

Setting up TPSS camcorder and wireless microphone Canon Vixia HF R50 video camera



Canon WM-V1 Wireless Microphone

Topics Covered

Canon Vixia HF R50 video camera

1. Charging the battery
2. Memory chips, speed class and in-camera formatting
3. Camera modes, AUTO OK for most situations & Intelligent IS
4. Zoom 2 ways with on camera slider and LCD touch
5. Selecting the movie format for recording
6. Dual recording using SD chip and camera memory.
7. Setting the white balance, manual and presets.
8. Setting the focus: auto vs manual.
9. Tele macro, getting good close up images.
10. Setting the exposure.
11. Audio scene with camera presets.
12. Audio level: auto vs manual settings

Charging the battery

1. See DC connect on side opposite the LCD screen.
2. With plug in and uncharged battery a red light is seen.
3. Red light will stop when battery is fully charged.
4. You have little over 1 hour of battery use for normal shooting with minimal zooming.
5. Battery does not charge when the camera is turned on and plugged into the AC adapter.

CHARGING THE BATTERY



Video is can be recorded on both Memory Card and internal camera memory

1. Video is recorded to a SD memory chip.
2. Speed class ratings for the SD chip are recommended to be 4, 6 and 10.
3. Insert the memory card into the slot with the label facing towards the lenses.
Close the memory slot door when the card is seated and you are ready to record.



- 32GB Data Storage Capacity
- Class 10 Speed
- Ultra High Speed Class 3
- Max. Read Speed: 95 MB/s
- Max. Write Speed: 90 MB/s

Formatting = Initialize the SD Memory Chip



Camera recording modes AUTO & PROGRAM AE

1. For most recording situations you can leave the camera in the AUTO mode.
2. In the AUTO mode the camera adjusts the necessary settings according to the recording
3. The Auto mode icon will change when certain recording situations change.

Smart **AUTO** icons

Background → (color of the icon)	Bright* (gray)	Blue skies* (light blue)	Vivid colors* (green/red)	Sunsets (orange)
Subject ↓				
People (stationary)	 ()	 ()	 ()	—
People (moving)	 ()	 ()	 ()	—
Subjects other than people, such as landscapes	 ()	 ()	 ()	
Close objects	 /  ( / )	 /  ( / )	 /  ( / )	—

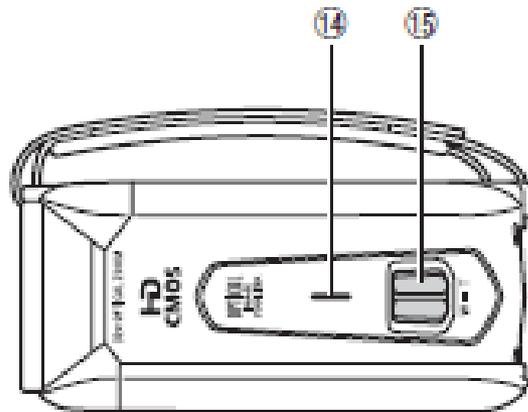
Camera recoding modes

Setting the AUTO & PROGRAM AE Mode



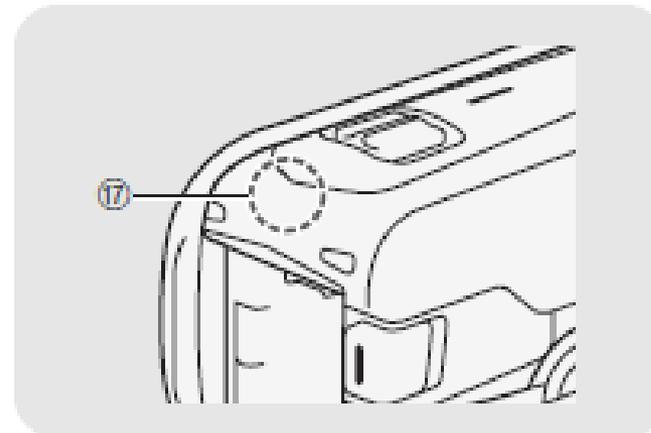
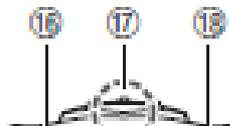
Zooming – On Camera slider and LCD screen

Top view



- ⑭ Speaker (□□ 49)
- ⑮ Zoom lever (□□ 43)
- ⑯ ACCESS indicator (□□ 37, 40)
- ⑰ **HFR52/R50** Wi-Fi antenna (□□ 119)

Back view



Menu item	Setting options	□□
[Zoom Speed]	[VAR Variable], [>>> Speed 3], [>> Speed 2], [> Speed 1]	-

Zooming – On Camera slider and LCD screen

The speed of the zoom function can be changed based on where you touch the zoom control on the one screen slider or set at a fixed speed (see video)



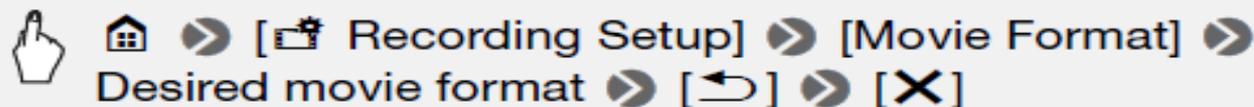
Selecting a movie format:

AVCHD = playback with highest quality, larger files and shortest time of recording on memory chip

MP4 = format for play back on smart phones or uploaded to the Web.

1. record everything in AVCHD, this provides the best quality images.
2. software to convert these large files into formats that are used for DVD authoring, embedding in slide shows or streaming content on the WEB.
3. The only other choice in recording format are the number of frames per second and interlace or progressive format.
4. If you plan to shoot sports, lots of panning or fast moving actions use the 60i, (60 frames per second/interlaced) for all other types of recording use the 30P (30 frames per second/progressive).
5. use the 30P setting. See video to set this recording parameter.

Operating modes:



Selecting a movie format:



The difference b/w 30P and 60I video formats

Simply stated, the "i" or "p" after the capture rate indicates whether or not the video is interlaced or progressive.

“Interlaced“ means that each field consists of (typically) the odd rows or even rows in the picture UPDATED EVERY 1/60TH OF A SECOND

30p video also displays one entire frame every 1/30th of a second so an entire frame is displayed at once.

1. Simply put, 60i amounts to capturing 60 **half frames** per second.
2. 30p video generally results in better resolution and sharpness than 60i video
3. 60i video excels in fast action video such as sports.
4. 60i can be useful if you plan to video a sporting event or if you are taking video where you must do a lot of panning from side to side.
5. 30p is generally better for most slow to average speed pans and motion due to the ability of 30p to capture more detailed information and sharpness.

Setting the white balance, manual and presets.

The white balance function helps to accurately reproduce colors under different light conditions so that white objects will always look white. The options white balance are:

Options (♦ Default value)

- [**AWB Automatic**]♦ The camcorder automatically sets the white balance for natural looking colors.
- [**☀ Daylight**] To record outdoors.
- [**☀ Tungsten**] To record under tungsten and tungsten-type 3-wavelength fluorescent lighting.
- [**🎨 Custom WB**] Use the custom white balance setting to make white subjects appear white under colored lighting.

In **AUTO** mode white balance is set by the camera, for more precise color recording change from **AUTO** to **Program AE** mode to manually set white balance

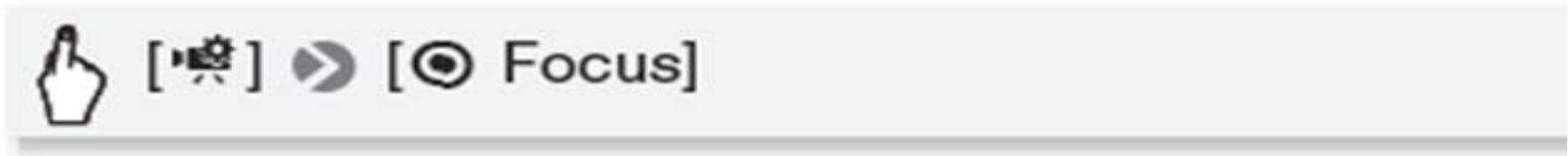


Setting the focus: auto vs manual

1. The Autofocus feature will work well with most scenes where the subject is not moving.
2. Autofocus may not work well with highly reflective surfaces, fast moving subjects, through wet windows, night scenes or when subjects have a low contrast (similar lighting, colors or distance from camera).
3. At full wide angle you can focus on an object 0.4 inches away.
4. Using tele macro you can focus on a subject 1.6 ft. away at full telephoto.

Manual Focus

- 1 Open the manual focus screen.



- 2 Touch **[MF]**.
Touch **[MF]** again to return the camcorder to autofocus.
- 3 Touch and hold **[▲]** or **[■]** to adjust the focus.

Setting the focus: auto vs manual



Tele macro, getting good close up images

1. It is common in making video content for scientific content to obtain a very close images of the subject.
2. Subject like insects or flower parts are examples of things that we may need very close images of.
3. Your camera can be used to get these close-up shot by using a feature called Tele Macro.
4. You can only set the camera at 1.6 feet or 50 cm from the subject at full telephoto. If you move too close you will not be able to focus on the subject.
5. This function also adds a soft focus to the background making the subject appear larger and to stand out more.



Tele macro, getting good close up images



Setting the exposure.

1. The camera general does a good job of determining the optimal exposure of a scene based on the average brightness of the entire picture.
2. When you want to record a subject that is much brighter or darker than its surroundings, automatic focusing may not provide the look you want.
3. You can manually make the whole picture brighter or darker so that the subject of your picture has the correct exposure.

1 Open the exposure adjustment screen.



Setting the exposure.



Audio scene with camera presets.

1. For much of your scientific video content you will want to add voices over the video that you record.
2. When the recorded audio is an important part of the final video content you can have the camera optimize the recorded audio by selecting the audio scene that matches your surroundings.
3. The list below will describe the various audio scenes that you may need the very best audio for.



Options (◆ Default value)

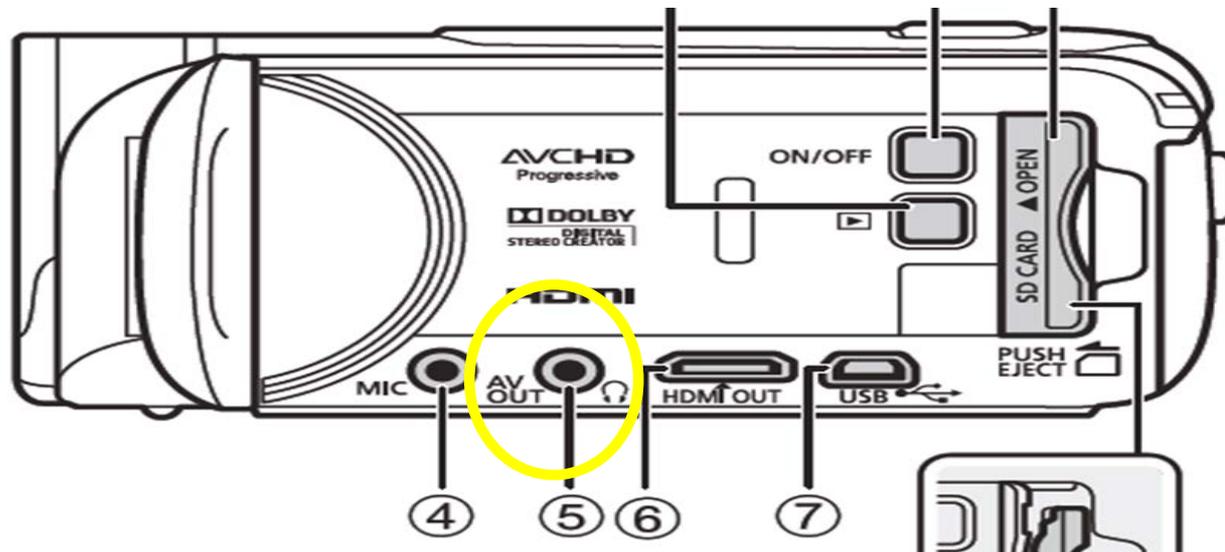
- [🎵 **Standard**] To record most general situations. The camcorder records with standard settings.
- [🎸 **Music**] To vibrantly record music performances and singing indoors.
- [👤 **Speech**] Best for recording human voices and dialog.
- [🌳 **Forest and Birds**] To record birds and scenes in forests. The camcorder clearly captures sound as it spreads.
- [🔊 **Noise Suppression**] To record scenes while reducing noise from wind, passing vehicles and similar ambient sound. Ideal for recording at the beach or in places with a lot of noise.

Audio scene with camera presets.



Audio level: auto vs manual settings

1. Auto audio record setting can cause the loss of voices when the camera tries to adjust from loud sound to normal sound. When speaker resumes after applause.
2. Manual audio keeps the same level of recorded sound, best with ext. mics.
3. Before testing your sound levels it is best of view the on screen audio meter as well as listing to the sound via headphones.
4. When you plug in headphone you will be able to monitor the sound that the camera will be recording.
5. The headphone jack is indicated by the number 5 in the drawing above. The factory default is to set this headphone/AV (meaning audio/video).

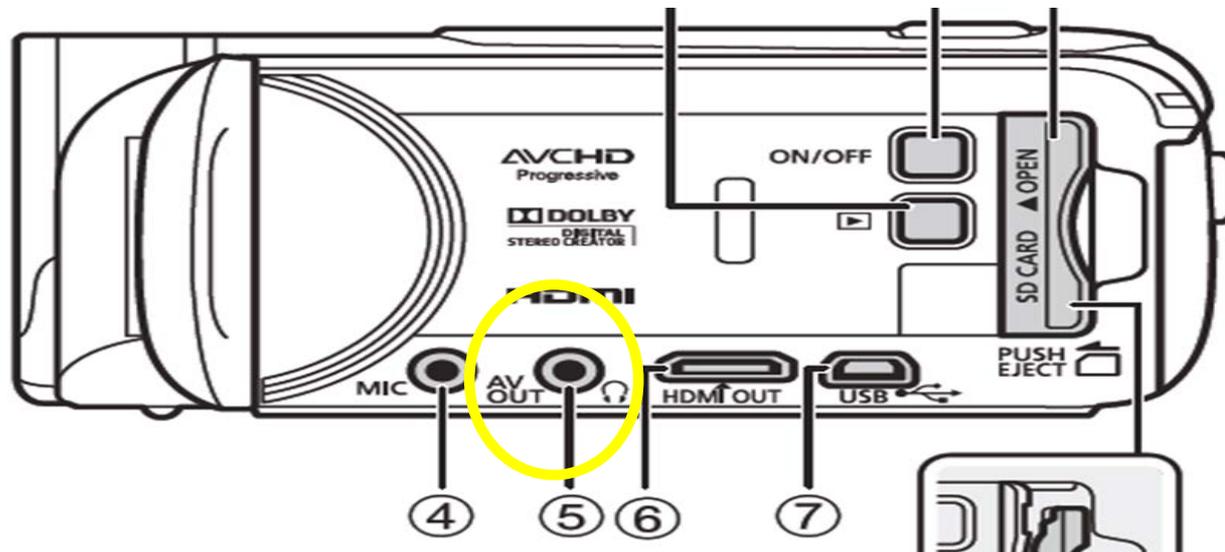


Audio level: auto vs manual settings
Change A/V to headphone function



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Audio level: auto vs manual settings
Change A/V to headphone function



Audio level: auto vs manual settings



TPSS video recording system includes a PAN table that can be controlled remotely with Blue Tooth equipped smart phone or tablet. Google Play store=Camera Access Plus. Best to reset all settings to make the camera and mobile device connect

Canon

<https://play.google.com/store/apps/details?id=jp.co.pixela.cameraaccessplus&hl=en>



Shown in Use



CameraAccess plus

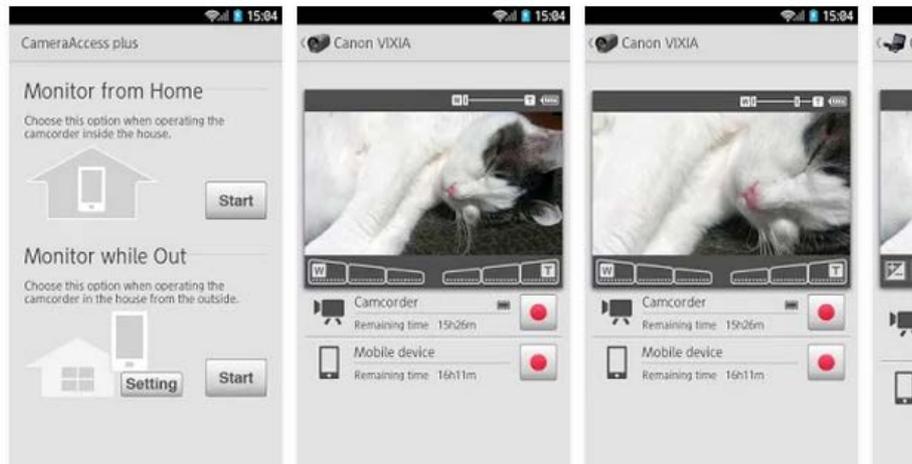
PIXELA CORPORATION Media & Video

★★★★☆ 229

Everyone

This app is compatible with some of your devices.

Installed



Cannot connect a WI-FI-enabled external device wirelessly to the camcorder.

- Use the **Reset All** setting to reset the camcorder. The camcorder's SSID will return to the default setting and the password will change. Delete the previous network settings from the external device and try to connect it to the camcorder.