

# KSP Modded Install — Setup Guide

Manual installation and configuration reference for your modded KSP 1.12.5 install.

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## Manual Installs

Install in the following order after all CKAN mods are installed. Each step may overwrite files from the previous — this is intentional.

### Step 1 — Blackrack's Volumetric Clouds R5

Source: <https://www.patreon.com/blackrack>

- Extract and copy contents into your GameData folder
- This will overwrite the Scatterer and EVE Redux versions CKAN installed — allow it
- Also extract Blackrack's bundled TUFX profile into GameData
- Update if downloaded before 14 March 2026 (wet surfaces + SSR update)

### Step 2 — Argentgamer's OPM Volumetrics

Source: <https://spacedock.info/mod/4028/Outer%20Planets%20Mod%20Volumetrics>

- Extract and copy contents into GameData
- Do not install alongside any other OPM EVE or Scatterer config pack
- Update if downloaded before 2 April 2026 (v1.1 with darker gas giants)

### Step 3 — SpacePotato's Volumetric Enhancements

Source: <https://github.com/TheSpacePotato/SpacePotato-s-Volumetric-Enhancements>

- Extract and copy contents into GameData
- Layers on top of Volumetric Clouds R5 — no file overwriting expected
- Adds cirrus clouds, volumetric aurorae, Jool rings, biome-dependent surface sounds

### Step 4 — Rareden 8K Skybox

Source: <https://forum.kerbalspaceprogram.com/topic/78778-raredens-real-8k-skybox-for-texture-replacer/>

- Copy the six cubemap face files into GameData/TextureReplacer/Default/
- Files should already be named correctly for TextureReplacer

### Step 5 — Blackrack's TUFX Profile

Source: <https://drive.google.com/file/d/1Kxz5q6nvA7TKddxc2rGgPujyrEglEBTi/view>

- Download and place the profile file in GameData/TUFX/Profiles/
- Select it from the TUFX in-game menu

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## In-Game Configuration

Work through these settings before starting a save. Launch KSP after completing manual installs.

### KSP Graphics Settings

Main Menu → Settings → Graphics tab

- Antialiasing → Off
- Terrain scatters → Off (Parallax Continued replaces these)
- Reflection refresh → Low
- Reflection resolution → 256
- Pixel light count → 8
- UI Scale → increase as needed for readability at DLDSR resolution

## 4kSP Expanded

- Scales map view icons, labels, and maneuver nodes to match the stock UI Scale setting
- Adjust via its in-game window accessible from the map view toolbar

## TextureReplacer

*At the Space Center view, click the TextureReplacer toolbar button*

- Personalise Suits → Off (prevents conflict with Benjee10Suits)

## Parallax Continued

- Before first launch: delete Settings.cfg from your KSP root folder for a clean planet configuration
- If CKAN reports a conflict between Deferred and ParallaxContinued, install Deferred manually
- Scatter collisions: verify the correct config path in the Parallax Continued GitHub wiki before enabling

## Scatterer

*Open Scatterer settings from the toolbar in flight*

- TAA → Off
- SMAA → Off
- Tonemapper → Off (let TUFx handle tonemapping exclusively)

## TUFx

*Open TUFx from the toolbar and select Blackrack's bundled profile*

- HDR → On
- Ambient Occlusion → On (integrates specially with Deferred's lighting model)
- Bloom → On (keep subtle for streaming — excessive bloom clips highlights for SDR viewers)
- Tonemapper → use Blackrack's profile default; switch to ACES only if RTX HDR output looks wrong
- TAA → Off: open Blackrack's TUFx profile in a text editor and delete the AntiAliasingMode line; confirm it shows AntiAliasingMode None in-game
- SMAA → Off (enable only if DLDSR alone leaves visible shimmer on thin geometry such as antennas)
- Motion Blur → Off
- Auto Exposure → On

## Anti-Aliasing Summary (DLDSR 2.25x)

*DLDSR 2.25x renders at ~5160x2160 and downsamples — this provides strong spatial AA on its own*

- Stock AA: Off
- Scatterer TAA: Off
- Scatterer SMAA: Off
- TUFx TAA: Off (delete AntiAliasingMode line from profile file)
- TUFx SMAA: Off by default — enable only if shimmer persists on thin geometry

## HDR / RTX HDR

- TUFEX provides HDR rendering internally but outputs SDR — KSP's Unity 2019.4 cannot output native 10-bit HDR
- RTX HDR is the only path to 10-bit display output from KSP
- Keep TUFEX HDR enabled regardless — it improves internal rendering precision even when outputting SDR
- Recommended RTX HDR starting values: Mid Grey = 44, Contrast = 25, Saturation = -50
- Do not use a heavy TUFEX filmic curve alongside RTX HDR — this double-tonemaps the image and blows out highlights
- If using RTX HDR: use ACES or Blackrck's default tonemapper, not an aggressive filmic curve

## Waterfall / StockWaterfallEffects

- StockWaterfallEffects intentionally overrides WaterfallRestock configs for: Vector, Mammoth, Nerv, Rhino, Skiff, Skipper, Spark — this is expected behaviour
- To remove specific overrides: delete relevant files in GameData/StockWaterfallEffects/Mod Configurations/ReStock/WaterfallRestock\_overrides/

## BackgroundThrust + MechJeb

- Do not use MechJeb autopilot while BackgroundThrust is active during warp — MechJeb's SAS/throttle control will prevent BackgroundThrust from activating
- When running warp thrust burns: disengage MechJeb autopilot and set SAS manually before activating
- BackgroundThrust works even when the vessel is unloaded/out of focus — resource buffers are managed automatically

## Benjee10Suits

- Uses the stock suit switching system — does not require TextureReplacer
- Turn off Personalise Suits in TextureReplacer settings (Space Center toolbar) to avoid conflicts
- Suit type can be assigned per Kerbal in the crew roster