

# Film-Tech

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Sony Dynamic Digital Sound™

**SDDS SETUP SOFTWARE**

**USER'S MANUAL - PRELIMINARY**

**REVISION 2 SOFTWARE VERSION 1.40**

**02/15/95**

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## 1. INTRODUCTION

The SDDS Setup Software is used to adjust the settings of the DFP-D2000 Digital Film Sound Decoder. DFP settings are adjusted through a Windows based interface using either mouse or keyboard input. In addition to adjusting DFP settings, the SDDS Setup Software can also be used to monitor the operating status of the Decoder and Reader while film is running.

This manual covers the operation of the SDDS Setup Software.

Detailed Information regarding Installation and Operation of the SDDS Film Playback System is covered respectively in the SDDS Installation and SDDS Operation Manuals.

## 2. REQUIREMENTS

To ensure the proper operation of the SDDS Setup Software, the PC or PC laptop must have the following minimum configuration.

1. MHz or higher processor (486 recommended)
2. A minimum of 4 Mbytes of RAM (8 Mbytes of RAM recommended)
3. At least 20 Mbytes of available hard disk space
4. Windows 3.1 or Windows for Workgroups 3.11
5. One serial interface port
6. Null Modem cable for connection between the PC and the DFP
7. A mouse or trackball pointing device (if using a laptop)
8. (Optional) A 9600 baud modem. Contact your SDDS representative for details regarding modem communications with the DFP 2000 processor.

### 3. INSTALLATION

1. To ensure proper operation of the SDDS Setup Software, install the software using the following procedure.
2. Turn the PC on and start Windows. If Windows does not automatically start, enter **WIN** at the MS-DOS prompt to start Windows. For additional details on starting Windows, see your Windows documentation.
3. Insert the 3.5" SDDS Setup Software installation disk into drive A or B.
4. In the Windows Program Manager, choose the **Run** command from the **File** pull-down menu. In the **Command Line** box, type **a:install** if you inserted the installation disk in drive A. Type **b:install** if you inserted the installation disk in drive B.
5. If a previous version of the SDDS Setup Software is already installed, the installation software will display the following list of options.

**De-install** - Removes the currently installed version of the SDDS Setup Software from the system. **The SDDS file directory and existing project files are not removed.**

**Upgrade** - Replaces only the SDDS program files that have changed since that last installation of the software. The existing SDDS.INI file and project files are not overwritten or removed.

**Full** - A full installation is performed. (see step 5). Any project files found in the current SDDS installation directory will be copied to the new file directory.

Choose the appropriate option. If **de-install** or **upgrade** is chosen, the specified action is performed and the installation software will terminate. A new SDDS program group will be installed in the Windows Program Manager (if the **upgrade** option is chosen). See **Getting Started** for details on how to execute the software.

5. If this is the first time the SDDS Setup Software is being installed on the system or if the **Full** option is chosen in step 4, the following installation display is presented.

**SDDS Software Installation**

Welcome to the SDDS Setup  
Software Installation Procedure  
Version 1.3

**Installation Setup**

Enter name of directory where software is to be installed:  **Install Software Now**

Source Drive:

**Installation Status**

File being processed: N/A

Percent installation completed:

**Cancel** **Help**

Enter installation directory, source drive and click the installation button

Enter the pathname where the software should be installed (default is c:\sdds). If the source drive is incorrect, enter the disk drive designation where the installation disk resides (default is A:). If using the keyboard, TAB to the respective fields and enter the data. To start the software installation, click the **Install Software Now** button (or if using the keyboard, TAB to the button and then press the ENTER key). The installation software will then copy the SDDS program files from the installation disk to the specified directory. The installation procedure should take approximately 2 minutes. The SDDS Setup Software requires about 1.5 Mbyte of hard disk space. Once the installation is complete, a SDDS program group will be active in the Windows Program Manager.

## 4. DE-INSTALLATION

Use the following procedure to remove the SDDS Setup Software from the PC.

1. In the SDDS program group, double click the mouse on the SDDS Install icon.
2. The installation software will display the following list of options.

**De-install** - removes the currently installed version of the SDDS Setup Software from the system. **The SDDS file directory and existing project files are not removed.**

**Upgrade** - only replaces the SDDS program files that have changed since that last installation of the software. The existing SDDS.INI file and project files are not overwritten or removed.

**Full** - a full installation is performed. (see step 5). Any project files found in the current SDDS installation directory will be copied to the new file directory.

Choose the **de-install** option. The SDDS program files will be removed. In addition, the SDDS program group icon in the Windows Program Manager will also be removed. The installation software will then terminate.

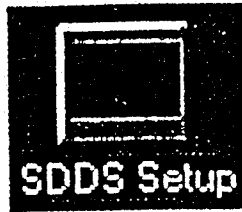
## 5. GETTING STARTED

Once installed (see **Installation**), the software is started by selecting the SDDS program group in the Windows Program Manager. The SDDS program group includes the SDDS Setup application icon. If you want the SDDS Setup Software to automatically execute every time Windows is started, copy the SDDS Setup icon to the Startup program group in the Program Manager. For more information regarding the Startup program group, see your Windows documentation.

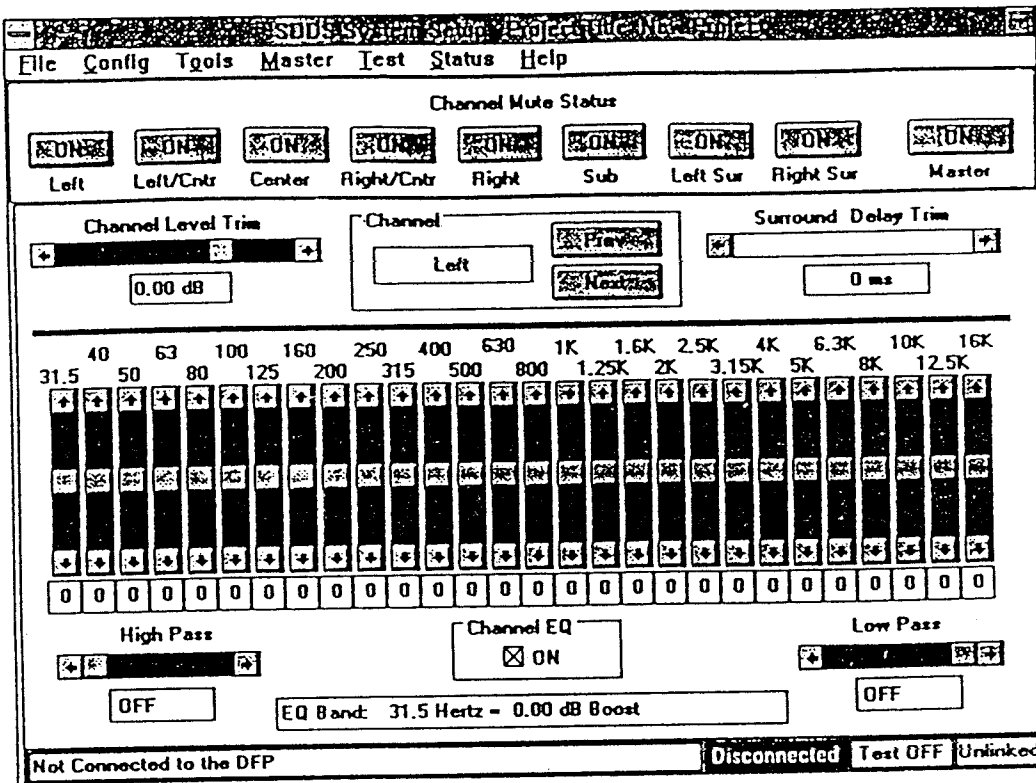
**Starting SDDS Setup Software using the mouse** Using the mouse or trackball pointing device, double click the SDDS program group. Place the mouse or trackball over the SDDS Setup icon and double click the left mouse button.

**Starting SDDS Setup Software using the keyboard** Hold down the CTRL key and press TAB until the program group's title bar is highlighted. Press the ENTER key. Hold down the CTRL key and press TAB until the SDDS Setup icon is highlighted. Press the ENTER key.

Once the SDDS Setup Software icon has been selected, the main SDDS Setup screen will be displayed







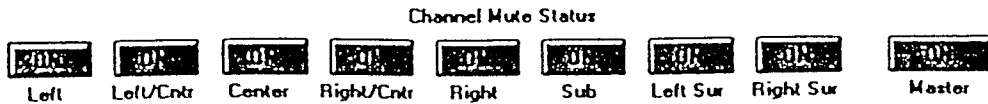
### 5.1 OPERATIONAL OVERVIEW

The SDDS Setup Software Main Display is divided into four components -

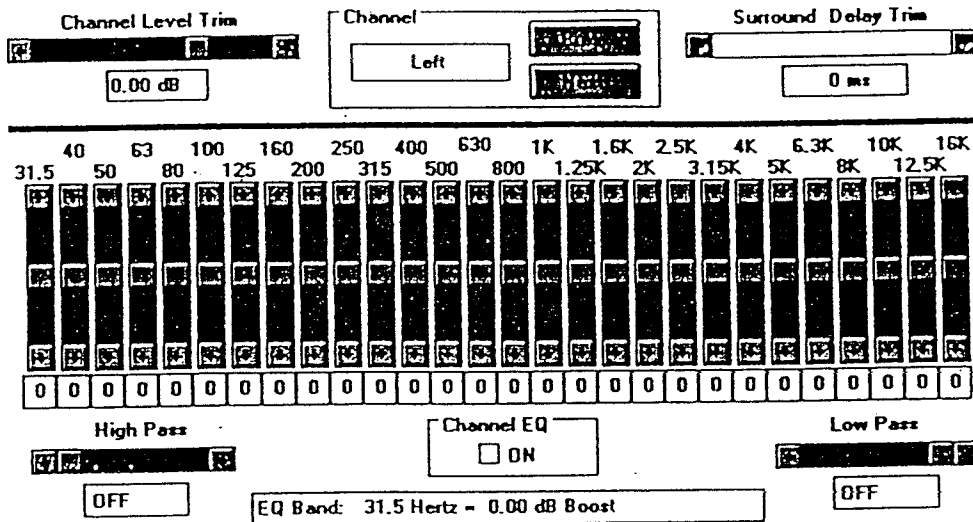
- Main Menu Bar (top of the screen)
- Mute Channels Selection (upper screen)
- Channel Adjustments (middle screen)
- Status Bar (bottom of the screen).



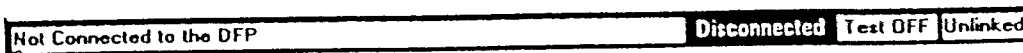
**MAIN MENU BAR** (located across the top of the display) contains pull-down menus for project file management (**File**), configuration management (**Config**), adjustment utilities (**Tools**), master control adjustments (**Master**), and test signal generation, film ECC statistics and monitoring utilities (**Test**). The main menu also contains the **Status** menu for monitoring the operational status of the DFP, and a pull-down **Help** menu containing on-line help.



MUTE CHANNEL buttons (located underneath the Main Menu Bar) are used to toggle on and off the mute status of individual channels. The **Master Mute** button is provided to mute all channels simultaneously. The Master Mute button mirrors the operation of the Mute button located on the front face plate of the DFP-D2000 processor.



**CHANNEL ADJUSTMENTS** (Middle portion of the display) For each channel (except the subwoofer), the channel level trim, high and low pass filters, and EQ Band settings can be adjusted using the controls located on the main display. Additionally, the left and right surround channels have adjustable digital delay trims. The subwoofer channel allows adjustment of level and high pass filter only. Whenever an adjustment is made, the software updates the new setting in the processor (if connected).



**STATUS BAR** (located at the bottom of the display) provides information regarding the operation of the software and DFP hardware. By default, warnings are displayed on a yellow background and errors are displayed on a red background. These background colors can be changed using the **Config** pull-down menu in the main menu bar.

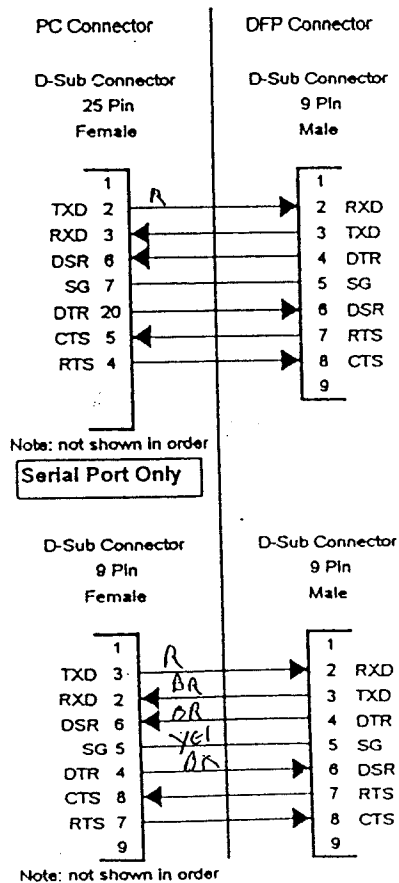
## 5.2 SUGGESTED SDDS PROCESSOR ADJUSTMENT

The DFP is adjusted by first connecting to the DFP processor, starting the test signal generator and then setting the appropriate operational parameters using the adjustment controls located in the SDDS Setup Software display. In addition, non-channel adjustments (i.e., projector setup, matrix mode, etc.) are made using pull-down menus located in the main menu bar (top of the screen). Once the adjustments have been made, disconnect from the DFP (using the **Config** pull-down menu) and then exit the software using the **File** pull-down menu.

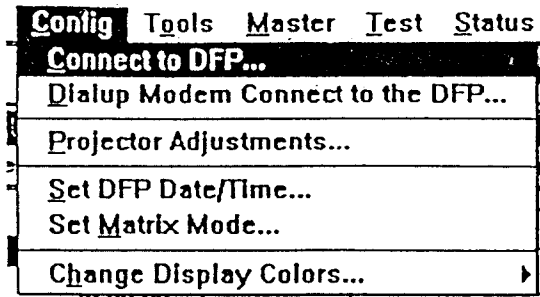
## 6. CONNECTING TO THE DFP

Communications with the DFP are established using a RS-232c serial interface protocol. A Null Modem cable is connected between the serial port of the PC and the RS-232c port on the back of the DFP processor. The following is the specification for the RS-232c Null Modem cable. The following diagram indicates a 25 pin configuration for the PC Connector. This connector must be a serial port not the typical 25 pin parallel port found on PC's.

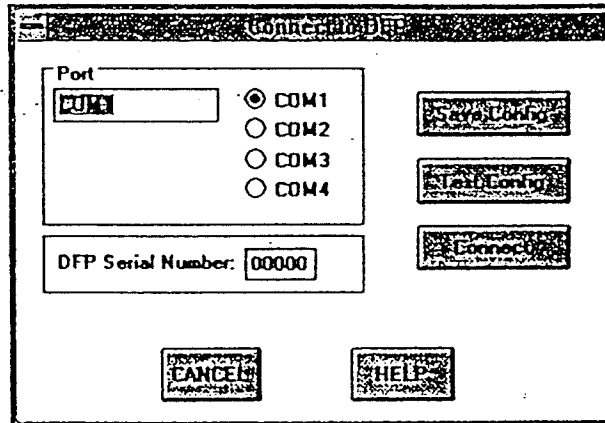
PC to DFP Direct Connect Cable Configurations



Once the SDDS Setup Software is running and a Null Modem cable is connected between the PC and the DFP, establish communications with the DFP using the following steps.



1. In the SDDS Setup Software display use the mouse to select **Config** (or ALT - C if using the keyboard) from the main menu bar at the top of the display. A menu of options will be displayed. Use the mouse to select the **Connect to DFP** menu option (or if using the keyboard, press the C key).
2. A port connection screen will display connection options. The factory default settings will be COM1 & Serial Number 00000.



3. If COM1 is not the correct serial port, select the appropriate port by placing the cursor over the desired port and pressing the left mouse button. If keyboard input is used, TAB to the currently selected port and use the UP and DOWN cursor (arrow) keys to select the desired port.
4. The correct DFP serial number must be used to ensure that communications with the DFP processor can be established. If the current DFP serial number is incorrect, place the mouse cursor into the DFP Serial Number input field (or TAB to the field), enter the correct number and press ENTER.

5. If settings were changed, use the **Save Config** button to save the new configuration. This will be helpful in the future when connections are made to the DFP. If the keyboard is used, TAB to the **Save Config** button and press ENTER.
6. The **Test** button is used to test the existence of the specified port. If you are unsure that the port selected is valid, use the **Test** button. The software will display a message indicating the availability of the selected port.
7. To establish the connection with the DFP, use the **Connect** button. If using the keyboard, TAB to the **Connect** button and press ENTER. The software will then establish communications with the DFP. Connection status information will be displayed in the status bar at the bottom of the main SDDS Setup display.

Once communications with the DFP have been established, the software checks to see if a project is currently opened (see below). If a project is not open, the software polls the DFP to determine the current DFP operating environment and the display is updated to reflect the current settings. If a project is currently opened, a message box will be displayed. You will be given the option to allow the software to poll the DFP and overwrite the current project settings in the software or you can have the software reset the DFP to reflect the current project settings.

## 7. FILE MANAGEMENT

Theater specific DFP adjustments and settings can be saved in project files. These project files contain data and theater information that can be used to reset a DFP to a prior operating condition. Project files are particularly useful for resetting DFPs that have been reconfigured due to a firmware or hardware upgrade. Associated with each project file is a text file containing theater specific information (i.e., theater location, technician name, etc.) and general comments.

File management is handled by the **File** pull-down menu located on the main menu bar at the top of the SDDS Setup Display. Use the mouse to access this pull-down menu or if using keyboard input, simultaneously press the ALT and F keys. The following project file options are available (if using keyboard input, press the underlined key to access the specified option).

**New** - Use this option to create a new project. The following display will be presented.

The screenshot shows a dialog box titled "New Project File". It contains the following fields and controls:

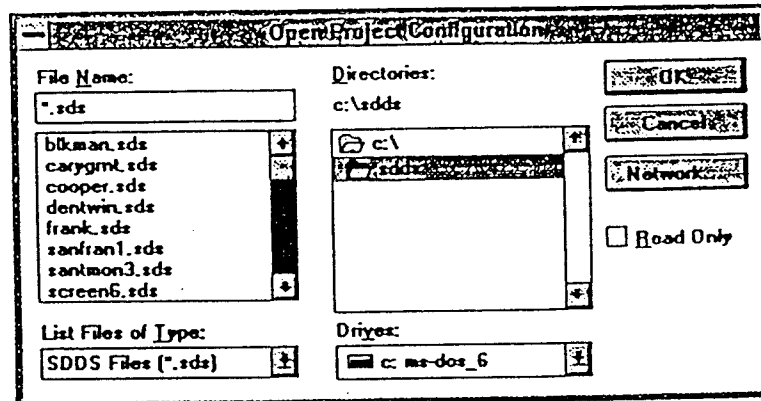
- Enter name of project:
- Theater Name:
- Enter name of project file:
- Screen Number:
- Technician Name:
- DFP Serial Number:
- Current Date: Thu 12/15/94
- Site Modem Number:
- Project Comments:
- OK:
- Cancel:
- Help:

Enter information in each field. You must enter a project file name. All other fields are optional. If using keyboard input, TAB to each field, enter the information, and press the ENTER key. The current date is based on the PC clock and is not modifiable.

Comments regarding theater setup, firmware upgrades, observations and general comments can be added to the project file. To add comments, use the **Project Comments** button to gain access to the Windows Notepad editor (if using keyboard input, TAB to the button and press ENTER). Once in the editor, enter project related information and then use the editor's File pull-down menu to exit the application. Windows will automatically return control back to the new project display.

When finished entering information, use the OK button to save the information to the project file. Once created, the project name (or the project file if the project name was not entered) will be displayed in the title bar at the top of the SDDS Setup Software display. If you use the CANCEL button, the information entered will not be saved and no project file will be created. If using the keyboard, TAB to OK or CANCEL button and press ENTER.

**Open** - Open an existing project. The following display will appear listing the projects in the current working directory.



Either select the desired project from this list or select a different directory for additional project files (for keyboard input, use the TAB and UP/DOWN cursor keys to maneuver through the dialog box and the ENTER key to make a selection). The default file extension for project files is .sds.

If an existing project is currently opened or if connected to the DFP, you will be prompted to determine if the current DFP settings should be overwritten.

Selecting YES, the opened project will update the display to reflect the new settings and, if connected to the DFP, the new settings will be sent to the DFP.

Selecting NO, the opened project will not update current DFP settings and the next Save or Close operation will cause the settings in the opened project to be overwritten with the current DFP settings.

**Close** - Close the currently opened project. The current DFP settings will be saved to the project file. **\*Note\*** the software still retains in memory the DFP settings even after the project is closed.

**Project Info:** - Update project information. This option is only available if a project is currently opened. The following project information display will be presented.

The screenshot shows a window titled "Project Information" with a decorative border. Inside the window, the following fields and controls are visible:

- Name of project:** An empty text input field.
- DFP Serial Number:** A text input field containing the value "00000".
- Technician Name:** An empty text input field.
- Site Modem Number:** An empty text input field.
- Current Date:** A label displaying "Sat 12/17/94".
- Theater Name:** An empty text input field.
- Screen Number:** An empty text input field.
- Buttons:** Three buttons are located at the bottom: "OK", "Cancel", and "Project Comments".

Make the necessary changes to the project information (for keyboard input, TAB to the desired field, make the changes and press ENTER).

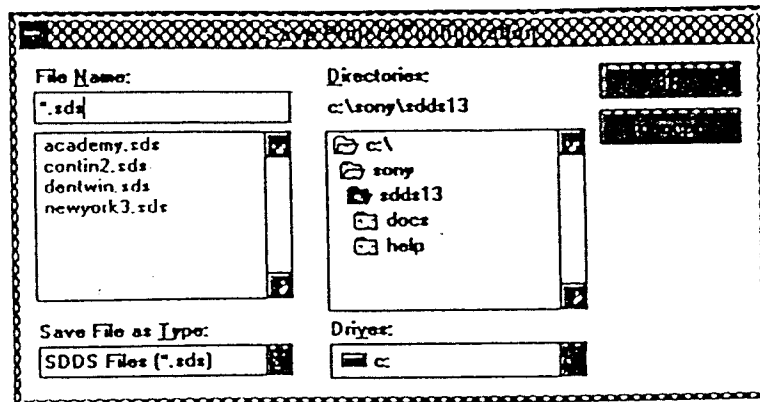
To update project comments, use the **Project Comments** button. The software will open the appropriate project text file and place you in the Windows Notepad editor. Enter comments and then exit the Notepad editor. Windows will return control back to the Project Information display.

When finished entering information, use the **OK** button to save the information to the project file. If the project name was updated, the new project name will be displayed in the title bar at the top of the SDDS Setup display. If you use the **Cancel** button, the information entered will not be saved. If using the keyboard, TAB to **OK** or **Cancel** button and press ENTER.

**Save** - Save the DFP settings to the currently opened project file. When making adjustments to the DFP, periodically save the DFP settings to the project file.

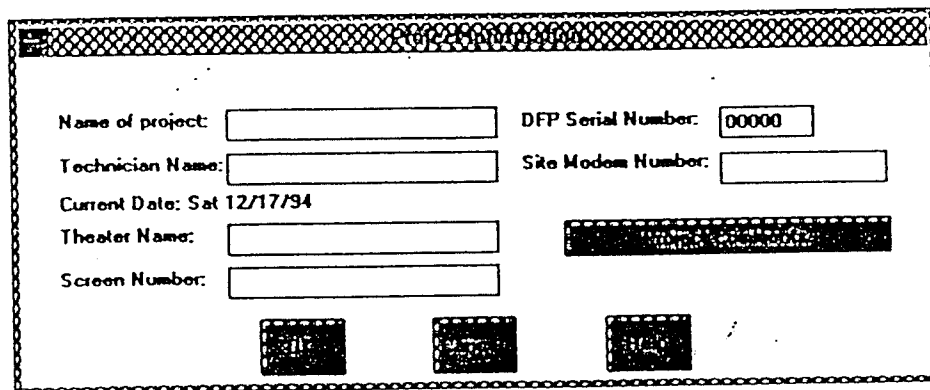


**SaveAs** - Save the current DFP settings to a new or existing project file. To select a project file, the following display will be presented.



Enter a new project name or select the desired project from this list or select a different directory for additional project files (for keyboard input, use the TAB and UP/DOWN cursor keys to maneuver through the dialog box and the ENTER key to make a selection). The default file extension for project files is .sds.

If the specified file is new, the current settings are automatically saved. In addition, the following project information display will be presented.



See Project Information (above) for information on how to use this display.

If the specified file already exists you will be prompted to confirm that you want to overwrite the existing file. If you enter NO, you will be returned to the SaveAs file display so you can make another selection.

If you elect to overwrite the selected project file and if a project is currently opened while using the SaveAs option, several options are available.

1. Save the current DFP settings and the project (theater) specific information (i.e., project name, technician name, theater, etc.) to the specified file

2. Save only the current DFP settings. If you elect to save only the DFP settings, a project information display (see **Project Information**) will be presented. Enter the appropriate project related information.

**Exit** - Exit the software. If changes have been made to the DFP settings since the last **Save** or **SaveAs** operation, you will be prompted to save the data to a project file. Once the information has been saved (or if you elect not to save the data), the software will terminate. If you were connected to the DFP, the software will disconnect from the DFP prior to software termination. When disconnecting from the DFP, the software verifies (and sets if necessary) that the mute status of all channels is off and that test signal generation is off.

## 8. DFP ADJUSTMENTS

Adjustments are made by moving scrollbar controls and clicking buttons on and off. In addition, non-channel related settings (i.e., projector setup, matrix mode, etc.) are adjusted using pull-down menus located in the main menu bar. All adjustments can be made using either the mouse (or trackball) or the keyboard.

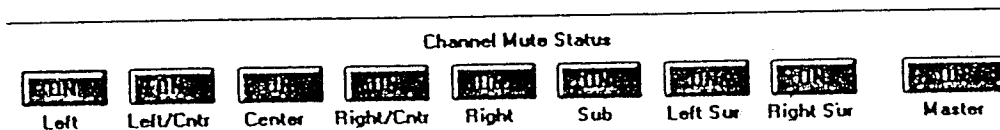
**\*Note\*** If the SDDS Setup software is not connected to the DFP, adjustments can be made on the software without the adjustments being sent to the DFP.

### 8.1 MUTE FUNCTIONS

By default, the mute buttons (one for each channel) are off. However, during test signal generation (see below), one or more channels can be muted (i.e., no test signal is generated for that channel). To guard against leaving channels in a mute state after making DFP adjustments, the software automatically sets the mute status of all channels to off when the user selects the option **Disconnect from DFP**.

**\*NOTE\*** if connected to the DFP and the PC should crash or the cable between the PC and the DFP is disconnected, muted channels will not be reset to the off position. This will effect sound quality while a film is running.

To toggle the mute status of a channel on and off, use the mouse to click the button associated with the desired channel. For keyboard input, F1 through F8 function keys are mapped to the eight channels. Press the corresponding function key to toggle the mute status of the desired channel on and off.



#### Linked Mute Channel Mode

To aid in tuning a theater, a channel link option is available in the **Tools** pull-down menu (see **Tools** below). This feature causes the software to automatically mute all channels except for the currently selected channel. In linked mute channel mode, every time a channel is selected (either by clicking one of the channel mute buttons or by clicking the **Next** or **Prev** buttons in the SDDS Setup Software display), the mute status of the remaining channels are toggled on. To toggle off the mute status of additional channels while in linked mute channel mode, position the cursor over the desired mute channel button and press the **right mouse button** (if using the keyboard, simultaneously press **ALT** and the function key mapped to the desired channel - for example **ALT -F1** to toggle off the mute status of the left channel).

## MASTER MUTE

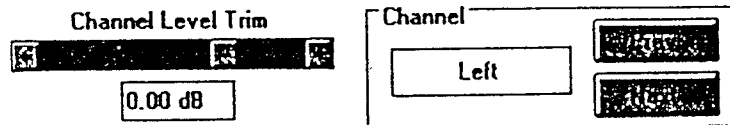
By default, the **master mute** is off. Choose this option to mute all channels. This feature is particularly useful if all channels should be muted quickly. For example, when generating pink noise (-20 dB) during testing, if all channels are on (i.e., not muted), there is a high probability that theater equipment and/or human hearing will be damaged (Note: the SDDS Setup Software makes every attempt to avoid this situation). Using the **master mute** can quickly turn test generation off to all channels. Click the **master mute** button to toggle on and off the master mute. For keyboard input, press the F9 function key to toggle the master mute on and off. Note: once the master mute is on, you cannot toggle on and off the mute status of individual channels.

### Mute All Keys At Once

To toggle on the mute status of all channels, use the F10 function key. This functionality mutes each channel individually. This differs from the Master Mute functionality (see below) where the DFP stops sending a signal to all channels as a group. Using F10 is a convenient way to mute all channels and then selectively turn on (i.e., turn mute status off) each channel individually.

## 8.2 CHANNEL SELECTION

If **linked mute channel mode** is off (see **Mute Buttons** above), then the current channel is selected using the **Next** and **Prev** buttons on the display. When a new channel is selected, the display is updated to reflect the current DFP settings for that particular channel. In **linked mute channel mode**, toggling the mute button for a particular channel will automatically cause the software to make the selected channel the current channel and the display will be updated accordingly. For keyboard input, use the Page Up or Page Down keys to select the next or previous channel.



## 8.3 CHANNEL LEVEL TRIM

This control allows adjustment of the output level of the currently displayed channel. This adjustment is relative to the **Master Level Control** (see **Master Settings**). Any change in **Master Level** will simultaneously adjust all channels accordingly. For critical adjustment of channel level, make certain the **Master Level Control** is in the desired position..

To make level trim adjustments, position the mouse cursor on the scrollbar and drag to the desired setting. For keyboard input, press a **lowercase l** and then use the UP and DOWN arrow (cursor) keys to make the adjustments.

## 8.4 SURROUND DELAY TRIM

This control is only active with the two surround channels. It provides access to the digital surround delay available in the DFP.

To adjust the delay trim, position the mouse cursor on the scrollbar and drag to the desired setting. For keyboard input, press a **lowercase d** and then use the UP and DOWN cursor (arrow) keys to make the adjustments.

## 8.5 EQ BAND SETTINGS

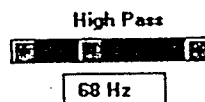
Adjustments to the 28 octave bands (31.5 Hz to 16 KHz in 1/3 octave steps) can be made for each channel except the sub-woofer. Adjustments between -10 dB and 10 dB can be made on each band. To adjust a band level, position the cursor over the desired band and use the left mouse button to drag the scrollbar to the desired setting (the band will be highlighted in red - the default highlight color).. For keyboard input, use the right or left cursor keys to position the cursor over the desired band Use the UP and DOWN cursor (arrow) keys to set the control to the desired setting.

## 8.6 NOMINALIZE EQ BAND SETTINGS

Adjustments to all 28 octave bands (for the currently selected channel) can be made. In the Tools pull-down menu (see below), select the Nominalize EQ Bands option (or simultaneously press ALT and n if using the keyboard). A display will be presented allowing you to specify the adjustment to add to all EQ bands for the currently selected channel. The software has a built in upper and lower bounds to prevent you from specifying an adjustment that will cause one or more EQ band settings to exceed the -10 dB to 10 dB window.

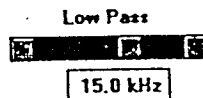
## 8.7 HIGH PASS FILTER

For each channel (except the sub-woofer), the high pass filter frequency can be set. For the currently selected channel, position the cursor over the high pass filter scrollbar and drag to the desired filter setting. For keyboard input, use the right or left cursor (arrow) keys to position the cursor on the high pass filter scrollbar (it will be highlighted). Use the UP and DOWN arrow keys to adjust the filter setting.



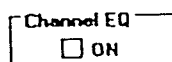
## 8.8 LOW PASS FILTER

The low pass filter frequency can be adjusted for each channel. For the currently selected channel, position the cursor over the low pass filter scrollbar and drag to the desired filter setting. For keyboard input, use the right or left cursor (arrow) keys to position the cursor on the low pass filter scrollbar (it will be highlighted). Use the UP and DOWN arrow keys to adjust the filter setting. The default low pass filter setting for the sub-woofer is 330 Hz. When generating test signals, the SDDS Setup Software will automatically set the low pass filter setting for the sub-woofer to 330 Hz, unless a lower setting is selected (see **Test Signal Generation** below).



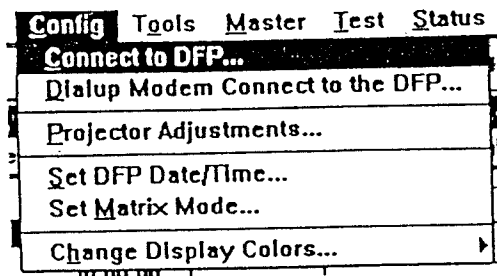
## 8.9 EQ ON/OFF

Adjustments to the EQ bands for the currently selected channel are stored in the memory of the DFP. However, for the settings to take effect, the EQ ON/OFF checkbox must be checked (On). To toggle the EQ ON/OFF box, position the cursor key over the checkbox and use the left mouse to toggle the box. For keyboard input, use the F12 function key.



## 8.10 CONFIG PULL-DOWN MENU

The following is a description of the menu options found in the Config pull-down menu.



### 8.10.1 CONNECT TO DFP/DISCONNECT FROM DFP

See Connect to DFP (above) for details on connecting to the DFP. Once connected to the DFP, the Connect to DFP menu option is replaced with the Disconnect from DFP. To disconnect from the DFP, click this option (if using the keyboard, press D). A message will be displayed to confirm that you want to disconnect from the DFP. If you elect not to disconnect, the software returns control to the main SDDS Setup Software display. If you elect to disconnect, the SDDS Setup Software verifies that the mute status of all channels are off, the master mute is off, ECC statistics collection is off (see Test), and that there is no test signal being generated. If any of these settings are incorrect, the software sends the appropriate commands to the DFP to ensure these conditions are met. Once disconnected, the software replaces Disconnect from DFP with Connect to DFP in the Config pull-down menu.

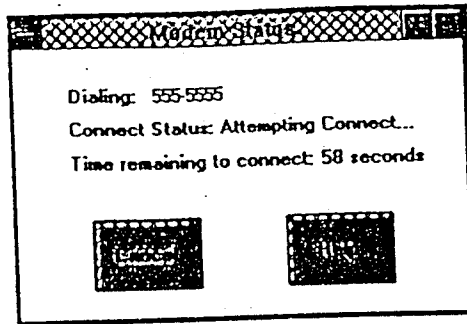
### 8.10.2 DIAL-UP MODEM CONNECT TO THE DFP/DISCONNECT FROM DFP

Connection to the DFP can be established through a dial-up modem. Contact your SDDS representative to determine if you have the correct DFP Processor firmware version to support modem connections. When choosing this option (if using the keyboard, enter D) the following display is presented.

By default, COM1 is the serial port where the modem is connected and 00000 is the DFP serial number. If COM1 is not the correct serial port, position the mouse cursor over the desired serial port and press the left mouse button. If using the keyboard, TAB to the currently selected port and then use the UP and DOWN cursor (arrow) keys to select the desired serial port. Enter the correct DFP serial number (if using the keyboard, TAB to the serial number field, enter the serial number and press ENTER). To dial the modem connected to the DFP, enter the phone number in the Modem Phone Number input field. To save the information for future use, use the **Save Config** button. The **Test** button is used to verify that the selected serial port exists. If an invalid port is selected, a message will be displayed indicating the error. Choose another port and try testing again. To connect to the DFP, use the **Connect** button.

When connecting to the DFP, the software initializes the PC modem (i.e., modem connected to the serial port on the PC) and then sends a dial-up command containing the modem phone number supplied by the user. During the initialization process, you will experience some delay before the actual dialing takes place. This delay is a built-in factor that ensures that the software will communicate with most Hayes compatible modems. Monitor the status bar at the bottom of the screen for messages indicating the status of the initialization process. Once initialized, dialing will start and the following message box is displayed.





The software has a sixty second time envelop in which an attempt is made to establish connection with the DFP. If a connection is not made within the sixty second time slice, the software will abort the process and return control back to the Connect to the DFP using Modem Dial-up display.

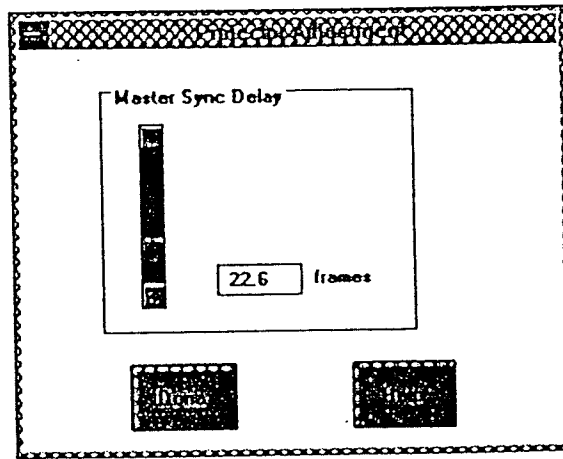
If a modem connection is established with the DFP and no project is currently opened (**File Management** above), the software polls the DFP to determine the current operating environment. During this polling process, a display is presented indicating the polling status. Once the DFP operating environment has been determined, you are now ready to make adjustments to the DFP settings.

If a modem connection is established with the DFP and a project is currently opened (**File Management** above), you will be given two options. You can either update the DFP to reflect the settings of the currently opened project or you can poll the DFP and overwrite the settings of the currently opened project. In either case, some delay will be experienced as communications between the PC and the DFP take place.

Once connected to the DFP, the software replaces the **Dial-up Modem Connect to the DFP** entry in the Config pull-down menu with **Disconnect from the DFP**. To disconnect from a modem connection, choose **Disconnect from the DFP** from the Config pull-down menu (or press D if using the keyboard). A message will be displayed to confirm that you want to disconnect from the DFP. If you elect not to disconnect, the software returns control to the main SDDS Setup Software display. If you elect to disconnect, the SDDS Setup Software verifies that the mute status of all channels are off, the master mute is off, ECC statistics collection is off (see **Test** below), and that there is no test signal being generated. If any of these settings is incorrect, the software sends the appropriate commands to the DFP to ensure these conditions are met. After verification, the software disconnects from the DFP and then sends a hang-up command to the local modem. There will be a time delay as the modem hang-up operation is performed. Once disconnected, the software replaces **Disconnect from the DFP** with **Dial-up Modem Connect to the DFP** in the Config pull-down menu.

### 8.10.3 PROJECTOR SETUP

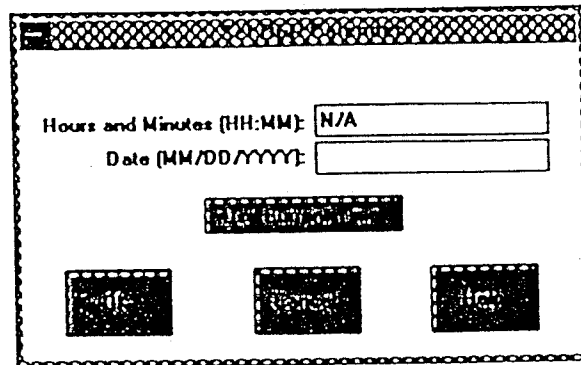
**Master Sync Delay** This setting adjusts the amount of delay the DFP will introduce to assure that the SDDS digital sound track is in sync with the picture and analog sound track. This setting is calculated in frames and should be set while listening to a film sound track. The DFP provides a headphone monitor connection within the unit for listening to both the analog and digital center channel tracks simultaneously. Refer to the SDDS DFP installation manual for further information. To change the projector sync delay, select Projector Setup from the Config pull-down menu (if using the keyboard, simultaneously press the ALT and C keys to get the Config pull-down menu and then press the P key). The following display will be presented.



To make an adjustment, position the cursor over the scrollbar and drag to the desired setting. The new adjustment will be sent to the DFP. If using the keyboard, TAB to the scrollbar and use the UP and DOWN cursor (arrow) keys to set the desired sync value. When finished, click the Done button (or if using the keyboard, TAB to the Done button and then press ENTER).

#### 8.10.4 SET THE DFP DATE/TIME

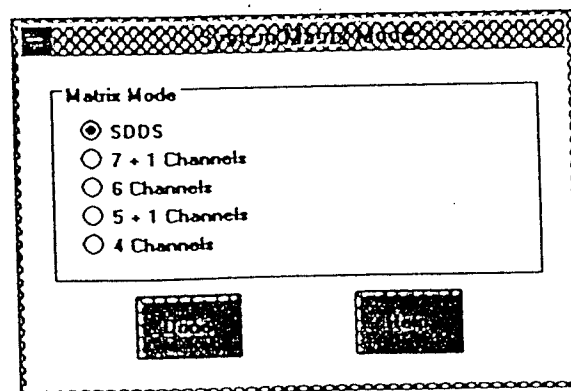
The current DFP date and time can be set using the SDDS Setup Software. Select **Set DFP Date/Time** from the **Config** pull-down menu (if using the keyboard, simultaneously press ALT and C to gain access to the Config pull-down menu and then press S). The following display will be presented.



Enter the appropriate date and time in the format specified (if using the keyboard, TAB to each field and enter the information). If the current PC date and time is correct, use the **Use Current Time** button. Click the **OK** button to send the new date and time to the DFP. If you select **CANCEL**, the DFP date and time is not updated.

#### 8.10.5 SET MATRIX MODE

The SDDS Playback Processor can be configured to produce several output configuration options. By selecting the desired output configuration mode, the DFP can be used in a variety of theaters having different channel configurations. To select a matrix mode select the **Set Matrix Mode** from the **Config** pull-down menu. If using the keyboard, simultaneously press the ALT and C keys to gain access to the Config pull-down menu and then press the M key. The following display will be presented.



Choose one of the following options (if using the keyboard, TAB to the matrix selection box and use the UP and DOWN cursor (arrow) keys to make the desired selection).

**SDDS Mode** This format will provide a 1:1 mapping of the 8 channels on the film to the 8 output channels.

SDDS Full Range Format	OUTPUTS							
	L	LC	C	RC	R	SW	LS	RS
Inputs								
1 Left	X							
2 Left/Center		X						
3 Center			X					
4 Right/Center				X				
5 Right					X			
6 Sub Woofer						X		
7 Left Surround							X	
8 Right Surround								X

**7 + 1 Mode** This format will provide a stereo surround format with 3 full range speakers behind the screen and baby booms.

70MM Format w/Stereo Surrounds	Outputs							
	L	LC	C	RC	R	SW	LS	RS
<u>Inputs</u>								
1 Left	X							
2 Left/Center	X		X					
3 Center			X					
4 Right/Center			X		X			
5 Right					X			
6 Sub Woofer		X		X		X		
7 Left Surround							X	
8 Right Surround								X

**6 Channel Mode** This is a standard 70MM, baby boom sound format with mono surrounds.

70MM Format w/Mono Surrounds	Outputs							
	L	LC	C	RC	R	SW	LS	RS
<u>Inputs</u>								
1 Left	X							
2 Left/Center	X		X					
3 Center			X					
4 Right/Center			X		X			
5 Right					X			
6 Sub Woofer		X		X		X		
7 Left Surround							X	
8 Right Surround							X	

5.1 Channel Mode This format provides 3 screen channel, stereo surrounds, and sub woofer.

Phantom LC & RC	Outputs							
	L	LC	C	RC	R	SW	LS	RS
<u>Inputs</u>								
1 Left	X							
2 Left/Center	X		X					
3 Center			X					
4 Right/Center			X		X			
5 Right					X			
6 Sub Woofer						X		
7 Left Surround							X	
8 Right Surround								X

**4 Channel Mode** This format provides 3 screen channel, mono surrounds, and an optional sub woofer.

Standard Stereo Optical Format	Outputs							
	L	LC	C	RC	R	SW	LS	RS
<u>Inputs</u>								
1 Left	X							
2 Left/Center	X		X					
3 Center			X					
4 Right/Center			X		X			
5 Right					X			
6 Sub Woofer						X		
7 Left Surround							X	
8 Right Surround							X	



## 8.10.6 CHANGE DISPLAY COLORS

The following are the default colors (as shipped from SDDS) for the SDDS Setup Software.

white	background color of the displays
green	background color of the scrollbars
red	scrollbar highlight, background of error and alert messages
yellow	background of warning messages
gray	background of buttons

Use **Change Display Colors** in the **Config** pull-down menu to change the default colors (if using the keyboard, simultaneously press the ALT and C keys to gain access to the Config pull-down menu and then press h). A popup menu will be displayed with the following entries.

**Scrollbar Color** changes the default scrollbar color

**Scrollbar Highlight Color** changes the default scrollbar highlight color

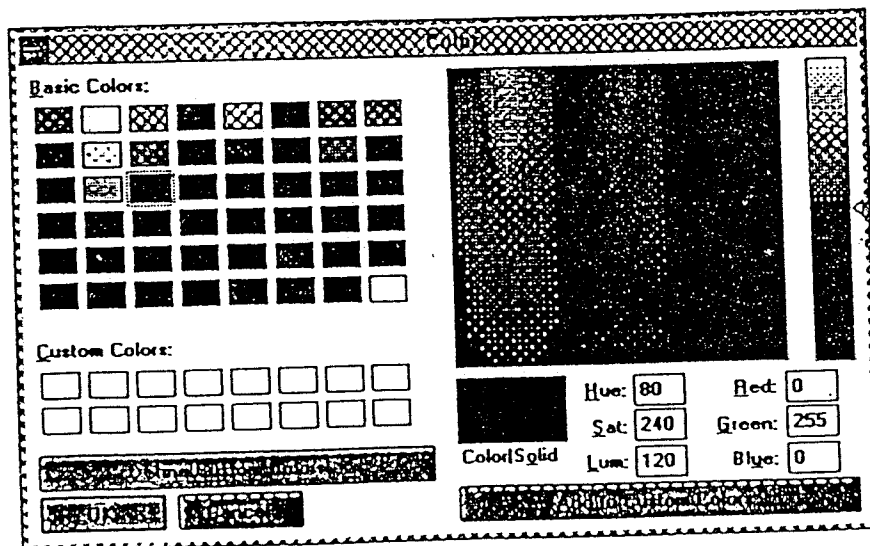
**Button Color** changes the default button background color

**Window Background** changes the default window color

**Alert Status Color** changes the default error and alert background color

**Warning Status Color** changes the default warning background color

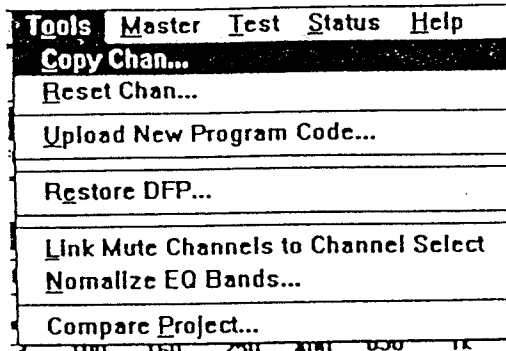
After selecting one of the above entries (if using the keyboard, press the underlined key and then press ENTER), the following display will be presented.



Select the desired color and click the OK button (if using the keyboard, TAB to the desired color and press ENTER). The selected color will become the default color for the particular control from now on.

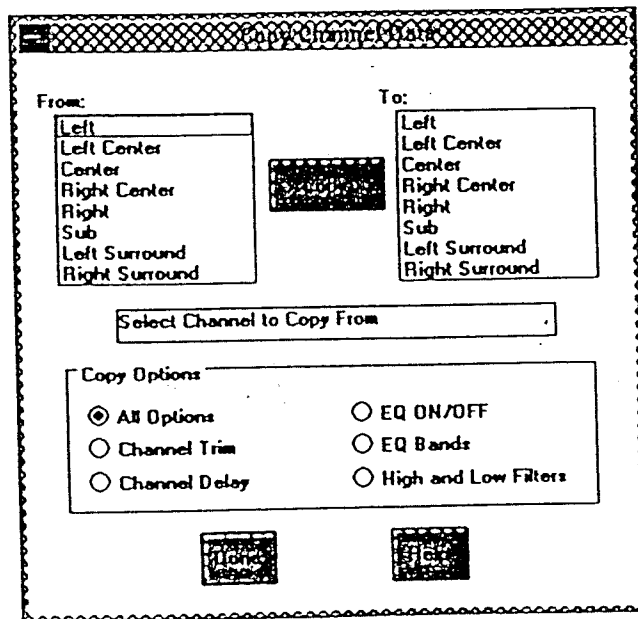
### 8.11 TQOLS PULL-DOWN MENU

The following is a description of the menu options found in the Tools pull-down menu.



#### 8.11.1 COPY CHANNEL

Channel settings (i.e., trim levels, EQ bands, high/low pass filters, etc.) can be copied from one channel to another. To copy channel settings from one channel to another, select Copy Chan from the Tools pull-down menu. If using the keyboard, simultaneously press the ALT and O keys to gain access to the Tools pull-down menu and then press C). The following display will be presented.



Select the "From" channel from the list on the left side of the display (the selected channel will be highlighted). Select the desired channel (the "To" channel) where the channel settings will be copied from the list on the right side of the display (this selected channel will also be highlighted).

To perform the copy operation, use the **Copy** button. Once the Copy button has been activated, a message box will appear warning you that the DFP settings of the "To" channel will be overwritten. If you elect to cancel the operation, the software will return you to the main SDDS Setup display without performing the copy operation. If you elect to carry the operation out, the DFP settings of the "From" channel will be copied to the "To" channel. To copy the DFP settings to additional channels, select another "To" channel from the list on the right of the display and perform the same steps just described.

**Copy Options** By default, all channel settings are copied from the "From" channel to the "To" channel. However, copy operations where only a subset of the DFP channel settings are to be copied can be performed (i.e. Copy EQ bands only). To select a subset of the channel settings, position the mouse over the desired setting (at the bottom of the Copy Chan display) and press the left mouse button. Continue selecting setting options until the desired subset is selected. Now use the Copy button to perform the operation.

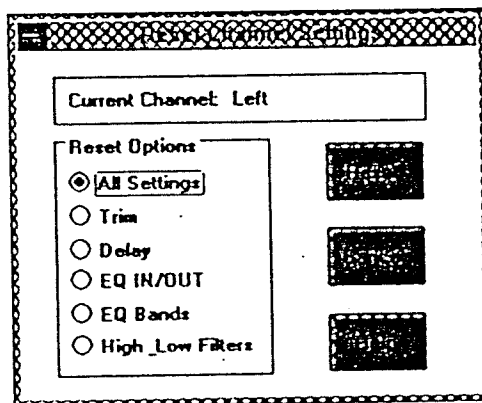
When finished copying settings from one channel to another, use the **Done** button to exit the display.

### 8.11.2 RESET CHAN

Channel settings can be reset to SDDS specifications. The following are the default channel settings as shipped.

0 dB	for all EQ bands
OFF	high pass filter setting
OFF	low pass filter setting (330 Hz if sub-woofer)
-10 dB	channel level trim
0 msec	surround delay trim (for surround channels only)
OFF	EQ switch (if ON EQ bands are adjusted in DFP)

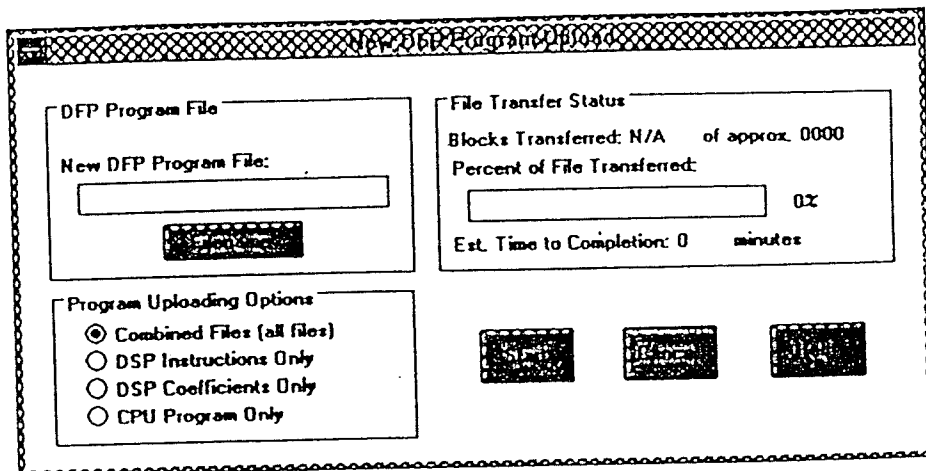
To reset the settings of a channel, select the channel using the **Next** or **Prev** buttons (Channel Selection) and then select **Reset Chan** from the **Tools** pull-down menu. The following display will be presented.



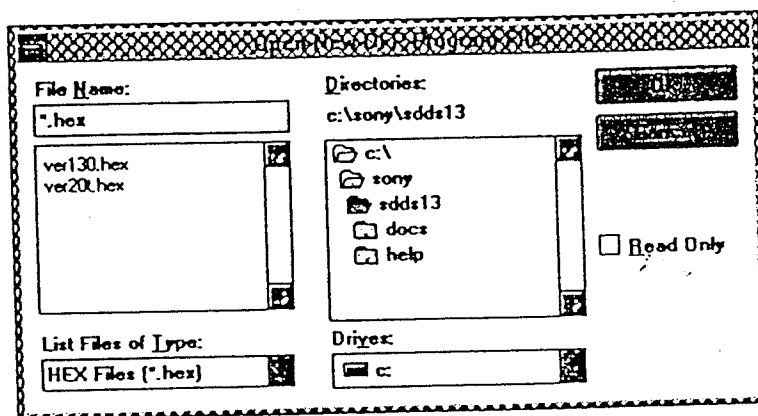
Either all channel settings can be reset or a selected subset can be defined. To reset all channels, position the cursor over the All Settings option and press the left mouse button. If a subset of settings is desired, position the cursor over the desired setting and press the left mouse button. Continue this operation until all settings have been selected. To reset the settings, use the **Reset** button. Once the Reset button has been activated, a message will be displayed warning that the selected settings for the current channel will be overwritten. If the user elects to cancel the operation, the software will return you back to the SDDS Setup display and the reset operation will be canceled. If the user continues the reset operation, the selected channel settings will be set to the defaults and control will be returned to the main SDDS Setup display.

### 8.11.3 UPLOAD NEW PROGRAM CODE

New firmware (supplied by your SDDS representative) can be uploaded to the DFP. To upload a new firmware version, select **Upload New Program Code** from the Tools pull-down menu. The following display will be presented.



To upload a new program file, you must enter the full filename (including the directory pathname) of the program file supplied by your SDDS representative. To obtain a list of available program files, use the **Filename** button to access the Open New DFP Program File display.



Select one of the listed program files (default extension is **.hex**) or select a directory to display additional program files.

**Program Uploading Options** By default new DFP program files are shipped with the CPU program, DSP coefficients and DSP instructions combined into one file. However, there are occasions when the shipped file contains only one of the aforementioned components. If the selected program file only contains one of the three components (you will be notified by your SDDS representative if the shipped program file contains only one component), select the appropriate option in the Program Uploading Options box. To select an option, position the cursor over the desired selection and press the left mouse button.

**Start Uploading** Once the program file and uploading option has been selected, use the **Start** button to start the uploading process. Once the start button is activated, the software calculates the number of blocks of data to transfer and the estimated time (in minutes) of completion. In addition, the Start button becomes the **Stop** button. As the program file is uploaded, the percent of completion is displayed in the flow bar on the New DFP Program Upload display. To Stop the uploading process, use the Stop button (the Stop button now becomes the Start button). To continue the uploading process, use the Start button.

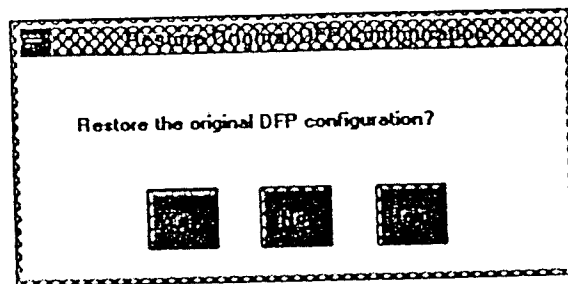
When **Canceling** the uploading operation, the DFP automatically disconnects from the PC (you will be notified via a message box). Use **Connect to DFP** in the **Config** pull-down menu to reconnect to the DFP. Note: if you prematurely cancel the uploading process, the DFP continues to operate using the old program firmware.

Once the complete program has been uploaded (a process that can take up to 30 minutes), the DFP performs a verification pass on the new program file (which is stored in temporary storage). The verification process takes approximately 5 minutes to complete. Once the verification process has finished, a message asking to reboot with the new program code appears. At this point, the old DFP program code is still operational. However, once the DFP is rebooted, the old program code is overwritten with the new program. If the user elects not to reboot the DFP, the DFP will disconnect from the PC. Use **Connect to DFP** in the **Config** pull-down menu to reconnect to the DFP. If the user elects to reboot the system with the new program code, the DFP overwrites the old program code with the new program code, disconnects from the PC and then reboots the DFP. Use **Connect to DFP** in the **Config** pull-down menu to reconnect to the DFP running the new program code.

**Problems** If communication problems occur during the uploading process or if during the verification pass the DFP determines that the program data is corrupted, the software will display an error message and the DFP will disconnect from the PC. Use **Connect to DFP** in the **Config** pull-down menu to reconnect to the DFP (which will be running the old program).

#### 8.11.4 RESTORE DFP

When a connection is first made with the DFP, the current operating state of the DFP is saved in memory. To restore the DFP to the state that existed prior to connecting to the DFP, use **Restore DFP** in the **Tools** pull-down menu. (If using the keyboard, simultaneously press the ALT and O keys to access the Tools pull-down menu and then press E.) When selecting **Restore DFP**, the following display is presented.



Select **yes** to restore the original DFP configuration (if using the keyboard, TAB to the yes button and press ENTER). If you select **no**, the DFP settings are not restored. If **yes** is selected, a message is displayed warning that the current settings in the DFP will be overwritten. If the user elects to cancel the operation, the software will not send the stored configuration to the DFP.

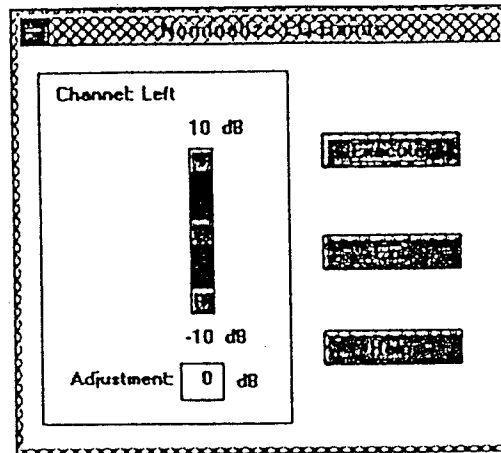
#### 8.11.5 LINK MUTE CHANNELS TO CHANNEL SELECT

When generating a test signal (see Test below) and making adjustments to the DFP settings, it is convenient to link the mute button keys to the channel select operator (see Channel Select above). When the mute buttons are linked, the software will automatically mute all channels except for the currently selected channel. When a channel is selected (either by clicking one of the channel mute buttons or by clicking the Next or Prev buttons in the SDDS Setup Software display), the mute status of the remaining channels are toggled on. To toggle off the mute status of additional channels while the mute buttons are linked, position the cursor over the desired mute channel button and press the **right mouse button** (if using the keyboard, simultaneously press ALT and the function key mapped to the desired channel - for example ALT -F1 to toggle off the mute status of the left channel).

**Unlink Mute Channels to Channel Select** When selecting **Link Mute Channels to Channel Select** (if using the keyboard, press L), the software overwrites the menu entry with **Unlink Mute Channels to Channel Select**. To cancel linked mute channels, select **Unlink Mute Channels to Channel Select**. If using the keyboard, press U.

### 8.11.6 NOMINALIZE EQ BANDS

Instead of individually adjusting each EQ band, a nominal adjustment can be made to all EQ bands at once. To make a nominal adjustment, select **Nominalize EQ Bands** from the **Tools** pull-down menu. If using the keyboard, simultaneously press the ALT and O keys to gain access to the Tools pull-down menu and then press the N key. The following display will be presented.



For the currently selected channel (see **Channel Selection**), Use the mouse to position the scroll thumb to the desired nominal value to add to each EQ band. If using the keyboard, TAB to the scrollbar and use the UP and DOWN cursor (arrow) keys to position the scroll thumb. To add the nominal value to the EQ bands, use the **Execute** button (if using the keyboard, TAB to the **Execute** button and press ENTER). The settings for the EQ bands will automatically be adjusted. To exit the display, use the **Exit** button (if using the keyboard, TAB to the **Exit** button and press ENTER).

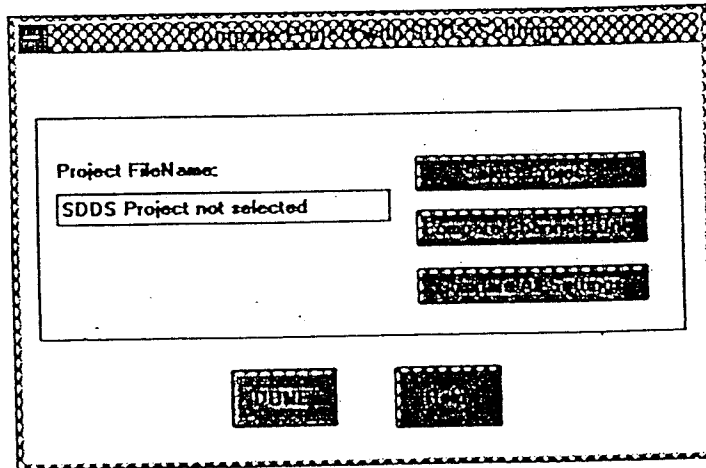
When **Nominalize EQ Bands** is selected, the software automatically calculates a range of acceptable nominal values that can be added to the EQ bands. The upper and lower bounds of this calculated range will be displayed at the top and bottom, respectively, of the nominal value scrollbar. These bounds are used to prevent a nominal value from being chosen that when added to a particular EQ band setting, causes the new setting to be set outside the allowable -10 dB to 10 dB range.



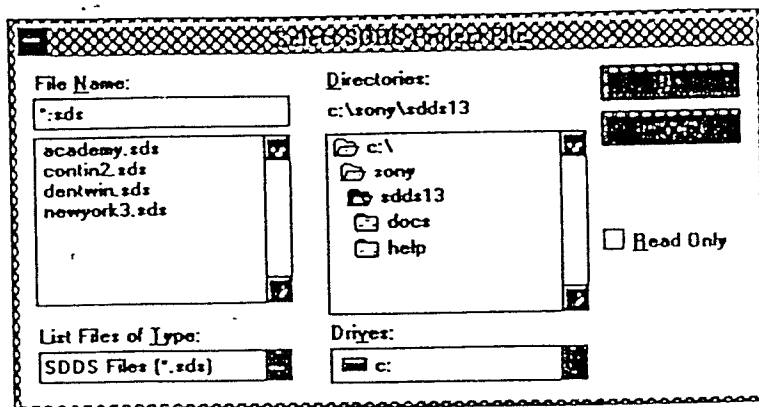
### 8.11.7 COMPARE PROJECT

Select **Compare Project** from the **Tools** pull-down menu to compare the settings of an existing project with the current DFP settings (if connected to the DFP). If using the keyboard, simultaneously press the ALT and O keys to access the Tools pull-down menu and then press P. This function is particularly useful to verify that the current DFP settings have not changed since the previous tuning session. Since this function compares the settings of an unopened project file with the current settings in the SDDS memory, this function can also be used to compare the settings of two projects. To do this, make sure the software is not connected to the DFP (see **Disconnect from the DFP**), open a project and then use **Compare Project** to select the other project.

When Compare Project is selected, the following display is presented.



To select a project to compare settings, use the **Select Project** button (if using the keyboard, TAB to Select Project and press ENTER). The following display will be presented.



Select the desired project file (or select another directory for additional lists of project files). If using the keyboard, TAB to the desired project filename or directory and press ENTER.

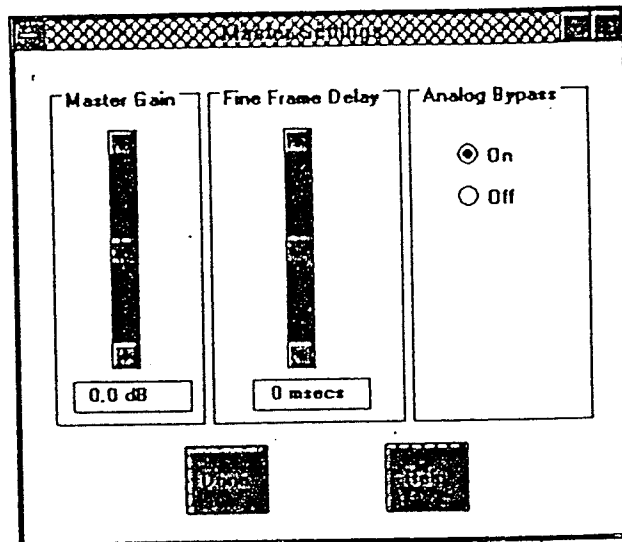
Once a project file has been selected, you can either compare the channel settings or compare all settings. If you choose **Compare Channels Only**, differences in the level trim, surround delay trim, EQ band settings, and the high and low pass filter settings between the selected project and the currently opened project (i.e., the current DFP settings if connected to the DFP) will be displayed. Since there are eight channels of information, several screens of information may be displayed depending on the number of differences found.

If you elect to choose **Compare All Settings**, the aforementioned settings are compared as well as the current projector master sync delay setting, master level and lip sync settings, analog/digital bypass setting, and the matrix mode are also compared. As with Compare Channel Settings, several screens of information may be displayed depending on the number of differences found.

## 8.12 MASTER PULL-DOWN MENU



To set the master level, lip sync, and the analog bypass select the **M**aster pull-down menu (if using the keyboard, simultaneously press ALT and the M keys). When **M**aster is selected, the following display will be presented.



### 8.12.1 MASTER GAIN

The master level control can be adjusted either from the front panel on the DFP or from the master setup display. To adjust the master gain, position the mouse over the master gain scrollbar and move the scrollbar thumb to the desired value. If using the keyboard, TAB to the master gain scrollbar and use the UP and DOWN cursor (arrow) keys to position the scrollbar thumb to the desired value. It is important to note that this adjustment can be altered by the front panel control or any SDDS remote unit at any time. It is good practice to set this control to 0 and then trim the individual channels to produce the nominal level per channel in the auditorium. The master gain is intended as an overall level control for the theater.

**\*Note\*** Since the master gain can be adjusted from the front panel of the DFP, the SDDS Setup Software periodically polls the DFP to determine the current Master Gain setting.

### 8.12.2 FINE FRAME DELAY

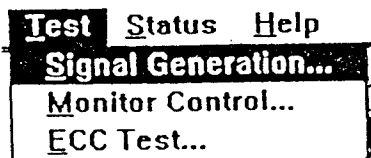
The fine frame delay is intended to allow precise adjustment of the lip sync between digital tracks and the picture. This adjustment is a fine control in contrast to the master sync delay (see **Projector** in the **Config** pull-down menu) which provides course adjustment. To adjust the fine frame delay, position the cursor over the fine frame delay scrollbar and move the scrollbar thumb to the desired position (value). If using the keyboard, TAB to the fine frame delay scrollbar and use the UP and DOWN cursor (arrow) keys to position the scrollbar thumb at the desired value.

### 8.12.3 ANALOG BYPASS

The analog bypass allows manual control of the bypass relays within the DFP. In normal operation, these relays work automatically, however during setup it may be desirable to manually switch between analog and digital signals. It is possible to activate the bypass relays manually using the front panel switch on the DFP. To toggle the bypass switch on and off, position the cursor over the desired setting and press the left mouse button. If using the keyboard, TAB to the current setting of the analog bypass and use the UP and DOWN cursor keys to select the desired setting. When disconnecting from the DFP the bypass control is returned to OFF to assure proper automatic operation of the DFP.

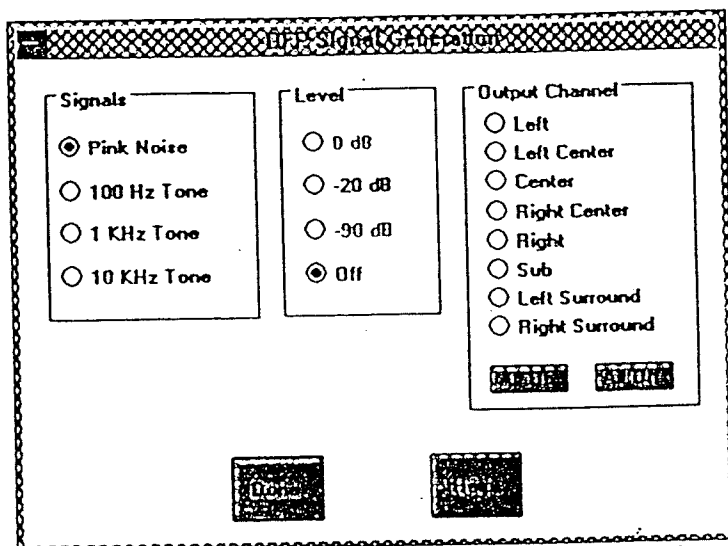
### 8.13 TEST PULL-DOWN MENU

To facilitate the tuning of a theater, test signal generation and channel monitoring setup are provided. In addition, a utility is provided that is used to monitor and collect ECC error statistics being performed by the DFP processor while a film is running.

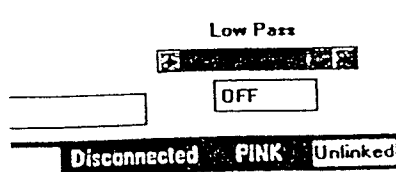


#### 8.13.1 TEST SIGNAL GENERATION

To generate a test signal, select the Signal Generator from the Test pull-down menu. The following display will be presented.



Select the desired test signal (pink noise, 100 Hz tone, 1 KHz tone and 10 KHz tone) and level (0 dB, -20 dB, -90 dB and Off) from the options listed in the display. If pink noise is selected, the 0 dB and -90 dB test levels are not available (grayed out). To turn test signal generation off, set the test level to Off. When a test signal is generated, the name of the test signal generated is displayed in the test signal status box at the bottom of the SDDS Setup Software display.



As long as a test signal is being generated, the test signal status box will continue to display the name of the signal. When disconnecting from the DFP, the software will make sure test signal generation is off. If a signal is being generated, the software will send the appropriate message to the DFP to turn test signal generation off.

Use the Done button to exit the DFP Signal Generation display. If a test level other than Off is selected, the test signal will continue to be generated even though the display is gone.

**Signal Routing** Once a test signal is generated, the channels where the signal is to be routed must be selected. From the list of channels on the right side of the DFP Signal Generation display, select (and unselect) the desired channels to route the signal. If you want to route to all channels, use the **All On** button. To unselect all channels, use the **All Off** button. The All Off button is convenient to use when you want to route to only one channel and there are currently a number of active channels. Use All Off to unselect the channels and then select the desired channel.

**Mute Status and Signal Routing** Although a channel is selected for signal routing, the signal will not be heard if the desired channel is currently in a mute state. Make sure the mute state of the selected channels are off.

### 8.13.2 MONITOR CONTROL

The digital signal generated (either in testing or when a film is running) can be monitored by plugging a headphone set into the left monitor jack of the DFP (located behind the front panel). To select what is sent to the left monitor jack select the **Monitor Control** command which is found under the **I**est menu. The following display will be presented.

**SDDS Monitor Controls**

**Monitor Position**

- Program Out
- Pre-Channel Fader
- Pre-Filter and GEQ
- Post Matrix

**Monitor Channel**

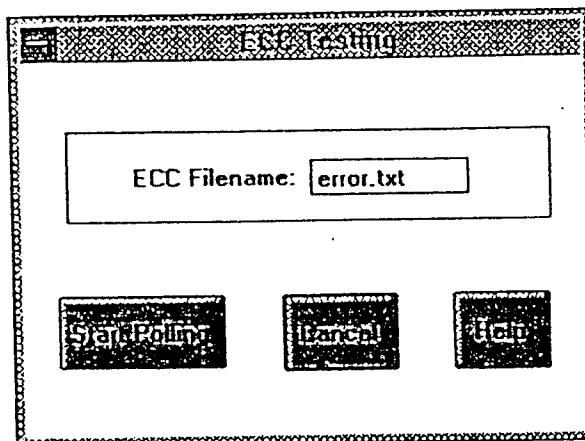
- All Channels
- Surround only
- Right side only
- SW only
- Left side only
- Center only
- Front side only
- LC + RC only
- Center + SW only
- L + R only

MTC MTC

Select the desired monitor location from along the digital signal path and then select which channel combination you want to monitor. The signals will be sent to the monitor headphone jack in stereo. To adjust the level, use the control located next to the headphone jack on the circuit card. **NOTE:** not all of the channel combinations are available for a particular monitor location. If an invalid combination is chosen, a message box will be displayed indicating that an invalid configuration has been selected.

### 8.13.3 ECC TESTING

The SDDS Setup Software can be used to monitor ECC error correction while a film is running. This feature is useful for determining the quality of a film print. For example, poor sound quality in a theater may be due to a worn print rather than a poorly tuned auditorium. Using this feature to target a worn print will prevent re-tuning the theater. To monitor ECC error correction, select **ECC Testing** from the **Test** pull-down menu (if using the keyboard, simultaneously press ALT and E keys to access the test pull-down menu and then press E). The following display will be presented.



When a film is running, the DFP reads and processes digital data from both the P and S tracks of the film. Error correction is performed on the data to ensure the highest quality sound signal. However, from time to time, the data read from a sound track is so corrupted that error correction cannot improve the sound quality. When this occurs, the DFP falls back to Digital Concealment Mode (DCM). Since the digital data on the S-track side of the film lags the corresponding P-track side by approximately 17 frames, the DFP will use the P-track data (which is stored in memory) whenever a DCM occurs while reading the S-track. As long as the P-track data stored in memory is error free, the sound quality of the print is high. However, if the P-track data stored in memory is also corrupted (while the DFP is in DCM due to S-track failure), both sources of digital data are corrupted and the DFP falls back to Analog Concealment Mode (ACM). When the DFP is in ADM, analog data is sent to the channels.

**ECC Filename** Since DCMs are a measure of film quality, the film address (film footage and frame) for a track where a DCM is detected is saved to file. This file can then be analyzed to determine the quality of the print. By default, the error file is named **error.txt** and is created in the current working directory (where the SDDS Setup Software is installed). If a different filename is desired, enter the new name and press ENTER (if using the keyboard, TAB to the ECC Filename input field, enter the filename, and press ENTER).



**Start Polling** To start polling the DFP for DCM error correction statistics, use the **Start Polling** button (if using the keyboard, TAB to the Start Polling button and press ENTER). If the ECC Filename already exists, the software will display a message giving you a choice to overwrite the file or cancel the current operation. If you elect to cancel the operation, the software will return control back to the ECC Testing display where you can enter another filename. If you elect to overwrite the file, the following display will be provided.

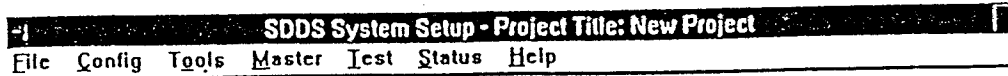
	S - Track	P - Track
Poor:	<input type="text"/>	<input type="text"/>
Fair:	<input type="text"/>	<input type="text"/>
Good:	<input type="text"/>	<input type="text"/>
Excellent:	<input type="text"/>	<input type="text"/>
Total DCM:		
Reel:	Footage:	Frame:

Start Stop Exit

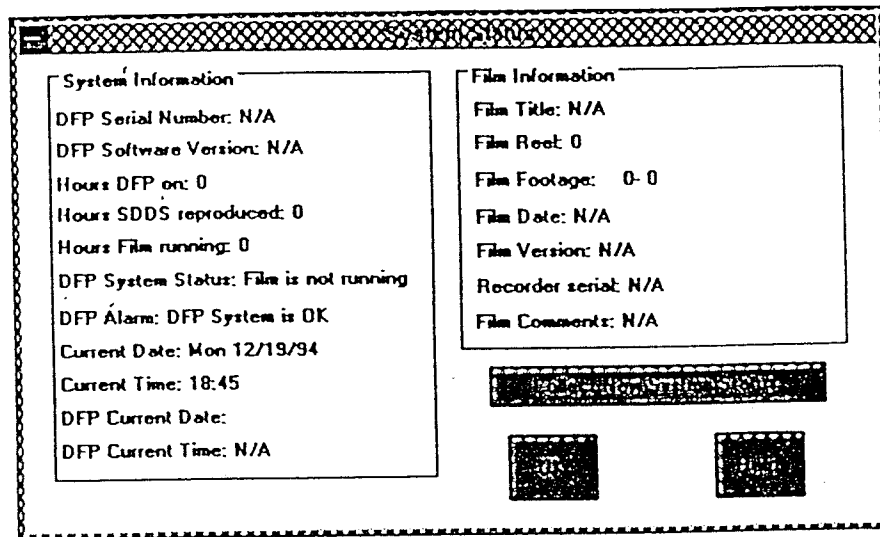
Use the **Start** button to start collecting ECC data (the software will replace Start with **Stop**). The software will continue to poll the DFP until the **Stop** button is pressed. The quality bars in the display will be filled with color indicating the stage of error correction for the current film footage. When the top level bars are red, a DCM has occurred. At this point, the software records the film footage in the error file specified earlier. Normally, the first level bars (Excellent) are filled (green) indicating normal operation of the DFP. However, if the DFP is not running a film, ECC error correction is not underway and no data will be displayed.

To stop ECC error correction monitoring, use the **Stop** button. Use the **Exit** button to return back to the main SDDS Setup display. If you use the Start button again (the software replaces Stop with Start when the Stop button is used), the software continues to poll the DFP for ECC data.

## 8.14 STATUS



To monitor the current status of the SDDS Setup software and the DFP, select **Status** from the main menu bar. If using the keyboard, simultaneously press ALT and S). The following display is presented.



If connected to the DFP, the DFP serial number, current DFP firmware version, hours the DFP has been powered on, number of hours sound has been reproduced from digital data, number of hours film has been running through the DFP and the DFP system status will be displayed. The **DFP status** can be one of the following:

- Film is not running
- Film is running
- SDDS is reproduced
- ECC rate statistics is running

If the **DFP status** is "ECC rate statistics is running", sound quality will be compromised and the DFP should be reset to "SDDS is reproduced". To place the DFP into "SDDS is reproduced", start ECC Testing (see the Test pull-down menu above), collect some data (i.e., several frames) and then exit ECC Testing.

The DFP Alarm can be one of the following.

- DFP System is OK
- LED in the reader unit
- Power for the reader unit
- Cooling fan in the reader
- Presence of CCD signal
- V\_Lock
- PLL\_Lock
- Cooling fan in the decoder unit

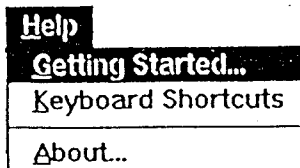
Except for the first alarm (DFP system is OK), the remaining alarms indicate an operational problem with the DFP. If one of these alarms is displayed, contact your SDDS representative.

In addition to the DFP status and alarms, the DFP date and time is displayed. If DFP date and time is not the same as the current date and time, use Set Date/Time in the Config pull-down menu to set the DFP date and time.

If a film is running, the film title, reel number, film footage, film recording date, version number, film recorder number and film comments will also be displayed.

To refresh the display, use the Collect New System Status button. If using the keyboard, TAB to the Collect New System Status button and press ENTER.

## 8.15 HELP



Use help to access the on-line help provided with the SDDS Setup Software. When selecting Help (if using the keyboard, simultaneously press ALT and H), a pull-down menu will be displayed.

### 8.15.1 GETTING STARTED

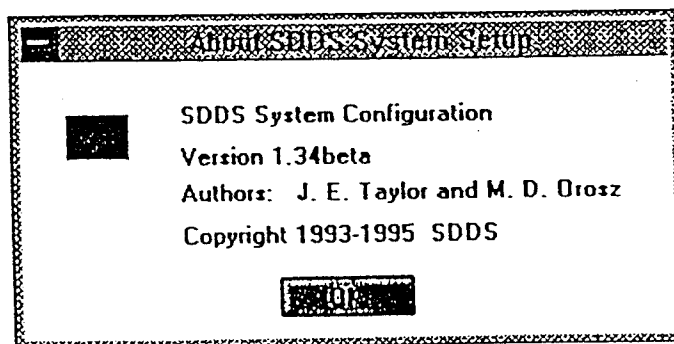
Select this menu entry to access help on how to get started using the SDDS Setup Software. In addition, detail help regarding the features available in the software can be accessed using the Contents button of Windows Help. See the Windows documentation for more information on using Windows Help.

### 8.15.2 KEYBOARD SHORTCUTS

Select this menu entry to get a list of the keyboard shortcuts available in the software. Keyboard shortcuts are keyboard key sequences that are used to access pull-down menus, maneuver through displays and make adjustments to DFP settings. These keyboard key sequences are particularly useful for laptop computers where the mouse or trackball device is missing or is inconvenient to use.

### 8.15.3 ABOUT

Use this menu entry to display the following SDDS Setup Software information box.



## 9. FURTHER INFORMATION

If you have any questions regarding the SDDS Setup Software please contact.

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