

Nikon Z6II Optimal Camera Settings Guide

Customized for Your Lens Collection

This guide provides optimal camera settings for your Nikon Z6II across five photography genres, tailored to your specific lens collection. All settings use English terminology as displayed in the camera menu.

1. Portrait Photography

Recommended Lenses

Primary: NIKKOR Z 24-120mm f/4 S (at 85-120mm range)

Secondary: Tamron 90mm f/2.8 Di III MACRO VXD (excellent bokeh and sharpness)

Camera Settings

Setting	Recommended Value
Shooting Mode	A (Aperture Priority) or M (Manual)
Image Quality	RAW (NEF) or RAW + JPEG Basic
Image Size	Large (6048 × 4024)
Aperture	f/2.8 - f/4 (single subject), f/5.6 - f/8 (group portraits)
ISO Sensitivity	ISO 100-800, Auto ISO (max 3200)
Shutter Speed	Minimum 1/160s (handheld), 1/focal length rule
Focus Mode	AF-S (Single-servo AF)
AF-Area Mode	Single-point AF or Eye-Detection AF (auto)
Face/Eye Detection	ON (Face and eye priority)
Metering	Matrix Metering
Picture Control	Portrait (softer skin tones)
White Balance	Auto (AWB) or Manual preset for consistency
VR/IBIS	ON (Normal mode)

Lens-Specific Tips

NIKKOR Z 24-120mm f/4 S:

- Use 85-120mm range for flattering perspective
- f/4 is sharp enough for single portraits with good background separation

- VR provides ~5 stops of stabilization - excellent for handheld work
- Consider f/5.6-f/8 for group portraits to ensure everyone is sharp

Tamron 90mm f/2.8 MACRO:

- Wide open at f/2.8 creates beautiful bokeh for headshots
- Stop down to f/4-f/5.6 for sharper eyes and more depth
- Focus range limiter: Use 0.7m-∞ for general shooting, 0.7m-macro for close-ups
- Minimum focus distance of 0.5m allows for tight headshots

2. Landscape Photography

Recommended Lens

Primary: NIKKOR Z 24-120mm f/4 S (versatile range, 24mm for wide landscapes)

Camera Settings

Setting	Recommended Value
Shooting Mode	A (Aperture Priority) or M (Manual)
Image Quality	RAW (NEF)
Image Size	Large (6048 × 4024)
Aperture	f/8 - f/11 (sweet spot for sharpness)
ISO Sensitivity	ISO 64-400 (lowest possible for best quality)
Shutter Speed	Variable (use tripod for long exposures)
Focus Mode	AF-S or Manual Focus (for hyperfocal distance)
AF-Area Mode	Single-point AF (focus 1/3 into scene)
Metering	Matrix Metering
Picture Control	Landscape (saturated colors)
White Balance	Daylight or Manual preset
VR/IBIS	ON (if handheld), OFF (on tripod)
Additional	Exposure delay mode: ON (reduce vibration), Long exp. NR: ON

Lens-Specific Tips

NIKKOR Z 24-120mm f/4 S:

- At 24mm: be aware of slight distortion at edges (auto-correct in camera)
- f/8-f/11 delivers peak sharpness across the entire frame
- Use tripod for shutter speeds below 1/30s even with VR
- Turn VR OFF when using tripod to prevent micro-vibrations
- Enable Virtual Horizon for perfectly level landscapes
- Consider exposure bracketing for HDR in high-contrast scenes

3. Nature Photography (Wildlife)

Recommended Lens

Primary: Tamron 150-500mm f/5-6.7 Di III VC VXD (excellent reach and stabilization)

Camera Settings

Setting	Recommended Value
Shooting Mode	S (Shutter Priority) or M (Manual)
Image Quality	RAW or RAW + JPEG Basic (for quick review)
Image Size	Large (6048 × 4024)
Aperture	f/5.6 - f/6.7 (lens dependent, often wide open)
ISO Sensitivity	ISO 800-6400, Auto ISO (max 12800 if needed)
Shutter Speed	1/500s - 1/2000s (depends on subject movement)
Focus Mode	AF-C (Continuous-servo AF)
AF-Area Mode	Wide-area AF (L) or Animal-detection AF
Release Mode	CH (Continuous High): 14 fps
Metering	Matrix Metering
Picture Control	Standard or Vivid
White Balance	Auto (AWB)
VR/IBIS	ON (use lens Linear or Non-linear mode)
Additional	Back-button focus recommended for better AF control

Lens-Specific Tips

Tamron 150-500mm f/5-6.7:

- At 500mm, you're shooting at f/6.7 - compensate with higher ISO (3200-6400)
- Linear mode: smooth, predictable tracking (video/panning). Non-linear: faster response for erratic movement
- Gimbal head is essential for smooth tracking and reducing fatigue
- Balance lens on gimbal properly (tripod collar ring position)
- Minimum shutter speed: 1/1000s for birds, 1/500s for slower animals
- Pre-focus on anticipated path when tracking fast-moving subjects
- Z6II handles ISO 6400 well - don't be afraid to raise ISO for proper shutter speed

4. Macro Photography

Recommended Lens

Primary: Tamron 90mm f/2.8 Di III MACRO VXD (1:1 magnification ratio)

Camera Settings

Setting	Recommended Value
Shooting Mode	A (Aperture Priority) or M (Manual)
Image Quality	RAW (NEF)
Image Size	Large (6048 × 4024)
Aperture	f/8 - f/16 (depth), f/2.8 - f/4 (bokeh/isolation)
ISO Sensitivity	ISO 400-1600 (often shooting in shade/indoors)
Shutter Speed	1/250s minimum (compensate for magnification shake)
Focus Mode	AF-S or Manual Focus (MF often more precise)
AF-Area Mode	Single-point AF (pinpoint accurate)
Metering	Matrix or Spot Metering (for specific areas)
Picture Control	Standard or Vivid
White Balance	Auto or Shade (for outdoor macro)
VR/IBIS	ON (critical for macro)
Additional	Focus Peaking: ON, Live View recommended

Lens-Specific Tips

Tamron 90mm f/2.8 MACRO:

- 1:1 magnification ratio (life-size reproduction on sensor)
- Minimum focus distance: 0.5m (working distance ~0.3m from subject)
- Use tripod for critical sharpness - even slight movement is magnified
- At 1:1 magnification: depth of field is razor-thin even at f/16
- Consider focus stacking (multiple shots at different focus points)
- Manual focus often better than AF for precise control
- Use Focus Peaking in Live View mode (highlights in-focus areas)
- Focus range limiter: Set to 0.7m-macro to speed up AF when shooting close-up
- Programmable function button: Assign to AF-ON, focus limiter toggle, or other custom function

5. Architecture Photography

Recommended Lenses

Primary: NIKKOR Z 24-120mm f/4 S (versatile for interiors and exteriors)

Secondary: NIKKOR Z 40mm f/2 (for detail shots and low-light interiors)

Camera Settings

Setting	Recommended Value
Shooting Mode	A (Aperture Priority) or M (Manual)
Image Quality	RAW (NEF)
Image Size	Large (6048 × 4024)
Aperture	f/8 - f/11 (maximum sharpness throughout frame)
ISO Sensitivity	ISO 64-800 (exterior), ISO 800-3200 (interior)
Shutter Speed	Variable (use tripod for long exposures)
Focus Mode	AF-S
AF-Area Mode	Single-point AF (focus 1/3 into building)
Metering	Matrix Metering
Picture Control	Standard or Neutral
White Balance	Manual preset (for consistency across series)
VR/IBIS	OFF (always use tripod for architecture)
Additional	Virtual Horizon: ON, Distortion control: ON

Lens-Specific Tips

NIKKOR Z 24-120mm f/4 S:

- At 24mm: excellent for large buildings and interiors
- Enable in-camera distortion control to correct barrel distortion
- Virtual Horizon is essential for keeping vertical lines straight
- Always use tripod - turn VR OFF to prevent micro-vibrations
- Zoom range allows composition flexibility without changing position

NIKKOR Z 40mm f/2:

- Perfect for architectural details and textures
- f/2 aperture excellent for low-light interior shots
- Compact and discrete for indoor photography
- Sharp even wide open, but use f/8 for maximum sharpness
- Natural perspective for street-level architectural photography

General Tips & Equipment Usage

Tripod Usage

- Essential for: Landscape, Architecture, Macro, and low-light situations
- Always turn VR/IBIS OFF when using tripod
- Use Exposure Delay Mode or electronic front-curtain shutter

Gimbal Head (for Wildlife)

- Balance Tamron 150-500mm properly using tripod collar
- Allows smooth panning for tracking moving subjects

- Reduces fatigue during long shooting sessions

Remote Release/Intervalometer

- Eliminates camera shake for tripod-mounted shots
- Essential for long exposures and focus stacking
- Can be used for time-lapse sequences

Key Z6II Features to Leverage

- Eye-Detection AF: Excellent for portrait work
- Animal-Detection AF: Game-changer for wildlife (firmware 1.30+)
- IBIS: Up to 5 stops of stabilization (works with lens VR)
- Dual card slots: Use backup or overflow for important shoots
- High ISO performance: Usable up to 12800 with minimal noise
- Focus Peaking: Invaluable for manual focus in macro work
- Virtual Horizon: Critical for architecture and landscape

Programmable Function Button Settings

Both the Tamron 90mm f/2.8 MACRO and NIKKOR Z 24-120mm f/4 S have programmable function buttons. Here are recommended assignments per photography type:

Portrait (Tamron 90mm or NIKKOR 24-120mm):

- AF-area mode: Quick toggle between Single-point and Eye-Detection AF
- Alternative: Subject detection ON/OFF toggle

Landscape (NIKKOR 24-120mm):

- Depth-of-field preview: Useful at f/8-f/11 to verify sharpness throughout frame
- Alternative: Virtual horizon quick display

Macro (Tamron 90mm):

- AF-ON (back-button focus): Separate focus from shutter button for precise control
- Alternative: Manual/Auto focus toggle for quick switching without using lens switch

Architecture (NIKKOR 24-120mm):

- Virtual horizon: Essential for keeping vertical lines straight
- Alternative: Grid display for composition and alignment

Back-Button Focus Tips

Since you use back-button focus (AF-ON button), here are specific techniques to maximize its benefits:

Portrait:

- Focus on eyes, release AF-ON to lock, then recompose without refocusing
- For moving subjects (children): Keep AF-ON pressed for continuous tracking with AF-C

Landscape:

- Focus on hyperfocal point (1/3 into scene), lock, then recompose as needed
- Consistency benefit: No accidental refocusing when adjusting composition on tripod

Wildlife:

- Pre-focus on area where animal will appear, hold AF-ON while tracking movement
- With AF-C: Release AF-ON to lock focus if subject stops moving, preventing focus hunting
- Critical advantage: Shoot bursts without refocusing between frames - just hold shutter

Macro:

- Focus with AF-ON, lock, then rock body forward/backward for perfect focus point
- Prevents "focus hunting" at high magnification where even tiny movements confuse AF
- Allows taking multiple shots at same focus point without AF interference

Architecture:

- Focus on 1/3 point of building, lock, adjust composition without refocusing
- Perfect for tripod work: Focus once, shoot multiple exposures or bracketing sequences

Note:

These settings are starting points. Adjust based on lighting conditions, creative intent, and specific shooting scenarios. Experiment and develop your own preferences as you gain experience with your Z6II and lenses.