



FLAAR Reports  
Digital photography

# Camera Review

February 2011

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## Canon EOS Rebel T2i



Picture taken with Canon rebel EOS t2i  
Lens EF-S 18-55mm f/3.5-5.6 F/20 1/30 ISO 200



Picture taken with Canon rebel EOS t2i  
Lens EF-S 18-55mm f/3.5-5.6 F/6.3 1/80 ISO 200

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Picture taken with Canon rebel EOS t2i Lens Canon EF-S 18-55mm f/3.5-5.6 F/4 1/200 ISO 800

## Introduction

I believe that the camera does not make you a better photographer, no matter how expensive it is the camera or how many applications have. Take pictures involves effort, patience, even luck, but above all this, you need passion for capturing moments, immortalize people and objects, be the eyes of people who cannot reach places where you have the good fortune to be.

In this review, I have seen besides the advantages and disadvantages that this camera I has learned the fact that the camera is only a tool for the photographer.





## Compliments

You know you have written a factual review when the product manager sends you a nasty letter stating that “all the other reviewers heaped more praise on our camera than you did.”

If a camera company makes sure you do not get a demo camera, or do not get one long enough to really thoroughly test the camera, then you can usually surmise they prefer the suck-up kind of commercial review.

If a company has an outstanding product, it will do quite well in a serious long-range review. BetterLight provided our first review camera back about 1997 or 1998, about \$19,000 in those days. We took the camera out on location for months and generated publicity read by thousands of photographers. When the next model came out, that was sent for review too.

## What to look for

### General

Canon EOS Rebel T2i, price \$687.28 its creation was announced February, 2010.

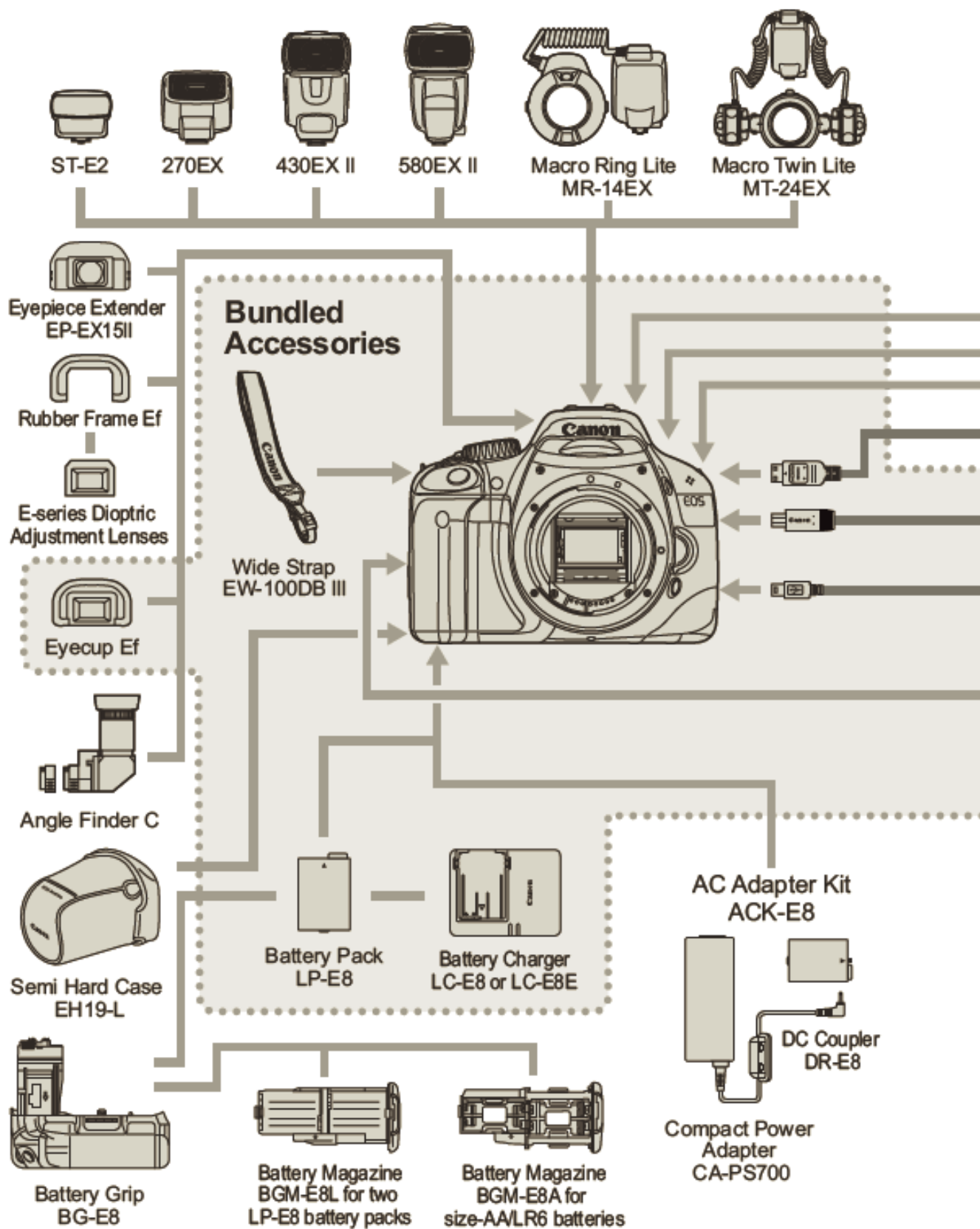
### Accessories

- Remote switch RS-60E3
- Remote controller RC-6





These are all the accessories that can adapt to the camera.



This diagram was taken from the user manual of the camera Canon EOS T2i.

## Batteries

Comes with LP-E8 Lithium-Ion rechargeable battery, and lasts with viewfinder shooting, approx. 400 shots, with live view shooting, 180 shots. Enough for a photo-shoot, but it is always advisable to have an extra battery, charged and ready to use.

## File formats

It has the format of a professional camera as RAW, but I would have liked to have a faster way to change the JPG to RAW. Since in this camera is a bit awkward having to go to the menu to find the option.

- Supports RAW, JPEG, RAW (14-bit, Canon original), RAW+JPEG
- Video: MOV (Image data: H.264, Audio: Linear PCM)
- Continuous shooting 3.7 fps

## Flash

The flash E-TTL II automatic built-in pop-up works great as long as the sensor receives light focusing (when using the autofocus) because otherwise if the camera are not having reference this causes a series of shots of the flash to focus the object, but it is very tedious and it does not shoot when you want it which is quite annoying.

## Image quality

The T2i has six quality settings for the JPEG format, which make the image quality down or up depending on the requirement; regularly for photographs that we know are to be distributed via the Internet for example usually used the medium or small size. There are two settings each for the Large, Medium, and Small settings. The two settings represent more or less image compression based on your choice. The Large, Medium, and Small settings determine the actual physical size of your image in pixels. Let's work with the highest-quality setting possible.

## Image size

Its maximum size is of 17.9 megapixels, very good size for a camera of this price.

## ISO range

- ISO 100 to 6400
- User selectable max ISO



Picture taken with Canon rebel EOS t2i Lens Canon EF-S 18-55mm f/3.5-5.6 F/6.5 1/60 ISO 200



Sculpture at Santo Domingo del Cerro in Antigua Guatemala by Sofia Monzon

Picture taken with Canon rebel EOS t2i Lens Canon EF-S 18-55mm f/3.5-5.6 F/6.3 1/80 ISO 200



Efraín Recinos mural, panoramic photograph by hand at Santo Domingo del Cerro in Antigua Guatemala by Sofia Monzon



## Screen

The screen size is quite acceptable, has a light sensor that turns off the screen when it is blocked by something, this can be a bit annoying for some people, but for me it only works as saving energy.

- Type LCD
- Size 3.0"
- Resolution 1,040k dots

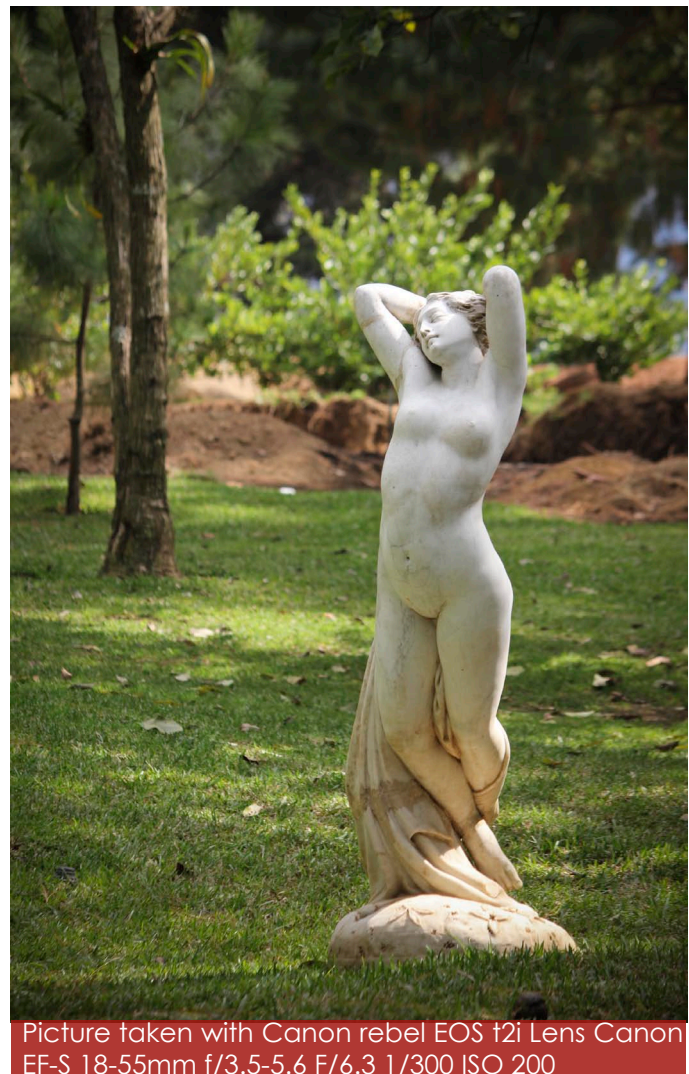


## Recording Media

This camera does not have a slot for a raw compact flash, but technology has a SDXC Extended Capacity Secure Digital, which has a maximum capacity of 2TB (2048 GB). Also accepts SDHC cards they also have a maximum capacity of 2 TB based on the data structures of the card, but it is arbitrarily limited to 32GB for SD 2.0 document.

I think this technology is fantastic for a camera that takes such good video, which implies the need for a large amount of storage space because the videos in highdefinition are heavy and consume the space of a conventional card in a few minutes.

1 Storage slots, SD memory card, SDHC memory card, SDXC Memory Card.



Picture taken with Canon rebel EOS t2i Lens Canon EF-S 18-55mm f/3.5-5.6 F/6.3 1/300 ISO 200

## Lenses

Compared with other cameras in this category, it has a compatibility with a wide number of lenses, which is very useful considering that the video quality deserves good use all kinds of lenses for extraordinary videos.

The way to change the lens is very easy to do and does not require any extra effort, has a red dot marking the spot where you should put the white point of the lens.

- Lens availability 162 lenses
- Lens focus motor
- Lens mount, Canon EF
- Interchangeable lenses



Canon lens range. Source: [www.foto-digital.com.mx](http://www.foto-digital.com.mx)



## Mirror, anti-shake delay

To further reduce the possibility of camera shake, use a shutter release cable or set the self-timer to two seconds. In self-timer mode, the mirror will lift when you press the shutter release button but the camera will fire automatically after two seconds, so you don't have to touch the camera again. Also remember that the Mirror Lockup feature will remain active (even after turning the camera on and off) until you disable it in the menu.

## Noise

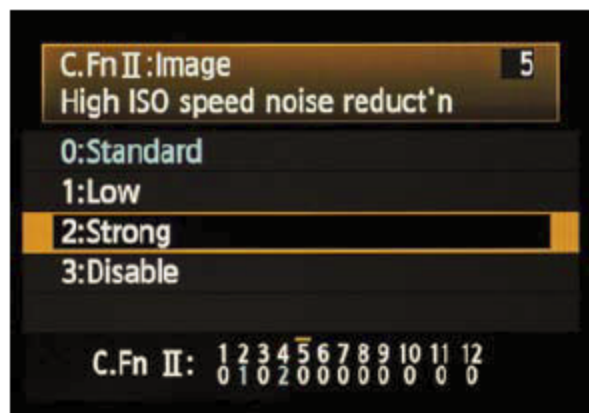
Noise as in all cameras is only present in low light, for these situations the camera has a couple of features that you can turn on to combat noise from long exposures and high ISOs. There can be an issue when using a low ISO setting: the sometimes-lengthy shutter speeds can also introduce noise. This noise is a result of the heating of the camera sensor as it is being exposed to light. This effect is not visible in short exposures, but as you start shooting with shutter speeds that exceed one second, the level of image noise can increase. The camera has a couple of features that you can turn on to combat noise from long exposures and high ISOs.

### Setting up noise reduction

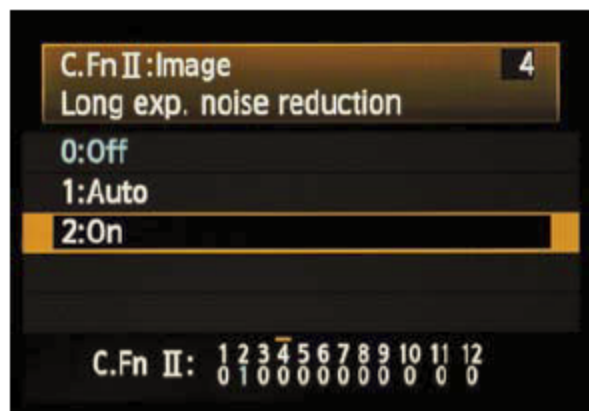
1. Press the Menu button, then use the Main dial to get to the Custom Functions menu (A).
2. Using the Cross keys, select C. Fn II: Image 5, and then press the Set button (B). The default setting is Standard but you may require the Strong setting for really high ISOs.
3. Press the Menu button to return to the Custom Functions menu and then select screen 4, Long exp. noise reduction. Press the Set button to change the options. The default setting is Auto, which will handle most scenarios. If you know you are going to be making extremely long exposures you should probably go ahead and set it to On (C).



A



B



C

## Video capability

At first I had a problem in which the set aperture moves unexpectedly when shooting movies in manual exposure mode using some Canon lenses (such as macro lenses) In July 2010 Canon released firmware 1.0.8 that fixes this problem.

Video can be captured at a number of resolutions and frame rates for numerous applications. It can capture 1920 x 1080 Full HD video at frame rates of 24 (23.976), 25 or 30 (29.97) frames per second, for up to 4GB per clip.

Movies are saved as MOV files and can be viewed in Full HD through the EOS Rebel T2i's HDMI output. Other recording sizes include HD at 1280 x 720 (50/60 (59.94) fps) or SD/VGA at 640 x 480 (50/60 (59.94) fps).

The camera has a built-in microphone for simple mono recording and stereo sound can be recorded through a self-powered external microphone.

Like a video camera is wonderful, I never get as good quality video of a camera, it's really amazing to see what can be done with this camera, and I compared it with the 7D and Canon camera does not really have much to envy in terms of video, but say that there is some few hundred dollars difference.

- Format 1080p @ 30fps
- Supports 24p
- All formats
- 480p @ 25fps
- 480p @ 30fps
- 720p @ 25fps
- 720p @ 30fps
- 1080p @ 24fps
- 1080p @ 25fps
- 1080p @ 30fps





## Viewfinder

The viewfinder works well, is precisely well as the pentamirror permitted, which is quite acceptable, taking into account that has a thin mismatch. Has also gauge the graduation of the viewfinder, very common in most cameras of this type.

- Type Pentamirror
- Viewfinder size 0.54x
- Coverage 95%

## White balance

There is no choice available for white balance. You are simply stuck with the Auto setting. This isn't always a bad thing, but your camera doesn't always get it right. And in the Basic zone, there is just no way to change it. You can select the most appropriate white balance for your shooting conditions in a couple of ways. The first is to just take a shot, review it on the LCD, and keep the one you like.

Of course, you would need to take one for each white balance setting, which means that you will have to take about seven different shots to see which is most pleasing. The second method, and my personal favorite, doesn't require taking a single shot. Instead, it uses Live View to get perfectly selected white balances. Live View gives instant feedback as you scroll through all of the white balance settings and displays them for you right on the LCD. Even better, you can choose a custom setting that will let you dial in exactly the right look for your image.



Dioptic adjustment knob

Live view/ Movie Shooting



Picture taken with Canon rebel EOS t2i Lens Canon EF-S 18-55mm f/3.5-5.6 F/4 1/200 ISO 800

## Size and weight

The size of the camera is wonderful, is very versatile and comfortable, perfect for long hours of photographic work.

- Size 129x98x62 mm
- Depth 2.4"
- Weight 530 g
- Live view



## Sensor

The sensor size and especially the image quality is impressive considering the price of the camera compared to a Canon professional line or Nikon that compares in price. Sensor (Advanced), True resolution 17.9 MP, Native resolution 5184 x 3456, Pixel size 18.5  $\mu\text{m}^2$

- CMOS, Size APS-C 22.3x14.9mm
- Megapixels 17.9 MP
- Light sensitivity 6,400 ISO
- Light sensitivity (boost) 12,800 ISO
- Crop factor 1.6x



## Shutter

The camera manages a sufficient rate to regular jobs that do not require extreme speed, and for night photography 30 seconds is sufficient in most cases.

- Max 1/4000s
- Min 30s







Picture taken with Canon rebel EOS t2i Lens Canon EF-S 18-55mm f/3.5-5.6 F/6.3 1/200 ISO 200

### Firmware updates

- In July 2010 Canon released firmware 1.0.8 that fixes a phenomenon in which the set aperture moves unexpectedly when shooting movies in manual exposure mode using some Canon lenses (such as macro lenses).
- 25 December 2010 Canon offered firmware version 1.0.9 which should fix tone jumps in some images, depending on the shooting scene and when shooting with the Auto Lighting Optimizer settings (low/standard/strong).



Picture taken with Canon rebel EOS t2i Lens Canon EF-S 18-55mm f/3.5-5.6 F/6.3 1/800 ISO 200



## Acknowledgements

All photographs taken for this evaluation were stored in Hoodman CF memory cards, which were kindly donated to help us continue our work to inform and educate on digital photography technology.

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