

SM1000 User and SmartMedia Programming Guide

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SM1000 Operation

SM1000 Play Mode

There are two play modes, Play All Messages and Play Only One Message. The currently selected play mode is stored in the Smart Media, so that the play mode is unaffected by power interruptions. The Play Mode is reset to Play All Messages each time that a SmartMedia card is re-programmed. (Premier Technologies manually sets the play mode to play message 1 only, when the unit is shipped.) A maximum of 256 play mode changes can be made on each SmartMedia card between reprogramming.

Play All Messages mode will play all messages stored on the SmartMedia card, in order, starting with message 1 and ending with the last message, up to a maximum of 6 messages. After playing the last message, the unit will loop back to message 1.

Play Only One Message mode plays the same message over and over regardless of how many messages are stored on the SmartMedia.

SM1000 Changing Play Mode

To change the Play Mode, press and hold the Play Mode button. The LED will turn on and off. Count the blinks and when the count equals the message number to be played, then release the button and the SM1000 will play the selected message number only. If the message number selected does not exist, then the SM1000 will remain on the last valid play mode, ignoring the request.

To change the Play Mode to Play All Messages, press and hold the button for a count of 7 blinks. The SM1000 will continuously play all stored messages in sequence.

SM1000 LED Status Information:

- * No Media Inserted State.
- * Unsupported Media Size
- * Wait Status
- * Error Status
- * Message Number

No Media Inserted State

When the SM1000 is powered up but doesn't have a SmartMedia in the socket, the LED will stay off.

Unsupported Media Size

The SM1000 supports only the 2 and 8 Meg 3.3 Volt SmartMedia, if the card size is not supported by the SM1000 the LED will blink on and off with a 1 second cadence. (Do not use 5 Volt SmartMedia.)

Wait Status

The "MuVer" software copies a fresh "Table.txt" file to the SmartMedia every time that new audio files are written to the card. The SM1000 uses that file to map the location of audio files within the card and to store the current Play Mode. The SM1000 creates and writes a new map to this file the first time that the newly programmed card is inserted into the SM1000. While this map is being created, the SM1000 signals a wait period with the LED on. This wait state can last up to 20 seconds, at the end of which the LED will go to the Message Number Status or an Error Status. The Wait Status will not happen again unless you modify the files saved in the SmartMedia.

Error Status

The SM1000 will signal an error status for the following conditions.

- SmartMedia not making connection
- No "Table.txt" File found
- Corrupted data on SmartMedia

Just as in the unsupported media size, the SM1000 LED will blink on and off with a 1 second cadence.

Message Number

The SM1000 unit will blink the LED to indicate the message number being played. The unit will quickly blink the message number to be played, and then stay off for 3/4 seconds.

SmartMedia Programming Using MuVer Software

Warning: Use only 3.3 volt, 2 or 8 megabyte SmartMedia cards in the SM1000 player.

Warning: Do not format a SmartMedia card with any of the standard Windows format utilities. This will make your SmartMedia card unusable. If you must format the card because it is not working properly, only use the format utility that is provided with the SmartMedia programmer.

Installing The MuVer Software

- 1) Insert the Premier Technologies CD in your drive.
- 2) Via Windows Explorer, locate the file named "mu_setup.exe" and double click on it.
- 3) Click OK on the message " This is the installer for the muVer program."
- 4) Click on setup to launch the installer.
- 5) Follow the instructions, and select the folder where you want to save the program.
- 6) When it's done, click finish. It is advisable to re-boot your computer at this point.

Installing The SmartMedia Reader/Programmer

Install your SmartMedia reader/programmer by following the instructions included with the device.

General MuVer Information

Programming a SmartMedia card with new audio messages requires a SmartMedia reader/programmer (we recommend using the SMA03 by RatoC) and MuVer software. Install the SmartMedia Reader and the MuVer software onto your computer. Use the MuVer software to select audio files to be loaded onto the SmartMedia card. The MuVer software can delete audio files from the card, convert file formats if necessary, and can copy audio files onto the card in the order that they appear in the MuVer selection box (this is the same order that the files will play if Play All Messages mode is selected). MuVer will also copy a new table.txt file to the card so the audio files can be properly mapped and read by the SM1000.

MuVer Audio File Formats

MuVer software will work with the following audio file formats that can be provided by your dealer:

- 1) .ulw- This is the actual file format used by the SM1000. This is a ulaw format digitized at 8kHz and 8 bits per sample = 64kbits per second for real time. (There is no header information in this audio file.) MuVer software will convert any of the other three formats to this format.
- 2) .wav- This is standard Windows pcm format. The optimum configuration would be 8kHz and 16 bits per sample = 128kbits per second for real time. Note that 8 bits per sample has poor sound quality and that higher sample rates take much longer to download over the internet.
- 3) .vox- This is a Premier file format that is 8kHz and 4 bits per sample = 32kbits per second for real time. This format provides minimum file size and minimum download time over the internet.
- 4) .mp3- These are standard mp3 file formats that typically have real time data rates of at least 64kbits per second. MuVer software takes the most time to convert this format to .ulw format. Conversion times may take longer than the audio message play time.

To Play An Audio Message

The muVer software lets you play and listen to the messages before you move them to the SM1000. To play a file right click on the file and select play from the pull down menu. The muVer will call the audio application (like, Premier Audio Player, Sound Forge, Windows MediaPlayer, RealPlayer, Winamp, Jukebox, etc) that is currently associated to the file type you want to play.

You can also play the audio messages with the Premier Audio Player included in the CD on the tools folder; to install the Premier Audio Player simply double click on the ppsetup.exe file and follow the instructions.

What Does MuVer Software Do?

- 1) Deletes any audio messages that are not in the "Cartridge Contents" window.
- 2) The first audio file message is converted to ulw format if it is not already in that format.
- 3) The first .ulw audio file is written to the SmartMedia.
- 4) Changes the audio file name by adding a "1" (for the first message) to the beginning of the file name, truncating the file name to 8 characters, and adding the file name extension of ulw.
- 5) Repeat steps 2 through 4 for any other audio files that are to be added to the SmartMedia card.
- 6) Saves a .dat file to the SmartMedia which contains the original audio file names. This file is not used by the SM1000.
- 7) Adds a new table.txt file to the SmartMedia. The SmartMedia card is now ready to be played in the SM1000.
- 8) Optionally, the MuVer software can be used to play stored audio messages on the computer, prior to programming on the SmartMedia

Tutorial Editor Session Using MuVer

- 1) Preparation:
The SmartMedia reader / writer should be connected to the USB port on your computer, and the drivers installed, per the manufacturer's instructions.
The SmartMedia card is inserted in the reader, contact surfaces facing labeled side of reader.
The computer is on and ready, with start bar displayed.
- 2) Using the mouse, navigate to MuVer using :
Start/Programs/ MuVer/ MuVer, Then click to launch.
- 3) There will be a period of time where nothing seems to be happening (<= 60 Sec.).
This is because the program is reading the contents of the SmartMedia, observe that the amber led on the reader is turned on.
- 4) Once the amber led goes out, one of the following will be displayed:
A) A dialog box stating "No Media!", which means there is indeed no media , it is damaged, or it is plugged in backwards. Remember, contact side facing label side of reader. It could also be that MuVer is looking at the wrong drive, the correct drive would be the one you did not have before plugging in the USB port!.

- B) A dialog box stating " long filenames not found". This would be caused by a SmartMedia card that contains some data from another application such as a digital camera, or some files moved to the card by Windows Explorer. Just click "OK" and move on.
- C) A dialog box stating " Media is empty", which it may be. Just click "OK" and move on.
- D) A large dialog box which is the MuVer application, this is where we want to be.
- 5) The MuVer dialog box:
The most noticeable features here are the three large rectangular windows.
The two left ones are the source windows, or where the files come from.
The upper left one displays the path to the source files, the lower left shows the contents of the source folder. The only filetypes displayed in this window will have extensions WAV, VOX, MP3 or ULW. The right one is the destination window, or where they will end up (the SmartMedia). The only filetypes displayed here will be ULW.
- 6) Moving files:
Using the upper left window, navigate to your source folder that contains your source files (the ones with the WAV, VOX, MP3, or ULW extensions).
The files will be shown in the lower left window, and can be moved to the SmartMedia (right window) by one of three methods.
A) "Drag and drop"
B) Single click to select file, then single click on right arrow
C) Left click on file, then select move
Note: Files with ULW extensions will move instantly, the remaining file types will take longer because of the conversion. The MP3 files will take the longest, often exceeding their respective play times.
- 7) Setting play order:
The easiest way to set this is to move the audio files to the SmartMedia in the order you want them to play. You can also change the play order using the up/down arrow buttons on the right side of the dialog box. Simply click on the desired file to select it, then push the up/down arrow key to promote/demote the file. The top file will play first.
- 8) Removing files:
Undesired files can be removed by selecting them and pushing the "X" button.
- 9) Saving files:
Once you are satisfied with the files and their order, push the save button in the lower center of the dialog box. Depending on the number of files and their size, this process can take more than 60 sec. The screen will refresh when the save is complete. A more foolproof method would be to watch the amber led on the SmartMedia reader. Once it goes off, the save is complete. (Other programmers than the SMA03 may indicate that the programming is complete when in fact it is still programming. Removing the SmartMedia prior to completion of the programming will cause the SM1000 to not play audio or to play incorrectly.)
- 10) Your SmartMedia card is now ready for use in the Premier Technologies SM1000, or return it to it's protective sleeve for future use.

SmartMedia Readers/Programmers

Using SmartMedia Readers/Programmers

Premier Technologies has evaluated a number of SmartMedia readers. We found that all of the readers that were tested, worked in general, however, some of the readers caused errors sometimes when programming the SmartMedia card. This resulted in the SM1000 not being able to play the audio files properly. Most of the errors were able to be corrected by re-programming the SmartMedia or by re-formatting the SmartMedia with the format utility provided by the SmartMedia manufacturer (Do not use the Windows format utility). We believe that some of these errors were caused by removing the SmartMedia card before the save program had completed the saving process. Some of the SmartMedia readers give no indication or improper indication of the completion of the save cycle.

Premier Technologies has had consistently good results with the SMA03 Reader made by RATOC. (The SMA03 Reader has a USB interface.)

Formatting The SmartMedia With The SMA03

Only format the SmartMedia card in the event that you believe the card has been corrupted. Do not use the Windows format utility to format the SmartMedia card because this will make your card unusable in the SM1000. The SMA03 SmartMedia reader provides you with the [sma03fmt.exe] tool to format SmartMedia; look for the attached instructions to install the drivers and after that, follow the next steps.

NOTE: IT IS VERY IMPORTANT THAT YOU DO NOT HAVE SMART MEDIA IN THE READER WHEN YOU LAUNCH THE SMA03FMT.EXE SOFTWARE, AS WELL AS REMOVING THE SMARTMEDIA BEFORE QUITTING THE APPLICATION. FAILURE TO DO THE ABOVE, MAY REQUIRE YOU TO RE-INSTALL THE SMA03 READER DRIVERS AGAIN.

***** How to use the SMA03 format software. *****

- (1) Connect the SMA03 SmartMedia Reader/Writer to your computer USB Port.
- (2) Double click on the [sma03fmt.exe] to start the software.
- (3) Put in the SmartMedia card which you want to format in to the SMA03 SmartMedia Reader/Writer.
- (4) Click the [Refresh] button to detect SmartMedia.
- (5) Click on the [Start] button to start the formatting.
- (6) Click [OK] for confirmation message.
- (7) Wait for the message [The format was completed] then click [OK].
- (8) Remove the SmartMedia card from SMA03 SmartMedia Reader/Writer.
- (9) Click [Cancel] to quit the physical format software.
- (10) Your SmartMedia card is now ready to be re-programmed by the MuVer software.

FAQ

Q: I can't change the play mode.

A: The maximum number of changes to the Play Mode is 256 times. This can be cleared by re-saving the audio files with the MuVer software. The message number you are selecting may not exist on the SmartMedia.

Q: The SM1000 does not play properly but my computer has no problem reading files from the SmartMedia.

A: Your SmartMedia card may have been re-formatted using the Windows format utility (try reformatting using the SmartMedia format utility) or the files have been corrupted by removing the SmartMedia card from the programmer before the saving was complete (try re-saving or re-formatting and re-saving).

Q: The LED blinks message number 1 but I hear nothing.

A: Verify the SM1000 is really blinking a quick on and a long off, the unit might be blinking a longer on and a long off which means an Error Status. If it's really a Message 1 blink, try saving the message again.

Q: All my messages sound terrible or have noise at the beginning.

A: The audio files may be in the wrong format. Make sure you are using audio files with the proper format. Check with your dealer.

Q: I select Play Only One Message but the unit resets to the previous setting.

A: Is the message number you selected present ?. If not, the SM1000 will default to the last mode.

Q: The audio message plays but every thing sounds very broken up or out of sequence.

A: New audio files have been saved on the SmartMedia card but a new table.txt file has not been re-saved. This can happen if software other than MuVer is used to save files on the SmartMedia. A new table.txt file must be added to the SmartMedia.

Q: I put ulw files on the Smart Media but my SM1000 doesn't play.

A: An application other than Muver may have been used to save the files and the table.txt file is not present or the filenames are not following the proper naming convention used by the SM1000. Use MuVer software to save the files. If the LED blinks try cleaning the golden pads and if that doesn't work you may need to re-format the Smart Media (See formatting instructions)