LIBRARY INNOVATION STUDIOS
nebraska library commission

Canon

EOS REBEL T6
EOS 1300D

EOS REBEL T6 (W)
EOS 1300D (W)

Please check with Library staff to confirm minimum age certification requirements to use this machine with supervision, and without supervision as provided on the Equipment Usage Chart

Canon Rebel T6
Photography Guide and Tutorials:

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Why we chose this particular camera model

This first section will provide an overview of what we looked for when choosing this camera.

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What we wanted for the library

We wanted a camera that was great for beginners while still appealing to more advanced level photographers. Ideally, the camera would fit the following criteria:

- Be able to shoot still portraits and movies with decent quality
- Capable of low-light photography
- Capable of good quality close-up photography
- Produce images in a file format that is compatible with common photo editing software

In the end, we decided on the Canon Rebel T6 18-55mm camera. Then we picked up a video maker kit and more lens options to supplement the camera.

Why resolution matters

When you're looking at camera specifications, you will come across the term MP, or Megapixels. Megapixels tell you the number of pixels per inch a camera has the capability of producing. This is the resolution of the camera.

For example, many smartphones are capable of producing 12MP. This means there are approximately 12 million megapixels in each square inch of the photo. The Rebel T6 has 18MP, or 18 million pixels per inch. Generally, the higher the MP, the better the image quality.

But image resolution is not the only thing we need to look at when choosing a camera.

Why the image sensor matters

When looking at a camera head-on, you will first see the lens (the large, clear circle that covers the end of the camera). Behind the lens, there is a black circle, with a smaller white circle inside. This is the image sensor. Adjusting zoom will adjust the image sensor.

The average smartphone has an image sensor of about 3.4 x 4.5mm. The Rebel T6 has an image sensor of 22.3 x 14.9mm. Larger image sensors means you can take higher quality pictures in low-light or shadowy areas. Avoid cameras with high MP and small image sensors!

What types of cameras are there? How are they used?

When choosing a camera, it's nice to know your options. Here are some common camera types:

1. ***"Point-and-Shoot" Digital Camera:*** this camera type is available with or without zoom options. Here are a few points of note:
    a. Can be relatively inexpensive (depending on your definition of expensive)
    b. Cannot change out the lenses
    c. Image quality will likely be similar to a good smartphone camera
    d. Uses: great for the casual photographer. Not the greatest camera for large prints
2. ***Smartphone cameras****:* this camera type is great because you likely already carry it with you. Here are a few points of note:
    a. These images cannot easily be blown up for larger prints w/o losing quality
    b. Uses: they are great for selfies and convenience
3. ***Compact (Mirrorless) System Cameras:*** these are a step up from Point-and-Shoot Cameras. Here are a few points of note:
    a. Lightweight and usually cheaper than DSLR cameras. Lenses are interchangeable.
    b. Mirrorless cameras do not use a mirror to reflect the image to the view-finder of the camera. Instead, they generally use an LCD screen as a viewfinder.
    c. Uses: you can get more detail in the photo than with the Point-and-Shoot, but it won't be as good as the SLR camera in the next section
4. ***DSLR (Digital Single-Lens Reflex) Cameras:*** Professional photographers love these cameras. Here are a few points of note:
    a. Heavier camera, but offers excellent image quality
    b. This camera does use a mirror to reflect the image into the viewfinder
    c. They are more expensive but there is a wide range of options and price ranges

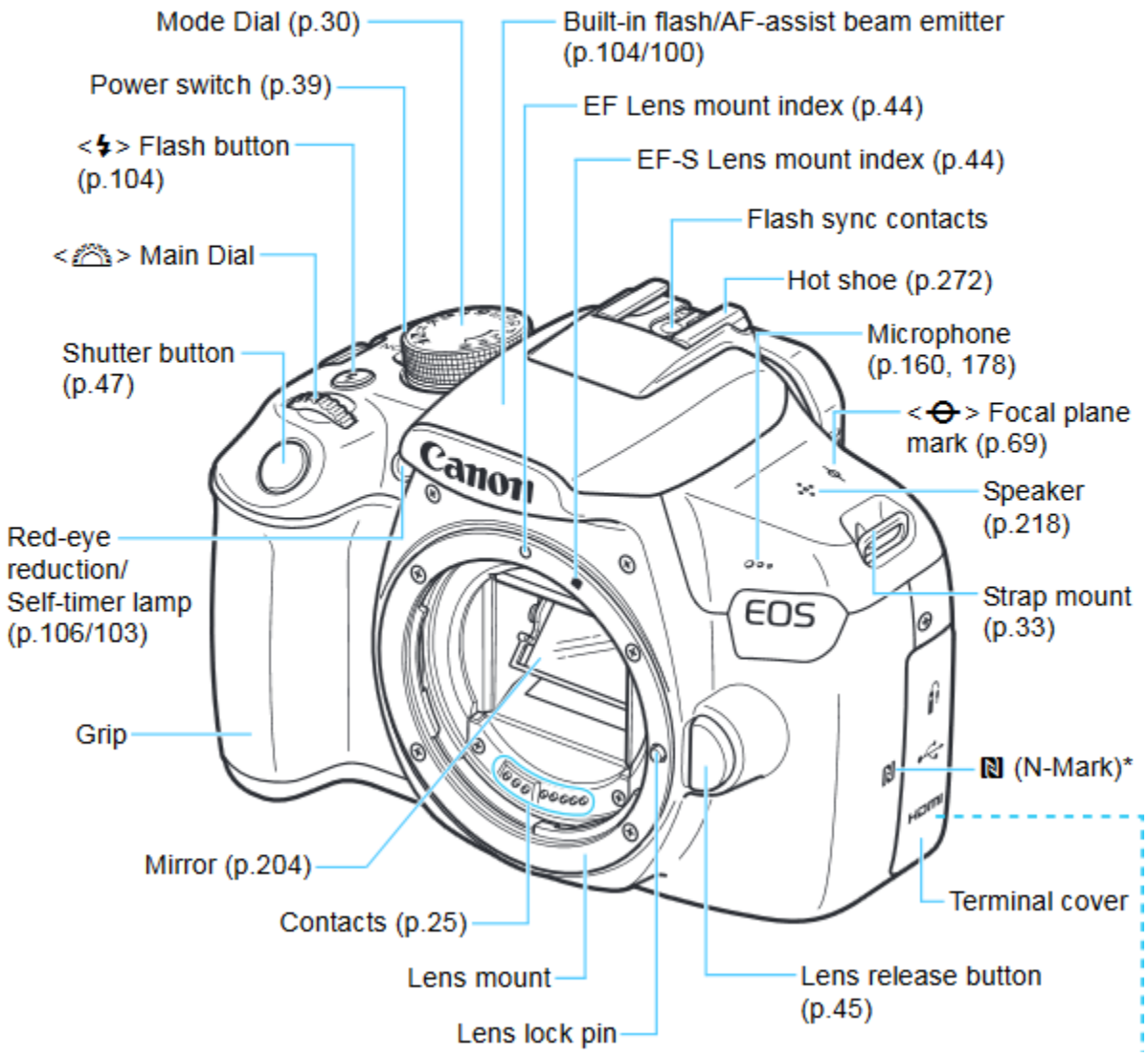
Why the Canon Rebel T6?

The Rebel T6 is a DSLR Camera. Since the Rebel T6 has a larger image sensor, it is capable of catching more light to capture more detail in the overall image.

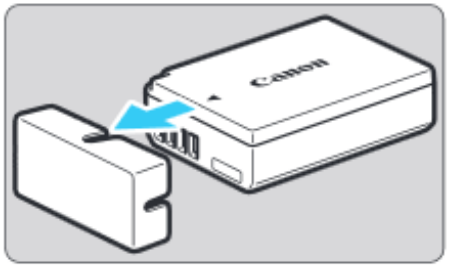
The 18MP camera resolution, paired with the larger image sensor means the Rebel T6 will take higher quality pictures than you could with most smartphones or point and shoot cameras.

Diagram of the Rebel T6

Nomenclature

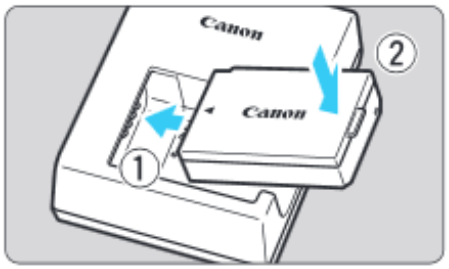


Charging the Battery



1 Remove the protective cover.

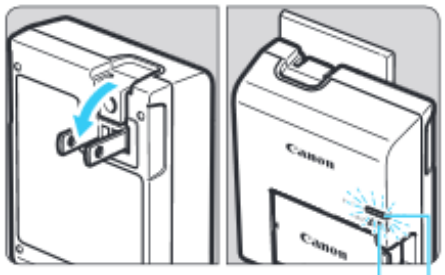
- Detach the protective cover provided with the battery.



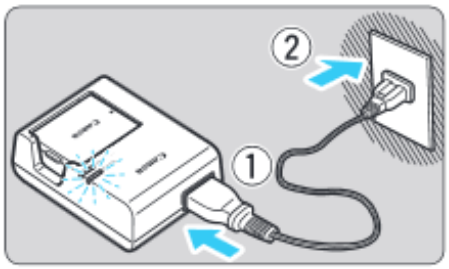
2 Attach the battery.

- As shown in the illustration, attach the battery securely to the charger.
- To detach the battery, follow the above procedure in reverse.

LC-E10



LC-E10E



3 Recharge the battery.

For LC-E10

- As shown by the arrow, flip out the battery charger's prongs and insert the prongs into a power outlet.

For LC-E10E

- Connect the power cord to the charger and insert the plug into a power outlet.

▶ Recharging starts and the charge lamp lights up in orange.

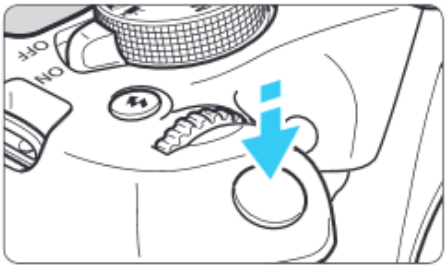
▶ When the battery is fully recharged, the full-charge lamp will light up in green.

- **It takes approx. 2 hours to fully recharge a completely exhausted battery at room temperature (23°C / 73°F). The time required to recharge the battery will vary greatly depending on the ambient temperature and the battery's remaining capacity.**

How to Focus and take a Picture

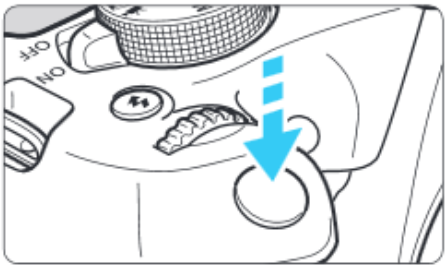
Shutter Button

The shutter button has two steps. You can press the shutter button halfway. Then you can further press the shutter button completely.



Pressing Halfway

This activates autofocusing and the automatic exposure system that sets the shutter speed and aperture.
The exposure setting (shutter speed and aperture) is displayed in the viewfinder (⏱4).
While you press the shutter button halfway, the LCD monitor will turn off (p.197).



Pressing Completely

This releases the shutter and takes the picture.

Preventing Camera Shake

Hand-held camera movement during the moment of exposure is called camera shake. It can cause blurred pictures. To prevent camera shake, note the following:

- Hold and steady the camera as shown on the preceding page.
- Press the shutter button halfway to autofocus, then slowly press the shutter button completely.

Mode Dial Explained

The mode dial is the rotating dial on top of the camera (to the right of the flash). If you turn the camera on and rotate the mode dial, it will tell you what each function does. Below is a more detailed table of what each mode symbol is and how it is used.

Symbol	Exposure Mode	Description
	Scene Intelligent Auto	Completely automatic photography; the camera analyzes the scene and selects settings that it thinks will produce best results.
	Flash Off	Just like Scene Intelligent Auto except that flash is disabled.
	Creative Auto	Similar to Scene Intelligent Auto but gives you a way to tweak some picture qualities, such as how much the background blurs.
	Portrait	Produces classic portraiture, a sharply focused subject against a blurred background.
	Landscape	Capture scenic vistas, city skylines, and other large-scale subjects; produces a large depth of field, and as a result, objects both close to the camera and at a distance appear sharply focused.
	Close-up	Photograph flowers and other small objects; take care not to be closer than the minimum focusing distance of the lens you're using or it will be impossible to focus on the subject.
	Sports	Designed to capture moving subjects without blur.
	Food	Tweaks color and exposure in a way that makes food appear more appetizing. If you're shooting in incandescent lighting (which emits reddish light), tones down warm hues to make whites whiter. Exposure is also increased slightly to make everything brighter
	Night Portrait	Delivers a better-looking portrait at night (or in any dimly lit environment).
P	Programmed autoexposure	Camera selects aperture and shutter speed, but you can choose from different combinations of the two. Full access to all camera features.
Tv	Shutter-priority autoexposure	You select shutter speed, and camera chooses f-stop. Full access to all camera features.
Av	Aperture-priority autoexposure	You select f-stop, and camera chooses shutter speed. Full access to all camera features.
M	Manual exposure	You control the f-stop and shutter speed. Full access to all camera features.
	Movie	Choose this mode to record video.

Quick Setup for Shooting Movies

There are several ways to adjust your settings for shooting movies. This guide shows you how to do a quick setup for automatic mode. More advanced resources are available at the end.

1. Turn the mode dial to Movie Mode.
2. The display will appear on the settings screen. The viewfinder doesn't work with movies
3. Choose Video System. Go to Menu- Choose tab 2- Video System. Choose NTSC (used the U.S.). PAL is used in Europe and globally. Not a huge difference between the two.
4. Change file size. Go to Menu- Choose tab 2- Movie Record Size. The top two options will result in higher quality. For beginners, high resolution with low frames/ second is fine. (Ex. 1920 x 1080 pixels/ 30 frames per second)
5. Make sure video is in Auto. Go to Menu- Tab 1- Movie Exposure. Choose Auto.
6. Shoot Video. Press the Camera icon (located to the right of the viewfinder).
7. A red light will appear in the upper right corner of the screen to indicate recording.
8. Press the Camera Icon again to stop recording.

Resources for Advanced Movie Shooting

Canon T6 Tutorial - Beginner's User Guide to the Menus & Buttons
https://www.youtube.com/watch?v=AsCrgCCz3ds

Canon Rebel T6 Best video settings |. Shoot movies with the #1300D
https://www.youtube.com/watch?v=96JLLJZ6L2E

Best Canon EOS 1300D | Rebel T6 Basic Settings video | How to set up your Canon RebelT6
https://www.youtube.com/watch?v=QX0sQNtlKEU

Shooting Video with your Canon EOS Rebel Camera (Part 1)
https://www.youtube.com/watch?v=8cIsxbfGlKQ

Shooting Video with your Canon EOS Rebel Camera (Part 2)
https://www.youtube.com/watch?v=2tyNdNZm_AQ

Shooting Video with your Canon EOS Rebel Camera (Part 3)
https://www.youtube.com/watch?v=qaz40jSzWfs

Dial Modes on the Canon 1300D Rebel T6 DSLR | setting the Dial Modes on the Canon #1300D
https://www.youtube.com/watch?v=8_3RytdWsoQ

Autofocus, focus points for beginners https://www.youtube.com/watch?v=48InhR6Jrgc

Canon website, lots of educational information to become a better photographer
http://www.learn.usa.canon.com/

Green Screen

Set up a green screen behind the subject so you can more easily remove the background and replace it with your own image during editing. Green screens work with both photos and videos. The only difference is the type of editing software you use to remove the background.

The process of making the background of the image transparent and layering it over your new background is called chroma keying. Green is not the only color that can be used in this process. Any uniform color that heavily contrasts the colors of the subject matter can be used in chroma keying. Many studios use green or blue screens. That color is removed and replaced in video editing software.

Setting up the Green Screen

1. Iron the green screen, or use several clips on the frame to stretch it out as smooth as possible. The fewer wrinkles, the easier the editing.
2. Set up the frame according to the instruction in the box.
3. Set up the camera, preferably on a tripod for stability.
4. Set up lights around the green screen so the shade of green looks as even as possible. This will help during editing.
5. Make sure the photo or video is framed so that green is on all sides of the subject of the photo. This makes it easier to remove the background without having to crop the image.

Open Source Software for Green Screen Editing

These have not been user tested yet, but they are some of the highest reviewed open-source green screen editors available.

Top 5 Free Green Screen Software You Need to Know (Filmora)
https://filmora.wondershare.com/video-editing-tips/free-green-screen-software.html

For free video editing software, try this link:
https://filmora.wondershare.com/video-editor/free-video-editing-software-windows.html