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ideas for life

2004
DIGITAL CAMERA



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DIGITAL
NETWORKING

LUMIX



Enter a new realm of imagery with LUMIX. Leica and Panasonic technologies join to create a masterpiece.

In digital photography, the key to creating beautiful images goes beyond just the number of pixels. The lens that "sees" the image and the digital technology that processes it are as important. That's why LUMIX digital cameras feature Leica DC lenses,

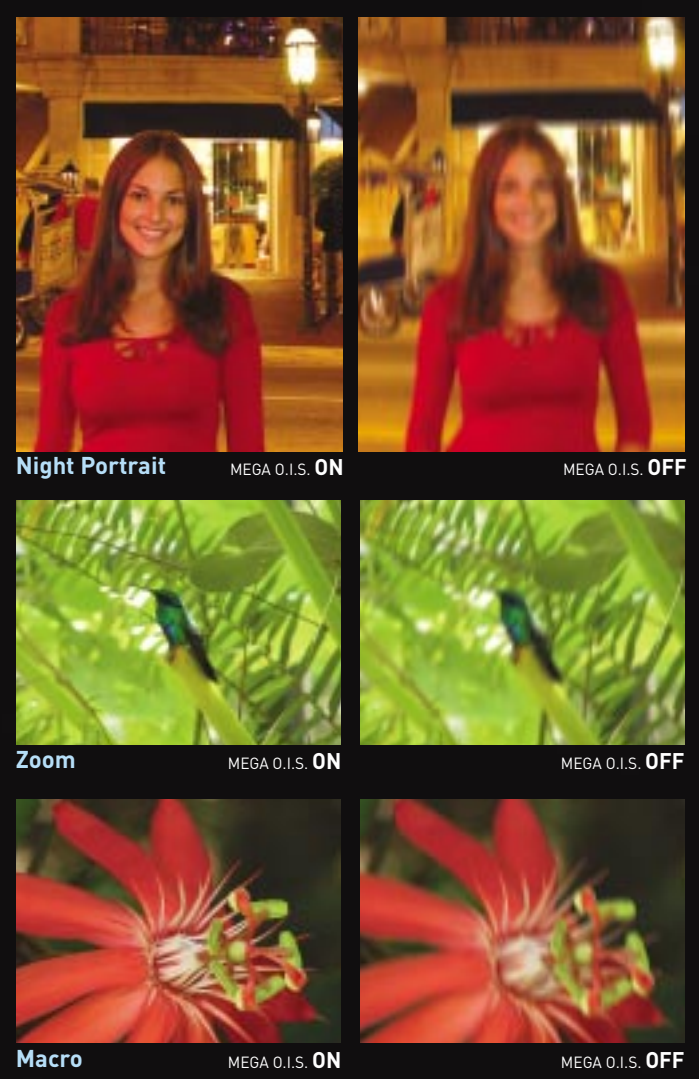
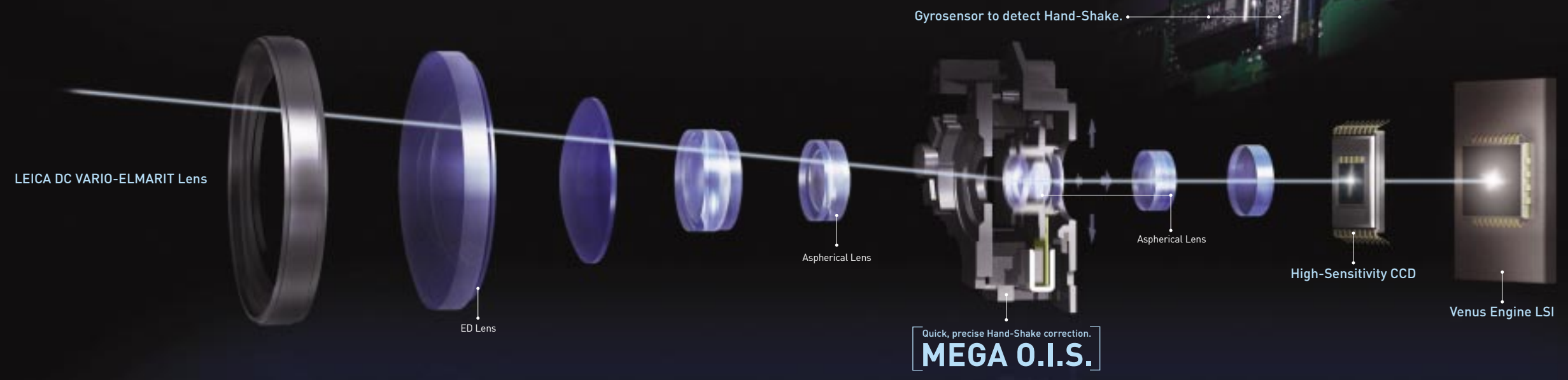
which incorporate the advanced optics that make Leica Camera AG one of the most distinguished names in the camera world. When combined with the exclusive Panasonic Venus Engine LSI superb images are rendered time after time with quick, responsive performance. Further refinements are made by the MEGA Optical Image Stabilizer to help keep images razor sharp even if there's unintentional hand-shake or while shooting in low light. The result is bold, exceptional images born of fine optics and exquisite technology. Pixels are only part of the story. True photography begins with a masterful balance of art and science. Perfect digital technology. Perfect lens. Perfect pictures. LUMIX digital cameras.



The Pinnacle of Expressiveness

LUMIX **LEICA DC LENS**

MEGA O.I.S. corrects for Hand-Shake to give you clear, sharp images.



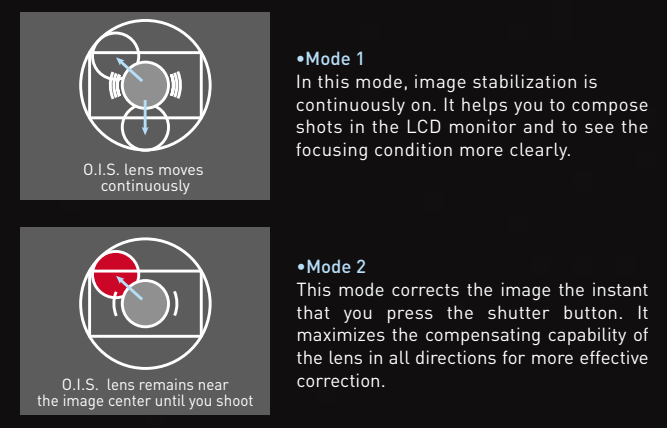
Clear, sharp images.

MEGA O.I.S.

(Optical Image Stabilizer)

When shooting with a lightweight digital camera, unintentional hand-shake can result in blurry images, particularly with telephoto shots. LUMIX cameras solve this problem with an advanced MEGA O.I.S. (optical image stabilizer) technology. In the event that hand-shake is detected by the built-in gyrosensor, a signal is relayed to a microcomputer, which instantly calculates the amount of compensation needed. A linear motor then shifts O.I.S. lens as necessary to guide incoming light from the image straight to the CCD. This entire process—detection, calculation, lens adjustment—takes less than a hundredth of a second so you can't even tell it's happening. All you'll notice are beautiful, sharp images. And, with MEGA O.I.S., you can expand your shooting possibilities. For example, using the MEGA O.I.S. and a slow shutter speed, you can shoot a sunset scene or take shots in dim indoor lighting and capture all the mood and atmosphere. You won't even have to worry about the extra hand-shake that occurs at slower shutter speeds.

The DMC-FX5, DMC-FX1 and DMC-FZ10 have two correction modes. In Mode 1 image stabilization is continuously on, in Mode 2 it turns on only when you take a picture.

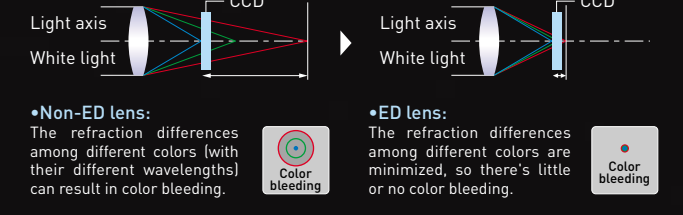


Night Portrait MEGA O.I.S. ON MEGA O.I.S. OFF
Zoom MEGA O.I.S. ON MEGA O.I.S. OFF
Macro MEGA O.I.S. ON MEGA O.I.S. OFF

A tradition of excellence.

Leica DC Lenses

The Elmarit and Summicron lenses made by Leica Camera AG of Germany have earned the acclaim of top photographers everywhere. Now some of the same cutting-edge technologies that make these lenses so exceptional have been adapted to the digital camera. Presenting the LEICA DC VARIO-ELMARIT and LEICA DC VARIO-SUMMICRON—two lenses that inherit the traits that make Leica a legend in the camera world. Small in size yet featuring a large, bright aperture, each of these lenses meets Leica's stringent quality standards. In fact, the DMC-FZ10 goes a step further by using ED (extra-low dispersion) glass in its lens, which helps minimize the refraction differences among light of different wavelengths. This helps to suppress the color bleeding that often occurs in telephoto shots, giving you crisp, vivid images no matter how far you've zoomed in on your subject.



Minimal Spherical Aberration
Use of some aspherical lenses virtually eliminates spherical aberration. The result is extremely precise image rendering with minimal distortion, even in wide-angle shots.

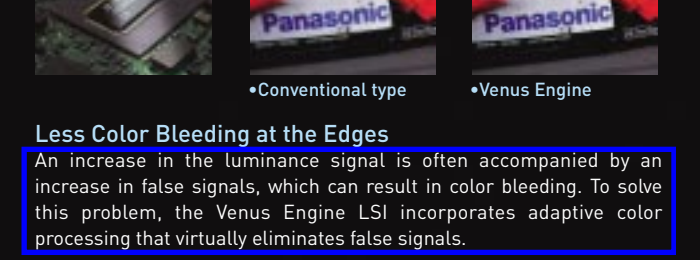
Sharp Resolution All the Way to the Edges
Even enlarged images captured with a Leica DC lens are crisp and clear right to the edges.

Less Flare or Ghosts
A Leica multi-coating process applied to the lens helps to prevent the fogging caused by flare and ghosts that can result from excessive light.

High-speed, high-quality image processing.

Venus Engine LSI

50% Increase in Diagonal Resolution
Whereas some conventional image processing systems generate the luminance signal using only the green component, the Venus Engine LSI uses all three color components - red, green and blue. This helps to increase the luminance signal data in the diagonal direction by about 50%, for fine image rendering and great detail.



Less Color Bleeding at the Edges
An increase in the luminance signal is often accompanied by an increase in false signals, which can result in color bleeding. To solve this problem, the Venus Engine LSI incorporates adaptive color processing that virtually eliminates false signals.

Crisp Detail, Even in Dark Portions of the Image
A noise reduction circuit helps to suppress the noise of the image, giving you sharp, beautiful pictures.

Quick Response - So You're Ready to Shoot
The Venus Engine LSI handles all processes from receiving the CCD data to writing it, in parallel, onto the SD Memory Card. As a result, shutter time lag is reduced to just 0.1 second. The shutter interval (the time it takes to shift to the next shot) is short too - one second or less.

*Leica is a registered trademark of Leica Microsystems IR GmbH. The Leica DC lenses are manufactured using measurement instruments and quality assurance systems that have been certified by Leica Camera AG based on the company's quality standards.

FZ10

4 Megapixels, 12x Optical Zoom
LEICA DC VARIO-ELMARIT Lens

Color: -S (Silver), -K (Black)



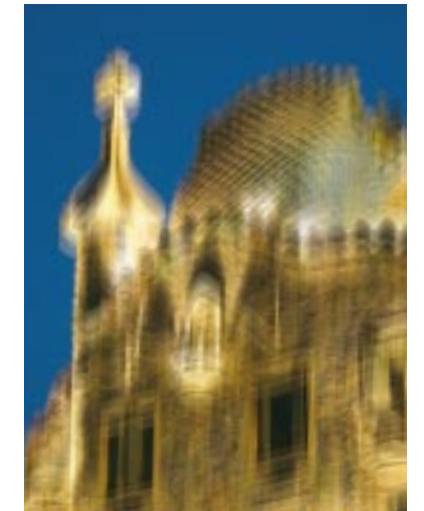
12x optical zoom with F2.8 brightness, plus 4-megapixel resolution and MEGA O.I.S. - for consistently beautiful images.

MEGA O.I.S. ON

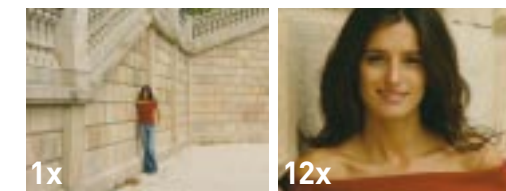


Program AE (shutter speed: 1/8 sec, aperture: F2.8)

MEGA O.I.S. OFF



With its high-powered 12x optical zoom; the FZ10 lets you capture the subtle nuances of subjects from a great distance away. And with 4-megapixel resolution and a MEGA O.I.S. (optical image stabilizer), it renders those subjects in sharp detail—even during hand-held zoom shots or while shooting in low light. The FZ10's lens system consists of 13 lenses in 8 groups, including 3 aspherical lenses. It provides outstanding F2.8 brightness across the entire zoom range. The FZ10 also features a new ED (extra-low dispersion) lens—similar to the kind used on high-end professional cameras—to help minimize imaging problems caused by color aberration. It all adds up to make your shots clear, bright and beautiful.



LEICA
DC LENS



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From full auto to manual-capturing images just the way you see them.



Manual [shutter speed:1/4 sec, aperture:F2.8]



Panning Mode [shutter speed:1/6 sec, aperture:F4.0] Sports Mode [shutter speed:1/500 sec, aperture:F4.0] Portrait Mode [shutter speed:1/15 sec, aperture:F2.8] Macro Mode [shutter speed:1/500 sec, aperture:F5.6] Night Portrait Mode [shutter speed:1 sec, aperture:F2.8]

8 shooting modes to cover most any shooting condition.
Mode Dial



Program AE Mode

This mode, which determines the optimal aperture and shutter speed settings for you, is ideal for normal snapshots and most shooting conditions. If you want to change the settings for a shot, simply use the Program Shift function.

A/S/M Mode

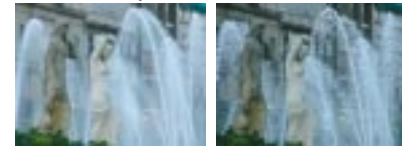
Select from three modes according to the effect you want to achieve. Aperture-Priority AE (A) lets you create a softer focus (set between F2.8 and F8.0); Shutter-Priority AE (S) allows you to freeze or express movement (set between 8 and 1/2000 sec.); and Manual Exposure (M) gives you full control over the aperture and shutter speed.

Aperture-Priority AE (A)



F2.8 F8.0

Shutter-Priority AE (S)



1/10 sec 1/160 sec

Manual Exposure Assist



When you choose to set the exposure manually, this function shows how much your setting differs from the setting the camera considers optimal.

Macro Mode

Enjoy dynamic, macro close-ups. You can focus on subjects as close as about 5cm from the lens.*
*When shooting with the lens at the wide-angle position.

Portrait Mode

This softly blurs the background while capturing the subject in a clear, sharp focus.

Sports Mode

Uses a higher shutter speed to catch fast-moving subjects.

Panning Mode

To capture a moving subject in clear detail while the background appears to flow by, Panning Mode lets the camera detect hand-shake and then automatically compensates for vertical jitter only. This imparts a feeling of high-speed motion.

Night Portrait Mode

The MEGA O.I.S. minimizes hand-shake at slow shutter speeds, to clearly capture subjects such as people and night landscapes.

Moving-Image Mode

This mode records 320x240-pixel moving images with audio at either 30 or 10 frames/sec. (QuickTime™ Motion JPEG). If you need to shoot great amounts of footage simply choose an optional, large-capacity SD Memory Card.

Playback Mode

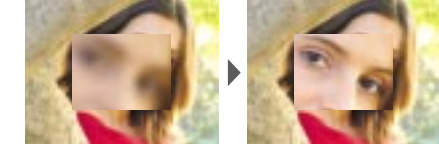
Enjoy functions such as slide shows, 9-window display, and enlarged views of the images.

Freely Change the Focusing Method

To manually focus a subject with the FZ10, simply flick the Focus button on the side of the lens to MF (manual focus). The One-Shot AF function in the MF mode also lets you focus automatically for a single shot by pressing the ∇ button.



Manual Focus Assist



Enlarges the center part of the image in the viewfinder or LCD monitor by 3x, making it easy to get a perfect manual focus.

Digital Zoom* plus Optical Zoom: Combined 36x Zoom Power

Use the 3x digital zoom together with the 12x optical zoom and you've got ultra-powerful 36x zooming. That approximates a huge 1260mm lens on a 35mm camera.

*As digital magnification increases, resolution significantly decreases.



1x [35mm equivalent: 35mm] 3x [35mm equivalent: 105mm] 6x [35mm equivalent: 210mm] 9x [35mm equivalent: 315mm] 12x [35mm equivalent: 420mm] 36x 12xOptical 3xDigital

Functions for creativity.



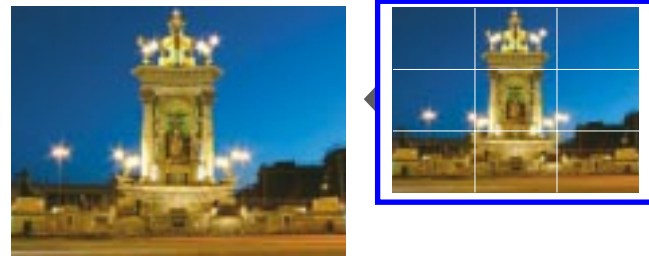
Standard Mode [7 frames max.]

Up to 7 images at 4 frames/sec. at full-resolution. **MEGA BURST Consecutive Shooting***

*Up to 5 images in Fine Mode

Helps with shot composition. **Composition Guide Lines**

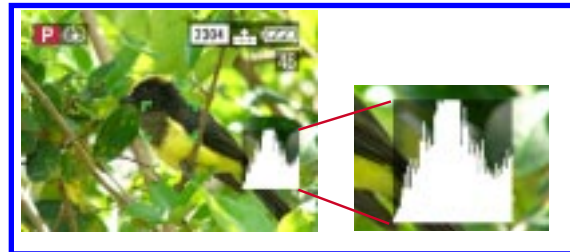
Displayed in the viewfinder and LCD, these thin horizontal and vertical lines make it easy for you to compose your shots or to hold the camera level.



Aperture-Priority AE [shutter speed:1/600 sec, aperture:F3.3]

Instant confirmation of shooting performance. **Real-Time Histograms**

This graph, which can be displayed in the LCD monitor as you line up the shot, shows the status of the exposure and contrast in real-time.



Program AE [shutter speed:1/20 sec, aperture:F2.8]

Set color tones to match the light source.

White Balance

Choose from six white balance fine adjustment settings: Auto, Daylight, Cloudy, Halogen, Flash, and White Set. When there are several different light sources and it's difficult to get the exact coloration you want, you can also fine-tune the photo by adding bluish or reddish tones, in up to ± 5 steps of 300K each.*

*Fine-tuning is not possible in Auto Mode.



Bluish

Normal

Reddish

Delivers beautiful, low-light images.

Outstanding Flash Shots

The FZ10 is equipped with a built-in multifunctional flash that features Auto, Auto/Red-Eye Reduction, Slow Sync./Red-Eye Reduction, Slow Sync., and Forced On/Off. The flash intensity can be adjusted within a range of ± 2 EV. If desired, you also can mount the optional DMW-FL28 external flash onto the FZ10.

Auto Bracketing*

This lets you pick the best shot from different, automatically graduated exposures. * $\pm 1/3 - 1$ EV step, 3 frames

Two Metering Modes

In Intelligent Multiple Metering mode, the FZ10 measures the light at different points over the entire image to achieve a balanced exposure setting. In Spot mode, the FZ10 measures the light at a particular spot in the image and sets the exposure accordingly.

Picture Adjustment

The FZ10 lets you adjust the sharpness, saturation, and contrast, each in three steps.

Functions for added fun

Color Effect Mode

Alter the coloring effect to your liking.

Flip Animation

Using up to 100 of your photos, you can create a "flip animation" clip up to 20 seconds long.

Zoom Auto Review

This function shows you an enlarged view of the image right after you shoot, to make it easier to check the focus.

Exposure Compensation*

Adjust the exposure setting to create a particular image. *1/3 EV step, ± 2 EV

ISO Sensitivity Settings

You can choose light-receiving sensitivity from Auto/50/100/200/400.

Self-Timer

You can use either a 10-second or 2-second setting.

Color EVF

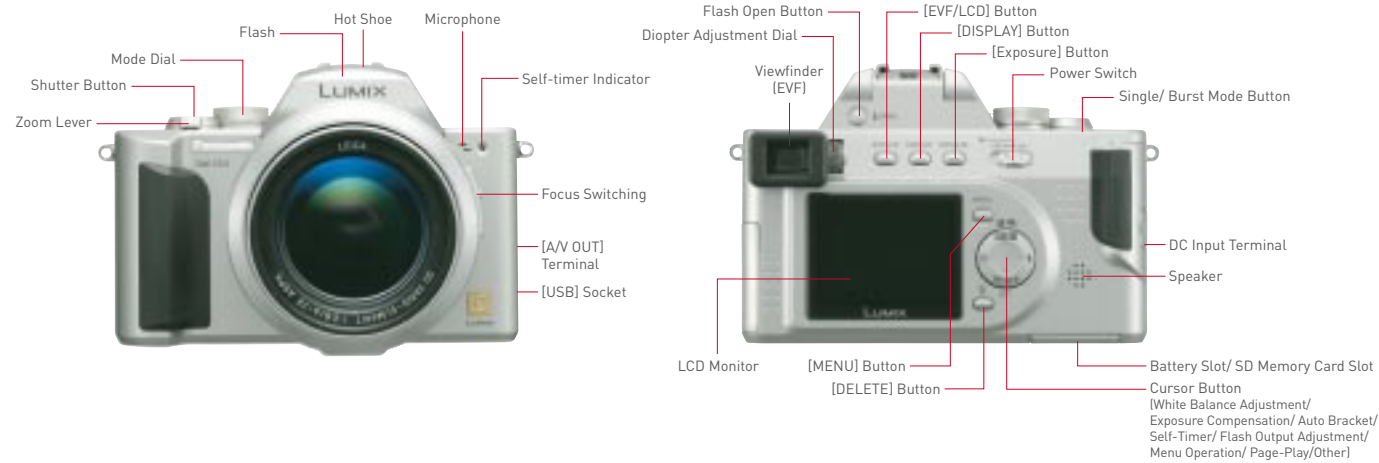
The viewfinder with diopter adjustment lets you see your subject in full-color.

[Standard Accessories]

• Battery Charger/AC Adaptor • Battery Pack • SD Memory Card (16MB) • AC Cable • DC Cable • Lens Cap • Lens Hood • A/V Cable • USB Connection Cable • Strap • CD-ROM



Main Parts and Controls



12x optical zoom lens, F2.8 brightness and MEGA O.I.S.
– in a super-compact package.

FZ2

2 Megapixels, 12x Optical Zoom
LEICA DC VARIO-ELMARIT Lens
Color: -S (Silver), -K (Black)



A small camera with 12x optical zoom and F2.8 brightness.

The FZ2's LEICA DC VARIO-ELMARIT lens is small and lightweight yet delivers the same zoom power as a big, heavy 400mm-class lens. This lens system consists of 13 lenses in 8 groups, with 3 aspherical lenses and a total of 4 aspherical surfaces. With outstanding F2.8 brightness across the entire zoom range, this fine lens renders exquisite images, even when the subject is a far away.

8 shooting modes to cover every shooting condition.

Mode Dial



- ♥ Simple Mode
- 📷 Panning Mode
- 📷 P/A/S P/A/S Mode
- 📷 Night Portrait Mode
- 🌿 Macro Mode
- 📷 Moving-Image Mode
- 👤 Portrait Mode
- ▶ Playback Mode
- 🏃 Sports Mode

Aperture-Priority AE (A)

This gives portraits and other shots a soft, delicate-focus effect.

Shutter-Priority AE (S)

Ideal for capturing fast-moving subjects, such as sports.

Functions for added fun

Up to 7 images at 4 frames/sec. at full-resolution.

MEGA BURST Consecutive Shooting*

*Up to 5 images in Fine Mode

Set color tones to match the light source.

White Balance

Choose from five white balance fine adjustment settings: Auto, Daylight, Cloudy, Halogen, and White Set. When there are several different light sources, making it difficult to get the exact coloration you want, you can also fine-tune the photo with bluish or reddish tones, in up to ± 5 steps of 300K each.*

*Fine-tuning is not possible in Auto Mode.

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Conversion Lenses Broaden Your Creative Possibilities



Wide Conversion Lens

Allows shooting at 0.8x with F2.8 brightness across the entire 28mm to 56mm range (35mm lens equivalent). Lets you take photos with excellent perspective.



35mm: Wide-angle setting



28mm: With optional, wide-angle conversion lens mounted



DMW-LWZ10 (Optional)



Tele Conversion Lens

Allows shooting at 1.5x with F2.8 brightness across the entire 315mm to 630mm range (35mm lens equivalent). Lets you take powerful telephoto shots.



420mm: Telephoto setting



630mm: With optional, telephoto conversion lens mounted



DMW-LTZ10 (Optional)

Continuous AF This allows for clear, sharp focus, even for moving subjects.

Auto Bracketing* This lets you pick the best shot from different, automatically graduated exposures. * $\pm 1/3$ -1 EV step, 3 frames

Intelligent Multiple Metering Mode* This helps to select the accurate exposure. *Spot metering is also possible (Spot Mode).

Picture Adjustment

Offers three image quality modes to suit your artistic needs.

Color Effect Mode Alter the coloring effect to your liking.

Exposure Compensation*

This lets you choose your settings for special conditions. * $1/3$ EV step, ± 2 EV

Pop-Up Digital Flash Wide flash-setting range.

ISO Sensitivity Settings

You can choose light-receiving sensitivity from Auto/50/100/200/400.

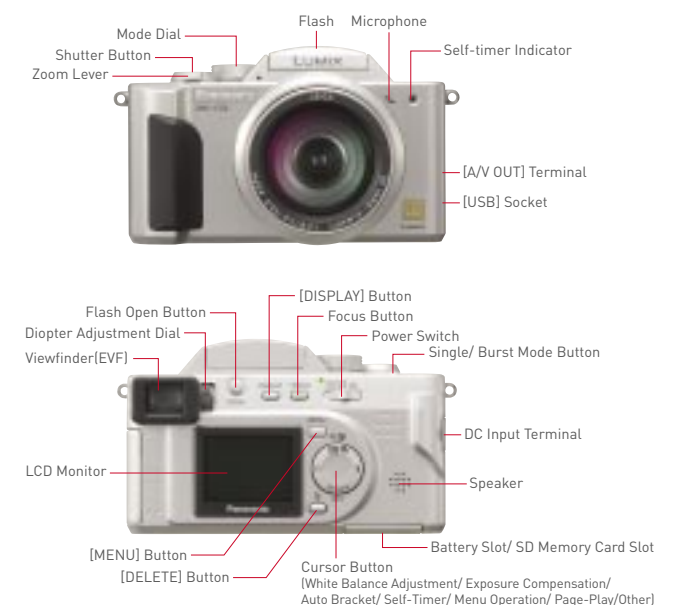
Self-Timer You can use either a 10-second or 2-second setting.

[Standard Accessories]

•Battery Charger/ AC Adaptor •Battery Pack •SD Memory Card (8MB) •AC Cable •DC Cable •Lens Cap •Lens Hood •Lens Hood Adaptor •A/V Cable •USB Connection Cable •Strap •CD-ROM



Main Parts and Controls



FX5

4 Megapixels, 3x Optical Zoom
LEICA DC VARIO-ELMARIT Lens

Color: -S (Silver), -A (Blue)



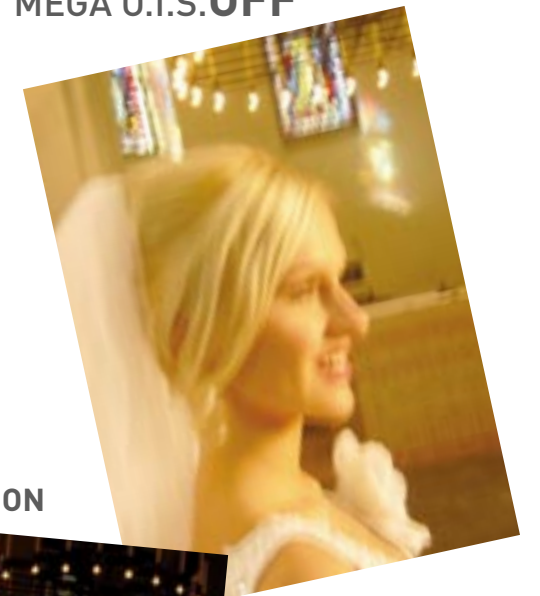
Small size, sleek design and the tack-sharp performance of MEGA O.I.S.

MEGA O.I.S. ON



Portrait Mode [shutter speed:1/8sec, aperture:F2.8]

MEGA O.I.S. OFF



Flash ON



Using a flash indoors can make the lighting look artificial and the background dark. With no flash, though, the slower shutter speed invites hand-shake. MEGA O.I.S. corrects the shaking to give you clear, sharp indoor shots even at slow shutter speeds.

The LUMIX FX5 digital camera is the perfect way to capture simple everyday moments or special once-in-a-lifetime events. That's because, beneath its compact and sleek exterior, this versatile camera packs a wealth of advanced technology. The remarkable Panasonic MEGA O.I.S. (optical image stabilizer) corrects for hand-shake to deliver crisp photos, even while shooting in dim lighting. The LEICA DC VARIO-ELMARIT lens system (with 7 lenses in 6 groups, including 3 aspherical lenses) provides superb image rendering and 3x optical zoom power. When combined with a 4-megapixel and our advanced Venus Engine LSI, images are recorded with breathtaking clarity. It's all here in the FX5. Handy size, convenient features and, most importantly, incredible image quality.

LEICA
DC LENS



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A compact camera that's big on creative options.



Simple Mode [shutter speed:1/50 sec, aperture:F4.6]



Normal Picture Mode [shutter speed:1/250 sec, aperture:F2.8]



Portrait Mode [shutter speed:1/80 sec, aperture:F2.8]



Night Portrait Mode [shutter speed:1/8 sec, aperture:F2.8]



Macro Mode [shutter speed:1/8 sec, aperture:F2.8]



Landscape Mode [shutter speed:1/500 sec, aperture:F3.7]



A single, easy-to-use dial for beautiful shots in most any situation.

Mode Dial

Simple Mode

All settings are made automatically. In this mode, even novices can take beautiful photographs by simply pressing the shutter button.

Playback Mode

Enjoy functions such as slide shows, 9-window display, and enlarged views of the images.

Normal Picture Mode (Program AE)

The camera automatically sets the aperture and shutter speed according to the subject's brightness. You can also adjust the white balance, ISO sensitivity, and other settings* to make your photos look their very best.

*Settings for these options can be adjusted in all modes except Simple and Moving-Image modes.

Macro Mode

Enjoy dynamic, macro close-ups. You can focus on subjects from about as close as 10 cm from the lens.*

*When shooting with the lens at the wide-angle position.

Portrait Mode

This mode helps you take beautiful portraits by adjusting the exposure and coloration to produce natural, true-to-life skin tones.

Landscape Mode

This mode provides quick focusing and crisp detail, for beautiful photos of scenery.

Night Portrait Mode

The MEGA O.I.S. helps minimize hand-shake at slow shutter speeds, to beautifully capture subjects such as people or night landscapes.

Self-Portraits

Simply aim the camera at yourself and the LED will light up to tell you when you're in focus. Then, after you press the shutter button, you can see the results right away on the LCD.



Moving-Image Mode

This mode records 320x240-pixel moving images with audio at either 30 or 10 frames/sec, (QuickTime™ Motion JPEG). If you need to shoot great amounts of footage simply choose an optional, large-capacity SD Memory Card.

Digital Zoom* and Optical Zoom for 9x Zoom Power

Use the 3x digital zoom together with the 3x optical zoom to enjoy up to 9x zoom power—that approximates a 315mm zoom lens on a 35mm camera.

*As digital magnification increases, resolution significantly decreases.



1x



3x

Instant confirmation of shooting performance.

Real-Time Histograms

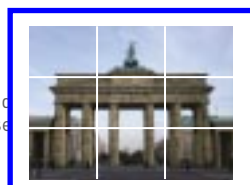
This graph, which can be displayed in the LCD monitor as you line up the shot, shows the status of the exposure and contrast in real-time.



Helps with shot composition.

Composition Guide Lines

Displayed in the LCD, these thin horizontal and vertical lines make it easy for you to compose your shots or to hold the camera level.



Set color tones to match the light source.

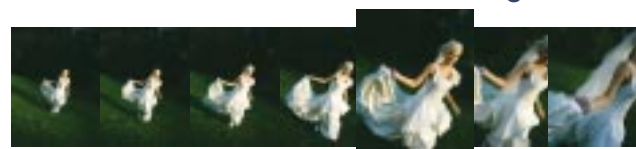
White Balance

Choose from five white balance fine adjustment settings: Auto, Daylight, Cloudy, Halogen, and White Set. When there are several different light sources and it's difficult to get the exact coloration you want, you can also fine-tune the photo by adding bluish or reddish tones, in up to ± 5 steps of 300K each.*

*Fine-tuning is not possible in Auto Mode.

Shoot up to 7 images at 4 frames/sec. at full-resolution.

MEGA BURST Consecutive Shooting*



*In Standard Mode, Up to 5 images in Fine Mode [FX5].
Up to 8 images at 4 frames/sec. in Standard Mode, and up to 5 images at 4 frames/sec. in Fine Mode [FX1].

Stylish and compact.

Aluminum Alloy Body

The FX5's slim, elongated and lightweight body gives you a firm grip for stable shooting. Shaped to slip into a pocket, the compact FX5 is easy to take everywhere you go.

Create frame-by-frame animations.

Flip Animation

Using up to 100 of your photos, you can create a "flip animation" clip up to 20 seconds long.

Automatically graduated exposures.

Auto Bracketing* $\pm 1/3$ -1EV step, 3 frames

Select the picture tone to match your creative vision.

Picture Adjustment •Natural •Standard •Vivid

Alter the coloring effect to your liking.

Color Effect Mode

•Black & White •Cool •Warm

Functions for added fun

Zoom Auto Review

Right after you shoot, see an enlarged view of the image.

AF Trigger

Lets you pre-focus on a specific area before you take the shot.

Economy Mode

Decreases the LCD power consumption and automatically turns the LCD off if the camera is not used for about 15 seconds.

Audio Recording

Add 5 seconds of sound to pictures, as you shoot. Or, if you prefer, add up to 10 seconds of sound after shooting.

Flash

Choose the ideal flash for most any situation.

Self-Timer

You can use either a 10-second or 2-second setting.

Exposure Compensation*

Adjust the exposure setting to create a particular image. *1/3 EV step, ± 2 EV

ISO Sensitivity Settings*

You can choose light-receiving sensitivity from Auto/50/100/200.

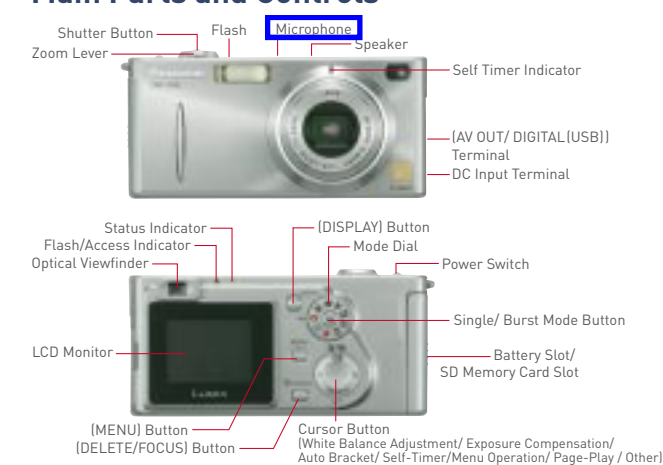
*In FX1, a setting of ISO400 is also possible.

[Standard Accessories]

•Battery Charger/AC Adaptor •Battery Pack •SD Memory Card [16MB]
•AC Cable •DC Cable •AV Cable •USB Connection Cable •Strap •CD-ROM



Main Parts and Controls



3.2 Megapixels and MEGA O.I.S. for clear, beautiful images.
And a choice of three stylish colors.

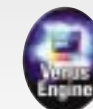
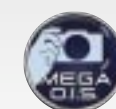
FX1

3.2 Megapixels, 3x Optical Zoom
LEICA DC VARIO-ELMARIT Lens

Color: -S (Silver), -R (Red), -A (Blue)



LEICA
DC LENS



Super-compact models with super-high image quality.
 And long-lasting power from "AA" size batteries.

LC70/50

LC70 4 Megapixels, 3x Optical Zoom
 LEICA DC VARIO-ELMARIT Lens
 Color: -S(Silver)

LC50 3.2 Megapixels, 3x Optical Zoom
 LEICA DC VARIO-ELMARIT Lens
 Color: -S(Silver)



A single, easy-to-use dial for beautiful shots in most any situation.
Mode Dial

Simple Mode
 All settings are made automatically. In this mode, even novices can take beautiful photographs by simply pressing the shutter button.

Playback Mode
 Enjoy functions such as slide shows, 9-window display, and enlarged views of the images.

Normal Picture Mode (Program AE)
 The camera automatically sets the aperture and shutter speed according to the subject's brightness. You can also adjust the white balance, ISO sensitivity, and other settings* to make your photos look their very best.
 *Settings for these options can be adjusted in all modes except Simple and Moving-Image modes.

Economy Mode
 Decreases the LCD power consumption. Or if you do not use the camera for about 15 seconds in recording mode, the LCD monitor is turned off to save the power.

Macro Mode
 Enjoy dynamic, macro close-ups. You can focus on subjects from about as close as 10 cm from the lens.*
 *When shooting with the lens at the wide-angle position.

Portrait Mode
 This mode helps you take beautiful portraits by adjusting the exposure and coloration to produce natural, true-to-life skin tones.

Landscape Mode
 This mode provides quick focusing and crisp detail, for beautiful photos of scenery.

Night Portrait Mode
 Captures people and night landscapes clearly and beautifully.

Moving-Image Mode
 This mode records 320x240-pixel moving images with audio* at either 30 or 10 frames/sec, (QuickTime™ Motion JPEG). If you need to shoot great amounts of footage simply choose an optional, large-capacity SD Memory Card.
 *The LC50 is not equipped with audio.

Extended Shooting from Two "AA" Size Batteries

The LC70 and LC50 can each be conveniently run using two AA alkaline batteries. Depending on the conditions, a pair of these batteries can provide enough power to snap about 160 shots (based on the CIPA Standard). As an additional convenience, the LC70 and LC50 can also run on nickel-hydrate rechargeable batteries and provide many more consecutive shots. Two AA nickel-hydrate rechargeable batteries are supplied with the LC70 as a standard accessory.

Number of Recordable Pictures (Approx.)

	LCD ON (Based on the CIPA Standard*)	LCD OFF (LCD is set to OFF. Other items are the same as the CIPA Standard.)
AA(LR6) Alkaline Batteries (Supplied with the LC50 as a standard accessory.)	160 pictures	400 pictures
AA Ni-MH Rechargeable Batteries (Supplied with the LC70 as a standard accessory.)	320 pictures	850 pictures

Digital Zoom* and Optical Zoom for 9x Zoom Power

Use the 3x digital zoom together with the 3x optical zoom to enjoy up to 9x zoom power—that approximates a 315mm zoom lens on a 35mm camera.
 *As digital magnification increases, resolution significantly decreases.



Shoot up to 8 images at 3.5 frames/sec. at full-resolution.* MEGA BURST Consecutive Shooting

*In Standard Mode. Up to 5 images in Fine Mode (LC50).
 Up to 5 images at 3.3 frames/sec in Standard Mode, and up to 3 images at 3.3 frames/sec in Fine Mode (LC70).

Create frame-by-frame animations.

Flip Animation (LC70 only)

Using up to 100 of your photos, you can create a "flip animation" clip up to 20 seconds long.

*Shooting conditions: 23°C with 50% humidity; LCD on; using the enclosed SD Memory Card; starting to shoot 30 seconds after turning on the power; shooting once every 30 seconds with the flash in full operation for every other shot; changing the zoom setting from telephoto to wide, or wide to telephoto, for each shot; and temporarily turning the power off after each 10 shots (long enough to lower the battery temperature).



Normal Picture Mode [shutter speed:1/30 sec, aperture:F3.0]



Portrait Mode [shutter speed:1/60 sec, aperture:F4.6]



Landscape Mode [shutter speed:1/250 sec, aperture:F6.0]



Simple Mode [shutter speed:1/15 sec, aperture:F3.4]



Macro Mode [shutter speed:1/400 sec, aperture:F2.8]



Night Portrait Mode [shutter speed:1/8 sec, aperture:F2.8]

Instant confirmation of shooting performance.

Real-Time Histograms (LC70 only)

This graph, which can be displayed in the LCD monitor as you line up the shot, shows the status of the exposure and contrast in real-time.

Helps with shot composition.

Composition Guide Lines

Displayed in the LCD, these thin horizontal and vertical lines make it easy for you to compose your shots or to hold the camera level.

Right after you shoot, see an enlarged view of the image.

Zoom Auto Review

Select the picture tone to match your creative vision.

Picture Adjustment •Natural •Standard •Vivid

Set color tones to match the light source.

White Balance

Choose from five white balance fine adjustment settings: Auto, Daylight, Cloudy, Halogen, and White Set. When there are several different light sources and it's difficult to get the exact coloration you want, you can also fine-tune the photo by adding bluish or reddish tones, in up to ±5 steps of 300K each*. *Fine-tuning is not possible in Auto Mode.

Alter the coloring effect to your liking.

Color Effect Mode •Black & White •Cool •Warm

Functions for added fun

AF Trigger (LC70 only)

Lets you pre-focus on a specific area before you take the shot.

Audio Recording (LC70 only)

Add 5 seconds of sound to pictures, as you shoot. Or, if you prefer, add up to 10 seconds of sound after shooting.

Auto Bracketing*

Automatically graduated exposures. * ±1/3-1EV step, 3 frames

Exposure Compensation*

Choose your settings for special conditions.*1/3 EV step, ±2 EV

ISO Sensitivity Settings

You can choose light-receiving sensitivity from Auto/50/100/200/400.

Flash

Choose the ideal flash for most any situation.

Self-Timer

You can use either a 10-second or 2-second setting.

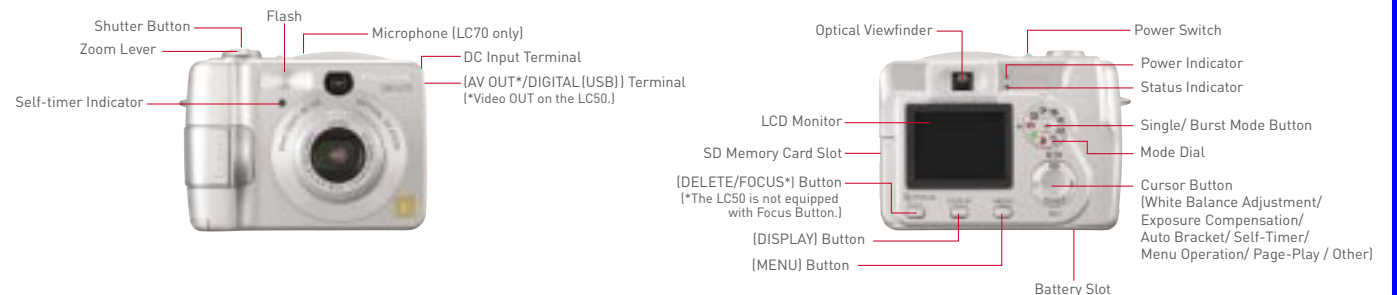
Trimming & Resizing

Let you trim the image, or reduce the amount of image data.

[Standard Accessories]

- Battery Charger (LC70 only) •AA Ni-MH Rechargeable Battery x2 (LC70 only) •AV Cable (LC70 only) •AA(LR6) Alkaline Battery x2 (LC50 only) •Video Cable (LC50 only) •SD Memory Card (16MB) •USB Connection Cable •Strap •CD-ROM

Main Parts and Controls



*Leica is a registered trademark of Leica Microsystems IR GmbH. The Leica DC lenses are manufactured using measurement instruments and quality assurance systems that have been certified by Leica Camera AG based on the company's quality standards.

LC1

5 Megapixels, 3.2x Optical Zoom
LEICA DC VARIO-SUMMICRON Lens
Color: -K[Black]



A joy to hold, a pleasure to use – the tool of an artist.

The LEICA DC VARIO-SUMMICRON lens: F2.0 to F2.4, 28mm to 90mm*1.



Manual Mode (M) [shutter speed:1/125 sec, aperture:F5.6]

Outstanding tone and gradation. Superior expressivity. A sublime soft focus with stunning depth and true-to-life ambience. The LUMIX DMC-LC1 delivers it all, providing a truly incomparable photographic experience that takes your photos to new heights. And the journey begins with the LEICA DC VARIO-SUMMICRON lens— heir to a tradition of optical excellence that makes Leica Camera AG a favorite among photographers around the world.

The stunning images captured by this fine lens are exquisitely rendered and faithfully recorded by the advanced Panasonic Venus Engine LSI. Quite simply, the LC1 has been engineered to be the finest photographic tool of its type. It's an impressive array of our best digital technologies, offering a wealth of automatic functions and the pure creative freedom of full manual operation. In every respect, it's been designed to serve as a natural extension of the hands and eyes of the true photography lover.



*1 Converted to 35mm equivalent.
*Leica is a registered trademark of Leica Microsystems IR GmbH.
The Leica DC lenses are manufactured using measurement instruments and quality assurance systems that have been certified by Leica Camera AG based on the company's quality standards.



Manual Mode (M) [shutter speed:1/250 sec, aperture:F5.7]

Manual Mode (M) [shutter speed:1/8 sec, aperture:F4.3]

The feel of a 35mm camera, the performance of a digital.

A Lens Worthy of the Renowned Summicron Name

The LEICA DC VARIO-SUMMICRON lens captures subjects in crisp, clear detail while giving shadows and highlights smooth, rich gradation. It conveys even the subtle moods and nuances that give a scene its emotional depth. The exquisite rendering of this fine lens, heir to Leica Camera AG's world-renowned optical technology, makes the LUMIX DMC-LC1 a tool of rare expressive power.

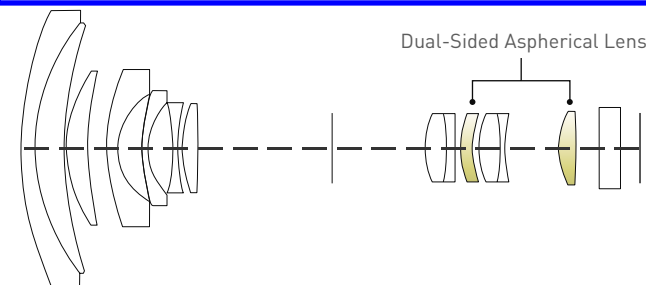


From 28mm wide angle to 90mm telephoto (converted to 35mm equivalent)

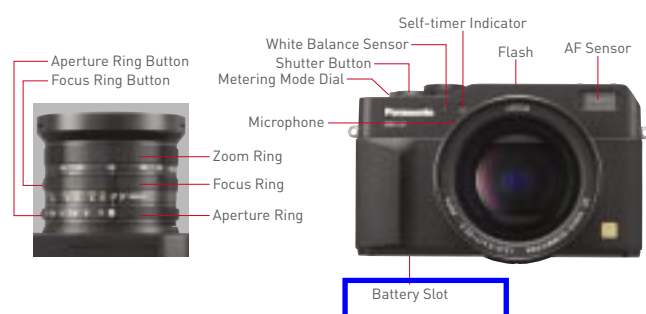
The LEICA DC VARIO-SUMMICRON lens boasts a wide-open aperture value of F2.0 at wide end and F2.4 at tele end. The large aperture is extremely helpful when shooting at higher shutter speeds or for giving backgrounds a gentle soft-focus. In addition, the camera provides 3.2x optical zooming, with a focal distance of 28mm to 90 mm (converted to 35mm equivalent). Together, the bright lens with the wide-angle to telephoto capabilities keep you ready for most any situation.

An Optical System with Aspherical Lenses and Multi-Coating

Featuring 13 lenses in 10 groups, the LC1's 3.2x optical zoom lens system renders sharp images from edge to edge with high contrast and rich colors. A total of 2 dual-sided aspherical lenses, produced using extremely sophisticated techniques, corrects the spherical aberration that can occur with some large-aperture lenses. In addition, a special multi-coating process on all surfaces reduces the surface reflection of each lens to diminish ghosts and flare, dramatically improving image clarity. The result is clear, vivid images with remarkably crisp transparency.



Main Parts and Controls



A Choice of Exposure Controls for Creative Shooting

Program AE Mode

In this mode the LC1 automatically determines the most appropriate exposure and adjusts the aperture setting and shutter speed accordingly. If you wish to change either setting, simply use Program Shift.



Aperture Priority AE Mode

This allows you to set the aperture between F2.0 and F11 (in 1/3 EV steps) to control the depth of field.

Shutter Priority AE Mode

This lets you set the shutter speed between 1/2000 seconds and 8 seconds (in 1 EV steps). It's great for catching a fast-moving subject in clear, sharp focus, or creating flowing "tracer" lines to convey the subject's motion.



Manual Mode

Sometimes to achieve a certain effect you need to manually set both the aperture and the shutter speed. The LC1 gives you the freedom of full manual control and even adds a Manual Exposure Assist function that displays the exposure value in the viewfinder or LCD.

Select Manual Focus and Shoot Like a Professional

Hybrid Auto Focus System

The LC1 has both an image feedback AF system and an additional AF sensor system. The sensor system acts first, quickly shifting the lens into a near focus position. Then the image feedback system takes over and provides precise focusing. This hybrid system assures high-speed focusing and sharp, detailed images.



Manual Focus

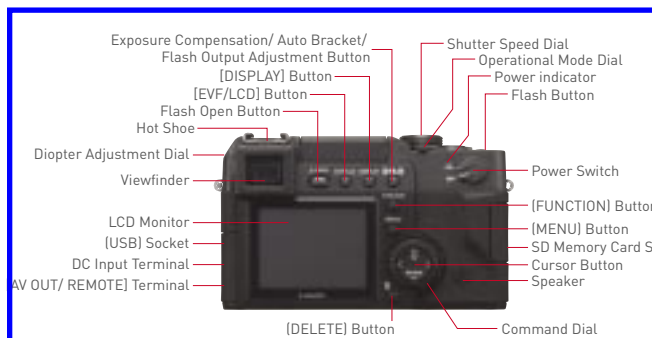
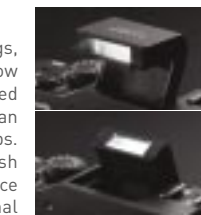
You can manually focus from 30 cm to infinity, according to your artistic intent. A Manual Focus Assist function magnifies the image, making it easier for you to check the focus. There are two assist modes. One shows the enlarged image only in the center of the screen, the other shows it over the entire screen.

Functions for added fun

For rich, well-lit photos.

Flash Light Adjustment

The LC1 flash offers several convenient settings, including Auto, Auto/Red-Eye Reduction, Slow Sync./Red-Eye Reduction, and Forced On/Off. You can adjust the flash intensity by ± 2 EV in 1/3 EV steps. And you can experiment with special flash techniques, like 2nd Curtain Synchro and Bounce Lighting. If desired, you can mount the optional DMW-FL28 external flash onto the LC1.



Easy to see even in daytime outdoor.

2.5" Polycrystalline TFT LCD Display (Transflective Type)

The 2.5" Polycrystalline TFT LCD Display provides a large view and clear, beautiful images. With 211,000 pixels, this monitor delivers all the resolution and detail you need for comfortable, accurate shooting.

Instant confirmation of shooting performance.

Real-Time Histograms

This graph, which can be displayed in the LCD monitor as you line up the shot, shows the status of the exposure and contrast in real-time.

Helps with shot composition.

Composition Guide Lines

Displayed in the viewfinder and LCD, these thin horizontal and vertical lines make it easy for you to compose your shots or to hold the camera level.

Three Metering Modes

In Intelligent Multiple Metering mode, the LC1 measures the light at points across the entire image to achieve a balanced exposure setting. You can also choose Center Weighted mode or Spot mode.

Picture Adjustment

The LC1 lets you adjust the sharpness, saturation, and contrast, each in three steps.

Set the color tones to match the light source.

White Balance

Choose from seven white balance fine-adjustment settings: Auto, Daylight, Cloudy, Halogen, Flash, Black&White, and White Set. The white balance sensor provides extremely accurate adjustment. When desired, you can also fine-tune the photo by adding bluish or reddish tones, in up to ± 5 steps of 300K each.*

*Fine-tuning is not possible in Auto and Black&White Modes.

Choose the shot with the correct exposure.

Auto Bracketing

In this mode, the camera automatically shoots either three or five shots, each with a different exposure. The exposure varies within a range of ± 1 EV in steps that vary from $\pm 1/6$ EV to ± 1 EV. After shooting, you can look at the results and keep the best shot.

RAW file mode*

You can get original image data, recording the image directly from the CCD without any image processing.

*RAW file format is designed for use in digital imaging applications, sold separately. You can, though, open RAW files with ArcSoft® PhotoImpression® in the supplied CD-ROM. As of writing, support for the Panasonic RAW file format is included in the latest version of the Camera Raw plug-in for Adobe® Photoshop®CS. For more information, access <http://www.adobe.com/>

USB 2.0 Interface(High-Speed)

The LC1 is USB2.0 compatible, so data can be transferred to a PC at speeds up to 480Mbps.

Remote Shutter (Included)

Prevents even slight shaking or vibration caused by contact with the camera.



MC Protector (Included)

Keeps your large-aperture lens safe.

Moving-Image mode

Records 320x240-pixel moving images with audio at 10 or 30 frames/sec.

[Standard Accessories]

- Battery Charger/AC Adaptor •Battery Pack •SD Memory Card (16MB)
- AC Cable •DC Cable •Lens Cap •Lens Hood •Hood Cap •AV Cable
- USB Connection Cable •MC Protector •Remote Shutter •Strap •CD-ROM



Options that give you more comfort, more creativity, more fun.

Wide Conversion Lens
DMW-LWZ10 (for FZ10)

Tele Conversion Lens
DMW-LW69 (for LC1)

Close-Up Lens
DMW-LTZ10 (for FZ10)

DMW-LC69 (for LC1)

ND Filter
DMW-LND72 (for FZ10) DMW-LND55 (for FZ2) DMW-LND69 (for LC1)

MC Protector
DMW-LMC72 (for FZ10) DMW-LMC55 (for FZ2)

Battery Pack
CGA-S002 (for FZ10, FZ2) CGA-S001 (for FX5, FX1) CGR-S602 (for LC1) DMW-FL28 (for FZ10, LC1)

PC Card Adaptor
BN-SDPC2E (for Windows®/98/2000/Me/XP)

USB Reader/Writer
BN-SDUSB2E (for Windows®/98/2000/Me/XP)

SD-CF Adaptor
BN-SDCF1E (for Windows®/98/2000/Me/XP)

SD Memory Card
512MB: RP-SDH512
256MB: RP-SDH256
128MB: RP-SD128
64MB: RP-SD64
32MB: RP-SD32

*Some accessories are not available in some countries.

Still Image Recording Capacity and Moving Image Recording Time

Pixels	Capacity	16MB		32MB		64MB		128MB		256MB		512MB	
		Fine	Standard	Fine	Standard	Fine	Standard	Fine	Standard	Fine	Standard	Fine	Standard
Still Image		8	16	17	34	35	70	72	142	144	283	291	571
1,600 x 1,200		17	34	36	72	74	149	150	301	300	600	604	1,209
1,280 x 960		22	43	47	90	96	184	195	372	390	743	785	1,497
640 x 480		69	129	145	270	298	553	602	1,118	1,200	2,229	2,418	4,491
1,920 x 1,080		17	34	36	72	74	149	150	301	300	600	604	1,209
Moving Image													
320 x 240	10 fps	75 sec		160 sec		350 sec		720 sec		1,450 sec		2,950 sec	
	30 fps	25 sec		55 sec		120 sec		240 sec		480 sec		1,020 sec	

Pixels	Capacity	16MB		32MB		64MB		128MB		256MB		512MB	
		Fine	Standard	Fine	Standard	Fine	Standard	Fine	Standard	Fine	Standard	Fine	Standard
Still Image		10	20	22	43	45	88	91	178	181	354	365	714
1,600 x 1,200		17	34	36	72	74	149	150	301	300	600	604	1,209
1,280 x 960		22	43	47	90	96	184	195	372	390	743	785	1,497
640 x 480		69	129	145	270	298	553	602	1,118	1,200	2,229	2,418	4,491
1,920 x 1,080		17	34	36	72	74	149	150	301	300	600	604	1,209
Moving Image													
320 x 240	10 fps	75 sec		160 sec		350 sec		720 sec		1,450 sec		2,950 sec	
	30 fps	25 sec		55 sec		120 sec		240 sec		480 sec		1,020 sec	

Pixels	Capacity	16MB		32MB		64MB		128MB		256MB		512MB	
		Fine	Standard	Fine	Standard	Fine	Standard	Fine	Standard	Fine	Standard	Fine	Standard
Still Image		15	29	31	61	64	125	130	252	260	503	523	1,014
1,600 x 1,200		22	43	47	90	96	184	195	372	390	743	785	1,497
640 x 480		69	129	145	270	298	553	602	1,118	1,200	2,229	2,418	4,491
Moving Image													
320 x 240	10 fps	80 sec		170 sec		350 sec		720 sec		1,450 sec		2,950 sec	
	30 fps	25 sec		55 sec		120 sec		240 sec		480 sec		1,020 sec	

Pixels	Capacity	16MB				32MB				64MB			
		RAW	Super Fine	Fine	Standard	RAW	Super Fine	Fine	Standard	RAW	Super Fine	Fine	Standard
Still Image		1	3	5	11	2	7	12	24	5	15	25	50
2,560 x 1,920		-	4	9	18	-	9	19	37	-	19	39	77
1,600 x 1,200		-	7	14	29	-	15	31	61	-	32	63	125
1,280 x 960		-	11	22	43	-	24	47	90	-	49	96	184
640 x 480		-	37	69	129	-	78	145	270	-	161	298	553
1,920 x 1,080		-	6	13	26	-	14	28	55	-	29	58	113
Moving Image													
320 x 240	10 fps	75 sec				160 sec				350 sec			
	30 fps	25 sec				55 sec				120 sec			

Pixels	Capacity	128MB				256MB				512MB			
		RAW	Super Fine	Fine	Standard	RAW	Super Fine	Fine	Standard	RAW	Super Fine	Fine	Standard
Still Image		11	30	51	101	23	61	102	202	46	123	206	408
2,560 x 1,920		-	40	79	156	-	80	159	312	-	161	320	628
1,600 x 1,200		-	65	128	252	-	131	255	503	-	264	515	1,014
1,280 x 960		-	100	195	372	-	200	390	743	-	403	785	1,497
640 x 480		-	326	602	1,118	-	650	1,200	2,229	-	1,309	2,418	4,491
1,920 x 1,080		-	60	118	230	-	120	236	459	-	241	476	924
Moving Image													
320 x 240	10 fps	720 sec				1,450 sec				2,950 sec			
	30 fps	240 sec				480 sec				1,020 sec			

These figures vary depending on the subject being photographed.

	FZ10	FZ2	FX5	FX1	LC70	LC50	LC1
Lens	LEICA DC VARIO-ELMARIT 13 elements in 8 groups (1 ED lens, 3 Aspherical lenses)	LEICA DC VARIO-ELMARIT 13 elements in 8 groups (3 Aspherical lenses)	LEICA DC VARIO-ELMARIT 7 elements in 6 groups (3 Aspherical lenses)	LEICA DC VARIO-ELMARIT 7 elements in 6 groups (3 Aspherical lenses)	LEICA DC VARIO-ELMARIT 7 elements in 6 groups (3 Aspherical lenses)	LEICA DC VARIO-ELMARIT 7 elements in 6 groups (3 Aspherical lenses)	LEICA DC VARIO-SUMMICRON 13 elements in 10 groups (2 Dual-sided aspherical lenses)
Optical Image Stabilizer	MEGA O.I.S. (Mode 1/Mode 2)	MEGA O.I.S.	MEGA O.I.S. (Mode 1/Mode 2)	MEGA O.I.S. (Mode 1/Mode 2)	—	—	—
Aperture	F2.8 (Wide to Tele)	F2.8 (Wide to Tele)	F2.8-4.9	F2.8-4.9	F2.8-4.9	F2.8-4.9	F2.0-2.4
Zoom	Optical: 12x Digital: 3x	Optical: 12x Digital: 3x	Optical: 3x Digital: 3x	Optical: 3x Digital: 3x	Optical: 3x Digital: 3x	Optical: 3x Digital: 3x	Optical: 3.2x Digital: 3x
Focal Distance	f=6-72mm (35mm Equiv.: 35-420mm)	f=6-65.2mm (35mm Equiv.: 35-420mm)	f=8-17.4mm (35mm Equiv.: 35-105mm)	f=8-17.4mm (35mm Equiv.: 35-105mm)	f=5.8-17.4mm (35mm Equiv.: 35-105mm)	f=5.8-17.4mm (35mm Equiv.: 35-105mm)	f=7.0-22.5mm (35mm Equiv.: 28-90mm)
Focusing Area	Normal: Wide 30cm/ Tele 200cm - Infinity Macro, A/S/M Mode: Wide 5cm/ Tele 200cm - Infinity	Normal: Wide 30cm/ Tele 200cm - Infinity Macro/Simple/A/S: wide 5cm/ Tele 120cm - Infinity	Normal: 50cm - Infinity Macro/Simple Mode: Wide 10cm/ Tele 30cm - Infinity	Normal: 50cm - Infinity Macro/Simple Mode: Wide 10cm/ Tele 30cm - Infinity	Normal: 50cm - Infinity Macro, Simple Mode: Wide 10cm/ Tele 50cm - Infinity	Normal: 50cm - Infinity Macro, Simple Mode: Wide 10cm/ Tele 50cm - Infinity	AF: 60cm - Infinity MF/AF-Macro: 30cm - Infinity
Camera Effective Pixels	4.0 Megapixels	2.0 Megapixels	4.0 Megapixels	3.2 Megapixels	4.0 Megapixels	3.2 Megapixels	5.0 Megapixels
Image Sensor	1/2.5", 4.2Total Megapixel CCD Primary Color Filter	1/3.2", 2.1Total Megapixel CCD Primary Color Filter	1/2.5", 4.2Total Megapixel CCD Primary Color Filter	1/2.5", 3.3Total Megapixel CCD Primary Color Filter	1/2.5", 4.2Total Megapixel CCD Primary Color Filter	1/2.5", 3.3Total Megapixel CCD Primary Color Filter	2/3", 5.2Total Megapixel CCD Primary Color Filter
Focus	Auto Focus System, Normal/Macro (Dial), Spot AF On/Off (Spot Mode), Continuous AF On/Off, Manual Focus (Ring), One-Shot AF	Auto Focus System, Normal/Macro (Dial), Spot AF On/Off (Spot Mode), Continuous AF On/Off, AF Trigger (Shutter/Focus button)	Auto Focus System, Normal/Macro (Dial), Spot AF On/Off (Spot Mode), AF Trigger (Shutter/Focus button)	Auto Focus System, Normal/Macro (Dial), Spot AF On/Off (Spot Mode), AF Trigger (Shutter/Focus button)	Auto Focus System, Normal/Macro (Dial), Spot AF On/Off (Spot Mode), AF Trigger (Shutter/Focus button)	Auto Focus System, Normal/Macro (Dial), Spot AF On/Off (Spot Mode)	Hybrid Auto Focus System with AF sensor, Normal/Macro (Ring), Spot AF On/Off (Spot Mode), Manual Focus (Ring)
ISO Sensitivity	Auto/50/100/200/400	Auto/50/100/200/400	Auto/50/100/200	Auto/50/100/200/400	Auto/50/100/200/400	Auto/50/100/200/400	Auto/100/200/400
White Balance	Auto/Daylight/Cloudy/Halogen/Flash/White Set, White Balance Adjustment (except for Auto Mode)	Auto/Daylight/Cloudy/Halogen/White Set, White Balance Adjustment (except for Auto Mode)	Auto/Daylight/Cloudy/Halogen/White Set, White Balance Adjustment (except for Auto Mode)	Auto/Daylight/Cloudy/Halogen/White Set, White Balance Adjustment (except for Auto Mode)	Auto/Daylight/Cloudy/Halogen/White Set, White Balance Adjustment (except for Auto Mode)	Auto/Daylight/Cloudy/Halogen/White Set, White Balance Adjustment (except for Auto Mode)	Auto/Daylight/Cloudy/Halogen/Flash/B&W/White Set, White Balance Adjustment (except for Auto and B&W Modes)
Exposure	Program AE (Program Shift/P Mode), Aperture Priority AE, Shutter Priority AE, Manual	Program AE (Program Shift/P Mode), Aperture Priority AE, Shutter Priority AE	Program AE	Program AE	Program AE	Program AE	Program AE (Program Shift/P Mode), Aperture Priority AE, Shutter Priority AE, Manual
Exposure Compensation	1/3 EV step, -2 - +2 EV	1/3 EV step, -2 - +2 EV	1/3 EV step, -2 - +2 EV	1/3 EV step, -2 - +2 EV	1/3 EV step, -2 - +2 EV	1/3 EV step, -2 - +2 EV	1/3 EV step, -2 - +2 EV
Auto [AE] Bracketing	±1/3 EV -1EV step, 3 frames	±1/3 EV -1EV step, 3 frames	±1/3 EV -1EV step, 3 frames	±1/3 EV -1EV step, 3 frames	±1/3 EV -1EV step, 3 frames	±1/3 EV -1EV step, 3 frames	±1/6 EV -1EV step, 3 or 5 frames
Light Metering	Intelligent Multiple/Spot (Spot Mode)	Intelligent Multiple/Spot (Spot Mode)	Intelligent Multiple/Spot (Spot Mode)	Intelligent Multiple/Spot (Spot Mode)	Intelligent Multiple/Spot (Spot Mode)	Intelligent Multiple/Spot (Spot Mode)	Intelligent Multiple/Spot (Spot Mode)
Scene Mode	P, A/S/M mode (menu selectable), Macro, Portrait, Sports, Panning, Night portrait, Moving-image	Simple, P/A/S mode, Macro, Portrait, Sports, Panning, Night portrait, Moving-image	Simple, Normal Picture, Macro, Portrait, Landscape, Night portrait, Self-portrait, Moving-image	Simple, Normal Picture, Macro, Portrait, Landscape, Night portrait, Self-portrait, Moving-image	Simple, Normal Picture, Economy, Macro, Portrait, Landscape, Night portrait, Moving-image	Simple, Normal Picture, Economy, Macro, Portrait, Landscape, Night portrait, Moving-image	—
Shutter Speed	8-1/2000 sec.	8-1/2000 sec.	8-1/2000 sec.	8-1/2000 sec.	8-1/2000 sec.	8-1/2000 sec.	Program AE / Aperture Priority AE: 2-1/4,000 sec. Shutter Priority AE / Manual: 8-1/2000 sec.
Self Timer	10 sec./2sec.	10 sec./2sec.	10 sec./2sec.	10 sec./2sec.	10 sec./2sec.	10 sec./2sec.	10 sec./2sec.
Picture Adjustment	Contrast, Sharpness, Saturation	Natural, Standard, Vivid	Natural, Standard, Vivid	Natural, Standard, Vivid	Natural, Standard, Vivid	Natural, Standard, Vivid	Contrast, Sharpness, Saturation
Color Effect Mode	Cool, Warm, Black & White	Cool, Warm, Black & White	Cool, Warm, Black & White	Cool, Warm, Black & White	Cool, Warm, Black & White	Cool, Warm, Black & White	—
Recording Image Size	2,304 x 1,728 pixels, 1,600 x 1,200 pixels, 1,280 x 960 pixels, 640 x 480 pixels, 320 x 240 pixels (Motion Image)	1,600 x 1,200 pixels, 1,600 x 1,200 pixels, 1,280 x 960 pixels, 640 x 480 pixels, 320 x 240 pixels (Motion Image)	2,304 x 1,728 pixels, 1,600 x 1,200 pixels, 1,280 x 960 pixels, 640 x 480 pixels, 320 x 240 pixels (Motion Image)	2,048 x 1,536 pixels, 1,600 x 1,200 pixels, 1,280 x 960 pixels, 640 x 480 pixels, 320 x 240 pixels (Motion Image)	2,304 x 1,728 pixels, 1,600 x 1,200 pixels, 1,280 x 960 pixels, 640 x 480 pixels, 320 x 240 pixels (Motion Image)	2,048 x 1,536 pixels, 1,600 x 1,200 pixels, 1,280 x 960 pixels, 640 x 480 pixels, 320 x 240 pixels (Motion Image)	2,560 x 1,920 pixels, 1,600 x 1,200 pixels, 1,280 x 960 pixels, 640 x 480 pixels, 320 x 240 pixels (Motion Image)
Image Quality	Fine/Standard	Fine/Standard	Fine/Standard	Fine/Standard	Fine/Standard	Fine/Standard	RAW/Super Fine/Fine/Standard
Motion Image (Quick Time™ Motion JPEG)	10 or 30 fps (320 x 240 pixels), *Max. recording time depends on Memory Card capacity.	10 fps (320 x 240 pixels), *Max. recording time depends on Memory Card capacity.	10 or 30 fps (320 x 240 pixels), *Max. recording time depends on Memory Card capacity.	10 or 30 fps (320 x 240 pixels), *Max. recording time depends on Memory Card capacity.	30 or 10 fps (320 x 240 pixels), *Max. recording time depends on Memory Card capacity.	30 or 10 fps (320 x 240 pixels), *Max. recording time depends on Memory Card capacity.	30 or 10 fps (320 x 240 pixels), *Max. recording time depends on Memory Card capacity.
Burst Shooting Mode	Full-Resolution Image, 4 or 2 frames/sec., Max. 7 frames (Standard Mode)/ 5 frames (Fine Mode)	Full-Resolution Image, 4 or 2 frames/sec., Max. 7 frames (Standard Mode)/ 4 frames (Fine Mode)	Full-Resolution Image, 4 or 2 frames/sec., Max. 7 frames (Standard Mode)/ 5 frames (Fine Mode)	Full-Resolution Image, 4 or 2 frames/sec., Max. 8 frames (Standard Mode)/ 5 frames (Fine Mode)	Full-Resolution Image, 3.5 or 2 frames/sec., Max. 5 frames (Standard Mode)/ 5 frames (Fine Mode)	Full-Resolution Image, 3.5 or 2 frames/sec., Max. 8 frames (Standard Mode)/ 5 frames (Fine Mode)	Full-Resolution Image, 2.7 or 1.0 frames/sec., Max. 9 frames (Standard Mode)/ 5 frames (Fine Mode)
Still Image Rec. with Audio	5 sec.	5 sec.	5 sec.	5 sec.	5 sec.	—	5 sec.
Audio Dubbing	Max. 10 sec.	Max. 10 sec.	Max. 10 sec.	Max. 10 sec.	Max. 10 sec.	—	Max. 10 sec.
Built-in Flash	Auto, Auto/Red-eye Reduction, Slow Sync./Red-eye Reduction, Slow Sync./Forced On/Off, Flash output Adjustment (1/3EV step, -2/+2EV) 0.4-4.0m (Wide/ISO Auto), 2.0-4.0m (Tele/ISO Auto)	Auto, Auto/Red-eye Reduction, Slow Sync./Red-eye Reduction, Forced On/Off, 0.3 - 2.1m (Wide/ISO100), 0.3 - 4.2m (Wide/ISO400), 1.2 - 2.1m (Tele/ISO100)	Auto, Auto/Red-eye Reduction, Slow Sync./Red-eye Reduction, Forced On/Off, 0.4-2.0m (Tele/ISO Auto)	Auto, Auto/Red-eye Reduction, Slow Sync./Red-eye Reduction, Forced On/Off, 0.4-3.3m (Wide/ISO Auto), 0.4-2.0m (Tele/ISO Auto)	Auto, Auto/Red-eye Reduction, Slow Sync./Red-eye Reduction, Forced On/Off, 0.3 - 4.8m (Wide/ISO Auto), 0.5 - 2.8m (Wide/ISO Auto)	Auto, Auto/Red-eye Reduction, Slow Sync./Red-eye Reduction, Forced On/Off, 0.3 - 4.8m (Wide/ISO Auto), 0.5 - 2.8m (Wide/ISO Auto)	Auto, Auto/Red-eye Reduction, Slow Sync./Red-eye Reduction, Forced On/Off, Flash output Adjustment (1/3EVstep, -2/+2 EV) 0.5-4.8m(Wide), 0.5-4.0m (Tele) (ISO100/ISO Auto)
External Flash	Hot Shoe	—	—	—	—	—	Yes (Metz SCA 3502 Compatible)
Viewfinder	0.33" Color EVF (114k pixels) Field of View : approx. 100%	0.33" Color EVF (114k pixels) Field of View : approx. 100%	Optical Viewfinder	Optical Viewfinder	Optical Viewfinder	Optical Viewfinder	0.44" Color EVF (235k pixels) Field of View : approx. 100%
LCD Monitor	2.0" Polycrystalline TFT LCD Display (114k pixels), Field of View : approx. 100%	1.5" Polycrystalline TFT LCD Display (114k pixels), Field of View : approx. 100%	1.5" Polycrystalline TFT LCD Display (114k pixels), Field of View : approx. 100%	1.5" Polycrystalline TFT LCD Display (114k pixels), Field of View : approx. 100%	1.5" Polycrystalline TFT LCD Display (114k pixels), Field of View : approx. 100%	1.5" Polycrystalline TFT LCD Display (114k pixels), Field of View : approx. 100%	2.5" Polycrystalline TFT LCD Display (211k pixels), Transflective Type, Field of View : approx. 100%
Recording Media	SD Memory Card, MultiMedia Card	SD Memory Card, MultiMedia Card	SD Memory Card, MultiMedia Card	SD Memory Card, MultiMedia Card	SD Memory Card, MultiMedia Card	SD Memory Card, MultiMedia Card	SD Memory Card, MultiMedia Card
Microphone	Yes	Yes	Yes	Yes	Yes	—	Yes
Speaker	Yes	Yes	Yes	Yes	—	—	Yes
Interface	DC Input, A/V Output, USB	DC Input, A/V Output, USB	DC Input, A/V Output, USB	DC Input, A/V Output, USB	DC Input, A/V Output, USB	DC Input, Video Output, USB	DC Input, A/V Output/Remote, USB
Power	Li-ion Battery Pack (7.2V, 680mAh) Battery Charger/AC Adaptor (Input: 110-240V AC) (Included)	Li-ion Battery Pack (7.2V, 680mAh) Battery Charger/AC Adaptor (Input: 110-240V AC) (Included)	Li-ion Battery Pack (3.6V, 680mAh) Battery Charger/AC Adaptor (Input: 110-240V AC) (Included)	Li-ion Battery Pack (3.6V, 680mAh) Battery Charger/AC Adaptor (Input: 110-240V AC) (Included)	Ni-MH Rechargeable Battery x2 (Included) AA Alkaline Battery x2 (Optional) AC Adaptor (Input: 110-240V AC) (Optional)	Ni-MH Rechargeable Battery x2 (Included) AA Alkaline Battery x2 (Optional) AC Adaptor (Input: 110-240V AC) (Optional)	Li-ion Battery Pack (7.

View images on your TV screen.



TV with an SD Memory Card slot

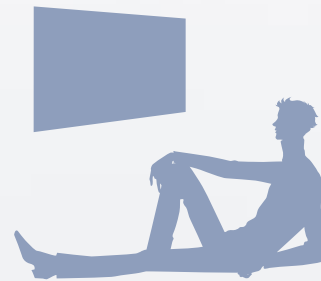
If your TV is equipped with an SD Memory Card slot, it's super-easy to view photos from your LUMIX digital camera on the large screen.

Project Them Onto a Large Screen



**LCD Projector
PT-735NT**

Whether or not there's a PC present, Presentation is easy, too, with features like Auto Slide Show. You can use the PT-L735NT to project images that have been transferred directly to an SD Memory Card from LUMIX.



Viewing

DIGITAL NETWORKING WITH LUMIX DIGITAL CAMERAS

So much fun. So many ways.

LUMIX digital cameras make it easy to capture beautiful images. And the SD Memory Card makes it easy to use those images in other digital equipment. Print out your favorite shots right on the spot. View them on a large screen. E-mail them to friends. There are so many options because-from TVs to digital printers-Panasonic offers a wide array of products that are equipped with SD card slots. That means more ways for you to enjoy images, more ways to be creative, and more ways to have fun. With digital images from LUMIX digital cameras, you can go places simply not possible with conventional photographs.



Print your images as you view them on your television.



**Digital Photo Printer
SV-AP10**

Achieve film-like image quality with 16,770,000 colors. And for remarkable convenience, you can display the images from the camera on your TV, so it's easy to choose the ones you want to print.

Make on-the-spot prints or stickers.



**SD Mobile Printer with LCD
SV-P20**

Weighing only 265grams (main unit), this mobile printer goes just about anywhere you go and lets you make prints, borderless cards, and stickers right on the spot.



Printing



Storing

Record your favorite images onto a DVD without using a PC.



**DVD Video Recorder with Built-In Hard Disk
DMR-E100H**

It's easy to save your digital photographs onto a DVD-RAM disc. Using the SD card slot of the E100H, you can save images to a DVD-RAM disc without using a PC or needing to connect any cables.

Save a huge number of digital images right on the spot.



**SD Media Storage
SV-PT1**

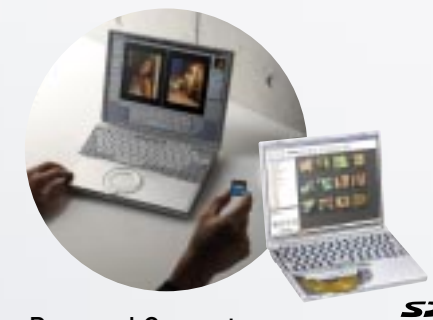
The SV-PT1 can store about 5,000* images. The image data from an SD Memory Card uploads quickly and allows you to clear the memory card for taking more pictures.

*Estimate based on each image taking up around 1MB, as is typical in Fine mode with a 2-megapixel digital camera.



Creating and Sharing

Process and edit your photos - then share them via the internet.



**Personal Computer
CF-W2**

LUMIX digital cameras come bundled with software that lets you process and edit your photos on a PC. You can attach your photos to e-mail messages, publish them on a Web site, or use them in other ways. The possibilities are endless.

SD Viewer for DSC
Use this utility to arrange your photos in a list format in order to create slide shows.



*SD Viewer for DSC: Requires Microsoft®98, Windows®98SE, Windows®Me, Windows®2000, or Windows®XP.
*SD Viewer for DSC is not included in LC70 and LC50.

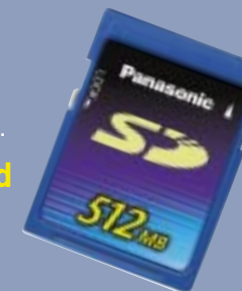
ArcSoft PhotImpression
This utility lets you manipulate your images and then use them in creative ways. For example, you can adjust the colors and create your own cards and calendars.



*ArcSoft PhotImpression: Requires Microsoft®98, Windows®98SE, Windows®Me, Windows®2000, Windows®XP, or Macintosh®OS 9 - OS 10 (Classic mode).
*ArcSoft PhotImpression is not included in LC70 and LC50.

High-capacity, high-speed compact storage medium for the digital age.

SD Memory Card



Slim and Compact

The SD Memory Card is just about the size of a postage stamp and is capable of storing vast amounts of data. Conveniently small and easy to handle, these cards are an ideal "bridge" media for moving data among different types of equipment.

Large Capacity

SD Memory Cards are now available in sizes as large as 512MB, and their capacity continues to grow. In the near future there will be 1GB cards-and plans for 4GB cards-for handling video and other large-volume content.

Fast Access

The SD Memory Card can write data at a lightning-fast rate of 10MB per second,* helping to minimize network access and loading times and improving capture speeds.

*10MB/sec with 256MB SD Memory Card and above; 2MB/sec with 128MB cards and below.