

## **CANON XA-10 - IMPORTANT VIDEO & AUDIO SETTINGS**

Review these settings on your camera prior to capturing footage. The last page contains a labeled diagram of the XA-10.

- **Initialize Memory:** FUNC > MENU > Wrench Icon > Initialize
  - This function will ERASE ALL VIDEO FOOTAGE from the memory source you have selected. Only initialize the memory either when you first check out the camera or if you have already backed up your video footage.
  - BACK UP YOUR FOOTAGE TO A COMPUTER OR HARD DRIVE BEFORE RETURNING THE CAMERA TO THE FILM CAGE, SO SOMEONE ELSE DOES NOT DELETE IT!
- **Recording Quality:** FUNC > MENU > Film Icon > Recording Mode
  - Set the recording quality to MXP for the highest definition image clarity.
- **Recording Media:** FUNC > MENU > Film Icon > Rec Media for Movies
  - Select either the internal memory storage or an SD card to be the recording media used to store your video footage.
  - To record onto an SD card, make sure the camera power is turned off and insert the card into one of the two memory card slots on the side of the camera opposite the LCD screen.
- **Frame Rate:** FUNC > MENU > Film Icon > Frame Rate
  - Choose 60i to record in 60 frames per second, a common video standard that allows you to slow down your footage by up to half speed while maintaining video fluidity.
- **Monitoring:** FUNC > MENU > Wrench Icon > AV/Headphones > Headphones Icon
  - Change this setting to Headphones to enable audio monitoring.
  - ALWAYS MONITOR YOUR AUDIO RECORDINGS WITH HEADPHONES, plugged into the headphones jack underneath the plastic door opposite the LCD screen.
- **Playback/Monitoring Volume:** FUNC > MENU > Wrench Icon > Volume
- **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 and backlit by your light source.
    - The icon will flash while the White Balance is set. Press back to exit and save the White Balance setting.

- **Exposure:** FUNC > Rec Programs

- The camera's exposure has a number of different exposure recording programs, which include:

- **P (Program Auto Exposure):** Automatically adjust shutter speed & aperture based on the selected program preset.

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

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

- **M (Manual Exposure):** Manually adjust the shutter speed and aperture.

- With **Manual Exposure** selected, press the **Adjust Settings Button**

- This menu allows you to 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 camera opening to let in more or less light onto the image sensor. A lower aperture number, or f-stop, indicates a larger opening, which corresponds with brighter exposure of your footage.

- 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 f stops let less light and expand your depth of field, allowing you to capture more of your image in focus but losing the blurring of the background present on lower f stops.

- **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 for video.

- Higher frame rates can be useful for very smooth motion and for footage you intend to playback in slow motion.

- Lower frame rates give your footage a choppy, jittery feel

- **Gain:** Similar to ISO, gain represents the sensitivity of your camera's image sensor.

- Leave at 0db to minimize noise.

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

- **Zebra Stripes:** This preview setting displays white zebra stripe lines on areas of your image that are overexposed and where color

information is being lost.

- Press the Wrench icon to turn on/off zebra stripes
- Press the next to the wrench to set the stripes to appear at either 70% or 100% exposure levels
- Some zebra stripes can be fine or even desirable, but try to limit the portion of your image which is being over exposed.
- **Waveform Monitor:** Show the video waveform in the viewer, representing the color levels of the recorded footage.

### **Audio Recording:**

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

- **INT (Internal):** Uses the internal microphone to record audio OR a microphone/line in cable plugged into the MIC terminal located on the bottom right side of the camera.
- **EXT (External):** Use this setting to plug up to two different microphones into the XLR inputs located on the opposite side of the camera handle.
  - To enable a microphone for recording, change the switch corresponding to either Channel 1 or Channel 2 (depending on where you plugged in your mics) from LINE to either MIC or MIC +48V.
  - MIC +48V turns on phantom power for microphones which require it. This setting can be used safely for almost all mics EXCEPT for the wireless mics, which could result in noisy recordings or even damage the equipment.

### **Adjusting the Audio Recording Level:**

- **Internal Mic:** FUNC > Mic. Level > Manual

- Use the on screen arrows to adjust the audio recording level.

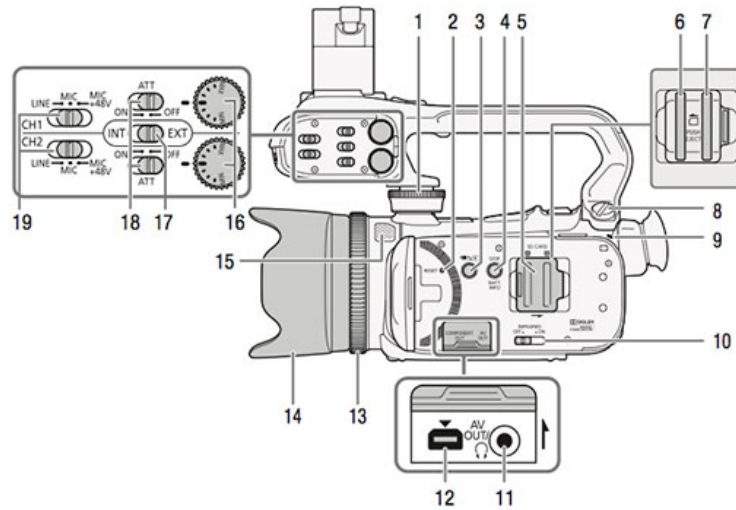
- **External Mic(s):**

- Turn the audio level dial next to Channel 1 or Channel 2 to adjust its recording level.
- The **ATT switch** next to the channel you are using turns on the microphone attenuator, which automatically reduces the audio recording level when the sound picked up is loud and increases the recording level when it is quiet.
  - Leave this setting OFF and adjust your recording level manually for the best results.

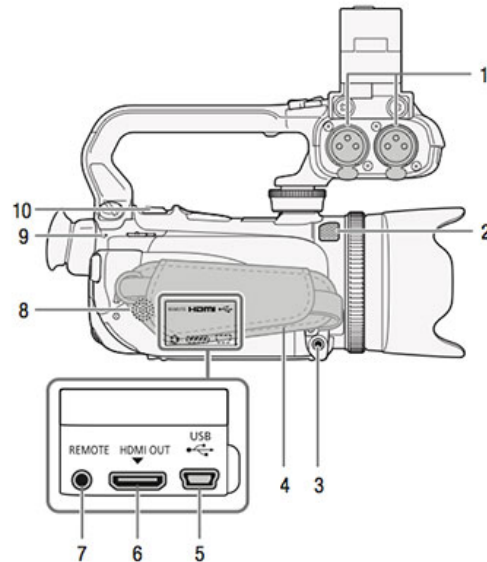
- The levels of the audio being recorded will appear near the bottom on the LCD screen.
- Ideally, your maximum audio level should be around -6 or -10db.
  - Setting the recording level too high may result in 'peaking', where the audio signal is cut off at its loudest points and sounds distorted.
  - Setting the recording level too low may result in quiet recordings with unwanted background noise when played back later on a computer.

### **Recording with the MIC/LINE Input:**

1. Plug in your line input (i.e. a wireless microphone receiver mounted on the top of the camera) into the **MIC Terminal** located on the bottom right side of the camera, underneath the plastic door.
2. Set the Audio Input Switch to **INT**.
3. Set the XLR Terminal Switch to **LINE** (as opposed to **MIC** or **MIC+48V**) for the desired channel(s).
4. On the LCD Screen, go to **FUNC > MENU > Camera Icon Tab > MIC Terminal Input**
5. Select **[MIC]** from the on-screen options to use the wireless mics.
  - These SHOULD be a LINE input, but for some reason they seem to work with the **[MIC]** setting.
  - If you are still not getting audio from your MIC/LINE source, switch to **[LINE]** from this screen.
6. Go to **FUNC > MENU > Camera Icon Tab > Audio Mix**
  - Turn **[ON]** Audio Mixing to mix audio from both the camera's internal microphone and the MIC/LINE Input.
7. Adjust the on-screen slider all the way to the right to select **[EXT]** and record audio only from the MIC/LINE Input.
8. Exit and go to **FUNC > Mic Level > Manual** and use the on-screen controls to adjust the MIC/LINE Input recording level.



- |    |                                                                                                 |    |                                                                |
|----|-------------------------------------------------------------------------------------------------|----|----------------------------------------------------------------|
| 1  | Handle unit front screw (□ 24)                                                                  | 11 | AV OUT terminal (□ 124, 126/<br>⊗ (headphones) terminal (□ 81) |
| 2  | RESET button (□ 162)                                                                            | 12 | COMPONENT OUT terminal<br>(□ 124, 125)                         |
| 3  | 📷 (camera/play) button (□ 31)                                                                   | 13 | Focus ring (□ 51)                                              |
| 4  | DISP. (onscreen display) button<br>(□ 87)/BATT. INFO (battery info)<br>button (□ 158)           | 14 | Lens hood (□ 25)                                               |
| 5  | Double memory card slot cover                                                                   | 15 | Built-in microphone (□ 78)                                     |
| 6  | Memory card slot <b>A</b> (□ 37)                                                                | 16 | Audio level dials for CH1 and CH2<br>(□ 77)                    |
| 7  | Memory card slot <b>B</b> (□ 37)                                                                | 17 | Audio input switch (□ 73)                                      |
| 8  | Handle unit rear screw (□ 24)                                                                   | 18 | ATT (microphone attenuator)<br>switches for CH1 and CH2 (□ 75) |
| 9  | ON/OFF (CHG) indicator (□ 22)<br>Green - ON<br>Orange - Standby (□ 48)<br>Red - Charging (□ 22) | 19 | XLR terminal switches for CH1 and<br>CH2 (□ 75)                |
| 10 | INFRARED switch (□ 89)                                                                          |    |                                                                |



- |   |                                         |    |                                |
|---|-----------------------------------------|----|--------------------------------|
| 1 | XLR terminals for CH1 and CH2<br>(□ 75) | 6  | HDMI OUT terminal (□ 124, 125) |
| 2 | Built-in microphone (□ 78)              | 7  | REMOTE terminal (□ 82)         |
| 3 | MIC terminal (□ 73)                     | 8  | Built-in speaker (□ 94)        |
| 4 | Grip belt (□ 27)                        | 9  | ACCESS indicator (□ 41)        |
| 5 | USB terminal (□ 124, 126, 137)          | 10 | Zoom lever (□ 56)              |