

# Dual Pixel Auto Focus

Dual Pixel Auto Focus is a revolutionary auto focus technology implemented in the EOS C300 Mark II. As a smooth, organic, and accurate auto focus system it allows filmmakers to keep their subjects in focus even under tough circumstances. From rocking interviewees to insert shots, Dual Pixel Auto Focus will become a pivotal tool in your belt. It is accessed under the Camera Setup Menu.

## Focus Modes

**One Shot:** Manual focus with quick, momentary “Push” Auto Focus Abilities.

**AF Manual Boosted:** Automatic Focus that will only focus on a selected area if it is already *relatively* sharp. Will not “hunt” for focus.

**Continuous:** Automatic Focus that will always try to focus on a selected area.

## Face Detection and Tracking

With Face Detection and Tracking enabled, a box will appear around all subjects’ faces in the frame.

Whether or not the system actually drives focus to the face is dependent on what Focus Mode the camera is in.

In addition to Face Detection, this option enables Object Tracking. Object Tracking allows for the camera to track specific objects throughout the frame in XYZ space. To engage object tracking, a button must be assigned to the “Tracking” function as shown in the Menu Configuration page.

## Face AF

**Face Priority:** If no faces are present, the auto focus will default to the selected Focus Mode.

**Face Only:** If no faces are present, the camera will not drive the focus until another face is found.

Face only is great for interviews. If the subject turns their head too much or dips out of frame, the auto focus won’t switch to AF Frame and try to focus, instead, it will hold the last focus position. When a face is found again, auto focus will continue.

# Custom Picture Configuration

Custom Pictures are a pivotal part to the image process. Defining the capture Gamma, Color Gamut, and Color Matrix has effects not only on your final image, but your entire post production process. Below are the camera presets and their recommended use.

## Canon Log 2

The Canon Log 2 curve captures the most information and dynamic range from the sensor as possible. This will produce the flattest image and requires the most color grading in post production. The following presets all capture in the Canon Log 2 Curve in varying color spaces:

**Canon Log 2:C. Gamut:** Proprietary Color Space for capturing the widest range of colors.

**Canon Log 2: BT.2020:** Abides by the new SMPTE BT.2020 Standard

**Canon Log 2: DCI-P3:** Color Space that is used by Digital Cinema Projection

**Canon Log 2: BT.709:** Color Space currently being used for HD Consumer Devices.

## Canon Log

The Canon Log preset is designed to match the Canon Log image of the original EOS C300. This curve does not capture the full 15 Stops of dynamic range of the EOS C300 Mark II, but is a much more manageable to grade compared to Canon Log 2. It is in a BT.709 color space.

## BT.2020

The BT.2020 preset uses the Wide DR curve for a contrasty but high detail image inside of a BT.2020 color space. Images produced in this preset are considered ready to air.

## BT.709

The BT.709 preset uses the Wide DR curve for a contrasty but high detail image inside of a BT.709 color space. Images produced are considered ready to air.

# EOS C300 Mark II Documentary Quick Start



## About this Guide

This guide is designed to give documentary filmmakers an initial recommendation for configuring the EOS C300 Mark II.

# EOS C300 MK II for Documentarians

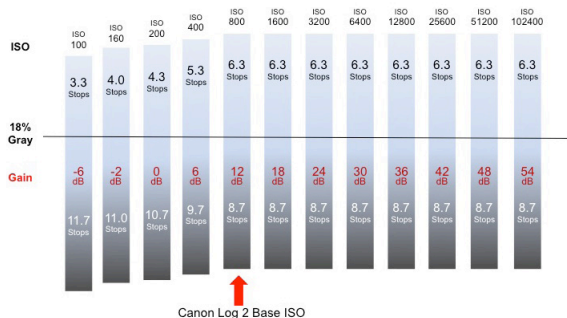
Like its predecessor, the EOS C300 Mark II is an incredible tool for documentary filmmakers. Whether your production is moving to 4K delivery or simply requires a small camera, the EOS C300 Mark II is a true workhorse. With support for a wide range of Color Gamuts and Gamma Curves, the EOS C300 Mark II is ready for your production and whatever the final delivery could be. Tools such as the Dual Pixel Auto Focus and Face Detection allow you to get the shot and tell your story no matter the size of your crew.

# Quick Tips for Documentarians

**1/ Proxy Recordings with LUTS**  
Proxy recordings can be captured simultaneously when shooting on the EOS C300 Mark II. When shooting in 4K DCI, the Proxies are formatted in 2K, and while shooting in UHD, the Proxies are 1920x1080. LUTs can be applied to the Proxies when shooting in either Canon Log or Canon Log 2.

**2/ Relay Recording and Formatting**  
Relay Recording allows for infinite uninterrupted recording ideal for capturing long-form interviews. When Card A fills up, the camera will automatically switch to capturing to Card B. The card not being captured to can then be swapped out and even formatted.

**3/ ISO Dynamic Range**  
When shooting in Canon Log 2, at 800 ISO and above the EOS C300 Mark II has 6.3 stops of high-light protection and 8.7 stops of shadow protection. When lowering the ISO below 800, the dynamic range shifts and begins to favor the shadows. For optimum highlight protection, such as when shooting outside, 800 ISO and above is the optimum range.



**4/ Automatic Black Balance (ABB)**  
Auto Black Balance resets the camera's reference for black and allows for the cleanest image possible. ABB can be found in the Camera Setup Menu and should be done daily before you start shooting as well as when the temperature of the environment changes.

# Menu Configuration 1

Below is a recommendation for initial setup of the EOS C300 Mark II in a documentary format. If a menu is not included in the chart, the camera's default configuration is ideal.

## Camera Setup

| Menu Setting           | Configuration            | Notes  |
|------------------------|--------------------------|--|
| ISO                    | <b>Extended Range:On</b> | Allows higher than 25,600 ISO and lower than 160 ISO   |
| Extended ND Range      | <b>On</b>                | Check Focus when using 8 and 10 Stop ND  |
| Focus                  | See Page 4               |  |
| Periph. Illum. Corr.   | <b>On</b>                | -Will reduce vignetting on certain lenses<br>-Noise may appear in the periphery of the image |
| Chromatic Aberr. Corr. | <b>On</b>                | Reduces color fringing   |

## CP Custom Picture

See Page 5

## Recording/Media Setup

| Menu Setting           | Configuration  | Notes  |
|------------------------|--|--|
| REC OUT 4K RAW Mode    | <b>Off:</b> Saves Power<br><b>2K:</b> Clean HD or 2K<br><b>4K RAW:</b> 4K/UHD RAW Signal | Unless capturing to external device, saves power when Off.       |
| Recording Mode         | <b>Normal</b>  | Use Slow & Fast Motion (crop) for 120FPS                         |
| Frame Rate             | <b>29.97P</b> or <b>23.98P</b>   | 4K/UHD can only be captured at these rates when in 59.94Hz Freq. |
| XF-AVC Proxy Recording | <b>Activate:On</b><br><b>Apply LUT:On</b>  | HD or 2K Proxies are recorded to the SD Card                     |
| Relay/Double Slot Rec  | <b>Relay Recording: On</b>   | When Card A fills, camera will continue recording to Card B      |

# Menu Configuration 2

## Picture/Terminals Setup

| Menu Setting             | Configuration                                | Notes   |
|--------------------------|--|---|
| Select Monitoring Device | <b>MON.+HDMI+LCD(VF)</b>                     | Enables the HDMI, SDI Mon. Output, and LCD, but VF can not run simultaneously |
| Time Code                | <b>Run:</b> Free Run<br><b>TC In/Out:</b> In | To sync cameras, one must be set to "Out" and other to "In"                   |

## Assistance Functions

| Menu Setting | Configuration                              | Notes                                |
|--------------|--|--------------------------------------|
| Focus Guide  | <b>On</b>                                  | A manual focus assist tool           |
| LUT          | <b>Activate: On</b>                        | Choose which sources receive a LUT   |
| WFM          | <b>Waveform Monitor&gt;Type:</b> Line+Spot | Allows for quicker exposure checking |

## System Setup

| Menu Setting                      | Button | Function             |
|-----------------------------------|--------|----------------------|
| Assignable Buttons <i>Camera</i>  | 8      | Tracking             |
|                                   | 11     | Face Det. & Tracking |
| Assignable Buttons <i>Grip</i>    | 1      | AF Lock              |
| Assignable Buttons <i>Monitor</i> | 1      | White Balance        |
|                                   | 2      | ISO/Gain             |
|                                   | 3      | Shutter              |