Sony® α DSLR
A300/A350 Digital
Field Guide
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A300/A350 Digital Field Guide

Tom Bonner

Wiley Publishing, Inc.
About the Author

Tom Bonner has been a photographer and journalist for more than three decades. His early work revolved around automotive and motorsports subjects, and his photos appeared extensively in automotive and travel magazines in the U.S. and Canada. He also edited a monthly publication for the International Show Car Association and traveled throughout the U.S. on photographic assignments for the ISCA.

At the start of the electronic publishing revolution, Bonner accepted a position with Applied Graphics Technology, where he worked closely with several major advertising agencies helping develop digital workflows and retouching ad images for Chevrolet, Buick, and GMC trucks.

The turn of the millennium found Bonner in coastal North Carolina. He continued to employ his photographic skills, recording golf courses, exclusive beach homes, and architectural subjects with both film and digital cameras.

Always a Minolta user, Bonner transferred his allegiance to the fledgling Sony Alpha dSLR line when Sony took over the photographic assets of Konica Minolta Corporation. In addition to exploring the new dSLRs from Sony, Bonner began to blog about the Alpha dSLR models at Alphatracks.com. Covering anything of interest to Sony Alpha and Minolta SLR owners, Alphatracks serves as an outlet for Bonner’s abiding interest in cameras, lenses, and photographic techniques.
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For Vicki, who waited while I wrote...
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Introduction

With the introduction of the Alpha A300 and its near twin the A350, Sony has blurred the distinction between introductory and advanced dSLR cameras. Both models include the features that users have come to expect in a high quality dSLR, but Sony has added icing to the cake with the exciting Quick Live View system. While other dSLR makers are also offering live view systems, the live view on the Sony A300 series is in a class by itself. At the time this was written, no other dSLR has a live view system that can match the features Sony has incorporated into the LCD on the A300 series.

Of course, the live view technology is only a single part of the A300 series. Both models include Sony’s Super Steady Shot image stabilization feature, which incorporates stabilization in the body, rather than in the lens. Image stabilization reduces camera shake in low light conditions, and with the Sony system, users do not need to buy special image stabilized lenses; nearly every A-mount lens will be stabilized on the A300 series.

With a maximum shutter speed of 1/4000 second and a choice of either a 10 or 14 megapixel sensor, the A300 series provides features that, until recently, even the most professional camera couldn’t match.

The great news is that Sony gives users the choice between a simple to use automatic exposure system or a fully customizable manual set up. No matter what level your photography experience, you can tune the A300 series to match.

Which illustrates the need for this book. Whether the A300 series camera is your very first dSLR or you have been shooting with a SLR for many years, the intent of this book is to help you get the most out your camera. While the automatic and semi-automatic features will allow you to create incredible images, automatic settings will only take you so far. If you really want to exploit all the features on the A300 series, you will need to delve beyond the automated settings and take full control of the camera. Both models in the A300 series are simple to use, but a full understanding of the controls will pay huge dividends when you are ready to move beyond creating mere snapshots.
Getting the most from this book

No matter where you stand on the photographic experience scale, it will be worth your while to study Chapters 1 and 2. These chapters explore the controls and menus on the A300 series in depth, and after reading them you will be well equipped to set up your camera for any conceivable photographic situation.

Chapter 3 will review the basics of photography, especially as they relate to digital SLR cameras. By reading through Chapter 3, you will be able to fully take advantage of the information you learned in Chapters 1 and 2.

Chapters 4 and 5 explore the accessories available for the A300 series, most notably auxiliary lenses and electronic flash units. If you are brand new to the world of dSLR photography, you may elect to skip these chapters the first time you read through this book. At some point, however, most dSLR owners find a need for additional lenses and lighting equipment. When that time comes, a careful perusal of Chapters 4 and 5 will prove very helpful.

Chapter 6 is the meat of the book, as it consists of exercises designed to hone and polish your photographic skills. If you take the time to work through some or all of the exercises in Chapter 6, you will be well on your way to mastering the A300 series.

Chapter 7 concludes the book by exploring your workflow options. There is a myriad of software options available to process and edit the images you shoot with the A300 series, and you should make sure you are aware of your software choices.

Finally, you will find troubleshooting information and a list of resources for Sony Alpha users in the Appendix section. The information here can help you to keep your A300 series healthy and introduce you to the extended Sony Alpha community.

Remember, this is a field guide, and as such it is designed to be carried with you on your photography excursions. Keep it handy in your camera bag, because you never know when you will encounter a situation where it could prove helpful. Don’t worry about the book becoming worn or dog eared. If you wear this book out while exploring photographic pursuits, you will undoubtedly increase your skills and knowledge. That means the book will have done it’s job well.

Finally, don’t just read about photography. Go out and have fun with your camera!
Using the Sony Alpha A300 Series

In This Part

Chapter 1
Exploring the Sony Alpha A300 and A350

Chapter 2
Setting Up Your Alpha A300 Series DSLR
Exploring the Sony Alpha A300 and A350

The Sony A300 and Sony A350 are twins: With the exception of the sensor, the cameras are identical. All the controls and menus work in exactly the same way. If you placed either an A300 or A350 into the hands of an experienced A300 series user, she wouldn’t know which camera she was using unless she peeked at the camera’s nameplate.

Of course, the real difference is the sensor inside the camera. The A350 records 14.2 megapixels (mp) of information, while the A300 captures 10.2 mp of data.

Some people will jump to the conclusion that the A350, with its higher resolution sensor, is the better of the two cameras. In truth, both cameras are great dSLRs, and are designed to appeal to different users. For some photo pursuits, the A300 is definitely the better choice, while in other situations the A350 excels. To say that one camera or the other is superior is a misnomer. At the end of the day, each camera can record wonderful images that meet its owner’s particular needs.

Some people think 14 mp is overkill, especially when you consider that, until recently, many professional photographers were shooting with 6 mp cameras. Don’t overlook the advantages of a high-resolution sensor, however. In the first place, that high resolution will allow you to make huge prints. When images from lesser cameras start to fall apart, images from the A350 will still have resolution to make an excellent poster or wall hanging.
Part I ✦ Using the Sony Alpha A300 Series

1.1 The A300 and A350 are functionally and cosmetically identical. The A350 boasts a higher resolution sensor, while the A300 offers a faster burst mode and marginally better image quality at high ISO settings.

The other major advantage comes when you crop images. If you need to crop extensively, images from a higher resolution sensor give you more pixels to work with. If you crop away 75 percent of the pixels from a 14.2 sensor, you still have 3.55 mp to work with. Eliminate 75 percent of a 10.2 mp sensor and you are left with 2.55 mp. If you always shoot in a studio, and have full control of the crop, then this may not be important to you. If you shoot sports, concerts, political functions, or other events where unexpected photo opportunities require you to shoot even when you can’t fill the frame, that extra 4 mp could be a lifesaver.

Despite the advantages of the A350’s sensor, however, the A300 provides its own strong points.

Because it is dealing with less pixel data, the A300 can shoot at 3 frames per second (fps) when using the optical viewfinder. The A350 can only muster 2.5 fps. A half frame a second may not sound like a major difference, but that means in a two second burst; the A300 can squeeze out six frames to the A350’s five. That extra frame could be the most important in the sequence.

A300 users are also dealing with smaller image files. File sizes of RAW and large JPEGs from the A350 are roughly 4 mp larger than those from the A300. This necessitates more space to store the images, reduces the number of images that can be recorded on a memory card, and requires more computer power to process images.

Finally, there is the issue of high ISO noise. In order to shoehorn four more megapixels onto the A350’s sensor, Sony engineers had to make the individual pixels smaller. Smaller pixels collect less light, so the A350 requires more image amplification than the A300 to achieve a specific ISO. More
amplification creates more noise, so the A300 enjoys a slightly better image quality at higher ISO settings.

None of these comments are intended to suggest that either camera is flawed. At the end of the day, both models are excellent, full-featured dSLRs that can provide stunning images.

**Working with the Sony Quick AF Live View System**

The A300 series has broken new ground in the dSLR arena, as both models come with Sony’s brand new Live View system. Sony is not the first dSLR maker to offer a live LCD

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1.2 Most models of the A300 series are black, but Sony has announced a champagne-colored A300 version, which is only available from the Sony-Style website. Reportedly, Sony will offer a very limited champagne-colored A350 in the Japanese market.

1.3 Unlike most of the competition, Sony’s Quick AF Live View system features two sensors. By focusing off the second sensor, the Alpha design can focus rapidly in the Live View mode, a major advantage over competitors.
Part I  ✦ Using the Sony Alpha A300 Series

In the normal optical viewfinder mode, the camera operates like any other SLR. When you look through the viewfinder, a system of mirrors and a ground glass allow you to see exactly what the lens is seeing. In this mode, the LCD is strictly for selecting menu options and viewing images you have already shot.

Moving the switch on the top of the camera into the Live View mode changes the camera from a dSLR into an electronic viewfinder (EVF) camera. The mirror moves out of the light path and the optical viewfinder is no longer usable. Instead, a second sensor located in the bottom of the mirror chamber displays the view through the lens.

Sony’s approach to this dilemma is to use a switch to allow the user to switch between the optical viewfinder and the LCD.

While almost all point-and-shoot cameras allow you to compose off the rear LCD screen, until recently dSLR users could only compose and focus with the camera’s optical viewfinder. Because SLR cameras utilize a mirror in the light path, it is difficult to design an LCD preview system that allows users to use the LCD screen as a viewfinder.

The LCD screen can tilt through a wide range of angles, so you can see the preview image from above, below, and behind.
on the LCD screen. You can focus or zoom and see the results instantly. If you move the camera very quickly, the image on the LCD screen may smear slightly, but all in all, the LCD view is perfectly useable as a viewfinder.

By using an additional sensor, Sony’s system is much faster than competitors that read the live view data off the actual image-capturing sensor. Most of these systems can’t focus very well in the Live View mode, because the mirror has to be up to read the data from the sensor, and come back down to focus. Thus, these systems are much slower when shooting in Live View because the camera waits until the time of the shot to focus the lens, requiring additional time before the shutter can fire.

In contrast, Sony’s dual sensor system can autofocus as fast in the Live View mode as it can with the optical viewfinder, earning the A300 series the reputation of having the fastest and most accurate live view system to date. As the owner of an Alpha A300 series camera, you may not appreciate just how much better the Sony Live View is until you compare it to DSLRs from other makers. Some competing models are starting to improve, but most of the live view implementations from other manufacturers fall short compared to the system A300 series owners enjoy.

If Sony’s Live View simply offered a fast LCD live view, it would still be superior to the competing live view technologies. But Sony didn’t stop there. The LCD screen tilts up and down, making it much more useful. Tilt the top of the screen out and you can use the LCD screen when the camera is above you. This is very helpful if the camera is on a tall tripod, or when you’re holding the camera above to get a “bird’s eye view” of your subject.

Tilting the screen out from the bottom gives you the opposite effect. Now you can use the LCD screen as a waist-level viewfinder or get an extremely low point of view without crawling on the ground.

The angle of the LCD is fully adjustable up to 90 degrees from the camera’s back, so you can obtain the perfect angle for viewing.

*Tip* Using the Live View LCD as a waist-level viewfinder is a great way to add interest to your images. By shooting up at your subject, you create the impression that they are strong, brave, and larger-than-life. The A300 series gives you the option to shoot either from eye level or waist level with a flick of a switch.

You have to remember to switch back to the OVF setting when you want to use the optical viewfinder. Until you do, the optical viewfinder will be totally black.

One other component of the Live View mode is the Smart Teleconverter feature. While not strictly part of the Live View system, the Smart Teleconverter relies on the Live View system to display the effect of the digital zoom.

The term teleconverter implies that the camera is somehow magnifying the focal length of the lens to provide a greater telephoto effect. That is what an actual teleconverter does, so new users of the A300 series can be forgiven if they expect the same thing to happen when they employ the Smart Teleconverter feature.

That is not what happens, however. If Sony had called the feature “Smart Cropping,” users might have a better idea of what the feature actually does.
Part I ✦ Using the Sony Alpha A300 Series

The Smart Teleconverter doesn’t magnify anything. Instead, it simply crops away a portion of the image to make the final image look larger (1.4 times or 2 times larger). The result is exactly the same as if you recorded a full-resolution JPEG, then cropped it to a smaller size in a software program on your computer. Both images would look like they were taken with a longer focal length lens, but the resulting resolution would be lower.

1. Turn on Live View.
2. Point the camera toward the subject and observe the subject on the LCD screen.
3. Press the Smart Teleconverter button.
The Smart Teleconverter icon with the indication x1.4 appears on the LCD and the preview image appears 1.4 times larger.
4. Press the Smart Teleconverter a second time.
The Smart Teleconverter icon with the indication x2 will appear on the LCD screen and the preview image will appear 2 times larger.
5. Pressing the Smart Teleconverter button a third time returns everything to the normal 1 to 1 setting.

An image taken at the 1.4x or 2x setting will be cropped to the view displayed on the LCD.

If the camera is switched off or the LCD blacks out to save power, the Smart Teleconverter returns to the normal 1 to 1 setting.

If the camera is not in Live View mode or the camera is set to record RAW files, pressing the Smart Teleconverter button displays the cryptic notice “Invalid Operation” on the LCD screen.

Mastering the A300 Series Controls

Your A300 series camera includes several controls that enable you to take full charge of your photographic experience. Knowing where those controls are and how to use them may seem intimidating at first, but that’s where this section comes in to help.
Front camera controls and features

Looking from the front, the A300 series controls are kept to a minimum. On the left is the built-in grip with the shutter release button and control dial.

The control dial is used to adjust either the aperture or shutter speed, depending on which mode the camera is in.

Below the control dial, you will find the self-timer lamp. It flashes red when the self-timer is counting down to make an exposure.

On the right front, you will find the lens release button. To remove a mounted lens, press the release button and twist the lens counterclockwise until it is free.

Top camera controls and features

The A300 series has several controls located on the top plate of the camera. A single mode dial is located to your left when you look at the camera from a shooting position. You will use the mode dial often to control which picture-taking function you want to

1.6 The business end of the A300 series is simple and uncluttered. It is also the only angle where you can tell the two models apart, thanks to the name badge and megapixel decoration.
use. Many settings and menus are dependent on which position the mode dial is in; you will always need to be aware of which mode you are using when setting up your camera.

On the very top of the camera you will find the hotshoe for the A300 series. The hotshoe provides a location to attach external flash units and accessories. Like all Sony Alpha dSLRs, the hotshoe is derived from the proprietary Minolta shoe design.

Some other Sony Alpha models come with a plastic cap that keeps dirt and debris from the hotshoe contacts. Sony doesn’t provide a cover with the A300 series, but it does sell caps as an accessory on the Sony Style Web site. It isn’t strictly necessary, but adding the optional cap will keep your hotshoe clean and give your camera a more finished appearance.

To the right of the prism area, you will find the Live View switch and the drive button. You have already learned about the Live View switch in the live view portion of this chapter.

The drive button brings up a menu on the LCD that allows you to select how the A300 series handles image capture sequence. There are six modes in the drive menu: