



LUMINOSITY MASKS

A brief overview of Luminosity Masks — including how much of each Tonal Zone is affected by every Luminosity Mask in the Lights, Darks, and Midtones series.

toddmars.com

WHAT IS A LUMINOSITY MASK?

A luminosity mask is a selection built not by drawing around a subject, but by reading the brightness values already embedded in your photograph. Every pixel in a digital image has a luminance value from 0 (pure black) to 255 (pure white). A luminosity mask converts those values directly into a selection: **bright pixels are selected strongly, dark pixels are selected weakly**, and every tone in between is scaled proportionally. The mask is perfectly tailored to the tonal structure of your specific image — because it *is* your image.

This concept was pioneered by photographer Tony Kuyper, and it fundamentally changed what was achievable in landscape post-processing. The property that separates luminosity masks from every other Photoshop selection tool is that they are **inherently self-feathering**. There is no manual brush stroke, no fixed feather radius, no arbitrary blend edge. The transition between selected and unselected areas is smooth because it follows the tonal gradients that already exist inside your photo. No amount of careful painting can match this mathematical precision.

The result is that adjustments applied through luminosity masks blend seamlessly into the surrounding image. They look *correct* rather than processed — because the selection was never imposed on the photo, it was extracted from it.

WHY GLOBAL SLIDERS AREN'T ENOUGH

Every RAW editor — Lightroom, Capture One, Camera Raw — gives you Highlights, Shadows, Whites, and Blacks sliders. These are powerful starting points, but they operate with a fundamental limitation: they apply a generic algorithm across the *entire frame simultaneously*, with no awareness of where in the frame you need the change.

Suppose you want to recover detail in a bright overcast sky without touching the midtone greens of the foliage below. A Highlights slider will pull down everything above a threshold — including bright highlights on wet rocks, light edges of bark, and any other textured bright surface. A luminosity mask applied to a Curves layer gives you exact control: target only the tonal range you want to affect, and leave everything else completely untouched.

Luminosity masks are not a replacement for Lightroom or Camera Raw — they extend what's possible. Make your global corrections first, bring the image into Photoshop, then use luminosity masks for the final targeted work that makes the image look genuinely three-dimensional.

THE INVISIBLE SELECTION — DON'T TRUST THE MARCHING ANTS

Photoshop's "Marching Ants" boundary only appears where a pixel is **more than 50% selected**. Anything below that threshold is invisible to the ants — but it is still receiving your adjustment in proportion to its selection strength.

This matters more than most tutorials acknowledge. If you load a Lights 1 mask to recover a bright sky and push the adjustment aggressively, your Zone V midtones — sitting at 50% brightness — are also 50% selected. They will absorb half of your edit. The marching ants make it appear that only the sky is selected. The reference tables in this guide tell you exactly how much effect each mask level applies at every tonal zone. Use them

before making adjustments, not after wondering why something looks wrong.

WHAT YOU CAN DO WITH LUMINOSITY MASKS

The techniques below are the highest-impact applications in landscape photography. Each produces more natural results through luminosity masks than through any other method.

1. EXPOSURE BLENDING — MANUAL HDR

The dynamic range of a landscape scene — particularly at golden hour or blue hour — routinely exceeds what any single RAW file can capture cleanly. Automated HDR software solves this technically but produces a well-documented look: compressed contrast, halos around hard edges, and a processing signature that experienced viewers recognize instantly.

Manual exposure blending with luminosity masks produces a result indistinguishable from a single perfectly-exposed frame. Shoot two or more bracketed exposures (2–3 stops apart). Stack them as layers in Photoshop. Apply a **Lights mask (L2 or L3)** to a dark exposure to reveal the sky detail while leaving the foreground transparent. Apply a **Darks mask (D2 or D3)** to a lighter exposure to recover foreground shadow detail without affecting the sky. The transitions are invisible because the masks match the tonal structure of the scene exactly.

2. ADVANCED DODGING AND BURNING

Traditional dodge and burn on a neutral gray layer produces two common failures: halos that appear around bright edges when dodge strokes spread into adjacent shadows, and muddy midtones when burn strokes bleed into tones that should stay clean.

Running your dodge or burn through a luminosity mask eliminates both. To brighten textured highlights on a rock face, apply a Curves dodge through an **L2 or L3 mask** — the brightening concentrates in the textured highlights and fades naturally before reaching the shadows. To deepen shadows for drama, burn through a **D2 or D3 mask** — the darkening is strongest in the deep shadows and falls off naturally before reaching the midtones.

3. COLOR GRADING BY TONE

One distinguishing characteristic of professional landscape work is deliberate color contrast between tonal zones: cool, desaturated shadows and warm, saturated highlights. This creates visual depth and guides the viewer's eye toward the brightest, warmest area of the frame.

Apply a Color Balance adjustment through a **Darks mask** to push your shadows toward blue and cyan. Apply a separate adjustment through a **Lights mask** to warm the highlights with amber and gold. Because the masks are derived from the image's own tonal data, the color shifts transition through the midtones in a way that looks organic rather than filtered. Start with small values — this technique has a disproportionate impact on perceived depth.

4. SHARPENING WITHOUT HALOS

Sharpening algorithms enhance local contrast along edges and can produce bright artifact halos on the light side of those edges. Applying sharpening through a **Darks mask** concentrates the sharpening effect in the shadow regions, where halos are dark and naturally hidden, while leaving the artifact-prone bright edges unsharpened. You gain perceived sharpness across the image without the visible white halos that a global sharpen would introduce.

5. TARGETED NOISE REDUCTION

Digital noise is most visible in the deep shadows. Apply aggressive noise reduction through a **Darks mask** to smooth Zone I–III areas while protecting the fine detail in brighter subjects. This avoids the plastic, texture-destroying effect that global noise reduction produces on surfaces that should appear textured.

6. LOCAL CONTRAST AND CLARITY

Adding Clarity globally is one of the fastest paths to an over-processed look — the algorithm crushes shadow detail and creates an unpleasant crunch throughout the frame. Apply Clarity through an **M1 or M2 midtone mask** instead. The effect concentrates precisely in the midtone range where texture and detail naturally live, and fades before reaching the extremes. The result is added punch and three-dimensionality without the HDR signature.

CREATING MASKS MANUALLY IN PHOTOSHOP

Understanding the manual process is essential even if you use a plugin for daily work. It tells you what the plugin is doing under the hood, and gives you the ability to troubleshoot, customize, and make informed decisions about which mask to reach for.

STEP 1 — OPEN THE CHANNELS PANEL

Go to **Window > Channels**. You'll see the RGB composite channel at the top, followed by the individual Red, Green, and Blue channels. Any alpha channels you've saved appear below these in the same panel.

STEP 2 — LOAD THE LUMINANCE AS A SELECTION (LIGHTS 1)

Hold **Cmd (Mac) / Ctrl (PC)** and click the **RGB composite channel thumbnail**. Photoshop reads the entire image's luminance and loads it as a selection — bright pixels are selected near 100%, dark pixels near 0%. Click the "Save Selection" icon at the bottom of the Channels panel and name it **L1**.

STEP 3 — INTERSECT TO CONCENTRATE THE LIGHTS SERIES (L2–L6)

With L1 still active as a selection, hold **Cmd+Shift+Alt (Mac) / Ctrl+Shift+Alt (PC)** and click the L1 alpha channel thumbnail. This *intersects* the selection with itself — mathematically it squares every selection value, pushing the result further toward pure white. Save as **L2**. Repeat to build L3 through L6, each one more concentrated toward the brightest tones.

STEP 4 — INVERT FOR THE DARKS SERIES

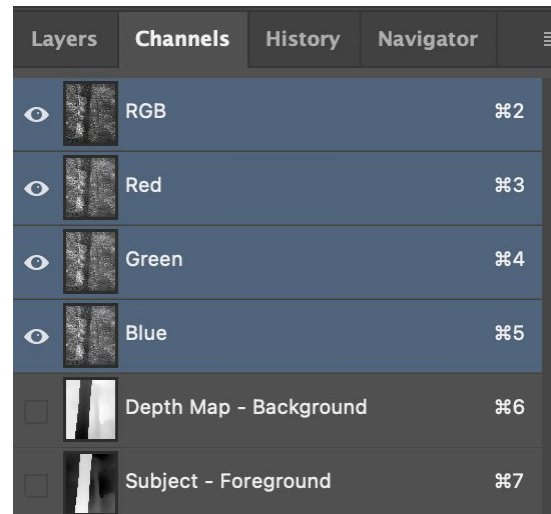
Load L1 by Cmd/Ctrl-clicking it in the Channels panel. Press **Cmd+I (Mac) / Ctrl+I (PC)** to invert — this is your D1 mask. Build D2–D6 by intersecting your Darks selections with themselves using the same Cmd+Shift+Alt method as the Lights series.

STEP 5 — APPLY THE SELECTION AS A LAYER MASK

With any selection active, create an adjustment layer (Curves, Color Balance, Hue/Saturation, etc.). Photoshop automatically applies the active selection as that layer's mask. The adjustment affects the image only where the mask is white, and has no effect where the mask is black.

THE MIDTONE PROBLEM

Creating midtone masks manually requires loading a Lights selection, then *subtracting* a Darks selection using Photoshop's Add/Subtract selection modes. The narrow band that remains is your midtone. This is slow, imprecise, and difficult to reproduce consistently — which is exactly why plugins exist.



The Photoshop Channels panel. Your saved luminosity masks (L1–L6, D1–D6) appear as additional alpha channels below the color channels, accessible at any time.

THE PLUGIN ADVANTAGE: WORK FASTER, SEE MORE

The manual method is essential knowledge. The plugin method is how you actually work. Building masks manually means stopping mid-edit, navigating the Channels panel, running the intersect sequence, naming alpha channels, and switching back to your layers. It pulls you out of the creative process at exactly the moment you need to be focused on the image.

A dedicated luminosity mask panel automates all of that. One click creates a mathematically precise mask and loads it as an active selection, ready to apply to an adjustment layer. More importantly, plugins generate masks that are difficult or impossible to produce by hand — particularly the **Midtone series**, which requires a complex subtraction workflow to build manually and even then is rarely as clean.

TK9 MULTI-MASK PANEL (MY RECOMMENDATION)

The **TK9 Multi-Mask Panel** by Tony Kuyper — the originator of the luminosity mask technique — is the industry-standard tool for this work in Photoshop. It generates the full Lights (L1–L6) and Darks (D1–D6) series instantly, along with its proprietary **Midtones series (M1–M3)**: perfectly symmetrical selections that target the middle of the histogram with a precision the manual method cannot match.

Beyond basic masks, TK9 includes: color channel masks (R, G, B, C, M, Y) for precise color work; an AUTO button that analyzes the image and recommends the optimal mask; blending controls for exposure composites; and tools for painting, refining, and saving custom masks. The numbered buttons run from 1 (coarsest selection) to 6 (most precise), with Lights on the left side and Darks on the right.

The green highlighted buttons in the panel image indicate the currently active selection — the RGB base channel (top left) and the Lights 1 mask (center row).

OTHER PANELS WORTH KNOWING

Lumenzia (Greg Benz Photography) — excellent midtone engine with a strong visual preview system that shows you what a mask targets before applying it. A great choice for photographers coming to luminosity masks for the first time.

f64 Elite Panel (Blake Rudis) — broad feature set covering masks, color grading, and sharpening within one panel. The luminosity mask tools are one part of a wider post-processing workflow.

RCG Mask Panel — focused specifically on masking with a clean, straightforward interface. Less complex than TK9, which makes it a practical entry point for photographers building the habit before going deeper.

All panels generate mathematically equivalent Lights and Darks masks. Differences lie in the midtone algorithms, color mask options, blending tools, and workflow integration. TK9 is the deepest, most comprehensive tool available.



The TK9 Multi-Mask panel. Lights (L6–L1) on the left, Darks (D1–D6) on the right. Midtone buttons (M1–M3) in the bottom row. Color channel masks along the top.

THE ZONE SYSTEM: YOUR TONAL MAP

Ansel Adams' Zone System divides the tonal scale from pure black (Zone 0) to pure white (Zone X) into eleven zones. For luminosity masking, it gives you a common language for identifying where your subject sits on the

histogram — which tells you which mask to choose. Before selecting a mask, ask: **what zone is my target?**

Zone	Brightness	Visual Reference
Zone X	100%	Pure white — specular highlights, no detail
Zone IX	90%	Bright white — very slight texture visible
Zone VIII	80%	Lightest textured tone (snow in open shade)
Zone VII	70%	High surface detail — light concrete, sand
Zone VI	60%	Average light tones — open sky, light skin
Zone V	50%	Middle Gray — the universal reference point
Zone IV	40%	Moderate shadow — forest floor, foliage
Zone III	30%	Deep shadow with full texture visible
Zone II	20%	First hint of detail — near black
Zone I	10%	Near black — texture lost
Zone 0	0%	Pure black — no detail whatsoever

THE LIGHTS SERIES — L1 THROUGH L6

Each column shows the percentage of your adjustment that will be applied to pixels at that tonal zone. L1 selects proportionally across the entire histogram. L6 concentrates nearly 100% of the effect on pure white and rapidly approaches zero by Zone VIII. Read across a zone row to see how effect strength drops as you use higher Lights levels.

Zone	L1	L2	L3	L4	L5	L6
X (100%)	100%	100%	100%	100%	100%	100%
IX (90%)	90%	81%	73%	66%	59%	53%
VIII (80%)	80%	64%	51%	41%	33%	26%
VII (70%)	70%	49%	34%	24%	17%	12%
VI (60%)	60%	36%	22%	13%	8%	5%
V (50%)	50%	25%	13%	6%	3%	2%
IV (40%)	40%	16%	6%	3%	1%	0%
III (30%)	30%	9%	3%	1%	0%	0%
II (20%)	20%	4%	1%	0%	0%	0%
I (10%)	10%	1%	0%	0%	0%	0%
0 (0%)	0%	0%	0%	0%	0%	0%

THE DARKS SERIES — D1 THROUGH D6

The Darks series mirrors the Lights series exactly, reading from the bottom of the histogram upward. D1 selects the full tonal range with emphasis on shadows. D6 concentrates selection near pure black. Use D3 or D4 when you want to lift shadows without any effect above Zone IV.

Zone	D1	D2	D3	D4	D5	D6
0 (0%)	100%	100%	100%	100%	100%	100%
I (10%)	90%	81%	73%	66%	59%	53%
II (20%)	80%	64%	51%	41%	33%	26%
III (30%)	70%	49%	34%	24%	17%	12%
IV (40%)	60%	36%	22%	13%	8%	5%
V (50%)	50%	25%	13%	6%	3%	2%
VI (60%)	40%	16%	6%	3%	1%	0%
VII (70%)	30%	9%	3%	1%	0%	0%
VIII (80%)	20%	4%	1%	0%	0%	0%
IX (90%)	10%	1%	0%	0%	0%	0%
X (100%)	0%	0%	0%	0%	0%	0%

TK9 MIDTONES SERIES — M1 THROUGH M3

The Midtones series is TK9's most distinctive capability. These masks are perfectly symmetrical — they select shadows and highlights equally at each zone distance from Zone V. M1 is broad and gentle, affecting a wide band. M3 is highly concentrated in the midtones (Zones IV–VI), making it ideal for targeted clarity and precise midtone color work. Zone X and Zone 0 are always fully protected.

Zone	M1 Selection	M2 Selection	M3 Selection
X / 0 (extremes)	0%	0%	0%
IX / I	6%	18%	15%
VIII / II	13%	32%	44%
VII / III	19%	42%	70%
VI / IV	23%	48%	82%
V — Middle Gray	24%	50%	84%

How to read the midtones table: Zone V (50% gray) always receives the highest selection strength. Zones VI and IV receive the same percentage as each other — the selection is perfectly balanced around the midpoint. As you go further from Zone V in either direction, selection strength drops to zero at the extremes.

WHAT A MIDTONE MASK LOOKS LIKE

These images show the same scene represented as three different states: the original color photo, and two TK9 midtone masks applied to it. In a mask, white means fully selected (full adjustment effect), black means fully protected (no effect), and gray represents partial selection. Comparing M2 and M3 shows how the mask progressively narrows its focus onto the middle tones.



Original Photo (no mask)

TK9 Midtone 2 Mask — broad midtone selection

TK9 Midtone 3 Mask — concentrated on Zone V

In the M2 mask, a wide band of tones — the sky, wet rocks, gray bark — all appear as medium gray, meaning they'd all receive the adjustment at varying strengths. In the M3 mask, the selection is far narrower. The deep shadows and bright highlights are nearly black (protected), while only the true midtones remain gray (affected). This precision is what makes M3 the right tool for local contrast and midtone color work — it applies the adjustment exactly where human perception is most sensitive to tonal nuance.

QUICK MASK SELECTION GUIDE

Goal	Use This Mask	Why It Works
Blend a bright sky from dark exposure	L2 or L3	Targets bright zones, fades naturally at midtones
Lift dark foreground shadows	D2 or D3	Lifts shadow zones, protects highlights completely
Add clarity without a crunchy look	M1 or M2	Confines effect to midtones, leaves extremes alone
Cool shadows, warm highlights	D2 + L2 (two layers)	Zone-specific color shift on each tonal range
Dodge textured highlights only	L2 or L3	Concentrates brightening in textured light zones
Burn and deepen deep shadows	D3 or D4	Targets Zones I–III, fades before midtones
Reduce noise in shadow areas only	D2 or D3	Applies NR in dark zones, preserves highlight detail
Sharpen without bright edge halos	D2 or D3	Keeps sharpening in shadow-side edges where halos hide

ABOUT THE AUTHOR

Todd Marsh spent his career studying the earth's deep structure as a geologist — a discipline that trained him to look carefully, notice what others miss, and document precisely what he sees. He brings that same mindset to landscape photography.

His approach to post-processing mirrors his scientific training: understand what's actually happening under the hood before you start pushing sliders. That's what drew him to luminosity masks — they operate on mathematical principles you can learn, verify, and repeat, rather than happy accidents you can't explain.

His Springer Spaniel, Caden, has strong opinions about where the best shots are and is always willing to demonstrate by positioning himself directly in front of the camera.

Todd shares techniques, tutorials, and unvarnished notes from the field — without jargon, without gatekeeping — at toddmarch.com.



WANT TO GO DEEPER?

This guide covers the foundations. The full article on toddmarsch.com includes step-by-step walkthroughs, additional mask use cases, and real-world examples showing exactly how these techniques are applied from start to finish.

Read the complete guide at:

toddmarsch.com/luminosity-masks-photoshop-tonal-selection/