

“UnDutchables 0.2.3 firmware” for the Canon Digital Rebel (300D) Released March, 2005

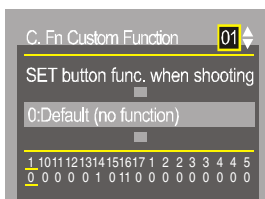
All enhancements over Canon 1.1.1

Enhancement over UnDutchables 0.1.0 are in *italic font*.

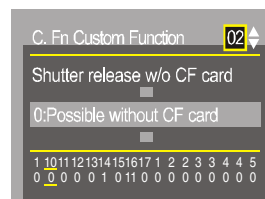
- Custom function menu found on the last page in the menu
- Ability to define how the SET button behaves (same menu found on the 10D - refer to the 10D manual for full explanation of these new enhancements)
- Exposure level increments either 1/2 or 1/3-stop
- Option to enable 1/200th flash speed sync in AV mode
- Ability to change the JPG size when shooting in RAW mode
- Shutter release with or without CF card
- FEC adjustment via the JUMP button, use the dial to adjust as shown on the LCD, only in Creative Modes
- ISO3200 now available, and is represented by an "H" in the LCD - same as how the 10D shows this
- Mirror lockup available via enabling the option in the custom function, works by pressing the shutter button which flips the mirror up, then the shutter opens after the timeout defined in C.Fn17 after MLU - note that this is different than how it is implemented on the 10D where you press once to flip the mirror and press again to open the shutter
- Mirror lockup delay adjustable via C.Fn17 – possible delay includes 1.5 sec, 3 sec, 4.5 sec, 6 sec, 7.5 sec, and 10 sec
- Immediately pressing the ERASE button after taking a photo, you can delete the photo by pressing the SET button again instead of selecting Ok previously, to not delete the photo press any other key
- In Creative modes, *right* button changes the focus mode and is displayed on the LCD as follows:
 - AF OF Lens set to manual focus
 - AF OS One shot
 - AF SE AI-Servo (selectable but cannot take a photo - one workaround, *press left to release the shutter*)
 - AF AI AI-Focus (first takes one shot then the camera may switch to AI-servo depending on what you are focussing on)
- Continues Drive in Basic Mode
- White balance selection in Basic modes
- Custom Function 1 available in basic modes enabling:
 - Quality Select via SET button
 - Parameter select via SET buttons
 - Menu via SET button
 - Image Replay via SET button
- White balance bracketing is working in basic modes.
- *Full menu's available in basic modes.*
- *Left button press turns AF off, release turns AF on again. Effectively this puts the lens in manual mode while the left button is pressed. Pressing it when in AI-Servo mode will therefore release the shutter. You lose AF during button press though. This means that AI servo does not support predictive focusing. The shutter button must be released before focusing and shooting again.*

Custom Function Menu

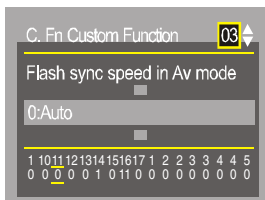
All images show the default value. ✓ designates working function.



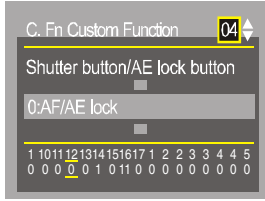
- CF1** ✓
- 0 Default (no function)
 - 1 Change quality
 - 2 Change parameters
 - 3 Menu display
 - 4 Image replay



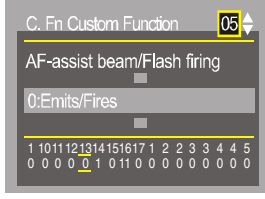
- CF2** ✓
- 0 Possible without CF card
 - 1 Not possible



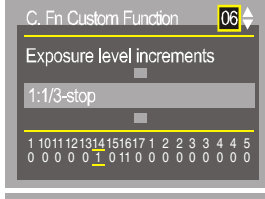
- CF3 ✓**
 0 Auto
 1 1/200sec (fixed)



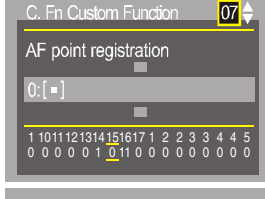
- CF4 ✗**
 0 AF/AE lock
 1 AE Lock/AF
 2 AF/AF lock, no AE lock
 3 AE/AF, no lock



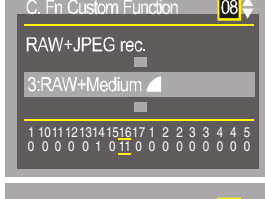
- CF5 ✗**
 0 Emits/Fires
 1 Does not emit/Fires
 2 Only ext. flash emits/Fires
 3 Emits/does not fire



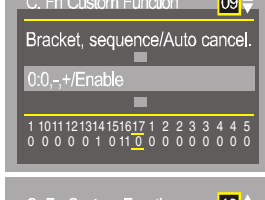
- CF6 ✓**
 0 1/2-stop
 1 1/3 stop



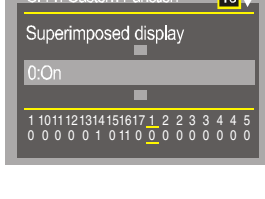
- CF7 ✗**
 0 [•] 4 [••]
 1 [-] 5 [•]
 2 [•] 6 [•]
 3 [•] 7 [•]



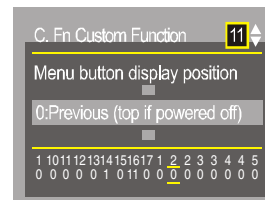
- CF8 ✓**
 0 RAW+Small Normal
 1 RAW+Small Fine
 2 RAW+Medium Normal
 3 RAW+Medium Fine
 4 RAW+Large Normal
 5 RAW+Large Fine



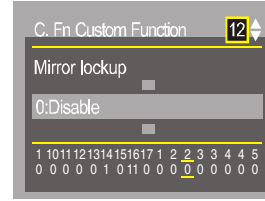
- CF9 ✗**
 0 0,-,+/enable (300D default)
 1 0,-,+/disable
 2 -,0,+/enable
 3 -,0,+/disable



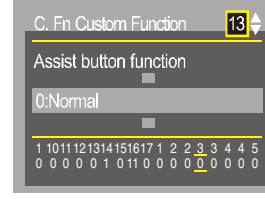
- CF10 ✗**
 0 On
 1 Off



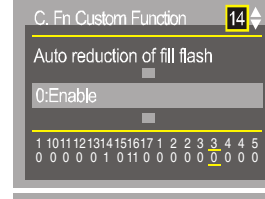
- CF11 ✗**
 0 previous(top if powered off)
 1 previous
 2 top



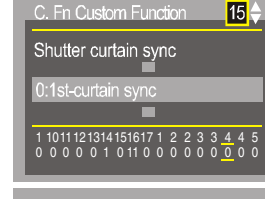
- CF12 ✓**
 0 disable
 1 enable



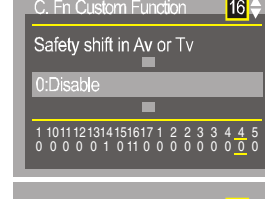
- CF13 ✗**
 0 enable
 1 disable



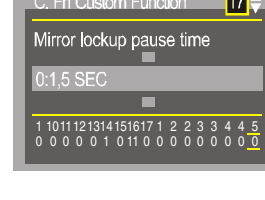
- CF14 ✗**
 0 enable
 1 disable



- CF15 ✗**
 0 1st-curtain sync
 1 2nd-curtain sync



- CF16 ✗**
 0 Disable
 1 Enable



- CF17 ✓**
 0 1.5 sec
 1 3 sec
 2 4.5 sec
 3 6 sec
 4 7.5 sec
 5 10 sec

Note: this is replaced in this firmware to allow for the user to adjust the MLU delay vs the 10D menu

For further explanations on these custom functions please refer to the 10D manual.

Watchouts

- Camera may lock up if you attempt to change the language, maybe possible to change the language but must be done on the original Canon 300D 1.1.1 firmware
- Some features may not work correctly if you are using another language - use English as a workaround
- If you upgrade and some of the things don't seem to work properly, set the settings in the Custom Function back to the original values (see below) and install the original 1.1.1 firmware, then upgrade to the new firmware
- If MLU does not work, ensure that the camera is in single drive mode
- When using a flash with the MLU enabled, the flash will fire when the mirror lifts and again with the shutter opens
- Menu items for the MLU timeout will show a few arrows – ignore the arrows
- The quick erase may have altered something with the code used for monitoring the battery, and the low battery icon may appear earlier than expected
- Numbering of the custom functions are incorrect but the functions themselves are correct
- *Picture quality can now be modified safely via the menu in all modes.*
- If the AF drive is set to AI-Servo the AF confirmation Light and Beep are turned off (as done in the 10D) but now it is turned off for *all* modes. Please change to AI-Focus or One-Shot if AF confirmation Light and Beep is desired.
- *AI Servo with the left button release does not support predictive focusing.*
- *All metering related adjustments do not work in basic zones. These include AEB, EC, FEC, ISO, focus point select. AEB can be set in the menu but will not work.*

Issues resolved from previous version

- When using MLU and the countdown timer, the 10 second countdown now behaves normally, then followed by the MLU
- Raw, white balance and continuous now available in basic modes.
- Full menu's available in all modes.
- *Left button function (AF mode) now moved to right button.*
- *Right button toggles AF enable/disable.*

Reverting back to the original version

- Reset all the Custom Function values to the original 300D settings. Note, you cannot use the Reset option in the menu, it does not affect these values. Below is a list of default binary values from left to right (the bottom numbers in the CF menu):
0,0,0,0,0,1,0,11,0,0,0,0,0,0,0,0
- Flash back to 1.1.1.

Web Resources

- *Yahoo group*
<http://groups.yahoo.com/group/canondigicamhacking>
- *DPreview Canon 300D forum*
<http://forums.dpreview.com/forums/forum.asp?forum=1031>
- *Canon EOS 300D Digital Rebel Tips and Tricks*
<http://www.bahneman.com/liem/photos/tricks/digital-rebel-tricks.html>
- *Canon 300D Firmware 1.1.1*
http://web.canon.jp/Imaging/eosdigital/E3kr_firmware-e.html
- *Canon10D manual (PDF)*
http://www.powershot.com/powershot2/customer/pdf/EOS_10D_E.pdf
- *Canon 300D manual (PDF)*
<http://www.canoneos.com/digitalrebel/download/manual.pdf>
- *300D Firmware Hacking Forums and the home of the UnDutchables*
<http://www.syeager.org/300d>