

SHUTTER SPEAK

PHOTOGRAPHY



Nikon Z Low-Light Photography Settings Guide

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HOW TO USE THIS GUIDE

This handout gives easy starting settings for using your Nikon Z camera in low light. Use them as a baseline, then tweak as you get more comfortable.

You will see three common situations:

- Handheld with people or movement
- Handheld night city scenes (no tripod)
- Tripod work (city lights, light trails, stars)

SCENARIO 1: HANDHELD IN LOW LIGHT

EVENTS, PEOPLE, STREET AT NIGHT

Mode: Aperture Priority (A)

Aperture

- **Value:** f/1.8–f/2.8
- **Notes:** Set your lens as wide open as it will go to let in more light.
- **Menu Location:** Shooting Mode dial (turn to A)

Maximum Aperture Lv

- **Value:** On (where available)
- **Notes:** This keeps the lens at its widest aperture for the live view display, which makes the viewfinder brighter and can help autofocus and your eyes see the subject more easily in very dark scenes, but it does not change the camera's rated AF sensitivity in EV.
- **Menu Location:** Custom Settings > a13 (Z6 III) or a14 (Z8/Z9)

ISO

- **Value:** Auto ISO
- **Notes:** Set a maximum of about ISO 6400–12800, depending on your noise tolerance. The camera raises ISO automatically so your shutter speed stays fast enough.
- **Menu Location:** Shooting Menu > ISO Sensitivity

Minimum Shutter Speed

- **Value:** $1 \div \text{focal length}$
- **Notes:** Example: 50mm lens → 1/50 second minimum. On high-resolution bodies (45 MP+), use 1/100 second. This helps reduce blur from camera shake.
- **Menu Location:** Shooting Menu > Minimum Shutter Speed (when using Auto ISO)

VR / IBIS

- **Value:** ON for handheld
- **Notes:** Stabilization helps reduce blur from your hands shaking.
- **Menu Location:** Shooting Menu > Vibration Reduction (VR) or lens VR switch

Autofocus Mode

- **Value:** AF-C (continuous) for moving people
- **Notes:** Switch to AF-S (single) if the camera struggles to lock focus in very low light.
- **Menu Location:** Shooting Menu > AF-C (Continuous) or dedicated AF button

AF Area

- **Value:** Single-point
- **Notes:** Put the point on the eye, face, or another clear edge instead of relying on auto face detect.
- **Menu Location:** Shooting Menu > AF Area Mode > Single-Point

Low-Light AF

- **Value:** ON (if available)
- **Notes:** Z5, Z6, Z6 II, Z7, Z7 II only. Helps older Z bodies focus when it gets really dark.
- **Menu Location:** Custom Settings > a11 (Low-Light AF) on older models

AF-Assist Lamp

- **Value:** ON for close indoor work
- **Notes:** Turn OFF if the light bothers people or is not allowed.
- **Menu Location:** Custom Settings > a12 (AF-Assist Illuminator)

Beginner tip:

If the camera keeps hunting for focus, switch to AF-S and put a single point on something with a clear edge, like an eye, glasses frame, or a line on clothing.

SCENARIO 2: HANDHELD NIGHT CITY SCENES

CITYSCAPES WITHOUT A TRIPOD

Mode: Aperture Priority (A)

Aperture

- **Value:** f/2–f/4
- **Notes:** f/2.8–f/4 is a good balance between sharpness and light gathering.
- **Menu Location:** Shooting Mode dial (turn to A)

Maximum Aperture Lv

- **Value:** On (where available)
- **Notes:** This keeps the lens at its widest aperture for the live view display, which makes the viewfinder brighter and can help autofocus and your eyes see the subject more easily in very dark scenes, but it does not change the camera's rated AF sensitivity in EV.
- **Menu Location:** Custom Settings > a13 (Z6 III) or a14 (Z8/Z9)

ISO

- **Value:** Auto ISO
- **Notes:** It is fine if ISO climbs here.
- **Menu Location:** Shooting Menu > ISO Sensitivity

Minimum Shutter Speed

- **Value:** 1/60 or 1/30 second (wide-angle)
- **Notes:** These speeds are realistic for most people when VR/IBIS is ON. Go slower only if you are very steady or you are well braced.
- **Menu Location:** Shooting Menu > Minimum Shutter Speed (when using Auto ISO)

VR / IBIS

- **Value:** ON for handheld
- **Notes:** Helps you hold 1/60 or 1/30 second without blur.

- **Menu Location:** Shooting Menu > Vibration Reduction (VR) or lens VR switch

Autofocus Mode

- **Value:** AF-S (single)
- **Notes:** Buildings and streets do not move much, so single-shot AF is more reliable.
- **Menu Location:** Shooting Menu > AF-S (Single) or dedicated AF button

Focus Point

- **Value:** Single-point on a contrasty area
- **Notes:** Aim at bright window edges, signs, or building outlines.
- **Menu Location:** Shooting Menu > AF Area Mode > Single-Point

Low-Light AF

- **Value:** ON (if available)
- **Notes:** Helps older bodies lock focus in very dark conditions.
- **Menu Location:** Custom Settings > a11 (Low-Light AF) on older models

AF-Assist Lamp

- **Value:** ON for closer subjects
- **Notes:** Less useful for distant buildings.
- **Menu Location:** Custom Settings > a12 (AF-Assist Illuminator)

Beginner tip:

Lean against a wall, pole, or railing and pull your elbows into your body. This simple bracing trick makes 1/30 second much easier to handhold.

SCENARIO 3: TRIPOD AT NIGHT

CITY LIGHTS, LIGHT TRAILS, ASTROPHOTOGRAPHY

Mode: Manual (M)

Aperture – City Scenes

- **Value:** f/4–f/8
- **Notes:** Gives good depth of field for buildings and streets.
- **Menu Location:** Shooting Mode dial (turn to M)

Aperture – Astrophotography

- **Value:** f/1.4–f/2.8
- **Notes:** Lets in as much starlight as possible.
- **Menu Location:** Shooting Mode dial (turn to M)

Maximum Aperture Lv

- **Value:** On (where available)
- **Notes:** This keeps the lens at its widest aperture for the live view display, which makes the viewfinder brighter and can help autofocus and your eyes see the subject more easily in very dark scenes, but it does not change the camera's rated AF sensitivity in EV.
- **Menu Location:** Custom Settings > a13 (Z6 III) or a14 (Z8/Z9)

ISO

- **Value:** City: ISO 64–100 (base ISO) for the cleanest image. Astro: 1600–6400 so stars show up clearly
- **Notes:** Maximize quality for cities; raise for stars.
- **Menu Location:** Shooting Menu > ISO Sensitivity

Shutter Speed

- **Value:** Use your histogram to guide you
- **Notes:** Take a test shot, check the histogram, then adjust. For light trails, use longer shutter speeds (several seconds or more).

- **Menu Location:** Manual control via shutter speed dial

VR / IBIS

- **Value:** OFF on a tripod
- **Notes:** Stabilization can actually cause blur when the camera is completely still.
- **Menu Location:** Shooting Menu > Vibration Reduction or lens VR switch

Autofocus

- **Value:** AF-S or Manual focus
- **Notes:** Often easier to manually focus using live view with magnification.
- **Menu Location:** Shooting Menu > AF Mode or dedicated AF button

AF-Assist Lamp

- **Value:** OFF
- **Notes:** Not helpful for distant scenes and can annoy others.
- **Menu Location:** Custom Settings > a12 (AF-Assist Illuminator)

Starlight View

- **Value:** ON to compose/focus; OFF before metering
- **Notes:** Turn ON to see in darkness (Z8, Z9, Zf). Turn OFF before final shot to check histogram.
- **Menu Location:** Display Settings > Starlight View or Custom Settings (body-dependent)

Remote Release

- **Value:** Use remote or 2-second self-timer
- **Notes:** Prevents camera shake from pressing the shutter button.
- **Menu Location:** Use ML-L7 remote or Shooting Menu > Self-Timer

Beginner tip:

Think of Starlight View like night-vision goggles. It just brightens the screen so you can see and focus. It does not change the actual exposure, so always turn it off and check your histogram before the final shot.

FIVE CORE SETTINGS MADE SIMPLE

1) Autofocus – Keep It Simple

Moving subjects (people, events):

- AF-C with Single or small focus point on a contrasty area
- Menu: Shooting Menu > AF-C Mode > AF Area Mode > Single-Point

Still subjects (buildings, landscapes):

- AF-S with Single point on an edge
- Menu: Shooting Menu > AF-S Mode > AF Area Mode > Single-Point

Tripod work:

- AF-S or Manual focus for precision
- Menu: Shooting Menu > MF (Manual Focus) or AF-S Mode

Turn on Low-Light AF and AF-Assist Lamp for close subjects when available.

- Menu: Custom Settings > a11 (Low-Light AF), a12 (AF-Assist Illuminator)

If face/eye detection hunts, turn it off and use single-point AF where you want focus.

- Menu: Shooting Menu > Face/Eye Detection > Off

2) Starlight View – See in the Dark

- Turn ON to frame and focus when it is very dark.
- Turn OFF before checking exposure and histogram, because it only brightens the screen.
- Available on newer bodies like Z8, Z9, and Zf, not on older Z5, Z6, Z7 models.
- Menu: Display Settings or Custom Settings > Starlight View (varies by body)

3) ISO – Don't Fear Higher Numbers

- Good light: ISO 100–200 for the cleanest image.
- Low light handheld: ISO 500–800 is very usable on modern Z cameras.
- Darker scenes: ISO 3200–6400 is still fine in RAW if exposed well.

- Use Auto ISO with a ceiling (for example 6400–12800) and let the camera adjust ISO for you.
- Menu: Shooting Menu > ISO Sensitivity > Auto ISO

4) Shutter Speed – Match Lens and Subject

Basic handheld rule:

- Minimum shutter $\approx 1 \div \text{focal length}$
- Example: 50mm lens \rightarrow 1/50 second (or 1/100 second on high-resolution bodies)
- Menu: Shooting Menu > Minimum Shutter Speed (when using Auto ISO)

With VR/IBIS and good bracing, you can often go down to 1/60 or 1/30 second on wide lenses.

On a tripod, there is no shutter limit from camera shake.

- Choose shutter speed based only on how bright you want the image and any motion effect (like light trails).

5) VR / IBIS – When to Turn It On or Off

Handheld: ON to help fight camera shake.

- Menu: Shooting Menu > Vibration Reduction (VR)

Tripod: OFF to start, then zoom in and check sharpness. Some lens/body combinations do better with stabilization off for long exposures.

- Menu: Shooting Menu > Vibration Reduction > Off

CHOOSING YOUR STARTING SETUP

Bright or decently lit low-light (events, street with lights)

- Mode: Aperture Priority (A)
- Aperture: f/1.8–f/2.8
- ISO: Auto ISO
- Autofocus: AF-C, single point

Dark but still scenes (night cityscapes, no tripod)

- Mode: Aperture Priority (A)
- Aperture: f/2–f/4
- ISO: Auto ISO
- Autofocus: AF-S, single point

Tripod, long exposures (light trails, astro)

- Mode: Manual (M)
- Aperture: f/1.4–f/8, depending on subject
- ISO: 64–100 for city; higher for astro
- Focus: AF-S or Manual; use Starlight View only to help you see and focus

SIMPLE PRE-SHOT CHECKLIST

Before you start shooting, quickly check:

- Autofocus mode set correctly (AF-C for moving, AF-S for still).
 - Menu: Shooting Menu > AF Mode
- Low-Light AF ON if available and it is very dark.
 - Menu: Custom Settings > a11
- AF-Assist Lamp ON for close handheld work; OFF for tripod or distant scenes.
 - Menu: Custom Settings > a12
- VR/IBIS ON for handheld; OFF as a starting point on tripod.
 - Menu: Shooting Menu > Vibration Reduction
- Minimum shutter speed set (for Auto ISO) to match your lens.
 - Menu: Shooting Menu > Minimum Shutter Speed
- ISO set to Auto with a sensible maximum, or a manual value you chose.
 - Menu: Shooting Menu > ISO Sensitivity
- Aperture wide enough for the light you have.
 - Aperture priority or manual mode dial
- Focus point placed on your subject (not left on auto-area).
 - Menu: Shooting Menu > AF Area Mode
- Starlight View used only to compose/focus, then turned OFF before metering the final frame.
 - Menu: Display Settings or Custom Settings
- Remote release or 2-second timer ready for tripod shots.

- Menu: Shooting Menu > Self-Timer or use ML-L7 remote
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COMMON PROBLEMS AND QUICK FIXES

Camera keeps hunting for focus

- **Cause:** Too much automation / low contrast
- **Fix:** Switch to AF-S, use a single focus point, aim at a strong edge, turn on Low-Light AF if available.
- **Menu Location:** Shooting Menu > AF Mode, AF Area Mode; Custom Settings > a11

Blurry handheld photos

- **Cause:** Shutter too slow / VR off
- **Fix:** Raise ISO, open aperture more, turn VR/IBIS ON, and brace yourself.
- **Menu Location:** Shooting Menu > ISO, Vibration Reduction

Over-bright windows or night sky

- **Cause:** Shutter too long or ISO too high
- **Fix:** Lower ISO, use a smaller aperture (higher f-number), or shorten shutter speed.
- **Menu Location:** Shooting Menu > ISO, Shutter Speed

Screen too dark to focus

- **Cause:** Display brightness too low
- **Fix:** Turn on Starlight View if your camera has it; increase screen brightness if needed.
- **Menu Location:** Display Settings > Starlight View, Screen Brightness

Slight blur on tripod shots

- **Cause:** VR/IBIS fighting the tripod
- **Fix:** Turn VR/IBIS OFF and test again; use remote or timer.
- **Menu Location:** Shooting Menu > Vibration Reduction > Off

EXTRA PRO TIPS MADE SIMPLE

1. **Brace yourself:** Lean on a wall or railing and tuck your elbows in to hold 1–2 stops slower shutter speeds.
2. **Always focus on contrast:** Autofocus works best on edges and bright/dark transitions.
3. **Know your noise limit:** Test ISO 3200, 6400, and 12800 on your own Z body so you know what you accept.
4. **Protect night vision:** Use warm display colors (Mode 2) and Starlight View sparingly so your eyes stay adjusted.
 - Menu: Custom Settings > Display Mode or Color
5. **Turn off extras:** If face/eye detection or other automation slows you down, switch to single-point AF and take control.
 - Menu: Shooting Menu > Face/Eye Detection > Off
6. **Check the histogram, not just the screen:** The screen can look brighter than the real exposure, especially with Starlight View.
 - Menu: Playback Menu > Display Info (cycle to show histogram)
7. **Use a timer or remote on tripod:** Even a tiny bump from your finger can blur a long exposure.
 - Menu: Shooting Menu > Self-Timer or use ML-L7 remote
8. **Daylight reset:** When you go back to daytime shooting, turn Maximum Aperture Lv OFF so the camera behaves normally and metering stays predictable.
 - Menu: Custom Settings > a13/a14 > Off

CAMERA BODIES

Applies to: Nikon Z5, Z6, Z6 II, Z6 III, Z7, Z7 II, Z8, Z9, Zf, and similar Z-mount bodies.

Settings and features can vary between models—always check your specific camera manual for exact menu locations.

- **Low-Light AF** is primarily available on Z5, Z6, Z6II, Z7, and Z7II.
 - **Starlight View** is available on Z8, Z9, Zf, and newer models.
 - **Maximum Aperture Lv** availability varies by body; check your manual.
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Version: 2.1 (Menu Locations Enhanced)

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