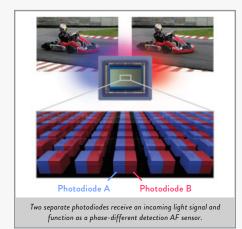


# DUAL PIXEL CMOS AF TECHNOLOGY for Enhanced Autofocusing Performance

The introduction of Dual Pixel CMOS AF technology enhances autofocus (AF) performance on the EOS C100 for smoother and accurate autofocusing results.

A Canon service center installed upgrade is now available for the EOS C100 that offers an autofocus mode to achieve sharp focus and smooth focus transitions. The upgrade enables a new Continuous AF Function for all Canon EF autofocus lenses, using Dual Pixel CMOS AF technology. A new AF Lock setting also gives you the freedom to change image framing while maintaining a chosen focus point. These precise focusing capabilities eliminate the chances of out-of-focus video while rendering a smoother focus transitions, providing greater assistance to users working with smaller crews.

The upgraded EOS C100 cameras are perfect for professionals in the field of electronic newsgathering, sports productions, documentary film-making, wedding videography and similar special events, nature and wildlife programs, and many others.



# WHAT IS DUAL PIXEL CMOS AF TECHNOLOGY?

The EOS C100 camera with Dual Pixel CMOS AF upgrade optimizes performance of its CMOS sensor, which holds an array of pixels, each featuring two separate photodiodes. By continuously comparing their outputs during AF mode, phase-difference autofocus helps ensure non-blurred images and smooth focus transitions even when the subject and/or the camera are moving. The new feature places high priority on maintaining sharp focus while providing a natural, smooth autofocus movement with select Canon EF lenses – including newer-generation STM lenses – which offer even smoother and quieter operation.

With the upgrade, the Continuous AF area on the EOS C100 represents 20% vertically and 25% horizontally of the image center – resulting in a wide AF zone. The AF Lock function complements the Continuous AF mode by allowing a selected focus point to be set and maintained, even when framing is changed.

# HOW DOES DUAL PIXEL CMOS AF BENEFIT VIDEO-SHOOTING?

### Fast, Smooth AF During Video Capture

An upgraded EOS C100's set-up menu will show two AF mode options - One-Shot AF and Continuous AF. The AF Lock function can be toggled on and off easily by setting the function to one of the camera's assignable buttons. During video capture, simply engage the AF Lock to prevent Continuous AF from changing focus, and pressing the button again to re-enable it.

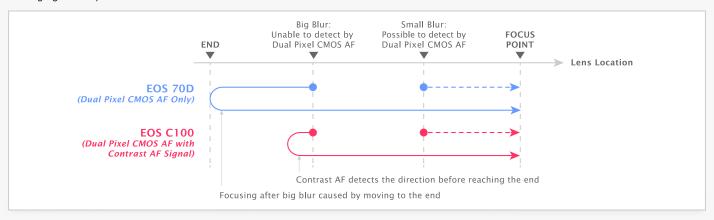


Continuous AF works in the center of the frame. It measures 25% horizontally and 20% vertically on the image plane.

 $\label{eq:AFLOCK} \mbox{The AF focus frame changes from white to grey}.$ 

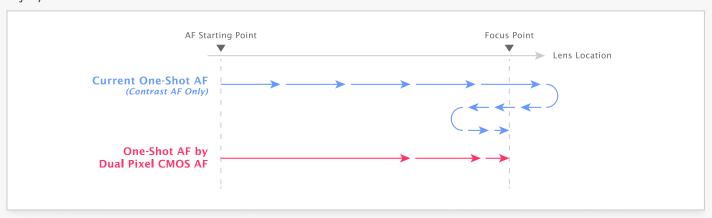
Focus is maintained even when framing is adjusted.

Dual Pixel CMOS AF technology delivers smooth and consistent AF, so that focus transitions appear natural and subjects remain in focus even as they move. Dual Pixel CMOS AF also works in tandem with the Contrast AF to determine which direction to drive the lens initially and helps to reduce focus hunting significantly.



### Faster One-Shot AF Mode

Contrast AF and phase-difference detection on the Dual Pixel CMOS AF work together to ensure that the AF system initially drives the lens in the correct direction to achieve faster focus. The upgraded EOS C100 will now obtain precise focus faster than an unmodified camera by nearly twice the speed, and with a more natural look without focus overshooting. Because the current One-Shot AF mode uses only Contrast AF, focusing may sometimes be jerky with overshoot errors.



## Compatibility with EF Lenses

Dual Pixel CMOS AF emphasizes on image quality, and its superior AF speed and precision enables smooth and hunt-free focusing with Canon EF lenses, excluding non-AF lenses. This technology provides continuous AF with any EF lens, spanning the EF and EF-S range, while One-Shot AF mode is supported by 104 EF lenses listed below:

	EF14mm F2.8L II USM	27	EF135mm F2L USM	53	EF-S17-55mm F2.8 IS USM	79	EF28-200mm F3.5-5.6 USM
2	EF15mm F2.8 Fisheye	28	EF135mm F2.8 Softfocus	54	EF-S17-85mm F4-5.6 IS USM	80	EF28-300mm F3.5-5.6L IS USM
3	EF20mm F2.8 USM	29	EF180mm F3.5L Macro USM	55	EF-S18-55mm F3.5-5.6	81	EF35-350mm F3.5-5.6L USM
4	EF24mm F1.4L II USM	30	EF200mm F1.8L USM	56	EF-S18-55mm F3.5-5.6 II	82	EF38-76mm F4.5-5.6
5	EF24mm F2.8	31	EF200mm F2L IS USM	57	EF-S18-55mm F3.5-5.6 USM	83	EF55-200mm F4.5-5.6 USM
5	EF24mm F2.8 IS USM	32	EF200mm F2.8L USM	58	EF-S18-55mm F3.5-5.6 II USM	84	EF55-200mm F4.5-5.6 II USM
7	EF28mm F1.8 USM	33	EF200mm F2.8L II USM	59	EF-S18-55mm F3.5-5.6 III	85	EF-S55-250mm F4-5.6 IS
3	EF28mm F2.8	34	EF300mm F2.8L USM	60	EF-S18-55mm F3.5-5.6 IS	86	EF-S55-250mm F4-5.6 IS II
9	EF28mm F2.8 IS USM	35	EF300mm F2.8L IS USM	61	EF-S18-55mm F3.5-5.6 IS II	87	EF70-200mm F2.8L USM
10	EF35mm F1.4L USM	36	EF300mm F2.8L IS II USM	62	EF-S18-135mm F3.5-5.6 IS	88	EF70-200mm F2.8L IS USM
11	EF35mm F2	37	EF300mm F4L USM	63	EF-S18-55mm F3.5-5.6 IS STM	89	EF70-200mm F2.8L IS II USM
12	EF35mm F2 IS USM	38	EF300mm F4L IS USM	64	EF-S18-135mm F3.5-5.6 IS STM	90	EF70-200mm F4L USM
13	EF40mm F2.8 STM	39	EF400mm F2.8L II USM	65	EF-S18-200mm F3.5-5.6 IS	91	EF70-200mm F4L IS USM
14	EF50mm F1.0L USM	40	EF400mm F2.8L IS USM	66	EF20-35mm F3.5-4.5 USM	92	EF70-300mm F4-5.6 IS USM
15	EF50mm F1.2L USM	41	EF400mm F2.8L IS II USM	67	EF22-55mm F4-5.6 USM	93	EF70-300mm F4-5.6L IS USM
16	EF50mm F1.4 USM	42	EF400mm F4 DO IS USM	68	EF24-70mm F2.8L USM	94	EF70-300mm F4.5-5.6 DO IS USM
17	EF50mm F1.8	43	EF400mm F5.6L USM	69	EF24-70mm F2.8L II USM	95	EF75-300mm F4-5.6 USM
18	EF50mm F1.8 II	44	EF500mm F4L IS USM	70	EF24-70mm F4L IS USM	96	EF75-300mm F4-5.6 II
19	EF50mm F2.5 Compact Macro	45	EF500mm F4L IS II USM	71	EF24-105mm F4L IS USM	97	EF75-300mm F4-5.6 II USM
20	EF-S60mm F2.8 Macro USM	46	EF600mm F4L IS USM	72	EF28-90mm F4-5.6	98	EF75-300mm F4-5.6 III
21	EF85mm F1.2L USM	47	EF600mm F4L IS II USM	73	EF28-90mm F4-5.6 USM	99	EF75-300mm F4-5.6 III USM
22	EF85mm F1.2L II USM	48	EF8-15mm F4L Fisheye USM	74	EF28-90mm F4-5.6 II	100	EF75-300mm F4-5.6 IS USM
23	EF85mm F1.8 USM	49	EF-S10-22mm F3.5-4.5 USM	75	EF28-90mm F4-5.6 II USM	101	EF100-400mm F4.5-5.6L IS USM
24	EF100mm F2 USM	50	EF-S15-85mm F3.5-5.6 IS USM	76	EF28-90mm F4-5.6 III	102	EF200-400mm F4L IS USM Extender 1.4x
25	EF100mm F2.8 Macro USM	51	EF16-35mm F2.8L II USM	77	EF28-135mm F3.5-5.6 IS USM	103	EF800mm F5.6L IS USM
26	EF100mm F2.8L Macro IS USM	52	EF17-40mm F4L USM	78	EF28-200mm F3.5-5.6	104	EF-S55-250mm F4-5.6 IS STM

As of November 7th, 2013.