



Production Technology Support

CAMERA PRODUCTION GUIDE | **RED RANGER MONSTRO 8K VV**

Settings and best-practices for capture with the RED RANGER MONSTRO 8K VV on Netflix 4k Originals.

Current Ops Manual: [HERE](#)

CAPTURE SETTINGS | **8K REDCODE RAW**

Preferred SELECTION setting shown in **YELLOW & BOLD** and alternatives in normal text.

SETTING	MENU NAVIGATION	SELECTION
SHOOTING MODE	Menu → Settings → Recording → Mode	Continuous Record
REDCODE RAW FORMAT	Menu → Settings → Recording → Codec	R3D
REDCODE RAW COMPRESSION	Menu → Settings → Recording → Codec*	5:1 ~ 8:1
IMAGE PIPELINE (COLOR SPACE/GAMMA CURVE)	Menu → Image → Image Pipeline**	IPP2 (REDWideGamutRGB/Log3G10) Legacy (DRAGONcolor2/Log3G10)

Note: HDRX capture is **not** approved by Netflix.

* 5:1 is the lowest REDCODE RAW compression available at 23.98 fps. Lowest possible compression ratio may change depending on the frame rate. 8:1 is the maximum compression allowed for Netflix 4k Originals on the RED RANGER MONSTRO 8K VV camera.

** IPP2 is the recommended image pipeline. IPP2 separates out the technical controls which are standardized references that rarely change, from the creative controls which are unique to the colorist/production.



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HIGH SPEED | 8K REDCODE RAW

INTERNAL MEDIA	MAX FPS	MAX RESOLUTION	MIN COMPRESSION
RED MINI-MAG (480GB/960GB)	40 fps	8192 x 4320	8:1

HIGH SPEED | 4K REDCODE RAW*

INTERNAL MEDIA	MAX FPS	MAX RESOLUTION	MIN COMPRESSION
RED MINI-MAG (480GB/960GB)	120 fps	4096 x 2160	6:1

HIGH SPEED | 2K REDCODE RAW*

INTERNAL MEDIA	MAX FPS	MAX RESOLUTION	MIN COMPRESSION
RED MINI-MAG (480GB/960GB)	240 fps	2048 x 1080	4:1

* To change the recording resolution of the camera, go to Menu > Settings > Project > Format, or simply touch the resolution on the control screen. Resolution less than 8K Full Format will utilize a smaller area of the sensor, and consequently change the field of view.



OPTIMIZING PERFORMANCE | **BLACK SHADING CALIBRATION**

SETTING	MENU	STANDARD OPERATING PROCEDURE
CALIBRATE SENSOR: MANUAL CAPTURE	Menu → Settings → Maintenance → Calibrate → Sensor	<ol style="list-style-type: none">1. Select Create.2. Select Manual.3. Select how many calibration maps you want to create from the Number of captures drop-down menu.4. Select the exposure you want for each calibration map from the Capture drop-down menu.7. Select Start Capture(s).

Black shading maximizes image quality by ensuring that pixel sensitivity remains consistent throughout an image.

WHEN TO APPLY

Black shading calibration should be performed before the start of any production, ideally during camera prep. Let the camera stabilize in temperature before performing calibration. If shooting in consistent ambient temperatures, it is recommended that black shading calibration is done once a week, usually at the end of the day while cameras are still warm.

The camera offers two (2) ways to calibrate the sensor:

- **Manual Calibration:** RED recommends using Manual Calibration for the HELIUM 8K S35, MONSTRO 8K VV (in both DSMC2 and RANGER bodies), and GEMINI 5K S35 sensors. For more information, go to [Calibrate Sensor: Manual Calibration](#).
- **Auto Calibration:** RED recommends using Auto Calibration for the DRAGON 4.5K, DRAGON 5K, DRAGON 6K, and DRAGON-X 5K sensors. For more information, go to [Calibrate Sensor: Auto Calibration](#).

For more information, see the [Sensor Calibration Methods](#) article and [this](#) video.