AR6 Pro

Digital Signage Player

User Manual

v1.1

October 22, 2008

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1 Introduction

1.1 The AR6 Pro

The AR6 is an entry-level advertising solution that allows the user to play content from an array of media cards on to a display screen. With a host of features and semi-customizable software, it is an extremely cost-effective digital signage solution. The integrated real-time clock allows you to schedule content delivery to get your message across when you need it most.

Product Dimensions: 14.0cm x 8.5 cm x 2.6 cm
                             5.51" x 3.35" x 1.02"

1.2 Package Contents

- AR6 media player
- External power adapter;
  Input 100-240V, Output +12V/1A
- Composite AV and S-Video cables
- Infrared remote control
- User manual

1.3 Playback Formats

1.3.1 Supported Media Cards
Compact Flash type I/II, IBM MicroDrive, MS, MS-Pro, MS-Duo, SD and MMC.

1.3.2 Playback Formats

- **Video**:
  MPEG-1, MPEG-2, MPEG-4
  (ASF simple profile 320 x 240 video)

- **Audio**:
  MP3, WAV
  (MP3 minimum 32 Kbps, maximum 256 Kbps)

- **Photo**:
  JPEG, Motion JPEG (AVI)
  (JPG minimum 16 x 16pixels, maximum 5120 x 3840pixels)
  (Motion JPG maximum 10 fps)

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1. CF/MD card reader
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3. Infrared receiver
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Confirm or play

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Previous file or page

Next file or page

Volume Up/Down

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In PHOTO mode, press this key to change between the different transition effects.

In MUSIC mode, press this key to toggle between the different equalizers.

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In PHOTO mode, press this key to start a slide show with background music (MP3).

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Add file to playlist

Delete selected file from playlist

Fast forward & reverse

Zoom 3x/4x image

Note: Ensure the battery (3V lithium cell, CR2025) is inserted before use.

1.6 System Setup

1.6.1 TV Connection

Find a suitable place for your AR6, within 1.4m of your TV screen, panel or LCD display. Connect the power supply to your device and the power outlet.

Included with your AR6 is the standard video cable with RCA connector and the S-Video cable. Plug in your preferred video cable to the video output connector on the AR6 and your screen.

Composite Video   *S-Video*

For better video quality, we recommend using the S-Video cable and S-Video connector instead of the yellow RCA connector. For LCD displays, an optional VGA cable is also available.

For audio output, use the red and white RCA connectors. Connect this cable to the audio output on your AR6 and plug it into your TV, external speakers or sound system.

Stereo Audio

1.6.2 TV Output

Once you have connected the cables, turn on the power switch. Wait a few seconds for the system to boot, then use the remote control to navigate and control the device.

If the screen stays blank, press the OUTPUT key on your remote control to toggle through the different video channels until you find the correct one.

To change between PAL and NTSC TV systems, press the SETUP button on your remote control and change the TV Type under Preferences or use the PAL/NTSC key.

To prevent any accidental change of the video output, you can lock your settings. To do this, press the SETUP key, go to Preferences, press the FAST FORWARD key once to unlock the menu and then select Output Lock. Turn it ON by selecting your preferred output and clicking OK to save it.

If you are using this device for the first time, set the correct time by going to the setup menu and pressing the DISP key on your remote control.

Set the time using the virtual keyboard and press OK to save the settings. You can select CANCEL or press the DISP key to skip the other settings.

2 Standard TV Mode

2.1 Home

On the main screen, you can choose VIDEO MODE to preview all movies (MPEG-1, MPEG-2, MPEG-4), MUSIC MODE to display all audio files (MP3, WAV) or PHOTO MODE to display all images (JPG).

To see all files sorted by folders as seen on the computer, choose the FILE LIBRARY. To enter the set up menu, choose the SETUP MENU or press the SETUP button on your remote control.

If more than one media card is inserted, you can select the one you want to access before seeing the HOME screen.

[HOME] To get back to the HOME screen, press the STOP key on your remote control, followed by the HOME key.

[Disp] Press the DISP key to see the calendar, date and the current time.

2.2 Video Mode

All movies on the media card will be displayed, regardless in which folder they are stored. A preview with small thumbnails and a short movie clip for each video file will be shown.

Use the arrow buttons on your remote control to navigate. Press the down arrow or the NEXT button to explore the next page and press the OK key to start playback.
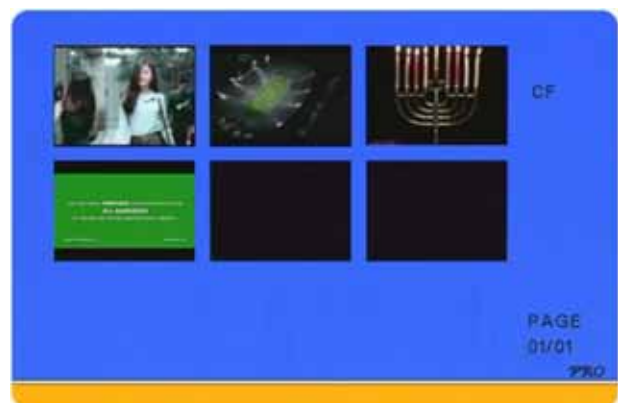
[Volume] Use the VOL+ and VOL- buttons on your remote control to adjust the volume and if needed, press the MUTE key to turn off the sound. To restore sound, press the MUTE key again.

[FF/RV] During playback, use the FAST FORWARD or REVERSE buttons to skip to a certain part of the movie.

2.3 Music Mode

All audio files on the media card will be displayed, regardless in which folder they are stored and it will automatically start to playback the first file.

Use the arrow buttons on your remote control to navigate. Press the down arrow or the NEXT button to explore the next page.

[OK] Press the OK button to display the equalizer and further details for the chosen music file.

[Volume] Use the VOL+ and VOL- buttons on your remote control to adjust the volume and if needed, press the MUTE key to turn off the sound. To restore sound, press MUTE once more.

[Music.s] Press the MUSIC.S button to start a slideshow with MP3 background music.

[Trans] In the equalizer mode, press the TRANS button to change between the different equalizer presets.

1. Standard
2. Classic
3. Jazz
4. Rock
5. Pop
6. Ballad
7. Dance
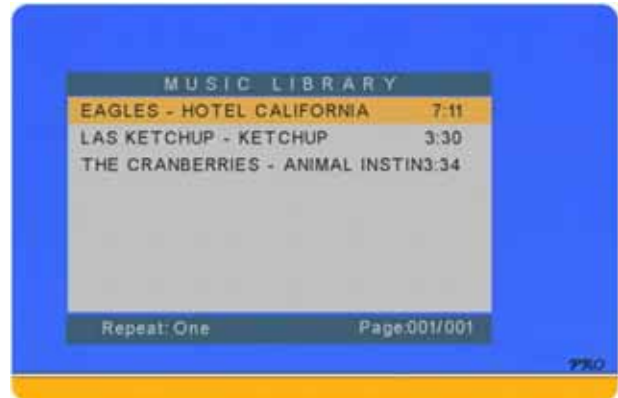
2.4 Photo Mode

All images on the media card will be displayed, regardless in which folder they are stored. A preview with small thumbnail images will be shown.

Use the arrow buttons on your remote control to navigate. Press the down arrow or the NEXT button to explore the next page if you have a lot of images and use the OK key to display the photo of your choice.

[ZOOM] When displaying a single image, you can use the ZOOM button to toggle through different enlargements (ON, 3x, 4x, OFF). During zoom mode, use the arrow buttons to pan.

[ROTATE] When displaying a single image, you can use the ROTATE button to rotate your photos clockwise in 90° increments. This function is not available during a slideshow.

[Music.s] Press the MUSIC.S button to start a slide show presentation with background music. This will automatically play back MP3 files stored on the media card.

[Trans] Press the TRANS button to toggle through 13 different transition effects for the slideshow presentation.

1. Full Screen
2. Roll: Top to Bottom
3. Roll: Bottom to Top
4. Roll: Top/Bottom to Centre
5. Roll: Centre to Top/Bottom
6. Blind: Top to Bottom
7. Roll: Left to Right
8. Roll: Right to Left
9. Roll: Left/Right to Centre
10. Roll: Centre to Left/Right
11. Roll: Implode
12. Blind: Left to Right
13. Cross Fade
14. Random

2.5 Slide Show

This is the same as when pressing the MUSIC.S button on the remote control in Photo Mode. It will start a slide show presentation using all the images and automatically play the MP3 files stored on the media card as background music.

Press the TRANS button during playback to toggle through the 13 different transition effects for the slideshow presentation.

2.6 File Library

In the file library, the data on the media card is displayed showing the folders and structure as seen on the computer. Only supported media files will be displayed.

Use the arrow buttons on your remote control to navigate and preview the files. Press OK to display the selected file in full screen mode.

[Context Menu] In the file library, you have the ability to erase and rename files, copy them to a different location and create new folders and add or delete files from the playlist. If more than one media card is inserted, you can also copy files between cards.

To use this function, select one of the files or folders and press the DISP key on your remote control to access the context menu. Use the arrow buttons to navigate and the OK button to confirm.

[Disp] In the file library, select a file and press the DISP key. A context menu with different options like editing playlist, file copy, delete, rename, new folder and properties will appear.

[Add/Del to List] Adds or deletes the selected file to or from the playlist. If there is no playlist available, it will create a new playlist and add the file on the first line. Files that have been added to the playlist will have red letters for the file name instead of black. To view the playlist, open the file named PLAY.

[Copy] Select copy to turn on the copy mode. Press the RIGHT arrow key and choose your destination, then press the LEFT arrow key and choose your source file. Press OK to copy the file or press STOP to cancel and return to the file library.

[Delete] Select delete, confirm the command and the file will be erased.

[Rename] Select rename and a virtual keyboard will appear. Type in the new name and confirm by clicking OK to change the file name.

[New Folder] Select new folder and a virtual keyboard will appear. Type in the folder name and click OK to create a new folder.

[Properties] Select properties to show detailed information about the file. Press OK to return to the file library.
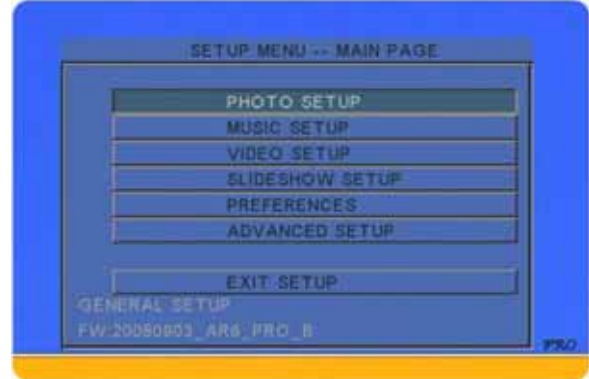
2.7 Setup Menu

To access the player's preferences and advanced settings, go to the HOME screen and press the SETUP key.

To set the time, alarm clock and Auto ON/OFF function, press the DISP key.

[Photo Setup] Settings for the thumbnail preview matrix (4/9/16/25 images on one page), transition mode (fast or slow) and display orientation (default or ignore).

If the orientation is set to default and the EXIF data or the JPG image includes the orientation tag, it will automatically rotate the image.

[Music Setup] Set the repeat mode when playing music. You can set it to repeat one file (ONE), all files (ALL) or turn it OFF completely (OFF). The current mode will be displayed at the bottom of the music library.

[Video Setup] Set the thumbnail preview matrix (4/9/16/25 previews on one page) and the repeat mode when playing videos. You can set it to play the video files once in sequence (ONE LOOP), repeat the same file (SINGLE) or repeat all continuously (CONTINUOUS).

[Slideshow Setup] Settings for the slideshow with transition effects (13 effects), interval timing (1/3/5/10 seconds) and repeat mode. If the folder repeat mode is set to ON, it will play the images continuously until stopped. If set to OFF, it will only play them once.

If Auto Play is turned ON, the next time you turn on the power, all files stored on the media card will be listed alphabetically and playback starts automatically. If PHOTO+MUSIC is ON, it will play only JPG images with background music (MP3) instead. Set the slideshow mode to AUTO for automatic playback or MANUAL to manually advance to the next file.

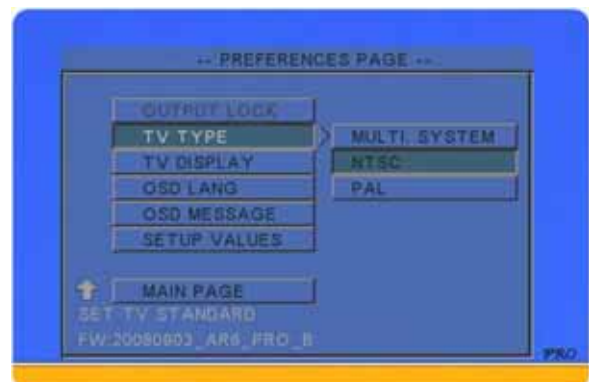**[Preferences]** Settings for the menu language, video output and reset function for preferences.

Output: S-Video, Composite, VGA, RGB
TV Type: NTSC, PAL, Multi. System
TV Display: Pan Scan, Letter Box, Wide Screen
OSD Languages: English, Chinese, Japanese
OSD Message: On-screen messages (ON/OFF).

Note: The Output Lock function is locked by default, to prevent changing it by accident. To use it, press the FAST FORWARD key to enable access, select one of the video outputs and then press the OK key to lock the video output setting.

[Advanced Setup] Settings for scheduled playback and timer functions.

Playlist: Set to OFF when using the standard and automated modes or select one of the playlists. Single uses a single playlist only, Date uses one list per day, Time depends on the time with up to 24 lists per day and Date+Time depends on both the date and time. You can also turn the Single playlist mode on or off by pressing the INFO button on the remote control.

Playing Mode: Use the standard mode to browse for your files with the remote control or use repeat to play all files that are stored on the media card continuously. The manual and standby modes allow the user to press a key combination to play certain files and then either return to the title file (manual) or wait for further input (standby). See Automated Playback for more details regarding the playing modes.

Auto ON/OFF: If turned ON, you can set a time for the unit to automatically turn ON and OFF.

After enabling this function, go to the main page of the setup menu and press the DISP key on your remote control to enter the timer setup. Enter the clock time using the virtual keyboard, then the shut down time and at the end the start up time. To skip one of the settings, press the DISP key or choose CANCEL.

Alarm: Enable the alarm by choosing between MP3 music (MP3) and the standard alarm sound (BEEP) or disable the alarm clock (OFF).

To set the time for the alarm clock, go to the main page of the setup menu and press the DISP key on your remote control to enter the timer setup wizard.

[Calendar] To view the calendar, press the HOME key to return to the main page and then the DISP key on your remote control to display it. To save the correct date, select it and press the OK key.

3 Automated Playback

3.1 Slideshow Setup

The slideshow is an easy way to play all files or only images with background music and automatically start when the power is turned on.

3.1.1 Auto Play

When this function is enabled, it will play all files (video, audio, images) continuously as soon as the player is turned on. After turning it ON, exit the setup menu and press the HOME key.
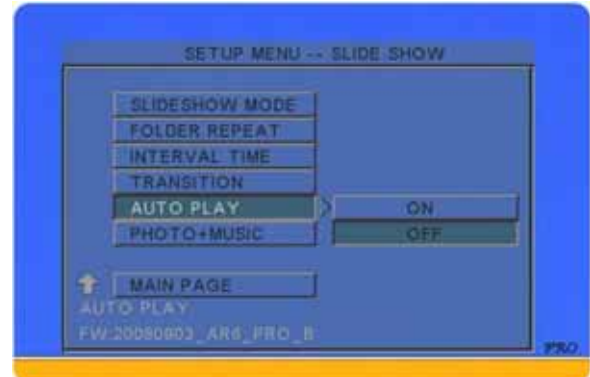
3.1.2 Photo + Music

When this function is enabled, it will play only images (JPG) with background music (MP3) continuously as soon as the player is turned on. After turning it ON, exit the setup menu and press the HOME key.

Note: To turn off the slideshow, go back to the setup menu and select OFF for that function, exit the setup menu and press the HOME key.

3.2 Single Playlist Mode

Go to Playlist in the advanced setup menu and select Single. It will then automatically play all files in the playlist (maximum 50 files).

Instead of using the setup menu, you can also turn the playlist mode on or off by pressing the INFO button. After changing it, press the HOME key to start playback or return to the main screen.
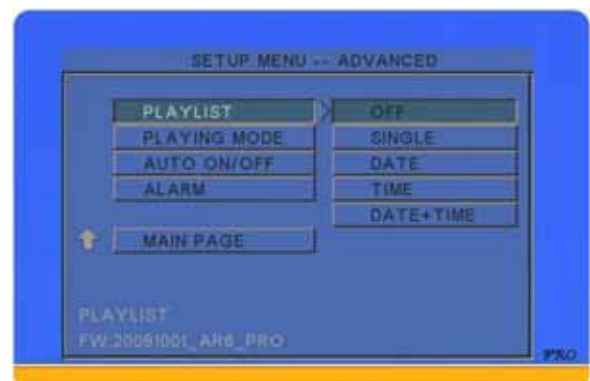
3.2.1 Creating a playlist

To use the playlist mode, a text file (play.lst) written on the computer and stored on the media card or a playlist that has been created via remote control has to prepared.

1. Turn on the media player, enter the file library and select a file.

2. Press the DISP key to open the context menu and select "Add to list" or without context menu, simply press the ADD LIST key on your remote control.

3. The letters of the files that have been added to the playlist will turn red.
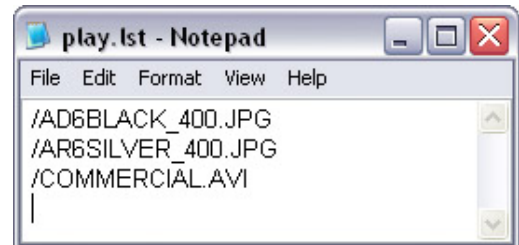
3.2.2 Editing a playlist

To view the current single playlist, select the PLAY file in the file library and open it or refer to the file names that are red instead of black, to see which of the files are currently on the list.

To edit a single playlist, files can be removed or added by using the ADD LIST and DEL LIST keys on the remote control or with the context menu. Alternatively, the play.lst file can also be modified with a text editor on the computer.

1. Stop playback and enter the setup menu.

2. Go to the advanced setup and turn off the playlist by enabling the standard mode.

3. Exit the setup menu, press the HOME key and then enter the file library.

4. To remove files that are currently on the playlist, select those with red letters and press the DEL LIST key or press the DISP key and use the context menu.

5. To add more files, select those with black letters and press the ADD LIST key or press the DISP key and use the context menu. The new files will be added at the end of the list.

6. Turn the playlist back ON and press the HOME key to continue playback.

To edit the playlist on the computer, turn off the media player, remove the media card and use a text editor to modify the "play.lst" file. Add one file per line with one extra line break at the end of the list (max. 50 files). Note that sub-directories are not supported.

File Path	Playback
/J001.JPG	Displays the JPG file J001.jpg from the root directory. The display time will depend on the interval time set in the Slide Show setup menu.
/J001.JPG 12	Displays the JPG file J001.jpg from the root directory. The additional time (maximum 65535 seconds) will overwrite the default interval time and display the image as long as set in the playlist.
/A001.MP3	Plays the MP3 file A001.mp3 from the root directory.
/J001.JPG 1 /A001.MP3 /J002.JPG 1 /A002.MP3	A JPG image followed by a MP3 file on the next line will use the MP3 file as background music, while displaying the JPG image until the end of the song. Use a delay time of 1 second for the JPG image in order for the music to start immediately after displaying the image.
/M001.MPG	Plays the MPG video M001.mpg from the root directory.

3.3 Multiple Playlist Mode

3.3.1 Playlist by Date
In order to have different playlists throughout the week without having to manually update them every day, you can create daily playlists based on the date.
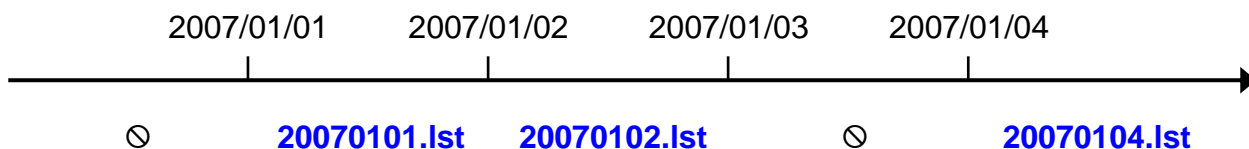
Example: 20070101.lst (year, month, date)

1. On your computer, create a **playlist** with the file structure like the single playlist.

2. Rename the file from play.lst to the date when that list should be used. As an example, for the files to be played on January 1st 2007, rename the file **20070101.lst**. Always use 8 numbers for the date.

3. Create as many lists as you like and store them on the media card in the **root directory**.

4. For the **playlist mode** on the AR6, select **Date**.

5. **Every day at midnight**, the AR6 will **automatically refresh** the content and if there is a specific playlist found for that day, it will rename the file to play.lst and use it for playback throughout the day. If the unit is not running at midnight, it will refresh the content as soon as it's started.

Note: Always use 8 numbers for the date (example: 20070408). When using the daily playlist function, make sure to first set the correct date and time on your AR6.

If there is no particular playlist for that day, the AR6 will pause at the main screen and continue playback as soon as it can find a new playlist for that particular day.

3.3.2 Playlist by Time

In order to use different playlists throughout the day without having to manually update them, you can create up to 24 different playlists based on the time.
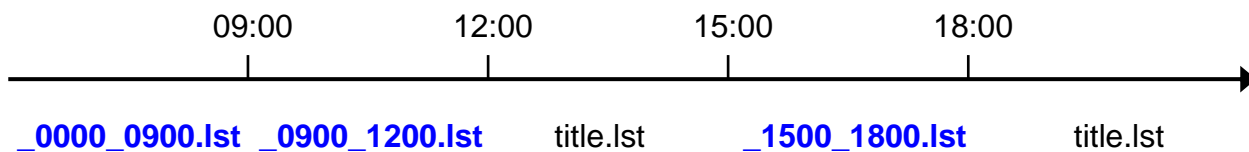
Example: _0900_1800.lst

1. On your computer, create a **playlist** with the file structure like the single playlist.

2. Rename the file from play.lst to the time when that list should be used. As an example, for the files to be played from 9AM to 6PM, rename the file **_0900_1800.lst**. Always use 4 numbers for each time with an underscore in front.

3. Create up to 24 lists and store them on the media card in the **root directory**.

4. For the **playlist mode** on the AR6, select **Time**.

5. Whenever the time is up, the AR6 will **automatically refresh** the content and if there is a specific playlist found for that time, it will rename the file to play.lst and use it for playback during the defined period.

6. If there is a gap in-between some of the time based playlists, it will automatically use the **title.lst** playlist. If that does not exist, it will pause at the main screen.

Note: When using the playlist by time function, make sure to first set the correct time on your AR6. Do not let the playlists overlap themselves in time!

If there is no playlist for a certain time and there is a gap until the next playlist starts, the AR6 will automatically use the title.lst playlist instead. If there is no title.lst, it will pause at the main screen and continue playback as soon as the time for the next playlist is up.

3.3.3 Playlist by Date+Time

In order to use different playlists throughout the day and also depending on the date without having to manually update them, you can create playlists based on the date&time.
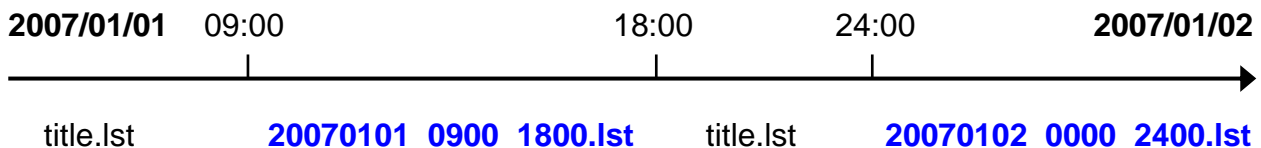
Example: 20070101_0900_1200.lst (year, month, day, time)

1. On your computer, create a **playlist** with the file structure like the single playlist.

2. Rename the file from play.lst to the date+time when that list should be used. As an example, for the files to be played from 9AM to 6PM on January 1st 2007, rename the file **20070101_0900_1800.lst**. Always use 8 numbers for the date and 4 numbers for the time with an underscore in between.

3. Create as many lists as you like but with a maximum of 24 per day and store them on the media card in the **root directory**.

4. For the **playlist mode** on the AR6, select **Date+Time**.

5. Whenever the time is up, the AR6 will **automatically refresh** the content and if there is a specific playlist found for that date+time, it will rename the file to play.lst and use it for playback during the defined period.

6. If there is a gap in between some of the time based playlists, it will automatically use the **title.lst** playlist. If that does not exist or there is no playlist at all for that day, it will pause at the main screen.

Note: When using the playlist by date&time function, make sure to first set the correct date and time on your AR6. Do not let the playlists overlap themselves in time!

2007/01/01	09:00		18:00	24:00	**2007/01/02**

title.lst	**20070101_0900_1800.lst**	title.lst	**20070102_0000_2400.lst**

If there is no playlist on that date at all or there is no title.lst, it will pause at the main screen and continue playback as soon as the time is up for the next playlist.

3.4 Playing Mode

This is the play mode that is used when the playlist and slideshow is turned off. By default, it is set to standard and the files on the media player can be accessed with the remote control.

3.4.1 Standard
This is the standard browser mode of the AR6 media player. The user is presented with the main screen and can then use the remote control to access and playback the media files.

3.4.2 Repeat
This mode is identical to the Auto Play function in the slideshow setup menu. It will play and repeat all the media files that are stored on the media card.

3.4.3 Manual & Standby
This play mode offers quick access to certain files via the numeric buttons on the remote control from 000-999. This function can be used for kiosks and other digital signage applications, where users may request certain information with the push of a button.
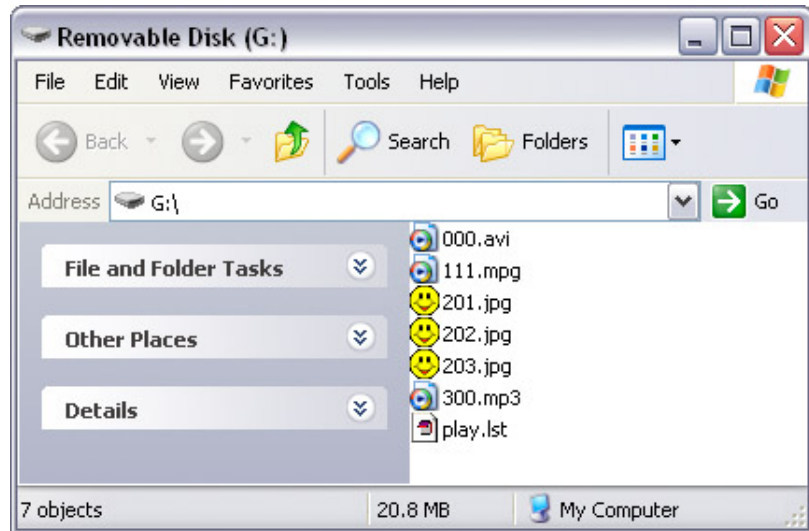
When this mode is used, the player will require a title file (e.g. 000.avi or 000.jpg) and up to 999 other media files (JPG, MP3, MPG or AVI), which are played when the corresponding numeric buttons are pressed. In Manual mode, once the media file has finished playing, it will return to the title file until another button combination is pressed. In Standby mode, it will wait for further user input.

Button	File
000 (title file)	000 (MPG, AVI, JPG or MP3)
001-999	001 ~ 999 (MPG, AVI, JPG or MP3)

Note: If you enable the Manual or Standard mode and there is no 000 file, it will display a message saying "No This File". The same message will appear if the 000 file is not an AVI, MPG, JPG or MP3 file.

Important: Make sure that there is no more than one file with the same file name!

3.5 Auto ON/OFF

For automated daily playback of advertisement or media files, scheduled playback with or without playlist can be set up.

Set a time for the unit to turn on and a time for it to turn off again automatically.

1. Press the SETUP key on your remote control to enter the setup menu.

2. Go to the Advanced Setup menu.

3. Select Auto ON/OFF.

4. Turn it ON and exit the setup menu.
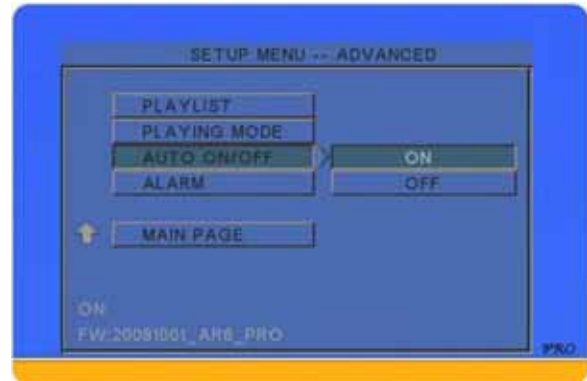
If you have already set the turn on and turn off time, you can skip this step, otherwise go back to the setup menu and set up the timer.

1. Press the SETUP key on your remote control to enter the setup menu.

2. Press the DISP key to enter the setup wizard for the timer setup.

3. Set the current time by using the virtual keyboard and select OK to confirm it. If you have previously set up the time, you can skip this step by selecting CANCEL or by pressing the DISP key

4. Skip the next step (set alarm time) by selecting CANCEL or by pressing the DISP key.

5. Use the virtual keyboard to enter the Auto OFF time and select OK to confirm it.

6. Repeat the previous step for the Auto ON time and select OK to finish the set up wizard.

The media player will now turn on and off automatically on a daily basis at your pre-set time. To turn this function OFF, go to the Advanced Setup menu, select Auto ON/OFF and deactivate it.

3.6 Alarm

Set a time for the alarm and choose between the standard beep for the alarm sound or MP3 to play a specific MP3 file instead.

1. Press the SETUP key.

2. Go to the Advanced Setup menu and select Alarm.

3. Select BEEP for the standard alarm sound or select MP3 to play a specific audio file. You will have to store an MP3 file in the root directory of the memory card and rename it "alarm.mp3".

4. Go to the main page of the setup menu and press the DISP key.

5. Set the current time or skip this step by pressing the DISP key. Now set the alarm time and finish the setup wizard by skipping the other steps.

Note: If the device is turned OFF, it will automatically turn on and play the wake up music or the alarm sound. Press any key on your remote control to stop it

4 Appendix

4.1 FAQ

Q: How do I display the file properties?
A: Press the DISP button to see the file info and press it again to turn it off. For more details, go to the File Library, select a file, click DISP and choose Properties. Press OK to close the file info.

Q: How do I access preferences when it's greyed out?
A: Exit the setup menu, press the HOME key to return to the main screen, press the SETUP key to enter the setup menu again and you will be able to access preferences.

Q: Why can't the output lock under preferences be selected?
A: To unlock this option, press the FAST FORWARD key.

Q: Where do I set the clock time?
A: Go to the SETUP menu and press the DISP key. Enter the time and confirm it. In the following screens, select Cancel or press the DISP key to skip the rest of the settings.

Q: I pressed the OUTPUT key but it doesn't change the video signal!
A: The video output has been locked. Unlock it first and then press the OUTPUT key again. To unlock, press the SETUP key, go to Preferences, press the FAST FORWARD key once and then select Output Lock. Turn it OFF and you can use the OUTPUT key to toggle between the different video outputs.

Q: How do I upgrade the firmware?
A: Download the latest firmware from our website and store the ROM file on a media card in the top directory. Then follow these instructions:

1. Turn off the device and remove all media cards.
2. Insert the media card with the new firmware.
3. Turn on the power and watch the screen.
4. It will read the new firmware and show Write/Erase during the process.
5. When the upgrade is finished (~ 1 minute), it will show Done and go blank.
6. Only now turn off the power and remove the media card.
7. Erase the firmware on your media card.
8. Turn the device back on; your new firmware is now ready to use.

Q: How can I view the content of the playlist on screen?
A: Stop playback and go to the file library. Either browse for and open the file named PLAY or refer to all the file names that are in red, indicating that they belong to the current playlist.

Q: My screen is blank and pressing OUTPUT doesn't change anything!
A: The OUTPUT key is locked. Unlock it first and then press the key again until you find the right video signal. Follow these instructions to unlock it:

1. Remove all media cards and turn off the power
2. Turn on the power and wait for player to boot up (you can hear a ping)
3. Press the SETUP key
4. Press the DOWN key 4 times and hit OK
5. Press the UP key twice
6. Press the RIGHT arrow key once and hit OK
7. Press SETUP and now use OUTPUT again to change the video signal

Q: I've turned on Auto Play in the Slideshow Setup menu but it only plays one file!
A: Go to the Slideshow Setup menu, select Slideshow Mode and change it to AUTO.

Q: Where do I set the TV aspect ratio?
A: Go to preferences in the setup menu and select TV Display. Normal PS stands for 4:3 PanScan, Normal LB stands for 4:3 Letterbox and Wide stands for 16:9 wide screen.

4.2 About this Manual

This manual covers all versions and combinations for the AR6 Pro media player. The functions in this manual are based on the firmware version 20081001_AR6_Pro. Images, descriptions and firmware functions may slightly vary between this manual and the actual product you have.

Visit our website at www.macpower.com.tw for the latest upgrades and download the updated version of this manual in PDF format.