

Canon XA10 - Reference Guide

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Camera Bag Checklist

Check the tag attached to the camera bag for a list of all included items. Always check that those specific items are in the bag so that you are not held responsible for their absence. Be sure to bring back all of the items on the list when you return the camera.

Powering On/Off the Camera

Turn the camera on or off using the power button located on the top rear of the camera.

LCD Screen

You can preview your video image by flipping out the LCD viewfinder on the left side of the camera. This screen will also rotate upwards 180 degrees (for self recording and showing your subjects a preview while shooting) or downwards 90 degrees.

Press on screen icons to select and change menu items, and drag up or down to scroll menus.

Operation Modes

The camera has two basic operation modes:

Recording: For capturing video and photos

Playback: For reviewing video and photos

To switch between operation modes, press the camera/play button located on the left side of the camera.

Recording Modes

Slide the mode switch located on the top rear of the camera to change recording modes. The three modes are:

Auto: Let the camera adjust all settings automatically.

Manual: Enjoy full access to menus, settings and advanced functions.

Cinema: In this mode the camera will adjust the frame rate and several other picture-related settings to give your recordings a cinematic look. You can also use a variety of cinematic-look filters to create unique movies with a distinctive appearance.

Recording Media: FUNC > MENU > Film Icon > Rec Media for Movies

Select either the internal memory or an SD card to be the recording media used to store your video footage.

To record onto an SD card, insert the card into one of the two memory card slots on the left side of the camera.

Initializing SD Card/Internal Memory: FUNC > MENU > Wrench Icon > Initialize

You should initialize the card or the internal memory before you start recording. This function will ERASE ALL VIDEO FOOTAGE from the memory source you have selected. Only initialize the memory when you first check out the camera or

if you have already backed up your video footage.

Recording Quality: FUNC > MENU > Film Icon > Recording Mode

Set the recording quality to MXP or FXP for the best high-definition image clarity.

Frame Rate: FUNC > MENU > Film Icon > Frame Rate

Choose **PF30** to record in 30 frames per second, a common frame rate for video producers; or select **24P** to record in 24 frames per second, a common frame rate for filmmakers. Once you select a frame rate for a specific project, stay consistent and use the same frame rate for all of the clips, so that all of your footage will match.

Recording Video

Remove the lens cap when you are ready to begin recording. Look at the LCD screen and press one of the two START/STOP buttons (located on the rear and top handle of the camera) to begin or pause recording. A red circle icon will appear on the screen while the camera is recording.

Zooming & Focusing

Zoom in and out of your image by adjusting one of the two zoom levers (located on top of the camera body and on the top handle of the camera).

Using the AF/MF button located next to the LCD screen, you can switch between two focusing modes:

Auto Focus: The camera continuously adjusts the focus automatically, based on the subject in the center of the screen.

Manual Focus: The user has total control over the focus by adjusting the focus ring on the front of the camera. A zoomed-in view of the center of your image will appear on the LCD screen while changing the focus, making it easier to ensure that your subject is in sharp focus. The zoomed-in view disappears when you are done adjusting the focal ring. (To see the zoomed-in view, the Focus Assistance function must be turned on (FUNC > MENU > Camera Icon > Focus Assistance).)

Face Detection & Tracking: FUNC > MENU > Camera Icon > Face Detection & Tracking

If this function is turned on, the camera automatically detects a person's face and uses this information to select the optimal focus setting, even if the face moves within the frame.

Exposure Programs: FUNC > Rec. Programs

You can select from a number of different exposure recording programs, which include:

P (Programmed Auto Exposure): Automatically adjusts shutter speed and aperture. This program is recommended for new users.

Tv (Shutter-Priority Auto Exposure): Automatically adjusts the aperture based on the selected shutter speed.

Av (Aperture-Priority Auto Exposure): Automatically adjusts the shutter speed based on the selected aperture.

M (Manual Exposure): Manually adjust the shutter speed and aperture. This program is recommended for advanced users.

P Program: FUNC > Rec. Programs > Programmed AE

You can leave the exposure in auto mode but, if desired, you can adjust the exposure manually and you can also use the waveform monitor and zebra stripes display.

Exposure: FUNC > Exposure

Touch the M icon to switch from auto mode to manual mode. A slider will appear at the bottom of the screen. Scroll on the slider to adjust the brightness of your image.

Waveform Monitor: FUNC > Exposure

When you touch the M icon, the waveform monitor icon will also appear. Touch the WFM icon to see the video waveform, representing the color levels of your image.

Zebra Stripes: FUNC > Exposure

This preview setting displays zebra stripe lines on areas of your image that are overexposed and where color information is being lost.

Press the zebra stripes icon to turn on/off zebra stripes.

Press the wrench icon to set the stripes to appear at either 70% or 100% exposure levels. The 70% setting is preferable if your subject is a human face.

Some zebra stripes can be fine or even desirable, but you can adjust the exposure to limit the portion of your image that is over-exposed.

M Program: FUNC > Rec. Programs > Manual Exposure

This program allows you to manually adjust the exposure of the image being captured by your camera. Press to select a setting and scroll on the slider at the bottom to adjust it. The different exposure settings you can adjust are:

Aperture: Change the size of the opening to allow more or less light to reach the image sensor. A lower number indicates a larger opening, which corresponds with a brighter image as the amount of light that passes through the lens increases.

A lower aperture setting also results in a shallower depth of field, making everything outside of your subject out of focus. This can be useful for close ups or shots intended to highlight a specific subject. Higher setting expands your depth of field, allowing you to capture more of your image in focus.

Shutter Speed: Length of time for which the camera shutter is open, measured in fractions of a second.

1/60 of a second is standard if your frame rate is 30 frames per second.

1/48 of a second is standard if your frame rate is 24 frames per second.

A fast shutter speed can create a stuttery/choppy effect. A slow shutter speed can add smear or blur to the motion of your shot.

Gain: Similar to ISO, gain represents the noise of the camera image.

Leave at 0db to minimize noise.

In low light situations, judiciously increase the gain to brighten up your captured image.

Zebra Stripes: Press the zebra stripes icon to turn on/off zebra stripes

Press the wrench icon to set the stripes to appear at either 70% or 100% exposure levels. The 70% setting is preferable if your subject is a human face.

Waveform Monitor: Show the video waveform in the viewer, representing the color levels of your image.

White Balance: FUNC > White Balance

AWB: Choose Auto White Balance to have the camera automatically set the white balance based on lighting conditions.

Set 1/Set 2: Manually set the white balance by:

Choosing Set 1 or Set 2

Pressing Set WB while a white reference object, such as a sheet of white paper, is placed in front of the lens.

An icon will start flashing; when the flashing stops, the white balance is set. Press back to exit and save the white balance setting.

Color Temperature: FUNC > White Balance > Color Temperature

This function allows you to adjust the color temperature of your image. Scroll on the slider at the bottom to give the image a warmer or cooler look.

Audio Recording

The camera can record audio from two different sources, which can be selected by using the INT/EXT switch on the left side of the camera handle.

Internal: Uses the internal microphone to record audio OR a microphone plugged into the MIC terminal located on the bottom right side of the camera via an XLR-to-3.5mm adapter

External: Use this setting to plug up to two different microphones into the XLR ports located on the right side of the camera handle. You can connect a microphone to either Channel 1 (CH1) or Channel 2 (CH2).

To enable a microphone for recording, change the switch for Channel 1 or Channel 2 (depending on where you plugged in your mic) from LINE to either MIC or MIC +48V. The switch is located on the left side of the camera handle.

MIC +48V turns on phantom power for microphones that require it. This setting can be used safely for almost all mics EXCEPT for wireless mics, which could result in noisy recordings.

Monitoring Audio: FUNC > MENU > Wrench Icon > AV/Headphones > Headphones Icon

Choose the headphones icon. If AV is selected, you cannot monitor your audio through your headphones. IF YOU'RE

HEARING STATIC THROUGH YOUR HEADPHONES, IT IS PROBABLY BECAUSE "AV" IS SELECTED. Adjust the headphone playback volume in the next menu setting (FUNC > MENU > Wrench Icon > Volume).

Selecting the XLR Recording Channel: FUNC > MENU > Camera Icon > XLR Rec Channel

You have two options: **CH1** or **CH1/CH2**

CH1 is the recommended setting. This option allows you to record audio to each channel separately. A mic connected to CH1 is recorded to Channel 1, while a second mic connected to CH2 is recorded to Channel 2. You should see two separate audio signals at the bottom of the LCD screen.

If you select **CH1/CH2**, a mic connected to CH1 is recorded to both channels. A mic connected to CH2 will not be recorded and you will not hear the mic in your headphones. IF YOU HAVE A MIC PLUGGED INTO CHANNEL 2 AND YOU'RE NOT GETTING AN AUDIO SIGNAL, THIS COULD BE WHY.

Adjusting the Audio Recording Level:

Internal Mic: FUNC > Mic. Level > Manual

Use the on screen arrow keys to adjust the audio recording level

External Mic(s):

On the left side of the camera handle, turn the control dials for the two audio channels to adjust its recording levels.

The levels of the audio being recorded will appear near the bottom the LCD screen. Ideally, your maximum audio level should be around -10 or -12db.

Setting the recording level too high may result in peaking, where the audio signal is cut off and sounds distorted at its highest points. Setting the recording level too low may result in unwanted noise when played back later on a computer.

The **ATT switch** on the left side of the camera handle turns on the microphone attenuator. This setting will automatically reduce the audio recording level 20 decibels. It is recommended to leave this setting off and adjust your recording level manually for the best results.

Playback Mode

Playback mode shows a series of scene icons representing your captured video footage. Swipe left or right on the LCD screen to navigate between scenes, and press on a scene icon to play back that footage.

Touch the screen during playback to bring up the on-screen controls. Use these controls to:

- Jump to the beginning of the scene
- Jump to the beginning of the next scene
- Pause, Play, Stop, Fast Forward and Rewind
- Adjust Playback Volume

If you are running low on storage space, pause your video clip and go to Edit > Delete and press yes to delete an unwanted video clip.

Taking Photos

You can take photos by tapping the PHOTO button on the LCD screen. A green icon will appear briefly on screen while the photo is captured, and afterwards the photos can be accessed in playback mode. Before taking a photo, go to FUNC > MENU > Film Icon > Rec Media for Photos. Select the internal memory or an SD card as the recording media for storing your photos.

Transferring Footage via USB

To connect the camera to your computer, you can plug the included micro USB cable into the designated port (located underneath the cover behind the grip belt) and plug the other end into a USB port on your computer. The camera should show up as an external hard drive in a Finder window.

GO TO <http://www.retn.org/camera101resources> TO CHECK OUT RETN'S VIDEO TUTORIALS AND OTHER BASIC CAMERA WORKSHOP RESOURCES