# Customizable Hologram Shader

Main Color – color of a hologram.

Alpha – final alpha multiplier.

**Random Offset** – random offset to randomize different holograms.

**ZWrite** – toggle for ZWriting.

Cull Mode - cull mode of face culling.

Fresnel – Fresnel values for hologram effect.

Fresnel Scale – scale of Fresnel effect for color.

Fresnel Power – power of Fresnel effect for color.

Fresnel Alpha Scale – scale of Fresnel effect for alpha.

Fresnel Alpha Power – power of Fresnel effect for alpha.

Line 1 – first line of hologram effect. Line uses vertex position to sample texture.

**Line 1** – line texture.

**Line 1 Speed** – speed of line panning animation.

**Line 1 Frequency** – line repeat frequency.

Line 1 Hardness - hardness of line.

Line 1 Inverted Thickness – dissolve amount of line.

**Line 1 Alpha** – alpha amount of line.

**Line 2** – second line of hologram effect. Line uses vertex position to sample texture. Second line blends with first line if both lines are enabled.

**Line 2** – line texture.

**Line 2 Speed** – speed of line panning animation.

**Line 2 Frequency** – line repeat frequency.

Line 2 Hardness – hardness of line.

**Line 2 Inverted Thickness** – dissolve amount of line.

Line 2 Alpha – alpha amount of line.

**Line Glitch** – glitch line of hologram effect. Line uses vertex position to sample texture.

**Line Glitch** – line texture.

**Line Glitch Offset** – screen space glitch direction and amount.

**Line Glitch Speed** – speed of line panning animation.

**Line Glitch Frequency** – line repeat frequency.

**Line Glitch Hardness** – hardness of line.

**Line Glitch Inverted Thickness** – dissolve amount of line.

Random Glitch – random glitch of hologram effect. Glitch uses vertex position to create noise.

**Random Glitch Offset** – screen space glitch direction and amount.

**Random Glitch Amount** – strength of random glitch.

**Random Glitch Constant** – 'unrandomazing' value for random glitch, useful for fade in and fade out animations.

**Random Glitch Tiling** – tiling of noise of random glitch.

**Color Glitch** – random color glitch of hologram effect. Glitch uses vertex position to create noise.

**Color Glitch Affect** – influence of color glitch.

**Grain** – grain noise of hologram effect. Glitch uses vertex position to create noise.

**Grain Scale** – size of grain.

**Grain Affect** – influence of grain.

**Grain Values** – remap values for grain. X – minimum, Y – maximum.

Normal Map – normal map used to add details of hologram.

Normal Scale – power of normals.

Normal Affect – influence of normals.

**Soft Intersection 1** – hologram soft depth intersections parameters.

**Soft Intersection 1** – type of intersection influence. [Off] – disabled, [Alpha] – hologram will be transparent on intersection, [Color] – add color to intersection.

**Soft Intersection 1 Distance** – distance of depth intersections.

**Soft Intersection 1 Intensity** – intensity of intersection color or power of alpha intersection.

**Soft Intersection 2** – hologram soft depth intersections parameters.

**Soft Intersection 2** – type of intersection influence. [Off] – disabled, [Alpha] – hologram will be transparent on intersection, [Color] – add color to intersection.

**Soft Intersection 2 Distance** – distance of depth intersections.

**Soft Intersection 2 Intensity** – intensity of intersection color or power of alpha intersection.

**Dissolve** – dissolve of hologram used to hide or show hologram by noise gradients.

**Dissolve Scale** – size of dissolve noise.

**Dissolve Hide** – hide parameter, [-1] – fully showed, [1] – fully hided.

**Mask** – box mask to hide hologram in area.

Mask Local – determines that mask will use transform origin instead of world space origin.

Mask Center – position of mask.

Mask Size - size of mask.

Mask Falloff – softness of mask.

**Mask Inversion** – parameter for mask inversion, [0] – hides mesh in mask, [1] – shows mesh in mask.

**Position** – vertex position parameters.

**Position Space** – space of vertices positions. [World] – all noises and lines will be in world space, [Local] – all noises and lines will be in mesh space, [Custom] – all noises and lines will be in custom space (requires matrix setting via script, property name '\_CustomMatrix').

**Position** – axis of vertices positions, used for lines.

**Position Direction** – axis multiplier of vertices positions.

Alpha Mask – alpha mask of hologram.

Alpha Mask – alpha mask texture.

Alpha Mask Affect – influence of alpha mask.

**Voxelization** – simulation of hologram voxelization.

**Voxelization** – local size of voxel.

Voxelization Affect – influence of voxelization.

### Soft Holo Cone

**Softness** – Fresnel effect softness.

**Color** – main color.

**Mask** – main mask texture.

**DepthFadeDistance** – soft depth intersection distance.

MaskSoftness – softness of main mask.

MaskSoftness 2 – softness of additional mask.

Mask 2 – additional mask texture.

**Mask2Speed** – speed of uv animation of additional mask texture.

**Alpha** – final alpha multiplier.

## Other

**Hologram Line** is shader function asset for Amplify Shader Editor.

**Unlit Depth Mask** is shader template for Amplify Shader Editor. When DepthMask pass is used code should be modified. Requirements for DepthMask pass:

Name "Depth Mask"

Blend SrcAlpha OneMinusSrcAlpha

ZWrite On

ColorMask 0

## Scripts

#### public class MeshRendererOrder

Provides custom rendering order of renderer.

public int Order - order of mesh rendering.

#### public class MatrixProvider

Provides custom matrix for renderers.

private string propertyName - matrix property name.

private Renderer[] targetRenderers - renderers that should have custom matrix in property block.

private bool eliminateRootBoneMatrix - when enabled custom matrix will be multiplied
to SkinnedMeshRenderer.RootBone.localToWorld matrix.

#### public class LocalRotator

Provides procedural rotation animation of transform.

```
public float MaxAngle - maximum angle.
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public AnimationCurve Curve - normalized rotation curve.

public float LoopLength - length of loop in seconds.

public float Offset - time offset.

public Vector3 Axis - rotation axis.