

Contents



DSP Audio Control Panel, v1.30

What Is Control Panel? (A Graphic Tour)

WAVE Volume/Synth Volume

Mixer

Display Indicators

REC Level

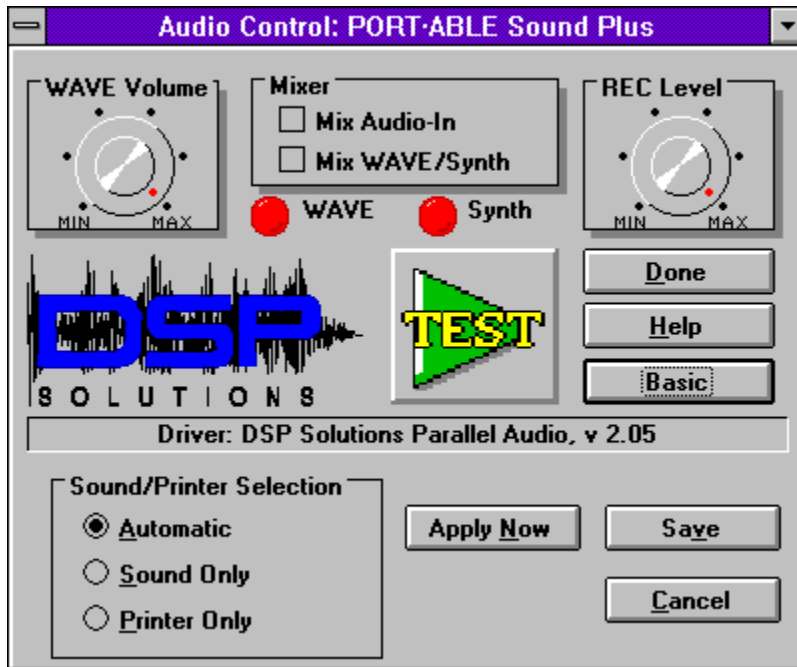
TEST Button

Command Buttons

Advanced Control

What Is Control Panel? (A Graphic Tour)

The DSP Solutions Audio Control Panel provides the user with direct control over DSP Solutions Audio Driver functions when a specific application does not provide a desired function. Click the left mouse button on the area of the panel that you are interested in.



WAVE Volume / Synth Volume

This control allows the user to set the sound level for playback of either digitized audio (.WAV) or synthesized audio (.MID,.RMI,etc.) files. Click and hold the left mouse button while on the dial pointer (red dot for color monitors), then drag the pointer in a clockwise direction to increase the volume. Dragging the pointer in a counter-clockwise direction reduces the volume.

The mouse pointer may also be clicked at any detent point on the outside of the dial (black dots) to directly set the volume.

Other applications (such as the DSP Sound Station) may affect the volume setting. The audio driver retains the level set by the last application to access the driver until Windows is exited and restarted.

To create default volume settings for Windows startup, click on the **Drivers** icon in the Windows Control Panel, select the DSP Solutions Audio Driver, then click on the **Setup** button.

Changing the volume for digitized audio files *does not* change the volume for synthesized audio files, and vice-versa. The device affected by the control is indicated by the title of the control. If **WAVE Volume** is displayed, the control affects only digitized audio. If **Synth Volume** is displayed, only synthesized audio is affected.

Note that if Mix WAVE/Synth is selected, only the Synthesized audio volume is affected by this control. The digitized audio volume cannot be changed when Mix WAVE/Synth mode is selected. If Mix WAVE/Synth is not selected, Synthesized audio volume may only be changed while synthesized audio is playing (when the Synth Volume title is displayed).

Mixer

Mix Audio-In (AGC On)

Mix WAVE/Synth

REC Level

This control allows the user to set the sound level for recording digitized audio (.WAV) files. Click and hold the left mouse button while on the dial pointer (red dot for color monitors), then drag the pointer in a clockwise direction to increase the volume. Dragging the pointer in a counter-clockwise direction reduces the volume.

The mouse pointer may also be clicked at any detent point on the outside of the dial (black dots) to directly set the volume.

Other applications (such as the DSP Sound Station) may affect the level setting. The audio driver retains the level set by the last application to access the driver.

To create a default recording level for Windows startup, click on the **Drivers** icon in the Windows Control Panel, select the DSP Solutions Audio Driver, then click on the **Setup** button.

The AUX= command line must be set to the DSP Solutions WAVE driver for this function to be enabled.

TEST Button

The **TEST Button** is a two-state button that toggles between **TEST** and **STOP**. When pressed, the button changes to **STOP** and the Audio Control Panel plays a continuous loop sound clip at 8 bits, 11025 samples per second. Click on the button a second time to stop the continuous play.

This function can be used to test the current volume setting if another sound is not being played.

If the WAVE driver is busy or unable to play a sound (Synth is playing in exclusive mode), the TEST Button will be displayed in gray and will not respond to mouse actions.

Command Buttons

Done

Help

Advanced/Basic

Advanced Control

When the **Advanced** command button is clicked, additional controls are revealed (except CD•NET Sound). These controls allow the user to force the Audio Device LPT port to operate exclusively as a printer port, a sound port, or to automatically determine the appropriate usage (default). The **Advanced** button label is changed to **Basic**.

Click on the **Basic** button to hide the additional controls. The **Advanced Control** section is not available for the CD•NET Sound internal sound card.

Sound/Printer Selection

Automatic

Sound Only

Printer Only

Advanced Command Buttons

Apply Now

Save

Cancel

Automatic

When **Automatic Sound/Printer** is selected, both sound and printing functions are enabled. The Audio driver determines which function is to be used at any particular time.

The Audio device must be properly connected and powered up.

Sound Only

When **Sound Only** is selected, the sound functions are exclusively enabled. In this mode, you will not be able to print even if there is a printer attached to the Audio device pass-through port. Use this selection when you have encountered printer conflict error screens while playing sound, and you do not require printing.

The Audio device must be properly connected and powered up.

Printer Only

When **Printer Only** is selected, the printer functions are exclusively enabled. In this mode, you will not be able to play sound through the Audio device. Use this selection when you have encountered printer conflict error screens while playing sound, and you do not require sound.

The Audio device is not required to be attached to the system in this mode.

Apply Now

Sends the Sound/Printer selection to the audio driver immediately. The selection is not saved when Windows is exited. To save the setting as the default in SYSTEM.INI, click the Save button.

Save

Sends the Sound/Printer selection to the audio driver immediately, and save the setting as the default in the SYSTEM.INI file under the [PORT*ABLE Sound Driver] section. The setting will be used the each time Windows is started. To apply the selection immediately, without saving it as the default, click the Apply Now button.

Cancel

Restore the Sound/Printer selection last sent to the audio driver. This command does NOT exit the Audio Control Panel.

Done

Click the **Done** button when finished manipulating the audio driver. The current Synth volume, WAVE volume and REC Level settings will be retained until another application changes them.

The Advanced Control section settings must be saved explicitly by clicking the Save button in the Advanced Control section

Help

Displays this help file using the Microsoft Windows Help System.

Mix Audio-In (AGC On)

This control is labeled 'Mix Audio-In' for the PORT•ABLE Sound Plus and CD•NET Sound products, and 'AGC On' for the Digispeech Plus product.

Mix Audio-In

When checked, the audio driver allows audio from the Audio-In jack to be mixed with the digitized and/or synthesized audio from the sound device. Clear this check box if you want the external sound source to be temporarily muted while sounds from the computer are being played.

Notes: 1) When the sound device is NOT playing digitized and/or synthesized audio, sound from the Audio-In jack is automatically routed through the sound device speaker.

2) AGC is always enabled on the PORT•ABLE Sound Plus product. It is hardware jumper selectable on the CD•NET Sound product.

AGC On

When checked, the audio device automatically adjusts the recording gain based on the surrounding noise level. If the noise level is low, the recording gain is raised, if the noise level is high, the gain is reduced.

For applications such as speech recognition systems that require constant recording gain, clear this check box.

Note: 1) Audio Line-In mixing is always enabled on the Digispeech Plus product.

The AUX= command line must be set to the DSP Solutions WAVE driver for this function to be enabled.

Mix WAVE/Synth

When checked, the audio driver allows both digitized audio (.WAV) and synthesized audio (.MID,.RMI,etc.) files to be played at the same time. When cleared, the driver reports that the device is busy if an application attempts to start playing one type of sound while the other is already being played.

Because of limitations imposed by the mixing of WAVE and Synthesis modes, it is desirable to leave this box cleared unless a specific application requires combination of the two audio types.

Note: When this box is checked, the following limitations apply:

- Only 8 bit linear PCM format (standard .WAV files), or MuLaw PCM files may be played with the WAVE driver.
- Software volume control of .WAV files is disabled (**WAVE Volume** control label changes to **Synth Volume**).

Display Indicators

WAVE Status Light

Synth Status Light

Synth Status Light

The Synth Status light indicates the current operational mode of the Synthesizer device driver. It has three possible states:



When the LED is green, the Synth driver is currently open and probably, but not absolutely, playing synthesized audio. If you do not hear sound, it is possible that an application did not close the Synth device when it was finished.



When the LED is red, the Synth driver is available, but currently closed. You should not hear synthesized audio at this point.



When the LED is red with a black diagonal line through it, the Synth driver is closed, and cannot be opened. This is usually caused by the WAVE driver being opened when the Mix WAVE/Synth checkbox is cleared. It also occurs if the Printer Only radio button is selected in the Advanced Control section of the Audio Control Panel.

WAVE Status Light

The WAVE Status light indicates the current operational mode of the WAVE device driver. It has three possible states:



When the LED is green, the WAVE driver is currently open and probably, but not absolutely, playing digitized audio. If you do not hear sound, it is possible that an application did not close the WAVE device when it was finished.



When the LED is red, the WAVE driver is available, but currently closed. You should not hear digitized audio at this point.



When the LED is red with a black diagonal line through it, the WAVE driver is closed, and cannot be opened. This is usually caused by the Synth driver being opened when the Mix WAVE/Synth checkbox is cleared. It also occurs if the Printer Only radio button is selected in the Advanced Control section of the Audio Control Panel.

DSP Solutions, Inc

DSP Solutions is a manufacturer of high quality audio peripherals for portable computing environments.

Driver Information

This field displays the Driver Identification String and version number of the first WAVE driver in the system. It is assumed that the WAVE, SYNTH, and AUX drivers are all from the same manufacturer and are at the same rev level.

Sound Device Model

The title bar contains the sound device model name, as determined at driver setup time. The model is stored in the SYSTEM.INI file, under the [PORT*ABLE Sound Driver] section, as entry 'MODEL='.

Note that the model indicated in the SYSTEM.INI determines the feature set enabled by DSPanel. If the model does not match the actual hardware, the results of some controls are undefined.

System Menu

Display the system menu, which contains commands for sizing, moving, and closing the *DSP Audio Control Panel* application, the About Box menu entry, and a menu entry to switch to another application.

Minimize Box



Display *DSPanel* as an Icon on the Windows Desktop. The application stays active and may be restored to its previous maximized or normal state by clicking once on the Icon and selecting **Restore** from the resultant system menu, or double-clicking on the Icon.

