

BUYING A CAMERA

How to get the right one

by Jack and Sue Drafahl

Purchasing a new camera today is not nearly as easy as it used to be. There used to be fewer camera choices and the features on each camera were minimal. Now with all the new high-tech electronics, it almost takes an engineering degree to figure out some of the new models. New cameras seem to come out faster than new cars, and some models cost almost as much as a car. Making the decision of which one to buy is mind boggling.

Since we are professional photographers working for PHOTOgraphic Magazine, people always ask us for advice. They figure that if we get to see all the latest, greatest cameras, we'll know which camera is the best to buy. We could take the easy way out and recommend whatever system we are using at the time. But, not everyone shoots pictures the same. You must make that decision for yourself, but we'll give you some help.

Your first step will be to analyze what type of photography you plan on doing. This step is easy.

Just sit down with a piece of paper, and start making a list of photos you plan on taking with your new camera. If you already have a camera and plan on upgrading, list both those types of photos you have taken in the past and those you plan for the future. Some examples of subjects would be flowers, kids outdoors, birthday parties, graduations, pets, sports, zoo animals and holiday celebrations. It may help to group your subjects into those you take indoors and outdoors. If you are still having trouble take a look through back issues of PHOTOgraphic Magazine, and make notes of those you like. This list will help you decide which camera features are necessary so you can take the pictures you want.

The next step is to research the types, models, and features on today's cameras. Since you probably have another full-time job, we are going to make it a lot easier for you. We are not going to recommend any specific camera, just show you what's out there, and give you the information in a nutshell. From this gained knowledge, you can finalize your wish list and make your camera purchase.

COMPACT CAMERAS

Over the last few years this type of camera has become a main player when it comes to capturing that special moment in time. At first the point-and-shoot camera was thought of as a low-end camera only for beginning photographers. Although it still may be the beginning camera for many people, the quality of these cameras has improved to the point that many professional photographers carry them as backups. It is even more amazing that over 150 models are available boasting every configuration possible.

The lowest level of compact camera is what is referred to as the "Single-Use" or "Recyclable" camera. Essentially it is a roll of film with a one-time shooting device wrapped around it. When



◀ **Left:** Top-of-the-line pro-model AF 35mm SLRs like this new Nikon F5 are the most versatile cameras, with a great selection of interchangeable lenses and accessories and pro durability. But they also are very expensive.

you are done shooting the roll, the photolab breaks the camera open, removes and processes your film. The remains of the camera is then recycled back into the system as raw materials. The focus is fixed with a single lens, and the exposure is covered by the 6-7-stop exposure range of the color negative film inside. Most of these throw-away cameras have a battery-powered flash packaged with the camera system. Manufacturers have even introduced a panorama version as well as ones that you can get wet.

These cameras are popular with people who forget their camera but don't want to miss those special moments. They can simply run to the nearest store and find one of these single-use cameras right next to the single rolls of film. We think of it as an emergency-use camera. For example, our daughter came home one day and told us that she needed a camera for a school project the next morning. Of course she waited to tell us this until all the stores were closed. We just grabbed one of the single-use cameras we had saved for emergencies and she was all set.

The next step in compact cameras is a single-lens, fixed-focus compact camera. These cameras usually have a basic finder for framing, a flash, automatic film ISO setting, and in most cases an automatic film advance. The focus is preset for general photography, so close-ups and distance shots may not work as well on this system.

If you want more variety with focus but still want simplicity, try a single-lens autofocus compact camera. Wow, that's a mouthful, but it's actually a lot simpler than it sounds. Load the film in the camera, look through the finder, frame the image, and shoot. The camera senses the film speed, autofocuses on the subject, adjusts the flash, and when you press the shutter, it advances to the next film frame. This type of camera is popular because no technical photo knowledge is necessary. All you have to do is find a subject, frame it, and take the picture—thus the nickname Point and Shoot.

The next level of compact cameras has two focal lengths available. These models provide the photographer either a normal to wide angle lens or normal to telephoto lens. A couple of the these compacts with very wide-angle lenses offer the panorama function. Other features include: autofocus, auto ISO film index, autoexposure, and film advance.

The zoom compact camera is the most versatile and also the most expensive. A single zoom lens is compressed inside the compact camera, and extends when the camera is activated. The focal lengths vary from model to model but some reach from wide-angle to telephoto in a quick flick of the zoom control. On most of these cameras you'll find autofocus, autoexposure, auto ISO index, red-eye prevention, film advance, parallax correction, and a few other nifty controls.

◀ **Top left:** Don't mistake fixed-focus or focus-free compact cameras with autofocus cameras—they're not. These low-end compacts are inexpensive, but they rely on depth of field for proper focus. Shown here is the Konica POP EF-80.

◀ **Bottom left:** Not only do dual-lens cameras autofocus, but they offer the convenience and versatility of two focal-length settings. One is usually wide angle for landscapes and group portraits; the other is usually normal or a mild tele for general picture-taking and portraits. Shown here is the Ricoh R1.



▲ **Above:** Single-use cameras, such as the Kodak Fun Saver, are terrific impulse purchases for when you find yourself without a camera, but they are severely limited in their capabilities.

The list of features on compact cameras today is quite extensive, but there are a few that we feel you should consider before purchasing your compact camera system.

MACRO MODE: The macro or close-up mode would extend a zoom lens to a long focal length, focus at the closest point (about 18 inches), stop down to a small aperture, and turn on the flash.

PORTRAIT MODE: The portrait mode on some cameras will extend the zoom lens to short telephoto, open the lens aperture, and turn on the flash if necessary.

SPORTS MODE: The sports mode will set the shutter speed high, and allow the film advance to move the film as fast as the camera can cycle.

FLASH-FILL: Flash-fill mode tells the camera to use the flash but not overpower the scene, simply assist the existing light.

RED-EYE MODE: The red-eye mode fires a pre-flash before the actual flash picture is taken. This pre-flash forces the subjects' eyes to close a little before the main flash fires thus reducing the chance of getting a red-eye image.

LONG-EXPOSURE SYNC: The long-exposure sync mode allows you to use flash with long exposures. This feature is helpful if you're shooting a portrait late in the day and still want the background exposed correctly.

OTHER CONTROLS: Individual controls may include flash on/off, self-timer, exposure bracket, or manual control of the zoom lens.

The main advantage to all these compact cameras is that they are compact. Image that! Many will fit in a pocket, purse, jacket, or the palm of your hand. The cost is generally less than the





▲ **Above:** Underwater cameras like the Canon Sure Shot A-1 are great for fun in the water (down to 16 feet), as well as when skiing or in the rain, or any situation where sand, dust or moisture might permeate less-resistant cameras.

rangefinder and SLR cameras, and they are less complicated. The disadvantage is that you don't see exactly what you are shooting, only an approximate image. You also don't have a choice of exotic focal length lenses.

ADVANCED PHOTO SYSTEM

A new twist in camera systems, The Advanced Photo System, or APS, adds even more choices for you. Since this system uses a new film configuration, a whole new set of compact cameras have been designed. In addition to all the features found on a standard compact camera, the new APS version allows the photographer to shoot three different formats on the same camera. You can also record printing data, date, and scene information. This processed film can be previewed on a special video viewer system, or you can make an electronic proof sheet. See the chapters on the Advanced Photo System for more details.

INSTANT CAMERAS

Instant cameras have been around for a long time, and still remain the domain of the Polaroid Corporation.

► **Upper right series:** A zoom compact camera offers a range of focal lengths to choose from, making it a very versatile compact camera. The Canon Z70 W 35mm compact, for example, offers focal-length settings from 28mm-70mm. The Samsung Maxima Zoom105 goes from 35mm to 105mm.

► **Right:** The "Panoramic" format crops the top and bottom of the photograph to create a wide-format, double-wide image.

These cameras are ideal for situations requiring immediate visual feedback. Kids for example, react favorably when you share a picture of them taken only moments before. Professional photographers use the instant film in various cameras to preview a scene before taking the final shots on standard silver process film.

BRIDGE CAMERAS

For a short time several manufacturers felt there was a need for a camera that bridged the features of a compact camera with the SLR camera. The zoom-lens reflex (ZLR) camera doesn't look like either camera system, in fact it looks more like something from the X-Files. The single zoom lens is built into the 35mm body and allows direct viewing through the single zoom lens. If you are the type of person who likes the idea of a SLR camera, but is happy with one lens that does it all, then this is your camera.



28mm



50mm



70mm



105mm



panorama

RANGEFINDER CAMERAS

In the early days of photography, the rangefinder camera system brought 35mm photography into its own. The amount of rangefinder cameras on the market today has dropped, but the demand for their positive features still guarantees them a loyal following. The rangefinder is usually smaller than a SLR but larger than a compact. It has a separate viewfinder that is not through-the-lens. They are quieter since they lack an internal mirror and they often have less automatic controls than a SLR. You can change lenses but the lens selection is usually limited to 21mm–135mm. Because there is no mirror slap, vibration is less, resulting in sharper images. The drawback is that you still have parallax problems, and you cannot preview the actual focus or depth of field.

SLR CAMERAS

If you are really into taking photography seriously you may want to consider the single-lens reflex camera, or SLR. Many of these cameras have a zillion features, that allow you to be fully automatic one moment and on manual control the next. Other models are totally manual from focus to exposure control. The advantage to these cameras is that you view through the taking lens and you can change lenses to fit the photographic situation.

Thanks to the new electronic chip technology, cameras now have some very sophisticated focusing systems.



▲ Above: The Samsung Maxima Zoom 145 has a 38–145mm zoom lens, mid-roll panorama mode, interval timer, power-zoom modes and a quartz databack.

◀ Left: Compact cameras with Quartz-data backs can imprint the time, date or a slogan directly onto the film. Shown here is the Canon A-1.

Point & Shoot Cameras

PROS

- Most are very simple to use
- Extremely compact and lightweight
- Generally more economical than SLRs
- High-end models offer many advanced features

CONS

- You are not looking through the picture-taking lens, so what you see is not necessarily what you get—such as fingers over the lens or parallax problems
- You usually have no control over shutter speed or aperture selection
- No interchangeable lenses (although some offer dual-lens or zoom settings)

SINGLE FOCUS:

The single lock focus is accomplished by depressing the shutter halfway until the camera locks onto a subject. The focus will stay locked at that focus point until either the picture is taken or the button is released and re-depressed.

CONTINUOUS FOCUS:

The continuous focus feature allows the camera to follow the subject's movement as long as the shutter is depressed halfway. When the shutter is re-depressed, the camera looks for a new subject and follows the new focus point.

MANUAL FOCUS:

Manual focus is as it sounds—the autofocus system is disengaged and you can manually focus the lens. This is a handy feature when working at high magnifications and you don't want the lens focus to drift.

FOCUS GRIDS:

Some of the more recent SLR models have selectable focus rectangles where you can select one of several rectangles outside the normal focus area. This feature is especially handy for subjects near the edge of the frame. Instead of using

▲ Above: Sigma's SA-300N is a low-priced AF 35mm SLR with a host of fine features, including a depth-of-field preview and a mirror pre-lock—two features rarely found on entry-level SLRs, and valuable for advanced work.



the single focus lock and then panning the camera, you merely select the rectangle you want to use and start shooting.

TRAP FOCUS: Trap focus is a special feature found on some cameras that allows you to depress the shutter release and wait for the subject to pass through the focus point. When accurate focus is accomplished the shutter fires, the camera advances the film and then waits for the next subject. This is a valuable feature when photographing birds, insects or other elusive critters.

Even the camera viewfinder has features to help you focus easier. When photographing in bright sunlight situations, a rubber eyecup mounts directly on the eyepiece to block the harsh sunlight. If you wear glasses, you can get a camera with a high-eyepoint viewer, or a diopter correction lens to replace your glasses. Some of the more expensive cameras offer a feature where all the camera functions power up when your eye comes up against the viewfinder. Another camera model automatically determines which focus grid to use just by analyzing where your eye is looking through the viewfinder.

Exposure systems on SLR cameras are extremely sophisticated, which makes it harder and harder to get an incorrect exposure.

Most of the new cameras offer three exposure metering options:

MATRIX METERING: The matrix or pattern metering reads the

entire image area and takes into account that there may be a bright or dark area influencing the reading. It then has the camera compensate for that variance.

CENTER-WEIGHTED METERING: The center-weighted metering system puts most of metering in-

formation in the center portion of the image and ignores the rest. This function is great for subjects that dominate the middle 50% of the image but it has difficulty when there is different lighting on the outer edge of the image.

SPOT METERING: The spot metering system is for the advanced amateur or professional who has a good grasp on how meters read 18% gray, white, flesh tones and black. You can easily make exposure errors with this metering method if you don't understand exactly how it works. When used properly, this is the most accurate exposure system. Many black-and-white photographers use the spot metering to expose their negatives in order to match a specific processing time.

EXPOSURE COMPENSATION: Most 35mm SLR cameras have a feature called an exposure compensation dial that will bias the overall exposure either plus or minus exposure depending on which you select. Some of the manual over/under compensation dials allow as much as 8 stops compensation. You could use this to compensate for processing differences, special shooting conditions, or if you desire an exposure different from the norm.

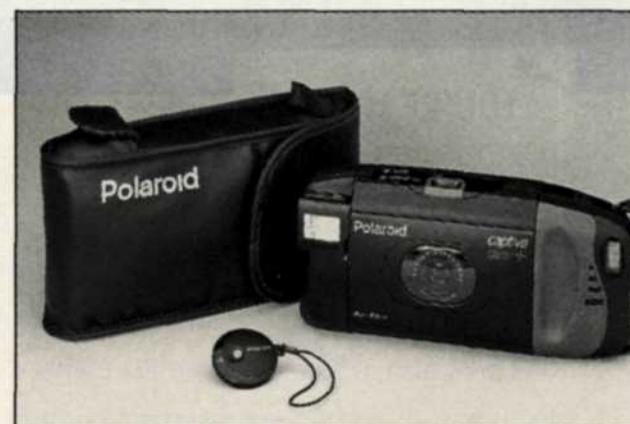
Some cameras have this exposure compensation built into an automatic

Point-&-Shoot Cameras

Understanding and selecting features that are right for you

We suggest you read the features section of this text to learn the specifics of what each feature can do for you. Then use the checklist below to determine your priorities when purchasing a new compact camera.

FEATURE	YES	NO	DESCRIPTION
Action Mode	<input type="checkbox"/>	<input type="checkbox"/>	Chooses higher shutter speeds to freeze action.
Autoexposure (AE)	<input type="checkbox"/>	<input type="checkbox"/>	Automatically selects "proper" exposure.
Autofocus (AF)	<input type="checkbox"/>	<input type="checkbox"/>	Automatically focus on central subject.
Backlight Comp.	<input type="checkbox"/>	<input type="checkbox"/>	Avoids silhouettes in backlit situations.
Dual-Lens	<input type="checkbox"/>	<input type="checkbox"/>	Offers choice of two focal-length settings.
DX Coding	<input type="checkbox"/>	<input type="checkbox"/>	Automatically recognizes and sets the film speed.
Exposure Lock	<input type="checkbox"/>	<input type="checkbox"/>	Enables proper exposure of off-center subjects.
Exposure Modes	<input type="checkbox"/>	<input type="checkbox"/>	Only available on super-high-end compact cameras.
Fill-Flash	<input type="checkbox"/>	<input type="checkbox"/>	Helps lighten shadows in harsh lighting situations.
Fixed-Focus	<input type="checkbox"/>	<input type="checkbox"/>	Does <i>not</i> autofocus.
Flash-Off/Cancel	<input type="checkbox"/>	<input type="checkbox"/>	Used for nightscapes and natural-light photos.
Focus Lock	<input type="checkbox"/>	<input type="checkbox"/>	Enables proper focus on off-centered subjects.
Force Flash	<input type="checkbox"/>	<input type="checkbox"/>	Lets you choose flash even when it's bright out.
Infinity Lock	<input type="checkbox"/>	<input type="checkbox"/>	Important for shooting through windows.
ISO Choices	<input type="checkbox"/>	<input type="checkbox"/>	Allows you to use films of different speeds.
Landscape Mode	<input type="checkbox"/>	<input type="checkbox"/>	Chooses small aperture to get everything in focus.
Macro/Close-up Mode	<input type="checkbox"/>	<input type="checkbox"/>	Lets you focus reasonably close to your subject.
Multibeam AF	<input type="checkbox"/>	<input type="checkbox"/>	Uses multiple infrared beams for more precise focus.
Multiple Exposure	<input type="checkbox"/>	<input type="checkbox"/>	Exposes more than one image on one frame of film.
Night/Slow Sync	<input type="checkbox"/>	<input type="checkbox"/>	Combines long exposure with flash illumination.
Panorama Format	<input type="checkbox"/>	<input type="checkbox"/>	Crops off top and bottom for a wide composition.
Portrait Mode	<input type="checkbox"/>	<input type="checkbox"/>	Chooses wide aperture for out-of-focus background.
Quartz-Data	<input type="checkbox"/>	<input type="checkbox"/>	Imprints date, time or slogan permanently onto film.
Real-Image Viewfinder	<input type="checkbox"/>	<input type="checkbox"/>	Zooms with lens to approximate what the lens sees.
Red-Eye Reduction	<input type="checkbox"/>	<input type="checkbox"/>	Pre-flash or lamp to reduce/eliminate red-eye.
Remote Control	<input type="checkbox"/>	<input type="checkbox"/>	Handy for self-portraits and surreptitious pictures.
Self-Timer	<input type="checkbox"/>	<input type="checkbox"/>	Great for including yourself in your photos.
Single-Use Camera	<input type="checkbox"/>	<input type="checkbox"/>	Very simplistic manual camera with few features.
Tele Focal-Length	<input type="checkbox"/>	<input type="checkbox"/>	Magnifies the image in the viewfinder.
Underwater	<input type="checkbox"/>	<input type="checkbox"/>	Usually submersible down to 16 feet.
Weatherproof	<input type="checkbox"/>	<input type="checkbox"/>	Resistant to water and dust (but <i>not</i> submersible).
Wide Focal-Length	<input type="checkbox"/>	<input type="checkbox"/>	Provides a wide field of view; great for landscapes.
Zoom Autoflash	<input type="checkbox"/>	<input type="checkbox"/>	A more efficient flash for zoom-lens cameras.
Zoom Lens	<input type="checkbox"/>	<input type="checkbox"/>	Gives you a range of focal-lengths to choose from.



▲ **Top:** The Canon EOS IX is an interchangeable-lens APS camera.

▲ **Above:** Polaroid instant cameras, like this Captiva, are essentially point-and-shoot cameras that use instant film rather than conventional film.

function. With this auto bracketing control the camera will automatically take several shots at different exposure compensations around the main exposure. This bracket function may be part of the original camera, or be an add-on accessory like a multi-function camera back.

EXPOSURE MODES: Once you have established the type of metering system you want to use, you will have several exposure modes from which to select. These adjust the way the camera operates the shutter and aperture controls to attain the correct exposure.

MANUAL EXPOSURE MODE: The simplest and least expensive of all SLRs offer only this exposure mode. With this method, the in-camera meter gives you information which you must decipher into a correct f-stop and shutter-speed adjustment. The more expensive cameras offer three other exposure options.

APERTURE-PRIORITY: The aperture-priority setting lets you pick the desired aperture and the camera selects the corresponding shutter speed. You will want to use the aperture-priority for images where you want to achieve maximum depth of field as in nature close-ups.

SHUTTER-PRIORITY: Shutter-priority let you pick the shutter speed and the camera then selects the corresponding f-stop. Shutter-priority is ideal for action shots where you need the shutter speed high enough to stop the action.

PROGRAM MODE: If you select the program mode, the camera selects both the shutter speed and aperture for correct exposure. This setting is similar to the full automatic on compact cameras. Some SLRs have several program

modes with one that leans toward more depth of field and another that prefers high shutter speeds. These special program modes are similar to the close-up and sports mode on compact cameras.

FILM ADVANCE: Most SLR cameras have several film advance modes. Single frame means that the camera will advance one frame each time the shutter is depressed. Slow motor drive will advance the film at a slow rate to capture slower action or so the flash has time to recycle. The high-speed motor drive is for situations where the action is fast and hard to capture in one or two frames. Be prepared to use a lot of film if you use this function.

SHUTTER SPEEDS: New-high tech electronic shutters allow shutter speeds of up to $\frac{1}{12,000}$ and as long as hours. This allows for some very unusual effects not possible on other types of cameras. The high shutter speeds are accessed on the main camera, while the very long exposures may need an accessory called a multi-function back. The high-speed shutter times would be ideal for action, sports, kids and pets, while the longer shutter times would be best suited for waterfalls, star trails, moving lights, or lightning.

ELECTRONIC FLASH: Some of the cameras have built-in flash units. These do a great job for flash-fill and subjects close to the camera, but usually lack output power. Most SLRs have a

▲ *Above right:* The Olympus IS-10 is a fine example of a bridge camera, with a built-in 28–110mm power-zoom lens, powerful built-in flash and many other advanced features.

► *Right:* Rangefinder cameras are extremely quiet and vibration-free. Shown here is the totally mechanical Leica M6 rangefinder with manual focusing, mechanical shutter speeds, one exposure mode (metered manual) and manual film transportation.

Bridge Cameras

PROS

- All-in-one camera, offering a “bridge” between point-&-shoot cameras and SLRs
- Offers through-the-lens (TTL) SLR automation
- Has unique, appealing styling

CONS

- As large and heavy as some SLRs without the advantage of interchangeable lenses



Instant Cameras

PROS

- Instant gratification—you know if you have it or if you don't.
- Great to give as a thank-you on-the-spot to people who model for you or help you
- Medium- and large-format Polaroid backs and holders are a great “proofing” method for commercial photographers

CONS

- What you get is what you have—reprints and enlargements are not as satisfactory as those made from negatives or transparencies.
- The price per picture is relatively high

Rangefinders

PROS

- No SLR mirror results in quieter, vibration-free operation and no exposure blackout in the viewfinder
- Easier focusing in dim light

CONS

- Fewer lens choices than with SLRs cameras
- Parallax problems with close subjects



hot-shoe that enables an accessory flash to connect to the camera. The communication between flash and camera allows direct flash, flash-fill, red-eye reduction and rear-curtain sync.

LENSES: One of the biggest drawing cards of the SLR camera system is its ability to use a variety of lens focal lengths. Each manufacturer makes dozens of lenses to cover every possible situation. Third-party lens manufacturers make even more lenses to complement your camera system. When you finally buy an SLR camera you will literally have more than a hundred different lenses to choose from ranging from fisheye to lenses in the thousands of millimeters! Keep in mind that with the SLR one lens is never enough. There will always be another reason to buy that latest, greatest new lens.

As we said earlier there seems to be a zillion features on most SLRs. Fortunately, most features can be ignored at first, and only use the main features. As you become comfortable with your SLR, you can start to explore the other functions and learn how they fit into the "picture." Someday you will have a need for a special feature and you'll be glad it's there.

DIGITAL CAMERAS

A new contender in the camera market is the digital camera. At present the high cost, lack of availability, and image quality limit these cameras from taking over silver market. They come in three resolutions.

LOW-RESOLUTION DIGITAL: The low-resolution digital camera is the digital "compact" camera and has a resolution similar to a computer monitor. Acceptable prints can be made if

the print size is kept below 5x7. These cameras cost from hundreds of dollars to over a thousand and are offered by a variety of manufacturers.

MEDIUM-RESOLUTION DIGITAL: The medium-resolution digital camera has about the same resolution as the new High Definition Television format and can be printed on 8x10

electronic paper with acceptable results. Both the medium- and high-resolution digital camera are modified SLR cameras with a digital film chip replacing the pressure plate. Many of the same SLR lenses and accessories will work with these digital cameras. These cameras usually have the price tag of a small car.

HIGH-RESOLUTION DIGITAL: The high-definition digital camera is pretty much out the range of most photographers' pocketbook. The quality of these images is similar to some of the new ISO 200 films found on the market. As the manufacturing techniques improve the price of these camera should eventually drop. Until then most of these cameras are used by the pros or the "Rich and Famous." Most of these cameras connect directly to a computer where gathered images are stored for editing and printing.

We realize that we have given you a lot of information to absorb. If you make an accurate wish list and look at each camera type, you can narrow the field down pretty quickly. Once you have decided on the camera type, the price tag will usually narrow the field down even more. Then it's just a matter of matching your wish list to the features of the camera models in that group.

WHERE TO BUY IT

There is some controversy as to where you should buy your camera system. The advantage of buying a

camera in a store is that you can see, feel, and touch before you buy. They are also around if you should have any camera trouble or need other accessories. It's true that mail order is generally cheaper, and it may work well if

Manual-Focus SLRs

PROS

- Full control over focusing operation, especially with off-center subjects
- Top-of-line models feature many automated features
- Often less expensive than its AF counterparts
- Some models require minimal or no batteries to function; others will often function (without meter) if batteries fail, such as in cold weather conditions

CONS

- You must focus this camera yourself, even if your eyes are fatigued
- Does not take advantage of some of the new autoexposure program modes made possible by linking information from the AF and flash systems in AF cameras

you know exactly what model you want. Be sure to make your lists and take the time to research cameras, so you can make the right decision on selecting your new camera system.

If buying mail-order, be sure to check to see if the price includes a U.S. warranty. Some mail-order companies offer "gray-market" merchandise that was not meant to be sold in the U.S. market—it was not imported through the manufacturer's official U.S. distributor and thus does not come with a U.S. warranty. The lack of a U.S. war-

Autofocus SLRs

PROS

- Will focus on the perceived subject automatically
- Often, the AF system is integrated with other camera systems to improve overall performance
- Usually, you can choose to focus manually and receive focus confirmation from AF system
- Generally offer other automated systems, such as film transport and autoflash
- Exceptionally valuable to people with poor eyesight or whose eyes fatigue easily

CONS

- Autofocus systems vary greatly from model to model. Some are extremely fast and can easily recognize off-centered subjects; others are slower
- Manual-focus override some times requires the switch of a button or is achieved via a narrower than desired focusing ring



▲ Above: The Nikon F3HP is a highly automated pro-oriented manual-focus camera, sturdily built to withstand the rigors of hard pro use. Like the new Nikon AF SLRs, the F3 accepts the full line of Nikkor lenses, from 6mm circular fisheye to 2000mm.

35mm SLR Checklist

Understanding and selecting features that are right for you

We suggest you read the features section of this text to learn the specific of what each feature can do for you. Then use the checklist below to determine your priorities. Have this list close by when you select your camera.

FEATURE	YES NO		DESCRIPTION
	<input type="checkbox"/>	<input type="checkbox"/>	
Aperture-Priority AE	<input type="checkbox"/>	<input type="checkbox"/>	You choose aperture and camera selects shutter speed.
AF Assist	<input type="checkbox"/>	<input type="checkbox"/>	Built-in flash assists AF system with infrared beam.
Bracketing, Auto	<input type="checkbox"/>	<input type="checkbox"/>	Automatic sequential frames at different exposures.
Center-weighted AE	<input type="checkbox"/>	<input type="checkbox"/>	Meter reading with more emphasis on central portion.
Continuous AF	<input type="checkbox"/>	<input type="checkbox"/>	Autofocuses continuously until you release shutter.
Custom Functions	<input type="checkbox"/>	<input type="checkbox"/>	Ability to create customized "program" modes.
Depth-of-field Preview	<input type="checkbox"/>	<input type="checkbox"/>	Closes lens to shooting aperture to preview DOF.
Diopter Correction	<input type="checkbox"/>	<input type="checkbox"/>	Corrects for mild focusing problems in viewfinder.
DX-Coding	<input type="checkbox"/>	<input type="checkbox"/>	Automatically recognizes the speed (ISO) of the film.
Exp. Compensation	<input type="checkbox"/>	<input type="checkbox"/>	1/2 exposure compensation in any exposure mode.
Fill-Flash Capability	<input type="checkbox"/>	<input type="checkbox"/>	TTL fill-flash with built-in or accessory flash.
Flash, Built-In	<input type="checkbox"/>	<input type="checkbox"/>	Integral flash, often pops up when needed.
Focus Trap	<input type="checkbox"/>	<input type="checkbox"/>	Pre-focus on a spot; camera fires when subject arrives.
Focus-Priority AF	<input type="checkbox"/>	<input type="checkbox"/>	Will not release shutter until focus is achieved.
High-Eyepoint VF	<input type="checkbox"/>	<input type="checkbox"/>	Allows eyeglass wearers to see entire viewfinder.
Hot-Shoe	<input type="checkbox"/>	<input type="checkbox"/>	Dedicated mount for attaching accessory flash.
Intervalometer	<input type="checkbox"/>	<input type="checkbox"/>	Takes sequential pictures at exact intervals.
ISO Override	<input type="checkbox"/>	<input type="checkbox"/>	Can set your own film speed for DX-coded films.
Manual Exposure	<input type="checkbox"/>	<input type="checkbox"/>	You pick both aperture and shutter speed.
Manual Focus	<input type="checkbox"/>	<input type="checkbox"/>	You physically turn focusing ring to achieve focus.
Manual AF Override	<input type="checkbox"/>	<input type="checkbox"/>	A system for instantly manually overriding the AF.
Mirror Lockup	<input type="checkbox"/>	<input type="checkbox"/>	Locks up mirror before exposure to reduce vibrations.
Motor Drive	<input type="checkbox"/>	<input type="checkbox"/>	Advances film, usually at a rapid pace.
Multiple Exposure	<input type="checkbox"/>	<input type="checkbox"/>	Exposes more than one image on one frame of film.
Multi-Segment AE	<input type="checkbox"/>	<input type="checkbox"/>	Meter compares information from different areas.
Multi-Segment AF	<input type="checkbox"/>	<input type="checkbox"/>	More than one AF island for more accurate focusing.
Panoramic-Format	<input type="checkbox"/>	<input type="checkbox"/>	Masks top and bottom of frame for wide composition.
PC Terminal	<input type="checkbox"/>	<input type="checkbox"/>	Allows synchronization of off-camera flash.
Pellicle Mirror	<input type="checkbox"/>	<input type="checkbox"/>	Partial mirror that doesn't raise before exposure.
Predictive AF	<input type="checkbox"/>	<input type="checkbox"/>	AF analyzes fast movement; extrapolates focus point.
Program Mode	<input type="checkbox"/>	<input type="checkbox"/>	Camera picks "proper" aperture and shutter speed.
Quartz-Data Back	<input type="checkbox"/>	<input type="checkbox"/>	Can print time/date or slogan permanently on film.
Rangefinder	<input type="checkbox"/>	<input type="checkbox"/>	Type of camera with separate viewfinder (non-SLR).
Red-Eye Reduction	<input type="checkbox"/>	<input type="checkbox"/>	Pre-flash/lamp to contract pupil and reduce red-eye.
Release-Priority AF	<input type="checkbox"/>	<input type="checkbox"/>	Shutter fires regardless of whether focus is achieved.
Shiftable Program	<input type="checkbox"/>	<input type="checkbox"/>	Shifts program mode toward bigger/smaller aperture.
Shutter-Priority AE	<input type="checkbox"/>	<input type="checkbox"/>	You choose shutter speed; camera selects aperture.
Single-Shot AF	<input type="checkbox"/>	<input type="checkbox"/>	Autofocus locks in on focus point and stays there.
Spot Metering	<input type="checkbox"/>	<input type="checkbox"/>	Takes meter reading from central 1%-7% of scene.
Wireless Remote	<input type="checkbox"/>	<input type="checkbox"/>	Camera can be fired from a remote location.
Wireless Remote Flash	<input type="checkbox"/>	<input type="checkbox"/>	Camera fires cordless flash from off-camera position.

BOGEN MANFROTTO 3001 TRIPOD



This super sturdy, compact, lightweight tripod (3 1/2 lbs., 21") is one of the most versatile available. Three click-stop spread angles plus reversible center-post allow range from 12 3/4" up to 55". Add any of these precision heads, and you're ready to go. See your dealer or contact Bogen Photo Corp., 565 E. Crescent Ave., Ramsey, NJ 07446 (201) 818-9500



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bogen

We don't sell anything
we wouldn't buy ourselves.



◀ **Far left:** Minolta's mid-line model is the Maxxum 600si, with Omni-Dimensional predictive AF, three AF sensors (keyed to the 14-segment honeycomb metering), center-weighted and spot metering, built-in red-eye-reducing TTL flash, built-in dioptic viewfinder eyepiece correction, depth-of-field preview and more.

◀ **Left:** The EOS Elan II is Canon's

ranty doesn't mean that the camera is no good; it just means that you'll have to pay to get it fixed (or send it overseas for warranty work) should anything go wrong with it.

Regarding private parties or swap meets as sources of used camera equipment—caveat emptor.

DO YOU NEED A SECOND CAMERA?

Sometimes it's nice to have a second camera. If you're a family person, maybe you want a simpler camera for the less-serious shooters in the family to use. A small camera like a compact is more likely to be taken along and always be there than a larger, more-complicated camera. You can't get the picture if you don't have a camera when you need it (this is where a single-use camera is especially nice)—if something exciting occurs, a simple point-and-shoot camera in the hand is worth a bunch of fancy top-of-the-line models back home in the closet. More serious photographers often carry two cameras so they can have two types of film or two different lenses always ready to shoot. Or they carry the second as a "backup" in case of equipment failure.

mid-line AF SLR, a model offering Eye-Controlled Focus, three AF sensors linked to the multi-zone metering system, a 2.5-fps Whisper Drive film advance, 11 built-in Custom Functions (including mirror prelock and depth-of-field preview), built-in red-eye-reducing TTL flash and more.

FINAL THOUGHTS

A camera is an artist's tool, a technical wonder, a magical and mysterious device. But basically it's just a light-tight box that keeps light from hitting your film until you want it to, and which holds a lens in place to focus an image on the film.

The question the editors are asked most often at PHOTOgraphic Magazine is, "What's the best camera." A simple question, just four little words. You'd think there'd be a simple answer. But there is no simple answer, because there is no "best" camera. The real answer depends on several things, including the type(s) of photography you do, your photographic experience/skill level, your photographic budget and your personal idiosyncrasies. Some cameras are ideally suited to certain types of photography and not at all suited to other types of photography. Some cameras are good all-around devices, but not as good for a specific task as others. Some cameras are ideally suited to point-and-shooters, but extremely limited for professionals. Some cameras offer all the features a serious photographer could want, but are too complicated for a beginner.

◀ **Left:** Built-in flash units are handy for fill-flash or when your subject is close to you. For greater illumination, you can attach a stronger accessory flash unit. Shown here is the Pentax PZ-1P, which features a built-in TTL flash, a personally programmable "user" setting and auto exposure bracketing.

As you can see from the foregoing, no one can tell you what the best camera for you is, except you. If you intend to specialize in a certain type of photography, find out what specialists in that type of photography use. Architectural photographers prefer view cameras, with their image-controlling camera movements. Fine-art scenic photographers prefer these large-format cameras, too, for the large image size and image-controlling movements. But some fine scenic and architectural work has been done with 35mm cameras.

Wedding professionals tend to prefer medium-format cameras, for the combination of large image size (which makes for better-quality enlargements) and relative ease of handling (compared to a view camera, anyway). As you'll see in the chapter on medium-format cameras, many of today's models offer quick and easy handling, so even some action photographers use them.

Sports and news photographers today generally work with AF 35mm SLRs, as do most serious amateur generalists. If you are serious about photography and want a highly versatile camera, the AF 35mm SLR is a good place to start. These offer a wider range of lens focal lengths than any other camera type, a wider range of accessories, an far wider range of films to choose from, plus the benefits of relatively small size and light weight, and quickness of use. Ansel Adams once described the 35mm camera as "an extension of the eye as used freely in the hand." And today's 35mm films produce excellent image quality, even from their relatively small negatives. Check 'em out. □

