

Start Guide to operation of the NCNCA finish line camera system

Insert power supply adapter into battery compartment of the camera. Run wire through slot near battery door and close door

Mount scoring camera on tripod and position camera lens directly perpendicular with the finish line. Tripod should be set high enough so the camera can see riders across the width of the finish line.

On barrel of the lens check that MF (manual focus) is on. Check that stabilizer is off.

Plug in USB cable into camera and computer. (on left side of camera and left side of computer)

Plug power supply from camera into the UPS (uninterruptible power supply) and plug UPS to main power. Tape cables coming from camera to the tripod for strain relief. Plug computer into main power.

Turn on camera with switch next to dial. Select movie mode icon on dial.

Format internal SD card in camera - select menu on camera, scroll to the page that has "format card" and select. Follow on-screen instructions. Press menu button again to exit the menu. Check date and time setting in camera menu. Correct if necessary.

Start up computer. Computer should recognize camera and open EOS utility 3 when startup is completed. Select "Camera Settings/Remote Shooting". If program does not automatically start, open EOS 3 from the alias on the desktop or in the application folder in the finder.

Select "live view shoot" in the settings panel (bottom portion of panel). Live view panel will open showing view from camera.

From the settings panel insure camera is in manual mode ("M" next to shutter speed adjustment on panel) then adjust settings for exposure. If, in the rare case it is showing Auto, then you need to change it to Manual at the camera (T6 model). Press menu on the camera select video tab 1 then select manual mode.

Setting for a standard daylight scene:

HD 59.94P (aka: 720/60fps) displayed in live view window lower left should be already set. If not, from settings panel click the wrench icon button and select it

To start off, set camera settings from the settings panel to the following:

Shutter: 2000 F Stop: f8 ISO: 800

White Balance: AWB

Adjust ISO and F stop if necessary to get proper exposure. Try to avoid using an F stop less than f5 or using the maximum ISO. You can adjust shutter speed down to 1000/sec if necessary without too much problem. Going below that may introduce blurriness in reviewing single frames from a clip.

Camera exposure should be set to see a rider number clearly without the white space around the bib number blowing out the exposure to the number. (Overall scene will appear slightly dark). You may have to adjust exposure during the day to account for changing lighting conditions.

Adjust camera lens using zoom or reposition camera to frame the finish line so that riders on either side of the finish area will be captured in frame. Adjust focus on the lens. Focus on a point approximately in the middle of the road to start off.

In live view click on the red record button (lower right corner of the frame) to start recording. Record light should show in the live view window along with a record counter. Click the record button to stop recording. Record a couple of test clips with riders passing through and adjust exposure if necessary.

To save clips, close live view window (button on lower right of window or "command W" or red close button on upper left of window. Dialog boxes will appear asking if you want to save clip(s) to the computer. Click yes both times. Computer will save clips to the folder on the desktop. All your clips will be saved for the day in that folder.

To review a clip select it and Quicktime will open it to view. Use the scrubber bar to move quickly through the clip and the left/right arrows to review frame by frame. To go back to recording clips, close the Quicktime window and select live view shoot from the settings panel.

Schematic for the setup of the generator and the camera backup power supply is on the following page.

Finish Line Camera Setup Schematic

