

SONY

Inside Guide to the DSC-T1





Contents

Introduction.....	Page 3
Design.....	Page 4
Carl Zeiss® Vario-Tessar zoom lens.....	Page 7
5 Megapixel CCD.....	Page 9
Real Image Processor.....	Page 12
Oversized 2.5-inch LCD monitor.....	Page 14
Shooting: Ergonomics.....	Page 14
Shooting: Composition.....	Page 15
Shooting: Focus.....	Page 16
Shooting: Exposure.....	Page 17
Shooting: Recording Modes.....	Page 19
Specifications.....	Page 20

Front cover photo courtesy of Carl Zeiss. Simulated on-screen picture.

Introduction

High style meets high technology in the Sony DSC-T1 digital camera. Here are the gorgeous pictures you'd expect from a high-end Sony digital camera. Yet it's no bigger than a deck of playing cards. Simply to pick up the DSC-T1 is to understand that this is an extraordinary camera.

- Finished in stainless steel, the DSC-T1 is about the size of a credit card, and less than one inch thin! It's not just small. It's amazingly small.
- While the typical zoom lens projects from the front of the camera, the DSC-T1 hides the zoom lens completely inside the camera body. And this is a superb a Carl Zeiss® Vario-Tessar® zoom lens.
- Sony's 5 megapixel effective CCD makes for amazingly detailed images, ready for enlargements and suitable for use in professionally printed brochures and flyers.
- Sony's big 2.5-inch LCD viewfinder satisfies the need to frame shots—as well as the urge to immediately show your shots to everyone.
- The DSC-T1 joins the top-of-the-line DSC-F828 as the world's first digital cameras equipped with Sony's Real Image Processor. You'll experience superb picture quality, amazing speed and extended battery life.

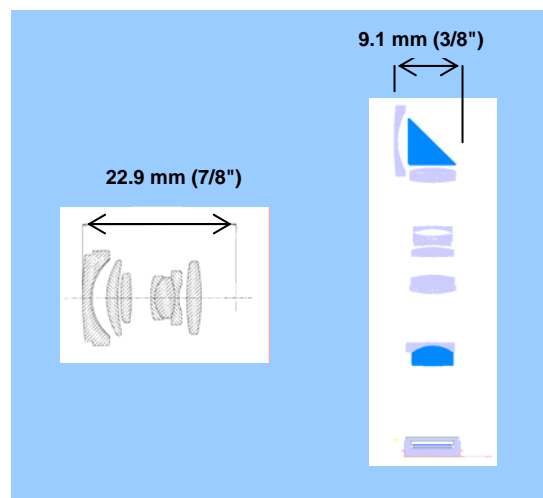
As embodied by the DSC-T1, Sony leadership in digital camera technology is no accident. Nor is it recent. We've been pursuing electronic imaging for decades. Today Sony is a world leader in digital cinematography, digital broadcast camcorders, and consumer digital camcorders as well as digital cameras. Behind this success stands proprietary Sony technology in CCD image sensors; Application Specific Integrated Circuits (ASICs); tape, optical and flash memory recording media; as well as proprietary algorithms for focus, exposure and Digital Signal Processing. In short, Sony is a leader because Sony can develop new technology that redefines the state of the art.

From the early transistor radios of the 1950s, Sony has astounded people with the unique ability to integrate high technology into ultra-small, ultra-portable products. The DSC-T1 is the latest expression of that tradition. The T1 is destined to delight owners while it amazes friends, family and onlookers with its unique mix of technology and style. Like no other.TM

Design

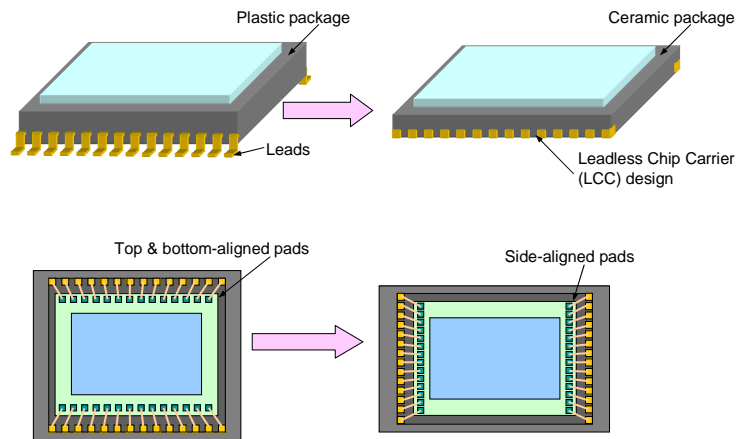
Sony's designed the DSC-T1 to represent a completely fresh expression of what digital photography could be. We wanted a new benchmark of style and sophistication, and no previous camera could serve as a starting point. That's why Sony developed the DSC-T1 from a blank sheet of paper. The design of the DSC-T1 reflects new thinking in the lens, image sensor, battery pack, recording media, and mechanical integration.

Internal zoom lens. The typical zoom lens extends out from the front when you turn the camera on. This adds considerable depth to the camera, and it also slows down operation. When you first turn on the camera, it can't focus or meter light—much less take the first shot—until the lens is finished extending. To overcome these issues, the DSC-T1 zoom lens is built completely inside the camera. Not only does this make for a slimmer design, it means that the lens is ready to shoot the instant you slide the lens cover back, an action that automatically turns on the camera. While there are other, superficially similar lenses on the market, the Carl Zeiss Vario-Tessar lens of the DSC-T1 has optical qualities that set it apart.



On the left, the zoom lens of Sony's popular DSC-P10 is close to one inch deep, even when it is collapsed for storage. On the right, the folded optical path of the DSC-T1 zoom lens is less than half as deep!

Image sensor. The 5 megapixel effective CCD image sensor of the DSC-T1 shares its basic structure with the sensor used in other Sony cameras. However, Sony repackaged the CCD for the T1 to achieve greater space efficiency. A ceramic package and Leadless Chip Carrier (LCC) design reduce the overall thickness of the image sensor, while side-aligned connection pads reduce the height dimension of the CCD, which corresponds to the depth dimension of the DSC-T1 camera.



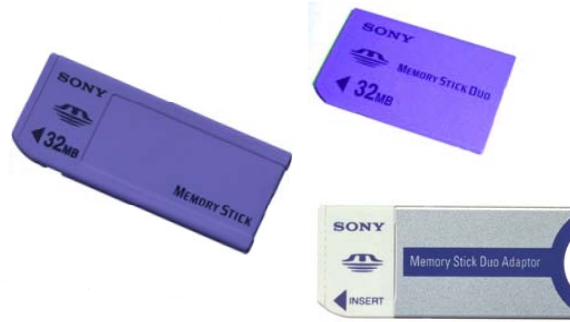
Refinements in the packaging of Sony's 5 megapixel effective CCD result in a 53% reduction in volume and a 15% reduction in height.

Battery pack. As a leader in Lithium-ion battery design, Sony also created an original InfoLithium® battery for the DSC-T1. The innovative NP-FT1 battery pack is one-quarter the size and thickness of the corresponding Sony InfoLithium M series battery.



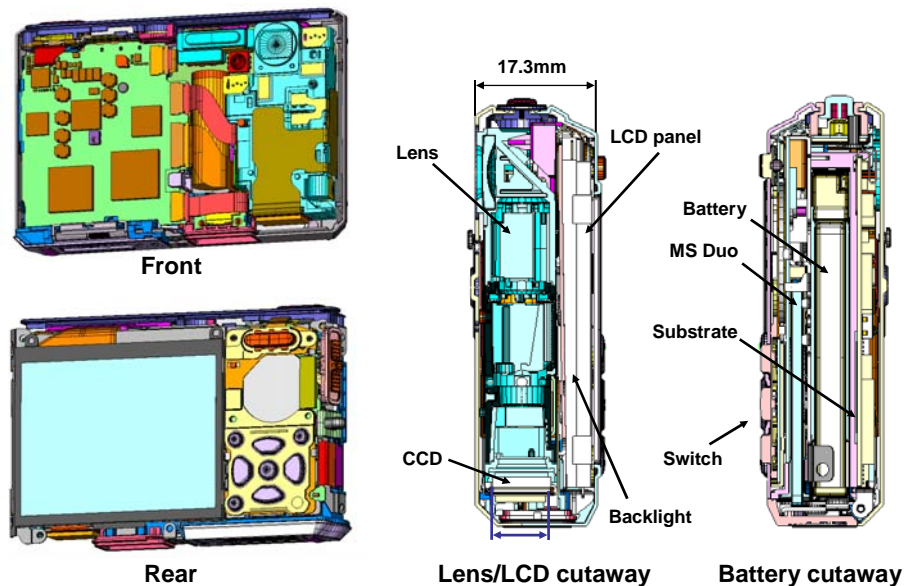
Sony's conventional InfoLithium® M series battery (left) dwarfs the InfoLithium T series battery of the DSC-T1.

Recording media. The DSC-T1 also leverages Sony's ultra-small Memory Stick® Duo media, which is just one-third the size of standard Memory Stick media. The supplied adaptor enables the Memory Stick Duo media to be used in conventional Memory Stick media slots.



Compared to conventional Memory Stick media (left), the Memory Stick Duo media of the DSC-T1 is 67% smaller. The camera is supplied with a 32 MB Memory Stick Duo card and the Memory Stick Duo Adaptor.

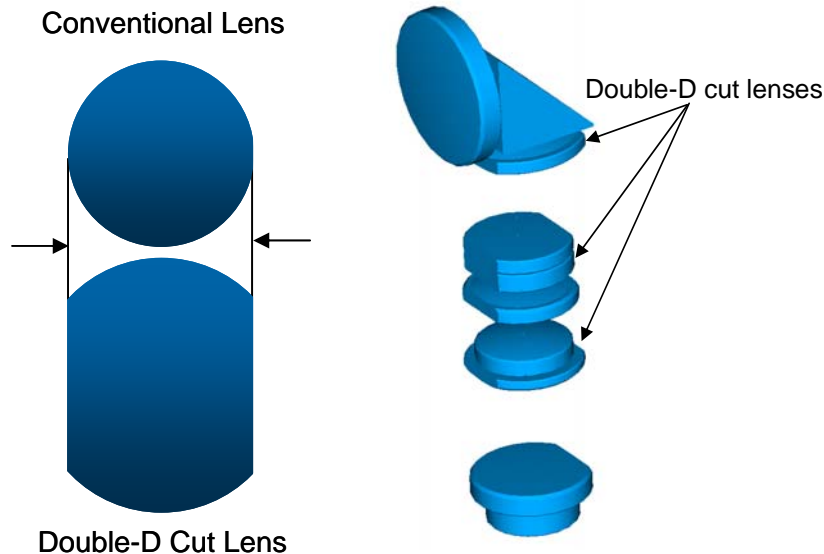
Mechanical integration. To conserve space, the subassemblies of the DSC-T1 are carefully sized, shaped and fit together like a 3D jigsaw puzzle. In comparison to the Sony DSC-P9, itself a handy, compact design, the DSC-T1 reduces internal space clearance by 80%.



In keeping with Sony's talent for microminiaturization, the DSC-T1 is an incredibly space-efficient design.

Carl Zeiss Vario-Tessar® zoom lens

Lenses are responsible for maintaining resolution, contrast, even illumination and consistent color from the center of the picture all the way out to the corners. With so much at stake, many professionals choose Carl Zeiss lenses in disciplines ranging from medicine and microscopy to laser rangefinders, projection, photography and cinematography. And that's why Sony chose a Carl Zeiss Vario-Tessar lens for the DSC-T1.



Double-D cut lenses deliver the benefit of a larger lens diameter in the confines of a smaller space. The DSC-T1 uses no fewer than six Double-D cut lenses.

The Vario-Tessar® lens enables compact design, moderate zoom range and quick autofocus, combined with sharp images, good contrast and minimum distortion. As implemented in the DSC-T1, the Vario-Tessar® design enables a 3x optical zoom lens to be mounted completely within the camera body. This reduces start-up time, because there's no need to wait for the lens to extend from the body. And it helps account for the sleek profile of the camera—less than one inch thin!

The lens fits into the camera body thanks in part to a folding optical path that uses a mirrored prism. Close observers of the digital camera scene will recognize that the DSC-T1 is not the first digital camera to use a folding optical path. However, the T1 lens has distinctive features that set it apart from previous cameras.

Extraordinary resolution, ideally suited to Sony's 5 megapixel image sensor. A super-resolution image sensor requires a super-resolution lens. This

Carl Zeiss lens responds. Including the prism, there are eleven optical elements in eight groups.

High performance in a tight space. The lens is carefully designed to achieve outstanding optical performance in minimum space. For example, five elements are aspherical, important for corner-to-corner focus in the tight confines of the DSC-T1. And three of these aspherical elements are glass—not plastic. The prism that "folds" the optical path is made from high transmissivity glass with a high refractive index. The prism's integrated mirror achieves higher performance than conventional evaporated Aluminum designs. Finally, the lens incorporates no fewer than six "double D cut" lenses, which deliver the benefit of larger lens diameter in a smaller space.

3X optical zoom. Sony's choice of Carl Zeiss lens achieves a 35mm equivalent zoom range from 38 mm wide to 114 mm telephoto. The wide setting is excellent for real estate, group portraits indoors and scenic landscapes. The tele setting is perfect for portraits and getting in tight on a distant subject.



The optical zoom range extends from 28 mm wide to 200 mm tele. (Sample photos for illustration purposes only.)

Macro mode enables you to shoot close-ups of flowers or insects. The minimum distance from the camera to the subject varies according to the zoom setting. The distance varies from approximately 8 cm (3 inches) at full wide to 25 cm (10 inches) at full tele.



*Macro photography is a window on the world of small wonders.
Taken with the DSC-T1. (Exposure Compensation -0.3 EV, ISO
100, Shutter Speed 1/400, Aperture F5.6.)*

5 Megapixel CCD

If you've read this far, you realize that there's more to a digital camera than the megapixels of its Charge Coupled Device (CCD). But you probably also realize that the CCD image sensor is a crucial to picture quality. After all, it is the CCD that transforms incoming light into electrical charges. So the CCD image sensor is roughly analogous to the emulsion of photo film or the retina of the eye. The CCD is largely—but not solely—responsible for high resolution, high sensitivity, low noise and low artifacts like "smear" and "blooming."

As the world leader in CCDs for digital cameras, Sony is in a good position to know. Sony has mastered the solid-state physics, the chemistry and the demands of micron-level engineering that go into creating advanced CCDs. Of course, we also have our own "fab" or fabrication plant for manufacturing CCDs. In this way, Sony could configure a unique, ultra-compact version of our renowned 5 megapixel effective CCD—especially for the DSC-T1.



5 Megapixels effective, in action: a sample image taken with the DSC-T1. (Exposure Compensation -1.0 EV, ISO 100, Shutter Speed 1/160, Aperture F3.5.)

The image sensor is designated a 1/2.4-inch (7.66 mm) device, with approximately 5,255,000 pixels total and 5,090,000 pixels effective, for a maximum image size of 2592 x 1944. While the entire world appears to understand that more megapixels are better, here's a reminder of why that is true.

Bigger prints. The 5 megapixel picture size supports prints up to 8-1/2 x 11 inches at 200 dots per inch (dpi) and 6 x 8 inches at 300 dpi. At these sizes, the native pixel count of the image sensor is a close match to the pixel count of the printed page. You'll see big enlargements with beautiful, continuous tones, and vivid, satisfying detail.

More applications. The high-resolution pictures are well suited to high-end graphics applications and the demands of the four-color separations used in lithographic printing. This makes the DSC-T1 a good choice if you're shooting for newspapers, brochures and catalogs.

Digital zoom. The 3x optical zoom is great for getting you close to subjects. Resolution is maintained as the zoom lens continues to use the full CCD image area. But for long distances, you'll want to use digital zoom, which typically places the image on a progressively smaller area of the CCD. Starting with a CCD that has fewer megapixels, you quickly degrade the quality and run out of digital zoom range. Starting with 5 megapixels, you sustain picture quality longer and get greater zoom range.

Cropping. Just as digital zoom gives you greater freedom when you compose the shot, "cropping" or cutting out unwanted parts of the image gives you freedom of composition after the shot has already been taken. Here again, starting with more megapixels means higher picture quality and greater freedom when the time comes to crop.

There's more to the DSC-T1 image sensor than just resolution. The image sensor also incorporates Sony's patented frame interline transfer technology, pixel-level micro lenses that increase sensitivity, and Sony's Hole Accumulated Diode (Super HAD™) CCD design, which improves signal-to-noise ratio.



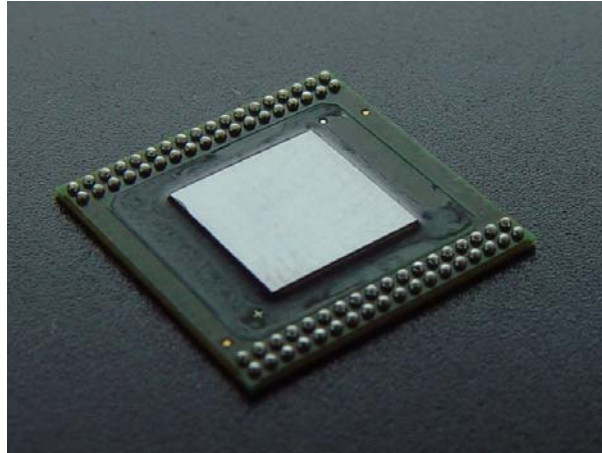
A high pixel count, high sensitivity and a slow shutter can combine to capture powerfully evocative shots. Taken with the DSC-T1. (Exposure Compensation 0 EV, ISO 100, Shutter 1.3 seconds, Aperture F3.5.)

Real Image Processor

Of all the critical components of a digital camera, perhaps the most overlooked is the image processor. Like the microprocessor that runs your PC, the image processor is the "brains" of the digital camera. Here is the circuit that transforms the analog output of the image sensor into digital image files that you can store in the camera's memory, output to a computer and display on the camera's LCD monitor. The image processor also evaluates scene brightness, contrast and detail, playing a vital part in the exposure and focus of your shots. In performing these functions, the image processor is critical to color fidelity and low "noise." The processor even plays a large part in the usability of your camera. Processing is the major factor in battery life and shutter lag, the cycle time between shots.

Ironically, as the number of megapixels in the image sensor increases, so does the burden on the image processor. So with its 5 megapixel effective CCD,

the DSC-T1 definitely benefits from Sony's Real Image Processor. The advantages are dramatic.



The DSC-T1 produces superbly low-noise pictures, thank in part to the Real Image Processor, shown here.

Low noise. "Noise" is unwanted grain, flecks or specks on the image. Downstream image processing is often the source, because it requires millions of additions, subtractions, divisions and multiplications on the picture data. As the calculations pile up, so do the rounding errors, which we see as noise. Sony's Real Image Processor fights the noise by calculating the image with two extra bits of precision—for four times the quantization levels. Fewer arithmetic errors accumulate, for cleaner, more accurate images. In addition, Sony's Triple Noise Reduction (NR) goes further still. Slow shutter NR improves the picture quality in low-light shooting (Twilight and Twilight Portrait modes). Clear Luminance and Clear Color NR maintain the detail and color of your images.

Speed. First-time digital camera users are often surprised at the lags and delays. These can make for practical problems. For example, delays in taking the picture can make it much harder to capture a baby's smile. In a group photo, it's harder to capture the moment when everyone is ready. In sports, it's harder to capture the desired moment: when the bat hits the ball, the soccer player kicks or the wide receiver makes the catch. Comparable issues exist in multi-shot burst mode and exposure bracketing. And speed becomes even more difficult to achieve as the pixel count climbs. Fortunately, Sony's Real Image Processor is uncommonly powerful and uncommonly fast. As a result, the DSC-T1 has already impressed independent reviewers with its speed and responsiveness.

Reduced power consumption. Image processors are partly to blame for the perception that digital cameras "eat" batteries. Sony's Real Image Processor fights the problem with large-scale integration (13 million transistors on a single chip), smaller parts and smarter clock control. The result is a 70% reduction in power consumed for a given pixel count versus current models.

Oversized 2.5-inch LCD monitor

The DSC-T1 makes it easier to frame your shots before you take them, and more enjoyable to view your shots later on, thanks to the generous 2.5-inch diagonal (viewable area) Liquid Crystal Display (LCD) monitor. The oversized LCD uses low-temperature polysilicon Thin Film Transistor (TFT) technology. Sony's "transflective" design generates an image either with reflected sunlight or built-in backlight. User-controlled backlight and brightness make the display visible in all conditions. A vivid 211K pixels of resolution delivers an uncommonly clear image that's far better for showing off the shots you've just taken.



The back of the camera is dominated by the big, bright, beautiful 2.5-inch diagonal LCD monitor. (Simulated on-screen picture.)

Shooting: Ergonomics

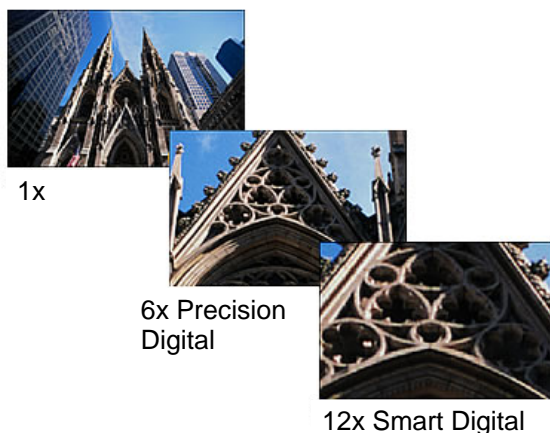
Every aspect of the DSC-T1 Cyber-shot® camera was designed around you. Sony considered the shape of your hand and the comfort of your vision. You can see the results in everything from the on-screen graphics to the placement of controls, to the size of the LCD monitor. Large on-screen fonts and function icons make it easy to navigate the camera's menus and controls. Pick up the camera and your right thumb instinctively lands on the pebble texture of the camera grip. Your index finger can turn the camera on, simply by sliding the lens cover down. Then move your index finger to the shutter release and shoot!

Shooting: Composition

The DSC-T1 gives you considerable freedom in shot composition.

Optical zoom. The 3x Vario-Tessar® zoom lens gives you flexible framing options, from 38 mm wide to 114 mm telephoto (35mm equivalents).

Digital zoom. Sony's Precision Digital Zoom doubles the total effective zoom range to 6x. Sony's Smart Digital Zoom uses a progressively smaller area of the CCD to create the image. Unlike some other digital zoom systems, Smart Digital Zoom always maintains a one-to-one relationship between pixels on the image sensor and pixels in the resulting picture, down to a limit of VGA (640 x 480) resolution. Smart Zoom, which is not available for 5 megapixel images, achieves up to 3.8x zoom at 3 megapixels, up to 6.1x with 1.3 megapixels and up to 12x with VGA images.



Precision Digital and Smart Digital Zoom get you closer to your subject. (Sample photos for illustration purposes only.)

Magnifying Glass mode. The DSC-T1 marks the debut of Sony's astonishing Magnifying Glass mode, which enables you to see (and capture) detail not visible to the naked eye. The degree of image magnification depends on the distance from the T1 to the subject.



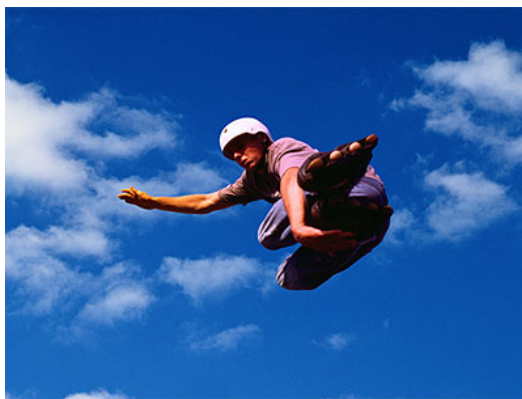
Magnifying Glass mode is your key to an incredible world of detail not visible to the naked eye. (Sample photo for illustration purposes only.)

Distance to Subject	Magnification
1 cm (1/2 inch)	3.3x
2 cm (1 inch)	2.1x
5 cm (2 inches)	1.0x
10 cm (4 inches)	0.5x
20 cm (8 inches)	0.3x

Shooting: Focus

Seven Auto Focus (AF) modes complement the way you think and the way you shoot. A built-in AF Assist lamp activates in low-light to help the camera latch onto your subject.

- **Multi-Point AF** automatically focuses on the most appropriate of five rectangular areas near the center of the frame.
- **Center AF** uses the center rectangle.
- **Spot AF** uses only a small spot, indicated by a small square at the precise center of the frame.
- **Focus Lock** enables you to first point directly at the subject, press the shutter half-way to lock the focus, and then frame your shot as you please.
- **Single AF** conserves battery power by focusing only when you press the shutter half-way.
- **Monitor AF** maximizes your photo opportunities by constantly pre-focusing as you compose your shot.
- **Continuous AF** is perfect for pictures of unpredictable sports, children and pets, because it continues to focus even after you've pressed the shutter half-way.
- **Preset Focus** enables you to override the Auto Focus system, setting your DSC-T1 for subject distances of 20 inches, 40 inches, 10 feet, 23 feet or infinity (0.5 m, 1 m, 3 m, 7 m, or infinity).

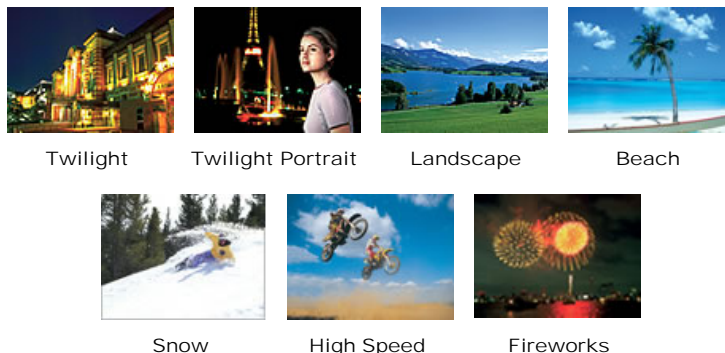


Continuous AF helps you follow fast action. (Sample photo for illustration purposes only.)

Shooting: Exposure

With Auto Exposure, Exposure Correction and seven Scene Modes, the DSC-T1 accommodates even difficult shooting situations like twilight, backlight and fireworks.

- **Auto** mode automatically selects the aperture, shutter speed, flash level and ISO sensitivity to match the scene brightness.
- **Twilight Mode** enables you to capture distant night scenes and retain the dark atmosphere of your surroundings. Takes advantage of Slow Shutter Noise Reduction.
- **Twilight Portrait Mode** enables you to capture your subject with flash yet still expose properly for the background. Uses Slow Shutter Noise Reduction.
- **Landscape Mode** focuses on distant subjects.
- **Beach Mode** clearly records the blue of the water in seaside and lakeside scenes.
- **Snow Mode** prevents colors from washing out when the scene is predominantly bright white.
- **High-Speed Shutter Mode** freezes sports action with a fast shutter speed that's especially suited to bright, outdoor shooting.
- **Fireworks Mode** captures fireworks in all their splendor by setting the focus to infinity and slowing down the shutter.
- **Exposure Correction** can compensate for backlight, unusually bright subjects and other creative challenges, with adjustments from -2.0 to +2.0 EV in 1/3 EV steps.
- **Auto Bracketing** is great for difficult exposures. With a single press of the shutter, you can take three shots at different exposure levels. You can bracket exposures at ± 1 EV, $\pm 2/3$ EV or $\pm 1/3$ EV.
- **Histogram** is a viewfinder display for critical analysis of exposure. Like an audio spectrum analyzer, the histogram reveals the prevalence of each brightness level in your image.



*Seven scene modes compensate for difficult shooting situations.
(Sample photos for illustration purposes only.)*

Light metering. To match your shooting situation and your style, the camera can meter light three different ways.

- **Multi-Pattern Metering** divides the image into a 7 x 7 grid. The camera calculates proper exposure through a unique Sony algorithm, which automatically identifies your subject and compensates for backlight and other tricky conditions.
- **Spot Metering** looks at just the center 3%—ideal when you want to expose for just a single subject.



Multi-Pattern metering (left) divides the frame into a 7x7 grid and is best for most situations. Spot Metering is ideal when your subject has a very different brightness level than the rest of the frame (right). (Sample photos for illustration purposes only.)

Flash with genuine TTL metering. The precision of genuine Through-the-Lens (TTL) flash metering is rare in digital cameras. But the DSC-T1 delivers.

- **Automatic Flash** sheds additional light on your subject whenever you need it.
- **Forced Flash** helps put light on your subject's face, when backlighting is a problem.
- **No Flash** mode is ideal for distant subjects in low light.
- **Red Eye Reduction** can control the annoying reflection of flash in the eyes of your subjects.
- **Flash adjustment** enables you to select high, normal or low for greater control over flash photography.

Color refinements. Shoot pictures of incredible nuance and subtlety when you control the parameters of sharpness, saturation and contrast. It's like having a digital darkroom when you take your shot.

White Balance. Capture true colors with Auto White Balance, or choose white balance presets for Daylight, Cloudy, Fluorescent, Incandescent and Flash.

ISO Sensitivity. Set ISO to Auto, or choose manual sensitivity settings for 100, 200 or 400. High-speed settings are especially useful in eliminating the blur of camera movement in low-light conditions.

Shooting: Recording Modes

Image sizes. The DSC-T1 saves your pictures as compressed JPEG files at five different sizes: 5 megapixels (2592 x 1944), 3:2 (2592 x 1728), 3 megapixels (2048 x 1536), 1.3 megapixels (1280 x 960) and VGA (640 x 480). Email saves a 320 x 240 image with your main picture. Voice captures up to 40 seconds of audio with your picture.

Burst Modes. Sony's Burst modes help you capture very fast motion in sports and athletic coaching as well as professional, industrial and scientific applications. You can shoot a four-shot burst either with picture on the monitor screen (Framing Priority Burst at 0.36 second intervals) or without a picture (Speed Priority Burst at 0.33-second intervals). A Multi-Burst function even saves a succession of 16 images as a single JPEG file (1280 x 960). Select Multi-Burst intervals of 1/30, 1/15 or 1/7.5 second. During playback, you can show the Multi-Burst images in sequence and freeze any individual frame.

MPEG Movies. The DSC-T1 offers three MPEG Movie modes, depending on your recording media. If you're shooting onto Memory Stick Duo PRO™ media, you can enjoy MPEG VX Fine mode at a smooth 30 frames per second! None of the three modes limits your continuous recording time. (In fact the only limits are the capacity of your recording media and the time left on your battery!)

Mode	Resolution	Frame Rate (approx.)
MPEG Movie Video Mail	160 x 112	8 frames/sec.
MPEG Movie VX	640 x 480	16 frames/sec.
MPEG Movie VX Fine (requires Memory Stick Duo PRO media)	640 x 480	30 frames/sec.

Print options. Use Digital Print Order Format (DPOF) printing, batch printing, and date stamp your images from the camera's LCD monitor, all without a PC.



The DSC-T1 cradle offers quick connection to a computer, an AC adaptor and a television. (Simulated on-screen picture.)

DSC-T1 Specifications

Imaging Device:	1/2.4" (7.66 mm) Super HAD™ Charge Coupled Device with primary color filter array	Recording Media:	Memory Stick® Duo media*, Memory Stick PRO™ Duo media* (Does not support Access Control security function. Tested to support Memory Stick Duo media capacity of up to 512 MB)
Total pixels:	Approx. 5,255,000 pixels		
Effective pixels:	Approx. 5,090,000 pixels		
Lens:	Carl Zeiss Vario-Tessar lens; 3x zoom; Focal length: 6.7 – 20.1 mm; 35mm Equivalent: 38 – 114 mm; Maximum Aperture: F3.5 – 4.4	LCD Monitor:	2.5" (6.2 cm) 211K Pixels (960 x 220) Low Temperature Polysilicon TFT
Zoom:	3X Optical 4X Smart Zoom (at VGA resolution) 12X Total Smart Zoom 2X Precision Digital Zoom 6X Total Precision Digital Zoom	Video Output:	NTSC/PAL Selectable
Exposure Control:	Automatic, Twilight Mode, Twilight Portrait Mode, Landscape Mode, Beach Mode, Snow Mode, High Shutter Speed Mode, Fireworks Mode	MPEG Movie Mode:	MPEG VX Fine (640 x 480, 30 fps) MPEG VX Standard (640 x 480, 16 fps) Video Mail (160 x 120, 8fps) All modes include audio
ISO:	Auto, 100, 200, 400	Microphone/Speaker:	Yes/Yes
White Balance:	Auto, Daylight, Cloudy, Fluorescent, Incandescent, Flash	Battery:	InfoLithium® NP-FT1 (3.6 V, 2.4 Wh, 680 mAh)
Focus:	5 Area Multi-Point AF, Center AF or Spot AF, Manual focus select	Supplied Accessories:	NP-FT1 InfoLithium® Rechargeable Battery MSA-32A 32 MB Memory Stick Duo card UC-TA USB Cradle with High Speed USB 2.0 interface, A/V output and DC input AC-LM5 AC Adaptor/In-Camera Charger MSAC-M2 Memory Stick Duo Adapter AC Power Cord A/V Cable USB Cable Wrist Strap Software CD-ROM Operating Instructions
Exposure Correction:	±2.0 EV, 1/3 EV Step		
Flash Modes:	Auto/Forced On/Forced Off/; Red Eye Reduction On/Off	Dimensions:	3-5/8 x 2-3/8 x 7/8 inches (91 x 60 x 21 mm)
Flash Effective Range:	Recommended distance with ISO sensitivity set to Auto: WIDE: 12" to 5' (0.3 m to 1.5 m); TELE: 20" to 5' (0.5 m to 1.5 m)	Weight:	6.3 oz. (180 g) with battery pack, media and wrist strap
Picture Effects:	Solarize, Sepia, Negative Art		
File Format:	Still images, Exif Ver. 2.2, JPEG compliant, DPOF compatible Audio with still image: MPEG1 compliant (monaural) Movies: MPEG1 compliant (monaural audio)		

SONY®

Sony Electronics Inc.
16765 West Bernardo Drive
San Diego, CA 92127
1-800-295-7669
www.sony.com/di

© 2004 Sony Electronics Inc. Reproduction in whole or in part without written permission is prohibited. All rights reserved. Features and specifications are subject to change without notice. Non-metric weights and measures are approximate. TV reception is simulated. Sony, Cyber-shot, InfoLithium, Like No Other, Memory Stick, Memory Stick PRO, the Memory Stick logo and Super HAD are trademarks of Sony. Carl Zeiss and Vario-Tessar are trademarks of Carl Zeiss. All other trademarks are property of their respective owners.

* Available storage capacity of Memory Stick Duo™ and Memory Stick PRO Duo™ media may vary. A portion of the memory is used for data management functions. Actual available memory in MBs is: 32=30, 64=61, 128=123, 256=220, 512=460.