## AP-8+ Configuration File

On any reset, the AP-8+ will attempt to open AP8CFG.TXT from the microSD card. This is a plain text file that contains configuration information for the player.

**Note**: *Elements surrounded by {} are optional.*

**`AMBIENT PLAY`** ***`filename{.wav}`***

This command will replace the internal ambient loop filename (AMBIENT.WAV) with the file specified after the PLAY sub-command. Note that the configuration process cannot verify the presence of the file; the user must ensure that the substitute file is present on the microSD card before running the player. The .WAV extension is assumed, hence does not have to be specified in the configuration command.

**Note**: The AP-8+ file system can only understand short filenames in the DOS 8.3 notation (using the .WAV extension). If a long filename (greater than eight characters in the name) is used, the player will attempt to create a compatible short filename. For example:

| | |
|---|---|
| `WINDHOWLS.WAV` | long filename |
| `WINDHO~1.WAV` | short (8.3) filename used by AP-8+ |

The configuration system will truncate the name to the first six characters and then append ~1, just as the operating system does for backward compatibility.

**Warning**: This only works when the first six names of the long filename are unique. If these two files were present:

```
WINDHOWLS1.WAV
WINDHOWLS2.WAV
```

...both would be treated as WINDHO~1.WAV by the AP-8+ which would result in only the first playing. To prevent possible configuration naming conflicts, ensure that the first six characters of all long filenames on the microSD are unique.

**`AMBIENT VOLUME`** ***`left/both {right}`***

This command will set the playback volume of the ambient loop file. Volume is specified in percent, 0 to 100. If only one value is provided, this will be used for both channels.

**Note**: The volume pots on the board are considered master levels; the file levels are adjusted by the configuration setting and then the master settings before moving to the playback engine.

**SELECT *n* PLAY *filename{.wav}***

This command allows the user to specify a file to play for a given position of the SELECT switch. The switch position (*n*) is 0 to 7. SELECT switch filename rules are the same as for the AMBIENT filename.

**SELECT *n* VOLUME *left/both {right}***

This command will set the playback volume of the file designated by the SELECT switch position *n* (0 to 7). Volume is specified in percent, 0 to 100. If only one value is provided, this will be used for both channels.

**SELECT *n* CPORT *bits***

This command sets the output of the control port (CP0 – CP3) while the file designated by the SELECT switch position *n* (0 to 7) is playing. The *bits* parameter is a number, with the recommended format of binary (% prefix) as this aids in visualizing the control port outputs. Examples:

| | |
|---|---|
| %0000 | no control port bits on |
| %0001 | CP3 = off, CP2 = off, CP1 = off, CP0 = on |
| %0110 | CP3 = off, CP2 = on, CP1 = on, CP0 = off |
| %1110 | CP3 = on, CP2 = on, CP1 = on, CP0 = off |

The control port outputs are capable of providing 5V which makes them idea for driving LEDs or accessory boards like the EFX-TEK “Amigo” series.

**SELECT *n* PRE *seconds***

This command sets the pre-delay period for the file designated by the SELECT switch position *n* (0 to 7). The pre-delay period is the time between the trigger input and playback of the file. The pre-delay period is specified in seconds between 0 and 30. Fractional periods may be specified, though all will be rounded to the nearest 0.1 second. For example, if the pre-delay is specified as 3.45 seconds, this will be rounded to 3.5 seconds by the AP-8+.

**SELECT *n* POST *seconds***

This command sets the post-delay period for the file designated by the SELECT switch position *n* (0 to 7). The post-delay period is the minimum time between the end of file playback and the next trigger input; in essence, this is a temporary trigger lock-out after the file plays. The post-delay period is specified in seconds between 0 and 300 (5 minutes). Fractional periods may be specified, though all will be rounded to the nearest 0.1 second.

**TRDELAY *seconds***

This command specifies the minimum time between a file playing (other than the ambient loop) and the next trigger input. The trigger delay is specified in seconds between 0 and 300 (5 minutes). Fractional periods may be specified, though all will be rounded to the nearest 0.1 second.

**Note**: If the last file has a post-delay period specify, the longer of the two periods will be used for the trigger delay.

**SERIAL MODE *wires***

The AP-8+ is factory configured for single wire control; this works well with small controllers like the BASIC Stamp or the Propeller. Other controllers, notably the Arduino, use a two-wire serial connection. The standard single wire approach allows multiple devices on one serial control line. If this is not required, the serial mode can be overridden. The *wires* parameter is 1 (default) for single-wire multi-drop systems, or 2 for two-wire, point-to-point control.

**Note**: Using two-wire mode requires a small PCB modification (cut a trace, solder a jumper closed).

**SERIAL BAUD *baudrate***

This command allows the user to override the baud rate (BR) configuration swithc on the AP-8+. The baudrate parameter is a number from 1200 to 115200.

## Example Configuration File

```
' AP-8+ configuration file
' -- any line that beings with apostrophe is ignored
' -- comments may also appear at ends of lines
' -- for large numbers, an underscore (_) can be used as a comma


AMBIENT PLAY WIND                       ' use WIND.WAV for ambient loop
AMBIENT VOLUME 25                       ' ambient volume to 25%

SELECT 0 PLAY WOLF                      ' play WOLF.WAV for position 0
SELECT 0 CPORT %0001                    ' activate CP0 while playing
SELECT 0 PRE 0.5                        ' wait 0.5 secs after trigger
SELECT 0 POST 10                        ' no new trigger for 10s

SELECT 1 PLAY LIGHTNING                 ' long filename
SELECT 1 CPORT %0010                    ' activate CP1 while playing
SELECT 1 POST 5

TRDELAY 10                              ' trigger delay is 10s

SERIAL MODE 1                           ' 1-wire serial (default)
SERIAL BAUD 57_600                      ' override baud switch setting
```