

Audio/Video Setup Instructions For Ratatouille

Thank you for downloading these instructions! Here you will find more details on how to use the Audio/Video Setup on your disc and extra facts that we hope you will enjoy learning about. We suggest you read through all of these instructions before using the setup package. The test patterns on your disc are meant to help you configure your home theater system for the best viewing experience. We want you to see and hear the movie as the director intended. Using these test patterns, you should be able to configure your Home Theater to:

- Display the correct aspect ratio
- Show all of the detail from the dark shadows to the very bright areas
- Have proper grey-scale reproduction
- Reproduce the proper colors
- Play the correct sound out of the correct speaker

In order to configure your Color and Tint properly, you will need to get your Color Adjustment Filter. You can order your Filter at <http://www.disneydvd.com/setup>.

Contents

From this menu page, you can move forwards and backwards among the test patterns using the arrow keys on your remote. Using the number keys on your remote, you may also choose individual test patterns by selecting the number corresponding to each menu item. This can be done at any point during the Setup. Depending on your player, you may need to press the number and then press "Enter" on your remote or you may be able to just press the number.

To start the test patterns in order, press the right arrow button on your remote.

Getting Started

Because you will be using these test patterns to help configure your display and audio system for the best viewing experience for the movie, make sure you

1. Set your room lighting to the same level at which you will have it when you watch the movie
2. Sit in your favorite viewing location

Unless you have previously configured your home theater with great care, now might be a good time to set your display to the factory defaults.

Aspect Ratio & Framing

Background

This test pattern will help insure that your DVD player and display are configured to present the image properly on your screen. There are several choices on both the player and current displays which could cause the image that you see to be distorted.

The first step is to determine what display shape you have. There are two types:

- 4x3 or 4:3
- 16x9 or 16:9

4x3 displays are almost square-looking - these are the original shape of displays since they were introduced in the 1950s. 16x9 displays are wider and much more rectangular in shape - these are now becoming more prevalent. 16x9 displays are often known as "Widescreen."

If you have a projector, the native aspect ratio of the imager may be less obvious. Consult your manual if necessary, or simply base your decision on the aspect ratio of your screen.

Extra Fact: You may be wondering why these numbers are used to describe the shape of your display. Since displays come in different sizes, the shape of the display is described as a ratio of width to the height. The first number describes the width of the display while the second number describes the height of the display as a ratio. Therefore, for a 4x3 display, the shape of the display

is 4 units wide and 3 units high. For a 16x9 display, the display is 16 units wide and 9 units high. Because the shape of the display is a ratio, you may hear the ratio referred to as “display aspect ratio.”

Instructions

1. Now that you know what shape display you have, you need to configure your DVD player to match your display, if you have not done so in the past. Find the Setup menu on your DVD player. This may require you to stop any playing discs. Find the option which lets you choose the type of display you have, either 4x3 or 16x9. This may be called “Display Type” or “Television Type” or something similar. If you have a 4x3 display, you may pick any choice that has 4x3 listed in it. If you have a 16x9 display, make sure that you pick the choice that has 16x9 listed.

Exit out of the player’s Setup menu. If you had to stop your disc to access the Setup menu, start it playing again and navigate back to the Aspect Ratio & Framing test. You should see a plate in the center of your screen with up to three yellow rectangles around the outside of the plate. Depending on your display, you may be able to adjust how the display shows the image’s aspect ratio.

2. For 4x3 Displays (If you have a 16x9 Display, skip ahead to Step 3)

Note that most 4x3 displays cannot be changed to different aspect ratios. If your 4x3 display can change, look for the button on your display remote or display Setup menu which lets you change the aspect ratio. You may also be able set your display to Auto to automatically adjust for various aspect ratios. Cycle through the options until you see an image similar to the one shown in Figure 1. If your 4x3 display does not let you adjust the aspect ratio, just look at the image of the plate and yellow rectangles. The plate should be a round circle. You may see one, two or three rectangles depending on how much your display will overscan or crop (see Extra Fact).

You should also see large black bars at the top and bottom of your screen. This is called *Letterboxing*. If you see something similar to the image in Figure 1 (remember, the number of yellow rectangles can vary), your display and DVD player are configured correctly, and you can skip to the next section on Brightness, Contrast and Gamma.

If you see the image in Figure 2 where the plate is tall and skinny, your DVD player is configured incorrectly. Go back to your DVD player’s Setup menu, stopping the disc if necessary, and change the display shape to 4x3 as discussed in Step 1.

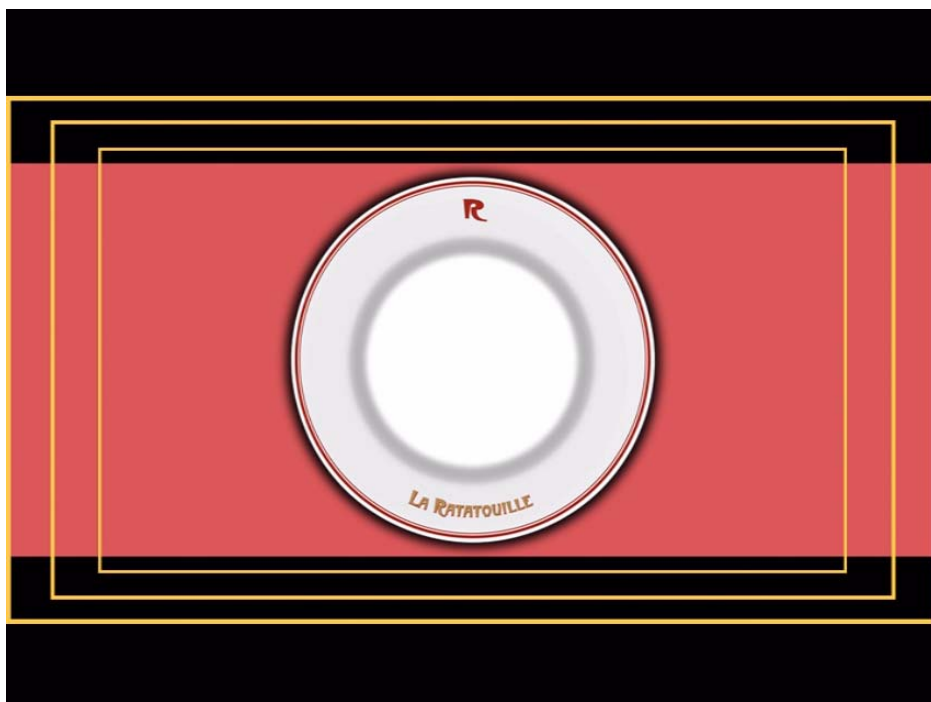


Figure 1 – Correct 4x3 Display

Extra Fact: *Ratatouille* is a wide-screen feature film. *Letterboxing* refers to the process of displaying the full width of the feature by adding horizontal black bars to the top and bottom of the frame. The name comes from the appearance of the wide horizontal slot in a postal “letterbox”. The red portion of Figure 1 corresponds to the letterbox area where the movie will be presented.

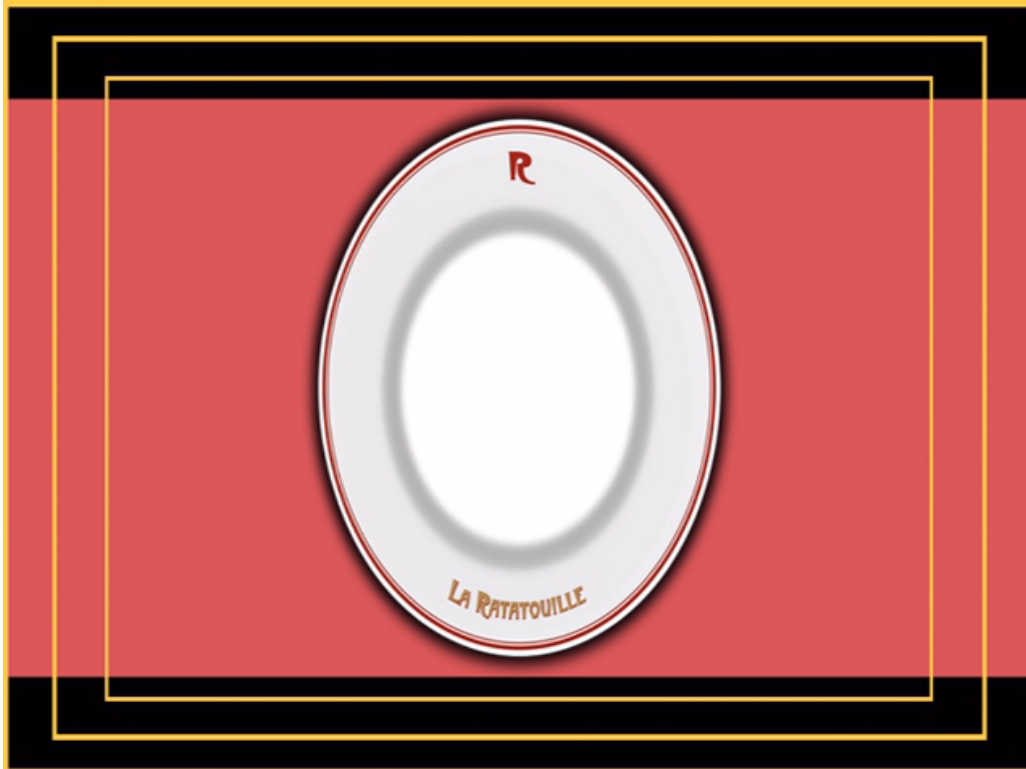


Figure 2 – Incorrect 4x3 Display

3. If you have a 16x9 Display

All 16x9 displays give you the ability to change the aspect ratio of the image. Find the button on your display remote or display Setup menu which lets you change the aspect ratio. This option may be called "Picture Size," "Screen Mode," "Aspect," "Wide" or something similar. Cycle through the options until you see an image similar to the one shown in Figure 3. The plate should be a round circle. You may see one, two or three rectangles depending on how much your display will overscan (see Extra Fact below). This mode will be the proper viewing mode for the feature.



Figure 3 – Correct 16x9 Display

If you see the image in Figure 4 in which the plate is short and fat, your DVD player is configured incorrectly. Go back to your DVD player's Setup menu, stopping the disc if necessary, and change the display shape to 16x9 as discussed in Step 1.

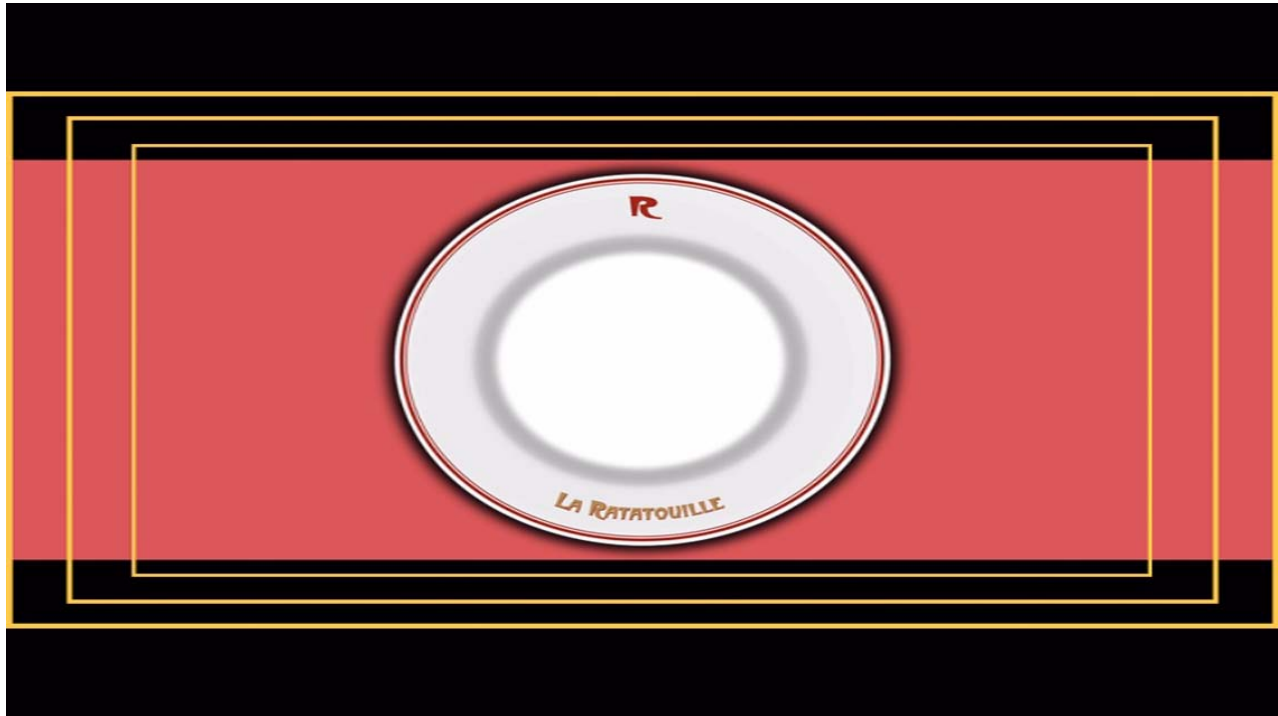


Figure 4 – Incorrect 16x9 Display

To summarize, the plate should be round and the image should be as large as possible, while still showing as many of the complete rectangles as you can.

Extra Fact: What is Overscan? Display types vary in the amount of area that they display. Some displays crop or lose the top, bottom and/or sides of the original image – the cropping is called *overscanning*. The amount of cropping can vary from very slight to a lot. There is nothing a consumer can do about the amount that the display crops, but the idea is to know what your display is capable of showing. If you can see all three yellow rectangles on the test pattern, your display is capable of displaying everything in the feature from top to bottom and left to right. If you see fewer than three yellow rectangles, some of the image area on the edges of the picture is being lost.

Brightness, Contrast and Gamma

For all picture adjustments to your display, remember to set your room lighting to the same level as that at which you will watch the movie. Please note that Brightness, Contrast and Gamma all interact with each other. As you adjust each one, you may need to readjust the others again.

Brightness

Background

You will use this test pattern to help you set the Brightness on your display. Setting the Brightness on your display correctly will help you see the detail in shadows properly without washing out or crushing the picture. For this control, you will be concentrating on the blinking black bars at the lower left portion of the screen, circled in blue in Figure 5.

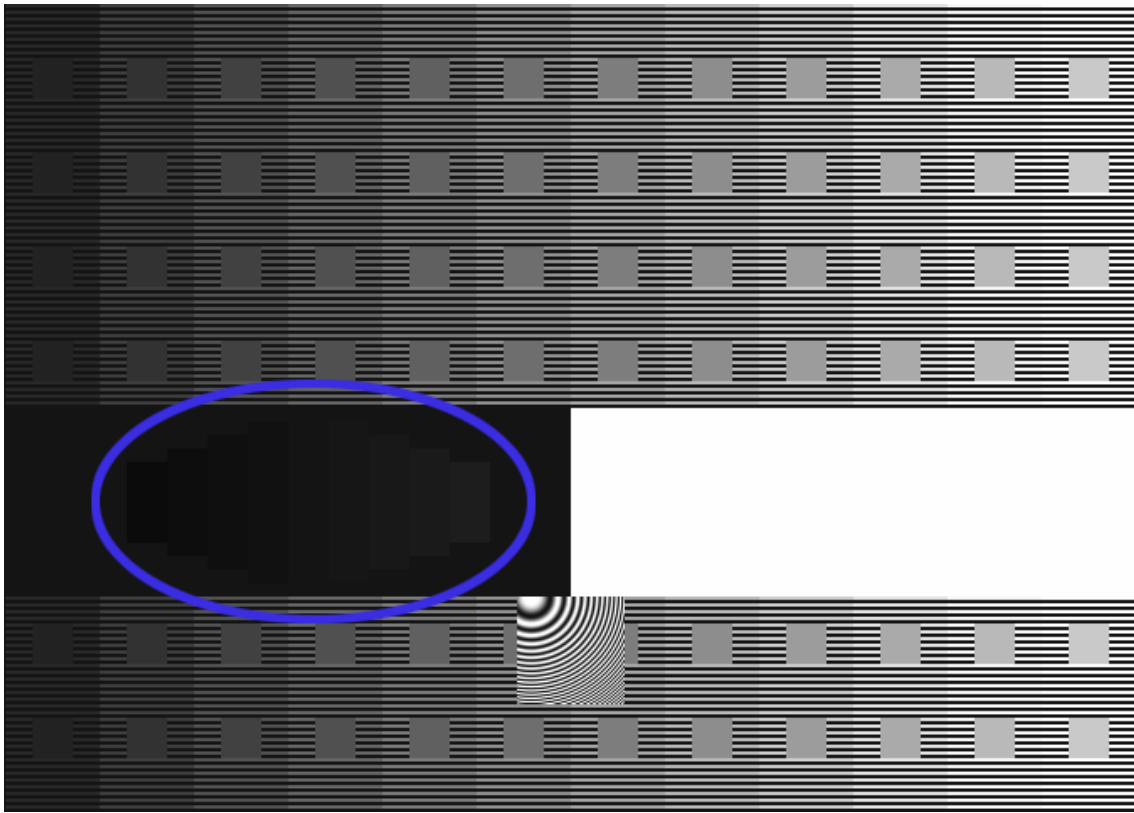


Figure 5

The shade of black around the blinking bars is considered to be the reference level for black on your display. The four bars outlined in red in Figure 6 are actually four different shades that are darker than black. The other four bars outlined in green in Figure 6 are four different shades lighter than black. By blinking, the patterns become easier to see. As you adjust brightness, the number of visible blinking bars will change. If brightness is too high, you will see too many; if too low, you will see too few. When the four darker bars just disappear, leaving four visible brighter bars, the black level is correct. Some DVD players cannot play back video levels below the reference black, in which case the goal is to have the four lighter bars be as dark as possible, while still all visible. This test pattern will still work without the below black bars, but your brightness setting would be more accurate if you could see the below black bars while performing the adjustment.



Figure 6

If you can't see the darker-than-black bars no matter what you try, you may wish to look for a setting in your player Setup Menu called something like Full/Limited.

Instructions

On your display remote, look for the picture adjustments. These may be located under a Setup Menu on your display, under Picture Settings, Video Settings or something similar. Look for the adjustment for Brightness and select it. Turn up the Brightness until you can see at least four

blinking dark bars in the lower left. Depending on your player, you may or may not see be able to see the four bars outlined in red, and you may see only the four bars outlined in green in Figure 6. If you can see both sets of bars outlined in red and green in Figure 6: Turn down your Brightness setting until the bars on the left (outlined in red in Figure 6) disappear into the black background. However, you should still be able to see all four bars on the right (outlined in green in Figure 6).

If you can see only the four bars outlined in green in Figure 6: Turn down your Brightness setting until you can see only three of the four bars. Then, turn up the Brightness setting just slightly so that you can just see all four bars.

Please note that Brightness, Contrast and Gamma settings all interact with each other. As you adjust each one during this test pattern, you may need to readjust the others again. Once you are finished with doing each once, double-check that you still see the four black bars that are outlined in green in Figure 6.

Contrast

Background

You will use this test pattern to help you set your Contrast on your display. Setting the Contrast on your display correctly will help you see highlight detail. For this control, you will be concentrating on the blinking white bars at the lower right portion of the screen, circled in blue in Figure 7.

The shade of white around the blinking bars is considered to be the reference level for white on your display. The four bars outlined in red in Figure 8 are actually four different shades that are brighter than white. The other four bars outlined in green in Figure 8 are four different shades darker than white. By blinking, the patterns become easier to see. As you adjust contrast, the number of visible blinking bars will change. If contrast is too low, you will see too many; if too high, you will see too few. When the four brighter bars just disappear, leaving four visible darker bars, the white level is correct. Some DVD players cannot play back video levels above the reference white, in which case the goal is to have the four darker bars be as bright as possible, while still all visible. This test pattern will still work without the above white bars, but your contrast setting would be more accurate if you could see the above white bars while performing the adjustment.

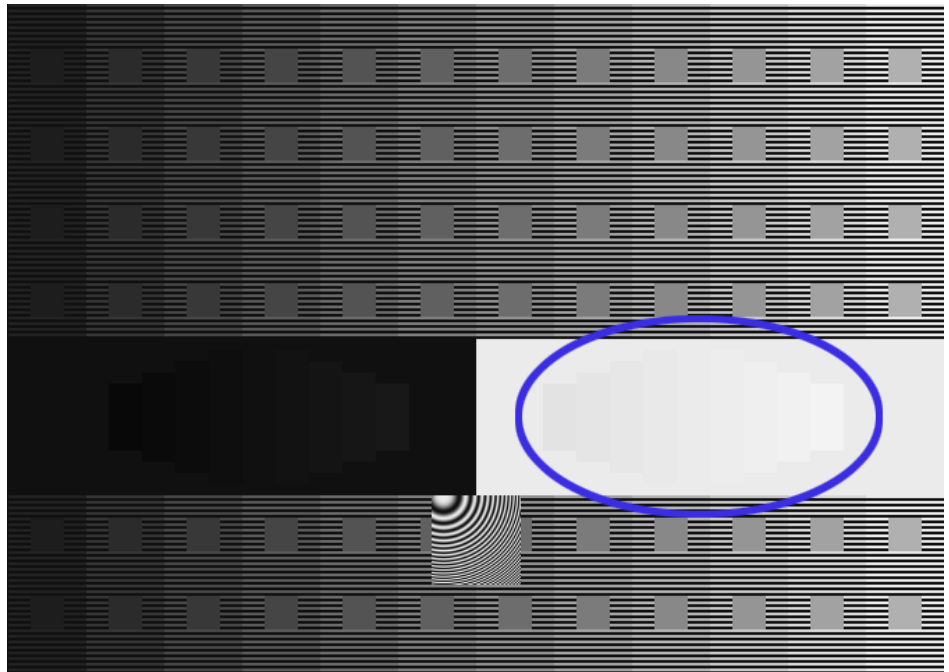


Figure 7



Figure 8

Instructions

On your display, look for the Contrast adjustment which should be in or near the same location as the Brightness adjustment. Often the Contrast setting may also be known as "Picture." Turn down the Contrast/Picture setting until you can see at least four blinking white bars in the lower right. Depending on your player, you may or may not see be able to see the four bars outlined in red, and you may see only the four bars outlined in green in Figure 8.

If you can see both sets of bars outlined in red and green in Figure 8:

Turn up your Contrast or Picture setting until the bars on the right (outlined in red in Figure 8) disappear into the white background. However, you should still be able to see all four bars on the left (outlined in green in Figure 8).

If you can see only the four bars outlined in green in Figure 8:

Turn up your Contrast setting until you can see only three of the four bars. Then, turn up the Brightness setting just slightly so that you can just see all four bars.

Please note that Brightness, Contrast and Gamma settings all interact with each other. As you adjust each one during this test pattern, you may need to readjust the others again. Once you are finished with doing each once, double-check that you still see the four black bars that are outlined in green in Figure 6.

Gamma

Background

Many modern displays and projectors give you the freedom to adjust the Gamma for the display. Gamma controls how your television/projector displays shades of gray between black and white. You may find the Gamma setting under an Advanced section of the Picture/Video Settings under your display's Menu system. Locate the Gamma adjustment for your display.

If your display does not have a Gamma control, there will probably be one setting of Contrast that gives you the most accurate Gamma display. In order to find it, proceed with the instructions below, using your Contrast control where we say Gamma. Try to ensure that the four darker squares of the Contrast check pattern are visible. It is OK if the brighter-than-white squares are still visible, as long as the gamma check pattern appears correct.

Instructions

In order to adjust the Gamma, you will use the same pattern that you used for Brightness and Contrast, but this time you will use the upper portion of the test, outlined in blue in Figure 9. With the DVD, you will see up to 12 columns of varying shades of gray with gray squares inside each column. With the Blu-ray disc, you will see up to 15 columns of gray with gray squares. Within each column are alternating lines of gray and black.

If you squint and look at the test pattern, the alternating lines of gray and black lines within each column should blur together to form a solid shade of gray, creating up to 12 shades of gray

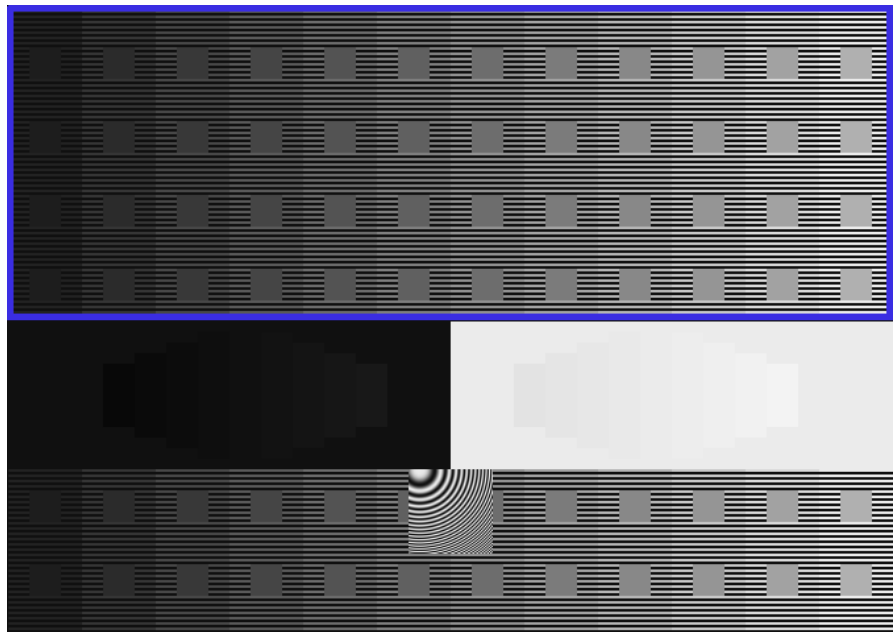


Figure 9 (DVD)

vertical bars on the DVD and up to 15 shades of gray vertical bars on the Blu-ray disc. Adjust the Gamma setting so that the gray squares inside each column seem to disappear into each column. You should see an optical illusion in which adjusting the Gamma will make the gray squares look like they are receding into or protruding out from the columns. The goal of this test is to try to make all of the gray squares blur into each column, as simulated in Figure 10.

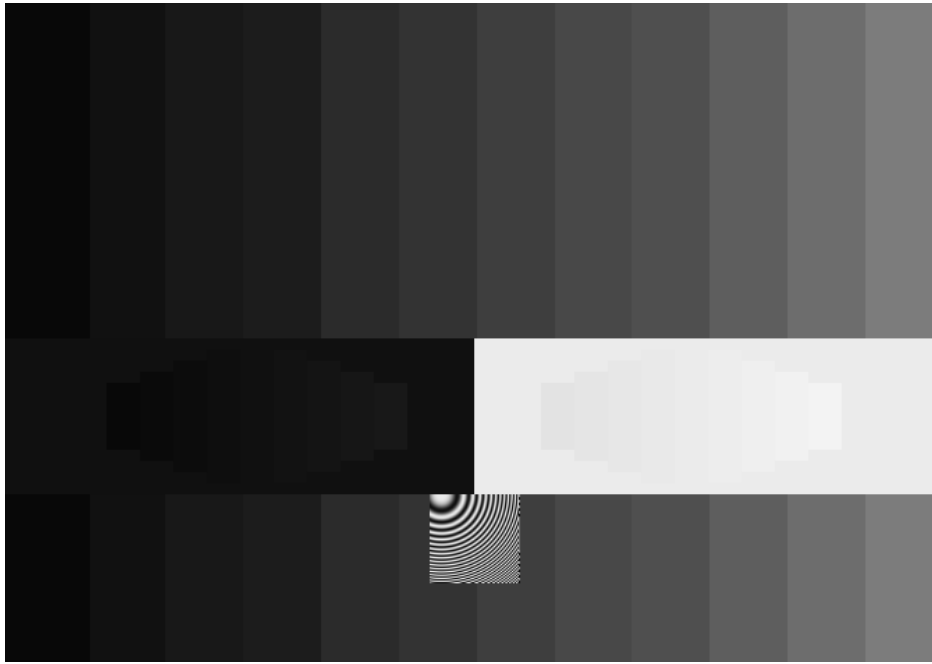


Figure 10

Note that depending on the capabilities of your display/projector, you may not be able to get all of the gray squares to blur into every column. Try to make as many gray squares disappear as possible.

Please note that Brightness, Contrast and Gamma settings all interact with each other. As you adjust each one during this test pattern, you may need to readjust the others again. Once you are finished with doing each once, double-check that you still see the four black bars that are outlined in green in Figure 6.

Extra Fact: You may be wondering about the moving psychedelic-looking square at bottom center of the screen. This is called a “Zone Plate.” This pattern can help you determine how smoothly your display/projector can display tiny details and motion. In a perfect world, you would see black and white rings of a partial circle smoothly moving in a rolling motion. There should be no colors or rainbows appearing in the pattern or other circles appearing in the corners. There is no “right answer” for this pattern, but it can help you determine what combination of settings on your DVD player, deinterlacing or upconverting devices and your display will create the best quality for motion and image quality.

Color/Tint – Hue/Saturation

Background

This test pattern will help you adjust your Color and Tint settings on your display/projector. The test pattern has four areas or quadrants that contain squares with three of the following four colors:

- White
- Magenta
- Yellow
- Red

The squares move around in a checkerboard pattern in order to make it easier to use this test pattern. Locate the adjustments for Color and Tint on your display/projector which should be in or near the same location as the Brightness and Contrast adjustments. Tint may also be called “Hue” while Color may be called “Saturation” on some monitors. In order to set your Color and Tint settings properly, you will need to look at this test pattern through your Color Adjustment Filter (the red film) which you can order at <http://www.disneydvd.com/setup>.

Instructions

Look through the red filter and adjust the settings for Color and Tint until the entire screen looks like it contains the same shades of red. You will notice that adjusting either the Color or Tint setting will

change one or more of the four quadrants. Your goal is to make the four quadrants match as closely as possible.

Make sure that none of the four areas appear lighter or darker than any of the other areas. For example, the top half of the screen should not be darker or lighter than the lower half of the screen or the upper left should not be darker or lighter than any of the other areas. You are trying to make the entire screen appear to have, overall, the same shade of red as shown in Figure 11.



Note: You should hold on to your red filter because it can be used on future Disney titles which have an Audio/Video Setup.

Figure 11

Audio

Background

The audio test patterns on this disc can be used to help you verify that your DVD player, receiver and speakers are configured properly. Please note that there is no need to turn up the volume on this test. Unless you are calibrating your sound levels, you should listen to the audio tests at a comfortable listening volume. As with any sounds, you can damage your speakers if you turn up the volume too much!

The audio tests will output a sound, called "pink noise," out of each speaker. The same speaker will continue to play until you press "Enter" on your remote to play the next speaker. You can play through each speaker as many times as you need to.

Instructions

Verify that the sound is coming from the speaker that is highlighted during this test. Depending on your sound system configuration, you may or may not hear certain speakers. If you have a 5.1 EX system, you should hear the pink noise through the same speakers that are highlighted on your display during this test. Below are some guidelines of what you may hear on any system other than a 5.1 EX system.

Alternate sound system configurations

Mono television speaker: Most likely, you will only hear the front left, center and right speakers in your television speaker. The other speaker audio tests may not appear or may be very quiet.

Stereo television speakers or Left/Right Speakers: All sound will appear in left or right speakers. The surround audio tests may be very quiet while the subwoofer test may be inaudible.

Pro-Logic Surround System: You will hear all surround speaker audio tests in both surround speakers. You may or may not hear the subwoofer audio test.

5.1 (no EX): The Surround Back audio test will appear in both the Left Surround and Right Surround speakers.

7.1: The Surround Back audio test should appear in both the Left Surround Back and Right Surround Back speakers.

No Subwoofer? Depending on your receiver's configuration, you may or may not hear the subwoofer audio in the left and right speakers.

Also, depending on your Bass Management or crossover settings, you may hear some of the subwoofer test in other speakers.

If you have a 5.1 or higher system, are using the digital S/PDIF output or HDMI to your receiver and do not hear the sounds from the correct speaker as listed above, there may be a problem with your sound system. Some areas to troubleshoot include:

- Verify that your wiring is correct from the receiver to the speakers
- DVD Players: Verify that your player's audio setting is set to output a bitstream
- Blu-ray Players: Verify that your player is outputting either a bitstream or 5.1/7.1 Linear PCM
- Verify that the receiver is decoding Dolby Digital or HDMI Multichannel and NOT Pro-Logic or Pro-Logic II

Once you have verified that each speaker is correctly playing back, you can also use this audio test to help calibrate the overall levels of your audio system. Find a comfortable overall listening volume for this audio test using your master volume on your receiver. Because each of the audio tests play back at the same level, you can use a sound meter placed in your listening position (consult your sound meter instructions for proper placement and usage) to verify that all speakers are playing back at the same level. If you notice that the levels are different between the speakers, many receivers allow you to finely adjust each speaker's volume. Consult your receiver manual for instructions on how to do this, and adjust each speaker's volume until all of the speakers play back at or near the same level.

Extra Fact: Each speaker except for the subwoofer uses filtered pink noise. The subwoofer uses unfiltered pink noise. All of the audio tests on this disc are recorded at a reference level of -20dBFS, so you can use these tests to help calibrate your system to a known level. The audio tests are encoded as Dolby Digital AC3, with a dialog normalization of -31dB, so your receiver will output the audio as is, with no reduction in level.

You are done!

Thanks for setting up your system with these instructions. We want to hear from you! We would like to hear your comments and feedback about your experience with this test pattern package and what you liked and did not like about it. You can send us your feedback through the [Questions](#) link at the bottom of the disneydvd.com website.