

7 STEPS FOR AN OPTIMAL IMAGE



1. Compatible Output Resolution

- Open VIDEO FORMAT and select a resolution /frame-rate all downstream devices support (e.g. **1080p60** or **1080p50**).
- Avoid **30fps** unless the entire chain is locked to it; fast motion looks choppy. **50fps** or **60fps** keep motion smooth.
- Apply the setting and reboot the camera so HDMI, SDI, IP and USB outputs synchronise.



2. Exposure & Light Sensitivity

- Navigate to CAMERA > EXPOSURE > Mode and select **AAE (Aperture Automatic Exposure)** for a stable baseline.
- Set the iris to F3.4 – F4.0 for greater depth of field and sharper focus.
- If lighting varies widely, you may remain in **AUTO**. Keep *G.Limit* (Gain Limit) as low as the scene allows to avoid noise.



3. Consistent Focus

- Open CAMERA > FOCUS and start with **MANUAL**; adjust until the subject is sharp.
- **Autofocus fallback**: If the subject distance changes constantly (roaming speaker, rapid PTZ moves) switch to **AUTO**. In very low light the lens may briefly search for focus.
- Save a preset; the selected focus mode is stored with it.



4. Flicker-Free Image

- Open CAMERA > EXPOSURE > Flicker and set **50Hz** (Europe) or **60Hz** (North America).
- If faint horizontal bands remain under LED or fluorescent fixtures, lock the shutter to **1/100s** (with Flicker=50Hz) or **1/60s** (with Flicker=60Hz).



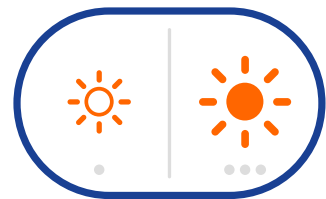
5. Accurate Colour & White Balance

- Select COLOR > WB Mode > OnePush. Fill the frame with a white card and press **Adjust** to lock the white point.
- Open COLOR > Saturation and boost to **120% – 130%** to restore vibrancy lost through IP compression.
- In case of changing lighting conditions (e.g. windows), choose auto white balance for the camera to adjust to the changing conditions.



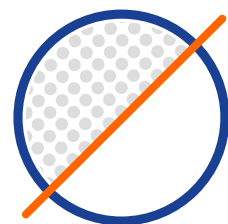
6. Motion Clarity vs Low-Light Brightness

- Low-light: Lower the output to 50fps; each frame lasts 20ms, allowing a 1/50s shutter that gathers 20% more light than 60fps.
- **Fast-action:** Keep **60fps** and set shutter to **≤1/250s**; add front lighting rather than excessive gain.
- Dropping to 30fps is a last resort; viewers perceive it as stutter on pans or quick movement.



7. Low-Noise Image

- Add light wherever possible before applying electronic corrections.
- Under CAMERA > NOISE REDUCTION (or VIDEO > Camera Settings > NR) select **NR-2D** or **NR-3D** and start at Low. Increase only until noise is acceptable; higher levels blur detail.



Saving Your Settings

- Save your settings in the camera.
- Only the focus settings are not stored in the camera but in the presets.
- The focus settings change automatically 1) when recalling a preset, 2) when you use the manual zoom.

Emergency Reset

- *Run OSD MENU > RESTORE DEFAULT > YES* to revert all global settings to factory values.
- User presets may be cleared or preserved depending on model.
- After reset, repeat Objectives 1–7 and re-save any needed presets.