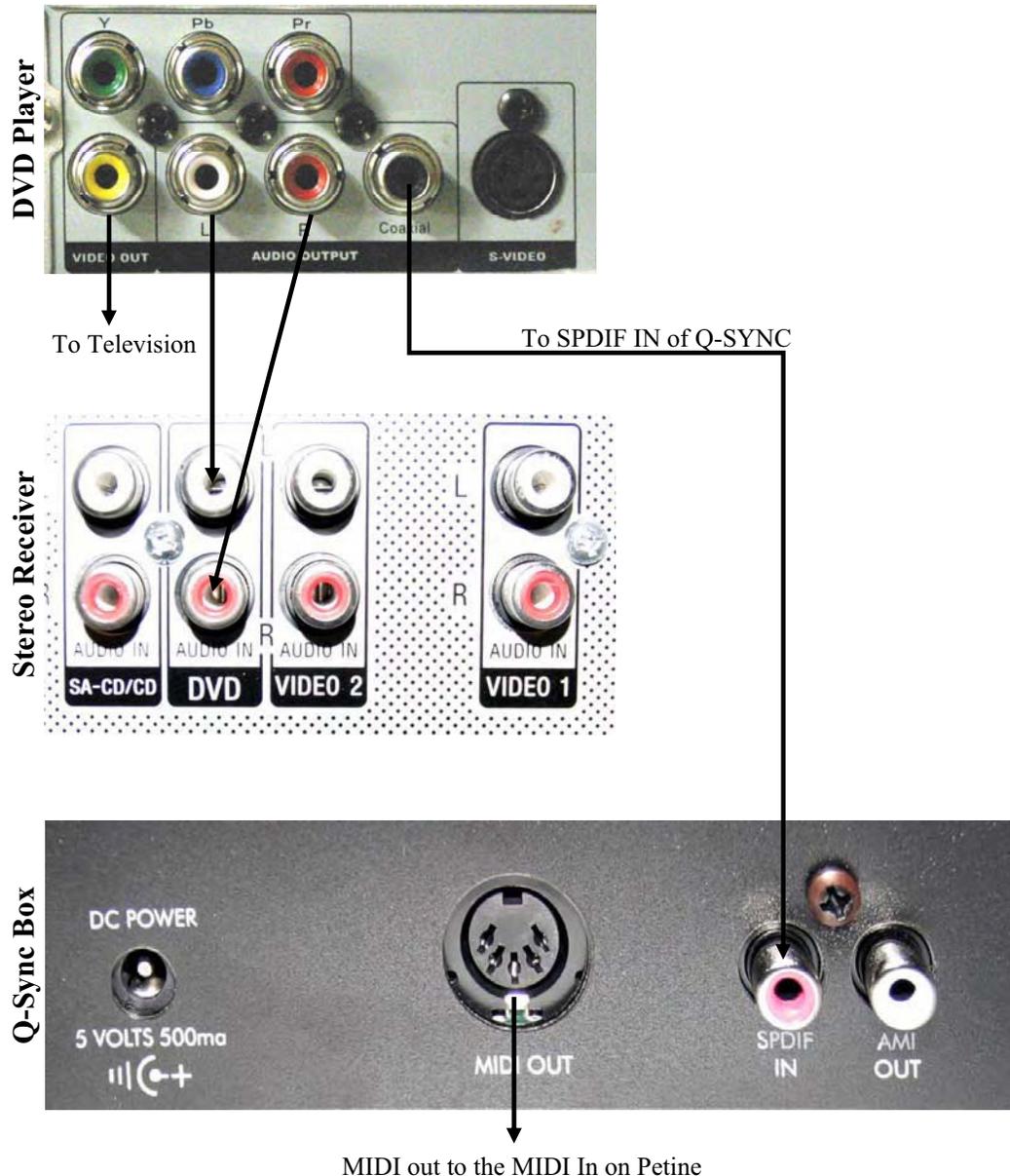




QSYNC Connection Guide

Setting Up Your New Q-Sync:

In order to use the Q-Sync you must have a DVD player that has a SPDIF out. The diagrams below show the Inputs and Outputs on these devices used and the standard connections for using Q-Sync. Refer to the Quick Guide for more instructions on playing the DVD on the Q-Sync.



This guide is specific to the QRS Q-Sync demo hardware and is intended for power center presentation. The actual product this demo represents will have it's own user guide and will differ in some key areas.

Main differences between dealer demo units and production units are:

A - Dealer demo units are limited in content to 6 internal DVD titles and the content resides in permanent form on a secure IC.

Production units will have secure content stored on CF cards and is fully up upgrade-able as the QRS library grows.

B - Dealer demo units operating system is not upgrade-able.

Production units OS can be upgraded via CF card at any time.

C - Demo units have basic functionality.

Production units have many features such as IR / home audio data port, integrated wireless AMI, Compact Flash reader, extended audio I/O and control, upgrade able content and OS through CF card.

D - Dealer demo units are identical to NAMM 06 wedge shaped demo units.

Production units have a new low profile, aesthetically pleasing look and feel.

Production units have upgrade OS for solid synchronization functionality and reliability.

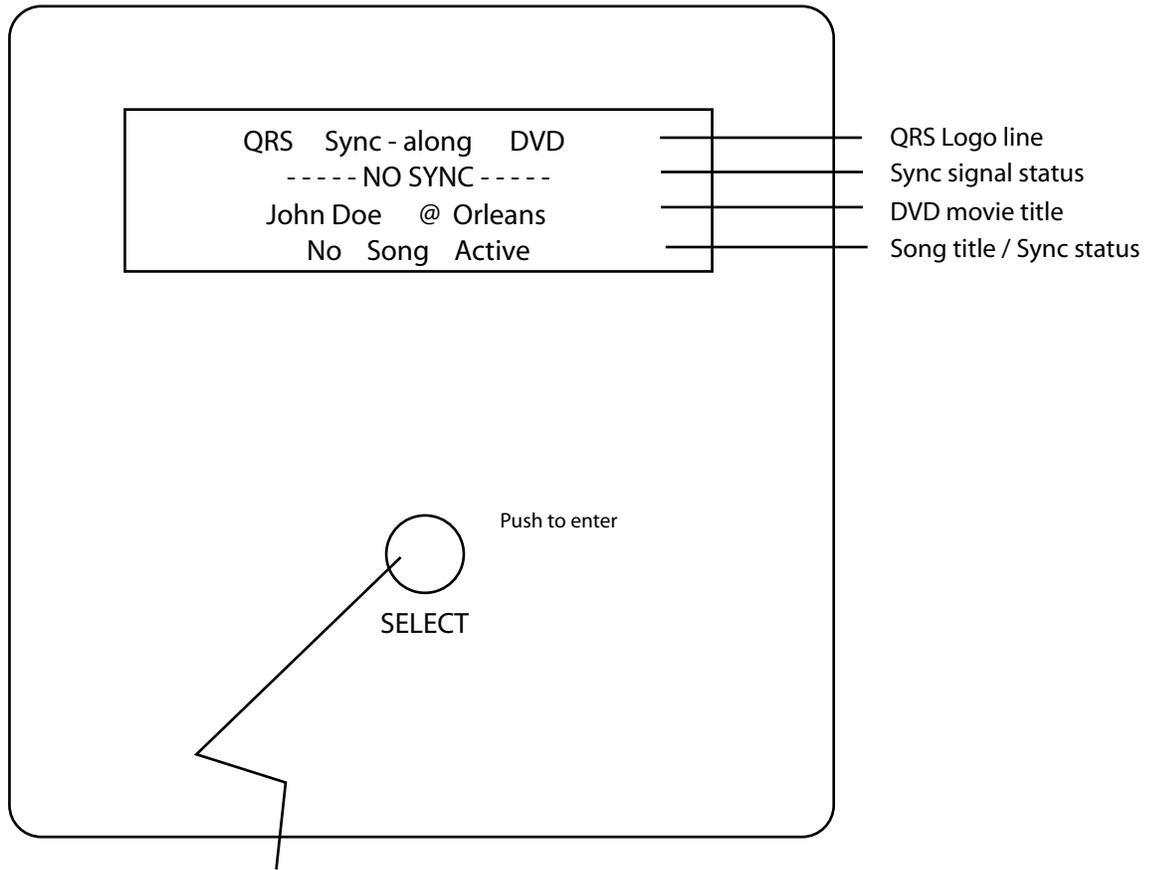
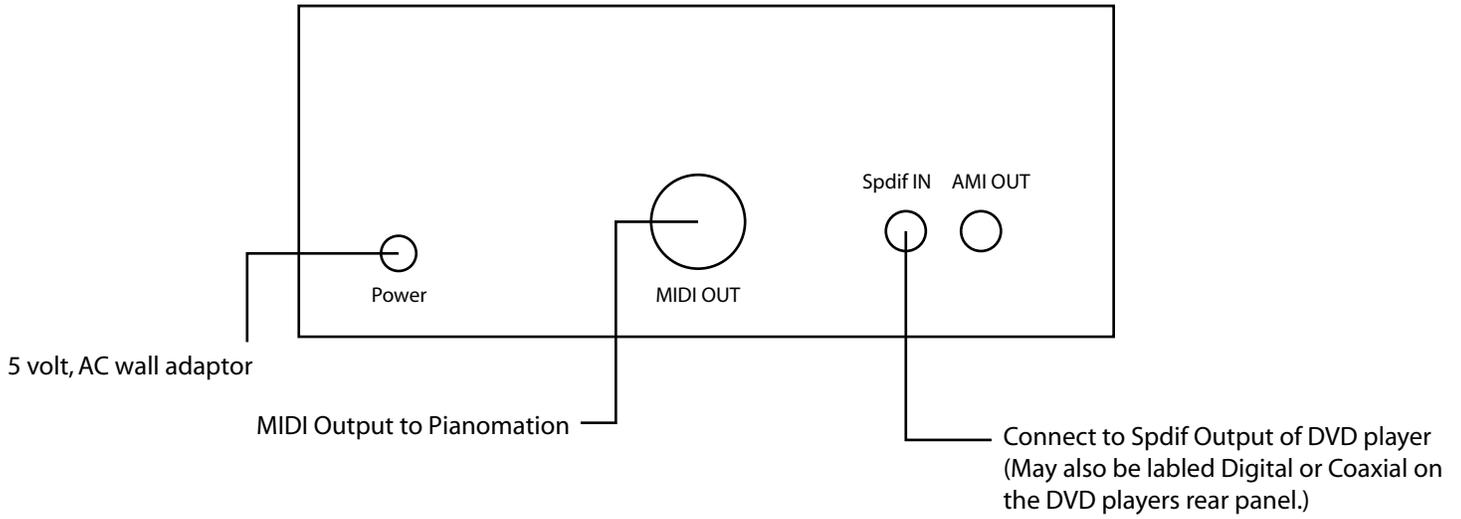
Please read the following pages in this guide to become familiar with the Q-Sync power center units. There are a few things you need to know about DVD's and the Patented QRS Q-Sync technology in order to provide a successful demonstration of this cutting edge development.

All DVD disc are not created equally and depending on how the content was authored you may experience some DVD titles that don't automatically play the piano. Don't panic! All is still good. We just have to be sure to select the correct audio settings. The discrepancies are both DVD disc related and DVD player related. We have gone to great lengths to minimize these issues in firmware but want you to understand the following.

DVD discs generally offer at least 2 if not more audio formats. The possibilities are AC3 2 channel, AC3 Dolby 5.1 surround, DTS Digital 5.1 and sometimes PCM linear audio. Q-Sync needs to see AC3 data to do it's magic.

The DVD disc itself normally tells the player what type of audio format to default to. The authors of the DVD believe they know what's best for their audience in terms of plug and play. We can't change their minds so we will educate you instead!

QRS Q-Sync power center user guide



Use to select DVD titles and adjust delay. Push to change selection option or enter a selected mode.

QRS Q-Sync power center user guide

1 - Make cable connections to Pianomation controller and DVD player as described on page 1.

2 - turn on the power to all devices.

NOTE: THIS STEP IS NORMALLY NOT REQUIRED BUT YOU SHOULD KNOW HOW TO CHANGE SETTINGS SHOULD SOMEONE CHANGE SETUP AFTER YOU HAVE THE SYSTEM WORKING.

3 - Using the setup menu in the DVD player, navigate to the Audio Setup page. Navigate to the Digital Audio options and select Digital Output / SPDIF / RAW. In most cases the DVD player will retain this setting option and this only needs to be done once. PLEASE SEE PAGE 4 FOR DETAILS OF SETUP AND USE.

4 - Place the desired DVD disc into the DVD player and navigate to the play menu.

5 - Using the DATA Dial on Q-Sync (Fig A-2), navigate to the DVD movie title that matches the DVD disc you chose. Press the data dial to enter the selection. Song titles will show up in the LCD display at location shown in Fig A-1.

As each chapter advances, the next title will automatically play and show on the LCD display.

Special Notes:

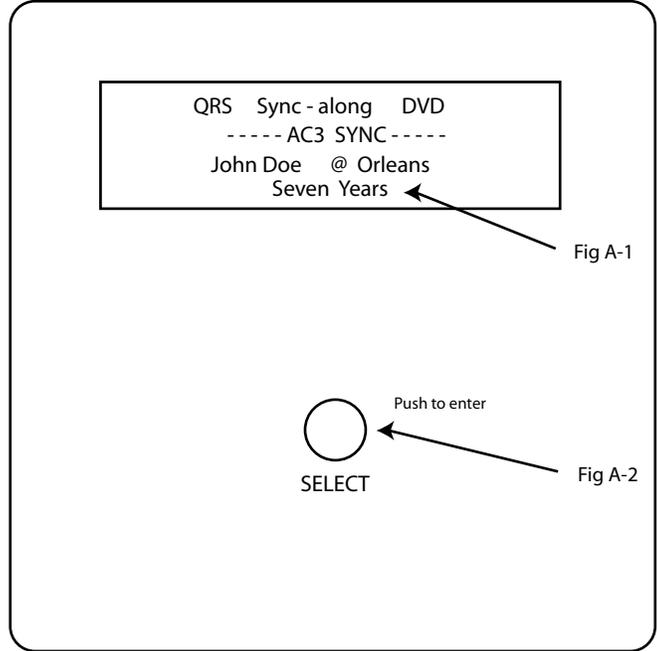
During playback, pressing the Data dial will allow you to enter "sync adjust mode" providing + / - 250 milliseconds of adjustment.

Using the search / jog function of the DVD player during playback will cause loss of synchronization. The piano will continue to play for about 20 seconds and then stop. To re-sync the Q-Sync to the DVD during playback simply skip back or ahead to the next chapter.

Titles available on Q-Sync DEALER DEMO unit

TITLE	DEFAULT AUDIO FORMAT	SET TO
1 - Diana Krall in Paris	DOLBY 2 CH	DOLBY 5.1
2 - Yanni at Acropolis	DOLBY 5.1	DOLBY 5.1
3 - Norah Jones @ Orleans	DOLBY 5.1	DOLBY 5.1
4 - Billy Joel at Yankee	DOLBY 2 CH	DOLBY 5.1
5 - Sinatra ClassicDuets	AC3 2 CH	AC3 2 CH
6 - The Legend of 1900	DOLBY 5.1	DOLBY 5.1

Be sure to select the DVD title that matches the inserted DVD disc.



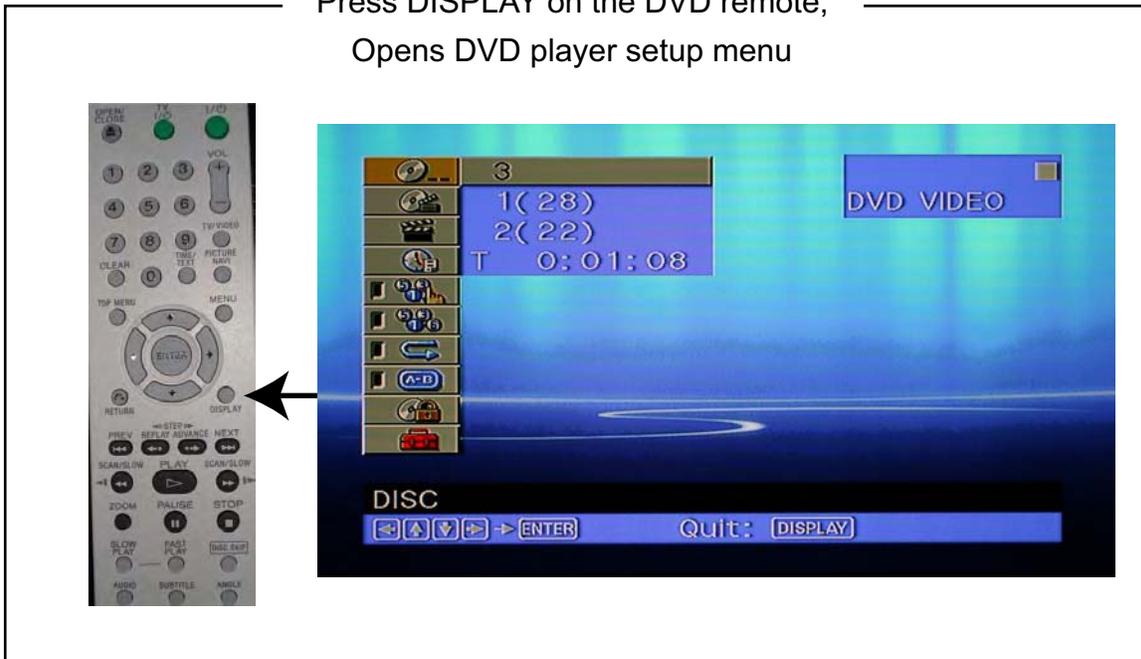
SETUP DETAILS,

QRS dealer power centers are intended to be setup with QRS supplied equipment to help minimize problems related to unfamiliar A/V components. The following description refers the Sony model CD/DVD Player DVP-NC85H and Sony home theater system HT-DDW700.

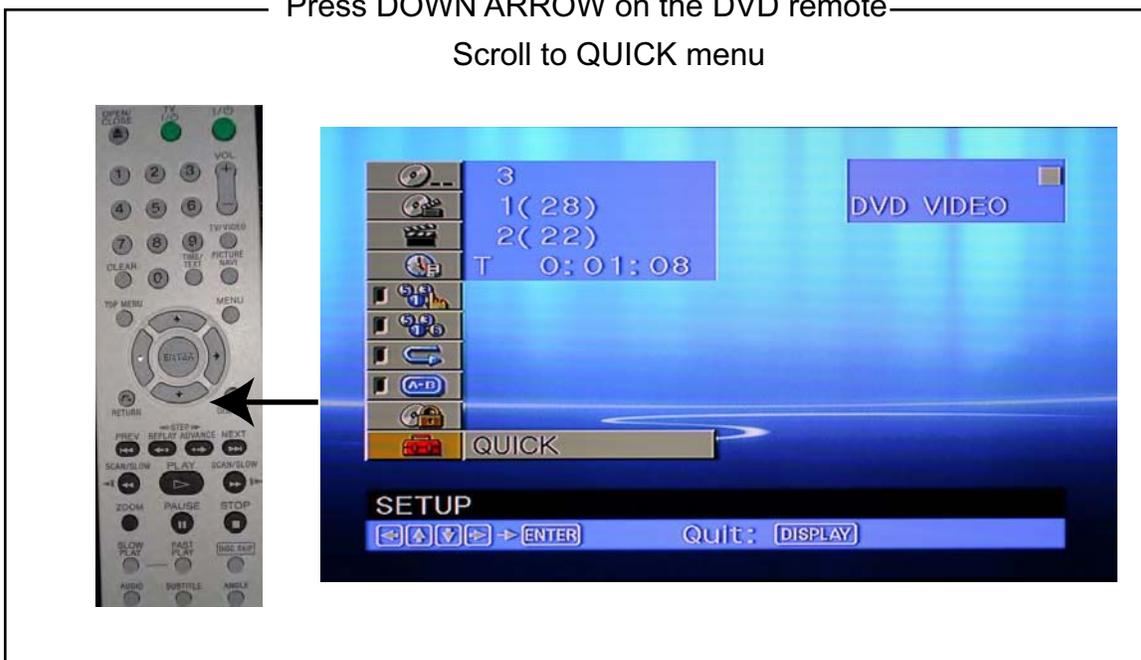
Once the DVD system is connected, place the Diana Krall in Paris into the DVD player. The DVD disc will be take you to a main window of options. At this point we will do two things,

- 1 - Set the audio options for the DVD player,
- 2 - Select the correct audio stream for the Diana Krall DVD.

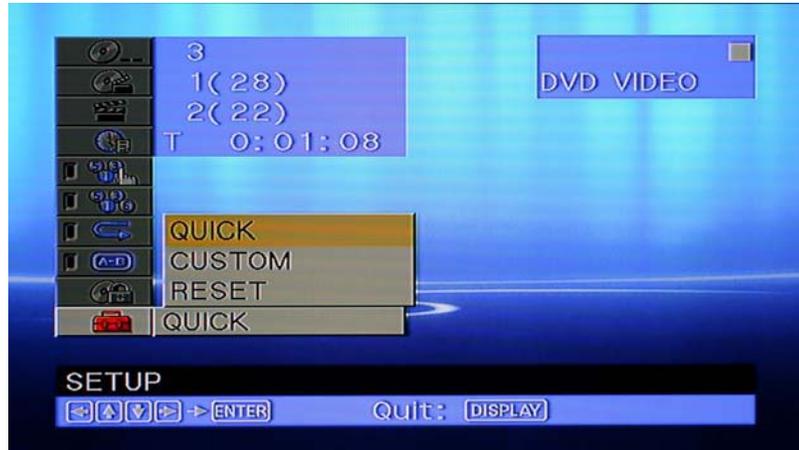
Press DISPLAY on the DVD remote,
Opens DVD player setup menu



Press DOWN ARROW on the DVD remote—
Scroll to QUICK menu



Press Direction arrow on the DVD remote,
Scroll to and select QUICK

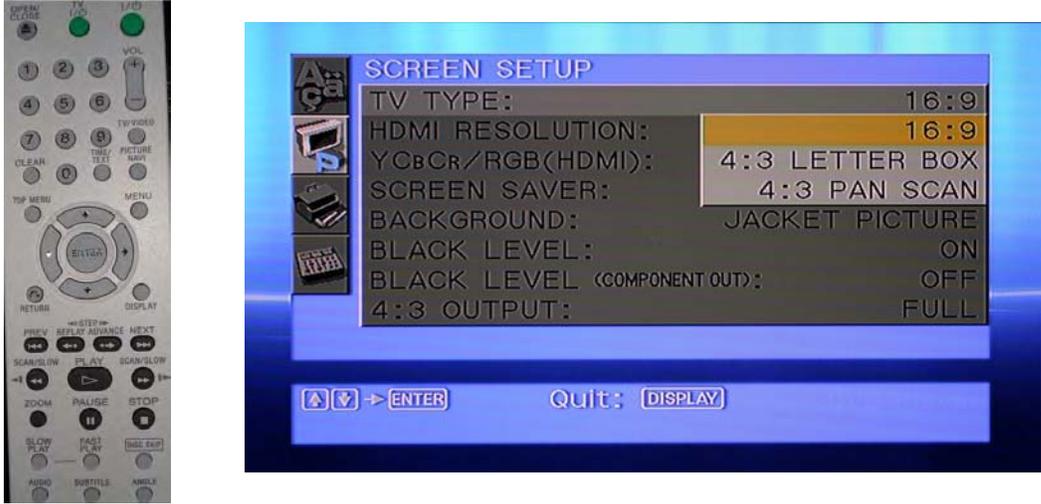


Press DOWN ARROW on the DVD remote
Scroll to and select ENGLISH



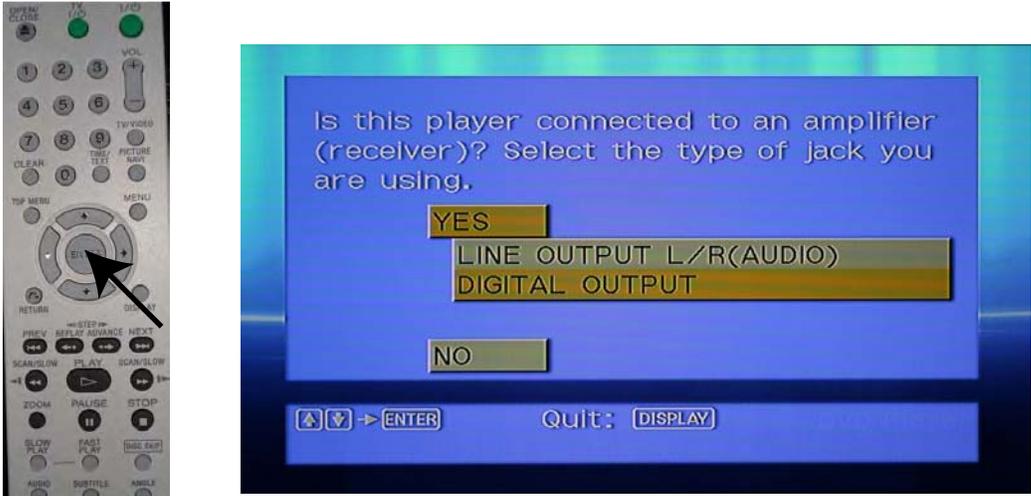
QRS Q-Sync power center user guide

Press Direction arrow on the DVD remote,
Scroll to and select 16:9 video



The image shows a DVD remote control on the left and a 'SCREEN SETUP' menu on the right. The menu lists various settings: TV TYPE: 16:9, HDMI RESOLUTION: 16:9, YCbCr/RGB(HDMI): 4:3 LETTER BOX, SCREEN SAVER: 4:3 PAN SCAN, BACKGROUND: JACKET PICTURE, BLACK LEVEL: ON, BLACK LEVEL (COMPONENT OUT): OFF, and 4:3 OUTPUT: FULL. At the bottom of the menu, there are navigation instructions: [UP] [DOWN] [RIGHT] ENTER and Quit: [DISPLAY].

Press DOWN ARROW on the DVD remote
Scroll to and select YES DIGITAL OUTPUT



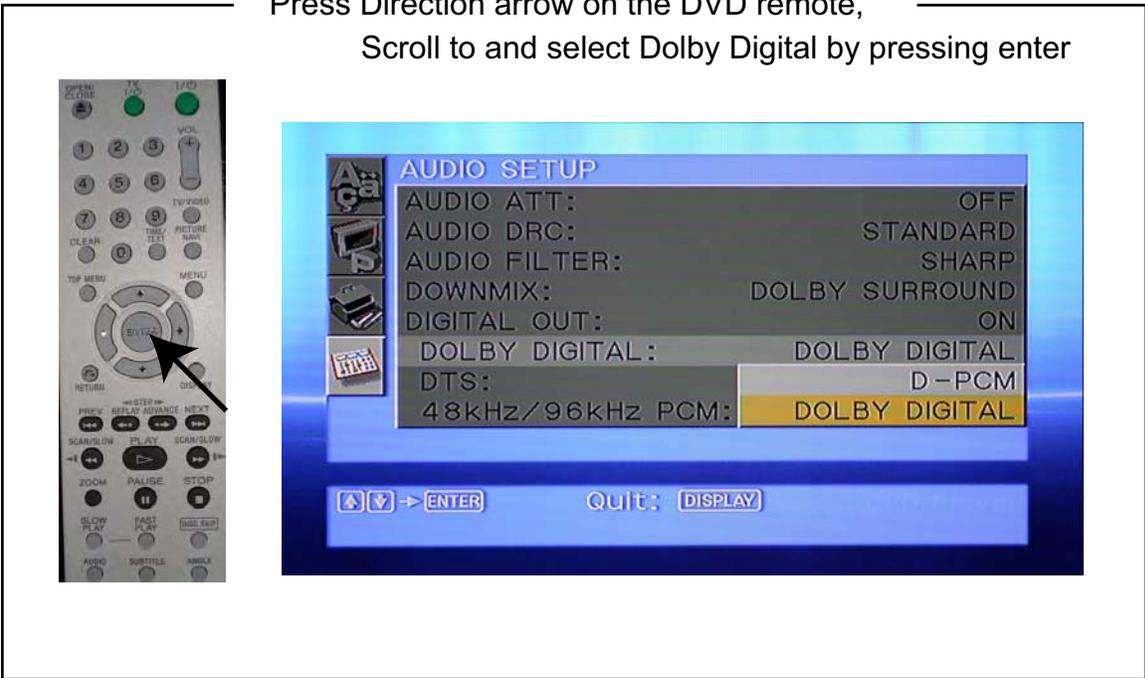
The image shows a DVD remote control on the left with an arrow pointing to the DOWN ARROW button. On the right is a screen displaying a question: 'Is this player connected to an amplifier (receiver)? Select the type of jack you are using.' Below the question are three options: YES, LINE OUTPUT L/R(AUDIO), and DIGITAL OUTPUT. At the bottom, there are navigation instructions: [UP] [DOWN] [RIGHT] ENTER and Quit: [DISPLAY].

Press the ENTER button on the DVD remote and then press DISPLAY to return to the DVD disc menu.

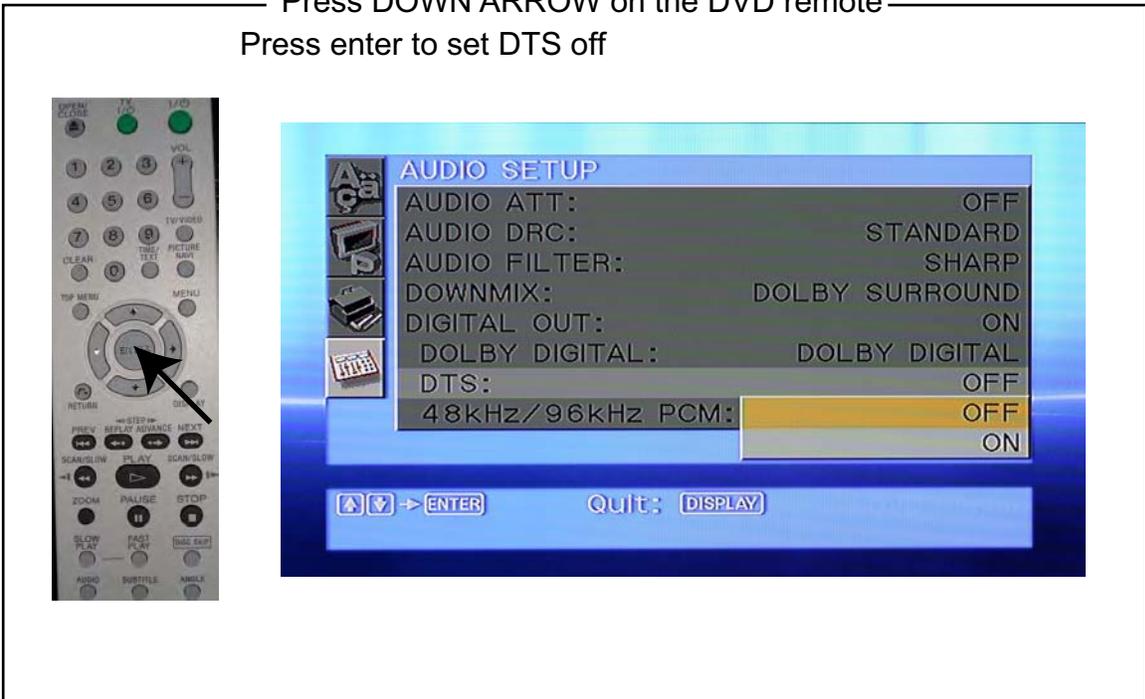
The DVD Player audio is now set up to work with Q-Sync. Proceed to page 7 for DVD menu setup.

QRS Q-Sync power center user guide

Press Direction arrow on the DVD remote,
Scroll to and select Dolby Digital by pressing enter



Press DOWN ARROW on the DVD remote
Press enter to set DTS off



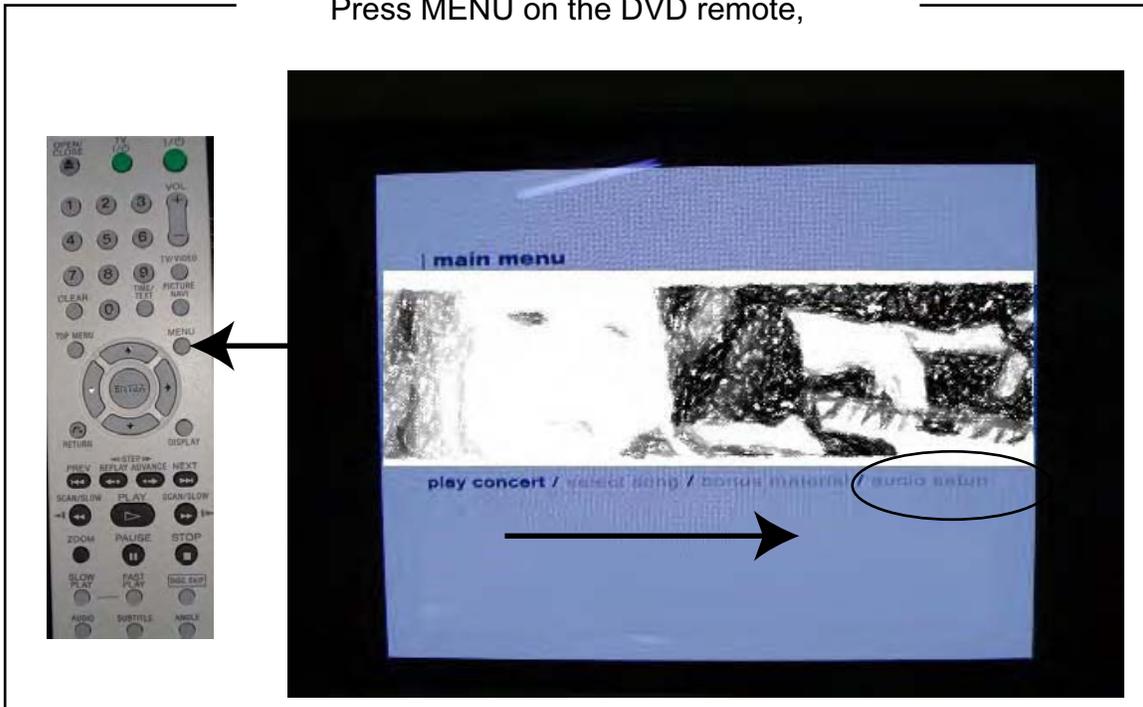
Press the ENTER button on the DVD remote and then press DISPLAY to return to the DVD disc menu.

The DVD Player audio is now set up to work with Q-Sync. Proceed to page 8 for DVD menu setup.

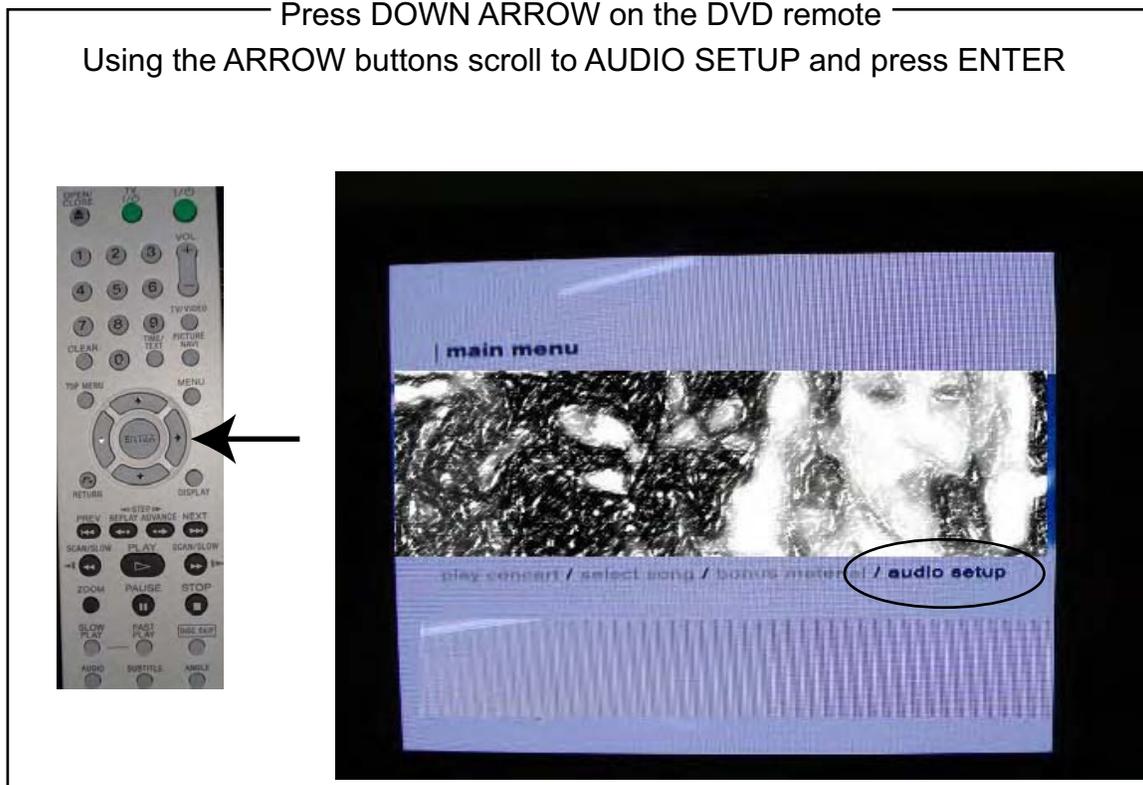
Now that your DVD Player is setup we will continue to look at the method for setting up the particular DVD disc audio options. As mentioned before, we have attempted to take care of this set in the firmware inside the Q-Sync hardware but from time to time you may need to set these parameters.

Once the DVD has been inserted into the DVD player it will automatically take you to a main menu window as shown here.

Press MENU on the DVD remote,



Press DOWN ARROW on the DVD remote
Using the ARROW buttons scroll to AUDIO SETUP and press ENTER



Press DOWN ARROW on the DVD remote

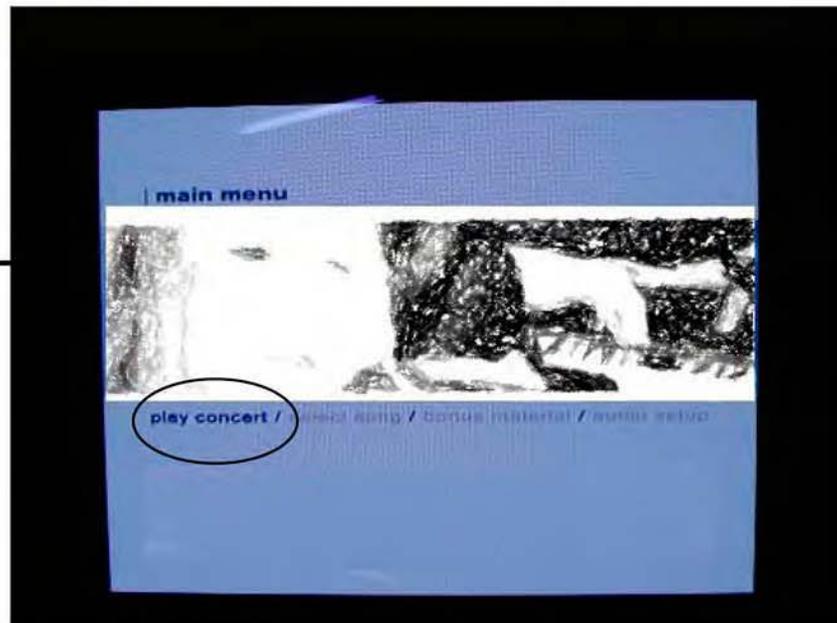
Using the ARROW buttons scroll to DOLBY digital stereo and press ENTER

REFER TO PAGE 3 FOR LIST OF FORMATS



Press MENU on the DVD remote,

You will be returned to the main option window for the DVD disc. Now you can select play concert. As the disc plays you will see video on the screen and will see that the chapter or song title will appear in the Q-Sync window.



After going through the setup procedures on the previous pages of this guide, you should now be enjoying your Story & Clark piano playing in sync with the video DVD concert.

To guarantee successful demonstrations of the QRS Q-Sync technology please follow these do's and don't.

1 - Always start your demonstration at the main start menu of the DVD and select PLAY ALL or PLAY CONCERT or similar option.

Starting from pause will not provide Q-Sync with needed AC3 information.

Starting from an intermediate chapter or track will also cause AC3 sync loss.

When you are normally playing a DVD you will see the AC3 SYNC indicated on the display. See page 2.

You will notice when you STOP, Pause or SEARCH the AC3 SYNC indication changes to NO SYNC.

If you then un-pause or quit searching the AC3 SYNC will come back on, but the piano will not play and no song selected will be displayed where there was a title.

At this point you can return to the main DVD disc option menu and select PLAY CONCERT again or select another chapter to regain sync status. If you select a chapter during playback and it does not pick up the song title in Q-Sync, you can use rewind to take you to the end of the previous chapter and then press play. Once the new chapter is picked up the song title should come up and the piano starts to play again.

2 - DO NOT use scan / search, FF or FRW during demonstrations. Q-Sync requires an uninterrupted stream from the digital output of the player and when you fast scan during playback the AC3 signal is lost and the piano will stop playing and will not know where to pick up again.

3 - The best scenario for a successful Q-Sync demonstration is start at the DVD disc's main option window that comes up when you first insert a disc. Then select PLAY and let the system play from the beginning without interrupting it.

We suggest spending a bit of time with the system and become familiar before doing demo's. You may find that you are comfortable changing chapters during playback. Just be sure you understand how to recover from possible sunrises related to DVD and DVD discs. Largely we think your customers will be impressed with the exciting new technology.

Note on setting other DVD players:

DVD players vary on what is needed to turn on the Dolby Digital Output. Some players use the term Bitstream, SPDIF out, or Coaxial output. Please refer to the DVD player owners manual in the section for setting up Audio. The manual will tell what is needed to turn on to enable Dolby Digital out of the Coaxial or SPDIF output. In some cases the Dolby Digital Out is a default and all that is required is to set the DVD Disc's audio menu to match the chart on page 4.