

AE Glass

v1.0

A physical refraction engine for After Effects. Turn shapes, text, solids, masks, logos or track mattes into real refractive glass. Fully parametric and non-destructive.

INSTALLATION

Recommended: aescripts + aeplugins manager. The easiest way to install and license AE Glass is the free [aescripts + aeplugins manager](#). It installs the plugin and activates your license automatically. To try it first, choose **Add Trial** from the manager's **Account** menu.

OR COPY THE PLUGIN MANUALLY TO:

MACOS

```
/Applications/Adobe After Effects <version>/  
Plug-ins/
```

WINDOWS

```
C:\Program Files\Adobe\Adobe After Effects  
<version>\Support Files\Plug-ins\
```

Requires After Effects 2025 or later · Restart AE after installation · Find under **Effect → SphereLab → AE Glass**

QUICK START

01

Pick a source.

A **shape**, **text**, **solid** or **masked** layer, or any layer that already has its own transparency (logo, PNG).

02

Turn on the Adjustment Layer switch.

On that layer, so the glass refracts everything below it through the layer's silhouette.
Required for every source.

03

Apply AE Glass.

Effect → SphereLab → AE Glass. Dial Refraction, Depth, Dispersion and Light to taste.



WHY THE ADJUSTMENT SWITCH? AE Glass refracts the layers below through your layer's silhouette, so it needs the Adjustment Layer switch on. With the switch off it leaves the layer untouched and shows a "turn on the Adjustment Layer switch" reminder. Flip it on and the glass appears.

How It Works

HOW TO USE IT

Leave Adjustment on ONE MODE

Enable the **Adjustment Layer** switch on your source: shape, text, solid, mask, logo, PNG or precomp. AE Glass reads everything below and refracts it through that layer's silhouette, updating live as you work. One mode covers every source.

Nothing to choose

However the shape is defined (exact geometry, glyphs, a mask, or a layer's own alpha), the workflow is identical: just keep the Adjustment switch **on**. If it's off, AE Glass passes the layer through and reminds you to enable it.

AE Glass honors the layers below: their transforms, opacity, blend modes and track mattes are all refracted faithfully.

SUPPORTED SOURCES

Parametric shapes	Rectangle, Ellipse, Polygon, Star. Exact analytic edges give the sharpest, most stable result. Rounded corners and star/polygon points are all honored.
Bezier paths	Any freeform Shape-Layer path, including multi-subpath shapes (e.g. a counter inside a letter). Drawn with the Pen tool or pasted.
Text layers	Live text: the glyph outlines become the glass. Edit the words and the glass follows. (Track mattes don't apply to text hosts.)
Solids	A solid becomes a clean rectangular glass panel sized to the solid itself.
Masks	Mask a solid or layer to shape the glass. Mask modes are honored (Add, Subtract, Intersect, Exclude), so you can carve holes or combine shapes.
Alpha layers	Logos, PNGs or precomps with transparency: the layer's own alpha becomes the glass. Keep the Adjustment switch on, the same as every other source.
Track mattes	On an adjustment layer, an Alpha or Luma matte (and their inverted variants) defines the glass. Useful when the shape lives on another layer.

Parametric shapes use exact analytic edges; everything else is built from a high-precision distance field. Both are clean and stable. Glass renders where the backdrop is, so deeply nested or collapsed precomp transforms are a known soft spot.

BEST PRACTICES

Stacking glass

Overlap multiple Glass layers with different Depth values for complex, Fresnel-style lenses.

Light direction

Match Light Angle to your comp's key light so the glass sits in the scene convincingly.

Carve with masks

Use mask modes (Subtract to punch holes, Intersect to clip) to build non-rectangular panels from a solid.

Performance & memory

On big comps (4K+) with several Glass layers, turn off

Composition > Preview > Cache Frames When Idle (⌘⇧I). It can fill RAM and crash with "out of application memory." Keep *Effect Scale* low; it multiplies render cost.

Controls & Tips

LIGHT

Light Angle	Direction of the edge highlight. Match it to your composition's main light source.
Light Intensity	Brightness of the highlight. 0 = off .

MAIN CONTROLS

Refraction	Power of the lens. Higher values bend light more aggressively at the edges.
Depth	How far distortion reaches inward from the edge. Low values give a "thin glass" look.
Dispersion	Splits RGB channels at edges to simulate the refractive index of real glass.
Frost	Blurs the inside of the silhouette. With a high Light Intensity, reads as frosted glass.
Splay	Pushes distortion outward from the center.

ADJUSTMENTS

Magnify	Bulge outward or curve inward like a lens.
Effect Scale	Scales the whole effect: rim, refraction, light. 1.0 = default (0.1–4.0). Higher multiplies render cost on heavy comps.
Rim Scale	Thickness of the lit edge rim, independent of the rest. 1.0 = default (0.1–4.0). Compounds with Effect Scale.

STARTING POINTS

Optical Prism

Refraction	90
Depth	15
Dispersion	100

Frosted Modern

Refraction	40
Frost	25
Light Int.	100

LIMITATIONS

Fill required

Shape layers need a **Fill**. A stroke on its own gives the effect only a thin outline, not a shape.

2D only

Renders in 2D; 3D layer transforms and camera perspective aren't followed. Keep glass layers 2D.

Adjustment switch on

The host layer's Adjustment switch must stay on. With it off, the layer renders through unchanged (and AE Glass reminds you).

Collapse Transformations

Inside a collapsed precomp the glass renders where the backdrop lives; keep the precomp at its default transform.