OUT THE USB CABLE AT ANY TIME!

Windows®

To safely disconnect the AV400 hard disk, click on the system tray remove icon (green arrow as shown below) and follow the instructions. Wait until you get a message saying that you can safely unplug the device before disconnecting the USB cable. Attention: The operating system will not allow you to safely disconnect the Multimedia AV400 if you have an open file from it in a running application. You will have to close all open AV400 files in any running application. Sometimes, even when files are closed in an application, you will have to shut down the application. Using the green disconnect arrow in the system tray will then allow you to safely disconnect the AV400.



2. Click on the icon to eject (unmount) the AV400 from the computer and select the 'Safely remove' message.



3. There will be a message indicating that it is now safe to disconnect the AV400. You can now go ahead and unplug the USB cable from the AV400.



Macintosh®



Drag the AV400 hard disk icon towards the trashcan, the trashcan will become a big arrow as shown in the screen shot to the left (Mac OS 9.x will still retain the trashcan icon. This is OK, don't worry.) Drop the hard disk icon onto the arrow (or trashcan). The hard disk icon will disappear from the desktop. You can now safely unplug the USB cable from your AV400 and/or computer.

7 s€TT

From the home screen, select the **Setup** option to reveal the menu options for various settings.



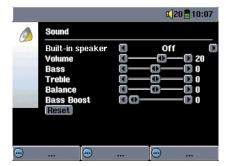


17.1 Sound Settings



If you would like to customize the sound quality, you can adjust the Bass, Treble, and other audio settings to suit your particular taste. Normally you will do this while listening to music so that you can hear the changes you make. Simply click on the LEFT function button **Setup** while listening to music.

- Once in the Setup screen, move over to the **Sound** icon and click again on ENTER •. Use LEFT and RIGHT to change a parameter's value. You will hear these changes instantly.
- Use the UP and DOWN buttons to select a different parameter.
- Click on STOP/ESC * when finished.
 You will return to the Setup screen.
- Click on STOP/ESC * again and you will return to the music playing screen.



The Sound Parameters

Parameter	Description
Built-in Speaker	Turns on and off the built-in speaker. Same as long press on the center function button.
Volume	32 levels of volume (0-31).
Bass	10 levels. Decreases or Increases the low frequencies.
Treble	10 levels. Decreases or Increases the high frequencies.
Balance	10 levels. Favors the right or left channel of the Stereo signal
Bass Boost	10 levels. Increases the very low frequencies
Reset button	Readjusts all settings to their default values

17.2 Play Mode Settings



If you would like the AV400 to play through an entire folder of songs, play songs at random (shuffle), or any of the other playing options, you can set these parameters in the PlayMode settings.

- Click on STOP/ESC * to return to the AV400 main menu and click on Setup. Or, while listening to a song click the LEFT function button Setup.
- Once in the Setup screen, move over to PlayMode and click again on ENTER •.
- Highlight one of the five PlayModes and click on ENTER to check that option.
- With the **Repeat & Shuffle** setting, choose if the songs are to be played in order, repeated or shuffled.
- See section 3.4 for details on using the ARCLibrary
- Picture Pause sets the amount of time paused between pictures in the slideshow mode. See the Photo chapter for more details.



Play Mode		
(AV400 is currently playing from a Playlist	
	Folder: Play all tracks in the current directory	
All	All: Play all tracks on AV400	
1	Single: Play a single track then stop	
11	Queue: User can queue the next track to be played †	
Sc	Scan: AV400 plays first 15 seconds of each track††	

†Queue Mode: While the current song is playing, click on Navigate, find the next song you want to play, then click Play. This is your queued song. You can only queue one song at a time. See the Playlist section to prepare multiple songs to play. Once the current track is finished playing, your queued track will be played. If you do not queue another track at this time, the AV400 will play the next song in the directory.

++Scan Mode: Each track in the directory is played for 15 seconds. This allows a quick sample of each song. If you want to play the whole song, click on the Play button during those first 15 seconds. The AV400 will then revert to single directory mode and play the rest of the songs in the directory without scanning.

17.3 Clock Settings

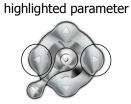


The AV400 has an internal real time clock. The time of day is shown on the top right of the **Clock** screen in either 24 hour or 12 hour display mode. To set it, go to **Setup** then select **Clock**.









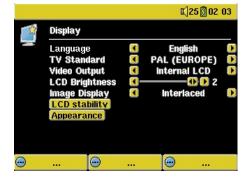
Choose Value for

When finished setting the parameters, move down to the Set button, then click on the ENTER/GO button . The clock time and date are now set. Click on the STOP/ESC button **★** to go back to the main settings menu.

17.4 Display Settings



These settings regulate the interface language and the presentation of the screen.





Setting	Description
Language	The AV400 can be set to English (default), French, or German.
TV Standard	NTSC (USA), PAL (Europe). In order to view images or videos on an external television, select one option to send the video signal compatible with your country's television system. Countries other than European or American will use one of these two systems.
Video Output	Internal LCD or External TV . To display via the built-in LCD screen or to view the display via an external television. Holding the LCD/TV button for three seconds will also alternate between these two options. Be sure your television is selecting the correct external input.
LCD Brightness	0, 1, 2 . The 3 brightness levels for the built-in LCD screen. Setting to a lower value will give you a longer battery autonomy.
Image Display	Interlaced, Progressive . This is the way the video output will be sent to the television. When viewing still images (JPEG and BMP) on a television screen, set this to Progressive to reduce possible flickering in the image.
LCD Stability	This setting is only for some models. Use this to reduce any LCD screen flicker you might have. Move the setting to the left and right to get the clearest image.
Appearance	Change the interface appearance

Setting	Description
Wallpaper	On, Off. When set to On , the selected picture (next item) will be displayed as the AV400 screen background.
Picture name	This option will display the names of the JPEG images in the AV400's System folder that can be used for screen backgrounds (Wallpaper). You can add your own JPEG images to the System folder by dragging and dropping a JPEG file from your computer. You should use JPEG images with small dimensions, ideally 320 x 240 pixels (large files slow down the display).
Font Outline	If your screen background is a dark color, it will be difficult to see the black text on the screen. Set Outlined font to On to have a more visible white outlined font.
Color scheme	Allows you to choose what color you would like to have for the status bar above and the screen buttons below.
Previous settings	Click this button to return to the settingss last set.

17.5 Power Settings



These settings will help you to save battery power thus allowing a longer battery autonomy.

You can set the AV400 to conserve power for both modes of operation (when it is powered from the battery, or when it is connected to the AC charger/adapter (DC-Power operation).



Parameter	Description
Power Off	1-9 minutes, Never. The number of minutes of user inactivity (no buttons pressed) before the AV400 shuts off. During the playback of MP3 and AVI files, this setting takes effect only after the files are finished playing.
Backlight Off	10-110 seconds, Never. The time of user inactivity (no buttons pressed) before the AV400 turns off the screen to conserve power. During the playback of AVI files, this setting only takes effect once the file is finished playing.
Hard disk	10-110 seconds, Never. The number of seconds from the time of the last file access before the AV400 tells the internal hard disk to stop spinning. The longer this time is set, the more often the hard disk is turning and the quicker the response time when accessing files. However, as it is set longer, it will quickly consume your battery. Caution: This setting should only be changed by experienced users.
Standby	1-9 minutes, Never. The number of minutes of user inactivity (no buttons pressed) before the AV400 goes into Standby mode. When powered by the AC charger/adapter (or connected to a powered TV Cradle), the AV400 will not completely shut off. It will go into Standby mode. This way, it can wake up to make a scheduled video recording.

A typical use of these settings is to set the power off, screen off, and hard disk to low values when used in battery mode. When the power adapter is plugged in, you do not need to conserve energy and thus keeping the Power on and the Backlight on makes using the AV400 more agreeable.

Increasing the hard disk value beyond the default may actually discharge the battery even when the Charger/adapter is plugged in. Note also that your unit will run hotter when the backlight and hard disk are on for long periods of time.

17.6 System Settings



The System settings allow you control over the low level parameters of the AV400.



Parameter	Description	
Show all files	Off (default), On. If set to Off, the Jukebox will only display the file names of file types, with their corresponding icons, that it knows how to play. If set to On, the Jukebox will display the names of ALL the files on the hard disk (using a ? icon for unknown types), even if they cannot be viewed or played, such as .tif or .pdf for example. This setting is important when inserting memory cards into the CompactFlash™ slot. Setting it to ON will allow the Jukebox to transfer all the files from the card media regardless of file type. If set to OFF, it will only display file types that the AV400 is capable of playing.	
Update Firmware	Used to update the AV400 to a new version of the Operating System. See chapter 18.	
Firmware Version	Displays the current version of the Operating System (OS).	
Product Key	Each AV400 device has a unique product key number.	
Hard Disk	Displays the amount of free and used space on the AV400's hard disk. The total is less than 20,40, or 80 GB due to space taken by formatting.	

17.7 TV control

See chapter 11 VIDEO – Setting the Infrared Emitter Code for a complete explanation of when and how to use this setting.

18

Updating the AV400 Firmware Operating System (05)

Archos periodically updates the Operating System (OS) and makes it available for free download on the ARCHOS website (www.archos. com). Updates to the Operating System include new features, feature improvements, and bug fixes. You should check to make sure that you are running the most recent version of the OS. Each time the AV400 starts up, the OS version is displayed on the screen (example: OS Version 1.1) on the bottom right. You will find the most recent version of the OS and its version number at the Archos website (www.archos.com) under the category Software.

Download the Update_AV400.AOS file



When you click on the link to download the new OS file (the file name is Update_AV400.AOS), your browser may warn you that the contents of the download may harm your computer. This is because the Windows® system does not know what a .AOS file is. Be assured that Archos has made every effort to ensure that the file does not contain viruses. Click on the option

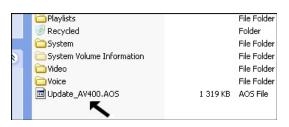
Save to download this file to a convenient place, such as **My Documents**, in order to later copy this file to your AV400. If your AV400 is connected to your PC, you can even save it directly to the AV400.

Read the History.txt File

You will also find next to the firmware download, a text file which details the list of changes from the previous version of the OS.

Copy to AV400 root and Update

When updating your Operating System, you must keep the AC charger/adapter plugged into the AV400 so that it will not shut down due to low batteries while you are performing the update. Connect your AV400 to your



computer (section 16.1), and then copy the Update_AV400. AOS file to the root directory of the AV400. The root directory is the top most level of the directory hierarchy. Just drag this .AOS file onto the AV400

Hard disk in your file manager and it will place it in the top most directory (outside any folder). If there is already an older version of the Update_AV400.AOS file on your AV400, Windows® will ask if you want to overwrite the current file. Click on Yes. Once this file is copied, safely disconnect (section 16.2) the AV400 from the computer.

Update Firmware

Next, go to the **System** parameters under **Setup** and then scroll down to *Update Firmware* and click on it. The AV400 will search for the .AOS file and will ask you to click **Yes**, to start the update. Follow the on-screen instructions. When completed, the AV400 will restart itself and you will see the new OS version displayed on the bottom right of the screen.

19

Technical Support

- For warranty and services purposes, keep your sales receipt for proof of purchase. The serial number for the AV420 model can be found in the battery compartment.
- If technical support (Telephone or E-mail) determines that your product needs to be returned, please contact the place of purchase to have your product repaired or replaced (depending on problem type). Customers who purchased directly from the Archos website should fill out the form on the website under Support: Product Returns.
- There is an FAQ Frequently Asked Questions section at the ARCHOS Website www.archos.com, Support: FAQ that can help answer many of your questions.
- If you need technical help, you may contact ARCHOS directly in your own language via these phone numbers. For other countries, please use e-mail technical support.

-----Telephone Support------

DO NOT USE PHONE SUPPORT FOR MARKETING AND SALES QUESTIONS. These numbers are to aid those who have technical difficulties / malfunctions.

949-609-1400	(USA, Canada)	09-1745-6224	(Spain)
01 70 20 00 30	(France)	02-4827-1143	(Italy)
0207-949-0115	(UK)	020-50-40-510	(Netherlands)
069-6698-4714	(Germany)		

-----E-mail Support-----

tech-support.us@archos.comEnglish (United States and Canada customers)tech-support.eu@archos.comEnglish or French (Europe and the rest of the planet)tech-support.de@archos.comGerman (Germany)

ech-suppon.de@dichos.com German (Germany)

To respond to your e-mails efficiently, when sending one, please indicate the product name and question type in the Subject of the e-mail.

For example:

To: tech-support.us@archos.com **Subject**: AV400 – Playing a Playlist

WWW.ARCHOS.COM

Worldwide Offices				
United States & Canada		Europe & Asia		
ARCHOS Technology		ARCHOS S.A.		
3, Goodyear - Unit A		12, rue Ampère		
Irvine, CA 92618 USA		91430 Ig	91430 Igny	
Phone:	1 949-609-1483	France		
Fax:	1 949-609-1414	Phone:	+33 (0) 169 33 169 0	
		Fax:	+33 (0) 169 33 169 9	
United Kingdom		German	ıy	
ARCHOS (UK) Limited		ARCHOS Deutschland GmbH		
3 Galileo Park		Bredelaerstrasse 63		
Mitchell Close		40474 Düsseldorf		
West Portway Andover		Germany		
SP103XQ Andover		Tel:	+49 211 1520 384	
United Kingdom		Fax:	+49 211 1520 349	
Phone:	+44 (0) 1264 366022			
Fax:	+44 (0) 1264 366626			





20.1 USB Connection issues

Problem: I cannot get my AV400 to be recognized by the computer. **Solutions**:

- Shut off and reboot the computer and the AV400 and then try connecting again in the preferred order mentioned in section 16.1.
- Only if using Windows 98SE, you must first install the Windows98SE drivers.
- If you installed the Windows 98SE driver on your Windows® XP, 2000, or ME edition, this could cause problems. Uninstall that driver and then reinstall the generic Windows® Mass Storage Device driver.
- If using a USB hub, try connecting without using the hub (some hubs are not powered and may not work with the AV400).
- If using a USB port in the front of your computer, try a USB port in the back. Front USB ports are often from non-powered hubs.
- Do not connect to a USB port repeated through a keyboard.
- On old computers, the USB driver software on your computer may be out of date. Find your USB chipset type by going to My Computer > Properties > Device Driver > Universal Serial Bus (USB) Controllers > Host Controller. You may have a chipset VIA, Intel, SIS or another. It is possible that you do not have the latest software drivers for these chipsets. For VIA updates, check out www.viaarena.com. For Intel check out www.intel.com. For SIS, uninstall the driver and reinstall the Windows default USB controller drivers.
- If using a laptop computer and a docking station, try connecting without the docking station.
- If Macintosh® OS 10.1.x says it cannot mount the volume, you can use Disk Utility to reformat the Jukebox hard disk to type MS DOS FAT32. However, files will only be readable from a Macintosh®, not a Windows® machine. You should update to version 10.2.4 or better.
- On older computers, make sure in your system BIOS the USB port is checked "ON" not "Off". Usually this just happens on old machines.
- On older Win98SE computers, if there is a line "lastdrive=" in the config.sys file, make sure that it is "lastdrive=z".
- If the Files Allocation Table (FAT) gets corrupted, the AV400 may not

show up in Windows XP for over one minute, and then it comes up as **local drive**. Use DOS Utility **ChkDsk** as shown below.

Windows® XP may recognize the AV400 hard disk but yet not assign a
drive letter to it. Right click on My Computer and select Manage. Then
select Storage, then Disk Management. Within this window you may
see the hard drive and be able to assign a drive letter by right-clicking
on the hard disk, and selecting the option Change drive letter and
paths...

Problem: What do I do if I try to disconnect via the green arrow but keep getting "The device 'Generic Volume' cannot be stopped now. Try stopping the device again later."

Answer: Shut off any program that might be accessing data on the AV400, including Windows® Explorer. If this does not work, shut down all programs, wait 20 seconds, then try the green arrow one or two times again. If this does not work, you should shut down the computer and disconnect the USB cable once the computer is off.

20.2 Charging and Power issues

You do not need to fully discharge the batteries before recharging them. **Problem**: You do not need to fully discharge the batteries before recharging them.

Answer: The specifications are under the condition that the screen backlight goes off after 30 seconds (for MP3 music) and the user does not access the machine, it just sits and plays. If you get significantly less time from a full charge, call our technical support hot-line.

20.3 AV400 locks up (freezes operation) or Stops

Problem: The AV400 locks-up. None of the buttons work.

Solution: If the lock buttons is set, none of the buttons respond. Hold down the top function button for three seconds to turn off the lock buttons function. A freeze up could also be caused by electrostatic phenomena. That is, static electricity has temporarily knocked out the AV400. Hold down on the STOP/OFF * button for 15 seconds and the AV400 will shut off. Restart it normally now.

20.4 The Computer locks-up (freezes operation) or Stops

Problem: The computer locks-up.

Answer: Most likely because you did not use the green 'safely remove hardware' icon in the system tray in order to remove the AV400 from your computer.

20.5 File issues, corrupted data, formatting, and partitioning

Problem: On the AV400, I find new file names and folder names that I never created or they have strange gibberish names.

Answer: Most likely, the AV400's file allocation table (FAT) has been corrupted. This could have been due to the AV400 shutting down (due to low battery power) while reading or writing to your computer via the USB connection. To fix a corrupted FAT problem, you should use the Error Checking utility or the Check Disk utility explained at the end of this section. Attention: Windows and Macintosh often write extra files to the hard disk such as **finder.def** or **System volume info**. These are normal and will not harm the AV400.

Problem: I have been using my AV400 to transfer files back and forth between different computers. Will defragmenting the AV400 hard disk do any harm to it?

Answer: Defragmenting the AV400 hard disk may be useful after having transferred many files to and from the AV400. It is never harmful to use the defragmenter on the AV400. Make sure no other program is running while using the Windows® defragmenter utility. **Make sure** you power the AV400 with the external power adapter during this procedure.

Problem: I have copied files to my AV400 via USB from my computer, but now I cannot see these files on the device.

Answer: You have probably transferred a file which the AV400 cannot play, for example a PDF, MOV, or DOC file. Go to the System Settings under Setup on the main screen and you will find a parameter called Show all files. If you set it to on, the AV400 will show all files, even if it cannot play the file (you must browse via the browser mode from the main menu screen). The browser will show a ? icon indicating that it is not one of the standard file types that it can play.

Problem: I want to reformat the AV400's hard disk.

Answer: You can do this, but it will erase ALL of the data on your AV400. Sometimes this may be necessary if your FAT (File Allocation Table) becomes so corrupted that nothing seems to fix your file problems. First, as explained below, you should run ScanDisk or the DOS chkdsk (Check Disk) program to try to fix your problem. If this doesn't fix your problem and you are sure you must reformat the AV400 hard disk, then go to the screen Setup > System and press and hold the Right function button for three seconds. A button "Format HD" will appear. Use this button to format the AV400's hard drive. Remember, doing this will erase all the data on the hard disk!!!

Problem: I would like to partition the AV400 hard disk.

Answer: If you know how to partition a hard disk, this is OK. The AV400 will, however, only recognize a FAT32 partition. Thus it will just see and use that partition of the hard disk which is a FAT32 partition.

Problem: My files have disappeared from the AV400.

Answer: To see all your files, make sure the setting **Show all files** is set to **ON**. Also make sure that you browse your files via the **Browser** mode and not a filtered view such as **Photo**, **Music**, or **Video**.

Windows® 98SE & ME Running Scan-Disk (Error Checking)

- Quit all running applications.
- Properly connect the AV400 to your computer as explained in chapter 16.
- Make sure external AC adapter is powering the AV400.
- Right click on the AV400 hard disk in Windows® Explorer and select Properties.
- Select the Tools option and run the Error checking program
- Make sure you check the box to automatically fix errors.
- Be patient, this may take a while. Windows® may ask you to restart the computer to make certain Windows files available. This is OK, click on Yes.

Windows® XP & 2000 Running Check Disk Utility (ChkDsk)

If you still have problems with the file system on your AV400 you can try to fix it using the DOS utility, check disk (chkdsk). Do the following;

- Make sure external AC adapter is powering the AV400.
- Quit all running applications.
- Properly connect the AV400 to your computer as explained in chapter 16.

- Wait patiently (up to 5 minutes) for Windows XP to show the **local drive** as mounted.
- Open a DOS window. Programs > Accessories > Command Prompt.
- At the prompt, type **chkdsk e: /f**. Use **e:** or **f:** or whatever drive letter is representing your AV400. The /f argument tells the program to automatically fix errors.
- Be patient, this may take a while.
- When it is finished, exit the DOS Window and properly disconnect the AV400 from your computer.

74



Technical Specifications

ARCHOS VIDEO AV400 series		
Storage Capacity	Model AV4xx : xx = Size of Hard Drive in Gigabytes*	
Computer Interface	High Speed USB 2.0 (compatible USB 1.1)	
Image Playback	JPG and BMP (4, 8, 24 bit) images, any size	
Audio Playback	Stereo MP3 decoding 30-320 kb/s CBR & VBR, WMA, WAV.	
Audio Recording	Stereo WAV (PCM & ADPCM)	
Video Playback	Video track: MPEG-4 Simple Profile compliant .AVI format (DivX™** 4.0 & 5.0 & XviD) 720 x 576 pixels @ 25fps maximum. Sound track: MP3 or WAV IMA-ADPCM stereo sound tracks	
Screen	Depending on model, either a 3.5 or 3.8 inch color TFT LCD (QVGA) 320x240 pixels 262 thousand colors	
Television	Video output in PAL (EU) or NTSC (US) standard	
Playback Autonomy***	Model 420: Up to 12 hours MP3, up to 4 hours video Models 440/480: Up to 16 hrs music, up to 4 ½ hrs video	
Scalability	Free Operating System updates downloadable from ARCHOS website	
Ports	CompactFlash [™] slot to read CompactFlash [™] type 1 memory cards	
AV Connections	Audio/video Multi-connect jack. Includes connections for audio/video IN and audio/video OUT.	
Power source	Model 420: Removable Lithium-Ion battery pack. Models 440, 480: Non-removable internal Lithium-Ion battery pack. All models come with an external charger/adapter.	
Physical Dimensions	Model 420: 127 x 82 x 21 mm (5.0 x 3.2 x .83 inches) - 274 grams Models 440, 480: 127 x 82 x 27 mm (5.0 x 3.2 x 1.1 inches) - 315 grams	
Temperature Range	5 °C to 35 °C running ; -20 °C to 45 °C storage	
System Requirements	PC: Windows 98SE, ME, 2000, XP Pentium II 266MHz with 64MB ram Mac: OS 9.2 or X (10.2.4), iMac, G3 or higher	

^{*1} GB = 1 billion bytes, formatted capacity is less.



Warranty and Limited Liability

This product is sold with a limited warranty and specific remedies are available to the original purchaser in the event the product fails to conform to the limited warranty. Manufacturer's liability may be further limited in accordance with its sales contract. In general, the manufacturer shall not be responsible for product damages caused by natural disasters, fire, static discharge, misuse, abuse, neglect, improper handling or installation, unauthorized repair, alteration or accident. In no event shall the manufacturer be liable for loss of data stored on disk media.

MANUFACTURER SHALL NOT BE LIABLE FOR ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES. EVEN IF INFORMED OF THE POSSIBILITY THEREOF IN ADVANCE.

ARCHOS licensor(s) makes no warranties, express or implied, including, without limitation, the implied warranties of merchantability and fitness for a particular purpose, regarding the licensed materials. ARCHOS's licensor(s) does not warrant, guarantee or make any representations regarding the use or the results of the use of the licensed materials in terms of its correctness, accuracy, reliability, correctness or otherwise. The entire risk as to the results and performance of the licensed materials is assumed by you. The exclusion of implied warranties is not permitted by some jurisdictions. The above exclusion may not apply to you.

In no event will ARCHOS's licensor(s), and their directors, officers, employees or agents (collectively ARCHOS' licensor) be liable to you for any consequential, incidental or indirect damages (including damages for loss of business profits, business interruption, loss of business information, and the like) arising out of the use of inability to use the licensed materials even if ARCHOS' licensor has been advised of the possibility of such damages. Because some jurisdiction do not allow the exclusion or limitation of liability for consequential or incidental damages, the above limitations may not apply to you.

Please see your sales contract for a complete statement of warranty rights, remedies and limitation of liability.

Furthermore, warranty does not apply to:

- 1. Damages or problems resulting from misuse, abuse, accident, alteration or incorrect electrical current or voltage.
- 2. Any product tampered-with or damaged warranty seal or serial number label.
- 3. Any product without a warranty or serial number label.
- 4. Batteries and any consumable items delivered with or in the equipment.

^{**}DivX is a trademark of DivXNetworks, Inc.

^{***}Depending on usage (stop/start/writing)

Warnings and Safety Instructions

CAUTION

To prevent risks of electric shock, this unit must only be opened by qualified service personnel. Power off and disconnect the power supply cable before opening the unit.

WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture. Use of this product is for personal use only. Copying CDs or loading music, video, or picture files for sale or other business purposes is or may be a violation of copyright law. Copyrighted materials, works of art, and/or presentations may require authorization to be fully or partially recorded. Please be aware of all such applicable laws concerning the recording and use of such for your country and jurisdiction.

FCC Compliance Statement

FCC Compliance

This equipment has been tested and found to comply with limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

CAUTION: Modifications not authorized by the manufacturer may void users authority to operate this device.

FCC Part 15 - Operation is subject to the following two conditions:

- 1. This device may not cause harmful interference;
- 2. This device must accept any interference received including interference that may cause undesired operation.

Electrostatic Discharge

Note: During electrostatic discharge, the product may be malfunctioning. Reset to return normal operation. The AV400 reset is actuated by pressing and holding the STOP/ESC button for 10 seconds. The unit will power off. Restart normally.

Copyright Notice

Copyright ARCHOS © 2003 All rights reserved.

This document may not, in whole or part, be copied, photocopied, reproduced, translated or reduced to any electronic medium or machine-readable form without prior consent, in writing, from ARCHOS. All brands and products names are registered trademarks and the property of their respective owners. Specifications are subject to change without notification. Errors and omissions accepted. Images and illustrations may not always match contents. Copyright ® ARCHOS. All rights reserved.

Disclaimer of warranty: to the extent allowed by applicable law, representations and warranties of non-infringement of copyrights or other intellectual property rights resulting from the use of the product under conditions other than as here above specified, are hereby excluded.

LCD Pixel Policy

The LCD screen on your Archos AV400 unit has been manufactured to rigorous standards to provide a high quality viewing experience. Nevertheless, your LCD screen may have slight imperfections. This is not particular to the Archos screen, but to all devices which have LCD screens regardless of the original manufacturer of the LCD. Each product vendor guarantees that his screen will contain no more than a certain number of defective pixels. Each screen pixel contains three dot elements (Red, Blue, and Green). One or all of the dots in a given pixel may be stuck on or stuck off. A single dot stuck off is the least noticeable. All three dots of a pixel stuck on is the most noticeable. Archos guarantees that its AV400 screen will have no more than 1 defective pixel (regardless if that pixel has one or more defective dots). This means that during the period of guarantee for your country or jurisdiction, if the screen on your product has two or more defective pixels, Archos will repair or replace your AV400 product at its cost. Thus, one defective pixel is not grounds for replacement or repair of the product.

Avoiding Hearing Damage

This product respects the current regulations for limiting the output volume of consumer audio devices to a safe level. By listening to your device with headphones or earbuds at high volumes, you run the risk of permanent damage to your ears. Even if you get used to listening at high volumes and it seems normal to you, you still risk the possibility of damaging your hearing. Reduce the volume of your device to a reasonable level to avoid permanent hearing damage. If you hear ringing in your ears, reduce the volume or shut off your device. This device has been tested with the Archos supplied earphones. Other manufactures earphones may produces volume levels higher or lower than the Archos delivered earphones.