

Canon 30D User's Guide

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INTRODUCTION

This is how I use and set up a Canon 30D.

Want free live phone support? In the USA, call (800) OK-CANON from 10AM - Midnight M-F, 10AM - 8PM Saturday, Eastern Time. They're closed Sundays.

I start off explaining things so my mom can understand, and get on to deciphering every menu item for advanced users at the end.

This article will teach you to be an expert on the 30D's controls and menus. It also includes a lot of tips, tricks, and the settings I prefer to use.

To get great photos you still need to get yourself to the right place at the right time and point the camera in the right direction, which is a lot harder than mastering the 30D. Right out of the box at default settings the 30D does a great job. Making a great photo involves locations, timing, patience and a whole lot more.

Below are the basics. Explicit details follow in later pages.

BASICS: CAMERA

Many of these adjustments require you to be in the P, Tv, Av or M exposure modes. You set that on the top dial. The cute preset modes often lock out some adjustments. I never use these preset scene modes and won't cover them.

I leave most settings at their defaults and use the Program exposure mode. I never use the cute little preset icon modes because I prefer to set anything special myself.

Power: I always leave the power switch ON or set to the line (explained at Controls). The 30D ignores all the other buttons except the shutter once it goes to sleep a minute after you ignore it. The only way to get the 30D to respond to other keys, like Playback or MENU, is to tap the shutter button to wake it up. I don't bother turning it OFF, since it doesn't use the batteries while sleeping. I only turn it off if it's going in a case where the shutter might get tapped unintentionally.

ISO: I use 100 in daylight. If the light gets dim and my images would get blurry from slower shutter speeds I increase the ISO to 400, 800 or 1,600. I never bother with in-between settings like 250 or 640. Unlike film, the 30D looks great at high ISOs, so I use them anytime I need them. I'd much rather have a slightly grainy but sharp image than a less grainy and blurry one. See examples of the noise and grain on my noise comparison page. I explain how to set these on my Controls page, and I explain ISO (sensitivity to light) on my ISO page.

White Balance: I use AUTO. I explain how to set these on the 30D at Controls. See my White Balance Examples page and my White Balance page for why you'd want to change them.

Quality: I shoot Large JPG NORMAL, which shows as L and a stair-step icon on the rear and top LCDs. Large is 3,504 x 2,336 pixels image size. I don't bother with RAW. See RAW vs. JPG and file format examples from a Nikon D200 for explanations and examples of the various settings. I explain how to set these at Menus.

For parties or sports where I'll be shooting hundreds and hundreds of images, I shoot Medium Normal (M and stair step icon) to save file space. The images still look great!

I've made 12 x 18" prints of the same shot and seen no difference among the file types. Don't worry!

I never use FINE, which is the quarter circle in place of the stair step icon. It looks the same to me and takes up twice the file space.

Picture Style: This is where you set the "look" of your images: saturation, color, contrast, etc. I prefer the vivid color I get from Fuji's Velvia 50 film, so I tweak the 30D to give color almost as vivid as I can get. The 30D has a much wider range of saturation adjustment than most other cameras, so halfway up on a 30D is the same as all the way up on a 20D, D80 or D200.

I leave everything at normal, and set the saturation to +2, +3, or, if I'm sitting down, +4. +4 is pretty wild. Try them for yourself.

I explain how to set this later at Picture Styles.

FOCUS: I use AI Focus. This clever mode automatically selects either of the two other focus modes. The other two focus modes are ONE SHOT, which means the 30D locks and holds the focus for you to compose still subjects, or AI Servo, which keeps the focus active to track moving subjects. I explain how to set these on my Controls page.

METERING: Evaluative (the solid dot and circle in a rectangle icon). I never use the other modes.

The other metering modes are: Center-Only (circle in rectangle, Canon calls this "Partial Metering"), Spot (dot in rectangle) or Center-Biased, Full-Frame Averaging (empty rectangle, Canon calls this "Center Weighted Averaging") modes. These modes are leftovers from before Evaluative metering was invented in 1985. I explain how to set these on my Controls page.

LENS

I leave the AF - MF switch set to AF, for Autofocus.

If the lens has an Image Stabilizer, I leave it ON.

Some telephoto and macro lenses may have a switch to limit the range over which the lens can focus. I leave these set to the widest range. If your lens is taking too much time to hunt around and get focused, you might want to select a more restricted range, in which case the lens only looks at those ranges and will save itself from hunting.

CONTROLS

TOP PANEL CONTROLS



Left side:

Control Wheel: I leave this on P, Program exposure. This lets the 30D select the aperture and shutter speed, which it does perfectly all by itself.

If I want different shutter speeds or apertures than the 30D's Program mode selections, I spin the front dial to select other combinations. Easy! Spinning the front dial in the Program mode is much faster and easier than switching to any of the other modes.

I'll use **Tv** ("Time value") if I want to select a certain shutter speed only, in which case the 30D selects the aperture. I never use this.

I'll use **Av** ("Aperture value") if I want to select a certain aperture only, in which case the 30D selects the shutter speed. I only use this when testing lenses and need exact apertures. I don't use this for real photography.

M is manual exposure. You have to select the aperture and shutter speed the hard way: with more knobs. I'll only use this if I'm photographing something weird that requires me to lock down the exposure and keep it from changing. This most often is outdoors at night.

A-DEP is a goofy mode which is supposed to select the aperture based on how much depth-of-field you require. I've tried it, and never use it.

The **Green Rectangle** mode sets everything all by itself. It disables much of the other adjustments about which I'll be writing in these pages. I only suggest the green rectangle mode for loaning your 30D to your mom. There's nothing wrong with it for starters, but defeats most of the adjustments you're here to learn.

The other modes are cute scene presets (portrait, sports, etc.) I don't use them. Instead I use Program mode and spin the front dial as needed to select fast shutter speeds for sports or big apertures for portraits or small apertures for landscapes. Many of the adjustments I'll be explaining are locked out in these preset modes.

Feel free to use any of these modes if they work for you. If you want to make more advanced adjustments in the future you may have to change to one of the P, Tv, Av or M modes above.

Right side:

Light Bulb: Press this to light the LCD display.

AF - WB: Tap this, and now the two control dials can change these. It will stop accepting input 6 seconds after you're done twiddling, or the instant you tap the shutter button.

AF mode is shown on the right of the LCD, it shows AI FOCUS. WB is shown on the left of the LCD, it shows AWB.

Important: these, as all the buttons, only work if you've first woken up the 30D by tapping the shutter button! Once the 30D is awake and you've tapped the AF-WB button:

1. Tap the AF-WB button and now the front dial, seen at the top of this picture, selects the Autofocus modes. I explained these on the first page.
2. Tap the AF-WB button and now the big dial on the back of the camera selects among the various White Balance options. See my White Balance Examples page and my White Balance page for the specifics.
3. Press the shutter to get back to shooting. You can leave the 30D alone, or press the AF-WB button again to get it out of the adjustment mode.

DRIVE - ISO works the same as the AF-WB button. It will stop accepting input 6 seconds after you're done twiddling, or the instant you tap the shutter button.

Tap it and the front dial selects the drive modes. You see the self-timer mode selected on the LCD in my photo.

Other drive options are:

Single mode makes only one shot, no matter how long you hold the button. It's shown as one rectangle.

Continuous mode shoots frames for as long as you hold down the shutter button. It's shown as a rectangle with a beard (more rectangles) growing out of it.

Continuous mode comes in two speeds:

- **High-speed** (5FPS) and
- **Low-speed** (3FPS).

High-speed is shown with a little "H" next to the bearded rectangle. Low-speed is just the bearded rectangle.

I prefer low-speed (3FPS) over high-speed (5FPS). High-speed is so fast it often fires two shots before I can remove my finger from the shutter, even if I only wanted one shot! I always use low-speed continuous, so a short press is one shot, and a long press is several. This saves me from having to switch modes. I always make several shots if the light is dim so I can pick a sharp shot from among the blurry ones.

The low speed mode is unique to the 30D. Both the 20D and 30D have high speed mode, although the 20D has no H to show for it. The 20D is always in high-speed mode if you select the bearded rectangle.

Of course for sports and action, use high-speed.

Tap **DRIVE-ISO** and the big dial on the back selects among the various ISO (light sensitivity) settings. It goes in third stops from 100 - 1,600. I prefer the 20D which only offers full stops. I never use middle ISOs like 320 or 640, so they get in my way on the 30D.

ISO 3,200 is locked out to prevent people from using it by accident and complaining about noise and grain. You have to enable it in Custom Function 08. Once you've set Custom Function 08 to ON, ISO 3,200 is selected as "H," one click past ISO 1,600.

I wish Canon allowed setting 1/3 stop ISOs between 1,600 and 3,200, since only at these very high speeds is there any real difference in noise between 1,600, 2,000, 2,500 and 3,200. The 20D and 30D only allow setting 1,600 or 3,200, not 2,000 or 2,500.

I set 100 outdoors, and higher ones as I need them. There is NO Auto setting, as I love using on my Nikons. (There is a partial auto setting in some of the scene modes selected on the left top dial, which I don't use.)

Rectangles, Circles, Lightning Bolt and +/- (Metering and Flash Brightness) Button: This button works the same as the other two buttons. It selects meter mode (the rectangle and circles) and flash brightness (the lightning bolt).

You spin the front dial to change the exposure meter modes. I explained the Meter Mode selections on the first page. I always use evaluative, which is the dot and circle inside the rectangle.

Flash brightness is set with the rear dial. I leave it on 0. + makes it brighter and - makes it darker.

REAR PANEL CONTROLS



Note: Canon color-codes buttons in **blue** and silver to correspond to their functions in playback or shooting. I may use these colors in the text to clarify.

Squiggle - Printer Button: I never use this. It's for messing around with transferring only some images from the camera to your computer (the squiggle) or for printing directly from the camera to an inkjet printer (the printer).

Trick: The squiggle/printer button does something useful, but only if you enable it in Custom Function 17. If enabled, hold this squiggle/printer button and press the (+) (magnify) button while an image is reviewing immediately after it's shot. It will let you magnify the image without having to hit Play. Beats me why you have to enable this in a custom function; all the Canon point-and-shoots do this by pressing their SET buttons without needing any menus.

Pro tip: format your card every time you shoot, pull all your images off the card at the same time, back them up, and then format the card again before shooting again. This prevents data errors. People who keep erasing (instead of formatting) cards are asking for trouble over time.

MENU: Calls up the menus.

INFO: In playback, this button cycles through three kinds of display:

- 1.) Just the image, or
- 2.) Image with file number, frame counts and f/stop and shutter speed, or
- 3.) A page of more data and a useless single-channel histogram. You'll get much better results with the RGB histogram you should select in the Playback Menu.

If the LCD is off, you're in shooting mode and pressing INFO calls up a screen of data related to the pictures you're about to take. It calls up the current time and date, exposure compensation, WB and Picture Style settings, available memory and etc.

JUMP: If you have the menus up, JUMP jumps to the next of three color-coded kinds of menu items: Shooting, Playing and Wrench.

If you're playing an image, press it and you'll see a scroll bar appear on the image. Now the big rear wheel jumps 10 images forward or back per click.

[>] (Play): Plays images. Press again to turn them off.

Trash: Delete image. To delete an image, press the trash button, spin the dial one click clockwise to highlight "Erase" and press SET.

ON / OFF: Power switch. The top "/" position enables the big dial to set exposure compensation, which makes images darker or lighter. Note how the "/" line connects to the big dial.

In "ON" the big dial still works in the menus and everything else, but it won't set exposure compensation. You may wish to use the "ON" position to prevent accidental changing of the lighten/darken value. This value is shown on the top LCD and in the finder as a bar under a dotted line.

In the photo of the top LCD above you can see this line on the bottom center of the LCD. In the photo the bar is at -1/3, my usual preference for the 30D.

Big Dial: Spin this to select items as shown on the two LCDs and explained throughout this article.

SET: This is the button in the center of the big dial. It rotates with the dial. I had to be sure I had it rotated so it said "SET" and wasn't upside down ("13S") for the photo. Don't worry, it does the same thing all the time.

Red light on bottom right of Big Dial: This lights when the memory card is working. Leave the memory card alone while it's lit. It only lights for short periods of time when taking pictures, or stays lit and flashing when downloading a lot of photos.

Unmarked Button above Big Dial: This is a 9-way navigation button. You can push it in 8 directions, or push it straight in.

In playback it lets you scroll around the image after zooming in. It ignores you if you're not zoomed in, or are in the multi-image playback mode.

In shooting it ignores you, unless you first press the top-right **[+]** button (explained below). After pressing the **[+]** button, the unmarked button allows you to select the autofocus sensor, which you'll see highlighted in red in the finder. You'll also see a cryptic **[-]** display on the top LCD, which is a rough representation of the selected AF sensor.

Move the unmarked button to select the AF sensor. Push the unmarked button straight in to select the center sensor, which is very handy. Push it straight in again to light all the sensors, which lets the 30D select the sensor automatically.

This button has nine direct positions and selects that sensor directly, regardless of the currently selected sensor. Unlike Nikon, it doesn't move the selection around by clicks.

Example 1: if you have the bottom sensor selected and want to select the lower left sensor, just press the button to the lower left. Pressing it to the upper left, as you'd do on Nikon to move it a click, would select the upper left sensor.

Example 2: if you have the right sensor selected and push the button left, you'll get the left sensor directly. You won't move a click to the center sensor as you would on Nikon. You get the center sensor by pushing the button straight in.

You can let the unmarked button move the AF sensor without needing to press the **[+]** button first in Custom Function 13.

Top Rear Corner



*** (star), Checkerboard, (-) Button:** This is on the top right of the rear of the 30D.

In playback: Zooms out (-), or if you're zoomed all the way out, the next push gets you into the 9-image display mode (checkerboard).

During shooting: * is Exposure Lock. Press * to lock the exposure. You'll see "*" in the finder to confirm after you've pressed it. This is the easy way to set the exposure in difficult (contrasty or backlit) light by pointing at one subject, locking the exposure and recomposing.

For instance, with strong backlight, zoom into the face, tap the * (see "*" in finder to confirm that the exposure is locked) and zoom back out and recompose for your photo. This is much faster than other ways of setting exposure. Of course in a backlit case you should be using fill flash, too.

It should be marked AEL. Sorry.

You can change the function of this button in Custom Function 04.

Once locked, it stays locked. I wish it unlocked if I pressed * again. Pressing it again merely locks it to a new setting Even taking a picture won't release it. You have to press one of the top AE-WB or DRIVE-ISO buttons to release it.

If your flash is on, it locks flash exposure, too. You'll see FEL (Flash Exposure Lock) blink in the finder right after you press it.

Flash Tip for the "*" Button:

Preflash - Eyes Closed



No preflash - eyes open

The 30D, like most cameras, fires a preflash a fraction of a second before the actual photo is taken to set how bright the flash should be. Then it takes the picture a fraction of a second later with a second pop of the flash. Most of the time the first pop of the flash starts people and pets blinking, which almost guarantees that their eyes will be closed in the actual photo!

Use the * button to pop the preflash before you take a flash picture of people or pets. Now, so long as the * stay lit in the finder, the 30D will only fire one flash for each photo, which won't cause people to blink the moment before the photo is taken. Be sure to press * again if you change your distance.

[+] - (+) Button: This is on the top right of the rear of the 30D.

In playback: Zooms in (+), or if you're in the 9-image display mode (checkerboard), returns you to an individual image.

During shooting: [+] allows you to change the selected AF sensor or sensors. I explained this above under the Unmarked Button above Big Dial.

SIDE and FRONT CONTROLS



Look for the buttons on the front of the 30D near the lens.

Lightning Bolt Button (just above and to left of EOS 30D label): Press it to pop up the built in flash. That's all it does. Unlike Nikon, you change the flash brightness (exposure compensation), if needed, with the flash exposure compensation button on the top of the camera.

The finder flashes **BUSY** while the flash recycles.

Big Unmarked Button (middle, to right of "Canon" marking on lens): Press it to unlock the lens for removal. Hold it in and turn the lens so the red or white dot goes towards the top of the camera to remove it. To mount another lens you merely match the red or white dot on the lens with the red or white dot on the 30D and rotate it until it clicks and locks automatically.

Teeny Unmarked Button (just below Big Unmarked Button): Press and hold it to preview if the background will come into sharp enough focus to be distracting. It probably will make the viewfinder get darker, ignore that. Photographers call this button the "depth-of-field preview button." This button was important for film cameras, but since you get a better view playing the image back on the LCD, today this button is for a quick check of the background when making portraits.

CUSTOM FUNCTIONS

Custom Functions are little menu tweaks that let you configure the 30D to your liking.

You are welcome to forget all of these if your 30D is the way you want it. There are a couple I suggest you change to get the most out of your 30D.

They are easy to see and to change. There are 18 of them, each with their own options.

Some are wonderfully helpful while and others are only for special purposes. Sadly they are all well hidden in the menu system.

How to Get to the Custom Functions Menu

1. Press **MENU**.
2. Spin the **Big Dial** to select **Custom Functions**, which is in the orange wrench section almost on the bottom.
3. Press **SET**. You're here.

How to Select a Custom Function: After the above, spin the **Big Dial**.

How to Change a Custom Function

1. After the above to select what you want to change, press **SET**.
2. Spin the **Big Dial** to see the options.
3. Press **SET** to save your choice.

THE CUSTOM FUNCTIONS

The default setting is "0" for each.

01: SET function when shooting lets you have the SET button do something helpful while shooting. These are cool; they give you instant access to your choice of a function, skipping a few clicks. I use the Change Quality setting.

Options are:

- 0: Nothing. The 30D ignores the SET button while shooting.
- 1: Change the Quality setting. You have to look at the top LCD.
- 2: Select a different Picture Style.
- 3: Call up MENU (duplicates the MENU button).
- 4: Replay the image.

02: Long Exposure Noise Reduction. This means after an exposure of a second or longer, the 30D makes a second exposure as long as the first, except with the shutter closed. The top LCD blinks BUSY during this second, dark, exposure. The 30D then subtracts any noise, fog or hot pixels seen in the known dark exposure from your image.

I never use this. I hate waiting, and I especially hate waiting for double-long exposures for this to finish. Use it only if you see fog or hot pixels and then only if it improves them.

03: Flash Sync in Av Mode.

- 0: Auto: the shutter speed remains as set for a good ambient exposure. I use this.
- 1: 1/250: It locks the shutter at its fastest 1/250 sync, making the backgrounds dark or black.

04: Shutter Button/AE Lock Button chooses the function of these two buttons. Hint: The AE lock button is the one marked *.

0: AF/AE Lock: The shutter button focuses the lens and locks the exposure. The * button locks exposure, too, and holds it after you've released it. I have no idea how to unlock the set exposure, except by cycling the power or tapping the AF-WB or DRIVE-ISO buttons.

1: AE Lock/AF is backwards from how I like things. The shutter button locks exposure, and the * button focuses.

2: AF/AF lock, no AE lock: the shutter button focuses and locks exposure. The * button locks focus.

3: AE/AF, no AE lock. The shutter only releases the shutter. Only the * button focuses, and it also locks exposure. This is different from what I'd expect from the labeling.

I use the default. Sadly, I have no idea how to get the buttons to work the way I want, which is for the shutter to lock focus but not exposure, and the * button to lock exposure only when held down.

05: AF Assist Beam. This is a trick: the 30D has NO AF illuminator! Sadly, the 30D instead fires off the flash numerous times, blinding your subjects. My wife kicked me out when she thought I was going to blind her dogs. The little light near the shutter button on the front of the body is only for the self-timer, not the AF illuminator. Sorry.

06: Set Exposure in 1/3 or 1/2 Stops: purely personal preference. I prefer full stops (not offered), except in Manual, where I prefer thirds.

07: Flash on/off: This one is silly. Turn it off, and the flash won't go off, even if popped up! That's the easiest way to confuse yourself and send in your camera for unneeded service. Really want to confuse your friends? Even if this is turned off, the flash will still go off in the dark to help focusing, but won't go off for the photo! leave this one alone at its default of ON.

08 ISO Expansion (ISO 3200 Enable): by default, this is off. If it's off, the highest ISO is 1,600. Set it to ON to let you get to ISO 3,200. Once set ON, you get to ISO 3,200 easily through the usual ISO setting.

Canon hid ISO 3,200 so inexperienced photographers wouldn't accidentally shoot photos at ISO 3,200 and be unhappy with the grain (noise). Of course ISO 3,200 is noisy. I use ISO 3,200 if it's dark and the difference between a sharp shot and a blurry one.

I always leave this custom function set to ON so I can get to ISO 3,200 any time I need it.

09: Bracket Sequence/Auto Cancel sets two things. (You enable bracketing in the menus.)

Sequence is the order of the exposures. Normal is 0 - +, which means the first shot is at the normal exposure, the next is underexposure, and the last is overexposure. You can change this to - 0 +, which makes the underexposure first, followed by the normal and then overexposed shot. This also applies to WB bracketing: + refers to more green or amber; - refers to more magenta or blue.

Auto Cancel is whether or not the bracketing cancels when you turn off the power or change lenses. By default, bracketing turns off with the camera. If you set this to disable (a double negative: you're disabling the auto-cancel so it doesn't cancel) then the bracketing is still turned on next time you turn on the 30D. I wouldn't do this; I'd leave it alone.

Canon's manual implies that you have to choose a non-default "disable" in order to repeat a bracket sequence. I think this was lost in translation, you can repeat sequences in any setting.

10: Superimposed Display (Red AF Sensor Lights) let you turn off the red AF sensor lights in the finder. I don't know why you'd do this. I leave this at its default, which lights up the sensor in use as you shoot. If you turn it off, you'll still see the sensors as you're selecting them manually.

11: Menu Button Display Position selects where you are each time you hit the MENU button

0: Previous (top if power off): Every time you hit MENU you are where you were the last time you hit it, unless you've turned off the 30D, in which case it starts again at the top of the menu list.

1: Previous: You are where you were the last time you hit the Menu button even if you've turned off the 30D.

2: Top. Every time you press the MENU button you start at the top of the list. (hint: use JUMP to jump to each section)

12: Mirror Lockup. This is to prevent vibration and blur for exposures on a tripod. Neither Canon nor Nikon do this correctly. They all did it correctly in the 1960s - 1980s, which is to have the mirror flip up as soon as the self-timer starts.

0: Disable. Normal shooting.

1. Enable: Mirror flips up on first press of the shutter button, and picture is taken either when the shutter is pressed again, or the self-timer completes (if you've set the self timer.)

This is a pain. For normal use (if you haven't paid the big bucks for the special Canon remote release cord) you have to set this way down in the menus, and then also set the self timer. Now all works fine: press the shutter, the mirror flips up, and 2 seconds later the shutter releases. All is fine until you're done: you have to go back into BOTH these settings and return them to normal.

I would suggest Canon do the right thing and make the mirror flip up by default at the beginning of the self-timer interval, without any menus needed.

13: AF Selection Mode.

0: Normal. The unmarked rear button selects them after you hit [+].

1: Direct. The unmarked rear button selects them without having to hit [+]. I prefer this; it's faster. The 30D ignores the unmarked rear button when it's asleep and around your neck anyway.

2: Quick Control Dial Direct (Big Dial). The Big Dial selects them directly without needing to hit [+]. Of course this is what you used to do to set exposure compensation, so now Canon says you have to hold [+] and spin the Big Dial to set exposure compensation. Mine doesn't do this - it ignores the [+] button and keeps changing AF points with the big dial. In this mode the unmarked rear button is ignored during shooting. Of course the 30D ignores the Big Dial for this unless you have the power switch set to "/."

14: E-TTL-II (Flash Metering) allows you to screw up the flash exposure.

0: Evaluative gives correct flash exposure, and balances it with daylight to fill in shadows. Lovely! Leave it here.

1: Average fires the flash with enough power to expose everything by it's light alone. It won't look good as fill. Don't do this.

15: Shutter Curtain Sync (Flash Mode) is how you select rear-curtain sync to make moving objects look like they're moving in the right direction, presuming you're using a slow shutter speed in Tv, Av or M modes.

0: 1st curtain: Flash fires as soon as the shutter opens.

1: 2nd Curtain: Flash fires at the very last instant of exposure. If a subject is moving and making a blur under ambient light, the final image will have the subject stopped with a ghost flash image at the beginning of the blur. This results in a sharp image with blurs behind a moving subject, implying speed.

The default above (same for all cameras) puts the blur in front of a moving object, which looks silly.

Nikon makes this easy to select with a direct button and knob, no menus.

Sadly, Canons can't do slow sync in Program mode as Nikons do. You have to work in M, Tv or Av.

16: Safety Shift in Av or Tv is great. I wish Nikon had this.

0: Disable. If the camera runs out of apertures or shutter speeds to work with the one you've chosen in Tv or Av, you get over or under exposure. This is silly.

1. Enable: if you've selected a shutter speed in Tv mode or an aperture in Av mode and the light isn't right to get a correct exposure with that setting, the 30D is smart enough to change your chosen value to get the right exposure. It works great!

Example: Set 1/500 in Tv mode. In a dark room, the finder will blink the maximum aperture of the lens, since it's gone to the largest aperture and still can't get enough exposure at 1/500. When you press the shutter halfway, you'll see the aperture stop blinking and a lower shutter speed appear. The 30D will shoot at the maximum aperture and a slower shutter speed, instead of being stupid like my Nikons and underexposing the image.

I love this. I leave it enabled. I wish my Nikons could do this.

17: Magnified View enables you to zoom the image right after you shoot it. I have no idea why this requires a menu option, even my canon point-and-shoots do this, automatically.

0: Playback only. You have to hit the Play button before you can zoom in. Stupid.

1: Review and Playback. You can zoom in after hitting the Play button as before. Also, while the image is reviewing, you can hold the squiggle/printer button while pressing the (+) (magnify) button to zoom in. This lets you magnify the image without having to hit Play. Beats me why you have to enable this in a custom function; all the Canon point-and-shoots do this by pressing their SET buttons without needing any menus.

18: Lens AF Stop Button lets you select what happens when you press AF Stop buttons which appear only on Canon's super telephoto lenses. Most lenses don't have these buttons.

19: Add Original Decision Data adds a checksum to the image file. If you pay \$700 extra for the DVK-E2 software kit, when playing back images you can get your computer to tell you if your file is as it came from the camera, or if it's been altered. This is something Canon pitches to people who use photos for evidence and forensics. I have no idea if anyone believes any of this. I wouldn't.

MENUS

These are called up with the MENU button. The 30D needs to be awake to respond to the MENU button. Tap the shutter button if the 30D has fallen asleep, which it does after a minute idle.

You'll see a bunch of things on the rear LCD.

You move up and down by spinning the big rear dial. You can jump to the top of any of the three color-coded sections by pressing the JUMP button.

The three sections of the menu are **SHOOTING** (a camera icon in **red**), **PLAYBACK** ([>] icon, **blue**) and **WRENCH** (hammer and sickle icon, **orange**).

SHOOTING MENU

Quality: Here's where you select file type, image size, and JPG compression level.

- I use Large Normal, which is L with a stair-step icon. Default is Large Fine, which is next to it as L and a quarter-circle icon. Fine makes a file with the same resolution and number of pixels, but with twice the file size (half as many pictures per card) and with 1% better quality. L is an image 3,504 x 2,336 pixels. My friend Paul Renner uses a 20D and people pay him top dollar for prints many feet on a side at this resolution.
- M is a slightly smaller image size, 2,544 x 1,696 pixels. I use this to save file space if I'm shooting hundreds and hundreds of shots of sports or at a party. I can print these files at 12 x 18" (50 cm wide) and they still look great.
- S is a smaller image at 1,728 x 1,152 pixels. I use it only if I want a small shot to record a sign in front of a location for reference. Even then, this will print just lovely at 8x12" (30 cm wide).

I don't use RAW. This makes huge files that must be processed later in your computer before you or anyone else can see them or do anything with them.

The **RAW + (...)** settings record two files, a raw file (.CR2) and a JPG per your choice.

More at my RAW vs. JPG page, and examples of how these look at my D200 File Format Examples page.

Red Eye shines an annoying light into the face of your subjects. Bars light up in the finder and come together in about a second letting you know it's time to take the picture. Unlike Nikon, you can take the picture anytime you want. I never use this feature. I leave it at its default of OFF. It doesn't work well to reduce red eye and annoys your subjects. If red eye (people's eyes glowing red in flash pictures) is a problem, try getting closer or using a regular flash instead of the built-in.

Beep. This is on by default, annoys everyone and screams AMATEUR!!! across every room and auditorium when others hear the idiotic noises. Please turn it to OFF.

Shoot Without Card. I leave this on its default of OFF. If you set it to ON it will let you think you're taking pictures, even if you have no memory card! You could shoot an entire wedding and get nothing. Leave it set to OFF.

AEB (Auto Exposure Bracketing): I leave this OFF (one dot). In the old days of film, less skilled photographers would guess and try several exposures for each shot, hoping to have at least one turn out. This is obsolete in digital, since you can see the exposure on the LCD monitor. Ansel Adams had stern words for photographers who had to resort to bracketing, even in the days of film.

If set on the 30D, the 30D makes a normal shot, then a darker one followed by a lighter one. It blinks things in the finder to let you know this is going on. Be careful: if you set this by accident, only 1/3 of your photos will be correct, and the other 2/3 will be too light or too dark. The 30D remembers this even if it goes to sleep.

If you do want to use this, it's easy to set: select it with the big dial, press SET to be able to change it, and spin the dial to select how far away the bracketed exposures will be. Be sure to press SET again to lock these settings, otherwise the 30D will ignore whatever you just set.

Once set, it's easy to use. Select the continuous drive mode and hold down the shutter for three shots each time.

I don't suggest the Single Frame mode for this. If you use it, you have to press the shutter three times for each bracketed series. If you release the shutter, the 30D will still make the next shot at an altered exposure.

You can tweak this in Custom Function 09.

WB SHIFT/BKT: This allows you change (shift) the white balance slightly, or bracket them (make several shots, each slightly different).

Shift: This is what you do to make subtle color shifts to images. To do this, press MENU, spin the dial to select WB SHIFT/BKT, press SET to get into it, use the unmarked rear navigation button to set the color shift, and press SET to lock it in. Oddly the center push of the button won't get you back to 0; you have to click back over the hard way. (The 30D ignores you if you forget to press SET.) This shift is subtle, you have to look carefully to see it. If you set it away from 0, you'll see a small "WB +/-" on the top LCD to remind you.

Bracket: Spin the big dial and you'll see three dots where before there was just one. Spin in one direction to get red/blue bracketing, and in the other direction for green/magenta. Shooting this way is easier than exposure bracketing, since the 30D automatically records three files, one for each exact WB, for each shot. This is because WB is calculated internally for each shot, unlike exposure. WB BKT records three frames from each shot automatically. Of course you also always need to press SET for these settings to take effect. You may shift the WB as in the above paragraph, and then bracket around it. Slick!

The unslick part is that this WB offset takes effect for all other WB settings. To turn it off or on or change it you have to get into these menus. You can't save a different value for Daylight and another for Cloudy, as you can on Nikon.

Nikons are better because they make changing this as simple as spinning the front dial while holding the WB button. Nikons are better because they store and recall the WB trim (shift) separately for each WB preset.

Canons are better because they also allow altering the WB along the green/magenta axis, which Nikons don't. Personally I never use green/magenta bias anyway. Canon also provides more adjustment points, although I find Nikon's +/- 3 settings more than enough. I prefer the Nikons here.

CUSTOM WB is how you set the 30D's white balance to a white or gray card or Expodisc. It's complicated, unlike Canon's compact cameras.

To set the WB to a random reference, first make a shot of the entire frame filled by that reference, but do it in anything other than the Custom WB mode. The Custom WB mode is an icon of a little square in the middle of two ramps.

Now press MENU, spin the big dial to CUSTOM WB, press SET (spin the dial again if you want to set the WB to an image other than the one you've just taken), press SET again to set the WB to that shot. You'll probably get a reminder now to set the WB (use the WB button) to Custom (square and two ramps).

If you did this correctly, your next shots will have perfect color balance.

COLOR TEMP lets you set the images to exactly your preference of warmth or coolness (amber or blue.)

Press MENU, spin the dial to COLOR TEMP, press SET, spin the dial to your choice, and press SET to lock it in.

You can't use this setting until you select [K] with the WB button. Canon makes this simple setting needlessly complex. Canon makes you do this because they combined the WB button with the AF button.

Nikon does this correctly by having a dedicated WB button which lets you use the first dial for selecting AUTO, DAY, Custom, K or whatever, and the second dial to select the exact K value or shift the WB. I prefer Nikon here, which lets you do this directly without menus.

COLOR SPACE allows you to use the default world-standard sRGB for accurate and vivid colors, or screw them up and get duller colors by selecting Adobe RGB. I explain this under color spaces. Just leave it at sRGB. Adobe RGB doesn't get any wider range of colors on any of the printers I've used (inkjet, giclée, lightjet or supergloss), but almost ensures that someplace along the line the colors will get screwed up and look too dull.

Canon makes this much easier to set than Nikon. Unfortunately this is something that should be buried, since you shouldn't use it unless you really, really know what you're doing, and print everything yourself from start to finish.

PICTURE STYLE settings are important. "Picture Style" is bad English for what should be called "critical artistic adjustments." This is where you set the critical "look" of your images. It's where you set Contrast, Sharpness, Saturation and even color shift (called color tone by Canon).

Nikon hides these deeper in its menus than Canon does. Nikon calls the same thing "Optimize Image."

There are nine memory banks, or sets, of "Picture Styles," of which five are locked and four are available for adjustment. The 20D only has six total, but the same number of adjustable ones. The 30D provides more presets, which I ignore.

The 30D has five preset (locked) sets of parameters, named Standard, Portrait, Landscape, Neutral and Faithful. Those names don't mean very much. You can see what settings these use for contrast etc. when you look through them, which is better than Nikon, which makes it almost impossible to see what values are used for their color presets. No big deal, if you're wanting to set your own you probably don't care about the canned values.

The next four are adjustable. One is B/W, called "monochrome," and the other three are color. Canon calls these three banks of color settings User Def. 1, 2 and 3.

Monochrome is Black and White. You can change the contrast, sharpening, add a sepia effect or even simulate the effect of using a colored filter in front of the lens in B/W. B/W of course offers no saturation or skin tone (color tone) tweaks

User Def. 1, 2 and 3 are where you store your own sets of color parameters. It's important to play with these to get the look you want. This is how I get bold color right out of my camera.

To select or adjust one of these Picture Styles:

1. Press MENU and spin the Big Dial to highlight Picture Style. Press SET.
2. Spin the Big Dial to select one of them.
3. Press SET to use it,

or

Press **JUMP** to adjust it. If you want to adjust the settings, spin the Big Dial to select what to adjust. If you choose a preset Picture Style first, you pull down all the settings from that fixed preset as a starting point for your own tweaks.

Once you've spun to one of the parameters, like Contrast, press SET and spin to adjust it.

Press **MENU** to lock in your selection. This last step is important. If, after making a change, you press anything other than MENU, your change will be ignored. Sorry! That drove me nuts until I figured it out.

It's easier to do than to write about.

When looking at the User Defined 1, 2 and 3 settings in the menu, they are blue if altered, or white if at defaults.

Thank God you'll probably only need to set these once!

I set mine all to defaults, except I set my User Def 1 to +2 for saturation, User Def 2 to +3 Saturation, and User Def 3 to +4 saturation.

Trick: Once you have these set, you can set Custom Function 01 to let you select among these nine sets using a push of the SET button! I LOVE this- it makes it easy for me to select just how loud I want my colors for each shot. I wish my Nikons could do this.

Now let me describe the individual settings:

Contrast: I leave this in the middle. You can soften images by turning it down, or make them harsher by cranking it up. I prefer Nikons which have an AUTO mode which adjusts automatically to the subject. On Canons you need to set this up or down manually if you have an unusually contrasty or flat subject. It always looks fine to me left alone at 0.

Sharpness is really how much extra sharpening is added. I leave at the default. The image can look harsh if set higher. Play around and see what you like, just remember it's not really sharpness, which if it was I'd crank it up, but artificial sharpening which is added later to the image. Too much looks bad.

Saturation is the vividness of the color. The 30D is exceptional in that it allows much more saturation than other cameras. Set to the middle of the boost, or +2, it's the same as most cameras cranked to the max. It has two positions above that, which are loud and louder color. Try it yourself and see. I love this!

Color Tone shifts skin tones. It seems to shift most other colors a little, too. Try it yourself and see if you like the effects. + makes skin tones yellower (yellows go greener) and - makes them redder (yellows go more magenta). - might mimic Fuji Velvia 50's wonderful warming of yellows and oranges. Try a - setting.

You can check the settings by going to the main menu and going back into these. You also can check them by pressing the INFO button. It will report these settings cryptically as a string of four digits. Sorry, I don't make this stuff up. If one fine day Canon asks me for my input, these will be much easier to figure out.

PLAYBACK MENU

You get to the Playback menu by pressing MENU and spinning the big dial, or pressing MENU and then JUMP. The 30D needs to be awake to respond to the MENU button. Tap the shutter button if the 30D has fallen asleep, which it does after a minute idle.

Protect allows you to prevent erasure of individual files. To do it, press MENU, get to Protect, and press SET. Now spin the dial to select the images you'd like to protect and press SET to protect or unprotect each image.

Of course formatting the card erases everything, even if you've protected a file. Be careful!

I only use this feature if I want to erase all the photos on a card except for a few. I protect them, then do **ERASE ALL**. I rarely do this. I copy all the files to my computer, back them up and format the card. I do my selections on my computer. Buy a bigger card if you have to, they're cheap today.

Rotate lets you set the rotation flag manually for any image. It doesn't actually rotate the images, and different computer software may see these flags differently. I leave my files unrotated and rotate them for real in iView (Action > JPEG Rotate) later.

Print Order is for selecting what and how you want pictures printed straight from the camera. It means you're ordering prints from within the camera! I don't do this - I prefer to sort and select my images on my computer. I've never seen a lab which works this way. I presume they're big in Japan, or that I haven't been paying attention. I suspect you're asking for trouble and losing files if you play around with all this in-camera on the memory card.

Transfer Order is also related to ordering prints. I don't use this either.

Auto Play plays a slide show on the tiny screen, or you can plug the 30D into a TV. Digital images look crummy played on TV. I never use this.

Review Time is how long, or if, images play on the screen after they're taken. Set it to **OFF** if you don't want them to play automatically. Default is 2 seconds, which is too short. I set it to 8 seconds or Hold.

AF Points lets you choose to display, during playback, the AF points that were used to make the picture.

Histogram must be set to RGB. The Brightness (default) setting is useless, as are all single-channel histograms. This is a major reason to buy the 30D over the 20D. Read more at [Histograms and Color Histograms](#). The Brightness setting can lead you to think you have a good exposure, when in fact you could have heinous overexposure, which would be obvious on the RGB histogram. The Brightness setting is only helpful for B/W photos, it's worse than useless in color.

WRENCH MENU

You get to the Wrench menu by pressing MENU and spinning the big dial, or pressing MENU and then JUMP. The 30D needs to be awake to respond to the MENU button. Tap the shutter button if the 30D has fallen asleep, which it does after a minute idle.

Auto Power Off sets how long the 30D stays awake before going to sleep. I find the default of 1 minute is fine. The OFF setting is a double-negative, if you choose OFF for Auto Power Off, the 30D stays on until you turn it off or the battery dies.

Auto Rotate adds flags to vertical images so they look vertical on most playback software. It doesn't actually rotate the images, and not all software will see the flags. I prefer to leave this off and rotate the images later in iView (Action > JPEG Rotate), unless I'm shooting a zillion images at a party. If you leave this on and the camera gets a few wrong, you can fix it in the playback menu's Rotate option.

LCD Brightness changes the brightness of the LCD backlight. See more at LCD Comparisons. I usually leave this cranked all the way up, not at its much dimmer default.

Date/Time sets both.

File Numbering lets new files made on a fresh card start off where the last file numbers left off. Leave this at its default of Continuous. Auto Reset is bad. If you use Auto Reset then each card or reformat will probably start at file IMG_0001.JPG again, which means over time you'll have a hundred files all called IMG_0001.JPG. This wreaks havoc later if you want to put them in the same folder or use them on the same web page. Beware, just leave this alone at Continuous. If you do, it will keep counting up until you get to file IMG_9999.JPG before it resets to IMG_0001.JPG.

Language lets you set the 30D to Swedish. For fun, try setting it to Korean and see if you can get it back to English!

Video System controls the TV output. Leave it at NTSC for the USA and Japan, and PAL in Europe. I never use the TV output. TV is much lower resolution and looks bad.

Communication: I leave this at Print/PC.

Unfortunately, no setting will make the 30D appear as an external hard drive, which most other brands like Casio and Nikon do. Because of this, you have to load software to get your images out of the camera, making it a pain if you travel and want to borrow a computer. Nikon and Casio cameras pop right up as external USB drives, making it trivial to transfer files to and from these cameras.

The **LAN(WFT-E1)** setting is for use with the WFT-E1 Wireless File Transmitter. The WFT-E1 is a \$999 gizmo and antenna that screws to your camera and attaches with a cable. It allows you to FTP your shots to your computer over Wi-Fi.

Format is important. Formatting erases the card and lets it start fresh. I format my card every time I shoot anything. Frequent formatting prevents file errors and corruption. Want to lose files and have unreadable cards? Then just keep erasing images from the card and forget to reformat. Reformatting is good hygiene. I prefer my Nikon SLRs, which have a two-button way to do this without menus. I prefer the Nikons because they make this easy for something I do a couple of times a day. I reformat after every time I download and back up.

Custom Functions are 18 more settings I cover at Canon 30D Custom Functions.

Clear Settings resets almost everything I just explained.

Clear All Camera Settings resets everything I just explained on the past few pages to their defaults.

Clear All Custom Functions resets everything I'm about to explain at Canon 30D Custom Functions.

I don't use these, because they reset everything without any intelligence. I prefer Nikon's green-button reset, because Nikons SLRs are smart enough to reset the tactical things like ISO, focus mode, WB, exposure compensations, flash modes, etc., that I change for every shot, but leave the strategic settings, like file numbering, timers, saturation and no beeping, alone.

Resets are important, because every night I usually wind up my camera to ISO 1,600 and some screwy custom white balance, flash mode and exposure compensation, and every morning I need to set it all back to ISO 100 and normal. With the Canons I need to run down a long checklist of about a dozen things I may have messed with, because I can't use their reset because it resets too much, meaning I would have to go down an even longer checklist to reset the strategic items.

Nikon's reset only resets what I need reset. I use it every time I shoot. It's not just for dummies!

Sensor Clean is for locking up the mirror and cleaning the sensor. Don't try this at home! I've made about 60,000 shots on DSLRs and I've never cleaned a sensor, except with a blower bulb. I have met pros who have destroyed their \$5,000 D2Xs because their sensor swab was defective. Don't let this happen to you. The only people who recommend trying this yourself are the people who want to sell you swabs.

Firmware lets you check your revision number, and update it if you have a newer version on a CF card.

Dedication

Adorama was a big help with this article. If you find this article helpful and want to get a 30D, getting it there helps us all continue to do more of this.