Technologies Explained – IXUS 210

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Advanced Touch Interface

The IXUS 210 features the most advanced IXUS touch screen user interface to date, giving access to the camera's main menu system, as well as large on-screen icons that directly control the most commonly used shooting functions.

Touch AF during shooting allows the user to touch the panel to indicate a desired area of focus within a scene. When "Fixed Frame" auto focus is selected in the menu, the user can simply touch the screen to directly select the focal point. When Face AiAF is selected, a touch of the screen will automatically select the object or face which is nearest to the area pressed. Even if the face or object moves in the frame, the camera will continue to track it. When using Servo AF/AE, the camera will also track focus and exposure right up to the moment when the shutter is pressed.

Touch Actions in playback allow users to match gestures made on-screen to commonly used functions. By moving a finger across the screen in one of four set directions, such as up and left, the camera will recognise this action and activate a preset function such as tagging images as favourites or erasing, rotating, or protecting images in the user's collection.

Browsing images is also made easy by enabling users to simply drag their finger across the screen – the camera will match the speed of review with the speed of the gesture made. Flicking the screen activates "scroll display" and double tapping the screen activates an easy to navigate thumbnail view which helps users find their images easily.

PureColor II Touch LCD screen

The new high-resolution 460K dot 8.8cm (3.5") wide aspect PureColor II Touch LCD makes it even easier to view the menu and frame and review images at angles and in bright sunlight. As well as offering outstanding contrast and accurate colour rendition, the new screen also reduces internal reflection of light so that brightness and visibility are much improved.

Active Display

Active Display now features "tap" control so users can simply tap either side of the camera to review the next or previous image in their collection. Pressing the left or right

arrow on-screen, while tilting the camera in an up or downward direction, allows for a fast transition through all of the images sorted on the memory card – further aiding navigation and overall user experience.

Optical Image Stabilizer

Canon's highly-effective optical Image Stabilizer technology prevents image blur by dramatically reducing the effects of camera shake. In situations where image blur due to camera shake is more likely – such as in darker conditions or when shooting with the zoom extended – the optical Image Stabilizer can help images remain sharp through minute vibration gyros which detect camera movement caused by hand shake. These signals are processed by a single-chip IS controller, which discriminates between hand shake and intentional camera movements. Signals are then sent to the IS unit, which moves one of the lens elements accordingly to re-align the light rays and cancel out the effects of camera shake.

Smart Auto mode and i-Contrast

Smart Auto mode uses Scene Detection Technology to determine the shooting scene by analysing subject brightness, contrast, distance and overall hue. The camera then selects a scene type and applies the best settings for optimum output. In Smart Auto mode a colour icon indicating the type of scene detected – and the lighting conditions of the scene – is shown on the LCD monitor. Smart Auto includes i-Contrast which reveals greater detail in dark and brightly lit regions, without blowing out correctly-exposed parts of the image. i-Contrast can also be used in playback to expose greater detail after the shot has been taken.

Smart Flash Exposure

The Smart Flash Exposure feature intelligently controls the power and usage of the onboard flash to ensure natural results in a variety of conditions. By using focusing distance as well as shooting scene information, an optimum balance between the ambient light of the scene and flash power is achieved. When shooting in very bright conditions, shadows which can appear on a subject's face are detected by the camera and flash can be used to eliminate them. When shooting at close distances, overexposure is avoided by sensing how reflective the subject is, as well as by reducing the flash power to compensate for the close shooting distance.

Auto ISO with Motion Detection Technology

Auto ISO mode, using Motion Detection Technology, calculates the movement of the

camera and subject as well as the speed at which the motion occurs. ISO sensitivity and shutter speed are then automatically adjusted to deliver minimum blur and maximum image quality in any situation.

Face Detection Technology

Face Detection Technology makes it easier than ever to produce superb people shots. This advanced system quickly and accurately detects faces in a scene and then optimises camera settings so that everyone looks their best. With the ability to detect up to 35 faces in one frame, it's great for group photos as well as portraits.

The camera includes the following Canon Face Detection Technologies:

- Face Detection AF: Sets the focus for the faces in people shots – not just the closest subject.
- Face Detection AE: Optimises exposure for faces in all lighting conditions – useful for backlit scenes or indoor shooting.
- Face Detection FE: Guards against washed-out faces when using the camera's flash – perfect for close-up shots in restaurants, clubs or other dimly lit locations.
- Face Detection WB: Optimises white balance for natural-looking skin tones which remain true to life regardless of skin colour and lighting conditions.
- Red-Eye Correction: Automatically eliminates the unwanted effects of flash photography immediately after the shot is taken. At the touch of a button in playback, natural-looking eyes can be instantly restored.

Smart Shutter

Smart Shutter mode uses Face Detection Technology to allow users to take both group shots and self-portraits easily and in a more relaxed way. The shutter can be triggered remotely in three different ways:

- Smile Detection: Triggers the shutter when the camera detects a smiling face within the frame.
- Wink Self-Timer: Triggers the shutter two seconds after the subject in the frame has winked, removing the need for a remote control.
- FaceSelf-Timer: Allows perfect group shots or self portraits by automatically triggering the shutter 2 seconds after a new face has entered the frame.

Smart Shuffle

Smart Shuffle is a creative way for users to browse through photos stored in their collection. Based on having 50 or more images, the camera suggests four other pictures to the one currently being viewed for the user to choose from. After selecting one of the suggestions, another set of four is offered (one of which being the previous image viewed). This function provides a fresh angle to looking at stored pictures.

Servo AF/AE

When a subject is moving towards or away from the camera and the shutter is half-pressed, Servo AF/AE will track it continously - ensuring that the subject is in focus and well-exposed when the shutter is finally pressed.

DIGIC 4 Processor

Canon's DIGIC 4 (Digital Imaging Core) processor manages all of the camera's primary functions to optimise operating efficiency. Advanced image processing algorithms deliver superb image detail and colour reproduction with accurate white balance and minimal noise. High-speed processing results in outstanding responsiveness and rapid auto focus.

Low Light Mode

Enabling users to shoot in darker scenes than ever before without having to use flash, Low Light mode is included in IXUS 210. At a reduced 3.5MP resolution, the camera chooses from ISO between ISO 400 and ISO 6400 to enable you to shoot in darker conditions. In Low Light mode, exposure and white balance can be set to match the shooting conditions.

SDXC card support

The IXUS 210 supports the latest SDXC memory cards, providing up to 2TB of storage. With SDXC memory cards, more content can be stored on a single card than ever before and movies and images can be shot without having to change cards.