**C100 Quick Use Guide**

- Turn on camera: power on CAMERA or MEDIA MODE
- Menu: Press MENU to open. Use joystick to navigate menus and press joystick to enter menu option; you can also move joystick right to open menu option. Hit cancel to exit a menu option or move joystick left.
- Format Card: MENU >wrench>initialize media>A or B>Complete
  - If using the Atomos to record to, you will need this as well
- Media Settings:
  - MENU>wrench>Bit Rate>24Mbps LPCM
  - MENU>wrench>Frame>24P (for 24fps) or 60i (for slow motion; this will also shoot at 720 resolution) the MKII will shoot 60i at 1080 resolution
  - Picture Profile: It should be locked to the CINEMA profile to give you flattest image possible. Leave it on this setting so you have a flat image to color correct in post.
    - To Unlock/Lock: MENU>camera>CP>Off (this turns off lock; do reverse to lock)
    - To select profile: Press Custom Picture button. Move joystick left to enter. Select CAMERA. Move joystick up and down to scroll options and press it to select. Please set to CINEMA for flat image (which is what you want).
- Focus: Rokinon Lenses are manual focus AND manual aperture setting
- Playback: power switch to MEDIA, use play/pause control buttons

**Menus**

*Camera Menu*

*Light Metering*
- Backlight: Use this meter when subject is backlit
- Standard: Use this for most scenes. It averages the scene, with focus on the center.
- Spotlight: Use when you have a lot of light contrast in a scene. So, say you have a spotlight illuminating the face of a subject and the rest of the scene is black. Put the spot on the face and meter the exposure for the face.

*AE Shift: ignore this. For autoexposure.*

*ISO/Gain: Set to ISO (not gain), keep extended range OFF (use this if you need 80,000 ISO, which will give you a very noisy image.) Set ISO increment to 1/3 stop so you can hit native ISOs (160, 320, 640, and 1250).*
**Iris:** Unless you are using a Canon lens that can communicate with the C100, don’t worry about this setting as you set your f/ with the lens. If using a Canon lens, set it to Manual, 1/3 stop.

**Shutter:** Set shutter Mode to Speed and set Shutter Increment to ¼ stop (this will allow you to shoot a 1/48 shutter; set at 1/3 stop you can only shoot 1/50 shutter.

**CP (Custom Picture) Lock:** We have locked these into the CINEMA picture profile. This will give you the flattest image possible using this camera. However, if you want to try custom profiles, just turn the lock off.

**LCD/VF Setup:**
- **Peaking:**
- **Zebra:** Will show zebra stripes on overexposed areas.
- **Markers:** If you want to shoot to frame for a cinemascope aspect ratio...Enable=On, Aspect Marker=White, Aspect Ratio= 2.35:1. If you want, you could also use the grid to help you with framing observing the rule of thirds.
- **Custom Display:** you can turn on and change display info

**Display:**
- ***If recording on the Atomos, make sure that the display settings are set to OFF! If you see the Canon exposure meter, waveform monitor, etc. on the Atomos, it will record that in your image!!!

**Wrench:**
- **Fan:** On
- **Relay Recording:** On if you have two SD cards. When one fills it will begin recording on other card.
- **Double Slot Rec:** allows you to record the same clip to two SD cards at once as backup
- **Frame Rate:** 24P or 60i (if you’re shooting for slow motion and need 60fps).
- ***With the MKII, you can ONLY shoot at 60fps in the AVCHD codec.
- ***If recording on the Atomos, make sure it’s set to the same FPS as the C-100

To Format: *Initialize media>Select Card A or B>Complete. On the next menu select OK. When it’s done select OK and your card is formatted.

**Media Storage and Management:**
The C100 shoots in AVCHD codec, .MTS format.

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***The C100 Mark IIs can shot in mp4 format. This will give you individual files opposed to an AVCHD package. The codec is the same although the mp4 can record at a higher bit rate. 35 mbps.

When shooting in the AVCHD codec to move footage from the SD card to an external (tip: back up footage in another location other than a hard drive you use to edit with), lock the read/write switch on the SD card (this will prevent any loss of media in transfer if card is corrupt), and then place in SD slot on computer or card reader. Open the Canon Folder. Transfer the Private folder to your external drive. It’s very important that you keep the Private folder and don’t move anything around in here as most NLE software needs data in the folder structure to transcode the .MTS files into files that can be edited. If you look inside the private folder there is an AVCHD file. This is all of your clips. When you import this file, the NLE software will recognize the clips in it. A suggestion is to make folders for daily shoots on your external drives and place the Private folders in them.

You can open up the AVCHD file in quicktime or import it directly into Final Cut Pro Premiere or another editing program.

After you have transferred your footage, the best way to erase it from your SD card is to reformat the card. Do not drag and drop to “trash” can on computer. (Note, if you locked the SD card read/write, you will have to unlock it before you format)

**Lenses:**
5 lenses come with the C100. They are each prime lenses and each has a set focal length. From wide to telephoto they include:

- Rokinon 14mm T3.1 - A very wide lens. Close objects may appear distorted. It also lets in less light than the other lenses.
- Rokinon 24mm T1.5 - A wide lens for establishing shots, buildings, and landscapes.
- Rokinon 35mm T1.5 - A wide to normal lens for medium to wide shots.
- Rokinon 50mm F1.5 - A normal lens for close up and medium shots.
- Rokinon 85mm T1.5 - A short telephoto lens. Distance between objects becomes slightly compressed along the Z-axis.
T-stop is similar to F-stop although it measures the total amount of light hitting the sensor opposed to the size of the aperture. The same number F-stop may be slightly different on different lenses because of a variety of factors while a T-stop number will let in the exact same amount of light on every lens.

**White Balance:**
Setting Custom WB:

Press joystick. Select Custom WB A or WB B. Have subject hold a clean white object or a gray card. Bring the camera to the white object so it fills the screen. Press the Custom WB button on the side of the camera. You will see the WB icon on LCD screen flicker and then it will set the WB and give you a K value. You can also select from a range of presets as well as set the K value yourself using the joystick.

**Picture Profiles:**
Press Custom Picture button. Select Enter on SET. Select file should be set to Camera. Press Enter. Use joystick up and down to go through list of picture profiles. You can load in custom ones from an SD card. NEVER shoot in the Standard mode!!! This will add fake/digital contrast, sharpness, and saturation. It’s best to shoot in CINEMA mode. It will give you the flattest image possible and allow you the most opportunity to create beautiful images through color correction. To reiterate you add real sharpness to an image using focus and depth of field (also, lens glass has a lot to do with it), and you add contrast and saturation in color correction.

You can also go in and adjust custom picture profiles.

**Audio Levels and Hookup:**
If possible use the onboard mic on Handle Unit and also a boom or other mic (you may prefer to record audio onto a separate device as well). If recording onto a separate recorder, it’s important to get source or “scratch” audio on built in mic for syncing. If using a boom mic and recording to the C100, it’s good to record using the onboard mic so you have a backup audio source if something goes wrong with the boom mic signal. Set AUDIO IN on one of the channels to INT (the onboard mic) and the other channel to EXT (the mic plugged into the XLR input).

Make sure you set to M, which is manual levels not A. When using the INT mic, you don’t need to adjust any other switches. For using the Senn 416 or other condenser...
mic right into the camera (condenser mics need power aka Phantom Power aka +48), set to MIC +48v and set to EXT.

If you have both the onboard mic and an external mic running you will hear each signal on a different side in the headphones. You will also control the gain of each channel using the audio levels controls on top of the Handle Unit. Using the VU meter on the LCD screen set these levels so that they are both peaking a bit above -10dB, which will give you enough headroom for louder sounds (yelling, coughing, crashing, etc.). NEVER set above this level.

If recording only one audio signal, the tendency is to record it onto both channels. This is essentially just recording the same signals onto separate channel paths. This may be useful, though, if you are using a boom mic and you want to record the signal two both channels but want to have different gain settings in case you set the gain too high or too low.

If you just need scratch track audio, say for a music video, set to MIC, A (you can just use auto levels), and INT for internal mic.