

LG G4 Camera User Guide



See the Great, Feel the Great

LG G4





Is it possible to take a good quality photo using a smartphone camera?

It is true that many believe that you can't beat the quality of a professional camera no matter how good the quality of photo being taken by a smartphone is. I was one of those who had doubts about a smartphone camera's performance. However, while on this project, I had to reverse my stereotype after experiencing the amazing functions of the G4 camera. The G4 camera guideline was written in simple terms for new users. Our goal was to show that our normal, everyday life is the best material for works of art through our daily surroundings and landscapes. I hope that the joy and warmth I felt when taking pictures can be transferred to the readers of this guideline and I wish for you to discover your potential as a photographer.

Photographer Joong Suk Oh

Genius Oh

PROFILE

- Photographer of MBC's Infinite Challenge (Calendar episode)
 - OnStyle Korea's Next Top Model Season4 Challenge, Photo shoots GUYS & GIRLS
 - Other photo shoots including VOGUE, BAZAAR, ESQUIRE
-

Special features of G4 Camera

01

Manual Mode
with ISO, WB, Shutter Speed



02

The world class brightness of
LaserCam F1.8



03

OIS 2.0 that captures
critical moments without shake



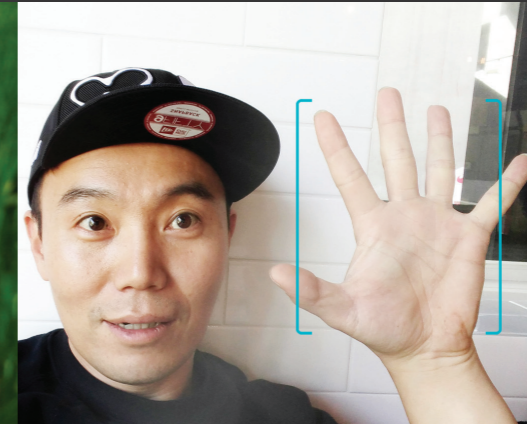
04

The Color Spectrum Sensor
that detects and reproduces natural color



05

The first 8.0 megapixel front camera
for your stylish selfie



06

Instant quick shot by pressing the
lower volume button twice on the
back of the phone



★ Above pictures were taken by G4



LESSON 1

Simple Mode (Touch & Shot)

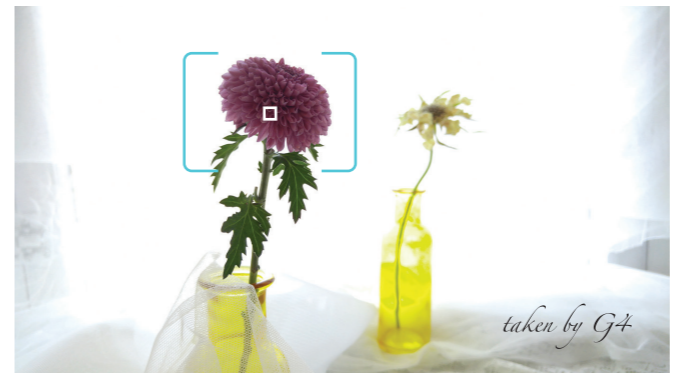
1. Touch Mode (), Select Simple Mode ()
2. Touch the subject you want to shoot

• Select Mode (Simple / Auto / Manual)

Focus and shoot simultaneously with a single touch!

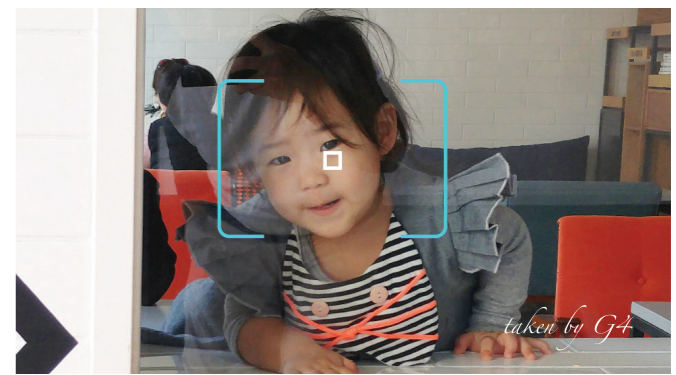
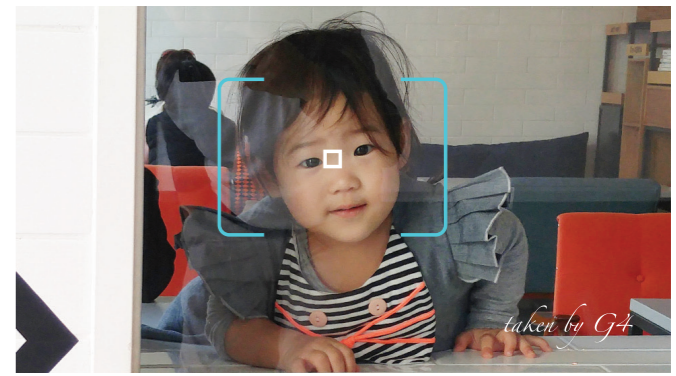
Wonder how you don't miss the various expressions of an adorable baby changing rapidly with every moment! How about the pose of a cute cat! Love and technique is what's needed in order to contain various short, quick changes. G4's simple mode allows you to never miss a moment by simultaneously focusing and shooting when you touch the screen.

With simple mode, you can take pictures quickly and adjust the focus on the areas you want.



1. Compose the screen so that various items are well-placed
2. Touch the subject you want to focus on in the display
3. Try to touch another subject

Take a picture by adjusting the focus on the movement of the baby.



If the background of a picture is not as you wish. Let the subject fill the frame to produce the best possible photo.



[Cool feature] Quick shot

Don't miss your favorite moments but capture them as much as you want. You can record your moments with two clicks of the lower volume button on the back of the phone even when the screen is turned off.

LESSON 2

Auto Mode

1. Touch Mode (☰), select Auto Mode (📷)
2. Select Panorama, Dual Recording function

Easily select the recording method with **quick set up!**

You can shoot vast and cool background pictures and capture the expression of your face by just setting up Panorama / Dual / Automatic Mode within Auto Mode. You can also record your SNS profile picture in an easy and convenient way by setting the aspect ratio. Quickly and easily capture memories with G4's unique Auto Mode.



genius Oh's Tip

LG G4 has a built-in color spectrum sensor that analyzes the surroundings of visible light and infrared ray wavelengths automatically. It allows the user to take photos that produce the most authentic color compared to what humans see.



★ Images used on the bottom are staged images.



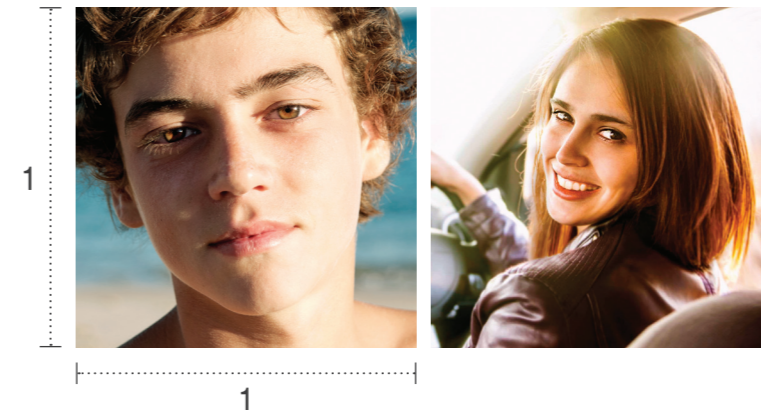
Panorama Shot

Contain the vividness of the scenery surrounding you.



Dual Camera

Record fun pictures with the dual recording mode and contain the smiles of a child and a father simultaneously.



Setting up 1:1 ratio

Instantly change your profile picture by shooting with G4.

1. Touch Setting (⚙️)
2. Select 16:9 (📷)
3. Select 1:1 (📷)

LESSON 3

Peek into the G4 Camera in detail



G4 Camera features

★ **Exposure adjustment** : The camera by default represents white to gray, and black to less black. Because the actual color can be represented differently you can take photographs that are similar to what we see in real life by correcting the exposure to either darker (-) or brighter (+).

★ **Histogram** : A type of a graph indicating the picture brightness. The shape of the graph will tilt to the right if excessive light enters the sensor causing pictures to be brighter thanks to overexposure. The shape of the graph will tilt to the left if too little light enters the sensor leading to underexposure. The shape of the graph will be convex in the center if the exposure is equal.

★ **Level** : A function that helps pictures to align horizontally when shooting and to prevent tilting to the one side.

★ **Automatic Focus (AF)** : The camera automatically sets focus to recognize the subject without any additional settings. With the automatic focus adjustment, even first timers can vividly capture a fast moving subject.

★ **Manual Focus (MF)** : There are cases when the camera will focus on the wrong subject. When having various subjects, MF function allows users to stage a photo as they wish by letting them adjust the focus manually.

What it means to have an F1.8 Lens for G4?

F1.8 lenses of DSLR lenses, receive the most attention even among professional photographers because of their excellent expression when shooting portraits. F value (=aperture) is a numerical value indicating the brightness of camera lenses. When having a lower value, it will increase the amount of light passing through; therefore, you can get a clear and bright picture even at night, or indoors with less light. The G4 smartphone is equipped with an F1.8 Lens for the first time which means you can take a picture of shining stars and the beautiful night sky, instantly capture the blowing out of birthday candles and other beautiful moments with exceptional quality. With G4's brightest F1.8 Lens, create your own world you wish to see in brighter way.



(Actual comparison using a picture from LG G4)

LESSON 4

Manual Mode

Master ISO / Shutter Speed / WB / Exposure Adjustment

Are you familiar with the position of each button and its use? Master the most important functions of ISO / Shutter Speed / WB / Exposure Adjustment before taking a photo! You will take amazing photos without realizing it!



genius Oh's Tip

When taking a photograph **1**. You can produce a smooth photograph without the noise by setting the ISO to a lower level
2. You can produce a clear photograph without shake by setting the shutter speed as a priority.

ISO

ISO

Sensitivity (ISO) is the extent to which the sensors respond to light represented by a number. It is indicated as 50, 100, 200, 400, and 800. Each number represents light sensitivity. This means each value is twice as sensitive as the previous value. Raising the sensitivity in the dark will increase the chance of taking a picture without blur (recommend raising the sensitivity even in broad daylight.) The higher the ISO, the brighter the picture will be because of the quantity of light let in. However, there is a drawback of decreased clarity because of more noise in the picture. Conversely, with lower ISO, the picture becomes darker but clarity increases. Set about 100-200 ISO when taking a photo at night or when it's dark indoors and 400 ISO would be good with general scenery.



taken by G4

With lower ISO (ISO 100) – Smooth and clean without noise



taken by G4

With Higher ISO (ISO 12800) – No blurring of subject but has rough and indefinite colors

LESSON 4

Manual Mode



Shutter Speed

Shutter Speed means adjusting the amount of light let in when the shutter opens and closes. With a faster shutter speed, less light is let in and sharper photos are produced but at times they can be dark. Conversely, with a slower shutter speed, more light is let in, leaving an afterimage of the subject. You can also shoot different styles of long exposure.



taken by G4

Slow shutter speed | 1/60s



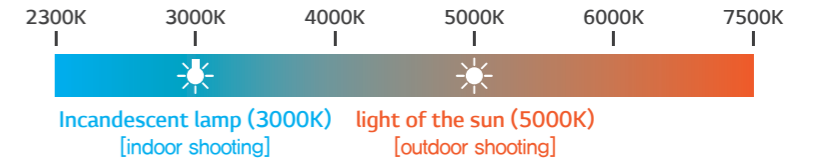
taken by G4

Fast shutter speed | 1/6500s



White Balance

White Balance is the technology that allows the camera to recognize natural color as we see it. Our eyes recognize the same white paper under fluorescent lighting or incandescent lamps; however, a camera is different to our eyes. In order to properly represent true white colors, it needs to set the color temperature. However, if you apply it conversely you can produce a variety of colors without using specialized programs like Photoshop.



taken by G4

WB 2800K



taken by G4

WB 5500K

Taking photos with lower WB values under incandescent lamps

It is possible to produce a different atmosphere of color, almost as if it were taken under sunlight with an increase in WB.

LESSON 4

Manual Mode

-2 · -1 · 0 · 1 · 2+

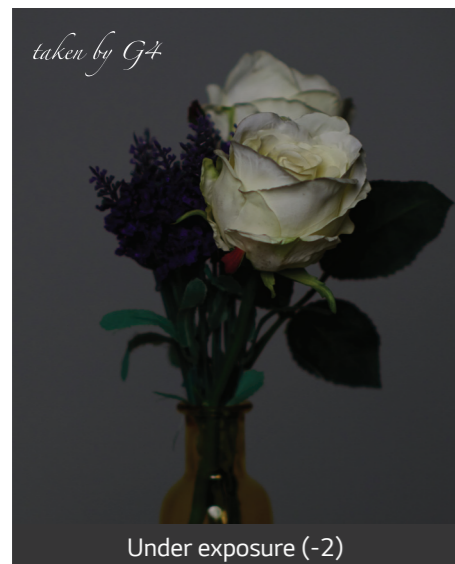
Exposure Adjustment

Exposure is a function to adjust the amount of light exposed to the image sensor. Exposure is affected by both the shutter speed and the aperture. Aperture controls the amount of light received at once and the shutter speed controls the amount of light overall by adjusting the time of exposure. Besides this, exposure is also affected by ISO (sensitivity). In other words, you have to utilize the aperture, shutter speed, and ISO in order to adjust the exposure. In the case of over exposure, the sensor receives too much light resulting in the brightening of pictures. Conversely, in the case of under exposure, the sensor receives too little light resulting in the darkening of pictures. By using G4's exposure adjustment function, you can take a picture as you intend to, with true-to-life quality.



genius Oh's Tip

In the case of having to take a picture with low light, set the exposure value to +, when there is excessive brightness, set the exposure value to -.



genius Oh's Tip

RAW & JPG Picture file format

The word "RAW", as you can already induce from the word itself; is a file format that is stored without processing. If you compare it to cooking, a JPG would be processed food that has been refined to suit the needs of the public which limits the taste that can be produced by a chef. On the other side, a RAW would be fresh ingredients that have the advantage to allow for the creation of taste without restrictions.

RAW
JPG



JPG

The most popularly used image file format that can be shared quickly on PCs or printers because of its compatibility and small size compared to picture quality.

RAW

It has more light and color information compared to JPG files it can be changed to JPG through exposure, white balance, and various modifications.

★ Save as RAW format

You can save pictures in RAW format to be corrected later. If you touch , DNG will be generated with JPG when shooting. Big storage space could be needed if you save in RAW format.  icon will be displayed once the picture is taken in RAW format. DNG also will be deleted once you erase the picture from the gallery and you can only erase DNG from the File Manager or PC.

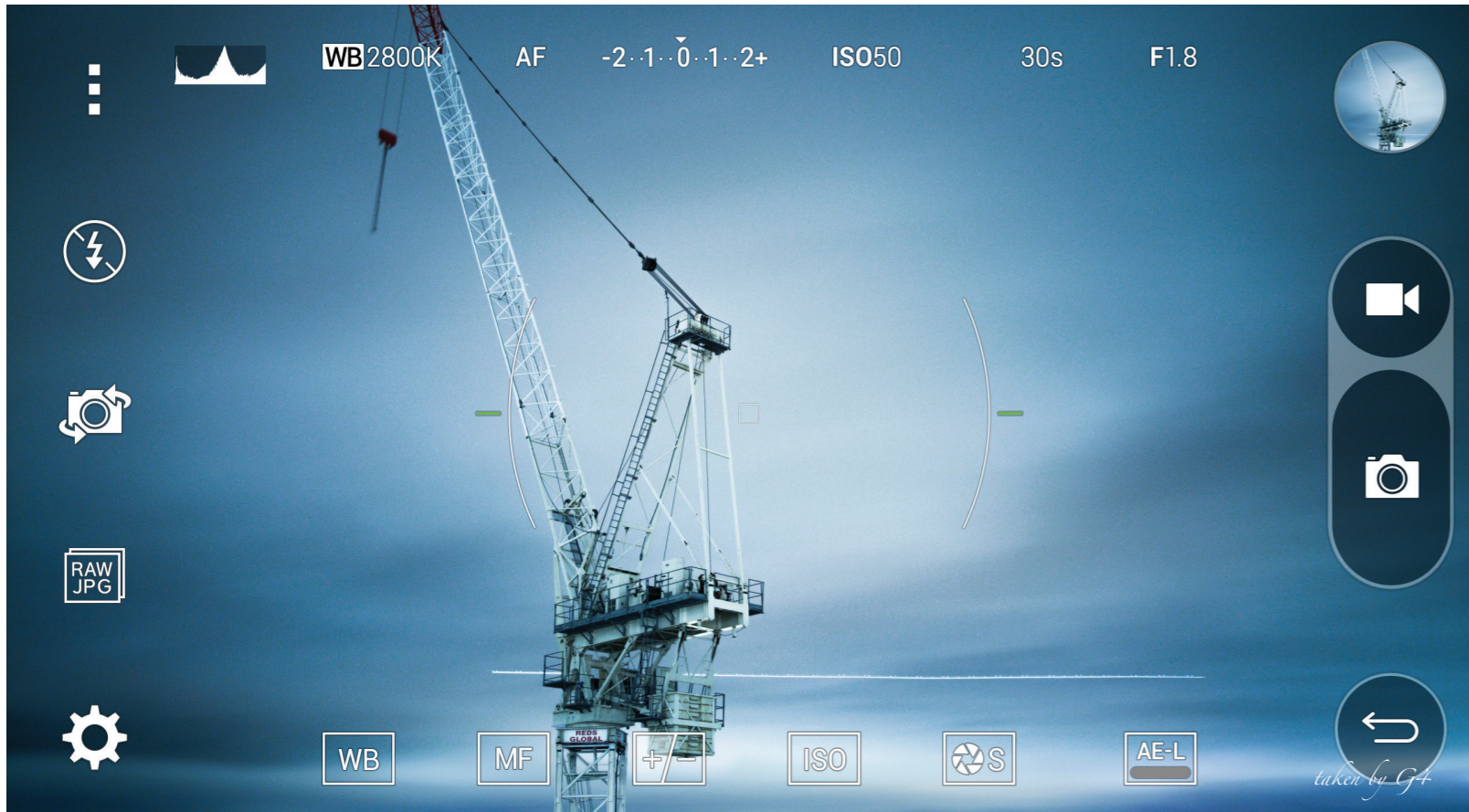
LESSON 4

Manual Mode

★ A part of pictures were set as a Manual Mode and were taken by ISO 50 to produce a clear quality with less noise



genius Oh's Comment

In order to capture the longer trail of the plane, I decreased the ISO and set the shutter speed to 30 seconds. With a low shutter speed, the long exposure of 30 seconds captures the trail of the plane. F1.8 | ISO 50 | Shutter Speed 30s | WB 2800K



Create memorable moments with Manual Mode!

Shoot your daily life with Manual Mode using features such as ISO / White Balance / Shutter Speed / Focus and set them as you desire. Get started by shooting with each function and along each step. Once you fully understand the various settings try manipulating them in various ways.

1. Select Mode (), Manual Mode ()
2. Detail Settings ISO, WB, Shutter Speed



genius Oh's Comment

The exquisite tones and color of this landscape were achieved through the use of a brighter exposure and by setting the white balance to 5500K since it is in direct sunlight.

F1.8 | ISO 50 | Shutter Speed 1/1000s | WB 5500K

LESSON 4

Manual Mode

STEP 1 Technique to take portrait shots

Techniques to take close up shots of bright and compelling skin

1. Raise a little lighter than it looks to ISO
2. A light or light of the window is to be focused on the face
3. Turn your face towards the light or the sun at an angle of 45 degrees

genius Oh's Comment

Since the amount of light was sufficient, I have taken a photograph raising the ISO to 100. In order to obtain a picture without blur, I chose the best shutter speed based on the value of the ISO (100) and WB (2800K). The value of WB (2800K) was set due to an incandescent light.

F1.8 | ISO 100 | Shutter Speed 1/60s | WB 2800K

genius Oh's Comment

By highlighting the model, a colorful stage for a full body shot was created.

A technique to take a full body shot that makes legs look longer

1. For the effective looks of brighter skin, select a background which is darker than the person.
2. Align the tiptoe to the bottom of the frame and leave space for the face at the top of the frame, and set the focus on the center.



genius Oh's Tip

When shots the face in full frame, due to the distortion of the lens head and feet are taken larger than the actual figure and the body is taken smaller than the actual figure.

F1.8 | ISO 50 | Shutter Speed 1/60s | WB 2800K



LESSON 4

Manual Mode

STEP 2 Food photograph tips

Techniques to make food photographs look more appetizing

1. To reflect the luster of the food, set the shooting direction to side or backlight.
2. Focus on the food in close-up. It is effective to take a close-up shot to deliver the sense of flavor and aroma, and of the food's texture and unique color.

F1.8 | ISO 50 | Shutter Speed 1/60s | AWB 5000K



taken by G4

genius Oh's Comment You can produce great food photography using a high angle.



genius Oh's Tip

- It is not necessary to apply white balance on food photographs because the whole atmosphere could become colder. If there is not an excessive use of yellow or red colors, these warm colors give a delicious effect to food.
- Be sure to shoot the food and hands with chopsticks and a spoon using close-up. It is important to show the cross-section of food that has been lifted up.
- With food that is soft try to focus in on the delicious part.

F1.8 | ISO 50 | Shutter Speed 1/30s | AWB 5000K



taken by G4

genius Oh's Comment I set the WB to auto and shot the picture because with the G4's color spectrum sensor I can capture the authentic color of the food. When photographing bowls and other items. Fill the frame of the photograph with the food to give a fresh feel.

LESSON 4

Manual Mode

STEP 3 Scenery photo tips

Beautiful scenery photography tips

1. When the picture is correct, set up RAW file as the saving format for easy correction of tone, saturation, and brightness.
2. For a stable screen configuration, first align a composition of horizontal and vertical aspects of the landscape and divide the screen into three equal parts to place subject on one-third or two-thirds of the screen.
3. To maintain a three-dimensional sense, place distant, intermediate, and far scenery in the frame.
4. For the wide-angle, set the aspect ratio to 16:9.

genius Oh's Comment

I was photographing a panoramic view of the sea and some gorgeous clouds. Because the photograph takes place in direct sunlight, I have set the white balance to 5500K. I captured moving clouds and a fishing man and raised the shutter speed to give a visual accent to the photo which could have looked lackluster.

F1.8 | ISO 50 | Shutter Speed 1/2000s | WB 5500K



F1.8 | ISO 50 | Shutter Speed 1/6000s | WB 5500K



genius Oh's Tip

- Landscape photos with buildings in a city can be given a majestic feeling by applying a low angle to the vertical approach.
- Shoot in monotone by reducing the saturation. Stunning images can be produced directing the painterly atmosphere.
- When shooting a blue sky, shoot against the sun. When shooting a sunset in the opposite direction, shoot toward the sun.



F1.8 | ISO 50 | Shutter Speed 1/1000s | WB 5500K



F1.8 | ISO 50 | Shutter Speed 1/500s | WB 6000K

LESSON 4

Manual Mode

STEP 4 Night scene photography tips

Tips for long exposure photography at night

1. For a steady shot, prepare a tripod. If you do not have a tripod, find somewhere you can stand and lean.
2. You can discover the difference in brightness by scrolling the shutter speed. Set the exposure for a bright tone and the ISO to the lowest value in order to decrease the noise.
3. Turn off the flash and set the shutter speed to the slowest mode.



genius Oh's Tip There is a great difference between having a light or not when shooting a night scene, pay careful attention as to not set a higher ISO value which can lead to brighter parts being blown away.



taken by G4

genius Oh's Comment By setting the shutter speed to 30seconds, the lights of the city reflected in the river and the sky were beautifully expressed by the long exposure. F1.8 | ISO 50 | Shutter Speed 30s | WB 2800K



genius Oh's Tip

- Do not miss the magic hour of 30 minutes after a sunset. When shooting at that magic hour, light will turn more yellow and softer and have a dramatic expression and effect on the gradient.
- Be ready to prepare a tripod to avoid shakiness in night scenes!



taken by G4

genius Oh's Comment By setting the white balance to 6000k, the reddish sky is expressed in a more dramatic way. F1.8 | ISO 50 | Shutter Speed 1/500s | WB 6000K

LESSON 5

8.0 megapixel selfie camera

★ Images used on the bottom are staged images.



LESSON 6

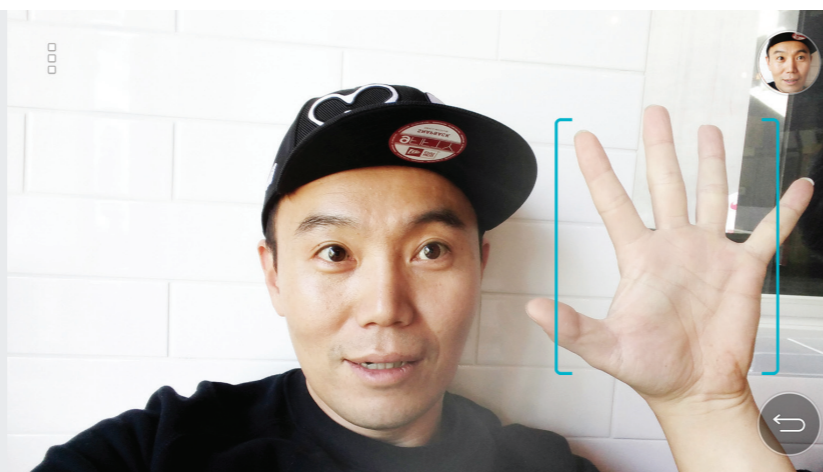
Video

★ Images used on the bottom are staged images.

Tips for **selfie gesture shot**

1. Remove skin blemish with Beauty Mode
2. Raise G4 to 45 degree angle
3. Open the palm looking at the screen
4. Close to make a fist when palm is recognized
5. Check the picture by lowering the screen (Gesture View)

  Photo shooting initiates once a fist is made.





Tips for **taking a clear and realistic video**

1. Touch settings (⚙)
2. Touch 16:9 of aspect ratio (16:9)
3. Touch UHD (UHD)
4. Start Video (▶)
5. Finish Video (⏹)



Tips for **Gesture interval shot**

1. Raise G4 to 45 degree angle
2. Looking at the screen, quickly open and close hand twice

  **x2** Once you open and close a hand twice, in 2 seconds 4 pictures will be taken continuously.



Tips for **taking slow-motion like a movie scene**

1. Touch setting (⚙)
2. Touch 16:9 of aspect ratio (16:9)
3. Touch Slow-motion (slow-mo)
4. Start Video (▶)
5. Finish Video (⏹)



taken by G4

genius Oh's Comment I have set the ISO to 50 in order to produce a clear and smooth photograph. Using the flash in macro photograph, I maximized the detail in the flowers that is not visible to our eyes. F1.8 | ISO 50 | Shutter Speed 1/500s | WB 5500K



taken by G4

genius Oh's Comment By shooting flowers in black and white under normal light, the gradients captured and produced a rich photograph of a flower. F1.8 | ISO 50 | Shutter Speed 1/30s | WB 2800K



genius Oh's Comment I set the shutter speed to 1/6000 and found the optimal ISO value in order to capture a jumping model without shake affecting the picture. F1.8|ISO 400|Shutter Speed 1/6000s|WB 2800K



genius Oh's Comment Without using a tripod, the trajectory of the stars was drawn on the photograph using 30 seconds of long exposure. Feeling of watercolors was expressed to describe the sky, the stars, and the light softly. F1.8|ISO 50|Shutter Speed 30s|WB 2800K



genius Oh's **Comment** After the models were asked to move freely, I found the optimal shutter speed to obtain a photograph without shake. They seem to pose in a stationary position even though they were moving in a continuous motion.

F1.8 | ISO 100 | Shutter Speed 1/125s | WB 2800K

taken by G4

