// GSS MATERIALFX

REFERENCE

165 materials in 11 bundles for UEFN: surfaces, post process, UI and more.

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HOW TO READ THIS REFERENCE

This is the reference for **GSS MaterialFX**: 165 master materials in 11 bundles, 540 material instances, 25 material functions and 45 textures. Each bundle opens with a short chapter page. After it, every master material has exactly one page: a picture, a one-line description, where to find it and its key parameters. Everything about setting a material up, tweaking it, using it from Verse and moving it into your own project is written once, in the next pages.

WHAT A MATERIAL PAGE SHOWS

Part	What you find there
Name and picture	The bundle, the master's display name and a picture of it: flat panel and shader ball from the editor. Post Process and Ember Dissolve show flat panel, sphere and cube; UI materials are shown in a widget, or a note says to preview them in one.
Description	One line on what it looks like.
Path	The master's asset path under `MaterialFX/`, its domain, blend and shading, and how many ready-made instances it has.
Key parameters	The first 8 parameters with default, range, Details group and a short note. The instance's Details panel lists all of them.
Instances	The ready-made variants. Pick one, or duplicate it to make your own.

READING THE PARAMETER TABLES

- **Field** is the parameter name as it shows in the instance's Details panel (CamelCase, no spaces, so Verse can address it).
- **Default** is what the master ships with. **Range** is the slider range in the editor.
- **Group** is the Details panel group: 00 Style, 01 Color, 02 Pattern, 03 Animation, 04 Glow, 05 Textures, 06 Lighting, Switches.
- A static switch is chosen in the editor per instance and cannot change at runtime.

> **NOTE:** Which material functions and textures each bundle needs is listed once, per bundle, in "Migrate one bundle (Route B)". When in doubt copy `MaterialFX/Functions` and `MaterialFX/Textures` too: an extra asset is harmless, a missing one breaks the material.

APPLY A MATERIAL

Applying a material takes about a minute and needs no Verse. Start with an instance in the Surface bundle; it is the simplest. Every instance ships with working defaults.

ON A MESH

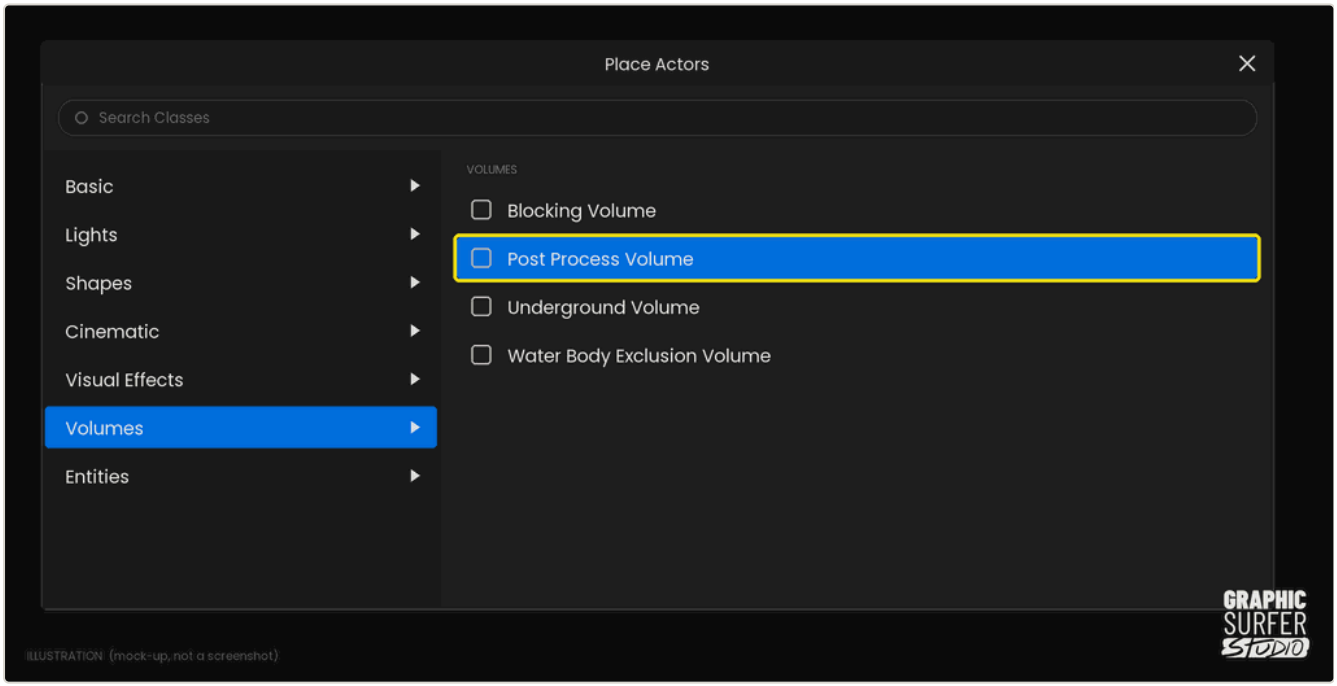
1. In the Content Browser open `MaterialFX/<Bundle>/Instances`, for example `MaterialFX/Surface/Instances`.
2. Drag an instance such as `MI_Surface_HoloFoil_Rainbow` onto a mesh in the Viewport. Or select the mesh, find its Materials slot in the Details panel and pick the instance from the drop-down.
3. Launch a Session or Push Changes to see it in play.
4. Double-click the instance to open it and change one setting at a time. Tick the box next to a parameter to override it, then change the value.

Most Surface materials are meant for flat or gently curved meshes; Optical Illusions in particular distort on strongly curved shapes. Screen-like materials (CRT, VHS, Radar, ScannerSweep, TargetLock) look best on flat planes.

IN A POST PROCESS VOLUME

Post Process materials do nothing on a mesh. They go in a Post Process Volume.

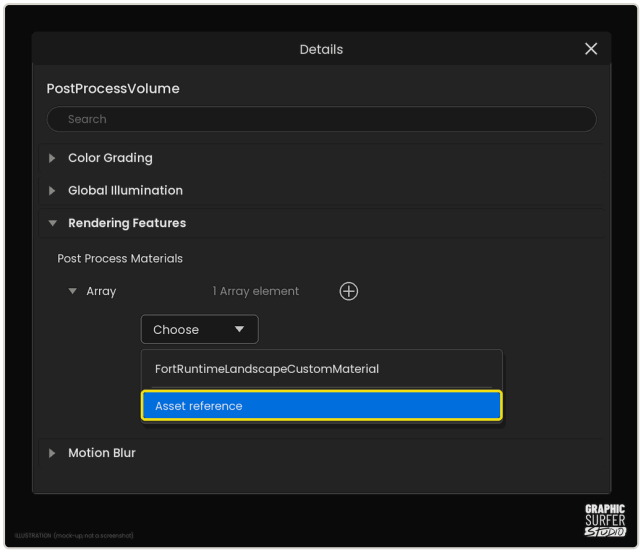
Step 1. Click Place Actors (the cube with a plus icon in the toolbar), open Volumes, pick Post Process Volume and drop it in the level.



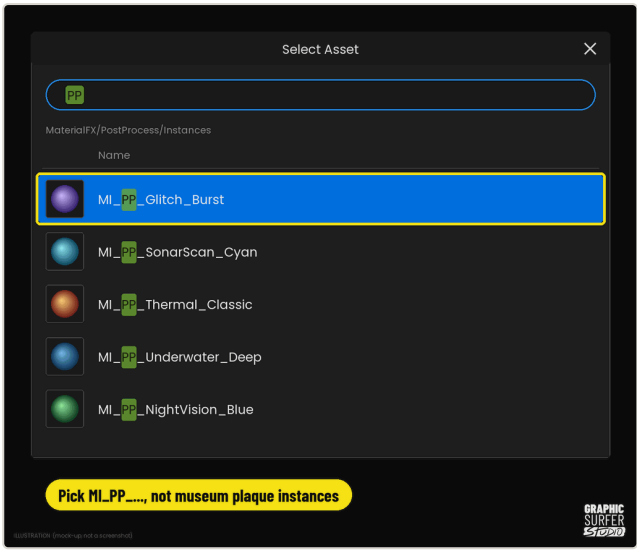
Step 1: Place Actors panel, Volumes, Post Process Volume

Step 2. Select the volume. In its Details panel search "Post Process Materials" (under Rendering Features). Click + to add one array element, open the Choose drop-down and pick Asset reference.

Step 3. Click the asset picker, type "PP" in the search box and pick an instance from `MaterialFX/PostProcess/Instances`, for example `MI_PP_Glitch_Burst`.



Step 2: Post Process Materials array, Choose, Asset reference

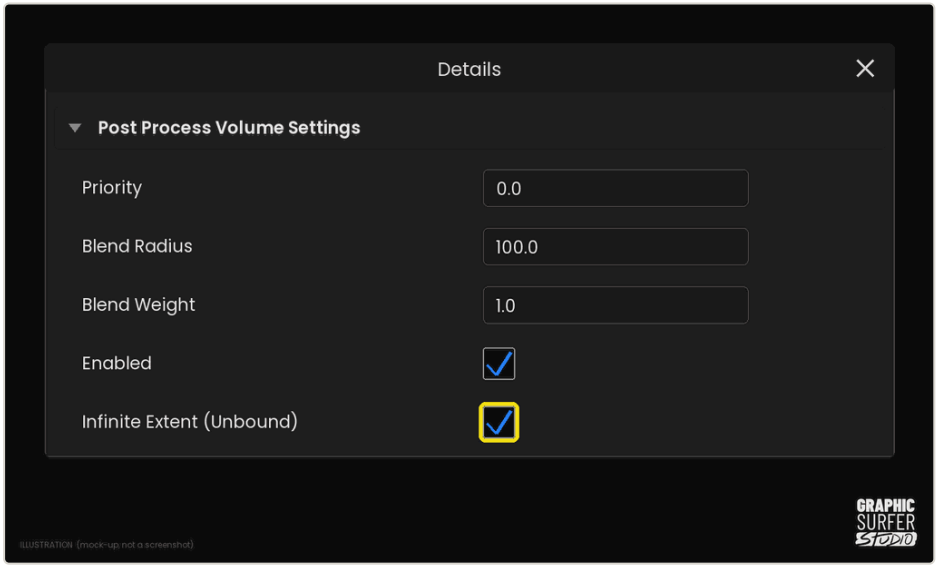


Step 3: asset picker with PP typed in the search box (illustration)

Pick a MaterialFX Post Process instance (`MI_PP_...`), not the gallery plaque instances (`MI_GSS_MFXM_Plaque_PP_...`). The plaques are gallery signs, not effects; they only appear in the list if the gallery level is in your project.

Step 4. Set the volume:

- Infinite Extent (Unbound): tick it for a whole-level effect. Otherwise scale the volume brush to the area.
- Priority: decides which volume wins when volumes overlap.
- Blend Radius: softens the edge of the volume.
- Blend Weight: 1.0 is full strength.
- Enabled: keep it ticked.



Step 4: Priority, Blend Radius, Blend Weight, Enabled, Infinite Extent

Step 5. Tips:

- One volume can hold several Post Process materials: add more array elements. Order is draw order.
- The effect shows in play and in the editor viewport. Press G (Game View) to hide the volume outline.
- On mobile, the UI overlay masters can stand in where Post Process is unavailable.

Three masters (`PP_DamageVignette` , `PP_FrostEdges` , `PP_Poison`) use a Material Parameter Collection so a Level Sequence can fade them in. The collection is part of the pack; migrate it with its master. Set Sequencer Driven to 0 on the instance if you do not use Sequencer.

IN A WIDGET (UI BUNDLE)

UI materials only show in a widget: use an instance from `MaterialFX/UI/Instances` as the image brush of a widget image. They have no effect on a mesh. 11 UI masters (AmmoPips, Banner, Compass, Cooldown, Crosshair, DamageDirection, HealthBar, Radar, RadialMeter, ShieldBar, XPBar) ship three looks, SciFi, Clean and Toon, chosen per instance with the static switches StyleClean and StyleToon. The UI bundle also holds mobile-safe screen overlays (low health, frost, poison, speed lines, helmet HUD, transition): use them if Post Process is unavailable, for example on mobile.

TWEAK A MATERIAL

Double-click an instance to open it. Its parameters are listed in groups in the Details panel. Tick the box next to a parameter to override it, then change the value.

DETAILS GROUPS

Group	What is in it
00 Style	Static switches that swap the whole look (UI: StyleClean, StyleToon).
01 Color	Colours, Tint, Brightness, Contrast.
02 Pattern	Shape and layout: Tiling, Intensity, Segments, UI values like Fill.
03 Animation	Speed and pulses.
04 Glow	Glow, Rim glow, overall brightness.
05 Textures	Texture slots. Swap in your own texture; the shipped one is the default.
06 Lighting	Toon lighting: UseSunDirection and light direction.
Switches	Other static switches.

Texture slots take any texture: the matcap masters (`M_Surface_Matcap`) change look by swapping one texture, and 19 matcap textures ship, one per instance.

MAKE YOUR OWN INSTANCE

1. Right-click an instance (or a master) in the Content Browser and choose Create Material Instance, or duplicate an instance with Ctrl+D.
2. Give it your own name, for example `MI_Surface_HoloFoil_Mine` , and keep it in your own folder, outside `MaterialFX/` , so a later update of the pack cannot overwrite it.
3. Change parameters, then assign it to your mesh.

Changing an instance changes every place that uses that instance, not the master. Do not edit a master unless you want every instance of it to change.

COMMON PARAMETERS

No parameter is on every master, but these appear often. Defaults and ranges differ per master; each material page gives its own.

Parameter	On how many masters	What it does
`Glow`	104	Brightness multiplier of the emissive light (higher is brighter, more bloom).
`Speed`	82	Animation speed. Negative reverses, 0 freezes.
`Tiling`	81	How many times the pattern repeats across the surface (UV scale).
`Brightness`	26	Overall brightness of the effect.
`Intensity`	26	Strength of the effect (0 is off).
`Aspect`	17	UI: width-to-height ratio of the widget shape, so circles stay round at any size.
`Tint`	14	Color multiplied over the result. White leaves the colours alone.
`RimPower` , `RimColor`	9	Tightness and colour of the edge (fresnel) glow.

VERSE (OPTIONAL)

No material needs Verse. Parameter names are CamelCase with no spaces, so UEFN reflects them in the generated Assets digest and Verse can set them where it helps, for example to drive a health bar. Static switches are compile-time and cannot be set from Verse at runtime.
Each UI master has a generated Verse class named after the asset. A health bar looks like this:

```
Bar := UI_HealthBar{}
set Bar.Fill = 0.35
material_block{DefaultImage := Bar, DefaultDesiredSize := vector2{X := 400.0, Y := 40.0}}
```

Fill, Trail and Hit are the values you drive from Verse on the health bar. The optional sample `mfx_ui_demo_device.verse` shows more of it.

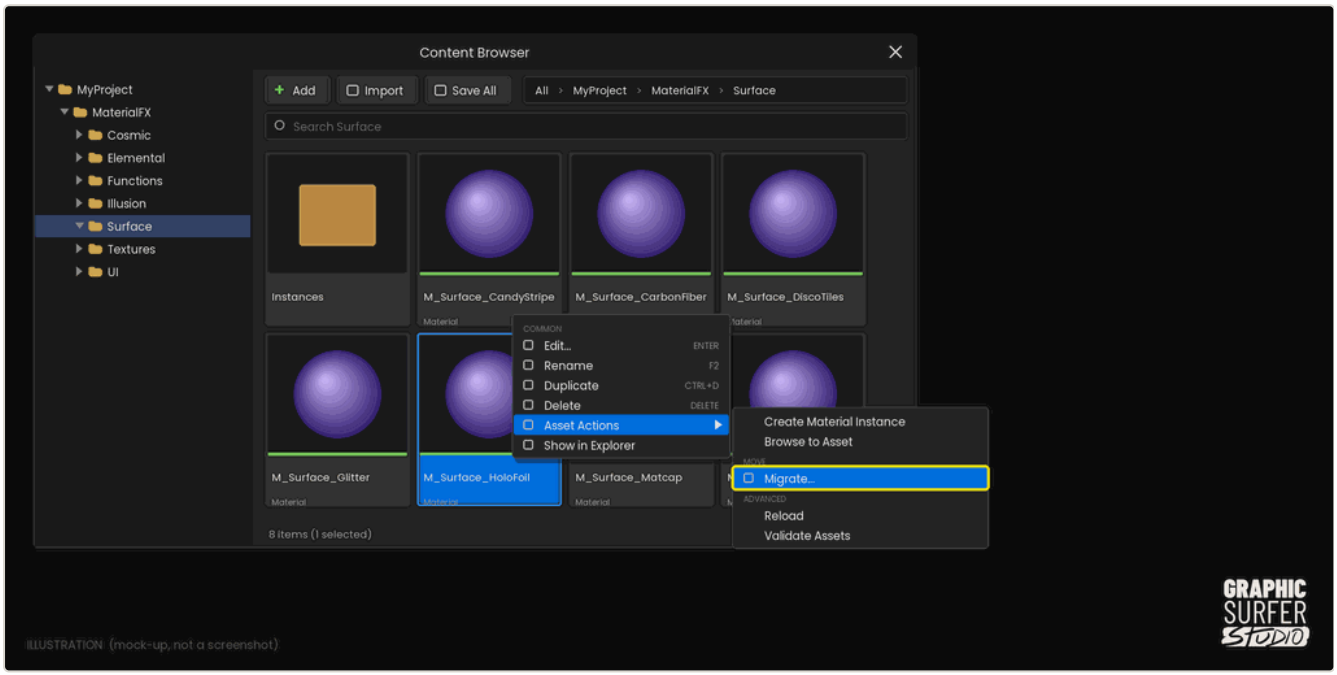
> **NOTE:** Verse that uses the generated material classes must sit in the same content folder as the materials, for example `MaterialFX/UI`, because nested folders are internal (error 3593). Placing materials on meshes, in volumes and in widgets has no folder rule. The Verse files are copied by hand. If Migrate skips a `.verse` file, copy it from the pack folder in File Explorer into the same path in your project.

MIGRATE INTO YOUR PROJECT

The pack is plain assets: materials, functions, textures and parameter collections. UEFN's own Migrate copies them into another project and brings the dependencies it finds.

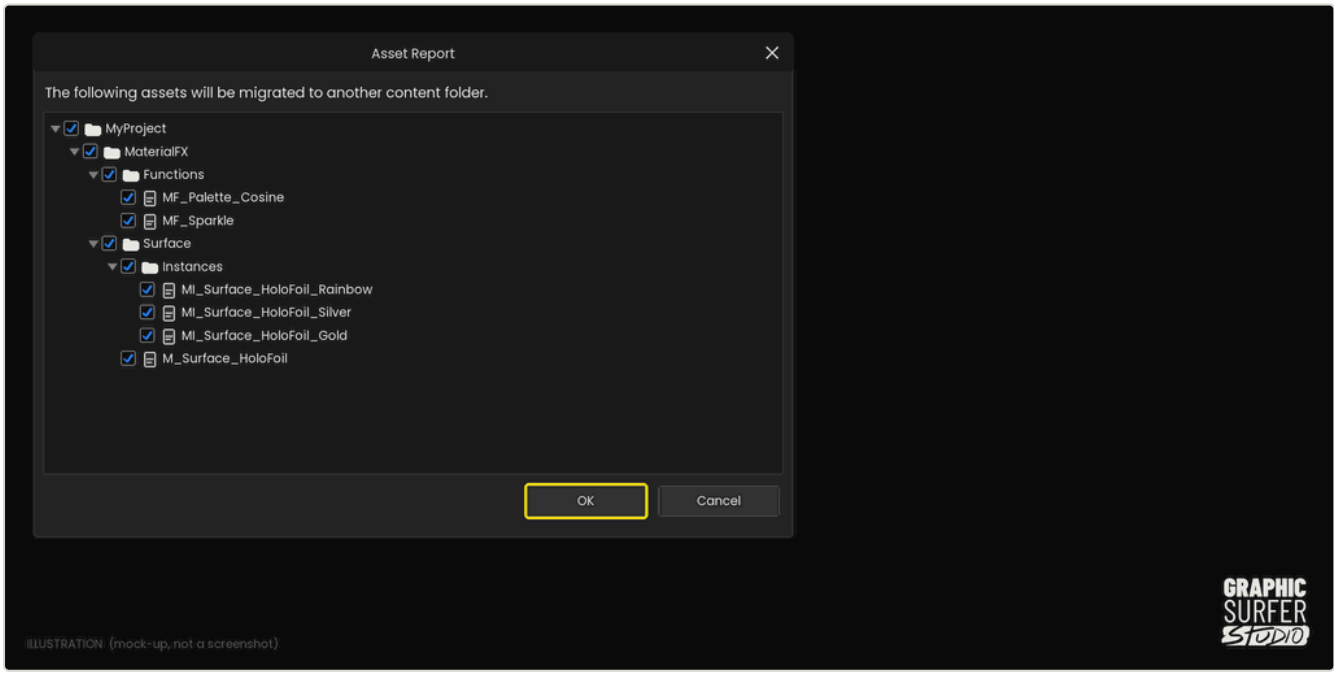
HOW TO MIGRATE

Right-click a material (or a folder) in the Content Browser, then Asset Actions, then Migrate.



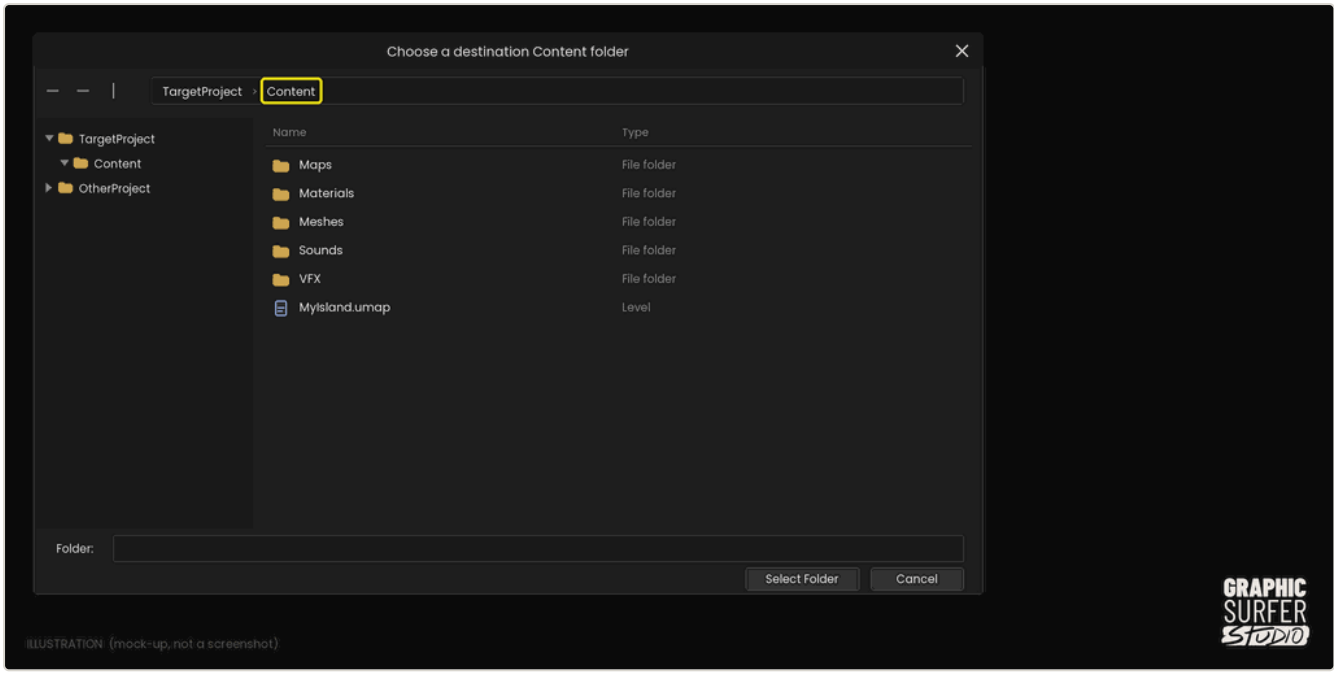
Click Migrate

Press OK. The Asset Report already selects every needed asset.



Press OK

Select the target project's Content folder.



Select the target project's Content folder

Then restart UEFN in the target project. The same folders appear in its Content Browser. Run Fix Up Redirectors on the folders if UEFN asks for it. The illustrations show a folder called `MyProject`; your project's content root is what you see in your own tree.

ROUTE A: COPY EVERYTHING (RECOMMENDED)

Right-click the `MaterialFX` folder, choose Asset Actions, Migrate, and pick your project's Content folder. This brings all 11 bundles, `Functions`, `Textures` and the 3 parameter collections. Then restart UEFN and check one instance on a mesh.

ROUTE B: ONE BUNDLE ONLY

Copy one bundle's folder plus the functions and textures it uses. The list for every bundle is on the next page, "Migrate one bundle (Route B)".

BUILD, RESTART AND FIX-UPS

Restart UEFN after copying and let it finish loading. Migrated assets can show validation errors until you do. Then open an instance, put it on a mesh and play. A Verse build is only needed if you use the optional Verse sample or your own Verse code.

Symptom	Cause	Fix
"hard references a missing package"	Migrated assets stay unsaved until restart	Restart UEFN, then build and validate.
A material looks grey, flat or wrong	A function or texture did not come across (Route B)	Migrate `MaterialFX/Functions` and `MaterialFX/Textures` again with it.
Post Process fade does nothing	The parameter collection was not migrated	Migrate the `PP_*_MaterialParameterCollection` with the master.
Verse error 3593	Verse file is in a nested folder	Move the Verse file to the same content folder as the materials.

> **WARNING:** Deleting assets and then running Build All in the same session crashed UEFN once. Save the level first (Save Current Level, then Save All), delete in one pass, restart UEFN, then build. Remove materials from meshes, volumes and widgets first, or they show as missing.

MIGRATE ONE BUNDLE (ROUTE B)

A bundle needs its own folder plus the functions and textures it uses. Copy `MaterialFX/<Folder>/` (with its `Instances` folder) plus the items below from `MaterialFX/Functions` and `MaterialFX/Textures`. Over-include when unsure: a missing asset breaks the material, an extra one is harmless.

`MF_AA_Checker`, `MF_AA_Stripes`, `MF_Spiral`, `MF_UV_Polar` and `MF_UV_WorldTop` are used by no master; they are utilities for your own materials.

Bundle	Material functions	Textures	Collections
`Illusion`	MF_Hash21, MF_Palette_Cosine, MF_UV_Cells, MF_UV_Hex, MF_UV_Kaleidoscope, MF_UV_LogPolar, MF_UV_Parallax, MF_UV_Tunnel	T_MFX_Filigree, T_MFX_Galaxy, T_MFX_Nebula, T_MFX_StainedGlass	none
`Cosmic`	MF_Rim, MF_Sparkle, MF_UV_Parallax, MF_UV_SkyWindow, MF_UV_Tunnel	T_MFX_Nebula, T_MFX_Noise_Packed_A, T_MFX_Noise_Packed_B, T_MFX_Stars	none
`SciFi`	MF_Hash21, MF_Pulse, MF_Rim, MF_UV_Cells, MF_UV_Flipbook, MF_UV_Hex, MF_UV_Tunnel, MF_WorldBands	T_MFX_Circuit, T_MFX_Galaxy, T_MFX_Glyphs, T_MFX_Lightning, T_MFX_Nebula, T_MFX_Noise_Packed_A, T_MFX_Noise_Packed_B, T_MFX_StainedGlass	none
`Elemental`	MF_Hash21, MF_Rim, MF_Sparkle, MF_UV_Parallax	T_MFX_Caustics, T_MFX_Clouds, T_MFX_Cracks, T_MFX_Flames, T_MFX_Frost, T_MFX_Lava, T_MFX_Lightning, T_MFX_Noise_Packed_A, T_MFX_Noise_Packed_B, T_MFX_Water_N	none
`Magic`	MF_Dissolve, MF_Hash21, MF_Pulse, MF_Rim, MF_Sparkle, MF_UV_Cells, MF_UV_Flipbook, MF_UV_Matcap, MF_UV_Parallax, MF_UV_Rotate, MF_UV_Twirl	T_MFX_Cracks, T_MFX_Filigree, T_MFX_Flames, T_MFX_Glyphs, T_MFX_Matcap_Crystal, T_MFX_Matcap_Gold, T_MFX_Nebula, T_MFX_Noise_Packed_A, T_MFX_Noise_Packed_B, T_MFX_RuneCircle, T_MFX_StainedGlass	none
`Surface`	MF_Hash21, MF_Palette_Cosine, MF_Rim, MF_Sparkle, MF_UV_Cells, MF_UV_Matcap	the 19 `T_MFX_Matcap_*` textures (Bronze, CarPaint, Chrome, Clay, Copper, Crystal, Gold, Holo, Ice, Jade, LavaGlow, NeonRim, Obsidian, Pearl, PurplePaint, Sketch, Toon, Toon2Tone, ToonWarm), T_MFX_Noise_Packed_B	none
`Gameplay`	MF_Dissolve, MF_Pulse, MF_Rim, MF_Sparkle, MF_UV_Hex, MF_UV_Rotate, MF_UV_Twirl	T_MFX_Noise_Packed_A, T_MFX_Noise_Packed_B	none
`Retro`	MF_Hash21, MF_Palette_Cosine, MF_Pulse, MF_UV_Cells, MF_UV_Pixelate, MF_UV_Rotate	T_MFX_Galaxy, T_MFX_Nebula, T_MFX_Noise_Packed_A, T_MFX_Noise_Packed_B, T_MFX_StainedGlass	none
`Toon`	MF_UV_Matcap, MF_UV_Rotate	T_MFX_Matcap_Chrome, Clay, Copper, Crystal, Gold, Holo, Jade, LavaGlow, NeonRim, Obsidian, Pearl, Toon, ToonWarm (all `T_MFX_Matcap_`), T_MFX_Noise_Packed_A, T_MFX_Noise_Packed_B, T_MFX_StainedGlass	none
`PostProcess`	MF_Hash21, MF_HueShift, MF_UV_Flipbook, MF_UV_Kaleidoscope	T_MFX_Caustics, T_MFX_FrostCrystal_M, T_MFX_FrostCrystal_N, T_MFX_Glyphs, T_MFX_Lightning, T_MFX_Noise_Packed_A, T_MFX_RainDrops_M, T_MFX_RainDrops_N	all 3 `PP_*_MaterialParameterCollection`
`UI`	MF_Hash21, MF_Pulse, MF_Sparkle, MF_UV_Cells, MF_UV_Hex	T_MFX_FrostCrystal_M, T_MFX_FrostCrystal_N, T_MFX_HexCells, T_MFX_Lightning, T_MFX_Noise_Packed_A	none

OPTICAL ILLUSIONS

Mind-bending patterns that move, breathe and fake depth on flat surfaces.



25 masters, 72 instances. Folder `MaterialFX/Illusion/` (instances in `MaterialFX/Illusion/Instances/`). Uses 8 material functions and 4 textures from `MaterialFX/Functions` and `MaterialFX/Textures`.

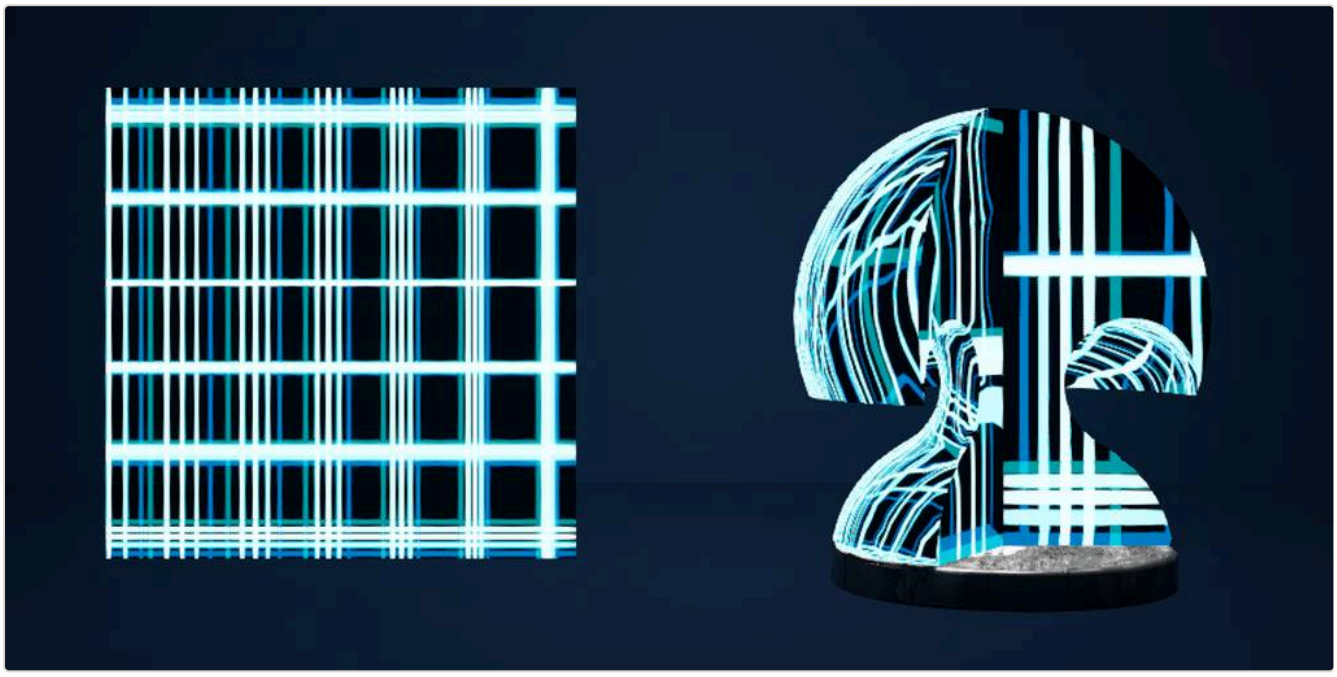
Domain	Blend	Shading	Sides	Masters
Surface	Opaque	Unlit	one-sided	25

> **NOTE:** Illusions are designed for flat surfaces (walls, floors, planes); on strongly curved meshes the effect distorts.
>
> **Note:** Some depth illusions (parallax) shift with the camera angle; they need a viewer, a screenshot of one angle does not show them.
>
> **Note:** Kaleidoscope-style masters take a texture: swap the shipped one for endless variations.
>
> **AI disclosure:** AI-generated textures used by this bundle (4 of its 4 textures): Filigree, Galaxy, Nebula, StainedGlass.

MASTERS IN OPTICAL ILLUSIONS

Master	Looks like	Instances
`M_Illusion_BottomlessGrid`	Glowing grids receding into infinite depth.	3
`M_Illusion_BreathingGrid`	Checkerboard that inflates and deflates in waves.	3
`M_Illusion_CafeWall`	Cafe wall illusion: perfectly straight mortar lines look...	3
`M_Illusion_DepthPit`	A bottomless pit painted on a flat surface.	3
`M_Illusion_Enigma`	Enigma (Leviant) illusion: still colored rings over radial...	3
`M_Illusion_FloatingCubes`	Tiles floating at different depths inside a flat wall.	3
`M_Illusion_FraserSpiral`	Fraser spiral: perfectly concentric circles that the eye...	3
`M_Illusion_HexRipple`	Hexagon floor where every cell swells and shrinks in a ripple...	3
`M_Illusion_HexTunnel`	Endless hexagonal neon tunnel with glowing corner edges.	3
`M_Illusion_HypnoSpiral`	Hypnotic rotating spiral.	4
`M_Illusion_InfiniteTunnel`	Endless checkered tunnel on any flat surface.	4
`M_Illusion_InfiniteZoom`	Endless zoom into the center (log-polar Droste).	3
`M_Illusion_InteriorRooms`	Fake 3D rooms behind a flat window (interior mapping).	3
`M_Illusion_Kaleidoscope`	Rotating kaleidoscope of any texture.	3
`M_Illusion_LensBulge`	Checkerboard warped by a roaming magnifying-lens bulge.	3
`M_Illusion_Lenticular`	Lenticular print: shows one image or another depending on...	2
`M_Illusion_Moire`	Moire interference from two orbiting ring patterns.	3
`M_Illusion_OpArtWaves`	Op-art wave lines (Bridget Riley style).	3
`M_Illusion_Ouchi`	Ouchi illusion: the inner disc seems to float and slide over...	2
`M_Illusion_PeripheralDrift`	Rotating-snakes illusion: a perfectly still pattern that...	3
`M_Illusion_RippleTank`	Wave interference from two moving sources.	3
`M_Illusion_ScintillatingGrid`	Scintillating grid: dark dots flicker at the grid...	2
`M_Illusion_SpinStop`	Motion aftereffect: a spiral spins, then stops dead.	2
`M_Illusion_Stereokinetic`	Stereokinetic cone: flat offset circles rotating together...	2
`M_Illusion_TumblingBlocks`	Isometric cube illusion from a flat hex grid.	3

BOTTOMLESS GRID



Bottomless Grid: flat panel and shader ball

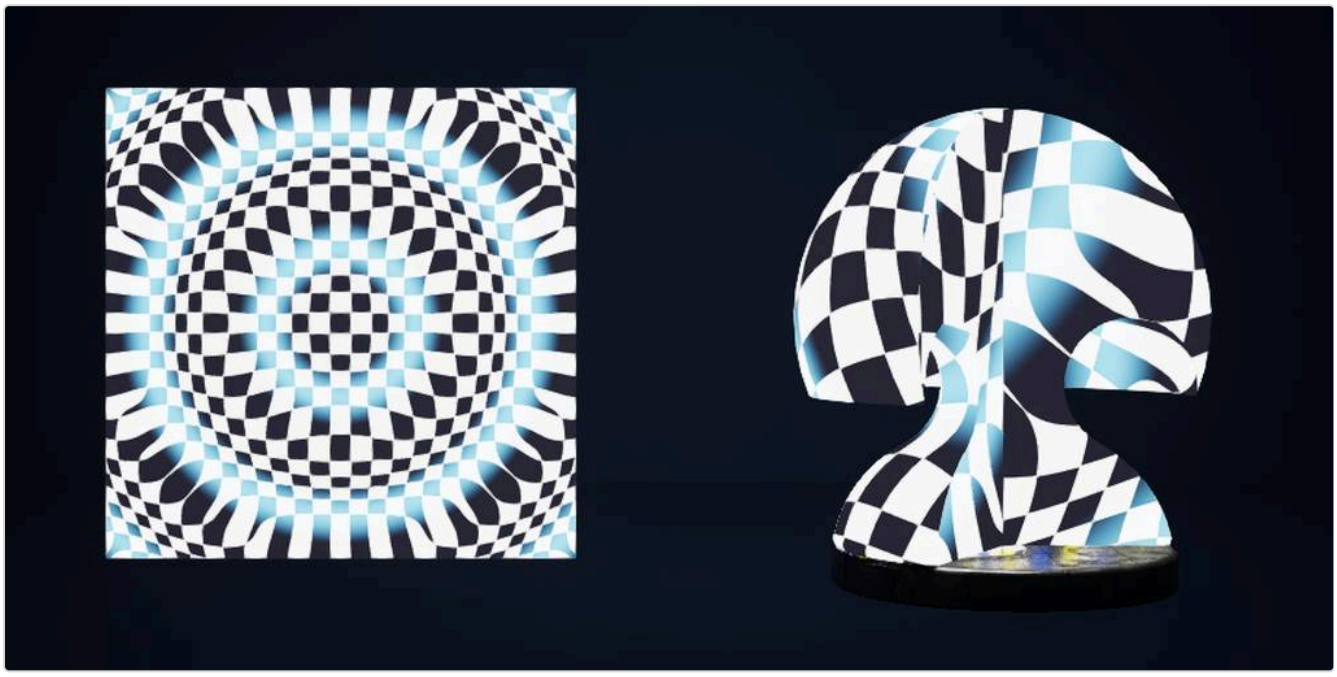
Glowing grids receding into infinite depth; layers fall forever (parallax, no geometry).

`MaterialFX/Illusion/M_Illusion_BottomlessGrid` Surface / Opaque / Unlit Instances `3`

Field	Default	Range	Group	What it does
`GridCells`	6	1 to 30	02 Pattern	Number of grid cells per tile in each of the stacked grid layers.
`LayerSpacing`	0.12	0.01 to 0.5	02 Pattern	Parallax depth gap between the stacked grid layers (depth = layer position x LayerSpacing x 5).
`LineWidth`	0.06	0.01 to 0.3	02 Pattern	Width of the grid lines on every layer.
`Speed`	0.15	-4 to 4	03 Animation	Animation speed.
`NearColor`	(0.1, 0.9, 1, 1)	-	01 Color	Colour of the nearest grid layer; fades to FarColor with depth.
`FarColor`	(0, 0.1, 0.5, 1)	-	01 Color	Colour of the deepest grid layer, far down.
`Glow`	2	0 to 50	04 Glow	Brightness multiplier of the emissive light (higher = brighter, more bloom).

Instances: `MI_Illusion_BottomlessGrid_Tron` , `MI_Illusion_BottomlessGrid_Synth` , `MI_Illusion_BottomlessGrid_Matrix`

BREATHING GRID



Breathing Grid: flat panel and shader ball

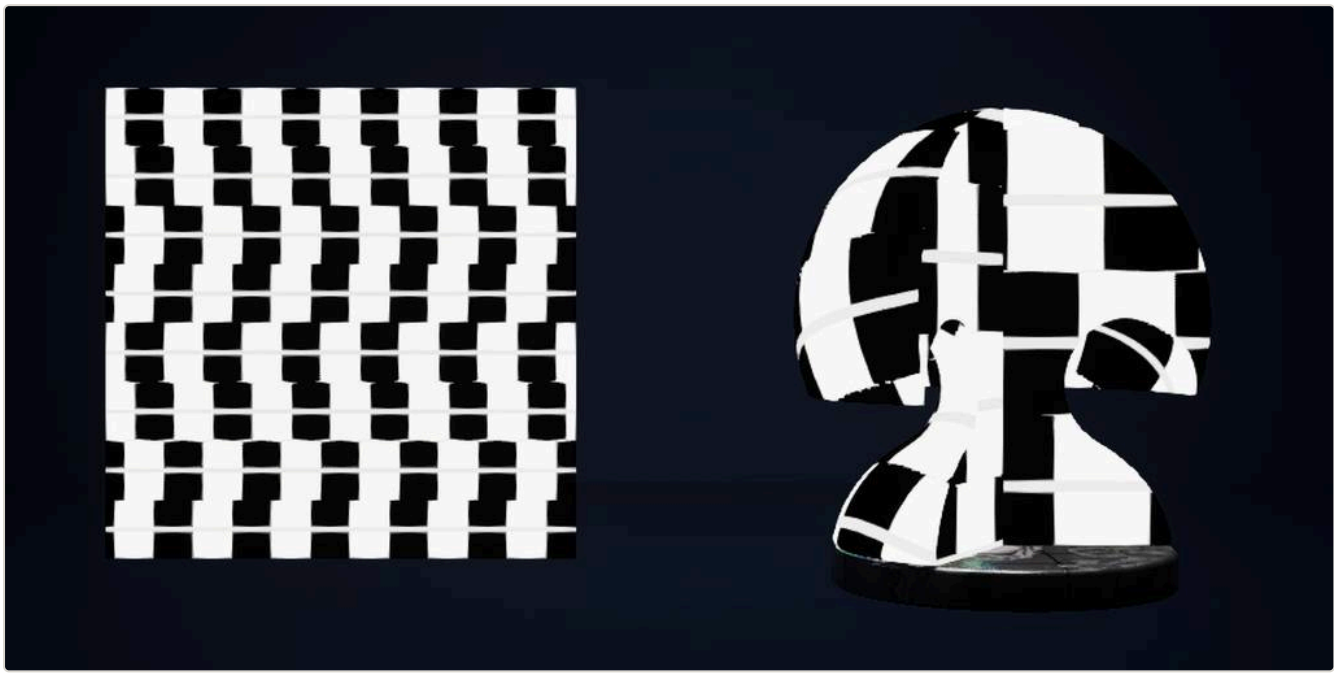
Checkerboard that inflates and deflates in waves, like the floor is breathing.

`MaterialFX/Illusion/M_Illusion_BreathingGrid` Surface / Opaque / Unlit Instances `3`

Field	Default	Range	Group	What it does
`Tiling`	1	0.1 to 16	02 Pattern	How many times the pattern repeats across the surface (UV scale).
`Speed`	0.35	-4 to 4	03 Animation	Animation speed.
`WaveCount`	4	0.5 to 16	02 Pattern	Number of radial wave crests from the centre outward; the wave drives the breathing distortion.
`Amplitude`	0.08	0 to 0.4	02 Pattern	How far the checker UV is pushed in and out by the wave: UV scale = 1 + wave x Amplitude.
`Checks`	12	2 to 40	02 Pattern	Number of checker squares per tile in each direction.
`ColorA`	(0.02, 0.02, 0.03, 1)	-	01 Color	Colour of the dark checker squares.
`ColorB`	(0.95, 0.95, 0.95, 1)	-	01 Color	Colour of the light checker squares.
`CrestColor`	(0.2, 0.6, 1, 1)	-	01 Color	Colour of the glowing crest of the travelling wave.

2 more parameters in the instance's Details panel. **Instances:** `MI_Illusion_BreathingGrid_Classic`, `MI_Illusion_BreathingGrid_Lava`, `MI_Illusion_BreathingGrid_Ice`

CAFE WALL



Cafe Wall: flat panel and shader ball

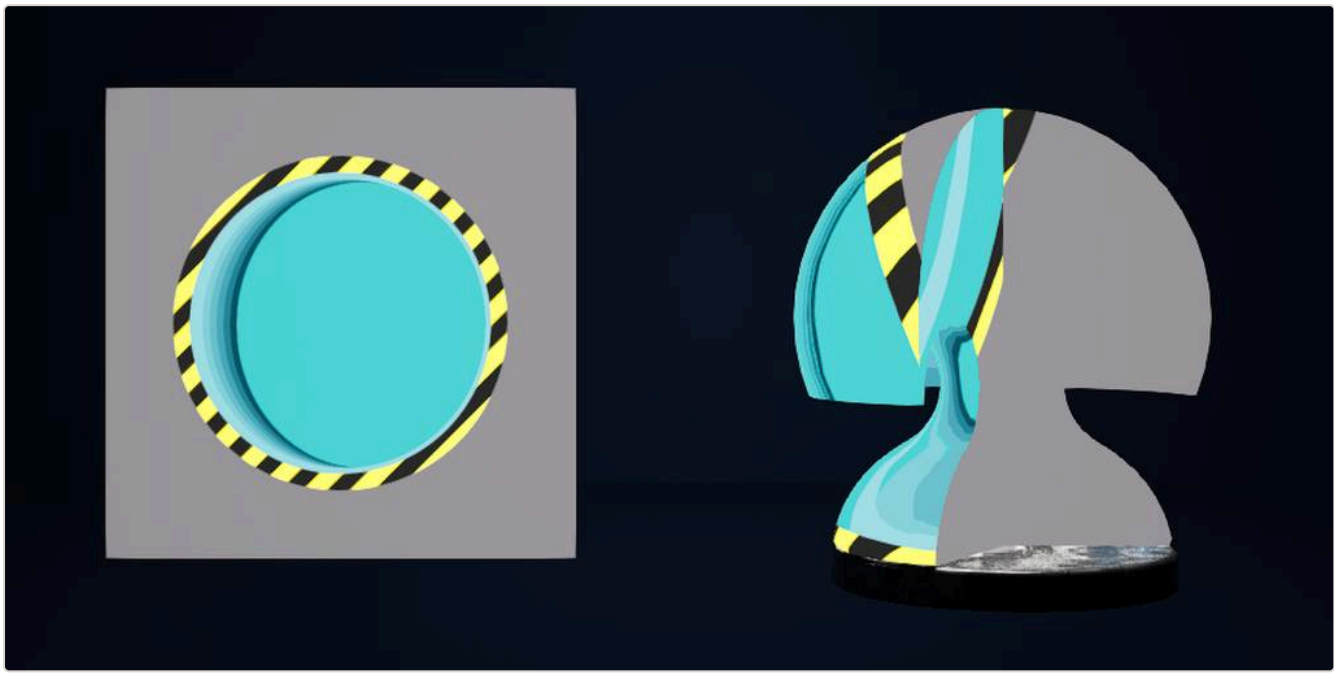
Cafe wall illusion: perfectly straight mortar lines look tilted.

`MaterialFX/Illusion/M_Illusion_CafeWall` Surface / Opaque / Unlit Instances `3`

Field	Default	Range	Group	What it does
`Tiling`	1	0.1 to 16	02 Pattern	How many times the pattern repeats across the surface (UV scale).
`Rows`	8	2 to 40	02 Pattern	Number of tile rows.
`Speed`	0	-4 to 4	03 Animation	Animation speed.
`TilesPerRow`	6	2 to 40	02 Pattern	Number of light/dark tile pairs along each row.
`MortarWidth`	0.08	0.01 to 0.3	02 Pattern	Thickness of the grey mortar line between rows.
`TileDark`	(0, 0, 0, 1)	-	01 Color	Colour of the dark tiles.
`TileLight`	(1, 1, 1, 1)	-	01 Color	Colour of the light tiles.
`MortarColor`	(0.5, 0.5, 0.5, 1)	-	01 Color	Colour of the mortar lines between the tile rows.

1 more parameter in the instance's Details panel. **Instances:** `MI_Illusion_CafeWall_Classic`, `MI_Illusion_CafeWall_Wobble`, `MI_Illusion_CafeWall_Neon`

DEPTH PIT



Depth Pit: flat panel and shader ball

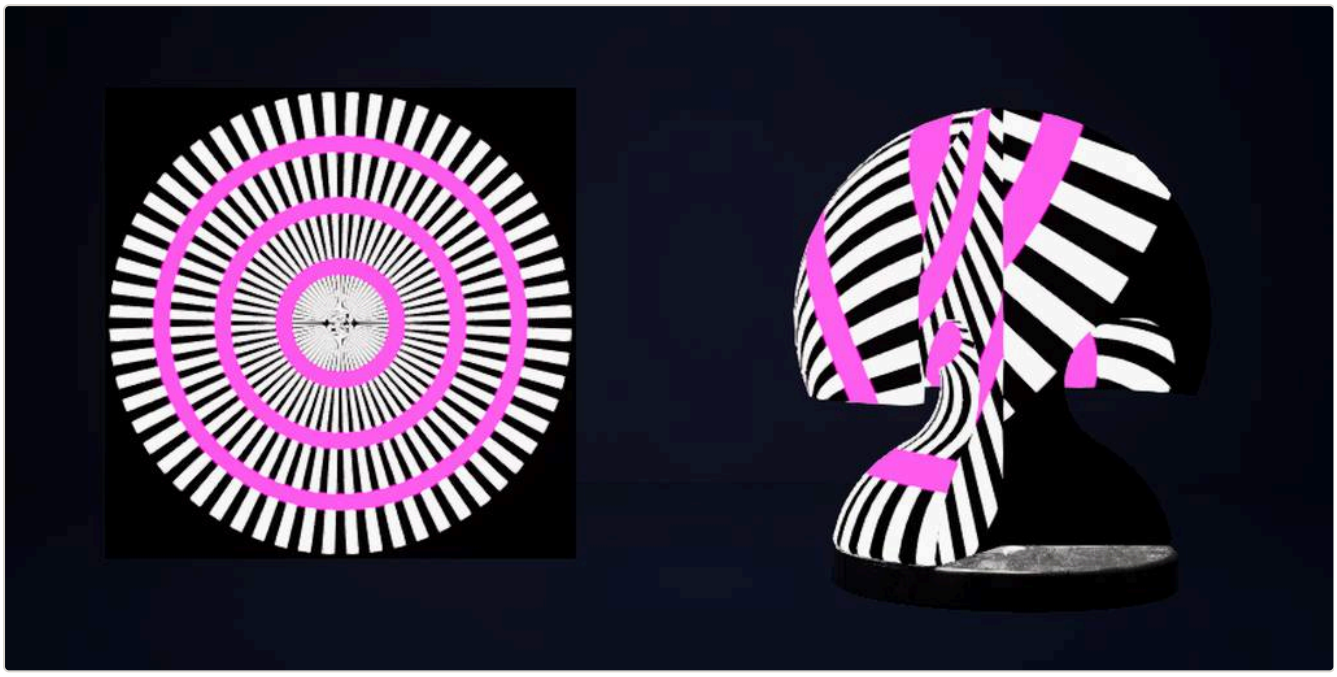
A bottomless pit painted on a flat surface: parallax rings create real-looking depth that shifts with the camera.

`MaterialFX/Illusion/M_Illusion_DepthPit` Surface / Opaque / Unlit Instances `3`

Field	Default	Range	Group	What it does
`HoleRadius`	0.32	0.05 to 0.48	02 Pattern	Radius of the pit opening in UV units (0.5 = half the tile).
`Depth`	0.25	0.01 to 1	02 Pattern	Strength of the fake depth / parallax.
`RingThickness`	0.012	0.002 to 0.05	02 Pattern	Line thickness of the stacked depth rings drawn down the pit wall (each deeper ring adds a little extra...
`Speed`	0.15	-4 to 4	03 Animation	Animation speed.
`WallColor`	(0.1, 0.35, 0.45, 1)	-	01 Color	Colour of the pit walls.
`BottomColor`	(0.1, 0.9, 1, 1)	-	01 Color	Colour of the glowing floor at the bottom of the pit.
`SurfaceColor`	(0.12, 0.12, 0.13, 1)	-	01 Color	Colour of the flat surface around the hole.
`RimColor`	(1, 0.75, 0, 1)	-	01 Color	Colour of the hazard-stripe band around the pit opening (alternates with near-black diagonal stripes).

1 more parameter in the instance's Details panel. **Instances:** `MI_Illusion_DepthPit_Hazard` , `MI_Illusion_DepthPit_Void` , `MI_Illusion_DepthPit_Lava`

ENIGMA



Enigma: flat panel and shader ball

Enigma (Leviant) illusion: still colored rings over radial spokes appear to swirl.

`MaterialFX/Illusion/M_Illusion_Enigma` Surface / Opaque / Unlit Instances `3`

Field	Default	Range	Group	What it does
`Tiling`	1	0.1 to 16	02 Pattern	How many times the pattern repeats across the surface (UV scale).
`Spokes`	60	12 to 200	02 Pattern	Number of radial stripes (angle multiplied by Spokes).
`Speed`	0	-4 to 4	03 Animation	Animation speed.
`RingWidth`	0.018	0.005 to 0.1	02 Pattern	Width of the three coloured concentric rings.
`RingColor`	(0.85, 0, 0.6, 1)	-	01 Color	Colour of the rings; the spokes stay black and white.
`Glow`	1	0 to 50	04 Glow	Brightness multiplier of the emissive light (higher = brighter, more bloom).

Instances: `MI_Illusion_Enigma_Classic` , `MI_Illusion_Enigma_Fire` , `MI_Illusion_Enigma_Ice`

FLOATING CUBES



Floating Cubes: flat panel and shader ball

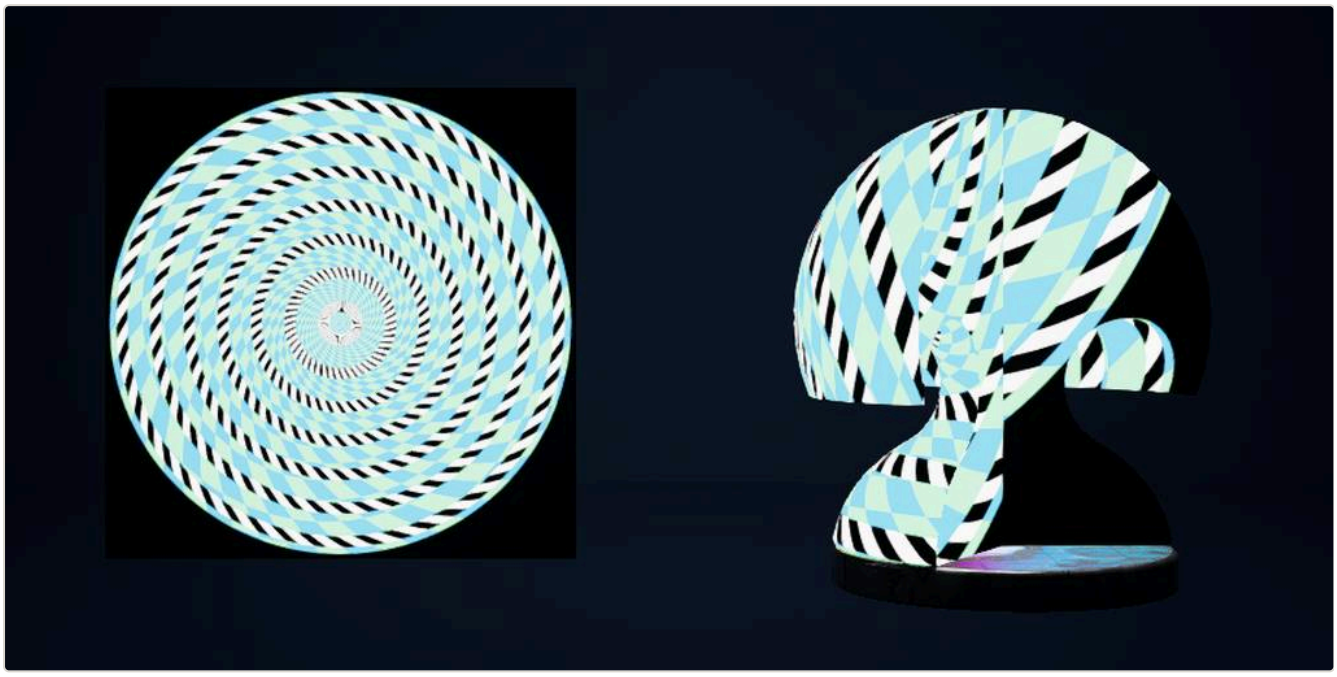
Tiles floating at different depths inside a flat wall: true parallax depth, slowly drifting layers.

`MaterialFX/Illusion/M_Illusion_FloatingCubes` Surface / Opaque / Unlit Instances `3`

Field	Default	Range	Group	What it does
`Depth`	0.35	0.02 to 1.5	02 Pattern	Total parallax depth of the four cube layers; deeper layers shift more with the view angle.
`NearColor`	(0.2, 0.9, 1, 1)	-	01 Color	Colour of the nearest cube layer; fades to FarColor with depth.
`FarColor`	(0.05, 0.1, 0.45, 1)	-	01 Color	Colour of the farthest cube layer.
`VoidColor`	(0, 0.01, 0.04, 1)	-	01 Color	Colour of the empty space between the cubes.
`Speed`	0.01	-4 to 4	03 Animation	Animation speed.
`Glow`	1.3	0 to 50	04 Glow	Brightness multiplier of the emissive light (higher = brighter, more bloom).

Instances: `MI_Illusion_FloatingCubes_Cyber` , `MI_Illusion_FloatingCubes_Candy` , `MI_Illusion_FloatingCubes_Gold`

FRASER SPIRAL



Fraser Spiral: flat panel and shader ball

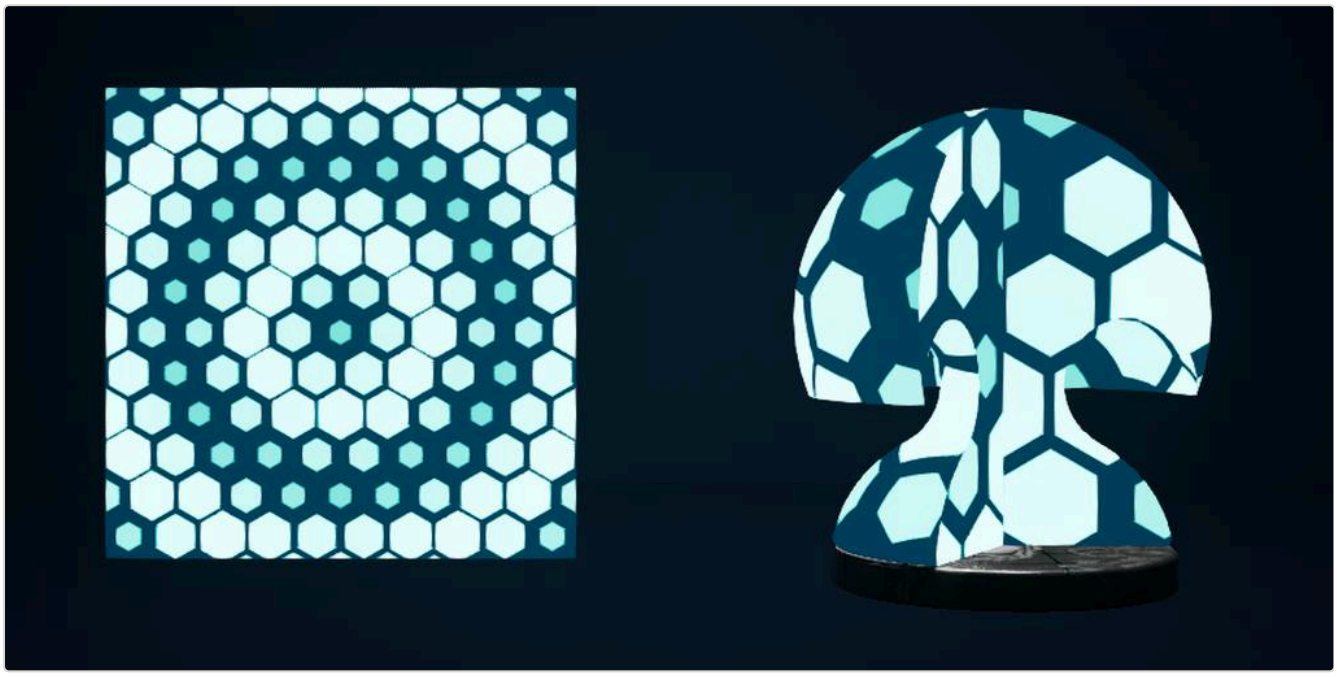
Fraser spiral: perfectly concentric circles that the eye insists are a spiral.

`MaterialFX/Illusion/M_Illusion_FraserSpiral` Surface / Opaque / Unlit Instances `3`

Field	Default	Range	Group	What it does
`Tiling`	1	0.1 to 16	02 Pattern	How many times the pattern repeats across the surface (UV scale).
`Rings`	7	2 to 20	02 Pattern	Number of concentric twisted-cord rings.
`CordSegments`	48	12 to 160	02 Pattern	Number of cord segments around each ring (the twisted-cord stripe frequency).
`Speed`	0	-4 to 4	03 Animation	Animation speed.
`BackgroundA`	(0.1, 0.35, 0.7, 1)	-	01 Color	Colour of the first background tone (the checker the cords sit on).
`BackgroundB`	(0.2, 0.6, 0.3, 1)	-	01 Color	Colour of the second background tone.
`CordDark`	(0, 0, 0, 1)	-	01 Color	Colour of the dark half of each twisted cord.
`CordLight`	(1, 1, 1, 1)	-	01 Color	Colour of the light half of each twisted cord.

1 more parameter in the instance's Details panel. **Instances:** `MI_Illusion_FraserSpiral_Classic`, `MI_Illusion_FraserSpiral_Neon`, `MI_Illusion_FraserSpiral_Warm`

HEX RIPPLE



Hex Ripple: flat panel and shader ball

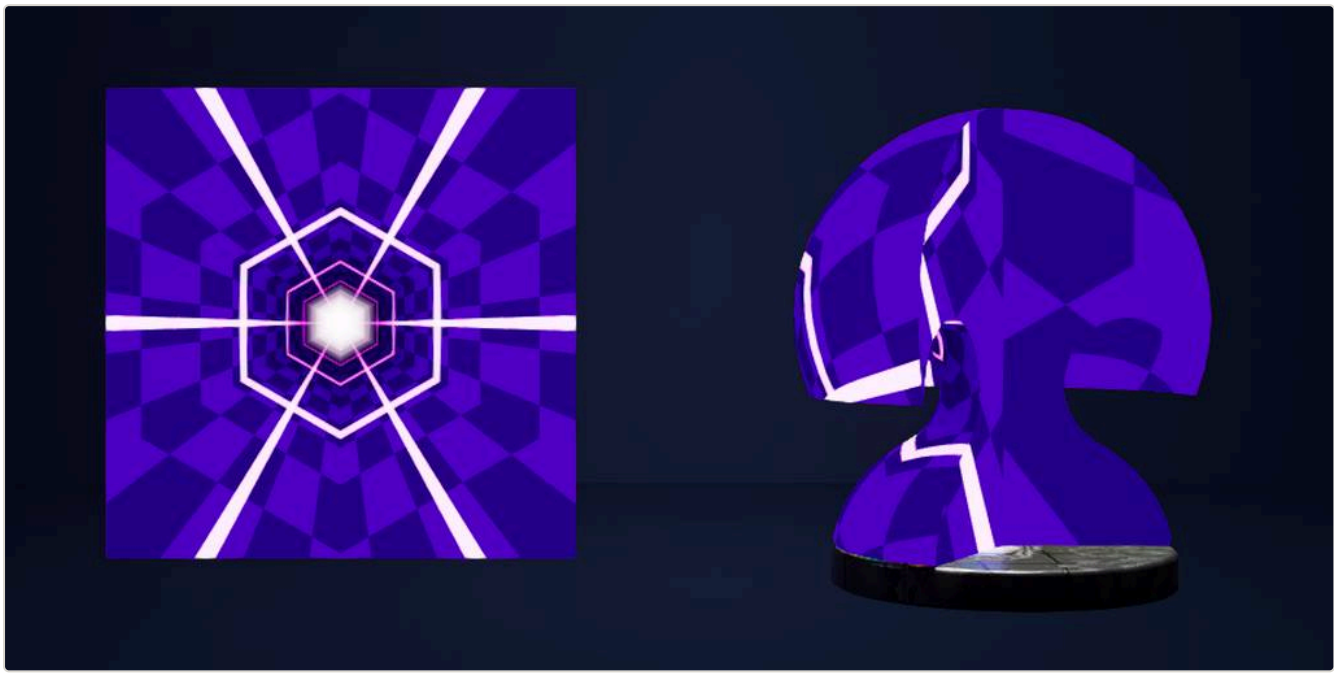
Hexagon floor where every cell swells and shrinks in a ripple spreading from the center.

`MaterialFX/Illusion/M_Illusion_HexRipple` Surface / Opaque / Unlit Instances `3`

Field	Default	Range	Group	What it does
`Tiling`	1	0.1 to 16	02 Pattern	How many times the pattern repeats across the surface (UV scale).
`HexScale`	10	2 to 40	02 Pattern	Number of hexagon cells per tile.
`RippleCount`	3	0.5 to 12	02 Pattern	Number of ripple crests radiating across the field (sine of distance from the centre, scrolling outward).
`Speed`	0.4	-4 to 4	03 Animation	Animation speed.
`CellColor`	(0.1, 0.9, 0.8, 1)	-	01 Color	Colour of the hexagon cells (brightened by the ripple).
`GapColor`	(0, 0.03, 0.05, 1)	-	01 Color	Colour of the gaps between the cells.
`Glow`	1.3	0 to 50	04 Glow	Brightness multiplier of the emissive light (higher = brighter, more bloom).

Instances: `MI_Illusion_HexRipple_Teal` , `MI_Illusion_HexRipple_Lava` , `MI_Illusion_HexRipple_Royal`

HEX TUNNEL



Hex Tunnel: flat panel and shader ball

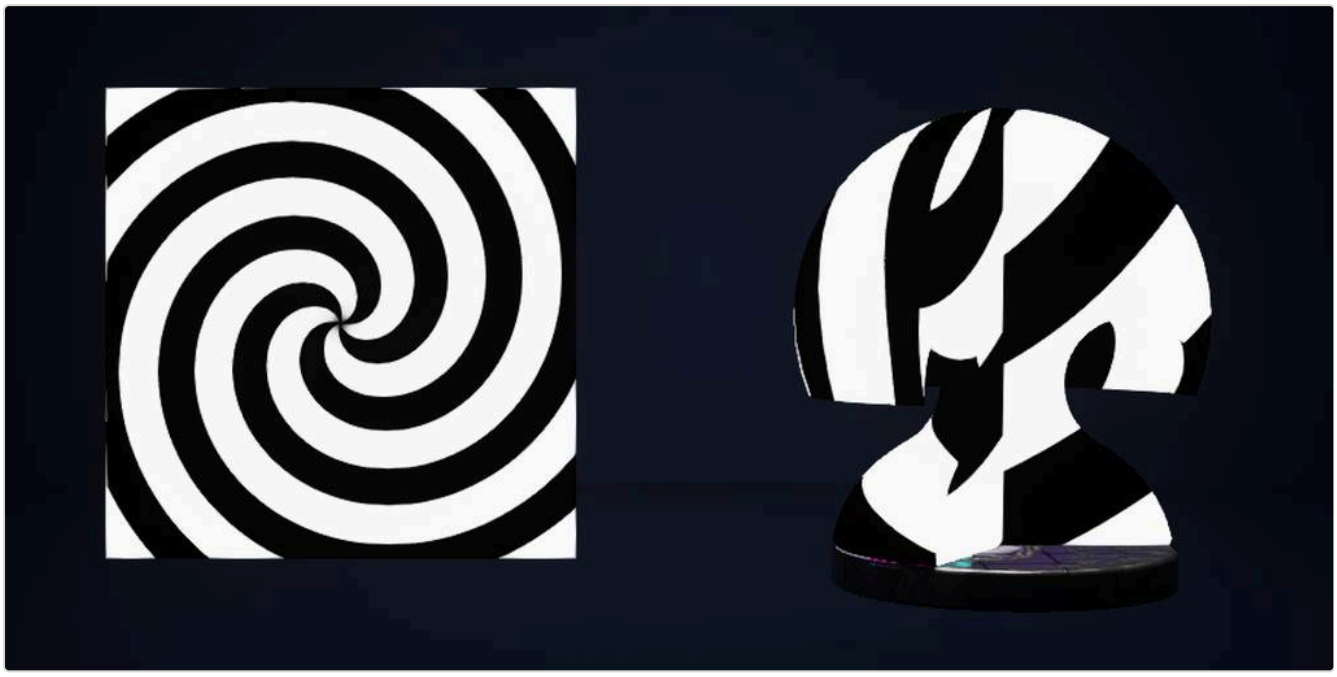
Endless hexagonal neon tunnel with glowing corner edges.

`MaterialFX/Illusion/M_Illusion_HexTunnel` Surface / Opaque / Unlit Instances `3`

Field	Default	Range	Group	What it does
`Tiling`	1	0.1 to 16	02 Pattern	How many times the pattern repeats across the surface (UV scale).
`Depth`	0.25	0.05 to 1.5	02 Pattern	Depth scale of the hexagonal tunnel: the depth coordinate is Depth / hexagonal radius.
`Speed`	0.5	-4 to 4	03 Animation	Animation speed.
`WallColor`	(0.02, 0, 0.1, 1)	-	01 Color	Colour of the tunnel walls.
`EdgeColor`	(0.9, 0.1, 1, 1)	-	01 Color	Colour of the glowing hexagon edges.
`CenterColor`	(1, 0.8, 1, 1)	-	01 Color	Colour of the bright light at the end of the tunnel.
`Glow`	1.5	0 to 50	04 Glow	Brightness multiplier of the emissive light (higher = brighter, more bloom).

Instances: `MI_Illusion_HexTunnel_Neon` , `MI_Illusion_HexTunnel_Gold` , `MI_Illusion_HexTunnel_Toxic`

HYPNO SPIRAL



Hypno Spiral: flat panel and shader ball

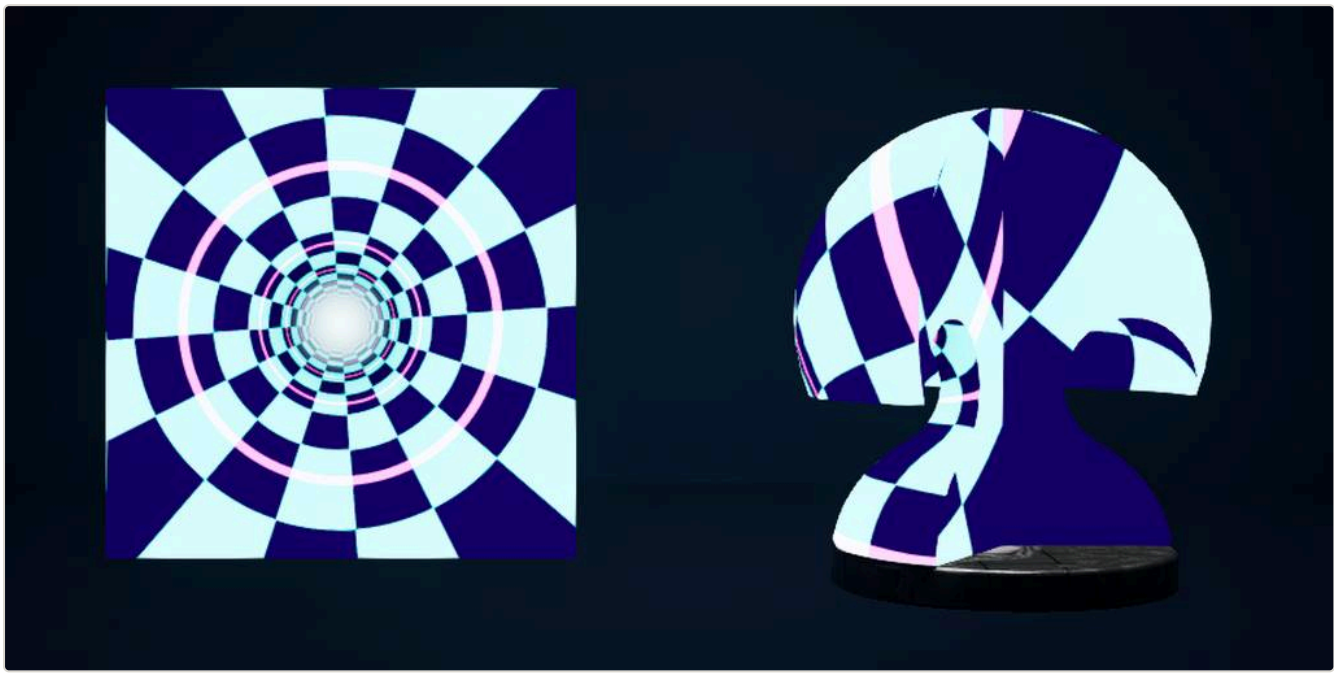
Hypnotic rotating spiral.

`MaterialFX/Illusion/M_Illusion_HypnoSpiral` Surface / Opaque / Unlit Instances `4`

Field	Default	Range	Group	What it does
`Tiling`	1	0.1 to 16	02 Pattern	How many times the pattern repeats across the surface (UV scale).
`Speed`	0.25	-4 to 4	03 Animation	Animation speed.
`Arms`	4	1 to 12	02 Pattern	Number of spiral arms (angle around the centre multiplied by Arms).
`Tightness`	6	0 to 30	02 Pattern	How tightly the spiral winds: the radius is multiplied by this and added to the arm phase.
`ColorA`	(0, 0, 0, 1)	-	01 Color	Colour of the first spiral arm.
`ColorB`	(1, 1, 1, 1)	-	01 Color	Colour of the second spiral arm.
`Rainbow`	False	-	Switches	Static switch.
`RoundMask`	0	0 to 1	02 Pattern	Blend 0-1 for cutting the tile to a circle: at 1 everything beyond radius 0.48-0.5 fades out.

1 more parameter in the instance's Details panel. **Instances:** `MI_Illusion_HypnoSpiral_Classic`, `MI_Illusion_HypnoSpiral_Toxic`, `MI_Illusion_HypnoSpiral_Rainbow`, `MI_Illusion_HypnoSpiral_Vortex`

INFINITE TUNNEL



Infinite Tunnel: flat panel and shader ball

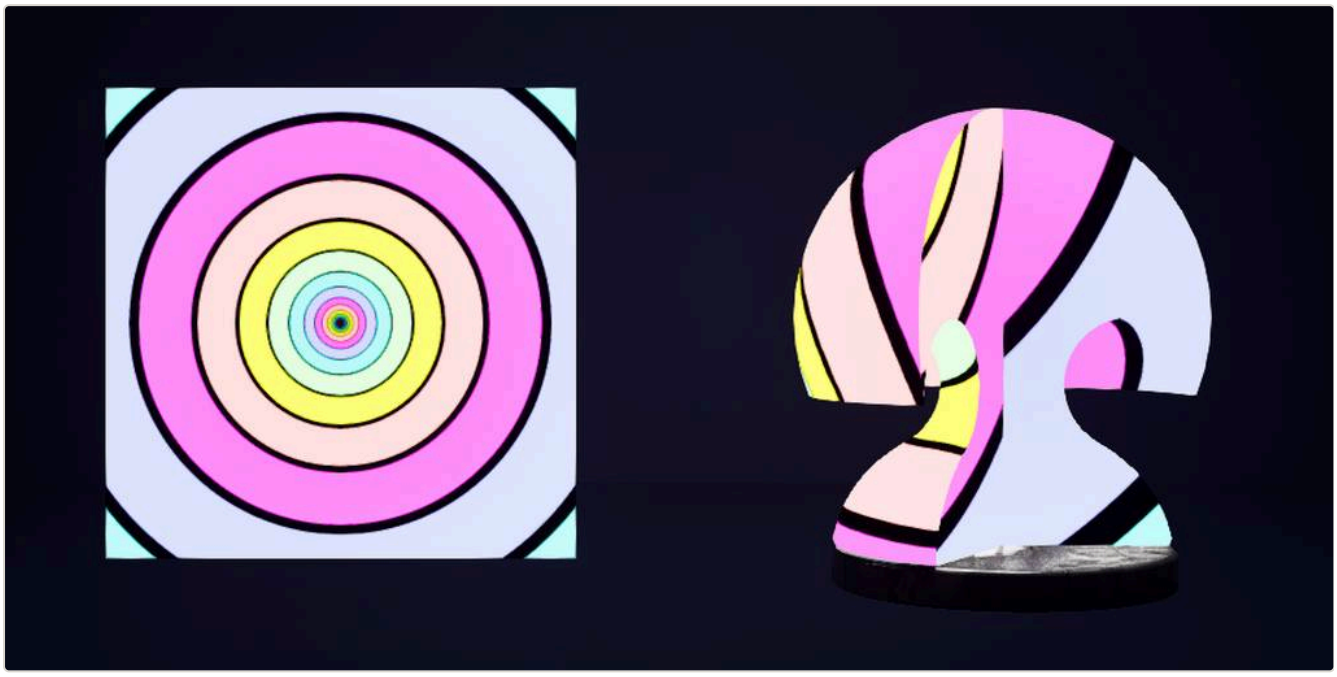
Endless checkered tunnel on any flat surface.

`MaterialFX/Illusion/M_Illusion_InfiniteTunnel` Surface / Opaque / Unlit Instances `4`

Field	Default	Range	Group	What it does
`Tiling`	1	0.1 to 16	02 Pattern	How many times the pattern repeats across the surface (UV scale).
`Depth`	0.35	0.05 to 2	02 Pattern	Strength of the fake depth / parallax.
`Segments`	8	1 to 32	02 Pattern	Number of repeated slices/segments.
`RingDensity`	1	0.25 to 4	02 Pattern	Number of check/ring rows along the tunnel depth per tunnel-UV unit (v = tunnel V x RingDensity).
`TwistSpeed`	0.05	-1 to 1	03 Animation	Speed at which the checker columns spin around the tunnel axis (a phase added to the tunnel U...
`Speed`	0.5	-4 to 4	03 Animation	Animation speed.
`ColorA`	(0.01, 0, 0.05, 1)	-	01 Color	Colour of the dark checker squares on the tunnel wall.
`ColorB`	(0.05, 0.85, 1, 1)	-	01 Color	Colour of the bright checker squares on the tunnel wall.

5 more parameters in the instance's Details panel. **Instances:** `MI_Illusion_InfiniteTunnel_Neon`, `MI_Illusion_InfiniteTunnel_Inferno`, `MI_Illusion_InfiniteTunnel_Mono`, `MI_Illusion_InfiniteTunnel_Candy`

INFINITE ZOOM



Infinite Zoom: flat panel and shader ball

Endless zoom into the center (log-polar Droste).

`MaterialFX/Illusion/M_Illusion_InfiniteZoom` Surface / Opaque / Unlit Instances `3`

Field	Default	Range	Group	What it does
`Tiling`	1	0.1 to 16	02 Pattern	How many times the pattern repeats across the surface (UV scale).
`BandDensity`	2	0.25 to 8	02 Pattern	Number of bands per log-polar radius unit.
`Twist`	0	-12 to 12	02 Pattern	Amount the bands spiral around the centre (log-polar angle multiplied by Twist).
`Speed`	0.1	-4 to 4	03 Animation	Animation speed.
`PaletteB`	(0.5, 0.5, 0.5, 1)	-	01 Color	Cosine palette amplitude (B): how far the colours swing around the base.
`PaletteD`	(0, 0.33, 0.67, 1)	-	01 Color	Cosine palette phase (D): shifts which colours appear in the rings.
`Glow`	1.3	0 to 50	04 Glow	Brightness multiplier of the emissive light (higher = brighter, more bloom).

Instances: `MI_Illusion_InfiniteZoom_Rainbow`, `MI_Illusion_InfiniteZoom_Ember`, `MI_Illusion_InfiniteZoom_AquaSpiral`

INTERIOR ROOMS



Interior Rooms: flat panel and shader ball

Fake 3D rooms behind a flat window (interior mapping).

`MaterialFX/Illusion/M_Illusion_InteriorRooms` Surface / Opaque / Unlit Instances `3`

Field	Default	Range	Group	What it does
`RoomsX`	4	1 to 16	02 Pattern	Number of rooms (windows) across the surface.
`RoomsY`	4	1 to 16	02 Pattern	Number of rooms (windows) up the surface.
`RoomDepth`	1	0.2 to 3	02 Pattern	Depth of each room behind the window plane; larger = deeper rooms, more parallax.
`LightsOn`	0.6	0 to 1	02 Pattern	Fraction (0-1) of rooms that are lit; each room gets a random value and is lit when it exceeds it.
`WallColor`	(0.85, 0.7, 0.5, 1)	-	01 Color	Colour of the room walls (varied slightly per room).
`FloorColor`	(0.35, 0.22, 0.12, 1)	-	01 Color	Colour of the room floors.
`LightColor`	(1, 0.85, 0.55, 1)	-	01 Color	Colour of the lamp glow in each room.
`FrameWidth`	0.05	0 to 0.2	02 Pattern	Thickness of the dark window frame around each room (fraction of the cell).

2 more parameters in the instance's Details panel. **Instances:** `MI_Illusion_InteriorRooms_Apartments`, `MI_Illusion_InteriorRooms_NeonCity`, `MI_Illusion_InteriorRooms_Lab`

KALEIDOSCOPE



Kaleidoscope: flat panel and shader ball

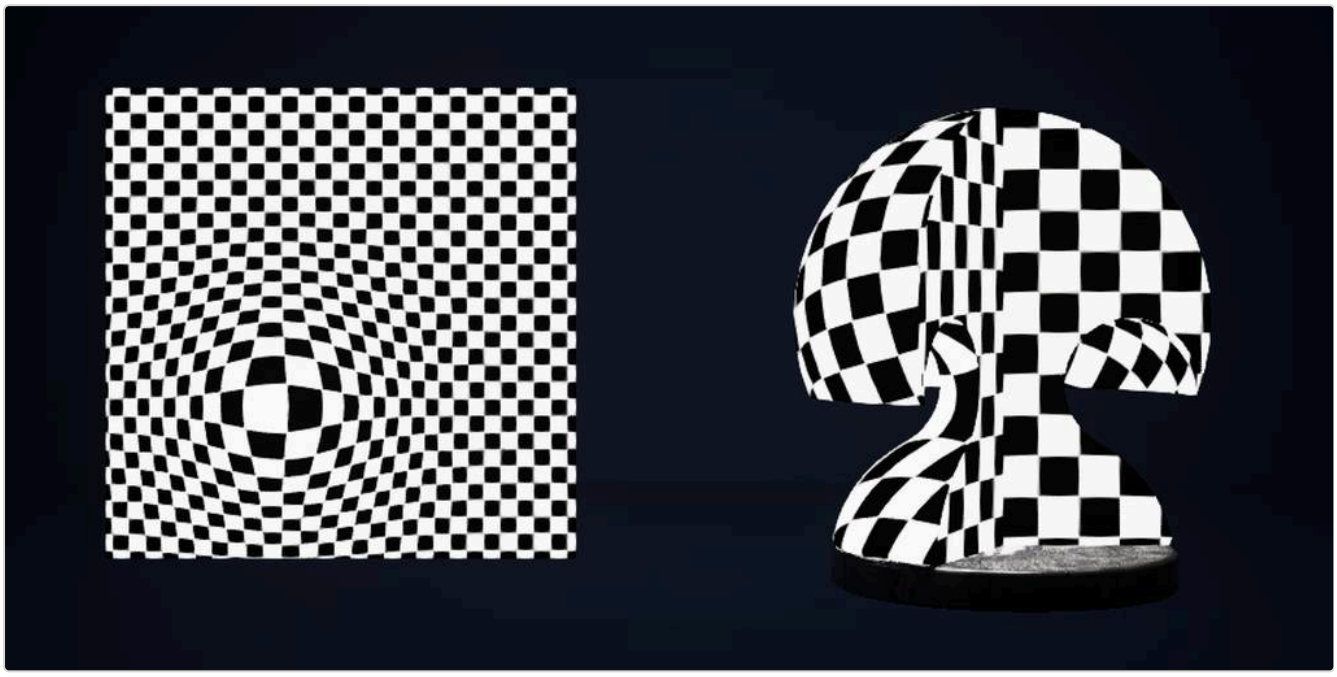
Rotating kaleidoscope of any texture.

`MaterialFX/Illusion/M_Illusion_Kaleidoscope` Surface / Opaque / Unlit Instances `3`

Field	Default	Range	Group	What it does
`Tiling`	1	0.1 to 16	02 Pattern	How many times the pattern repeats across the surface (UV scale).
`Segments`	6	2 to 24	02 Pattern	Number of repeated slices/segments.
`Speed`	0.03	-4 to 4	03 Animation	Animation speed.
`Zoom`	1	0.2 to 6	02 Pattern	Scale of the Pattern Texture inside each mirror segment.
`DriftSpeed`	0.02	-1 to 1	03 Animation	Speed at which the pattern texture scrolls horizontally inside the kaleidoscope.
`PatternTexture`	T_MFX_StainedGlass	-	05 Textures	Texture slot: swap in your own texture.
`Vignette`	1	0 to 1	02 Pattern	Amount 0-1 by which the tile edge (radius 0.35-0.5 from centre) fades to black.
`Glow`	1.4	0 to 50	04 Glow	Brightness multiplier of the emissive light (higher = brighter, more bloom).

Instances: `MI_Illusion_Kaleidoscope_StainedGlass`, `MI_Illusion_Kaleidoscope_Nebula`, `MI_Illusion_Kaleidoscope_GoldFiligree`

LENS BULGE



Lens Bulge: flat panel and shader ball

Checkerboard warped by a roaming magnifying-lens bulge.

`MaterialFX/Illusion/M_Illusion_LensBulge` Surface / Opaque / Unlit Instances `3`

Field	Default	Range	Group	What it does
`Tiling`	1	0.1 to 16	02 Pattern	How many times the pattern repeats across the surface (UV scale).
`Speed`	0.08	-4 to 4	03 Animation	Animation speed.
`Orbit`	0.22	0 to 0.45	03 Animation	Radius of the circular path the lens centre travels on.
`LensSize`	0.2	0.02 to 0.6	02 Pattern	Radius of the Gaussian lens (exp(-d^2 / size^2)).
`Bulge`	0.7	-1 to 0.95	02 Pattern	Strength of the magnification at the lens centre.
`Checks`	14	2 to 40	02 Pattern	Number of checker squares per tile in each direction.
`ColorA`	(0, 0, 0, 1)	-	01 Color	Colour of the first checker tone.
`ColorB`	(1, 1, 1, 1)	-	01 Color	Colour of the second checker tone.

1 more parameter in the instance's Details panel. **Instances:** `MI_Illusion_LensBulge_Classic`, `MI_Illusion_LensBulge_Toxic`, `MI_Illusion_LensBulge_Royal`

LENTICULAR



Lenticular: flat panel and shader ball

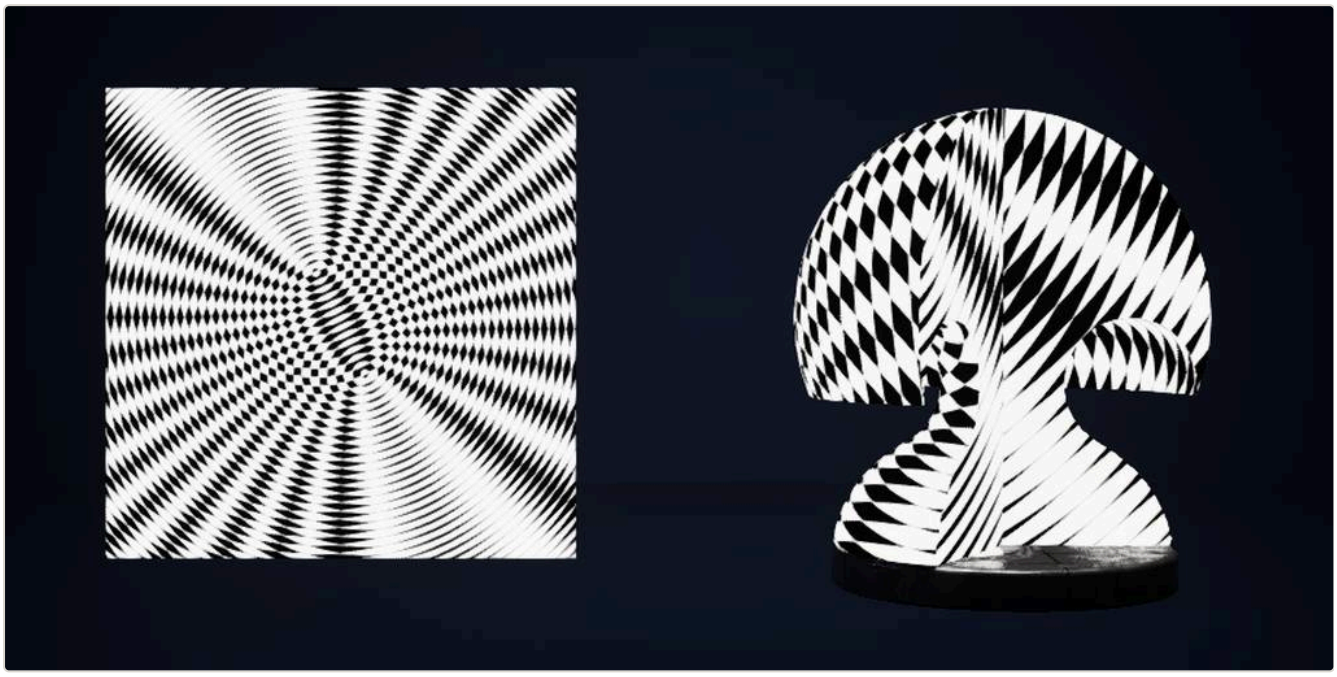
Lenticular print: shows one image or another depending on viewing angle, with ribbed plastic lines.

`MaterialFX/Illusion/M_Illusion_Lenticular` Surface / Opaque / Unlit Instances `2`

Field	Default	Range	Group	What it does
`Tiling`	1	0.1 to 16	02 Pattern	How many times the pattern repeats across the surface (UV scale).
`LensCount`	80	10 to 400	02 Pattern	Number of lenticular ribs across the surface.
`FlipBias`	0	-1 to 1	02 Pattern	Shifts the view angle at which Image A flips to Image B (added to the tangent-space view X).
`ImageA`	T_MFX_Galaxy	-	05 Textures	Texture slot: swap in your own texture.
`ImageB`	T_MFX_StainedGlass	-	05 Textures	Texture slot: swap in your own texture.
`Glow`	1.2	0 to 50	04 Glow	Brightness multiplier of the emissive light (higher = brighter, more bloom).

Instances: `MI_Illusion_Lenticular_GalaxyGlass` , `MI_Illusion_Lenticular_NebulaGold`

MOIRE



Moire: flat panel and shader ball

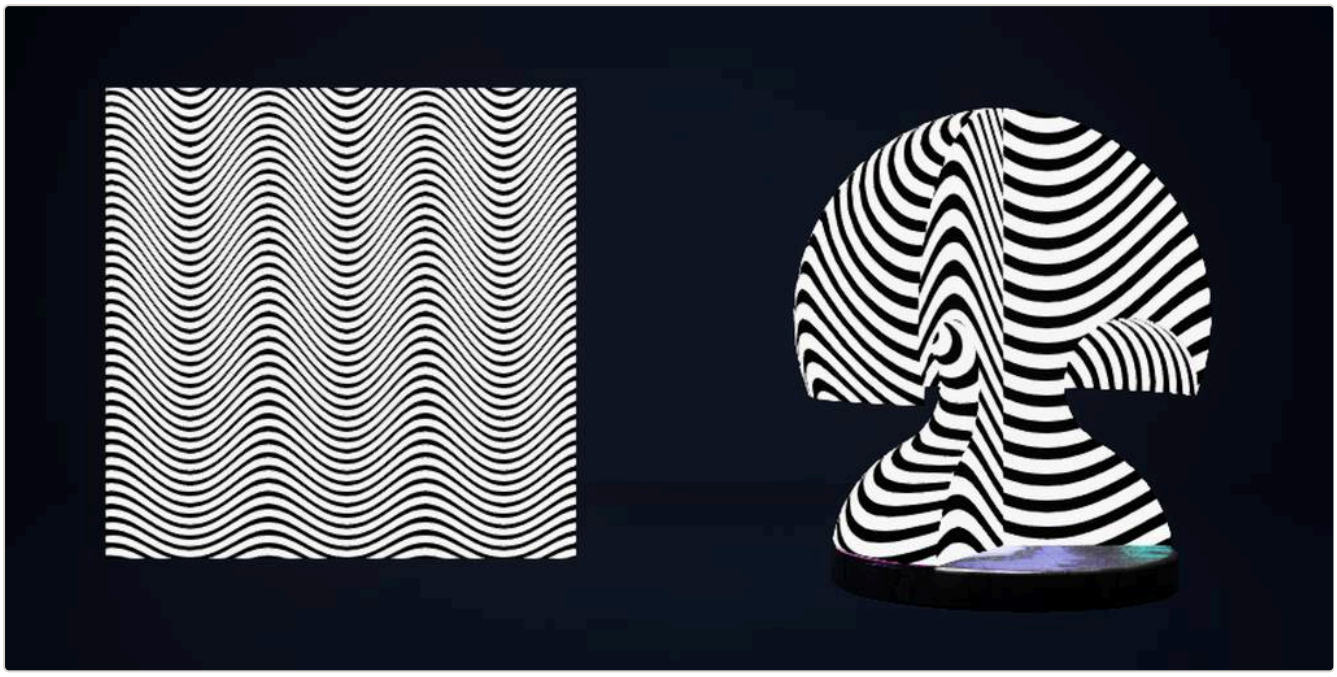
Moire interference from two orbiting ring patterns.

`MaterialFX/Illusion/M_Illusion_Moire` Surface / Opaque / Unlit Instances `3`

Field	Default	Range	Group	What it does
`Tiling`	1	0.1 to 16	02 Pattern	How many times the pattern repeats across the surface (UV scale).
`Speed`	0.06	-4 to 4	03 Animation	Animation speed.
`Orbit`	0.12	0 to 0.5	03 Animation	Radius of the circular path the two ring centres travel on (they move in opposite directions).
`RingFrequency`	28	4 to 120	02 Pattern	Number of concentric rings per UV unit in each of the two overlaid ring patterns.
`ColorA`	(0, 0, 0, 1)	-	01 Color	Colour of the first line set.
`ColorB`	(1, 1, 1, 1)	-	01 Color	Colour of the second line set.
`Glow`	1	0 to 50	04 Glow	Brightness multiplier of the emissive light (higher = brighter, more bloom).

Instances: `MI_Illusion_Moire_Classic` , `MI_Illusion_Moire_Ocean` , `MI_Illusion_Moire_Sunset`

OP ART WAVES



Op Art Waves: flat panel and shader ball

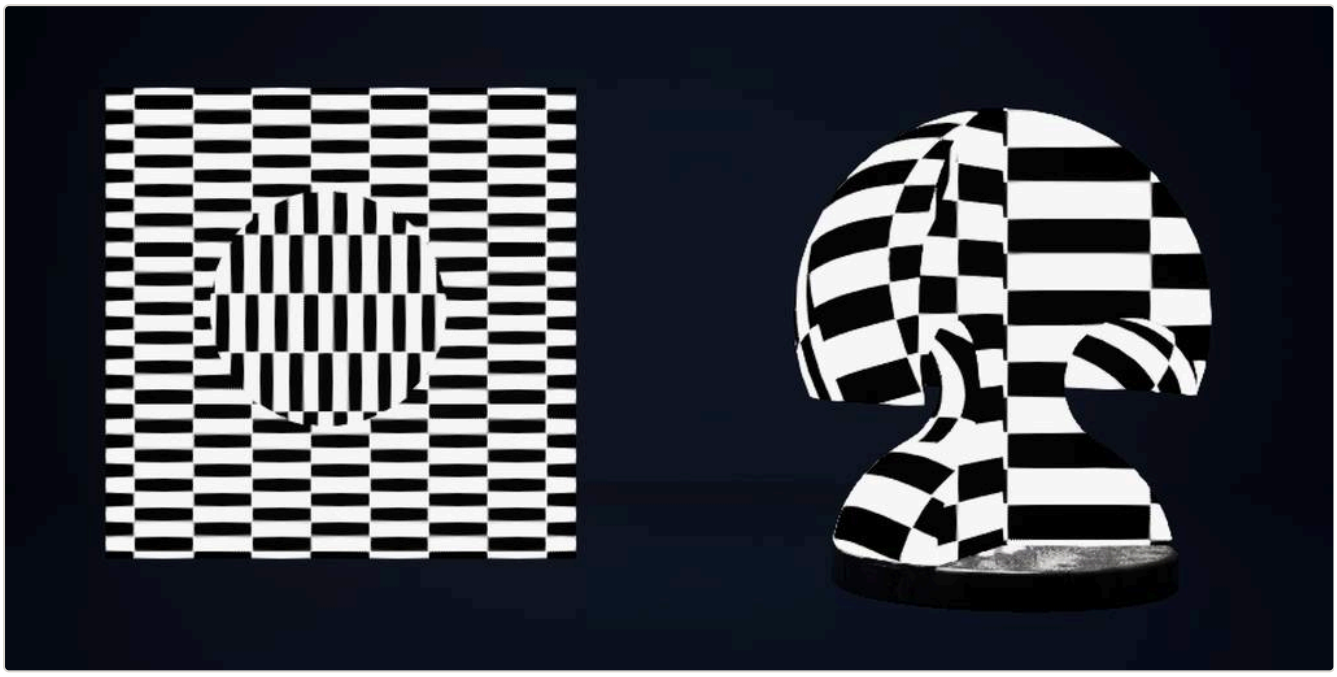
Op-art wave lines (Bridget Riley style).

`MaterialFX/Illusion/M_Illusion_OpArtWaves` Surface / Opaque / Unlit Instances `3`

Field	Default	Range	Group	What it does
`Tiling`	1	0.1 to 16	02 Pattern	How many times the pattern repeats across the surface (UV scale).
`Speed`	0.2	-4 to 4	03 Animation	Animation speed.
`Amplitude`	0.06	0 to 0.3	02 Pattern	Height of the sine wave that bends the stripes (its strength also pulses slowly along Y).
`Waves`	3	0.5 to 12	02 Pattern	Number of sine waves across the tile.
`Lines`	40	4 to 160	02 Pattern	Number of black/white stripes along Y.
`ColorA`	(0, 0, 0, 1)	-	01 Color	Colour of the dark wave bands.
`ColorB`	(1, 1, 1, 1)	-	01 Color	Colour of the light wave bands.
`Glow`	1	0 to 50	04 Glow	Brightness multiplier of the emissive light (higher = brighter, more bloom).

Instances: `MI_Illusion_OpArtWaves_Classic`, `MI_Illusion_OpArtWaves_Cyber`, `MI_Illusion_OpArtWaves_Retro`

OUCHI



Ouchi: flat panel and shader ball

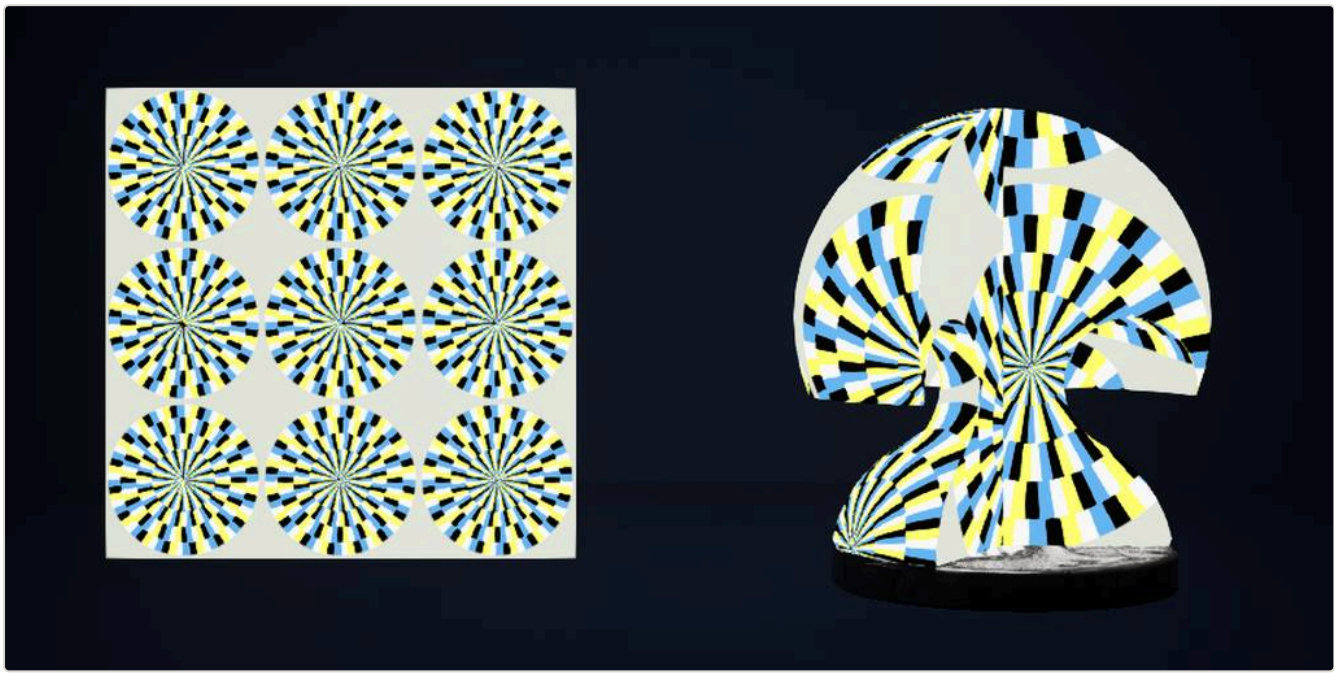
Ouchi illusion: the inner disc seems to float and slide over the background.

`MaterialFX/Illusion/M_Illusion_Ouchi` Surface / Opaque / Unlit Instances `2`

Field	Default	Range	Group	What it does
`Tiling`	1	0.1 to 16	02 Pattern	How many times the pattern repeats across the surface (UV scale).
`Speed`	0.05	-4 to 4	03 Animation	Animation speed.
`Drift`	0.04	0 to 0.2	03 Animation	Radius of the circular path the centre disc travels on.
`Bricks`	16	4 to 60	02 Pattern	Number of checker bricks across the tile (the inner disc uses the same bricks turned 90 degrees).
`DiscRadius`	0.25	0.05 to 0.5	02 Pattern	Radius of the centre disc whose bricks run in the other direction.
`ColorA`	(0, 0, 0, 1)	-	01 Color	Colour of the first checker tone.
`ColorB`	(1, 1, 1, 1)	-	01 Color	Colour of the second checker tone.
`Glow`	1	0 to 50	04 Glow	Brightness multiplier of the emissive light (higher = brighter, more bloom).

Instances: `MI_Illusion_Ouchi_Classic`, `MI_Illusion_Ouchi_Neon`

PERIPHERAL DRIFT



Peripheral Drift: flat panel and shader ball

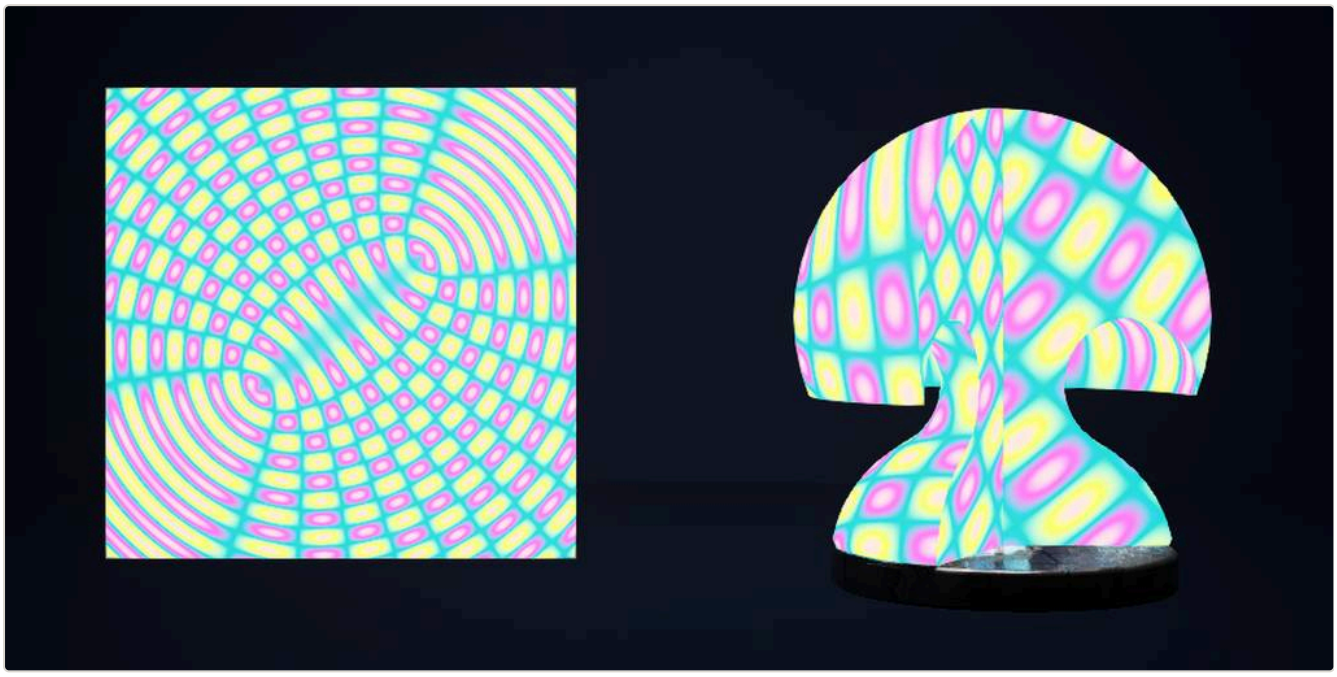
Rotating-snakes illusion: a perfectly still pattern that appears to turn in your peripheral vision.

`MaterialFX/Illusion/M_Illusion_PeripheralDrift` Surface / Opaque / Unlit Instances `3`

Field	Default	Range	Group	What it does
`Tiling`	1	0.1 to 16	02 Pattern	How many times the pattern repeats across the surface (UV scale).
`Discs`	3	1 to 12	02 Pattern	Number of discs per row and column (cell scale of the disc grid).
`Rings`	5	1 to 10	02 Pattern	Number of concentric rings inside each disc; each ring flips its segment direction.
`Segments`	16	4 to 40	02 Pattern	Number of repeated slices/segments.
`Speed`	0	-4 to 4	03 Animation	Animation speed.
`Color0`	(0, 0, 0, 1)	-	01 Color	Colour of the first (darkest) of the four tones painted on each disc.
`Color1`	(0.05, 0.15, 0.85, 1)	-	01 Color	Colour of the second tone of each disc.
`Color2`	(1, 1, 1, 1)	-	01 Color	Colour of the third tone of each disc.

3 more parameters in the instance's Details panel. **Instances:** `MI_Illusion_PeripheralDrift_Classic`, `MI_Illusion_PeripheralDrift_RedGreen`, `MI_Illusion_PeripheralDrift_Mono`

RIPPLE TANK



Ripple Tank: flat panel and shader ball

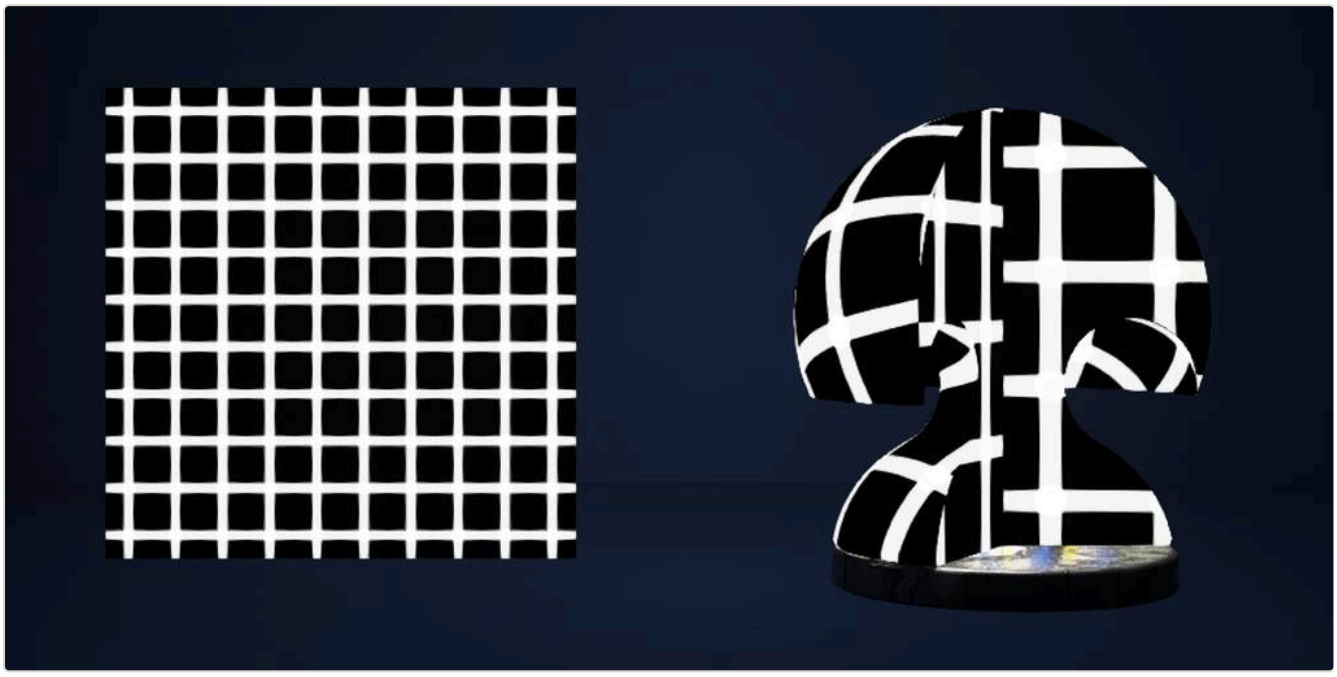
Wave interference from two moving sources, colored like thin-film light.

`MaterialFX/Illusion/M_Illusion_RippleTank` Surface / Opaque / Unlit Instances `3`

Field	Default	Range	Group	What it does
`Tiling`	1	0.1 to 16	02 Pattern	How many times the pattern repeats across the surface (UV scale).
`Speed`	0.4	-4 to 4	03 Animation	Animation speed.
`WaveFrequency`	14	2 to 60	02 Pattern	Number of ripples per UV unit from each of the two orbiting wave sources.
`PaletteC`	(1, 1, 1, 1)	-	01 Color	Cosine palette frequency (C): how many colour cycles appear across the ripples.
`PaletteD`	(0, 0.33, 0.67, 1)	-	01 Color	Cosine palette phase (D): shifts which colours appear.
`Glow`	1.4	0 to 50	04 Glow	Brightness multiplier of the emissive light (higher = brighter, more bloom).

Instances: `MI_Illusion_RippleTank_Prism` , `MI_Illusion_RippleTank_Ocean` , `MI_Illusion_RippleTank_Fire`

SCINTILLATING GRID



Scintillating Grid: flat panel and shader ball

Scintillating grid: dark dots flicker at the grid intersections you are not looking at.

`MaterialFX/Illusion/M_Illusion_ScintillatingGrid` Surface / Opaque / Unlit Instances `2`

Field	Default	Range	Group	What it does
`Tiling`	1	0.1 to 16	02 Pattern	How many times the pattern repeats across the surface (UV scale).
`Cells`	10	2 to 40	02 Pattern	Number of grid cells per tile in each direction.
`LineWidth`	0.18	0.02 to 0.5	02 Pattern	Width of the grey grid lines.
`DotSize`	0.14	0.02 to 0.4	02 Pattern	Radius of the white dots at the grid-line intersections (anti-aliased circle around the point where the…
`Background`	(0, 0, 0, 1)	-	01 Color	Colour behind the grid.
`LineColor`	(0.45, 0.45, 0.45, 1)	-	01 Color	Colour of the grid lines.
`DotColor`	(1, 1, 1, 1)	-	01 Color	Colour of the dots at the line crossings.
`Glow`	1	0 to 50	04 Glow	Brightness multiplier of the emissive light (higher = brighter, more bloom).

Instances: `MI_Illusion_ScintillatingGrid_Classic`, `MI_Illusion_ScintillatingGrid_Neon`

SPIN STOP



Spin Stop: flat panel and shader ball

Motion aftereffect: a spiral spins, then stops dead - and appears to keep turning backwards.

`MaterialFX/Illusion/M_Illusion_SpinStop` Surface / Opaque / Unlit Instances `2`

Field	Default	Range	Group	What it does
`Tiling`	1	0.1 to 16	02 Pattern	How many times the pattern repeats across the surface (UV scale).
`CycleSpeed`	0.12	0.01 to 1	03 Animation	Speed of the spin/stop cycle in cycles per second (the animation phase is frac(Time x CycleSpeed)).
`SpinPortion`	0.65	0.1 to 1	03 Animation	Fraction of each cycle spent spinning: smoothstep(0, SpinPortion, cycle).
`TurnsPerCycle`	3	1 to 10	03 Animation	Spiral turns made during one spin phase.
`Arms`	3	1 to 12	02 Pattern	Number of spiral arms.
`Tightness`	10	0 to 30	02 Pattern	How tightly the spiral winds (radius multiplier added to the arm phase).
`ColorA`	(0, 0, 0, 1)	-	01 Color	Colour of the first segment tone.
`ColorB`	(1, 1, 1, 1)	-	01 Color	Colour of the second segment tone.

1 more parameter in the instance's Details panel. **Instances:** `MI_Illusion_SpinStop_Classic` , `MI_Illusion_SpinStop_Red`

STEREOKINETIC



Stereokinetic: flat panel and shader ball

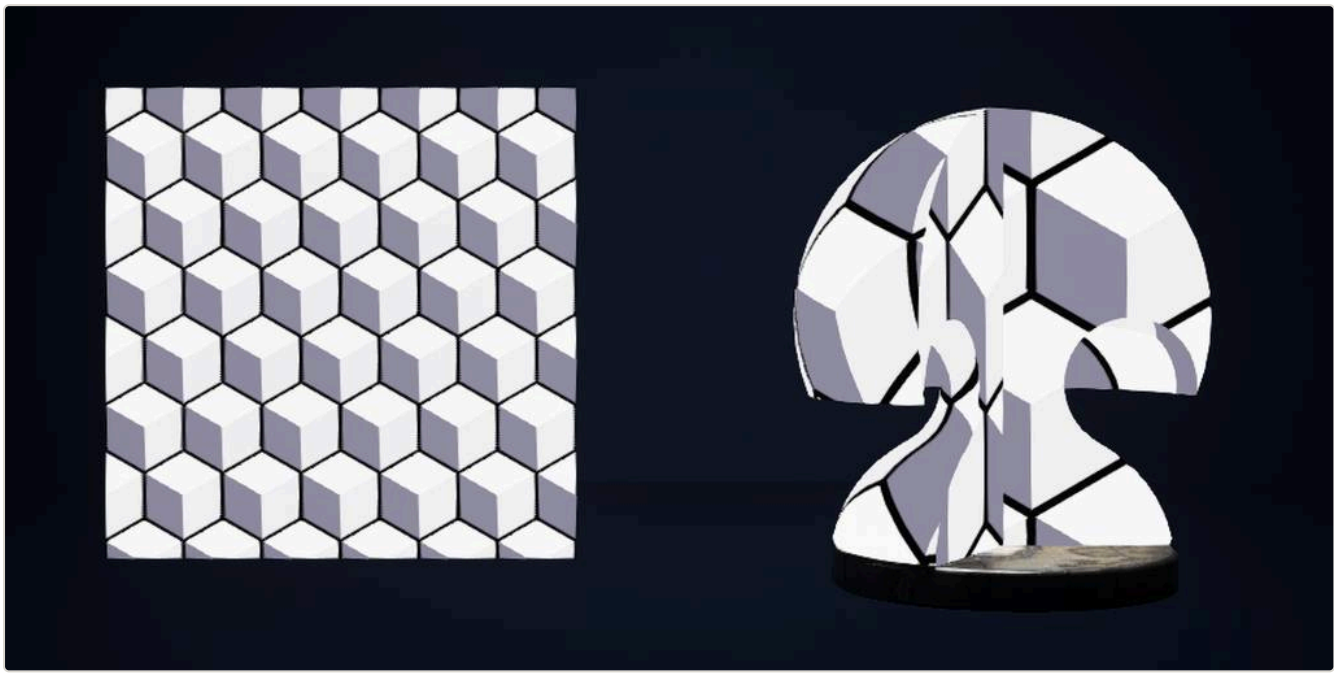
Stereokinetic cone: flat offset circles rotating together appear as a 3D cone or tunnel.

`MaterialFX/Illusion/M_Illusion_Stereokinetic` Surface / Opaque / Unlit Instances `2`

Field	Default	Range	Group	What it does
`Tiling`	1	0.1 to 16	02 Pattern	How many times the pattern repeats across the surface (UV scale).
`Speed`	0.2	-4 to 4	03 Animation	Animation speed.
`ColorA`	(0, 0, 0, 1)	-	01 Color	Colour of the first ring tone.
`ColorB`	(1, 1, 1, 1)	-	01 Color	Colour of the second ring tone.
`Glow`	1	0 to 50	04 Glow	Brightness multiplier of the emissive light (higher = brighter, more bloom).

Instances: `MI_Illusion_Stereokinetic_Classic` , `MI_Illusion_Stereokinetic_Neon`

TUMBLING BLOCKS



Tumbling Blocks: flat panel and shader ball

Isometric cube illusion from a flat hex grid.

`MaterialFX/Illusion/M_Illusion_TumblingBlocks` Surface / Opaque / Unlit Instances `3`

Field	Default	Range	Group	What it does
`Tiling`	1	0.1 to 16	02 Pattern	How many times the pattern repeats across the surface (UV scale).
`Scale`	6	1 to 30	02 Pattern	Number of hexagon cells per tile (scale passed to MF_UV_Hex).
`FlipSpeed`	0.12	0 to 2	03 Animation	Speed of the periodic cube flip in cycles per second (a 0-1 sine wave at this frequency shifts which…
`TopColor`	(0.95, 0.95, 0.95, 1)	-	01 Color	Colour of the top face of each block.
`LeftColor`	(0.55, 0.55, 0.6, 1)	-	01 Color	Colour of the left face of each block.
`RightColor`	(0.12, 0.12, 0.16, 1)	-	01 Color	Colour of the right face of each block.
`Glow`	1	0 to 50	04 Glow	Brightness multiplier of the emissive light (higher = brighter, more bloom).

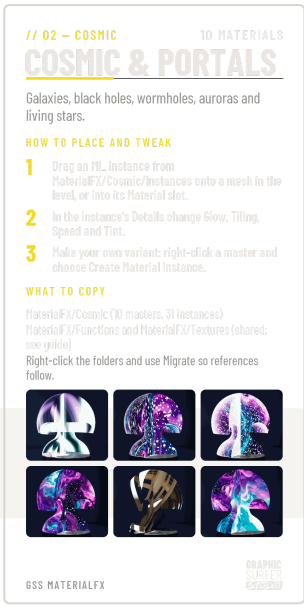
Instances: `MI_Illusion_TumblingBlocks_Classic` , `MI_Illusion_TumblingBlocks_Pastel` , `MI_Illusion_TumblingBlocks_Gold`

COSMIC & PORTALS

Galaxies, black holes, wormholes, auroras and living stars.

10 masters, 31 instances. Folder `MaterialFX/Cosmic/` (instances in `MaterialFX/Cosmic/Instances/`). Uses 5 material functions and 4 textures from `MaterialFX/Functions` and `MaterialFX/Textures`.

Domain	Blend	Shading	Sides	Masters
Surface	Additive	Unlit	two-sided	1
Surface	Masked	Lit (default lit)	two-sided	1
Surface	Opaque	Lit (default lit)	one-sided	1
Surface	Opaque	Unlit	one-sided	7

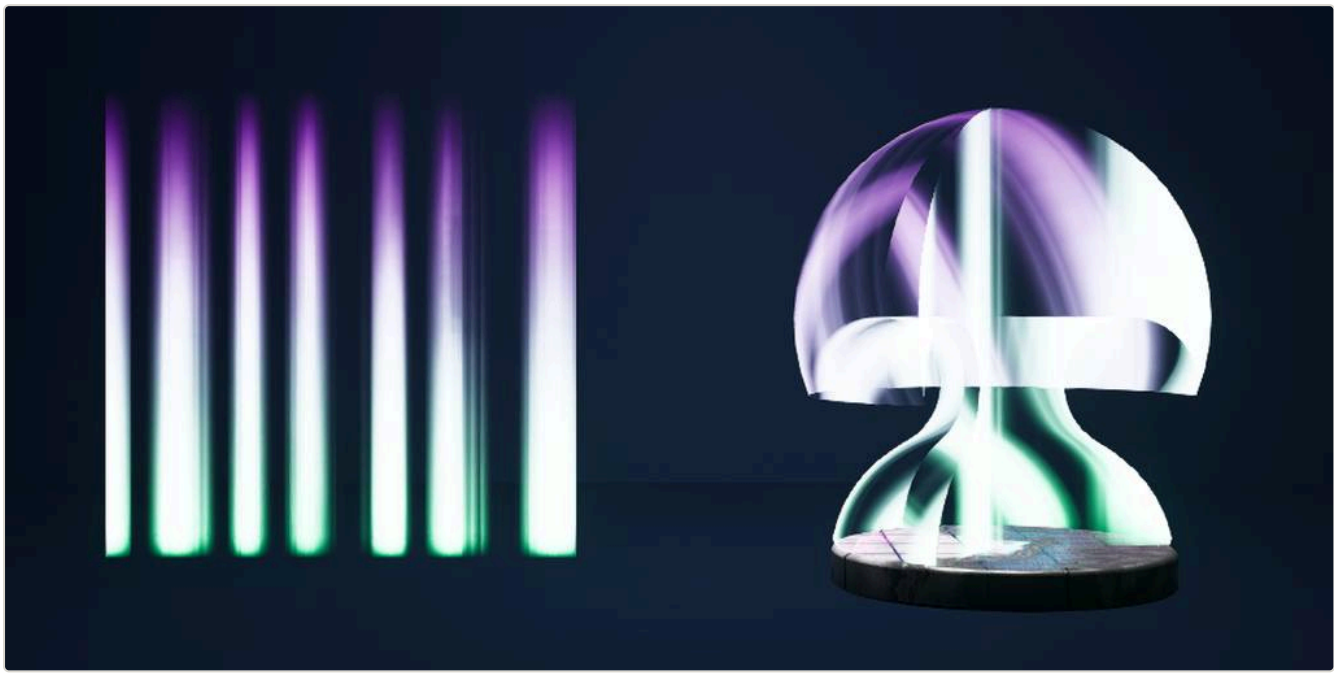


> **AI DISCLOSURE:** AI-generated textures used by this bundle (1 of its 4 textures): Nebula.

MASTERS IN COSMIC & PORTALS

Master	Looks like	Instances
`M_Cosmic_Aurora`	Aurora curtain: rippling ribbons of light.	3
`M_Cosmic_BlackHole`	Black hole with a glowing accretion disk.	3
`M_Cosmic_DeepSpace`	Layered parallax starfield: a flat panel that looks miles…	3
`M_Cosmic_Eclipse`	Total solar eclipse: black disc, shimmering corona rays and a…	3
`M_Cosmic_GalaxyWindow`	The mesh becomes a window into deep space.	4
`M_Cosmic_NebulaFlow`	Swirling nebula gas that flows endlessly across the surface…	3
`M_Cosmic_Planet`	Procedural gas-giant planet with rotating cloud bands.	3
`M_Cosmic_PlanetRings`	Planetary ring system: banded translucent rings with gaps and…	3
`M_Cosmic_StarSurface`	Boiling star surface: flowing plasma granules.	3
`M_Cosmic_Wormhole`	Flying through a nebula wormhole.	3

AURORA



Aurora: flat panel and shader ball

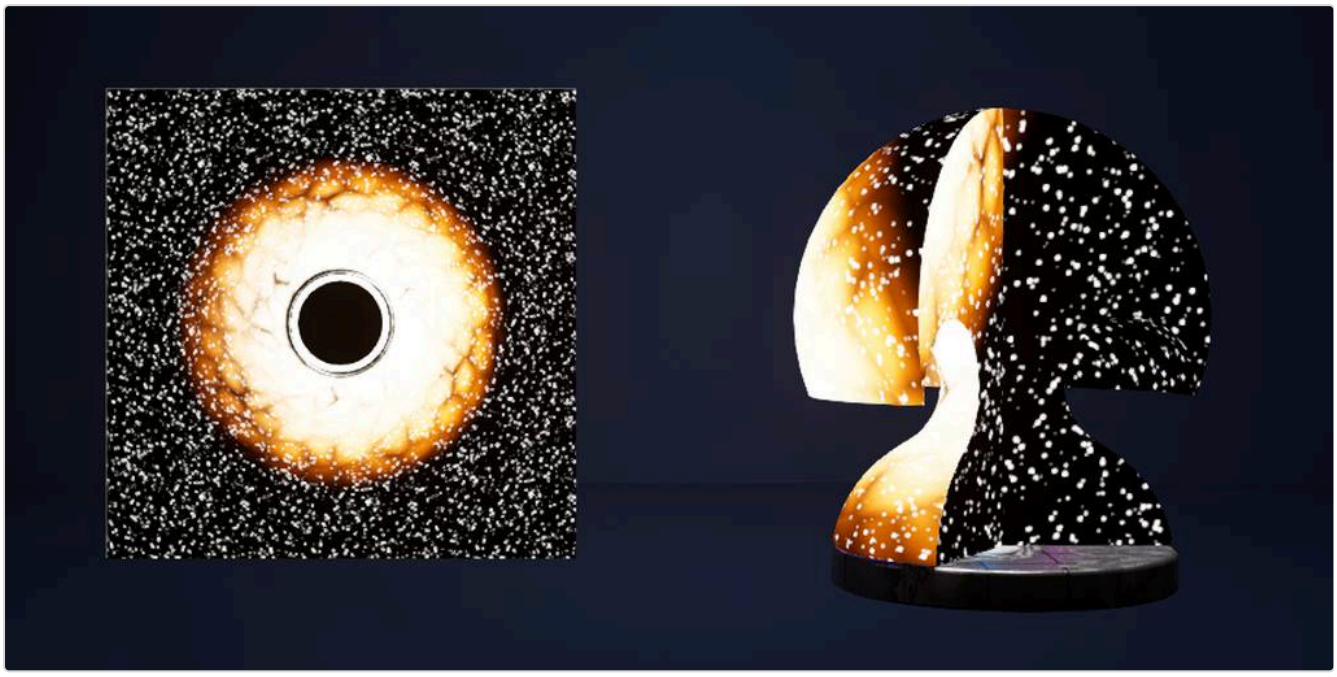
Aurora curtain: rippling ribbons of light.

`MaterialFX/Cosmic/M_Cosmic_Aurora` Surface / Additive / Unlit Instances `3`

Field	Default	Range	Group	What it does
`Tiling`	1	0.1 to 16	02 Pattern	How many times the pattern repeats across the surface (UV scale).
`Speed`	0.03	-4 to 4	03 Animation	Animation speed.
`WaveNoise`	T_MFX_Noise_Packed_B	-	05 Textures	Texture slot: swap in your own texture.
`Ribbons`	6	1 to 30	02 Pattern	Number of aurora curtain ribbons across the tile.
`Ripple`	3	0 to 10	02 Pattern	How strongly the slow wave noise bends the ribbons sideways (added to the ribbon coordinate).
`RayNoise`	T_MFX_Noise_Packed_A	-	05 Textures	Texture slot: swap in your own texture.
`LowColor`	(0.1, 1, 0.35, 1)	-	01 Color	Colour at the lower, brightest edge of the curtain (blended to HighColor toward the top by y^0.7).
`HighColor`	(0.6, 0.1, 1, 1)	-	01 Color	Colour at the upper, fading end of the curtain.

1 more parameter in the instance's Details panel. **Instances:** `MI_Cosmic_Aurora_Northern`, `MI_Cosmic_Aurora_Ember`, `MI_Cosmic_Aurora_Glacier`

BLACK HOLE



Black Hole: flat panel and shader ball

Black hole with a glowing accretion disk, photon ring and gravitationally lensed stars.

`MaterialFX/Cosmic/M_Cosmic_BlackHole` Surface / Opaque / Unlit Instances `3`

Field	Default	Range	Group	What it does
`Tiling`	1	0.1 to 16	02 Pattern	How many times the pattern repeats across the surface (UV scale).
`HorizonRadius`	0.09	0.01 to 0.3	02 Pattern	Radius of the black event-horizon disc in UV units; everything inside is black.
`DiskRadius`	0.36	0.1 to 0.5	02 Pattern	Outer radius of the accretion disc; it starts at 1.25 x HorizonRadius.
`Lensing`	0.012	0 to 0.05	02 Pattern	Strength of the gravitational lensing: background stars are displaced by Lensing / radius^2 around the...
`Stars`	T_MFX_Stars	-	05 Textures	Texture slot: swap in your own texture.
`StarBrightness`	1.5	0 to 10	04 Glow	Brightness multiplier of the lensed background stars.
`Speed`	0.06	-4 to 4	03 Animation	Animation speed.
`DiskNoise`	T_MFX_Noise_Packed_A	-	05 Textures	Texture slot: swap in your own texture.

5 more parameters in the instance's Details panel. **Instances:** `MI_Cosmic_BlackHole_Gargantua`, `MI_Cosmic_BlackHole_BlueQuasar`, `MI_Cosmic_BlackHole_Violet`

DEEP SPACE



Deep Space: flat panel and shader ball

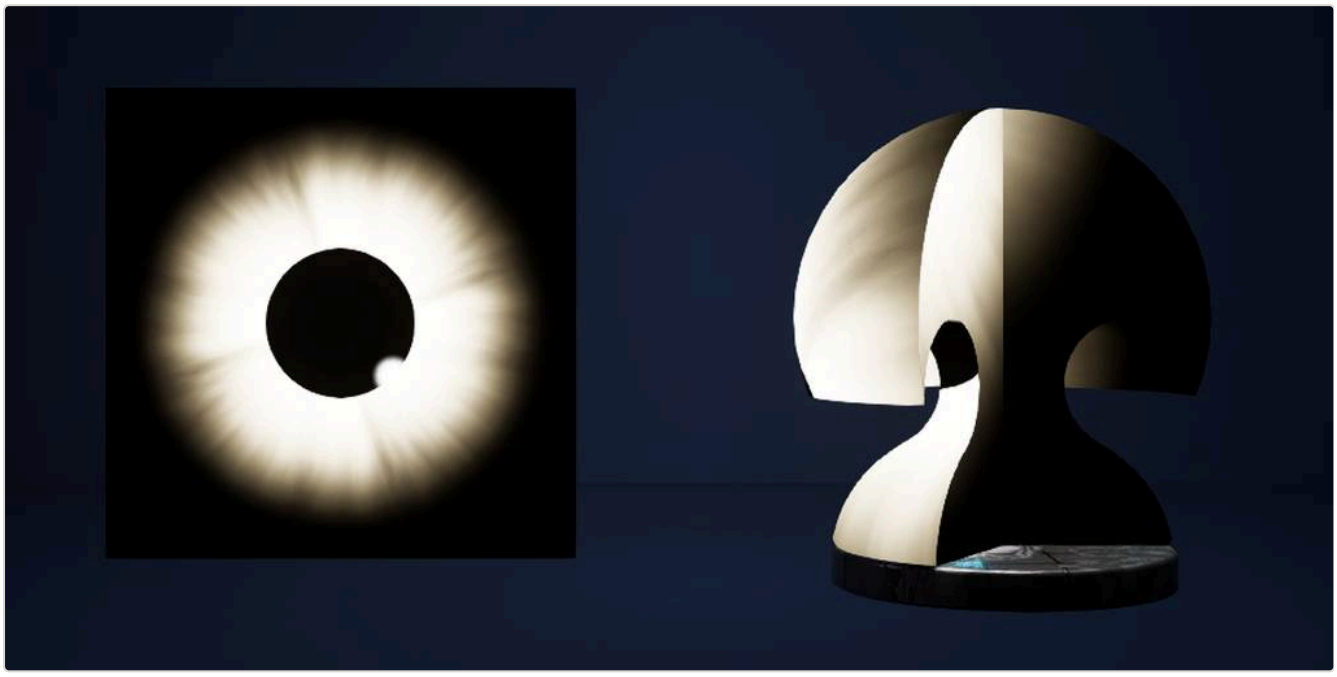
Layered parallax starfield: a flat panel that looks miles deep.

`MaterialFX/Cosmic/M_Cosmic_DeepSpace` Surface / Opaque / Unlit Instances `3`

Field	Default	Range	Group	What it does
`Tiling`	1	0.1 to 16	02 Pattern	How many times the pattern repeats across the surface (UV scale).
`Depth`	0.4	0 to 2	02 Pattern	Strength of the fake depth / parallax.
`DriftSpeed`	0.01	-0.5 to 0.5	03 Animation	Speed at which the star and nebula layers drift sideways (the nearer layers move faster).
`Stars`	T_MFX_Stars	-	05 Textures	Texture slot: swap in your own texture.
`NearStarColor`	(1, 1, 1, 1)	-	01 Color	Colour of the nearest, brightest star layer.
`Nebula`	T_MFX_Nebula	-	05 Textures	Texture slot: swap in your own texture.
`NebulaTint`	(1, 1, 1, 1)	-	01 Color	Multiplies the nebula cloud colours.
`Glow`	1	0 to 50	04 Glow	Brightness multiplier of the emissive light (higher = brighter, more bloom).

Instances: `MI_Cosmic_DeepSpace_Classic`, `MI_Cosmic_DeepSpace_Crimson`, `MI_Cosmic_DeepSpace_Teal`

ECLIPSE



Eclipse: flat panel and shader ball

Total solar eclipse: black disc, shimmering corona rays and a diamond-ring flare.

`MaterialFX/Cosmic/M_Cosmic_Eclipse` Surface / Opaque / Unlit Instances `3`

Field	Default	Range	Group	What it does
`Tiling`	1	0.1 to 16	02 Pattern	How many times the pattern repeats across the surface (UV scale).
`DiscRadius`	0.16	0.05 to 0.4	02 Pattern	Radius of the black eclipsing disc in UV units; the corona is drawn outside it.
`Speed`	0.02	-4 to 4	03 Animation	Animation speed.
`RayNoise`	T_MFX_Noise_Packed_A	-	05 Textures	Texture slot: swap in your own texture.
`CoronaSize`	0.3	0.05 to 0.5	02 Pattern	Distance beyond the disc over which the corona rays fade out.
`CoronaColor`	(1, 0.85, 0.6, 1)	-	01 Color	Colour of the glowing corona ring around the eclipsed disk.
`Glow`	1.5	0 to 50	04 Glow	Brightness multiplier of the emissive light (higher = brighter, more bloom).

Instances: `MI_Cosmic_Eclipse_Solar`, `MI_Cosmic_Eclipse_Blood`, `MI_Cosmic_Eclipse_Alien`

GALAXY WINDOW



Galaxy Window: flat panel and shader ball

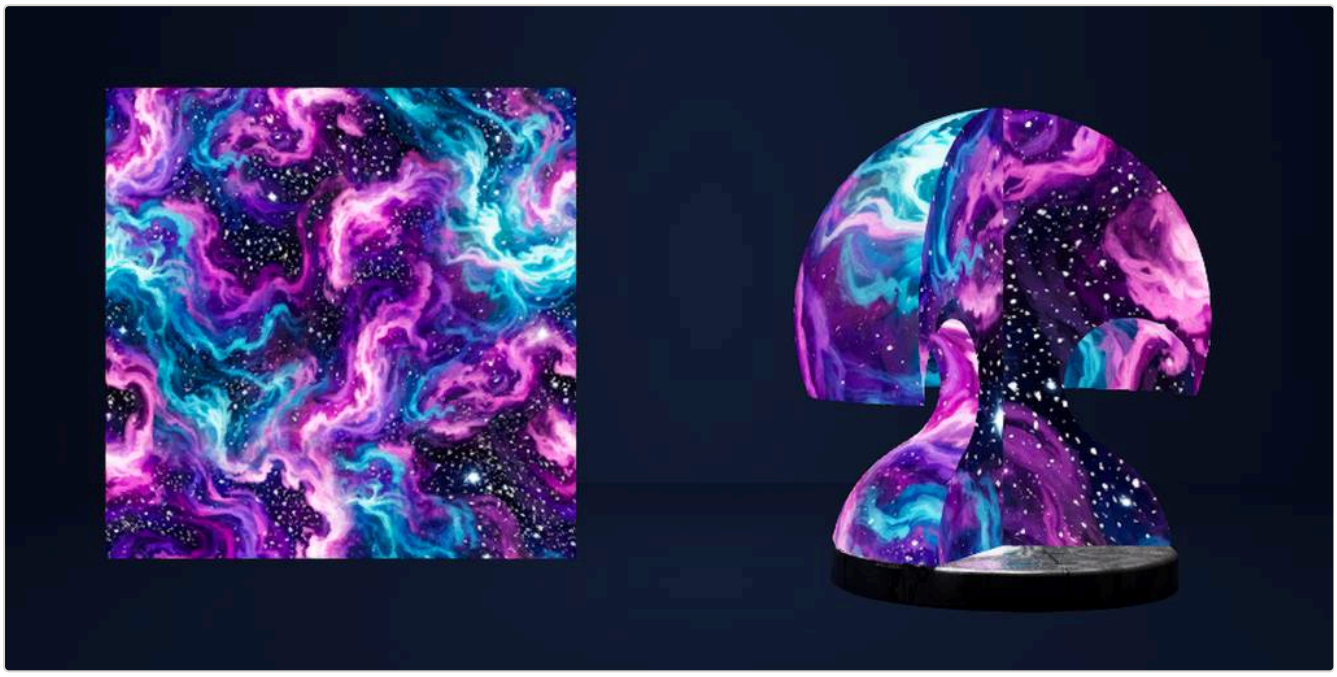
The mesh becomes a window into deep space: stars and nebula stay locked to the sky as you move (galaxy-skin look).

`MaterialFX/Cosmic/M_Cosmic_GalaxyWindow` Surface / Opaque / Unlit Instances `4`

Field	Default	Range	Group	What it does
`SkyScale`	2.5	0.1 to 8	02 Pattern	Scale of the sky seen through the window (Scale input of MF_UV_SkyWindow).
`DriftSpeed`	0.004	-0.2 to 0.2	03 Animation	Speed at which the nebula and the near star layer slide sideways (Hz of a wrapped phase added to U).
`Nebula`	T_MFX_Nebula	-	05 Textures	Texture slot: swap in your own texture.
`NebulaTint`	(1, 1, 1, 1)	-	01 Color	Multiplies the colours of the nebula layer seen through the window.
`NebulaBrightness`	1	0 to 5	04 Glow	Multiplier on the nebula layer (nebula texture x NebulaTint x NebulaBrightness).
`Stars`	T_MFX_Stars	-	05 Textures	Texture slot: swap in your own texture.
`StarColor`	(0.9, 0.95, 1, 1)	-	01 Color	Colour of the star field in the window.
`StarBrightness`	2.5	0 to 20	04 Glow	Multiplier on the twinkling star layers (two star samples x StarColor x StarBrightness).

4 more parameters in the instance's Details panel. **Instances:** `MI_Cosmic_GalaxyWindow_Classic`, `MI_Cosmic_GalaxyWindow_DeepBlue`, `MI_Cosmic_GalaxyWindow_GoldDust`, `MI_Cosmic_GalaxyWindow_Void`

NEBULA FLOW



Nebula Flow: flat panel and shader ball

Swirling nebula gas that flows endlessly across the surface (two-phase flow map).

`MaterialFX/Cosmic/M_Cosmic_NebulaFlow` Surface / Opaque / Unlit Instances `3`

Field	Default	Range	Group	What it does
`Tiling`	1	0.1 to 16	02 Pattern	How many times the pattern repeats across the surface (UV scale).
`FlowNoise`	T_MFX_Noise_Packed_B	-	05 Textures	Texture slot: swap in your own texture.
`FlowStrength`	0.25	0 to 1	02 Pattern	How far the nebula is pushed along the flow-noise direction during its endless two-phase flow loop.
`Speed`	0.08	-4 to 4	03 Animation	Animation speed.
`Nebula`	T_MFX_Nebula	-	05 Textures	Texture slot: swap in your own texture.
`Tint`	(1, 1, 1, 1)	-	01 Color	Color multiplied over the result.
`Glow`	1.3	0 to 50	04 Glow	Brightness multiplier of the emissive light (higher = brighter, more bloom).

Instances: `MI_Cosmic_NebulaFlow_Classic` , `MI_Cosmic_NebulaFlow_Emerald` , `MI_Cosmic_NebulaFlow_Inferno`

PLANET



Planet: flat panel and shader ball

Procedural gas-giant planet with rotating cloud bands, a storm spot and an atmosphere rim.

`MaterialFX/Cosmic/M_Cosmic_Planet` Surface / Opaque / Lit (default lit) Instances `3`

Field	Default	Range	Group	What it does
`RotationSpeed`	0.01	-0.2 to 0.2	03 Animation	Speed at which the planet surface scrolls in longitude (Hz of a wrapped phase added to U).
`BandNoise`	T_MFX_Noise_Packed_B	-	05 Textures	Texture slot: swap in your own texture.
`Bands`	9	1 to 30	02 Pattern	Number of horizontal cloud bands from pole to pole.
`Turbulence`	2	0 to 8	02 Pattern	How much the band noise bends the bands (noise x Turbulence added to the band coordinate).
`BandColorA`	(0.95, 0.8, 0.6, 1)	-	01 Color	Colour of the light cloud bands; blends with BandColorB across the bands.
`BandColorB`	(0.55, 0.3, 0.15, 1)	-	01 Color	Colour of the dark cloud bands.
`StormColor`	(0.85, 0.3, 0.15, 1)	-	01 Color	Colour of the storm spot painted over the bands.
`AtmosphereColor`	(1, 0.75, 0.5, 1)	-	01 Color	Colour of the glowing atmosphere rim at the planet edge.

1 more parameter in the instance's Details panel. **Instances:** `MI_Cosmic_Planet_GasGiant`, `MI_Cosmic_Planet_IceGiant`, `MI_Cosmic_Planet_Toxic`

PLANET RINGS



Planet Rings: flat panel and shader ball

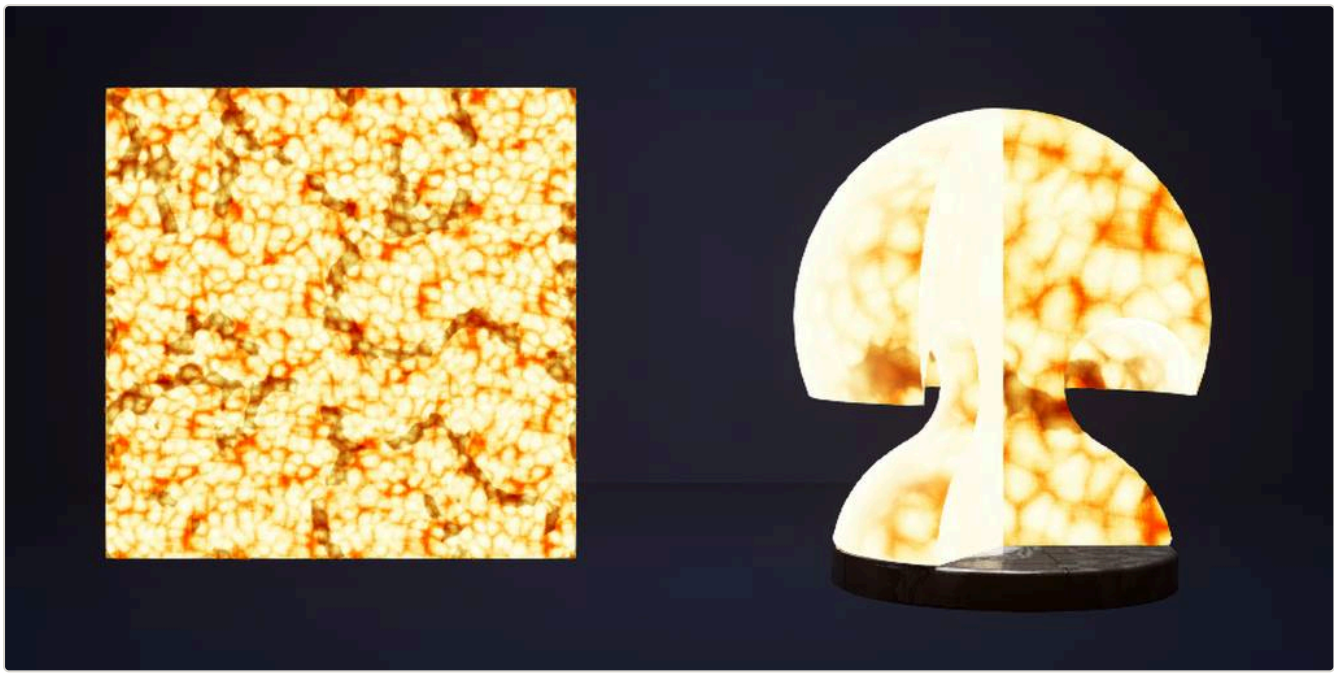
Planetary ring system: banded translucent rings with gaps and sparkling ice.

`MaterialFX/Cosmic/M_Cosmic_PlanetRings` Surface / Masked / Lit (default lit) Instances `3`

Field	Default	Range	Group	What it does
`BandNoise`	T_MFX_Noise_Packed_B	-	05 Textures	Texture slot: swap in your own texture.
`GapAmount`	0.25	0 to 0.9	02 Pattern	Threshold for the gaps (Cassini-division look): band-noise values below this are cut out of the rings.
`RingCenter`	0.78	0.3 to 0.95	02 Pattern	Radius (0-1, from the tile centre) of the middle of the ring band.
`RingWidth`	0.2	0.02 to 0.5	02 Pattern	Half-width of the ring band around RingCenter.
`RingColorB`	(0.5, 0.35, 0.2, 1)	-	01 Color	Colour of the dark gaps and bands between the bright ones.
`RingColorA`	(0.95, 0.85, 0.65, 1)	-	01 Color	Colour of the bright ring bands.
`Sparkle`	2	0 to 50	04 Glow	Brightness of the sparkling ice-particle glints (the Sparkle mask is multiplied into the emissive by...

Instances: `MI_Cosmic_PlanetRings_Saturn` , `MI_Cosmic_PlanetRings_Ice` , `MI_Cosmic_PlanetRings_Dust`

STAR SURFACE



Star Surface: flat panel and shader ball

Boiling star surface: flowing plasma granules, dark sunspots and a corona rim.

`MaterialFX/Cosmic/M_Cosmic_StarSurface` Surface / Opaque / Unlit Instances `3`

Field	Default	Range	Group	What it does
`Tiling`	2	0.1 to 16	02 Pattern	How many times the pattern repeats across the surface (UV scale).
`WarpNoise`	T_MFX_Noise_Packed_B	-	05 Textures	Texture slot: swap in your own texture.
`Speed`	0.06	-4 to 4	03 Animation	Animation speed.
`PlasmaNoise`	T_MFX_Noise_Packed_A	-	05 Textures	Texture slot: swap in your own texture.
`Sunspots`	0.7	0 to 1	02 Pattern	Strength 0-1 of the dark sunspots: the warp-noise alpha is smoothstepped and scaled by Sunspots.
`CoolColor`	(0.45, 0.03, 0, 1)	-	01 Color	Colour of the cooler, darker patches of the star surface; blends toward HotColor with heat.
`HotColor`	(1, 0.62, 0.15, 1)	-	01 Color	Colour of the hottest, brightest parts of the star surface.
`CoronaColor`	(1, 0.6, 0.2, 1)	-	01 Color	Colour of the glow around the star edge.

1 more parameter in the instance's Details panel. **Instances:** `MI_Cosmic_StarSurface_Sun`, `MI_Cosmic_StarSurface_RedGiant`, `MI_Cosmic_StarSurface_BlueStar`

WORMHOLE



Wormhole: flat panel and shader ball

Flying through a nebula wormhole: endless tunnel lined with space gas, bright exit at the center.

`MaterialFX/Cosmic/M_Cosmic_Wormhole` Surface / Opaque / Unlit Instances `3`

Field	Default	Range	Group	What it does
`Tiling`	1	0.1 to 16	02 Pattern	How many times the pattern repeats across the surface (UV scale).
`Depth`	0.3	0.05 to 2	02 Pattern	Strength of the fake depth / parallax.
`Speed`	0.3	-4 to 4	03 Animation	Animation speed.
`Spin`	0.03	-1 to 1	03 Animation	Rotation speed of the tunnel around its axis, in turns per second (applied as a phase to the tunnel U).
`Swirl`	1	-6 to 6	02 Pattern	Amount the tunnel texture twists with depth (tunnel V x Swirl x 0.1 added to U).
`Nebula`	T_MFX_Nebula	-	05 Textures	Texture slot: swap in your own texture.
`Tint`	(1, 1, 1, 1)	-	01 Color	Color multiplied over the result.
`CenterSize`	0.18	0 to 0.5	04 Glow	Radius of the bright glow at the tunnel centre: saturate(1 - radius / CenterSize) squared.

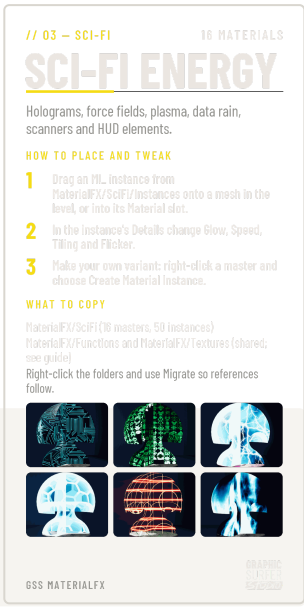
2 more parameters in the instance's Details panel. **Instances:** `MI_Cosmic_Wormhole_Classic`, `MI_Cosmic_Wormhole_Hyper`, `MI_Cosmic_Wormhole_Rift`

SCI-FI ENERGY

Holograms, force fields, plasma, data rain, scanners and HUD elements.

16 masters, 50 instances. Folder `MaterialFX/SciFi/` (instances in `MaterialFX/SciFi/Instances/`). Uses 8 material functions and 8 textures from `MaterialFX/Functions` and `MaterialFX/Textures`.

Domain	Blend	Shading	Sides	Masters
Surface	Additive	Unlit	two-sided	5
Surface	Masked	Unlit	two-sided	1
Surface	Opaque	Lit (default lit)	one-sided	3
Surface	Opaque	Unlit	one-sided	7



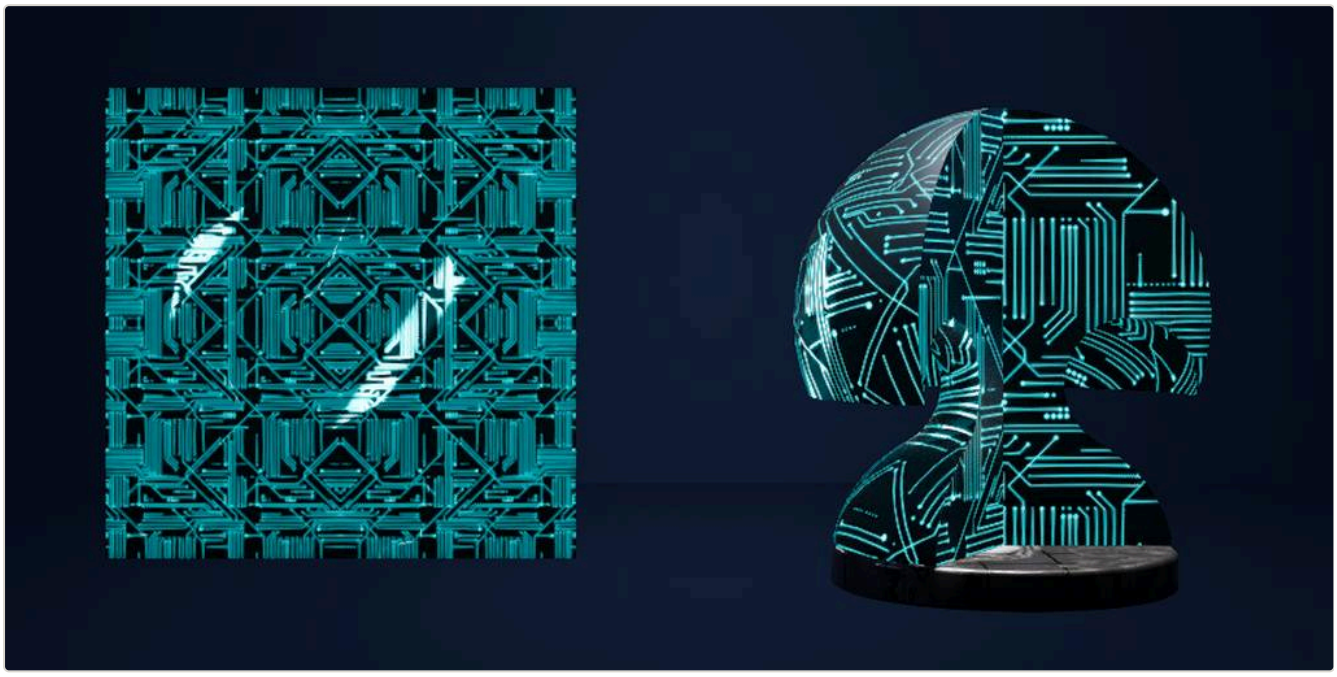
> **NOTE:** Several masters are screen-like (Radar, ScannerSweep, TargetLock): they look best on flat planes.
>
> **AI disclosure:** AI-generated textures used by this bundle (6 of its 8 textures): Circuit, Galaxy, Glyphs, Lightning, Nebula, StainedGlass.

MASTERS IN SCI-FI ENERGY

Master	Looks like	Instances
`M_SciFi_CircuitPulse`	Dark circuit-board metal with light pulses racing along the…	3
`M_SciFi_DataRain`	Digital rain: columns of alien glyphs falling at different…	3
`M_SciFi_EnergyCore`	Pulsing energy core: churning plasma.	3
`M_SciFi_ForceField`	Hex force field: glowing cell edges, expanding pulse waves.	4
`M_SciFi_Glitch`	Glitching screen: RGB split, tearing scan bands.	3
`M_SciFi_Hologram`	Hologram: world-space scanlines, sweeping scan band.	3
`M_SciFi_LaserGrid`	Security laser grid: sweeping red beams in world space with…	3
`M_SciFi_NeonTube`	Neon tube: white-hot core, colored glow falloff and an…	4
`M_SciFi_PanelLights`	Sci-fi wall panels with glowing seams and blinking status…	3
`M_SciFi_PlasmaFlow`	Plasma energy streaming along a tube or cable (flows along U).	3
`M_SciFi_Radar`	Radar screen: sweeping beam with a fading trail.	3
`M_SciFi_ScannerSweep`	A scanning beam sweeps across any mesh in world space.	3
`M_SciFi_Shockwave`	Looping shockwave ring for impacts and ground-pounds.	3
`M_SciFi_TargetLock`	HUD target-lock reticle: counter-rotating segmented rings and…	3
`M_SciFi_WarpSpeed`	Hyperspace jump: star streaks rushing past in an endless…	3
`M_SciFi_Wireframe`	See-through glowing wireframe built from the mesh UVs.	3

// SCI-FI ENERGY

CIRCUIT PULSE



Circuit Pulse: flat panel and shader ball

Dark circuit-board metal with light pulses racing along the traces.

`MaterialFX/SciFi/M_SciFi_CircuitPulse` Surface / Opaque / Lit (default lit) Instances `3`

Field	Default	Range	Group	What it does
`Tiling`	1	0.1 to 16	02 Pattern	How many times the pattern repeats across the surface (UV scale).
`CircuitMask`	T_MFX_Circuit	-	05 Textures	Texture slot: swap in your own texture.
`RegionNoise`	T_MFX_Noise_Packed_A	-	05 Textures	Texture slot: swap in your own texture.
`Speed`	0.3	-4 to 4	03 Animation	Animation speed.
`PulseColor`	(0.1, 0.85, 1, 1)	-	01 Color	Colour of the light pulses that run along the circuit traces.
`BaseColor`	(0.015, 0.02, 0.025, 1)	-	01 Color	Main surface color.
`IdleGlow`	0.35	0 to 2	04 Glow	Emissive level of the circuit traces when no pulse is passing (the pulse adds on top).
`Glow`	1.5	0 to 50	04 Glow	Brightness multiplier of the emissive light (higher = brighter, more bloom).

Instances: `MI_SciFi_CircuitPulse_Cyan` , `MI_SciFi_CircuitPulse_Gold` , `MI_SciFi_CircuitPulse_Magenta`

// SCI-FI ENERGY

DATA RAIN



Data Rain: flat panel and shader ball

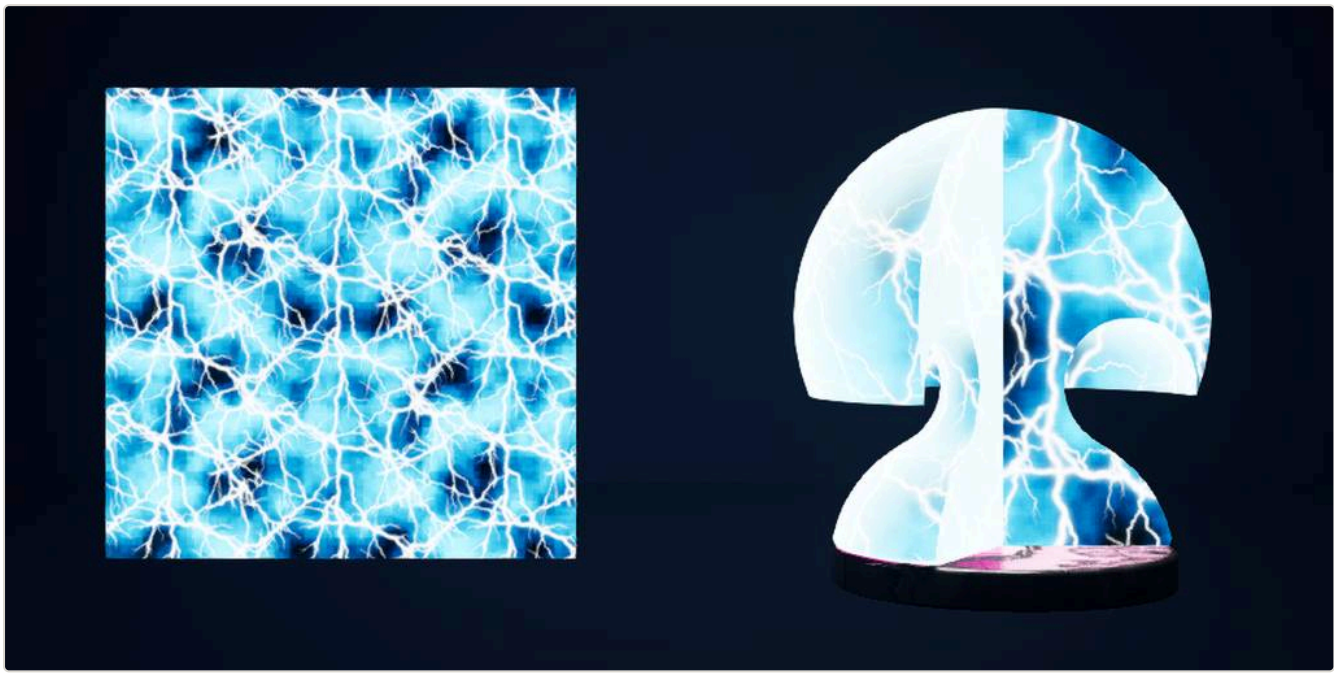
Digital rain: columns of alien glyphs falling at different speeds with bright leading heads.

`MaterialFX/SciFi/M_SciFi_DataRain` Surface / Opaque / Unlit Instances `3`

Field	Default	Range	Group	What it does
`Columns`	24	4 to 96	02 Pattern	Number of glyph columns across the surface.
`Rows`	32	4 to 128	02 Pattern	Number of glyph rows down the surface.
`Speed`	0.05	-4 to 4	03 Animation	Animation speed.
`TrailsPerColumn`	2	1 to 6	02 Pattern	Number of falling trails in each column.
`TrailLength`	3	0.5 to 12	02 Pattern	Exponent on the trail fade.
`GlyphSheet`	T_MFX_Glyphs	-	05 Textures	Texture slot: swap in your own texture.
`RainColor`	(0.1, 1, 0.3, 1)	-	01 Color	Colour of the falling character columns.
`HeadColor`	(0.8, 1, 0.85, 1)	-	01 Color	Colour of the bright head at the front of each column.

1 more parameter in the instance's Details panel. **Instances:** `MI_SciFi_DataRain_Matrix`, `MI_SciFi_DataRain_Ice`, `MI_SciFi_DataRain_Blood`

ENERGY CORE



Energy Core: flat panel and shader ball

Pulsing energy core: churning plasma, crackling arcs and a hot fresnel shell.

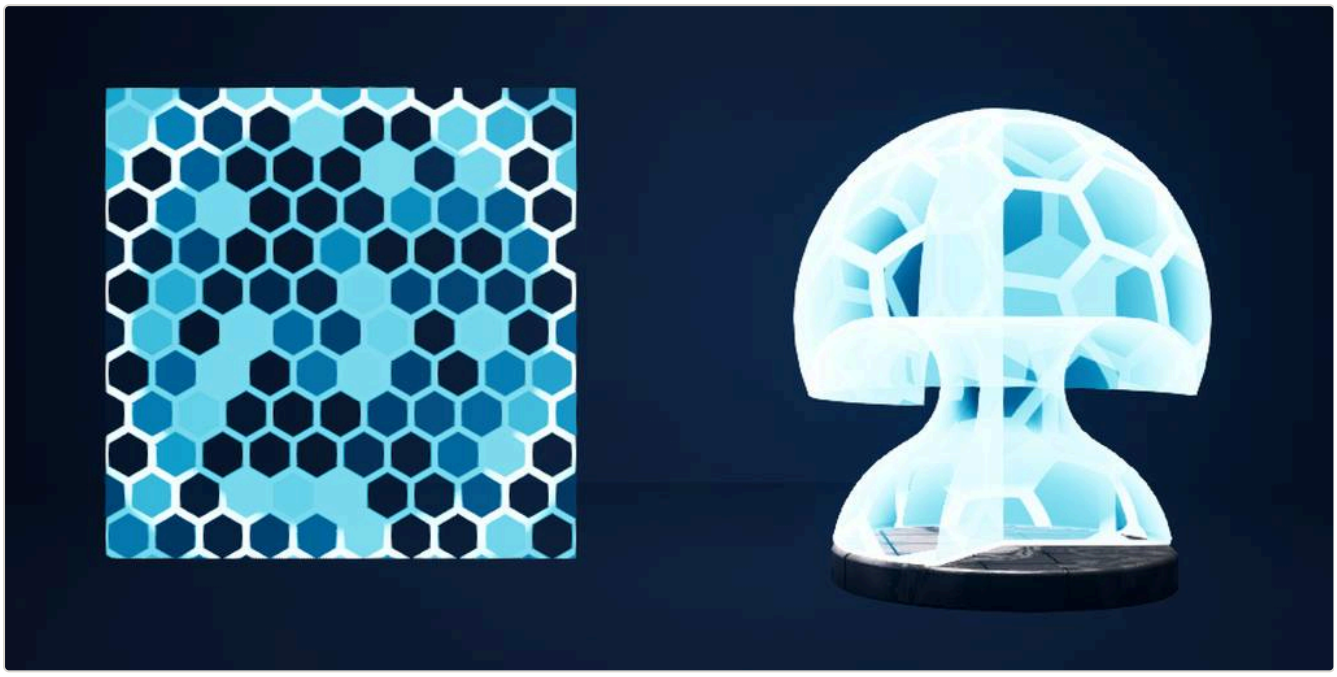
`MaterialFX/SciFi/M_SciFi_EnergyCore` Surface / Opaque / Unlit Instances `3`

Field	Default	Range	Group	What it does
`Tiling`	2	0.1 to 16	02 Pattern	How many times the pattern repeats across the surface (UV scale).
`Speed`	0.15	-4 to 4	03 Animation	Animation speed.
`PlasmaNoise`	T_MFX_Noise_Packed_A	-	05 Textures	Texture slot: swap in your own texture.
`Arcs`	T_MFX_Lightning	-	05 Textures	Texture slot: swap in your own texture.
`PulseRate`	0.8	0 to 5	03 Animation	How fast the pulse repeats.
`CoreColor`	(0.05, 0.35, 1, 1)	-	01 Color	Colour of the energy core body.
`RimColor`	(0.4, 0.9, 1, 1)	-	01 Color	Color of the edge/fresnel glow.
`ArcColor`	(0.8, 0.95, 1, 1)	-	01 Color	Colour of the electric arcs crossing the core.

1 more parameter in the instance's Details panel. **Instances:** `MI_SciFi_EnergyCore_Arc`, `MI_SciFi_EnergyCore_Reactor`, `MI_SciFi_EnergyCore_Dark`

// SCI-FI ENERGY

FORCE FIELD



Force Field: flat panel and shader ball

Hex force field: glowing cell edges, expanding pulse waves, twinkling cells and intersection glow.

`MaterialFX/SciFi/M_SciFi_ForceField` Surface / Additive / Unlit Instances `4`

Field	Default	Range	Group	What it does
`Tiling`	1	0.1 to 16	02 Pattern	How many times the pattern repeats across the surface (UV scale).
`HexScale`	10	1 to 60	02 Pattern	Number of hexagon cells per tile.
`EdgeThickness`	0.86	0.5 to 0.99	02 Pattern	Threshold on the hex edge distance: hex outlines are drawn where the edge value exceeds it.
`RimPower`	2.5	0.5 to 8	04 Glow	How tight the edge glow is (higher = thinner rim).
`WaveSize`	300	10 to 3000	02 Pattern	World distance (UE units) from the object pivot over which the energy pulse wave expands (distance is...
`Speed`	0.35	-4 to 4	03 Animation	Animation speed.
`IntersectionSize`	40	1 to 400	02 Pattern	Depth-fade distance (UE units) of the bright contact line where the shield meets other geometry.
`Tint`	(0.1, 0.5, 1, 1)	-	01 Color	Color multiplied over the result.

2 more parameters in the instance's Details panel. **Instances:** `MI_SciFi_ForceField_Blue`, `MI_SciFi_ForceField_Amber`, `MI_SciFi_ForceField_Toxic`, `MI_SciFi_ForceField_Crimson`

// SCI-FI ENERGY

GLITCH



Glitch: flat panel and shader ball

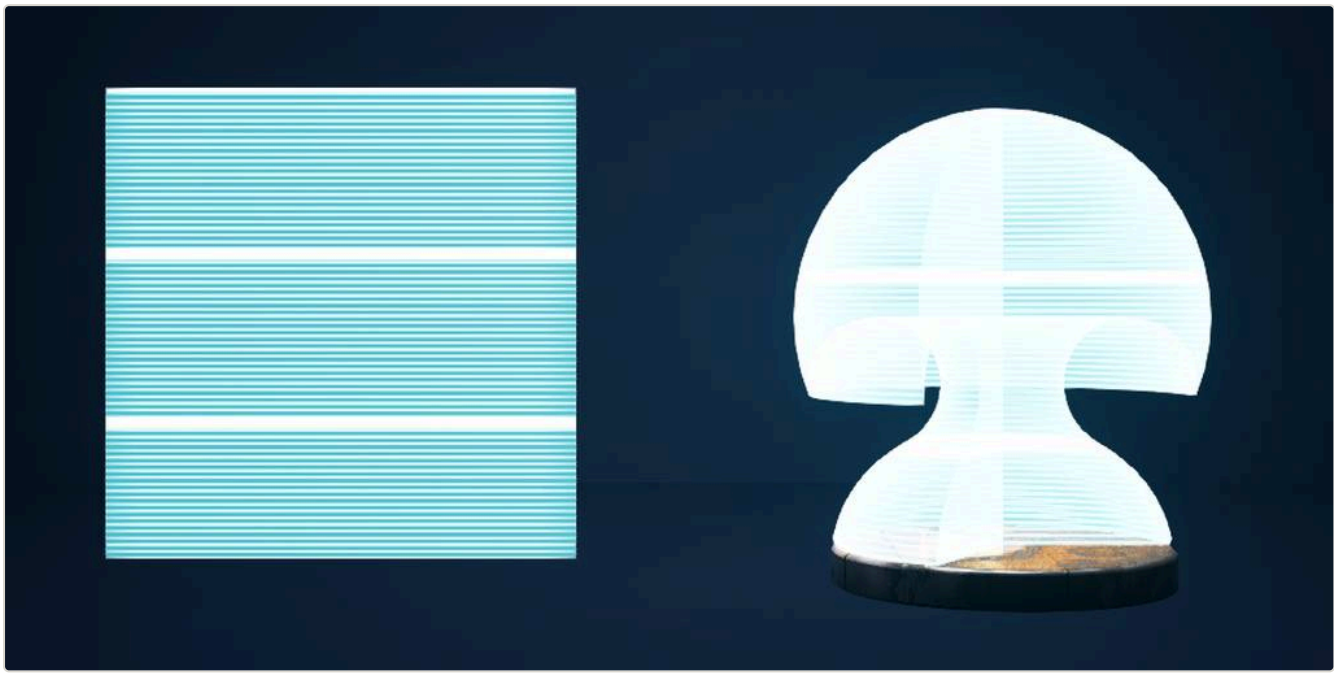
Glitching screen: RGB split, tearing scan bands, dropout blocks and scanlines over any texture.

`MaterialFX/SciFi/M_SciFi_Glitch` Surface / Opaque / Unlit Instances `3`

Field	Default	Range	Group	What it does
`GlitchFPS`	10	1 to 30	03 Animation	How many times per second the glitch pattern changes (stepped time).
`GlitchIntensity`	0.5	0 to 1	03 Animation	Strength 0-1 of the glitch: chance of a band tearing sideways.
`TearBands`	14	2 to 60	02 Pattern	Number of horizontal bands that can tear sideways.
`ScreenTexture`	T_MFX_Galaxy	-	05 Textures	Texture slot: swap in your own texture.
`Scanlines`	220	20 to 800	02 Pattern	Number of dark scanlines over the image.
`Glow`	1.3	0 to 50	04 Glow	Brightness multiplier of the emissive light (higher = brighter, more bloom).

Instances: `MI_SciFi_Glitch_Galaxy` , `MI_SciFi_Glitch_StainedGlass` , `MI_SciFi_Glitch_Nebula`

HOLOGRAM



Hologram: flat panel and shader ball

Hologram: world-space scanlines, sweeping scan band, fresnel edges and digital flicker.

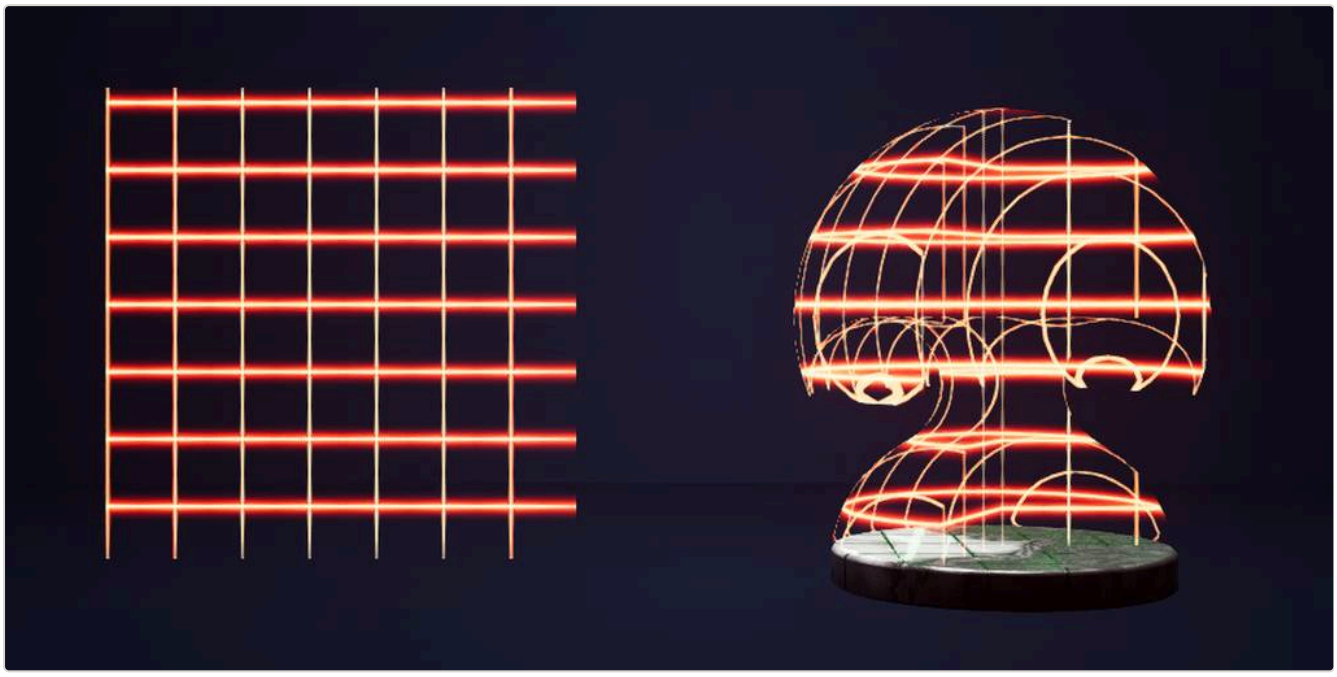
`MaterialFX/SciFi/M_SciFi_Hologram` Surface / Additive / Unlit Instances `3`

Field	Default	Range	Group	What it does
`ScanlineSpacing`	6	1 to 50	02 Pattern	World-space distance (UE units) between the fine scanlines (Spacing of MF_WorldBands).
`Speed`	0.6	-4 to 4	03 Animation	Animation speed.
`BandSpacing`	150	10 to 1000	02 Pattern	World-space distance (UE units) between the broad bright bands that travel through the hologram.
`BandSpeed`	0.25	-3 to 3	03 Animation	Speed of the broad bands in cycles per second (negative reverses).
`RimPower`	2	0.5 to 8	04 Glow	How tight the edge glow is (higher = thinner rim).
`Flicker`	0.35	0 to 1	03 Animation	Depth 0-1 of the random brightness dropouts (the whole hologram dims in short random bursts).
`Tint`	(0.15, 0.75, 1, 1)	-	01 Color	Color multiplied over the result.
`BandColor`	(0.7, 1, 1, 1)	-	01 Color	Colour of the bright bands that sweep over the hologram.

1 more parameter in the instance's Details panel. **Instances:** `MI_SciFi_Hologram_Cyan` , `MI_SciFi_Hologram_Red` , `MI_SciFi_Hologram_Green`

// SCI-FI ENERGY

LASER GRID



Laser Grid: flat panel and shader ball

Security laser grid: sweeping red beams in world space with flicker and glow.

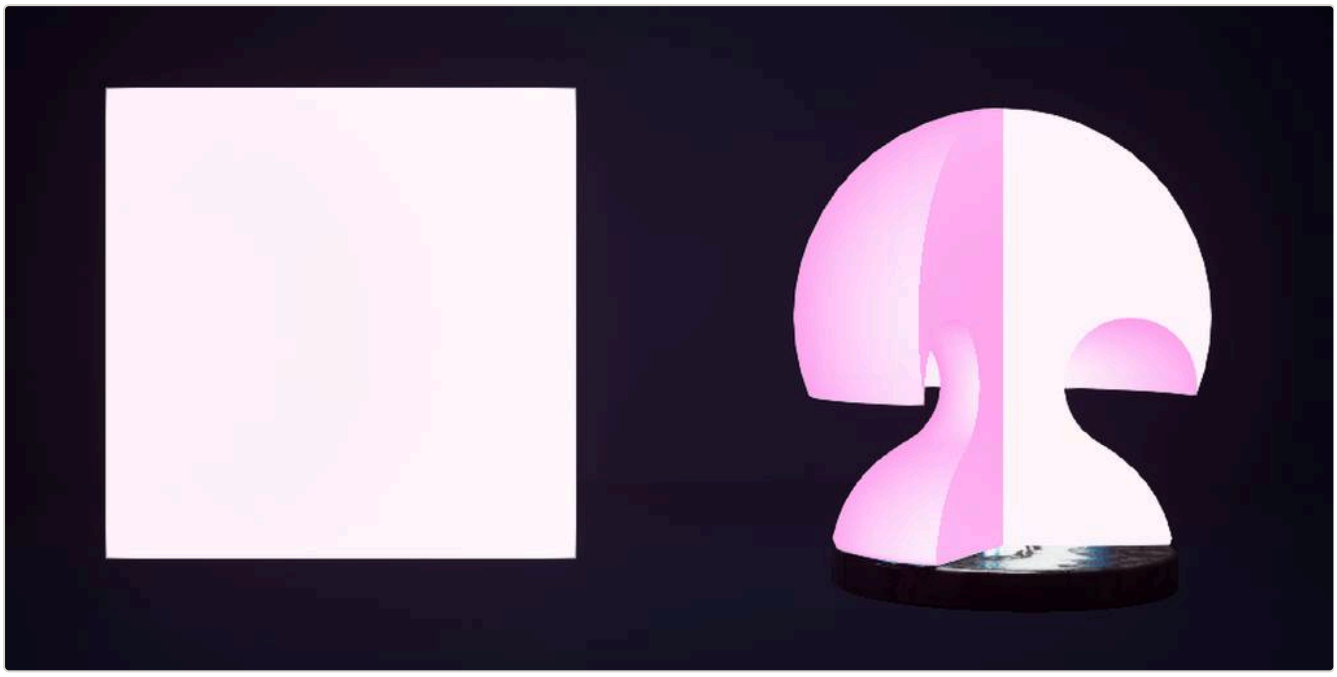
`MaterialFX/SciFi/M_SciFi_LaserGrid` Surface / Additive / Unlit Instances `3`

Field	Default	Range	Group	What it does
`Spacing`	60	5 to 500	02 Pattern	World-space distance (UE units) between laser beams.
`Speed`	0.15	-4 to 4	03 Animation	Animation speed.
`BeamWidth`	0.04	0.005 to 0.3	02 Pattern	Thickness of the beams.
`HorizontalBeams`	1	0 to 1	02 Pattern	Strength 0-1 of the horizontal (world Z) beam set.
`DiagonalBeams`	1	0 to 1	02 Pattern	Strength 0-1 of the diagonal (world X+Y) beam set.
`Flicker`	0.15	0 to 1	03 Animation	Depth 0-1 of the random brightness flicker (20 steps per second).
`LaserColor`	(1, 0.05, 0.02, 1)	-	01 Color	Colour of the laser beams and their halo.
`Glow`	4	0 to 50	04 Glow	Brightness multiplier of the emissive light (higher = brighter, more bloom).

Instances: `MI_SciFi_LaserGrid_Red` , `MI_SciFi_LaserGrid_Green` , `MI_SciFi_LaserGrid_Blue`

// SCI-FI ENERGY

NEON TUBE



Neon Tube: flat panel and shader ball

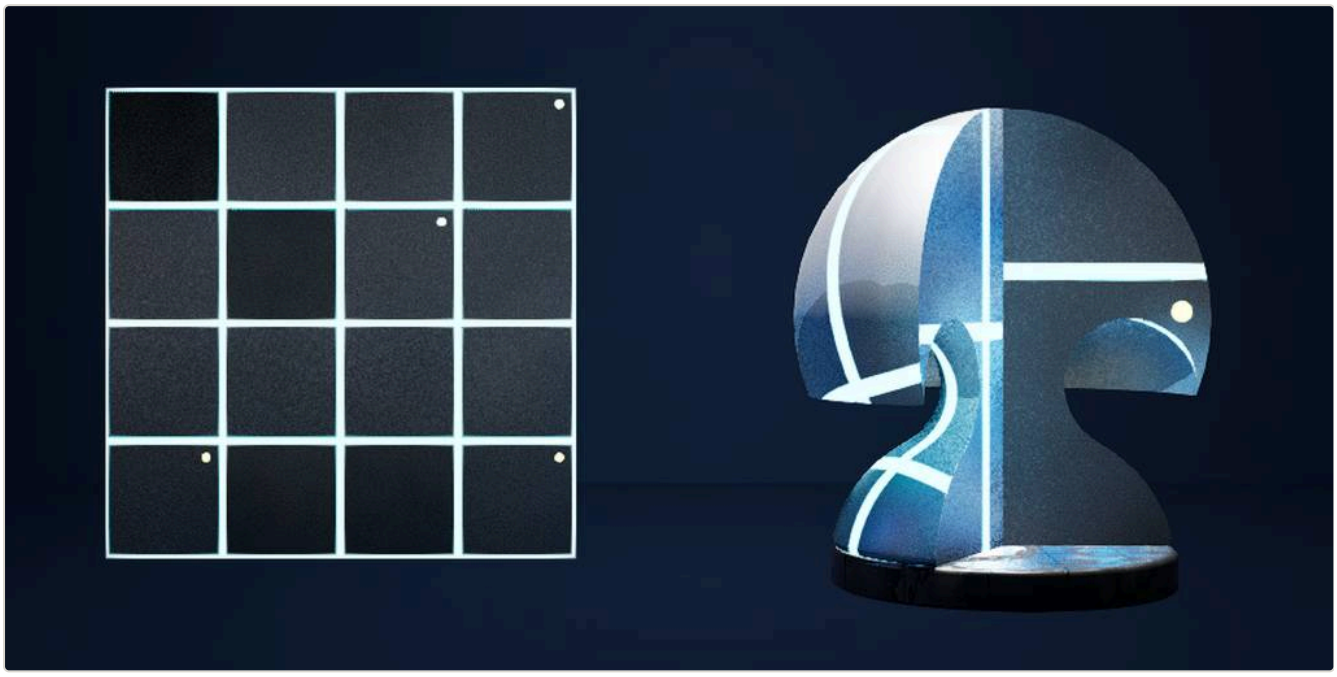
Neon tube: white-hot core, colored glow falloff and an occasional faulty flicker.

`MaterialFX/SciFi/M_SciFi_NeonTube` Surface / Opaque / Unlit Instances `4`

Field	Default	Range	Group	What it does
`CoreTightness`	3	0.5 to 12	02 Pattern	Exponent on N.V for the white-hot core in the tube centre.
`CoreBrightness`	1	0 to 3	04 Glow	Brightness multiplier of the hot core.
`Flicker`	0.15	0 to 1	03 Animation	How much the tube dims during its random dropout (0 = steady).
`BuzzRate`	60	0 to 120	03 Animation	Frequency of the fast brightness buzz (cycles per second).
`BuzzAmount`	0.04	0 to 0.5	03 Animation	Depth of the buzz (fraction of brightness removed at the dip).
`NeonColor`	(1, 0.1, 0.6, 1)	-	01 Color	Colour of the neon tube light.
`Glow`	2.2	0 to 50	04 Glow	Brightness multiplier of the emissive light (higher = brighter, more bloom).

Instances: `MI_SciFi_NeonTube_Pink` , `MI_SciFi_NeonTube_Cyan` , `MI_SciFi_NeonTube_Lime` , `MI_SciFi_NeonTube_Faulty`

PANEL LIGHTS



Panel Lights: flat panel and shader ball

Sci-fi wall panels with glowing seams and blinking status lights.

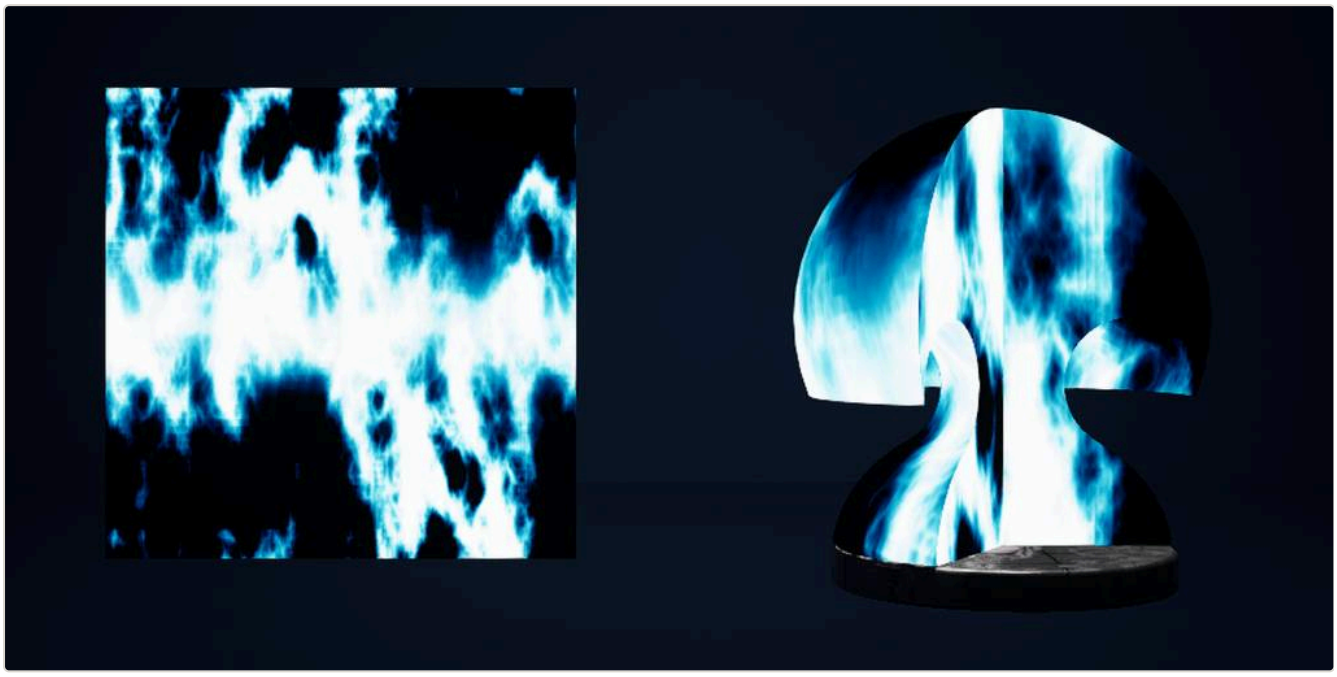
`MaterialFX/SciFi/M_SciFi_PanelLights` Surface / Opaque / Lit (default lit) Instances `3`

Field	Default	Range	Group	What it does
`Tiling`	1	0.1 to 16	02 Pattern	How many times the pattern repeats across the surface (UV scale).
`PanelsX`	4	1 to 20	02 Pattern	Number of panels across.
`PanelsY`	4	1 to 20	02 Pattern	Number of panels up.
`SeamWidth`	0.03	0.005 to 0.15	02 Pattern	Width of the glowing seam between panels (fraction of a panel).
`BlinkRate`	0.7	0 to 5	03 Animation	Blink frequency of the indicator lights (cycles per second; each panel has a random offset).
`PanelColor`	(0.25, 0.27, 0.3, 1)	-	01 Color	Colour of the metal panels (varied slightly per panel).
`SeamColor`	(0.1, 0.8, 1, 1)	-	01 Color	Colour of the glowing seams between the panels.
`Glow`	1.5	0 to 50	04 Glow	Brightness multiplier of the emissive light (higher = brighter, more bloom).

Instances: `MI_SciFi_PanelLights_Station` , `MI_SciFi_PanelLights_Military` , `MI_SciFi_PanelLights_Clean`

// SCI-FI ENERGY

PLASMA FLOW



Plasma Flow: flat panel and shader ball

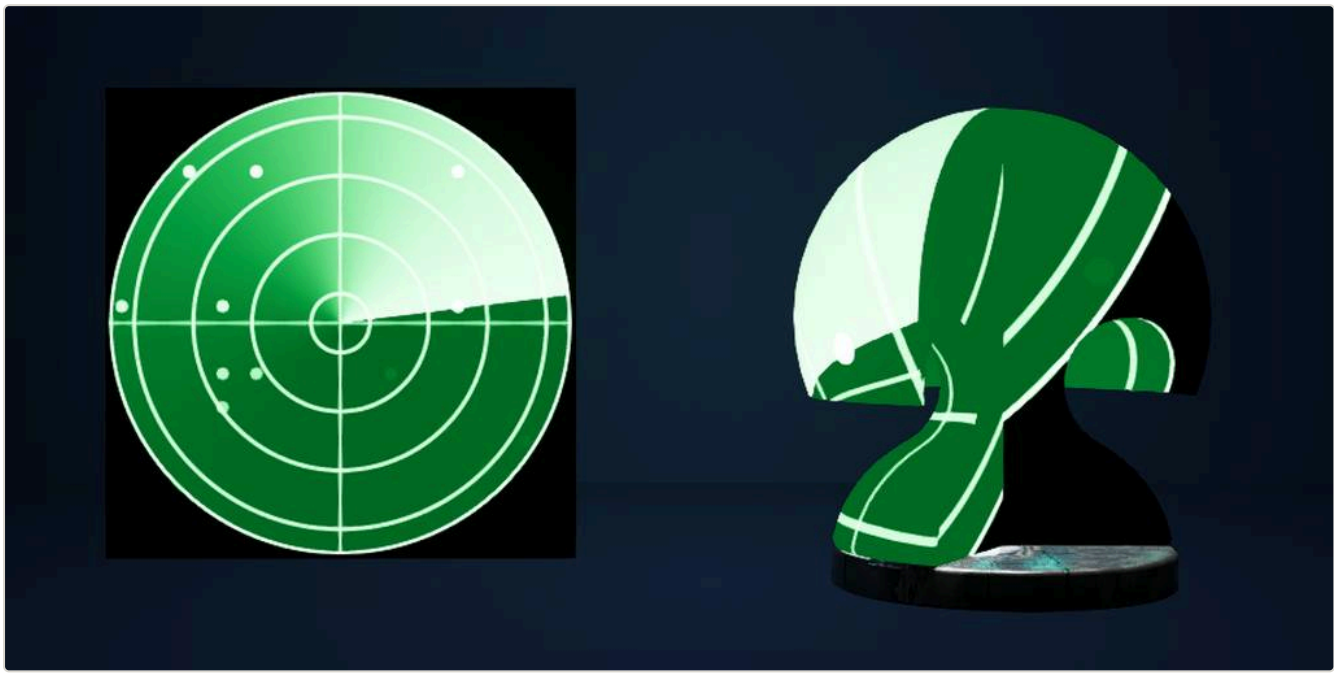
Plasma energy streaming along a tube or cable (flows along U).

`MaterialFX/SciFi/M_SciFi_PlasmaFlow` Surface / Opaque / Unlit Instances `3`

Field	Default	Range	Group	What it does
`Tiling`	1	0.1 to 16	02 Pattern	How many times the pattern repeats across the surface (UV scale).
`Speed`	0.6	-4 to 4	03 Animation	Animation speed.
`NoiseA`	T_MFX_Noise_Packed_A	-	05 Textures	Texture slot: swap in your own texture.
`NoiseB`	T_MFX_Noise_Packed_B	-	05 Textures	Texture slot: swap in your own texture.
`CoreSharpness`	3	0.5 to 12	02 Pattern	Exponent on the bright centre line of the plasma stream.
`ColorLow`	(0, 0.05, 0.3, 1)	-	01 Color	Colour of the calm, dark plasma.
`ColorMid`	(0.1, 0.6, 1, 1)	-	01 Color	Colour of the body of the plasma.
`ColorHot`	(0.85, 1, 1, 1)	-	01 Color	Colour of the hottest, brightest plasma.

1 more parameter in the instance's Details panel. **Instances:** `MI_SciFi_PlasmaFlow_Electric`, `MI_SciFi_PlasmaFlow_Fusion`, `MI_SciFi_PlasmaFlow_Void`

RADAR



Radar: flat panel and shader ball

Radar screen: sweeping beam with a fading trail, range rings and blips that light up as the beam passes.

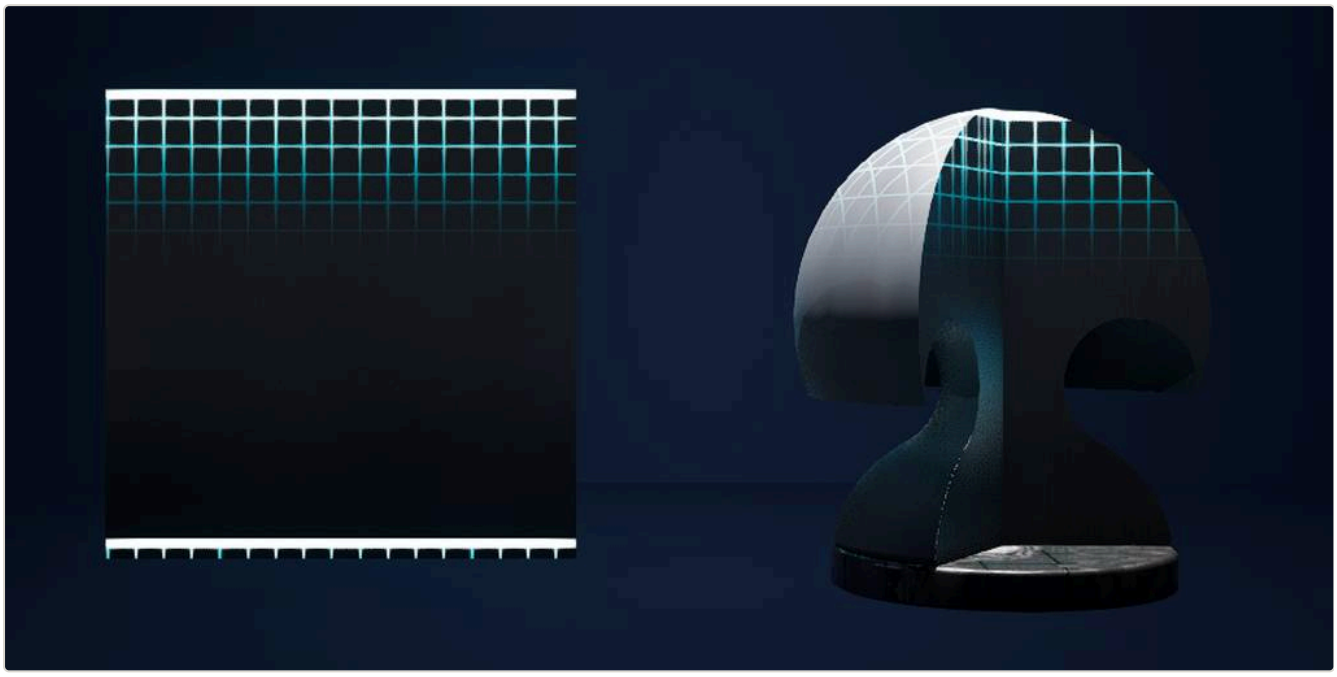
`MaterialFX/SciFi/M_SciFi_Radar` Surface / Opaque / Unlit Instances `3`

Field	Default	Range	Group	What it does
`Speed`	0.25	-4 to 4	03 Animation	Animation speed.
`TrailSharpness`	6	1 to 30	02 Pattern	Exponent on the sweep afterglow.
`RangeRings`	4	1 to 12	02 Pattern	Number of concentric range rings.
`BlipAmount`	0.08	0 to 0.5	02 Pattern	Fraction (0-0.5) of the 14 x 14 grid cells that hold a blip.
`ScreenColor`	(0.2, 1, 0.3, 1)	-	01 Color	Colour of the radar screen graphics (rings, sweep and blips).
`BeamStrength`	0.6	0 to 3	04 Glow	Brightness multiplier of the sweep beam and its trail.
`BlipBrightness`	2.5	0 to 10	04 Glow	Brightness multiplier of the blips (they light up as the beam passes).
`Glow`	1.5	0 to 50	04 Glow	Brightness multiplier of the emissive light (higher = brighter, more bloom).

Instances: `MI_SciFi_Radar_Green` , `MI_SciFi_Radar_Amber` , `MI_SciFi_Radar_Red`

// SCI-FI ENERGY

SCANNER SWEEP



Scanner Sweep: flat panel and shader ball

A scanning beam sweeps across any mesh in world space, revealing a holographic grid as it passes.

`MaterialFX/SciFi/M_SciFi_ScannerSweep` Surface / Opaque / Lit (default lit) Instances `3`

Field	Default	Range	Group	What it does
`SweepRange`	400	50 to 5000	02 Pattern	World-space distance (UE units) the scan band travels per cycle.
`Speed`	0.25	-4 to 4	03 Animation	Animation speed.
`BandWidth`	0.02	0.002 to 0.2	02 Pattern	Thickness of the bright scan band (fraction of the sweep range).
`GridSize`	25	2 to 200	02 Pattern	World-space size (UE units) of the 3D grid cells that light up behind the band.
`ScanColor`	(0.1, 0.8, 1, 1)	-	01 Color	Colour of the scan line and its trail.
`BaseColor`	(0.06, 0.065, 0.075, 1)	-	01 Color	Main surface color.
`Glow`	1.5	0 to 50	04 Glow	Brightness multiplier of the emissive light (higher = brighter, more bloom).

Instances: `MI_SciFi_ScannerSweep_Cyan` , `MI_SciFi_ScannerSweep_Red` , `MI_SciFi_ScannerSweep_Lime`

// SCI-FI ENERGY

SHOCKWAVE



Shockwave: flat panel and shader ball

Looping shockwave ring for impacts and ground-pounds.

`MaterialFX/SciFi/M_SciFi_Shockwave` Surface / Additive / Unlit Instances `3`

Field	Default	Range	Group	What it does
`Speed`	0.6	-4 to 4	03 Animation	Animation speed.
`ExpansionCurve`	0.6	0.2 to 2	03 Animation	Exponent on the ring growth over one cycle.
`MaxRadius`	1	0.2 to 1	02 Pattern	Ring radius (fraction of the tile) reached at the end of each cycle.
`RingWidth`	0.08	0.01 to 0.4	02 Pattern	Thickness of the shock ring.
`InnerFill`	0.15	0 to 2	04 Glow	Brightness of the soft filled disc inside the ring.
`WaveColor`	(0.3, 0.8, 1, 1)	-	01 Color	Colour of the expanding shockwave ring.
`Glow`	1.5	0 to 50	04 Glow	Brightness multiplier of the emissive light (higher = brighter, more bloom).

Instances: `MI_SciFi_Shockwave_Energy` , `MI_SciFi_Shockwave_Fire` , `MI_SciFi_Shockwave_Void`

TARGET LOCK



Target Lock: flat panel and shader ball

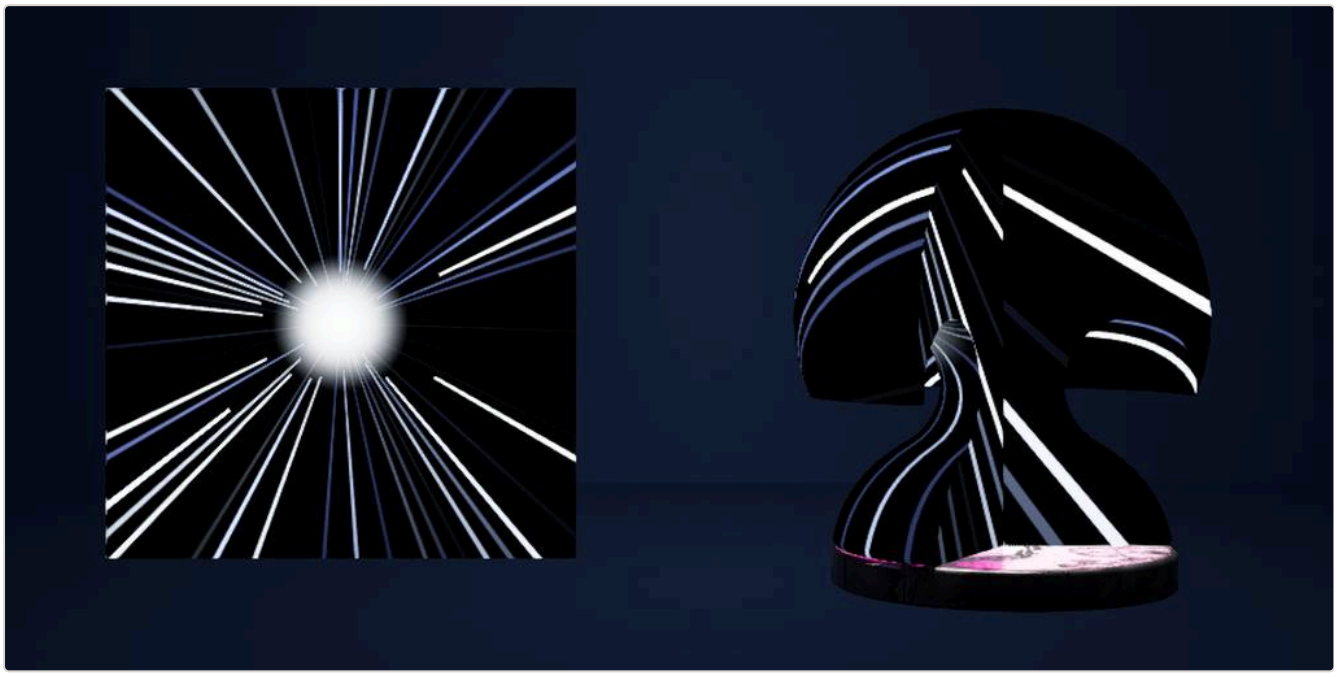
HUD target-lock reticle: counter-rotating segmented rings and corner brackets.

`MaterialFX/SciFi/M_SciFi_TargetLock` Surface / Additive / Unlit Instances `3`

Field	Default	Range	Group	What it does
`Speed`	0.15	-4 to 4	03 Animation	Animation speed.
`LineWidth`	0.015	0.003 to 0.08	02 Pattern	Thickness of the ring lines.
`OuterRingRadius`	0.8	0.2 to 0.95	02 Pattern	Radius of the outer segmented ring (0-1 of the tile).
`OuterSegments`	8	1 to 32	02 Pattern	Number of dashes in the outer ring (it slowly rotates).
`InnerRingRadius`	0.55	0.1 to 0.9	02 Pattern	Radius of the inner segmented ring.
`InnerSegments`	3	1 to 32	02 Pattern	Number of dashes in the inner ring (it rotates the other way).
`CenterDotSize`	0.04	0 to 0.2	02 Pattern	Radius of the centre dot.
`PulseRate`	2	0 to 10	03 Animation	How fast the pulse repeats.

3 more parameters in the instance's Details panel. **Instances:** `MI_SciFi_TargetLock_Red`, `MI_SciFi_TargetLock_Cyan`, `MI_SciFi_TargetLock_Yellow`

WARP SPEED



Warp Speed: flat panel and shader ball

Hyperspace jump: star streaks rushing past in an endless tunnel.

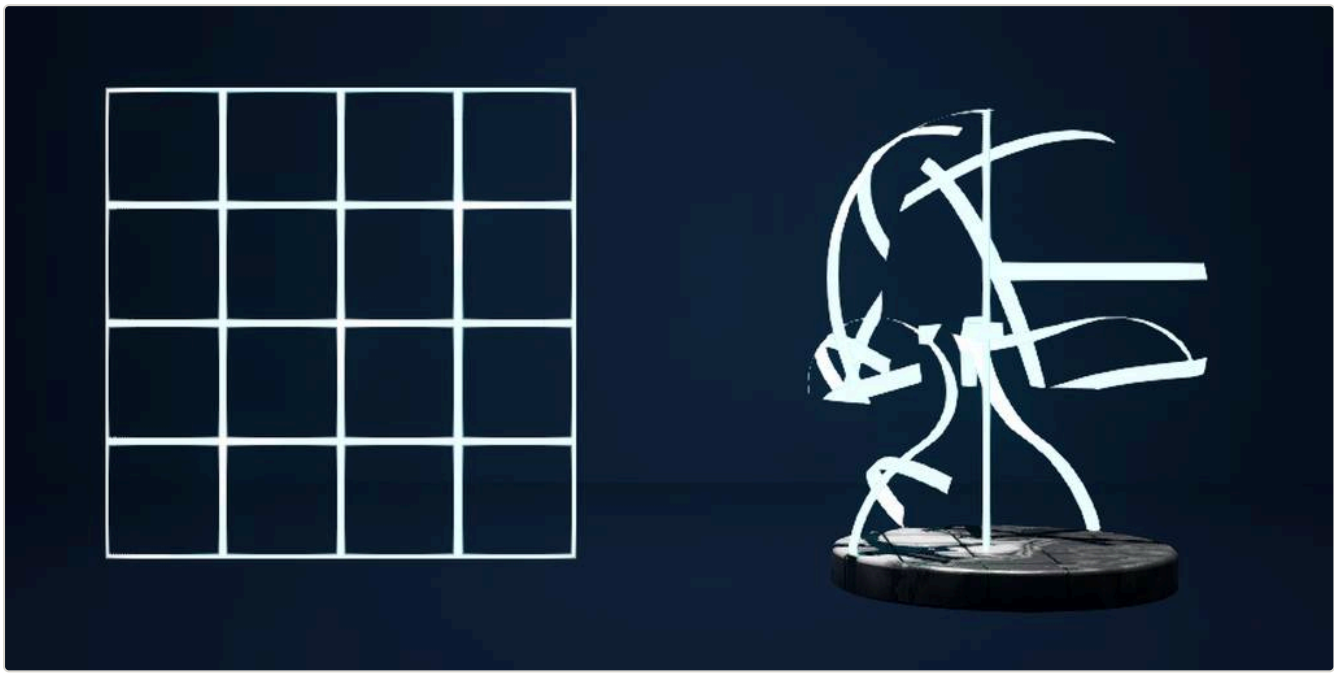
`MaterialFX/SciFi/M_SciFi_WarpSpeed` Surface / Opaque / Unlit Instances `3`

Field	Default	Range	Group	What it does
`Tiling`	1	0.1 to 16	02 Pattern	How many times the pattern repeats across the surface (UV scale).
`Lanes`	90	8 to 300	02 Pattern	Number of streak lanes around the tunnel.
`Speed`	0.8	-4 to 4	03 Animation	Animation speed.
`StreakSharpness`	10	1 to 40	02 Pattern	Exponent on the streak fade.
`ColorA`	(0.7, 0.85, 1, 1)	-	01 Color	Colour of the star streaks near the centre; blends toward ColorB at the edges.
`ColorB`	(0.3, 0.4, 1, 1)	-	01 Color	Colour of the star streaks toward the edges.
`CenterColor`	(0.8, 0.9, 1, 1)	-	01 Color	Colour of the bright glow at the vanishing point.
`Glow`	1.2	0 to 50	04 Glow	Brightness multiplier of the emissive light (higher = brighter, more bloom).

Instances: `MI_SciFi_WarpSpeed_Classic` , `MI_SciFi_WarpSpeed_Amber` , `MI_SciFi_WarpSpeed_Rainbow`

// SCI-FI ENERGY

WIREFRAME



Wireframe: flat panel and shader ball

See-through glowing wireframe built from the mesh UVs, with a pulse racing along the lines.

`MaterialFX/SciFi/M_SciFi_Wireframe` Surface / Masked / Unlit Instances `3`

Field	Default	Range	Group	What it does
`GridLines`	4	1 to 40	02 Pattern	Number of grid lines across the surface in each direction.
`LineWidth`	0.06	0.01 to 0.4	02 Pattern	Thickness of the grid lines; the same value drives the opacity mask.
`Speed`	0.4	-4 to 4	03 Animation	Animation speed.
`LineColor`	(0.1, 0.85, 1, 1)	-	01 Color	Colour of the wireframe lines and the pulse running along them.
`Glow`	2	0 to 50	04 Glow	Brightness multiplier of the emissive light (higher = brighter, more bloom).

Instances: `MI_SciFi_Wireframe_Cyan` , `MI_SciFi_Wireframe_Orange` , `MI_SciFi_Wireframe_Matrix`

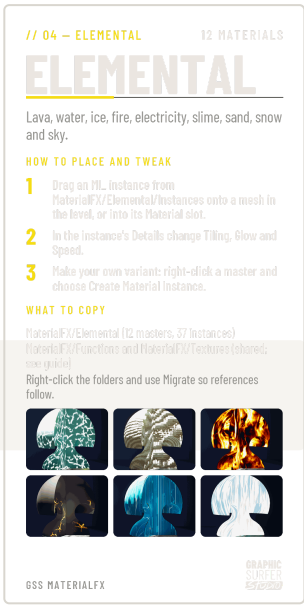
ELEMENTAL

Lava, water, ice, fire, electricity, slime, sand, snow and sky.

12 masters, 37 instances. Folder `MaterialFX/Elemental/` (instances in `MaterialFX/Elemental/Instances/`). Uses 4 material functions and 10 textures from `MaterialFX/Functions` and `MaterialFX/Textures`.

Domain	Blend	Shading	Sides	Masters
Surface	Opaque	Lit (default lit)	one-sided	8
Surface	Opaque	Unlit	one-sided	4

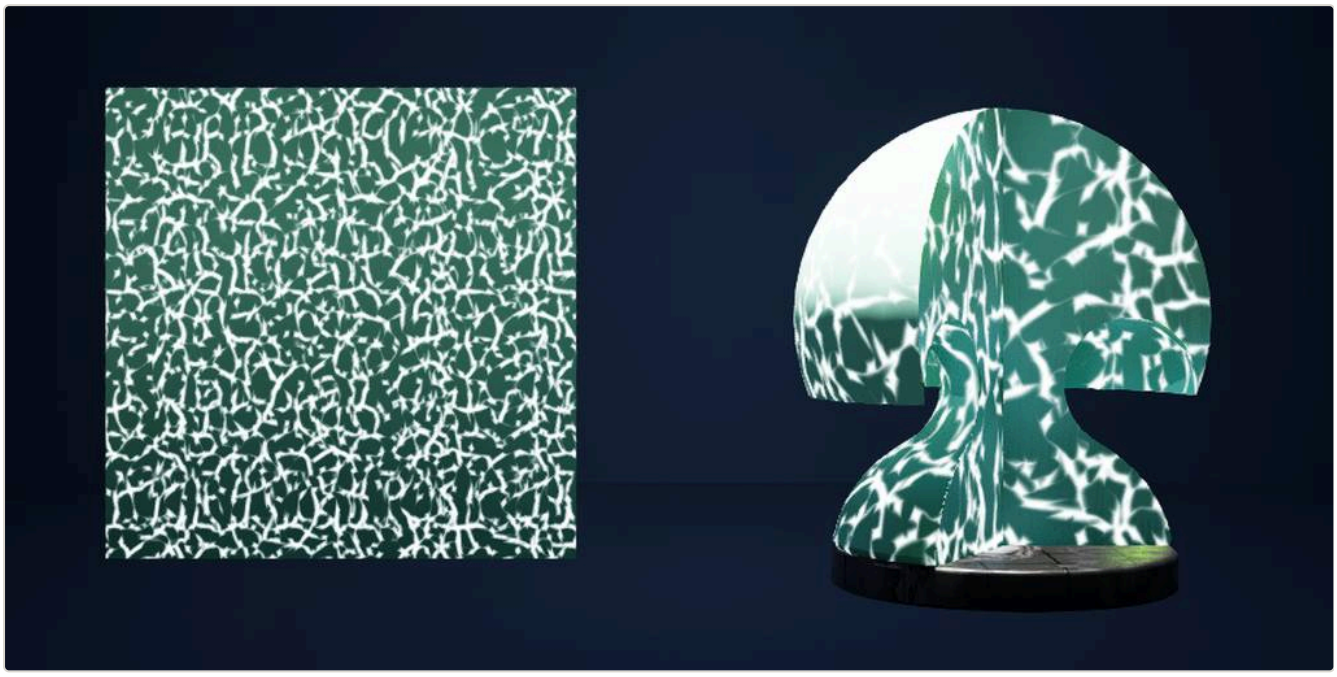
> **AI DISCLOSURE:** AI-generated textures used by this bundle (7 of its 10 textures): Caustics, Clouds, Cracks, Flames, Frost, Lava, Lightning.



MASTERS IN ELEMENTAL

Master	Looks like	Instances
`M_Elem_Caustics`	Underwater floor: interfering caustic light dancing over…	3
`M_Elem_Clouds`	Drifting stylized cloud layers over a sky gradient.	3
`M_Elem_Dunes`	Wind-swept dunes: rippling sand bands with lit normals that…	3
`M_Elem_Electric`	Crackling electricity: jittering branched arcs that flicker…	3
`M_Elem_FireSurface`	Burning surface: layered flames licking upward with heat…	3
`M_Elem_Ice`	Thick ice: frost on top, a deeper frozen layer seen through…	3
`M_Elem_LavaFlow`	Flowing lava: cooled crust plates drift over glowing molten…	4
`M_Elem_MagmaCracks`	Rock that cracks open to glowing magma.	3
`M_Elem_Snow`	Snow cover for any mesh: white builds up on upward-facing…	3
`M_Elem_StylizedWater`	Stylized water: two scrolling normal layers.	3
`M_Elem_ToxicSlime`	Glossy bubbling slime with glowing blobs and a wobbling…	3
`M_Elem_Waterfall`	Waterfall sheet: foamy streaks plunging down at different…	3

CAUSTICS



Caustics: flat panel and shader ball

Underwater floor: interfering caustic light dancing over sand, tinted by the water.

`MaterialFX/Elemental/M_Elem_Caustics` Surface / Opaque / Lit (default lit) Instances `3`

Field	Default	Range	Group	What it does
`Tiling`	2	0.1 to 16	02 Pattern	How many times the pattern repeats across the surface (UV scale).
`Speed`	0.04	-4 to 4	03 Animation	Animation speed.
`Caustics`	T_MFX_Caustics	-	05 Textures	Texture slot: swap in your own texture.
`WaterTint`	(0.3, 0.75, 0.8, 1)	-	01 Color	Multiplies the whole surface; gives the water its blue-green cast.
`SandColor`	(0.8, 0.7, 0.5, 1)	-	01 Color	Colour of the sea floor under the caustic light.
`LightColor`	(0.7, 1, 1, 1)	-	01 Color	Colour of the bright caustic light lines.
`Glow`	1.5	0 to 50	04 Glow	Brightness multiplier of the emissive light (higher = brighter, more bloom).

Instances: `MI_Elem_Caustics_Tropical` , `MI_Elem_Caustics_Deep` , `MI_Elem_Caustics_Pool`

CLOUDS



Clouds: flat panel and shader ball

Drifting stylized cloud layers over a sky gradient.

`MaterialFX/Elemental/M_Elem_Clouds` Surface / Opaque / Unlit Instances `3`

Field	Default	Range	Group	What it does
`Tiling`	1	0.1 to 16	02 Pattern	How many times the pattern repeats across the surface (UV scale).
`Speed`	0.01	-4 to 4	03 Animation	Animation speed.
`Clouds`	T_MFX_Clouds	-	05 Textures	Texture slot: swap in your own texture.
`SkyTop`	(0.15, 0.4, 0.9, 1)	-	01 Color	Sky colour at the top of the surface (the sky gradient starts here).
`SkyBottom`	(0.6, 0.85, 1, 1)	-	01 Color	Sky colour toward the bottom, near the horizon.
`CloudShadow`	(0.45, 0.55, 0.75, 1)	-	01 Color	Colour of the shaded undersides of the clouds.
`CloudColor`	(1, 1, 1, 1)	-	01 Color	Colour of the sunlit cloud tops.
`Glow`	1	0 to 50	04 Glow	Brightness multiplier of the emissive light (higher = brighter, more bloom).

Instances: `MI_Elem_Clouds_Day`, `MI_Elem_Clouds_Sunset`, `MI_Elem_Clouds_Night`

DUNES



Dunes: flat panel and shader ball

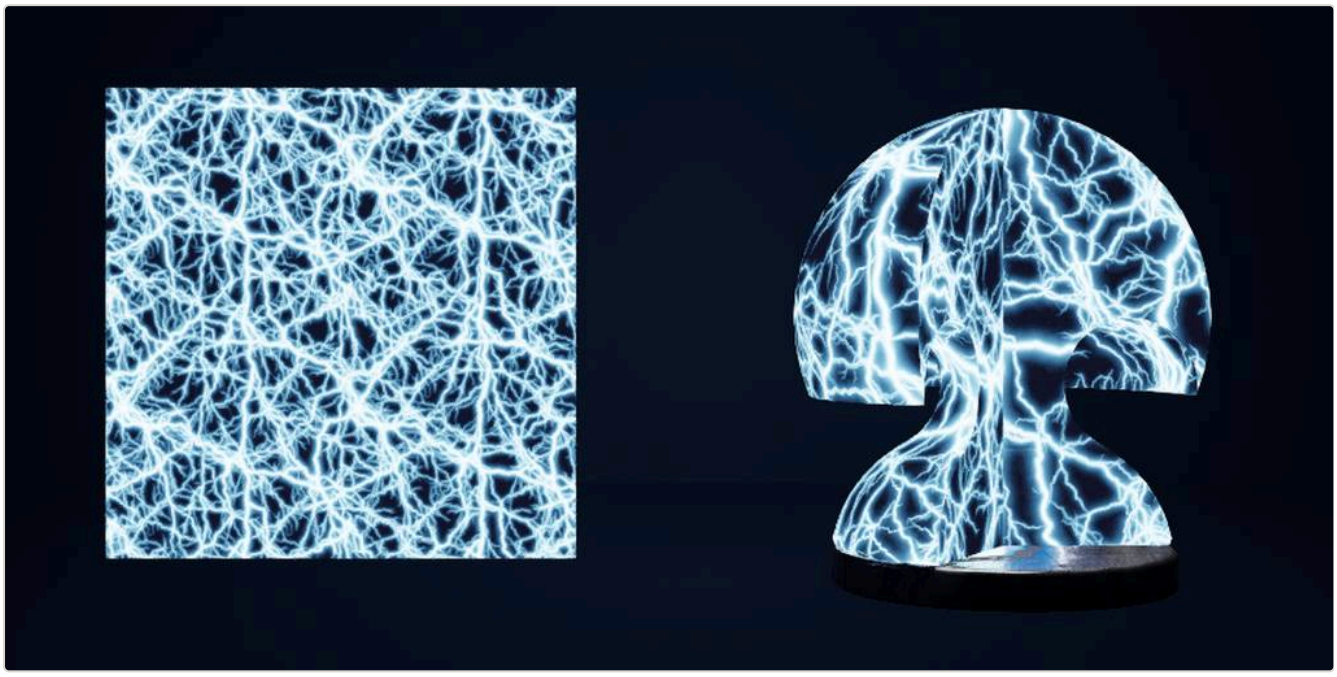
Wind-swept dunes: rippling sand bands with lit normals that slowly drift, plus sun glints.

`MaterialFX/Elemental/M_Elem_Dunes` Surface / Opaque / Lit (default lit) Instances `3`

Field	Default	Range	Group	What it does
`Tiling`	2	0.1 to 16	02 Pattern	How many times the pattern repeats across the surface (UV scale).
`WarpNoise`	T_MFX_Noise_Packed_B	-	05 Textures	Texture slot: swap in your own texture.
`Ripples`	18	2 to 80	02 Pattern	Number of sand ripples across the tile.
`Speed`	0.05	-4 to 4	03 Animation	Animation speed.
`RippleDepth`	0.6	0 to 3	02 Pattern	Strength of the ripple normal tilt (lighting depth of the ripples).
`SandDark`	(0.55, 0.38, 0.2, 1)	-	01 Color	Colour of the sand in the shaded troughs of the dunes.
`SandLight`	(0.95, 0.8, 0.55, 1)	-	01 Color	Colour of the sand on the lit dune crests.
`GlintBrightness`	2	0 to 50	04 Glow	Brightness of the sparkling sand glints (the glint mask is multiplied by this value).

Instances: `MI_Elem_Dunes_Desert` , `MI_Elem_Dunes_PinkSand` , `MI_Elem_Dunes_Snow`

ELECTRIC



Electric: flat panel and shader ball

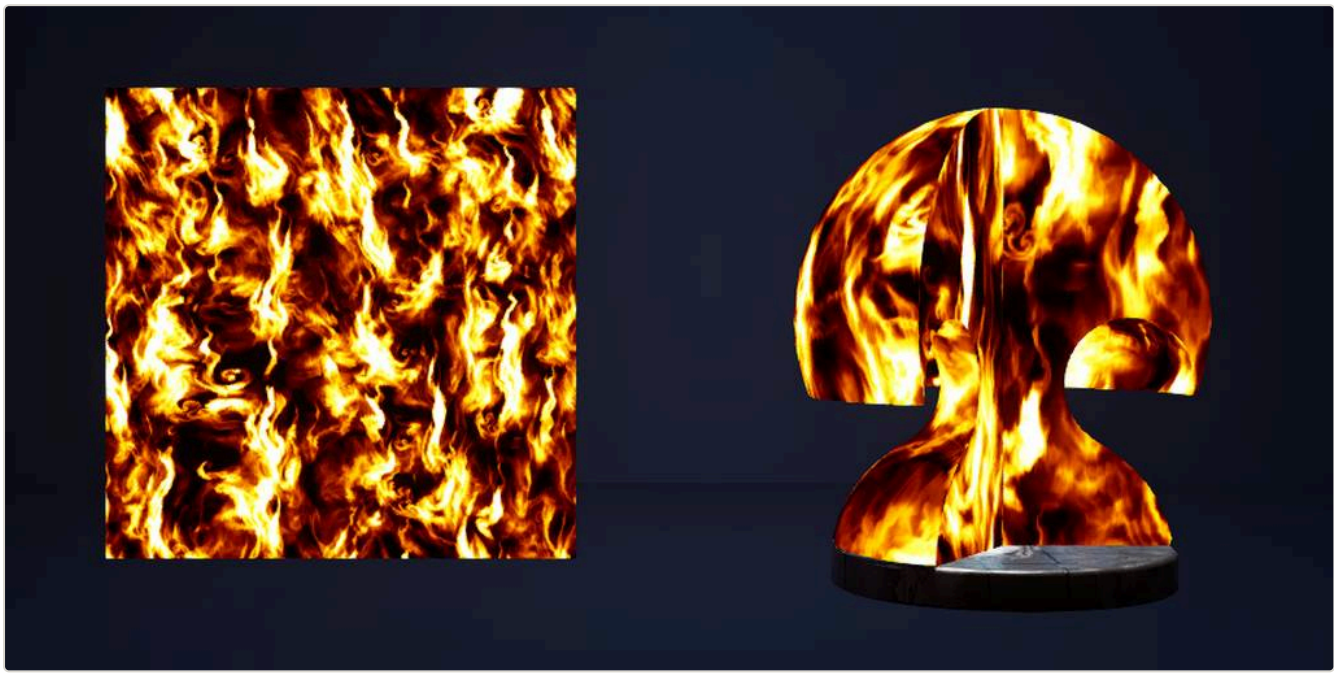
Crackling electricity: jittering branched arcs that flicker every frame over a dark surface.

`MaterialFX/Elemental/M_Elem_Electric` Surface / Opaque / Unlit Instances `3`

Field	Default	Range	Group	What it does
`Tiling`	1	0.1 to 16	02 Pattern	How many times the pattern repeats across the surface (UV scale).
`ArcFPS`	12	1 to 30	03 Animation	How many times per second the lightning arcs jump to a new random position (stepped time).
`Arcs`	T_MFX_Lightning	-	05 Textures	Texture slot: swap in your own texture.
`Background`	(0.01, 0.01, 0.02, 1)	-	01 Color	Colour behind the lightning; the dark space between arcs.
`ArcColor`	(0.25, 0.6, 1, 1)	-	01 Color	Colour of the electric arcs (their white-hot core is added on top).
`Glow`	3	0 to 50	04 Glow	Brightness multiplier of the emissive light (higher = brighter, more bloom).

Instances: `MI_Elem_Electric_Blue` , `MI_Elem_Electric_Purple` , `MI_Elem_Electric_Yellow`

FIRE SURFACE



Fire Surface: flat panel and shader ball

Burning surface: layered flames licking upward with heat distortion.

`MaterialFX/Elemental/M_Elem_FireSurface` Surface / Opaque / Unlit Instances `3`

Field	Default	Range	Group	What it does
`Tiling`	1	0.1 to 16	02 Pattern	How many times the pattern repeats across the surface (UV scale).
`Speed`	0.5	-4 to 4	03 Animation	Animation speed.
`DistortionNoise`	T_MFX_Noise_Packed_B	-	05 Textures	Texture slot: swap in your own texture.
`Distortion`	0.12	0 to 0.5	02 Pattern	How strongly the noise warps the flame texture coordinates (flicker amount).
`Flames`	T_MFX_Flames	-	05 Textures	Texture slot: swap in your own texture.
`BaseHeat`	0	-1 to 1	02 Pattern	Offset added to the flame heat before clamping.
`ColorLow`	(0.3, 0, 0, 1)	-	01 Color	Colour of the coolest, darkest flame areas.
`ColorMid`	(1, 0.35, 0, 1)	-	01 Color	Colour of the body of the flames.

2 more parameters in the instance's Details panel. **Instances:** `MI_Elem_FireSurface_Classic`, `MI_Elem_FireSurface_BlueFlame`, `MI_Elem_FireSurface_Cursed`

ICE



Ice: flat panel and shader ball

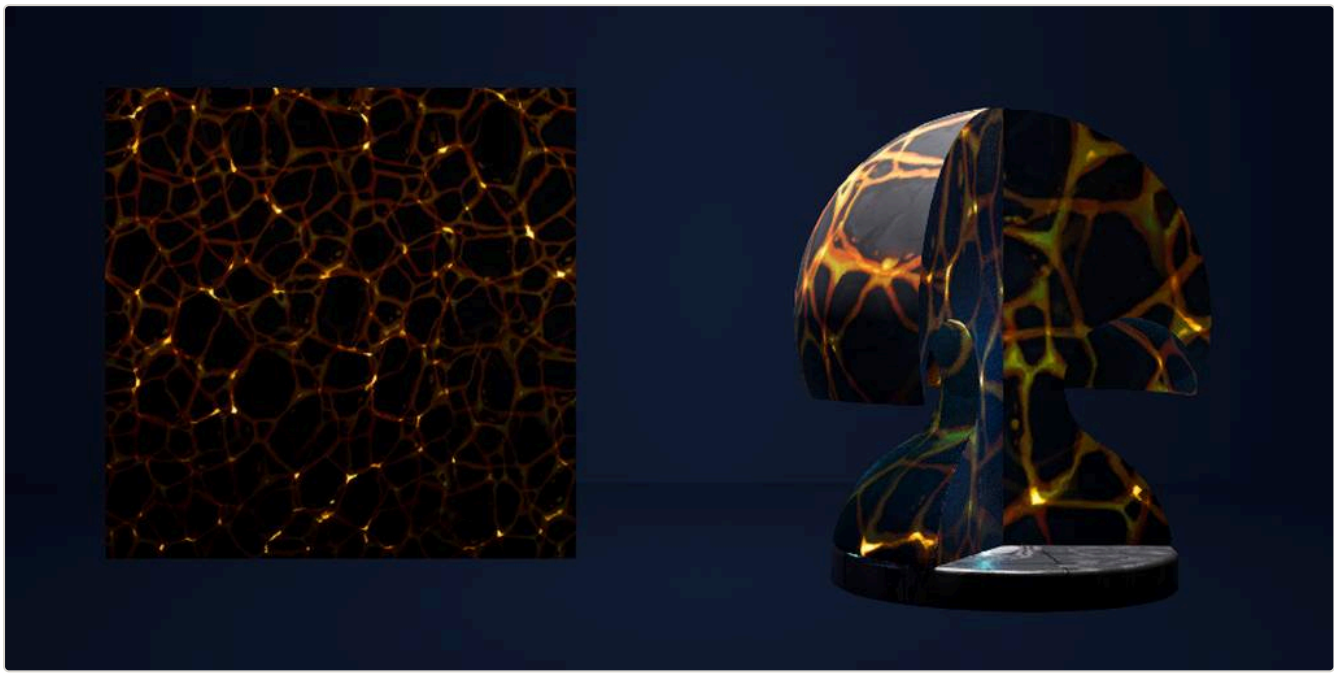
Thick ice: frost on top, a deeper frozen layer seen through it with parallax, glints and a cold rim.

`MaterialFX/Elemental/M_Elem_Ice` Surface / Opaque / Lit (default lit) Instances `3`

Field	Default	Range	Group	What it does
`Tiling`	1	0.1 to 16	02 Pattern	How many times the pattern repeats across the surface (UV scale).
`Frost`	T_MFX_Frost	-	05 Textures	Texture slot: swap in your own texture.
`IceDepth`	0.15	0 to 1	02 Pattern	Parallax depth of the inner frost layer seen under the ice surface.
`DeepTint`	(0.15, 0.45, 0.8, 1)	-	01 Color	Colour of the deep ice seen below the surface; blends toward the surface layer.
`RimColor`	(0.4, 0.8, 1, 1)	-	01 Color	Color of the edge/fresnel glow.
`Glow`	1	0 to 50	04 Glow	Brightness multiplier of the emissive light (higher = brighter, more bloom).

Instances: `MI_Elem_Ice_Glacier` , `MI_Elem_Ice_Arctic` , `MI_Elem_Ice_DarkIce`

LAVA FLOW



Lava Flow: flat panel and shader ball

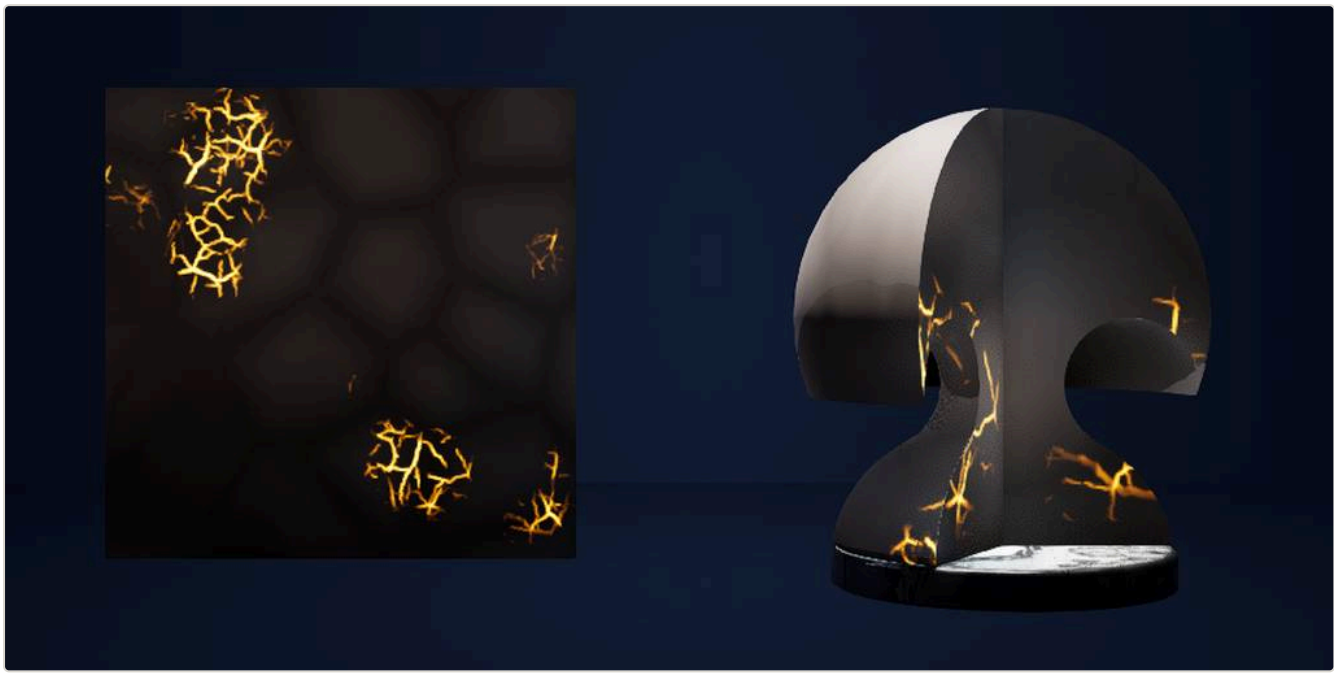
Flowing lava: cooled crust plates drift over glowing molten cracks that throb with heat.

`MaterialFX/Elemental/M_Elem_LavaFlow` Surface / Opaque / Lit (default lit) Instances `4`

Field	Default	Range	Group	What it does
`Tiling`	1	0.1 to 16	02 Pattern	How many times the pattern repeats across the surface (UV scale).
`FlowNoise`	T_MFX_Noise_Packed_B	-	05 Textures	Texture slot: swap in your own texture.
`FlowStrength`	0.2	0 to 1	02 Pattern	How far the lava texture is pushed along the flow-noise direction during its endless two-phase flow loop.
`Speed`	0.04	-4 to 4	03 Animation	Animation speed.
`Lava`	T_MFX_Lava	-	05 Textures	Texture slot: swap in your own texture.
`CrackThreshold`	0.3	0 to 1	02 Pattern	Lava brightness (0-1) at which the surface starts to glow: smoothstep(CrackThreshold, 0.75, brightness).
`ThrobRate`	0.4	0 to 3	03 Animation	Speed of the slow brightness throb of the glowing lava.
`HeatColor`	(1, 0.32, 0.03, 1)	-	01 Color	Colour of the glowing lava; the emissive light is this colour times the heat.

1 more parameter in the instance's Details panel. **Instances:** `MI_Elem_LavaFlow_Classic`, `MI_Elem_LavaFlow_BlueMagma`, `MI_Elem_LavaFlow_Toxic`, `MI_Elem_LavaFlow_Slow`

MAGMA CRACKS



Magma Cracks: flat panel and shader ball

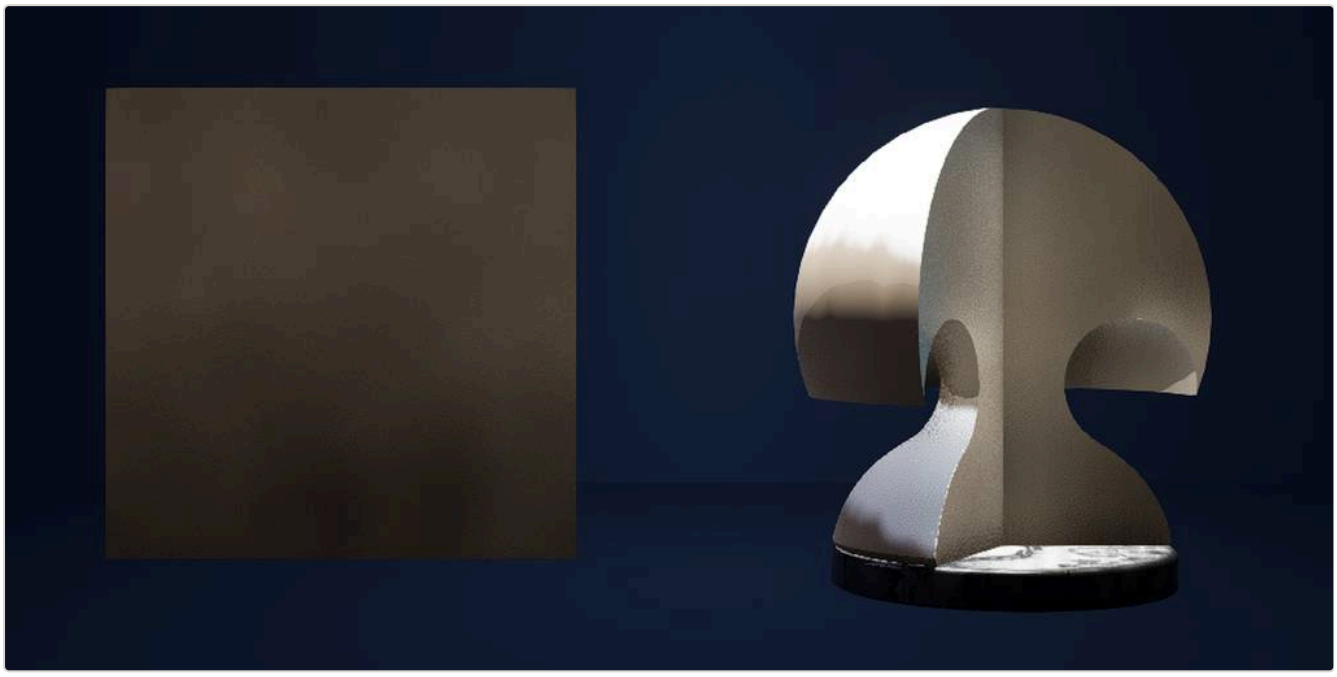
Rock that cracks open to glowing magma.

`MaterialFX/Elemental/M_Elem_MagmaCracks` Surface / Opaque / Lit (default lit) Instances `3`

Field	Default	Range	Group	What it does
`Tiling`	1	0.1 to 16	02 Pattern	How many times the pattern repeats across the surface (UV scale).
`RockNoise`	T_MFX_Noise_Packed_A	-	05 Textures	Texture slot: swap in your own texture.
`Cracks`	T_MFX_Cracks	-	05 Textures	Texture slot: swap in your own texture.
`AutoCycle`	0.15	0 to 2	03 Animation	Looping speed in cycles per second.
`Amount`	1	0 to 1	02 Pattern	How far the glowing cracks have opened, 0-1 (0 = solid rock, 1 = fully cracked).
`RockColor`	(0.12, 0.1, 0.09, 1)	-	01 Color	Colour of the cooled rock between the cracks.
`HeatColor`	(1, 0.35, 0.03, 1)	-	01 Color	Colour of the glowing magma in the cracks.
`Glow`	5	0 to 50	04 Glow	Brightness multiplier of the emissive light (higher = brighter, more bloom).

Instances: `MI_Elem_MagmaCracks_Erupting` , `MI_Elem_MagmaCracks_Static` , `MI_Elem_MagmaCracks_Frozen`

SNOW



Snow: flat panel and shader ball

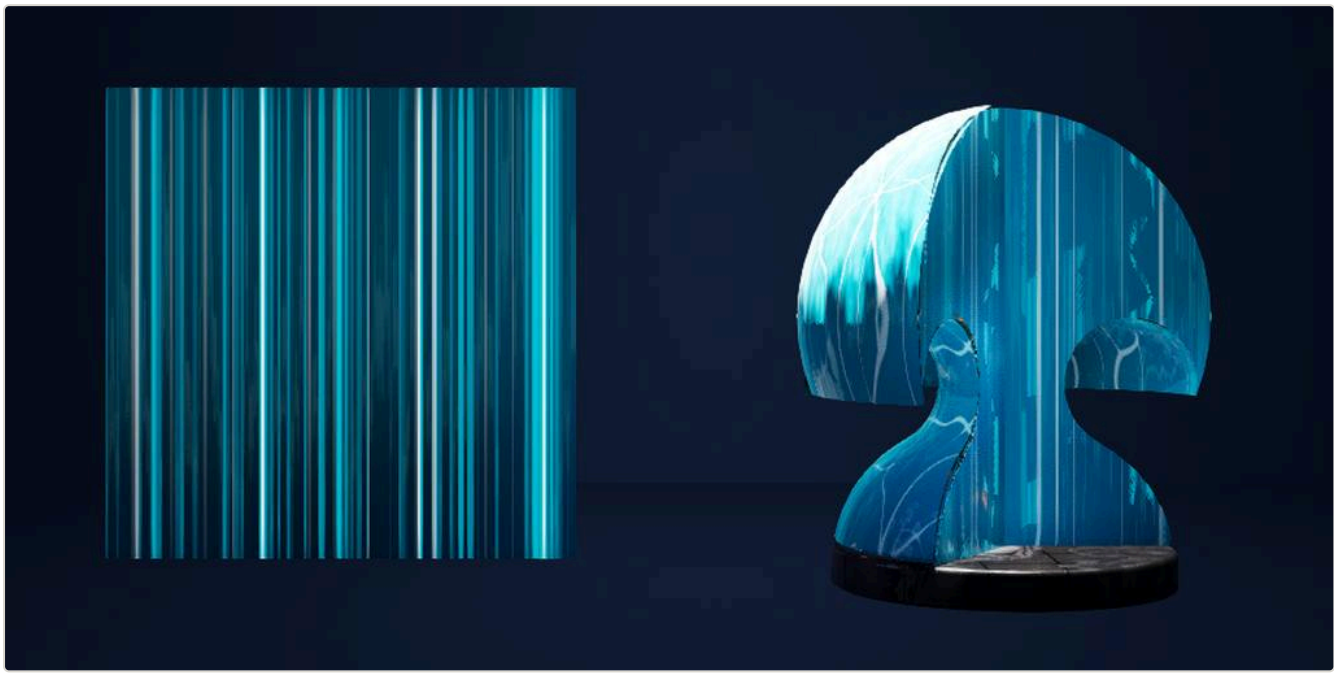
Snow cover for any mesh: white builds up on upward-facing surfaces with sparkles; the rest keeps its base color.

`MaterialFX/Elemental/M_Elem_Snow` Surface / Opaque / Lit (default lit) Instances `3`

Field	Default	Range	Group	What it does
`SnowNoise`	T_MFX_Noise_Packed_B	-	05 Textures	Texture slot: swap in your own texture.
`SnowAmount`	0.6	0 to 1	02 Pattern	Snow coverage 0-1 on upward-facing surfaces (threshold on the world-up normal, broken up by noise).
`BaseColor`	(0.25, 0.2, 0.15, 1)	-	01 Color	Colour of the ground showing through where there is no snow.
`SnowColor`	(0.95, 0.97, 1, 1)	-	01 Color	Colour of the snow cover; blends with BaseColor where there is no snow.
`Sparkle`	1.5	0 to 10	04 Glow	Brightness of the snow glints (they move with the view angle).

Instances: `MI_Elem_Snow_Fresh` , `MI_Elem_Snow_Light` , `MI_Elem_Snow_Ash`

STYLIZED WATER



Stylized Water: flat panel and shader ball

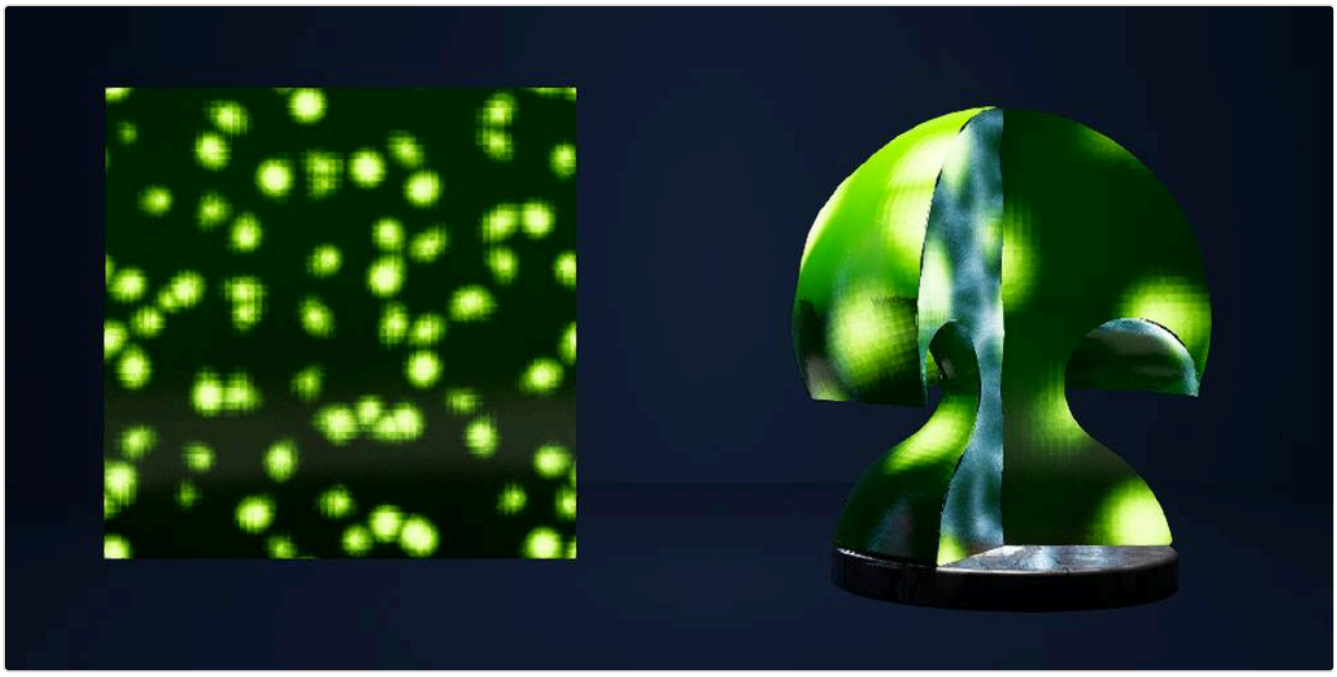
Stylized water: two scrolling normal layers, depth-to-horizon color, foam lines and gentle wave motion.

`MaterialFX/Elemental/M_Elem_StylizedWater` Surface / Opaque / Lit (default lit) Instances `3`

Field	Default	Range	Group	What it does
`TileSize`	400	50 to 4000	02 Pattern	World size (UE units) of one water-texture tile.
`Speed`	0.03	-4 to 4	03 Animation	Animation speed.
`WaterNormal`	T_MFX_Water_N	-	05 Textures	Texture slot: swap in your own texture.
`NormalStrength`	0.5	0 to 1	02 Pattern	Blend 0-1 from a flat surface to the animated water normal map.
`DeepColor`	(0, 0.25, 0.35, 1)	-	01 Color	Colour of the water seen straight down (deep).
`HorizonColor`	(0.3, 0.85, 0.85, 1)	-	01 Color	Colour of the water at grazing angles (shallow, toward the horizon).
`FoamPattern`	T_MFX_Caustics	-	05 Textures	Texture slot: swap in your own texture.
`FoamAmount`	0.6	0 to 1	02 Pattern	Strength 0-1 of the white foam drawn where the caustics pattern is bright.

4 more parameters in the instance's Details panel. **Instances:** `MI_Elem_StylizedWater_Tropical` , `MI_Elem_StylizedWater_DeepOcean` , `MI_Elem_StylizedWater_Swamp`

TOXIC SLIME



Toxic Slime: flat panel and shader ball

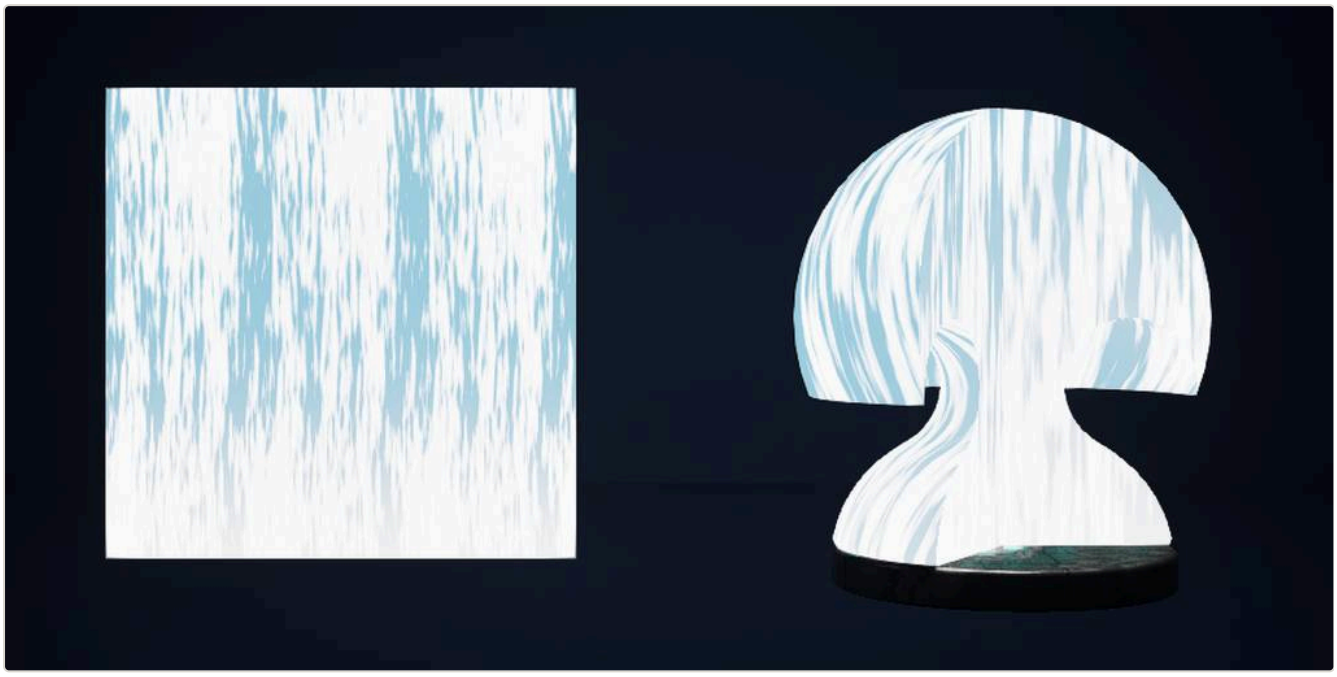
Glossy bubbling slime with glowing blobs and a wobbling surface (vertex animation).

`MaterialFX/Elemental/M_Elem_ToxicSlime` Surface / Opaque / Lit (default lit) Instances `3`

Field	Default	Range	Group	What it does
`Tiling`	1	0.1 to 16	02 Pattern	How many times the pattern repeats across the surface (UV scale).
`Speed`	0.06	-4 to 4	03 Animation	Animation speed.
`BubbleNoise`	T_MFX_Noise_Packed_A	-	05 Textures	Texture slot: swap in your own texture.
`SlimeBright`	(0.45, 1, 0.1, 1)	-	01 Color	Colour of the glowing bubbles and bright slime.
`SlimeDark`	(0.03, 0.12, 0, 1)	-	01 Color	Colour of the dark body of the slime.
`Glow`	1	0 to 50	04 Glow	Brightness multiplier of the emissive light (higher = brighter, more bloom).
`Wobble`	2	0 to 20	03 Animation	Amount of wobble/distortion.

Instances: `MI_Elem_ToxicSlime_Toxic`, `MI_Elem_ToxicSlime_Ooze`, `MI_Elem_ToxicSlime_Honey`

WATERFALL



Waterfall: flat panel and shader ball

Waterfall sheet: foamy streaks plunging down at different speeds, mist at the bottom.

`MaterialFX/Elemental/M_Elem_Waterfall` Surface / Opaque / Unlit Instances `3`

Field	Default	Range	Group	What it does
`Tiling`	1	0.1 to 16	02 Pattern	How many times the pattern repeats across the surface (UV scale).
`Speed`	0.6	-4 to 4	03 Animation	Animation speed.
`StreakNoise`	T_MFX_Noise_Packed_A	-	05 Textures	Texture slot: swap in your own texture.
`FoamNoise`	T_MFX_Noise_Packed_B	-	05 Textures	Texture slot: swap in your own texture.
`WaterColor`	(0.2, 0.45, 0.7, 1)	-	01 Color	Colour of the falling water.
`FoamColor`	(0.95, 0.98, 1, 1)	-	01 Color	Colour of the foam and mist; the water blends toward it where the foam is.
`Glow`	1	0 to 50	04 Glow	Brightness multiplier of the emissive light (higher = brighter, more bloom).

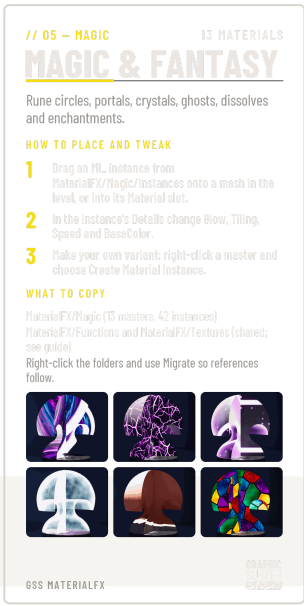
Instances: `MI_Elem_Waterfall_Clear`, `MI_Elem_Waterfall_Tropical`, `MI_Elem_Waterfall_Lavafall`

MAGIC & FANTASY

Rune circles, portals, crystals, ghosts, dissolves and enchantments.

13 masters, 42 instances. Folder `MaterialFX/Magic/` (instances in `MaterialFX/Magic/Instances/`). Uses 11 material functions and 11 textures from `MaterialFX/Functions` and `MaterialFX/Textures`.

Domain	Blend	Shading	Sides	Masters
Surface	Additive	Unlit	two-sided	3
Surface	Masked	Lit (default lit)	two-sided	1
Surface	Masked	Unlit	two-sided	1
Surface	Opaque	Lit (default lit)	one-sided	4
Surface	Opaque	Unlit	one-sided	3
Surface	Translucent	Unlit	two-sided	1

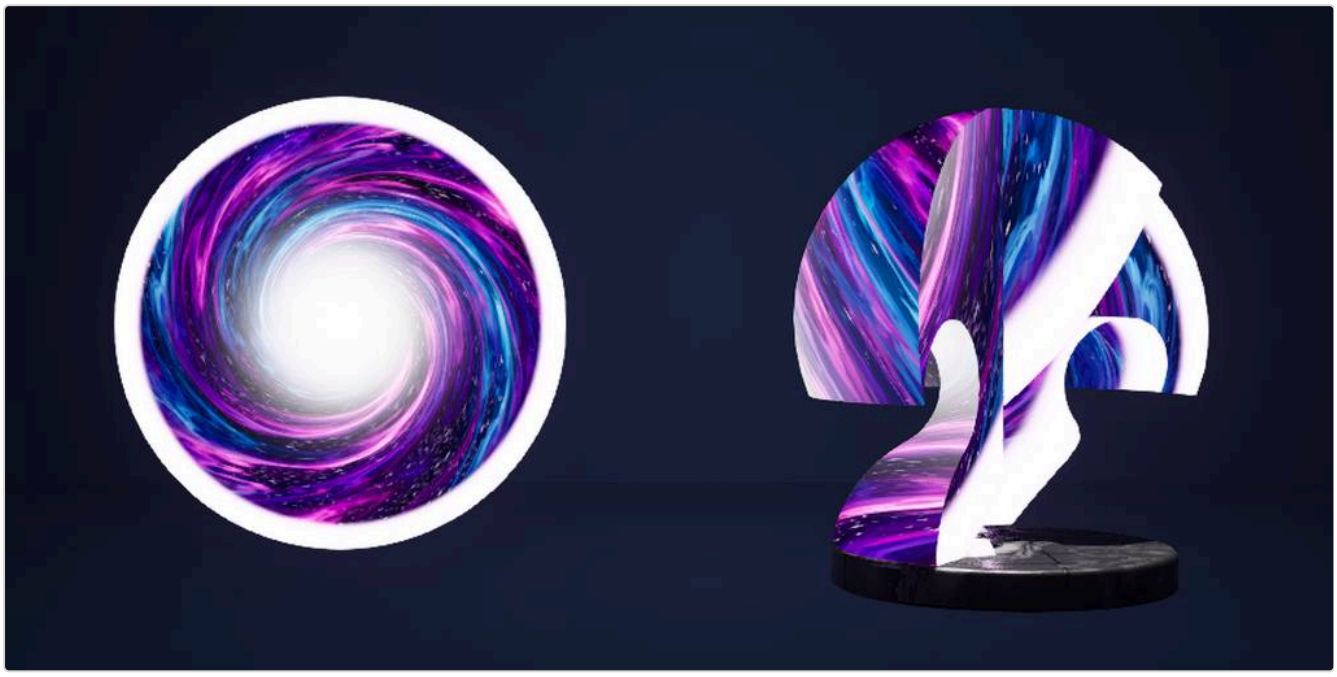


> **AI DISCLOSURE:** AI-generated textures used by this bundle (9 of its 11 textures): Cracks, Filigree, Flames, Glyphs, Matcap_Crystal, Matcap_Gold, Nebula.

MASTERS IN MAGIC & FANTASY

Master	Looks like	Instances
`M_Magic_ArcanePortal`	Swirling portal vortex with a blazing rim.	3
`M_Magic_Aura`	Power-up aura: flame-like energy licking up around the…	3
`M_Magic_Corruption`	Creeping void corruption: dark veins spread across a surface.	3
`M_Magic_Crystal`	Faceted magic crystal: matcap facets.	4
`M_Magic_EmberDissolve`	Burn-away dissolve with glowing ember edges.	3
`M_Magic_Enchanted`	Enchanted item: any base color with a magical shimmer…	4
`M_Magic_FairyDust`	Drifting, twinkling fairy dust.	3
`M_Magic_Ghost`	Spectral ghost: fresnel-lit see-through body with drifting…	3
`M_Magic_GlyphWall`	Ancient wall of glyphs that light up one by one.	3
`M_Magic_GoldShine`	Polished engraved gold (matcap) with a periodic shine sweep.	3
`M_Magic_Petrify`	Petrification creeping up from the base.	3
`M_Magic_RuneCircle`	Counter-rotating magic rune circle with pulsing glow.	4
`M_Magic_StainedWindow`	Glowing stained-glass window with slow divine light beams…	3

ARCANE PORTAL



Arcane Portal: flat panel and shader ball

Swirling portal vortex with a blazing rim.

`MaterialFX/Magic/M_Magic_ArcanePortal` Surface / Masked / Unlit Instances `3`

Field	Default	Range	Group	What it does
`Tiling`	1	0.1 to 16	02 Pattern	How many times the pattern repeats across the surface (UV scale).
`Speed`	0.08	-4 to 4	03 Animation	Animation speed.
`Twirl`	1.2	-4 to 4	02 Pattern	Strength of the swirl applied to the portal texture (MF_UV_Twirl Strength).
`SwirlTexture`	T_MFX_Nebula	-	05 Textures	Texture slot: swap in your own texture.
`SwirlTint`	(0.8, 0.5, 1, 1)	-	01 Color	Multiplies the colours of the swirling texture.
`PortalRadius`	0.46	0.1 to 0.5	02 Pattern	Radius of the portal disc in UV units; also sets the rim ring position and the cut-out mask.
`RimColor`	(0.8, 0.5, 1, 1)	-	01 Color	Color of the edge/fresnel glow.
`Glow`	1.3	0 to 50	04 Glow	Brightness multiplier of the emissive light (higher = brighter, more bloom).

Instances: `MI_Magic_ArcanePortal_Arcane` , `MI_Magic_ArcanePortal_Inferno` , `MI_Magic_ArcanePortal_Verdant`

AURA



Aura: flat panel and shader ball

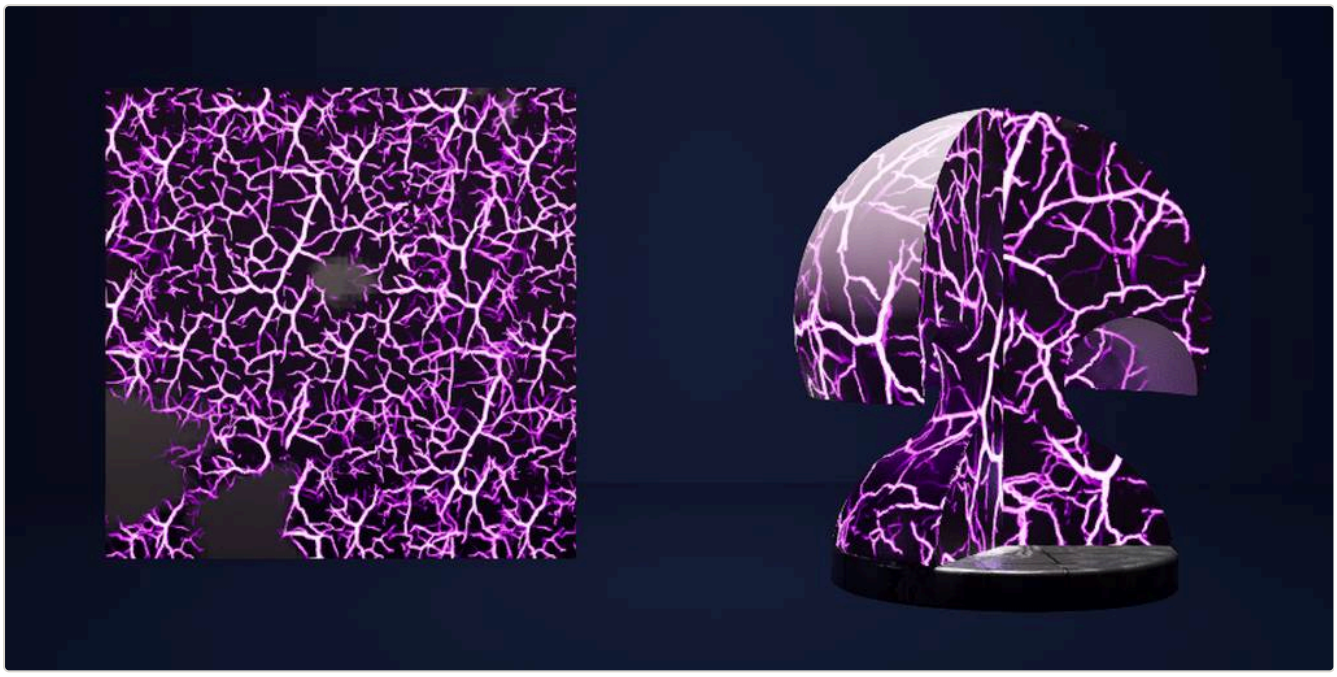
Power-up aura: flame-like energy licking up around the silhouette edge.

`MaterialFX/Magic/M_Magic_Aura` Surface / Additive / Unlit Instances `3`

Field	Default	Range	Group	What it does
`Tiling`	1	0.1 to 16	02 Pattern	How many times the pattern repeats across the surface (UV scale).
`Speed`	0.6	-4 to 4	03 Animation	Animation speed.
`FlameNoise`	T_MFX_Flames	-	05 Textures	Texture slot: swap in your own texture.
`RimPower`	1.5	0.3 to 6	04 Glow	How tight the edge glow is (higher = thinner rim).
`AuraColor`	(1, 0.75, 0.1, 1)	-	01 Color	Colour of the aura glow.
`Glow`	4	0 to 50	04 Glow	Brightness multiplier of the emissive light (higher = brighter, more bloom).

Instances: `MI_Magic_Aura_Super` , `MI_Magic_Aura_Dark` , `MI_Magic_Aura_Holy`

CORRUPTION



Corruption: flat panel and shader ball

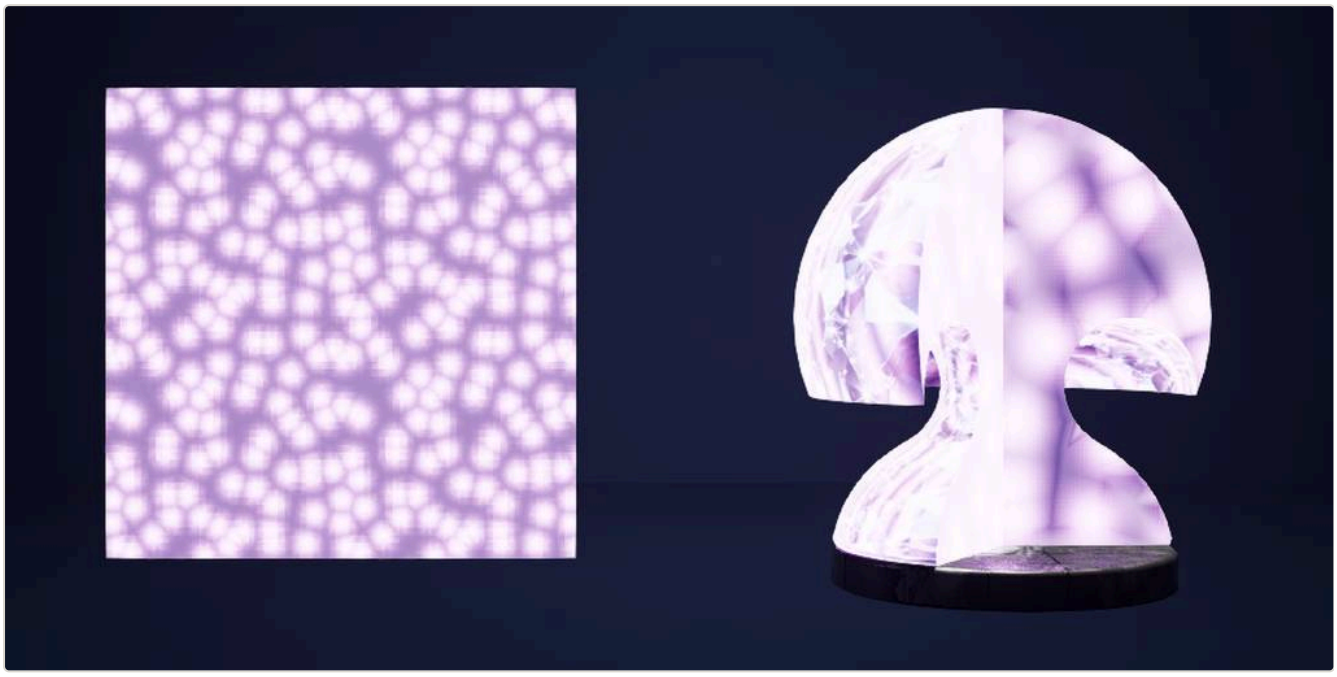
Creeping void corruption: dark veins spread across a surface, pulsing with purple light.

`MaterialFX/Magic/M_Magic_Corruption` Surface / Opaque / Lit (default lit) Instances `3`

Field	Default	Range	Group	What it does
`Tiling`	1	0.1 to 16	02 Pattern	How many times the pattern repeats across the surface (UV scale).
`SpreadNoise`	T_MFX_Noise_Packed_A	-	05 Textures	Texture slot: swap in your own texture.
`Veins`	T_MFX_Cracks	-	05 Textures	Texture slot: swap in your own texture.
`AutoCycle`	0.1	0 to 2	03 Animation	Looping speed in cycles per second.
`Amount`	0.7	0 to 1	02 Pattern	How far the corruption has spread, 0-1.
`PulseRate`	0.7	0 to 4	03 Animation	How fast the pulse repeats.
`BaseColor`	(0.45, 0.42, 0.38, 1)	-	01 Color	Colour of the clean, uncorrupted surface.
`VeinColor`	(0.6, 0.05, 1, 1)	-	01 Color	Colour of the glowing corruption veins.

1 more parameter in the instance's Details panel. **Instances:** `MI_Magic_Corruption_Void`, `MI_Magic_Corruption_Blight`, `MI_Magic_Corruption_Blood`

CRYSTAL



Crystal: flat panel and shader ball

Faceted magic crystal: matcap facets, glowing cells deep inside (parallax) and a bright rim.

`MaterialFX/Magic/M_Magic_Crystal` Surface / Opaque / Unlit Instances `4`

Field	Default	Range	Group	What it does
`Matcap`	T_MFX_Matcap_Crystal	-	05 Textures	Texture slot: swap in your own texture.
`Tiling`	2	0.1 to 16	02 Pattern	How many times the pattern repeats across the surface (UV scale).
`InnerDepth`	0.2	0 to 1	02 Pattern	Parallax depth of the glowing inner structure.
`InnerNoise`	T_MFX_Noise_Packed_A	-	05 Textures	Texture slot: swap in your own texture.
`Tint`	(0.8, 0.5, 1, 1)	-	01 Color	Color multiplied over the result.
`InnerColor`	(0.7, 0.3, 1, 1)	-	01 Color	Colour of the glow inside the crystal.
`Glow`	1	0 to 50	04 Glow	Brightness multiplier of the emissive light (higher = brighter, more bloom).

Instances: `MI_Magic_Crystal_Amethyst`, `MI_Magic_Crystal_Emerald`, `MI_Magic_Crystal_Ruby`, `MI_Magic_Crystal_Diamond`

EMBER DISSOLVE



Ember Dissolve: flat panel, sphere and cube

Burn-away dissolve with glowing ember edges.

`MaterialFX/Magic/M_Magic_EmberDissolve` Surface / Masked / Lit (default lit) Instances `3`

Field	Default	Range	Group	What it does
`Tiling`	1	0.1 to 16	02 Pattern	How many times the pattern repeats across the surface (UV scale).
`DissolveNoise`	T_MFX_Noise_Packed_A	-	05 Textures	Texture slot: swap in your own texture.
`AutoSpeed`	0.2	0 to 2	03 Animation	Looping speed in cycles per second.
`Amount`	0.5	0 to 1	02 Pattern	Dissolve progress 0-1 (0 = intact, 1 = fully dissolved).
`EdgeWidth`	0.06	0.005 to 0.3	02 Pattern	Width of the glowing ember edge along the dissolve front.
`BaseColor`	(0.4, 0.35, 0.3, 1)	-	01 Color	Main surface color.
`EmberColor`	(1, 0.35, 0.02, 1)	-	01 Color	Colour of the glowing edge where the surface burns away.
`Glow`	8	0 to 50	04 Glow	Brightness multiplier of the emissive light (higher = brighter, more bloom).

Instances: `MI_Magic_EmberDissolve_Fire` , `MI_Magic_EmberDissolve_Arcane` , `MI_Magic_EmberDissolve_Frost`

ENCHANTED



Enchanted: flat panel and shader ball

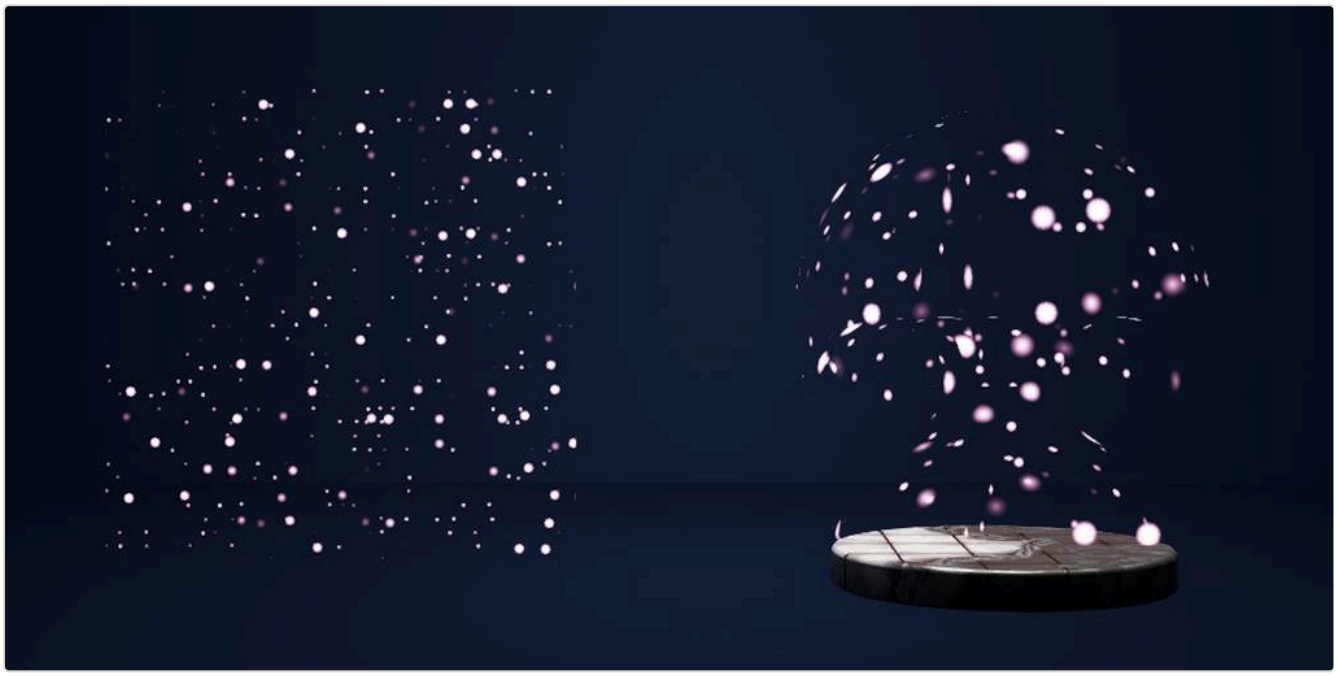
Enchanted item: any base color with a magical shimmer sweeping across, twinkles and a glowing rim.

`MaterialFX/Magic/M_Magic_Enchanted` Surface / Opaque / Lit (default lit) Instances `4`

Field	Default	Range	Group	What it does
`SweepSize`	300	20 to 3000	02 Pattern	World distance (UE units) over which the glowing sweep band travels.
`Speed`	0.3	-4 to 4	03 Animation	Animation speed.
`TwinkleDensity`	30	4 to 100	02 Pattern	Density of the twinkling sparkle points.
`EnchantColor`	(0.6, 0.2, 1, 1)	-	01 Color	Colour of the enchantment glow and glints.
`BaseColor`	(0.35, 0.36, 0.4, 1)	-	01 Color	Main surface color.
`Metallic`	0.8	0 to 1	02 Pattern	Metallic look amount.
`Roughness`	0.3	0 to 1	02 Pattern	Surface roughness (0 = mirror).
`Glow`	1	0 to 50	04 Glow	Brightness multiplier of the emissive light (higher = brighter, more bloom).

Instances: `MI_Magic_Enchanted_Arcane` , `MI_Magic_Enchanted_Fire` , `MI_Magic_Enchanted_Frost` , `MI_Magic_Enchanted_Gold`

FAIRY DUST



Fairy Dust: flat panel and shader ball

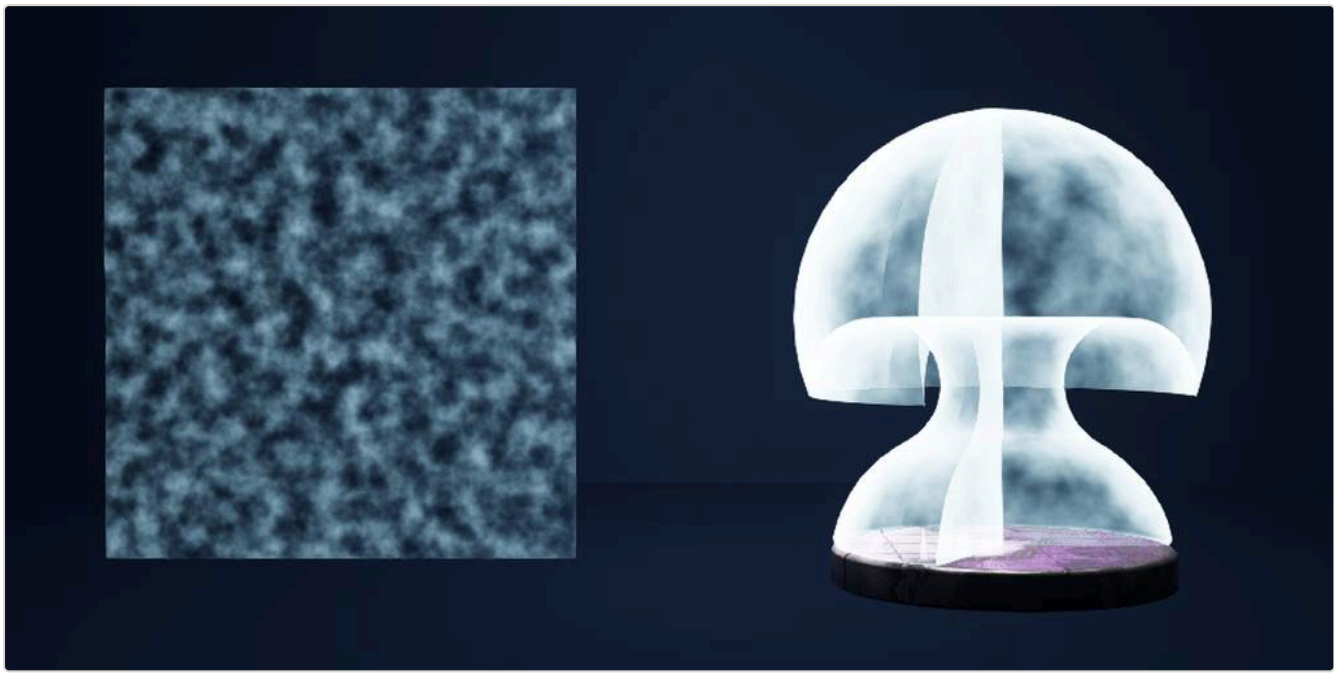
Drifting, twinkling fairy dust.

`MaterialFX/Magic/M_Magic_FairyDust` Surface / Additive / Unlit Instances `3`

Field	Default	Range	Group	What it does
`Tiling`	1	0.1 to 16	02 Pattern	How many times the pattern repeats across the surface (UV scale).
`Speed`	0.03	-4 to 4	03 Animation	Animation speed.
`Density`	18	2 to 80	02 Pattern	How many elements are drawn.
`DustColor`	(1, 0.5, 0.9, 1)	-	01 Color	Colour of the sparkling dust particles.
`Glow`	4	0 to 50	04 Glow	Brightness multiplier of the emissive light (higher = brighter, more bloom).

Instances: `MI_Magic_FairyDust_Pixie` , `MI_Magic_FairyDust_Golden` , `MI_Magic_FairyDust_Frost`

GHOST



Ghost: flat panel and shader ball

Spectral ghost: fresnel-lit see-through body with drifting wisps, flicker and a gentle float wobble.

`MaterialFX/Magic/M_Magic_Ghost` Surface / Translucent / Unlit Instances `3`

Field	Default	Range	Group	What it does
`Tiling`	1	0.1 to 16	02 Pattern	How many times the pattern repeats across the surface (UV scale).
`Speed`	0.1	-4 to 4	03 Animation	Animation speed.
`WispNoise`	T_MFX_Noise_Packed_B	-	05 Textures	Texture slot: swap in your own texture.
`RimPower`	2	0.5 to 8	04 Glow	How tight the edge glow is (higher = thinner rim).
`GhostColor`	(0.5, 0.8, 1, 1)	-	01 Color	Colour of the see-through ghost body and rim.
`Glow`	1.5	0 to 50	04 Glow	Brightness multiplier of the emissive light (higher = brighter, more bloom).
`Opacity`	0.6	0 to 1	02 Pattern	Maximum opacity of the ghost (the final translucency is scaled by this value).
`Wobble`	3	0 to 30	03 Animation	Amount of wobble/distortion.

Instances: `MI_Magic_Ghost_Spectral`, `MI_Magic_Ghost_Ectoplasm`, `MI_Magic_Ghost_Wraith`

GLYPH WALL



Glyph Wall: flat panel and shader ball

Ancient wall of glyphs that light up one by one, glow and fade.

`MaterialFX/Magic/M_Magic_GlyphWall` Surface / Opaque / Lit (default lit) Instances `3`

Field	Default	Range	Group	What it does
`Tiling`	1	0.1 to 16	02 Pattern	How many times the pattern repeats across the surface (UV scale).
`GlyphsX`	6	1 to 32	02 Pattern	Number of glyph cells across the wall.
`GlyphsY`	6	1 to 32	02 Pattern	Number of glyph cells up the wall.
`GlyphSheet`	T_MFX_Glyphs	-	05 Textures	Texture slot: swap in your own texture.
`Speed`	0.15	-4 to 4	03 Animation	Animation speed.
`StoneNoise`	T_MFX_Noise_Packed_A	-	05 Textures	Texture slot: swap in your own texture.
`StoneColor`	(0.3, 0.28, 0.25, 1)	-	01 Color	Colour of the stone wall.
`GlyphColor`	(0.5, 0.3, 1, 1)	-	01 Color	Colour of the glowing glyphs.

1 more parameter in the instance's Details panel. **Instances:** `MI_Magic_GlyphWall_Arcane`, `MI_Magic_GlyphWall_Ember`, `MI_Magic_GlyphWall_Jade`

GOLD SHINE



Gold Shine: flat panel and shader ball

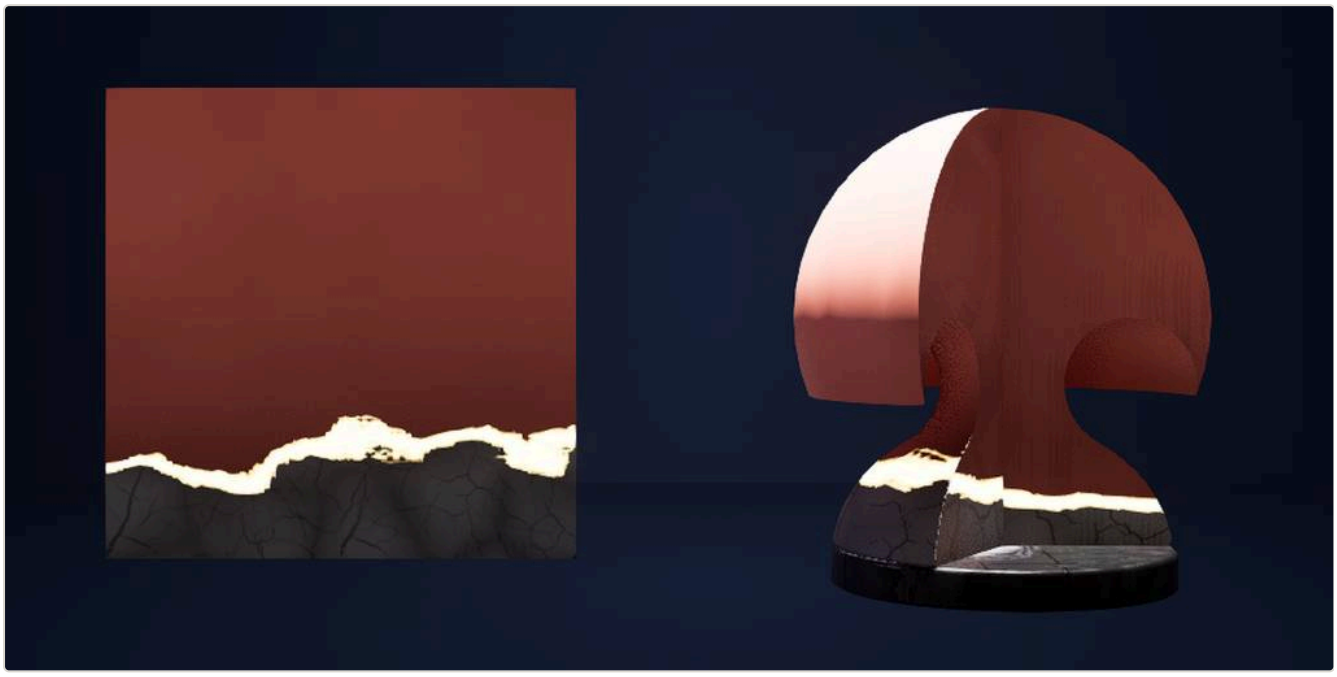
Polished engraved gold (matcap) with a periodic shine sweep.

`MaterialFX/Magic/M_Magic_GoldShine` Surface / Opaque / Unlit Instances `3`

Field	Default	Range	Group	What it does
`Matcap`	T_MFX_Matcap_Gold	-	05 Textures	Texture slot: swap in your own texture.
`Desaturate`	0	0 to 1	01 Color	How much color is drained.
`Tint`	(1, 1, 1, 1)	-	01 Color	Color multiplied over the result.
`Tiling`	2	0.1 to 16	02 Pattern	How many times the pattern repeats across the surface (UV scale).
`Engraving`	T_MFX_Filigree	-	05 Textures	Texture slot: swap in your own texture.
`EngravingStrength`	0.8	0 to 2	02 Pattern	How strongly the filigree engraving texture modulates the gold.
`Speed`	0.2	-4 to 4	03 Animation	Animation speed.
`ShineColor`	(1, 0.95, 0.8, 1)	-	01 Color	Colour of the moving shine highlight.

1 more parameter in the instance's Details panel. **Instances:** `MI_Magic_GoldShine_Gold`, `MI_Magic_GoldShine_Silver`, `MI_Magic_GoldShine_RoseGold`

PETRIFY



Petrify: flat panel and shader ball

Petrification creeping up from the base: color turns to cracked stone behind a glowing front.

`MaterialFX/Magic/M_Magic_Petrify` Surface / Opaque / Lit (default lit) Instances `3`

Field	Default	Range	Group	What it does
`Tiling`	1	0.1 to 16	02 Pattern	How many times the pattern repeats across the surface (UV scale).
`StoneNoise`	T_MFX_Noise_Packed_A	-	05 Textures	Texture slot: swap in your own texture.
`Cracks`	T_MFX_Cracks	-	05 Textures	Texture slot: swap in your own texture.
`ObjectHeight`	200	10 to 2000	02 Pattern	Height (UE units) of the object over which the stone front rises from bottom to top.
`AutoSpeed`	0.12	0 to 2	03 Animation	Looping speed in cycles per second.
`Amount`	0.5	0 to 1	02 Pattern	How far up the object the stone front has risen, 0-1.
`StoneColor`	(0.5, 0.5, 0.48, 1)	-	01 Color	Colour of the stone the surface turns into.
`BaseColor`	(0.8, 0.25, 0.2, 1)	-	01 Color	Colour of the not-yet-petrified surface.

3 more parameters in the instance's Details panel. **Instances:** `MI_Magic_Petrify_Stone` , `MI_Magic_Petrify_Midas` , `MI_Magic_Petrify_Freeze`

RUNE CIRCLE



Rune Circle: flat panel and shader ball

Counter-rotating magic rune circle with pulsing glow.

`MaterialFX/Magic/M_Magic_RuneCircle` Surface / Additive / Unlit Instances `4`

Field	Default	Range	Group	What it does
`Tiling`	1	0.1 to 16	02 Pattern	How many times the pattern repeats across the surface (UV scale).
`Speed`	0.03	-4 to 4	03 Animation	Animation speed.
`Runes`	T_MFX_RuneCircle	-	05 Textures	Texture slot: swap in your own texture.
`PulseRate`	0.5	0 to 4	03 Animation	How fast the pulse repeats.
`InnerColor`	(0.9, 0.6, 1, 1)	-	01 Color	Colour of the runes near the centre of the circle.
`OuterColor`	(0.45, 0.1, 1, 1)	-	01 Color	Colour of the runes toward the outer edge.
`Glow`	3	0 to 50	04 Glow	Brightness multiplier of the emissive light (higher = brighter, more bloom).

Instances: `MI_Magic_RuneCircle_Arcane` , `MI_Magic_RuneCircle_Holy` , `MI_Magic_RuneCircle_Frost` , `MI_Magic_RuneCircle_Demonic`

STAINED WINDOW



Stained Window: flat panel and shader ball

Glowing stained-glass window with slow divine light beams sweeping through.

`MaterialFX/Magic/M_Magic_StainedWindow` Surface / Opaque / Unlit Instances `3`

Field	Default	Range	Group	What it does
`Tiling`	1	0.1 to 16	02 Pattern	How many times the pattern repeats across the surface (UV scale).
`Glass`	T_MFX_StainedGlass	-	05 Textures	Texture slot: swap in your own texture.
`Speed`	0.07	-4 to 4	03 Animation	Animation speed.
`Tint`	(1, 1, 1, 1)	-	01 Color	Color multiplied over the result.
`Glow`	1.3	0 to 50	04 Glow	Brightness multiplier of the emissive light (higher = brighter, more bloom).

Instances: `MI_Magic_StainedWindow_Cathedral` , `MI_Magic_StainedWindow_Twilight` , `MI_Magic_StainedWindow_Ember`

PREMIUM SURFACES

Iridescent, holographic, chrome, toon, glitter and fabric finishes at mobile cost.



12 masters, 52 instances. Folder `MaterialFX/Surface/` (instances in `MaterialFX/Surface/Instances/`). Uses 6 material functions and 20 textures from `MaterialFX/Functions` and `MaterialFX/Textures`.

Domain	Blend	Shading	Sides	Masters
Surface	Opaque	Lit (default lit)	one-sided	8
Surface	Opaque	Unlit	one-sided	4

> **AI DISCLOSURE:** AI-generated textures used by this bundle (16 of its 20 textures): Matcap_Bronze, Matcap_CarPaint, Matcap_Chrome, Matcap_Clay.

MASTERS IN PREMIUM SURFACES

Master	Looks like	Instances
`M_Surface_CandyStripe`	Glossy candy / barber-pole stripes that spiral endlessly.	3
`M_Surface_CarbonFiber`	Procedural carbon-fiber weave with a view-dependent sheen.	3
`M_Surface_DiscoTiles`	Mirror-ball tiles: grid of mirrors flashing random colors in…	3
`M_Surface_Glitter`	Glitter: thousands of tiny flakes that flash individually as…	3
`M_Surface_HoloFoil`	Holographic trading-card foil: rainbow sheen and diffraction…	3
`M_Surface_LiquidChrome`	Liquid chrome (T-1000 style): mirror metal whose reflections…	3
`M_Surface_Matcap`	Matcap shading: chrome, gold, pearl.	19
`M_Surface_OilSlick`	Oil-slick iridescence: thin-film rainbow that shifts with…	3
`M_Surface_Pearl`	Pearlescent finish: soft white body with pastel iridescence…	3
`M_Surface_RainbowFlow`	Silky RGB gradient flowing across the surface.	3
`M_Surface_ToonCel`	Cel-shaded toon look: stepped lighting from a configurable…	3
`M_Surface_Velvet`	Soft velvet / plush fabric: dark core with a bright fuzzy…	3

CANDY STRIPE



Candy Stripe: flat panel and shader ball

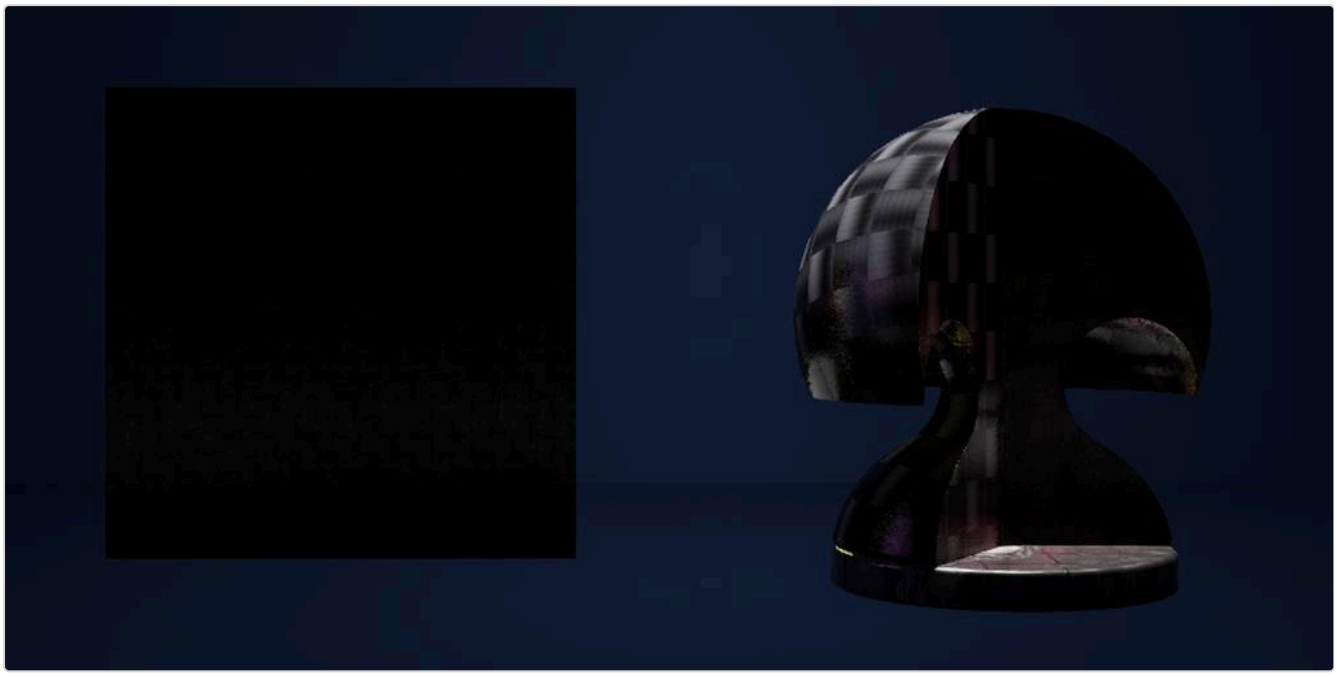
Glossy candy / barber-pole stripes that spiral endlessly.

`MaterialFX/Surface/M_Surface_CandyStripe` Surface / Opaque / Lit (default lit) Instances `3`

Field	Default	Range	Group	What it does
`Tiling`	1	0.1 to 16	02 Pattern	How many times the pattern repeats across the surface (UV scale).
`Twist`	1	-4 to 4	02 Pattern	Slant of the stripes: stripe coordinate = U + V x Twist.
`Stripes`	6	1 to 40	02 Pattern	Number of stripes across the tile.
`Speed`	0.4	-4 to 4	03 Animation	Animation speed.
`ColorA`	(0.9, 0.05, 0.1, 1)	-	01 Color	Colour of every other stripe.
`ColorB`	(1, 1, 1, 1)	-	01 Color	Colour of the stripes in between.
`Rainbow`	False	-	Switches	Static switch.
`InnerGlow`	0.08	0 to 50	04 Glow	Self-illumination of the stripe colour (a small glow multiplier so the candy never goes fully dark).

Instances: `MI_Surface_CandyStripe_CandyCane`, `MI_Surface_CandyStripe_Mint`, `MI_Surface_CandyStripe_Rainbow`

CARBON FIBER



Carbon Fiber: flat panel and shader ball

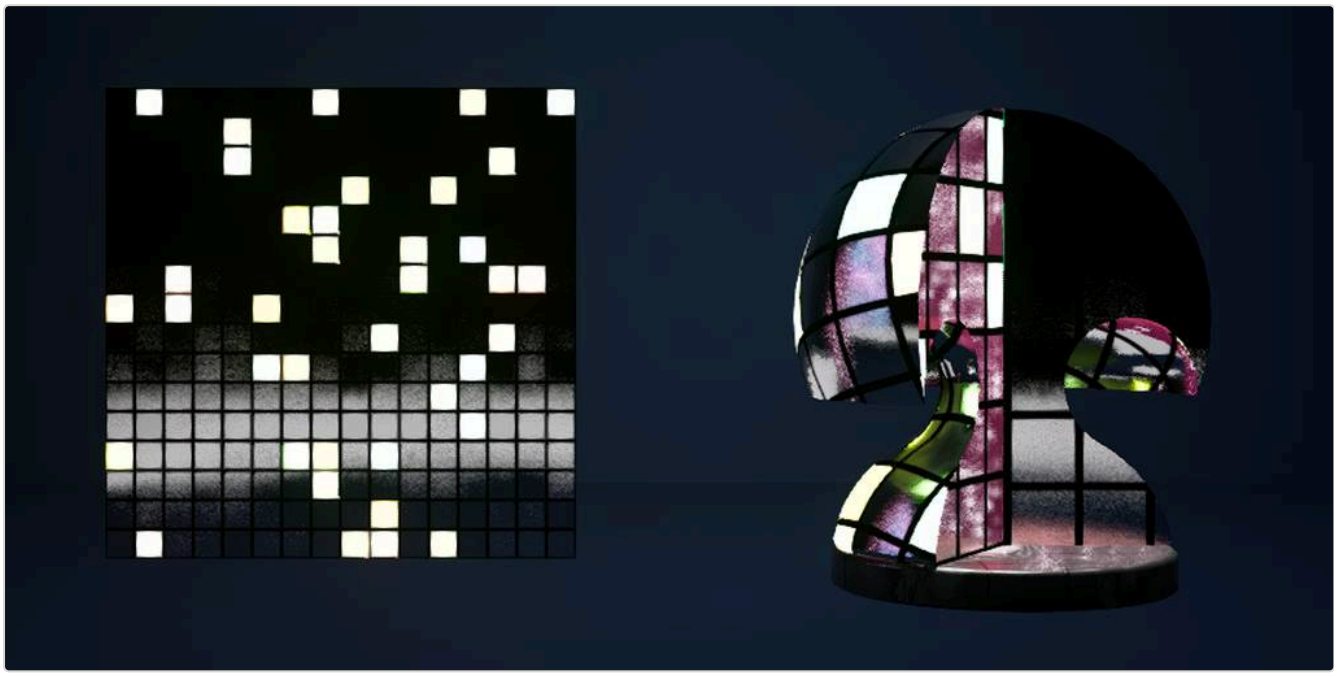
Procedural carbon-fiber weave with a view-dependent sheen.

`MaterialFX/Surface/M_Surface_CarbonFiber` Surface / Opaque / Lit (default lit) Instances `3`

Field	Default	Range	Group	What it does
`Tiling`	1	0.1 to 16	02 Pattern	How many times the pattern repeats across the surface (UV scale).
`WeaveDensity`	24	4 to 120	02 Pattern	Number of weave cells per tile in each direction.
`FiberColor`	(0.02, 0.02, 0.022, 1)	-	01 Color	Base colour of the carbon weave.
`SheenColor`	(0.6, 0.65, 0.7, 1)	-	01 Color	Colour of the view-dependent sheen on the weave.
`SheenStrength`	0.15	0 to 1	02 Pattern	Brightness of the anisotropic fibre sheen added to the base colour.
`Metallic`	0.4	0 to 1	02 Pattern	Metallic look amount.
`Roughness`	0.22	0 to 1	02 Pattern	Surface roughness (0 = mirror).

Instances: `MI_Surface_CarbonFiber_Black` , `MI_Surface_CarbonFiber_Red` , `MI_Surface_CarbonFiber_Blue`

DISCO TILES



Disco Tiles: flat panel and shader ball

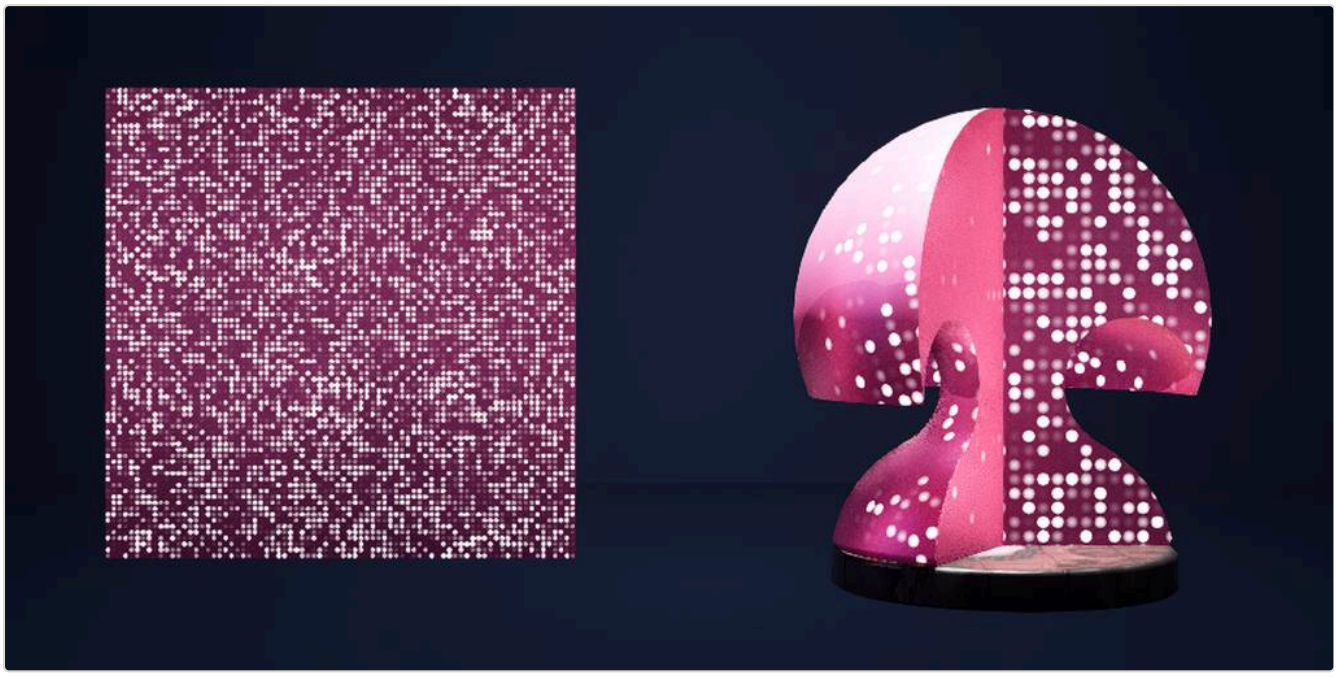
Mirror-ball tiles: grid of mirrors flashing random colors in time.

`MaterialFX/Surface/M_Surface_DiscoTiles` Surface / Opaque / Lit (default lit) Instances `3`

Field	Default	Range	Group	What it does
`Tiling`	1	0.1 to 16	02 Pattern	How many times the pattern repeats across the surface (UV scale).
`Tiles`	16	2 to 64	02 Pattern	Number of mirror tiles per tile in each direction.
`FlashRate`	4	0.5 to 20	03 Animation	How many times per second the set of flashing tiles is re-rolled (stepped time).
`ColorSaturation`	1	0 to 1	01 Color	Flash colour 0-1: 0 = white flashes, 1 = rainbow colours.
`MirrorTint`	(0.85, 0.85, 0.9, 1)	-	01 Color	Multiplies the mirror tiles.
`Glow`	4	0 to 50	04 Glow	Brightness multiplier of the emissive light (higher = brighter, more bloom).

Instances: `MI_Surface_DiscoTiles_Party` , `MI_Surface_DiscoTiles_Gold` , `MI_Surface_DiscoTiles_Ice`

GLITTER



Glitter: flat panel and shader ball

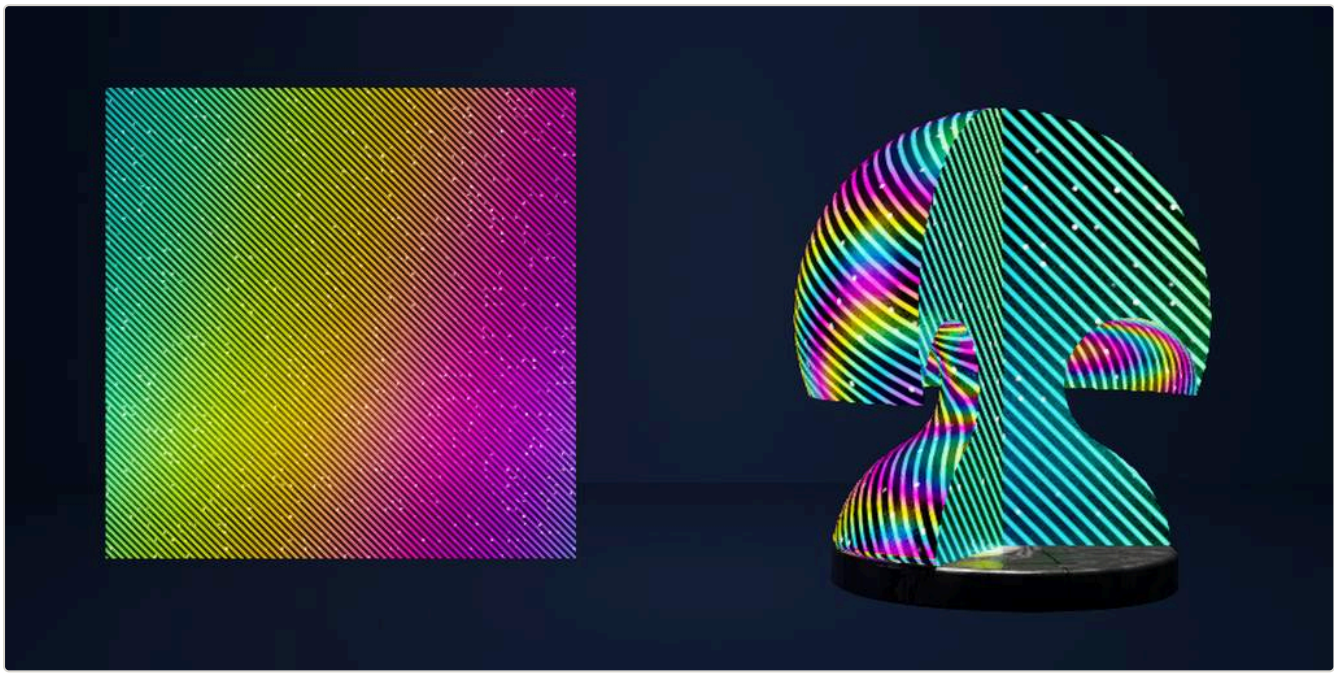
Glitter: thousands of tiny flakes that flash individually as the camera or object moves.

`MaterialFX/Surface/M_Surface_Glitter` Surface / Opaque / Lit (default lit) Instances `3`

Field	Default	Range	Group	What it does
`Tiling`	1	0.1 to 16	02 Pattern	How many times the pattern repeats across the surface (UV scale).
`FlakeDensity`	80	10 to 400	02 Pattern	Number of glitter flakes per tile in each direction.
`FlakeSharpness`	24	2 to 400	02 Pattern	Exponent on the flake facing test.
`BaseColor`	(0.9, 0.25, 0.55, 1)	-	01 Color	Main surface color.
`GlintColor`	(1, 0.8, 0.95, 1)	-	01 Color	Colour of the flashing glitter flakes.
`Glow`	6	0 to 50	04 Glow	Brightness multiplier of the emissive light (higher = brighter, more bloom).

Instances: `MI_Surface_Glitter_Pink` , `MI_Surface_Glitter_Silver` , `MI_Surface_Glitter_Galaxy`

HOLO FOIL



Holo Foil: flat panel and shader ball

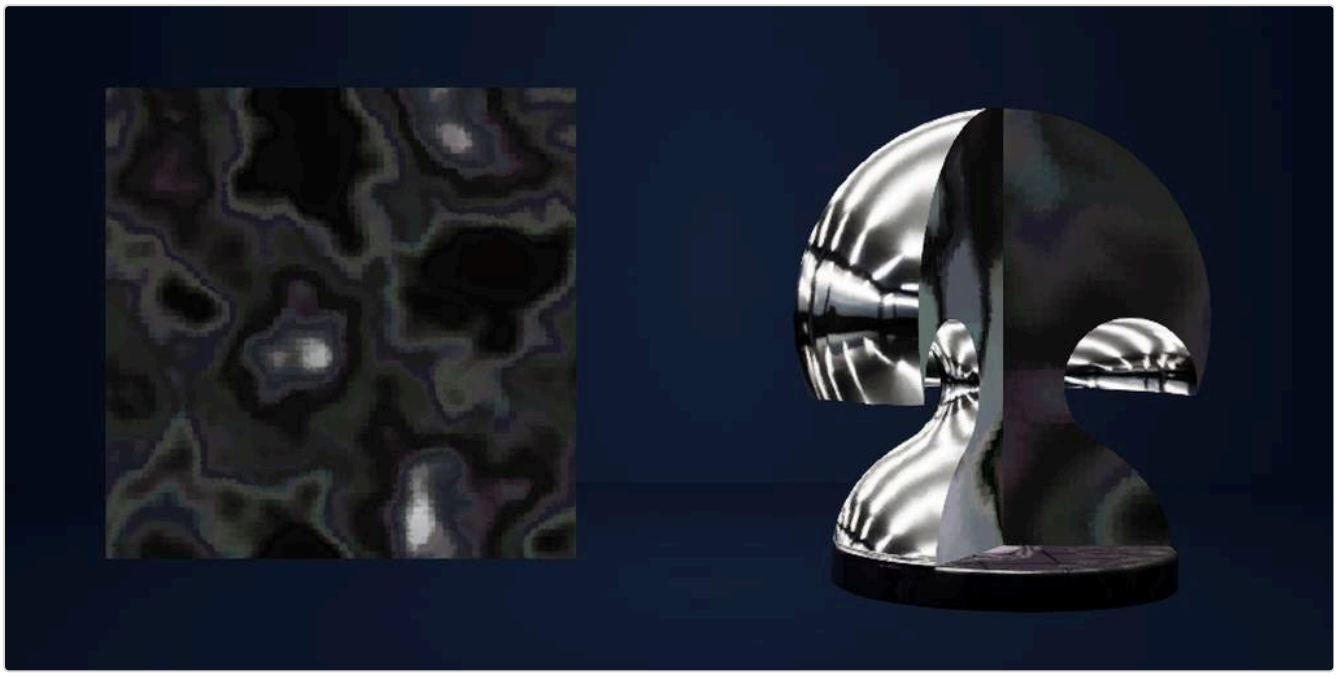
Holographic trading-card foil: rainbow sheen and diffraction lines that move with the viewer, plus view-dependent glitter.

`MaterialFX/Surface/M_Surface_HoloFoil` Surface / Opaque / Lit (default lit) Instances `3`

Field	Default	Range	Group	What it does
`Tiling`	1	0.1 to 16	02 Pattern	How many times the pattern repeats across the surface (UV scale).
`RainbowBands`	1.5	0.2 to 6	02 Pattern	Number of rainbow cycles across the reflection angle.
`FoilSaturation`	1	0 to 1	01 Color	Rainbow colour amount 0-1 (0 = grey foil, 1 = full rainbow).
`FoilTint`	(1, 1, 1, 1)	-	01 Color	Multiplies the rainbow foil.
`LineDensity`	60	5 to 300	02 Pattern	Number of diffraction lines across the foil.
`Glow`	1	0 to 50	04 Glow	Brightness multiplier of the emissive light (higher = brighter, more bloom).

Instances: `MI_Surface_HoloFoil_Rainbow` , `MI_Surface_HoloFoil_Silver` , `MI_Surface_HoloFoil_Gold`

LIQUID CHROME



Liquid Chrome: flat panel and shader ball

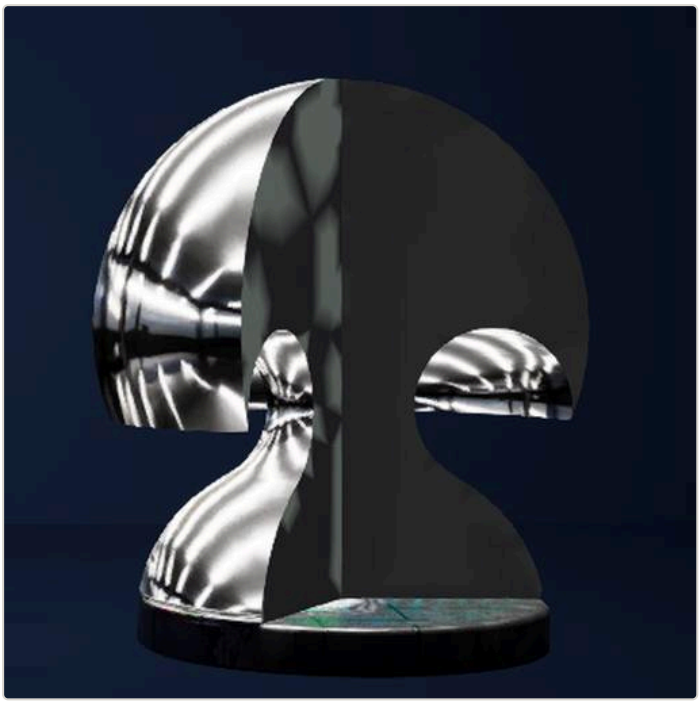
Liquid chrome (T-1000 style): mirror metal whose reflections ripple and flow.

`MaterialFX/Surface/M_Surface_LiquidChrome` Surface / Opaque / Unlit Instances `3`

Field	Default	Range	Group	What it does
`Tiling`	1	0.1 to 16	02 Pattern	How many times the pattern repeats across the surface (UV scale).
`Speed`	0.08	-4 to 4	03 Animation	Animation speed.
`FlowNoise`	T_MFX_Noise_Packed_B	-	05 Textures	Texture slot: swap in your own texture.
`Distortion`	0.06	0 to 0.3	02 Pattern	How far the animated flow noise shifts the matcap lookup, giving the flowing liquid look.
`Matcap`	T_MFX_Matcap_Chrome	-	05 Textures	Texture slot: swap in your own texture.
`Tint`	(1, 1, 1, 1)	-	01 Color	Color multiplied over the result.
`Brightness`	1	0 to 50	04 Glow	Overall brightness of the effect.

Instances: `MI_Surface_LiquidChrome_Chrome`, `MI_Surface_LiquidChrome_Mercury`, `MI_Surface_LiquidChrome_MoltenGold`

MATCAP



Matcap: on a shader ball

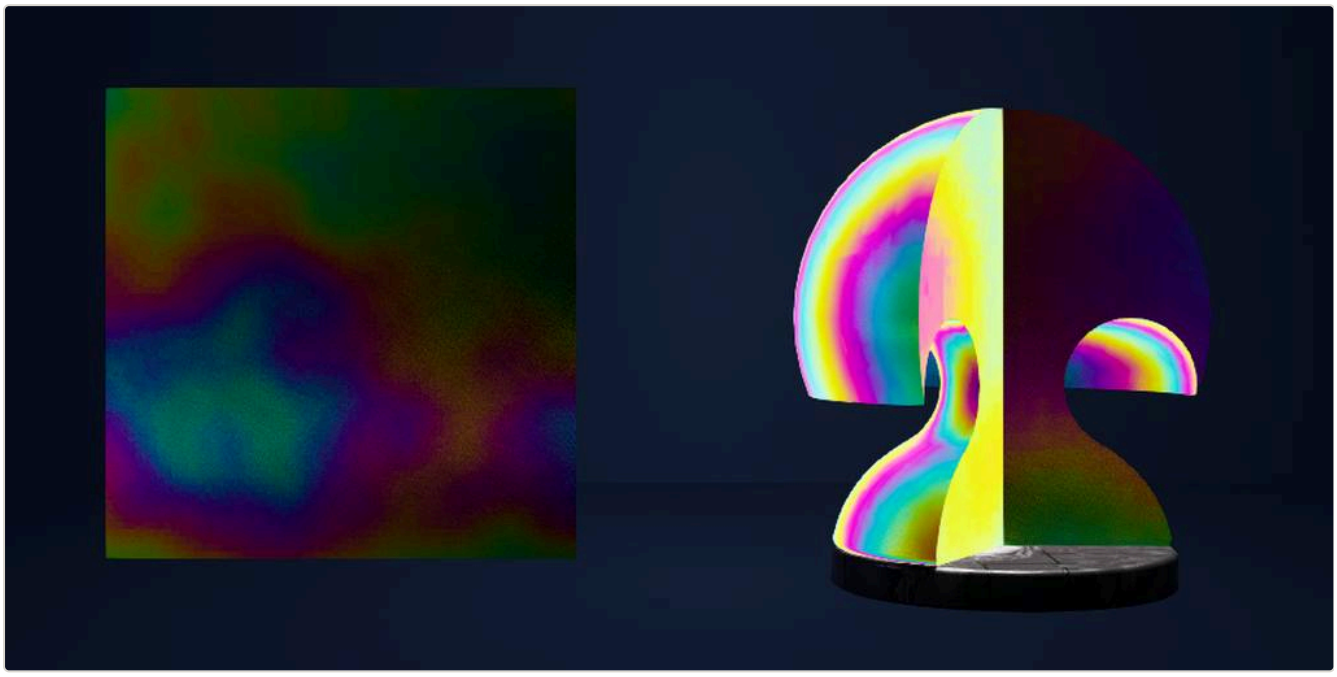
Matcap shading: chrome, gold, pearl, toon or crystal from a single texture lookup.

`MaterialFX/Surface/M_Surface_Matcap` Surface / Opaque / Unlit Instances `19`

Field	Default	Range	Group	What it does
`Tiling`	2	0.1 to 16	02 Pattern	How many times the pattern repeats across the surface (UV scale).
`DetailNoise`	T_MFX_Noise_Packed_B	-	05 Textures	Texture slot: swap in your own texture.
`SurfaceDetail`	0	0 to 0.3	02 Pattern	How much the detail noise distorts the matcap lookup (adds micro-surface variation).
`Matcap`	T_MFX_Matcap_Chrome	-	05 Textures	Texture slot: swap in your own texture.
`Tint`	(1, 1, 1, 1)	-	01 Color	Color multiplied over the result.
`Desaturate`	0	0 to 1	01 Color	How much color is drained.
`Contrast`	1	0.2 to 3	01 Color	Contrast of the result.
`RimPower`	3	0.5 to 10	04 Glow	How tight the edge glow is (higher = thinner rim).

3 more parameters in the instance's Details panel. **Instances:** `MI_Surface_Matcap_Chrome`, `MI_Surface_Matcap_Gold`, `MI_Surface_Matcap_Pearl`, `MI_Surface_Matcap_Toon` and 15 more

OIL SLICK



Oil Slick: flat panel and shader ball

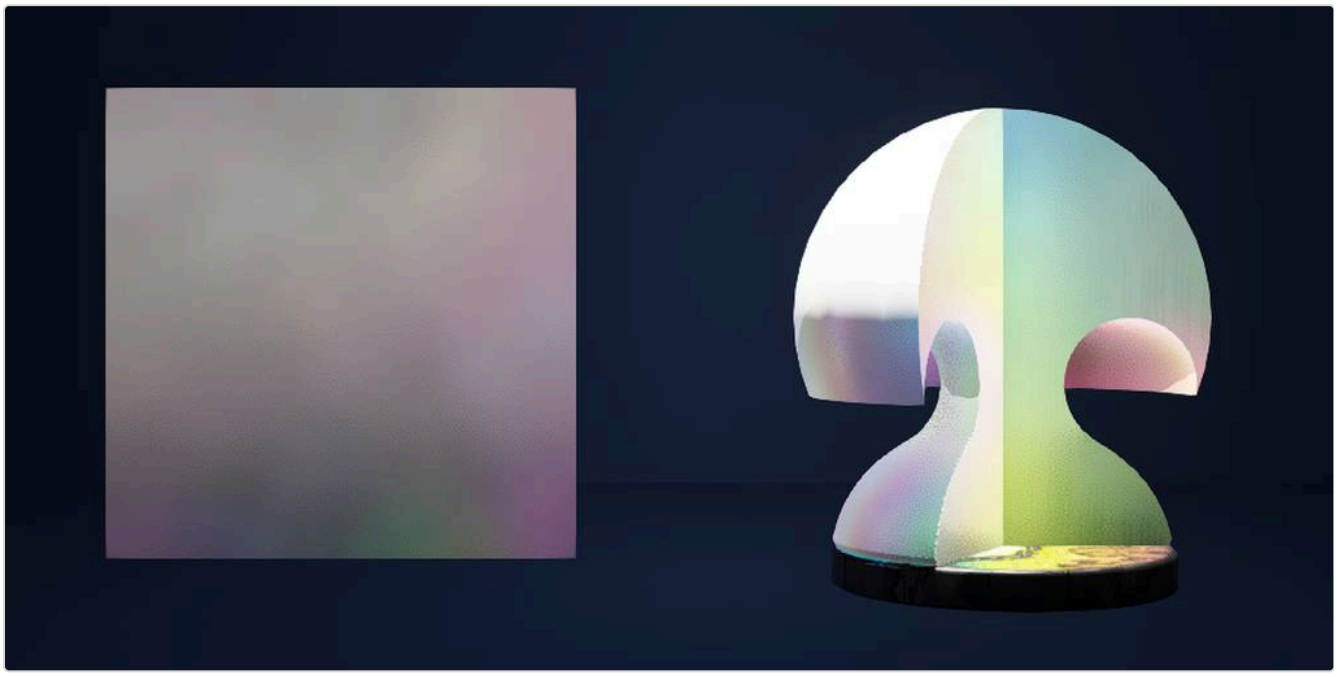
Oil-slick iridescence: thin-film rainbow that shifts with view angle and swirls slowly over dark metal.

`MaterialFX/Surface/M_Surface_OilSlick` Surface / Opaque / Lit (default lit) Instances `3`

Field	Default	Range	Group	What it does
`Tiling`	1	0.1 to 16	02 Pattern	How many times the pattern repeats across the surface (UV scale).
`Speed`	0.01	-4 to 4	03 Animation	Animation speed.
`ThicknessNoise`	T_MFX_Noise_Packed_B	-	05 Textures	Texture slot: swap in your own texture.
`ThicknessVariation`	0.8	0 to 3	02 Pattern	How strongly the thickness noise changes the film colour (noise x ThicknessVariation is added to N.V...
`FilmBands`	2	0.2 to 8	02 Pattern	Number of rainbow colour cycles across the film (multiplier on the iridescence phase).
`PaletteD`	(0, 0.33, 0.67, 1)	-	01 Color	Cosine palette phase (D): shifts which rainbow colours the oil film shows.
`BaseDarkness`	0.25	0 to 1	01 Color	Brightness of the base colour taken from the film colour (base = film x BaseDarkness + 0.02).
`Roughness`	0.18	0 to 1	02 Pattern	Surface roughness (0 = mirror).

1 more parameter in the instance's Details panel. **Instances:** `MI_Surface_OilSlick_Classic`, `MI_Surface_OilSlick_Beetle`, `MI_Surface_OilSlick_Opal`

PEARL



Pearl: flat panel and shader ball

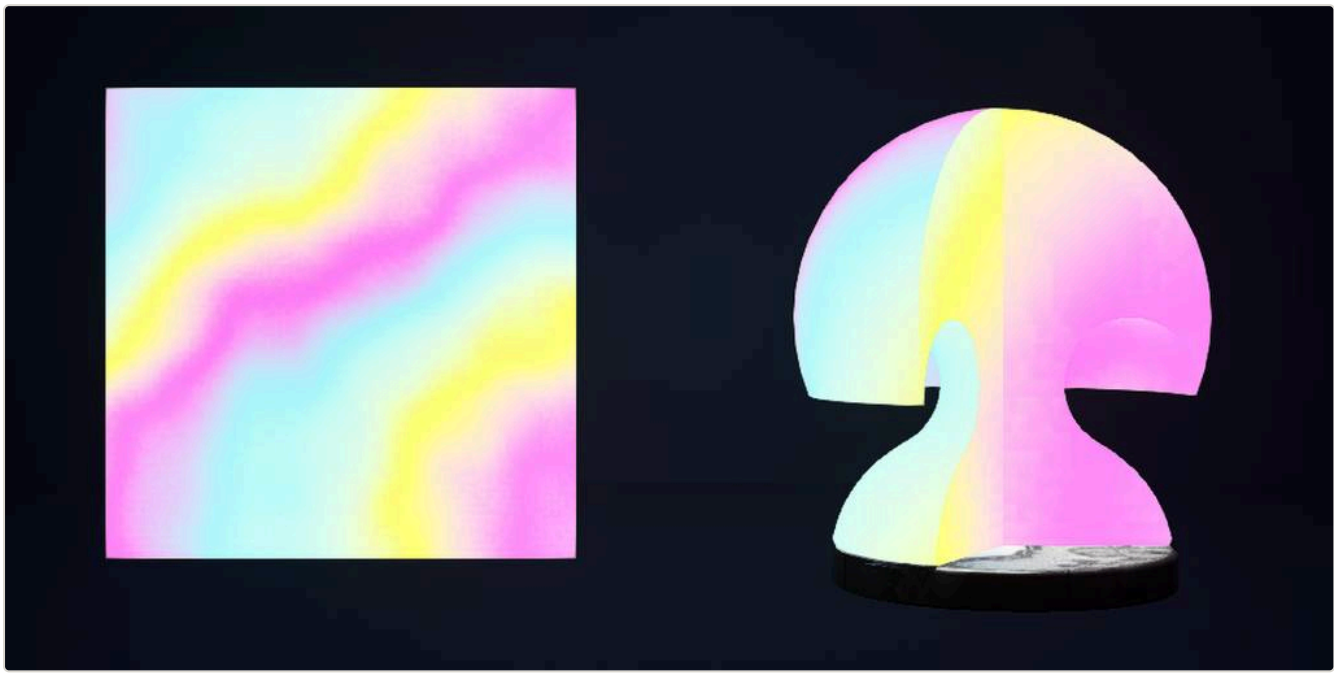
Pearlescent finish: soft white body with pastel iridescence blooming at the edges.

`MaterialFX/Surface/M_Surface_Pearl` Surface / Opaque / Lit (default lit) Instances `3`

Field	Default	Range	Group	What it does
`Tiling`	2	0.1 to 16	02 Pattern	How many times the pattern repeats across the surface (UV scale).
`NacreNoise`	T_MFX_Noise_Packed_B	-	05 Textures	Texture slot: swap in your own texture.
`Iridescence`	0.6	0 to 1	02 Pattern	Strength 0-1 of the colour shift toward grazing angles (blend between BaseColor and the iridescent...
`BaseColor`	(0.92, 0.9, 0.88, 1)	-	01 Color	Main surface color.
`SheenGlow`	0.15	0 to 50	04 Glow	Glow multiplier of the iridescent sheen (emissive = iridescence x strength x SheenGlow).

Instances: `MI_Surface_Pearl_White`, `MI_Surface_Pearl_Black`, `MI_Surface_Pearl_Pink`

RAINBOW FLOW



Rainbow Flow: flat panel and shader ball

Silky RGB gradient flowing across the surface, warped by soft noise.

`MaterialFX/Surface/M_Surface_RainbowFlow` Surface / Opaque / Unlit Instances `3`

Field	Default	Range	Group	What it does
`Tiling`	1	0.1 to 16	02 Pattern	How many times the pattern repeats across the surface (UV scale).
`WarpNoise`	T_MFX_Noise_Packed_B	-	05 Textures	Texture slot: swap in your own texture.
`Bands`	1	0.1 to 8	02 Pattern	Number of rainbow cycles across the surface.
`Warp`	0.6	0 to 3	02 Pattern	How strongly noise bends the rainbow bands.
`Speed`	0.12	-4 to 4	03 Animation	Animation speed.
`PaletteC`	(1, 1, 1, 1)	-	01 Color	Cosine palette frequency (C): how many colour cycles appear across the flow.
`PaletteD`	(0, 0.33, 0.67, 1)	-	01 Color	Cosine palette phase (D): shifts which colours appear.
`Glow`	1.2	0 to 50	04 Glow	Brightness multiplier of the emissive light (higher = brighter, more bloom).

Instances: `MI_Surface_RainbowFlow_RGB` , `MI_Surface_RainbowFlow_Sunset` , `MI_Surface_RainbowFlow_Ocean`

TOON CEL



Toon Cel: on a shader ball

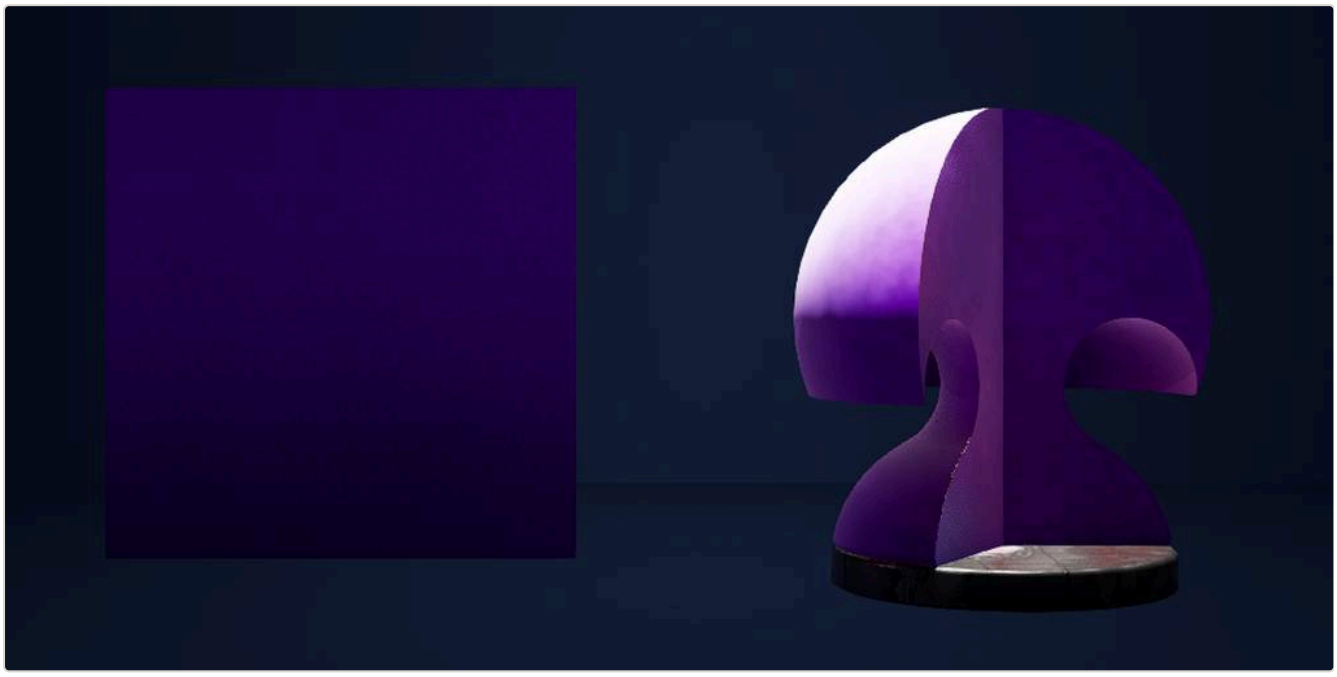
Cel-shaded toon look: stepped lighting from a configurable light direction, hard specular, rim light and ink edges.

`MaterialFX/Surface/M_Surface_ToonCel` Surface / Opaque / Unlit Instances `3`

Field	Default	Range	Group	What it does
`LightDirection`	(0.4, -0.5, 0.75, 1)	-	01 Color	Fixed direction the cel light comes from (this master has no sun switch.
`Steps`	3	1 to 8	02 Pattern	Number of cel shading bands (light level is rounded to this many steps).
`BaseColor`	(1, 0.35, 0.3, 1)	-	01 Color	Main surface color.
`ShadowColor`	(0.35, 0.3, 0.5, 1)	-	01 Color	Color of shadowed areas.
`Specular`	0.8	0 to 2	02 Pattern	Strength of the hard toon highlight (a smoothstep on N.H, 0 hides it).
`RimColor`	(1, 1, 0.9, 1)	-	01 Color	Color of the edge/fresnel glow.
`InkWidth`	0.22	0 to 0.6	02 Pattern	Width of the dark silhouette ink: darkened where N.V is below it (smoothstep over a fixed 0.04).
`Brightness`	1	0 to 50	04 Glow	Overall brightness of the effect.

Instances: `MI_Surface_ToonCel_Classic` , `MI_Surface_ToonCel_Anime` , `MI_Surface_ToonCel_Comic`

VELVET



Velvet: flat panel and shader ball

Soft velvet / plush fabric: dark core with a bright fuzzy sheen at grazing angles.

`MaterialFX/Surface/M_Surface_Velvet` Surface / Opaque / Lit (default lit) Instances `3`

Field	Default	Range	Group	What it does
`SheenPower`	1.8	0.5 to 6	02 Pattern	Falloff of the fuzzy edge sheen (MF_Rim power).
`Tiling`	4	0.1 to 16	02 Pattern	How many times the pattern repeats across the surface (UV scale).
`FiberNoise`	T_MFX_Noise_Packed_B	-	05 Textures	Texture slot: swap in your own texture.
`BaseColor`	(0.12, 0.03, 0.3, 1)	-	01 Color	Main surface color.
`SheenColor`	(0.7, 0.5, 1, 1)	-	01 Color	Colour of the fuzzy sheen at grazing angles.

Instances: `MI_Surface_Velvet_Royal` , `MI_Surface_Velvet_Crimson` , `MI_Surface_Velvet_Emerald`

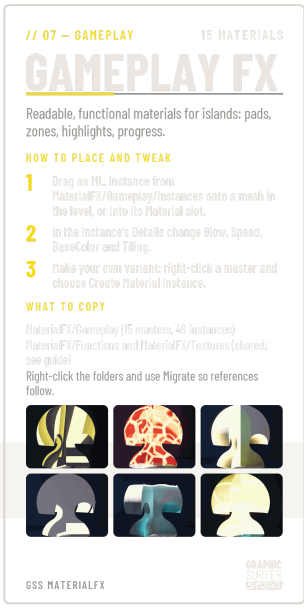
GAMEPLAY FX

Readable, functional materials for islands: pads, zones, highlights, progress.

15 masters, 48 instances. Folder `MaterialFX/Gameplay/` (instances in `MaterialFX/Gameplay/Instances/`). Uses 7 material functions and 2 textures from `MaterialFX/Functions` and `MaterialFX/Textures`.

Domain	Blend	Shading	Sides	Masters
Surface	Additive	Unlit	two-sided	3
Surface	Masked	Lit (default lit)	two-sided	1
Surface	Opaque	Lit (default lit)	one-sided	4
Surface	Opaque	Unlit	one-sided	5
Surface	Translucent	Unlit	two-sided	2

> **NOTE:** These are meant for islands: pads, zones, highlights.



MASTERS IN GAMEPLAY FX

Master	Looks like	Instances
`M_Game_BoostArrows`	Speed-boost strip: chevrons racing along the surface (U…	3
`M_Game_CaptureZone`	Capture point: radial progress ring in team color.	3
`M_Game_Cooldown`	Ability cooldown dial: radial wipe that refills clockwise…	3
`M_Game_DamageZone`	Damage zone floor: pulsing hex grid with warning sweeps.	3
`M_Game_HazardStripes`	Animated hazard stripes with a warning blink.	3
`M_Game_HitFlash`	Damage flash: drive Flash Amount (0-1) from gameplay.	3
`M_Game_InteractPulse`	Interactable highlight: a breathing rim glow that says "use…	3
`M_Game_JumpPad`	Jump pad: energy rings bursting outward from the center over…	3
`M_Game_ProgressBar`	World-space progress bar: segmented fill with a moving…	3
`M_Game_RarityGlow`	Loot rarity glow: set Rarity 0-5 (Common, Uncommon, Rare.	6
`M_Game_ShieldBubble`	Protective shield bubble: fresnel shell.	3
`M_Game_SpawnIn`	Spawn-in / build effect: the object materializes from the…	3
`M_Game_StormWall`	Storm wall: towering bands of churning energy with a bright…	3
`M_Game_Teleporter`	Teleporter pad: counter-rotating segmented rings.	3
`M_Game_WaypointBeam`	Waypoint / objective beam: tall glowing gradient with rising…	3

BOOST ARROWS



Boost Arrows: flat panel and shader ball

Speed-boost strip: chevrons racing along the surface (U direction) between glowing rails.

`MaterialFX/Gameplay/M_Game_BoostArrows` Surface / Opaque / Unlit Instances `3`

Field	Default	Range	Group	What it does
`Tiling`	1	0.1 to 16	02 Pattern	How many times the pattern repeats across the surface (UV scale).
`ArrowCount`	4	1 to 20	02 Pattern	Number of arrow chevrons along the pad.
`Speed`	1	-4 to 4	03 Animation	Animation speed.
`ChevronSlant`	0.5	-2 to 2	02 Pattern	How sharply the chevrons point (slant of each arrow arm).
`ArrowWidth`	0.35	0.05 to 0.9	02 Pattern	Thickness of each chevron.
`ArrowColor`	(1, 0.8, 0.05, 1)	-	01 Color	Colour of the boost arrows.
`BaseColor`	(0.02, 0.02, 0.03, 1)	-	01 Color	Main surface color.
`Glow`	1.5	0 to 50	04 Glow	Brightness multiplier of the emissive light (higher = brighter, more bloom).

Instances: `MI_Game_BoostArrows_Yellow` , `MI_Game_BoostArrows_Cyan` , `MI_Game_BoostArrows_Magenta`

CAPTURE ZONE



Capture Zone: flat panel and shader ball

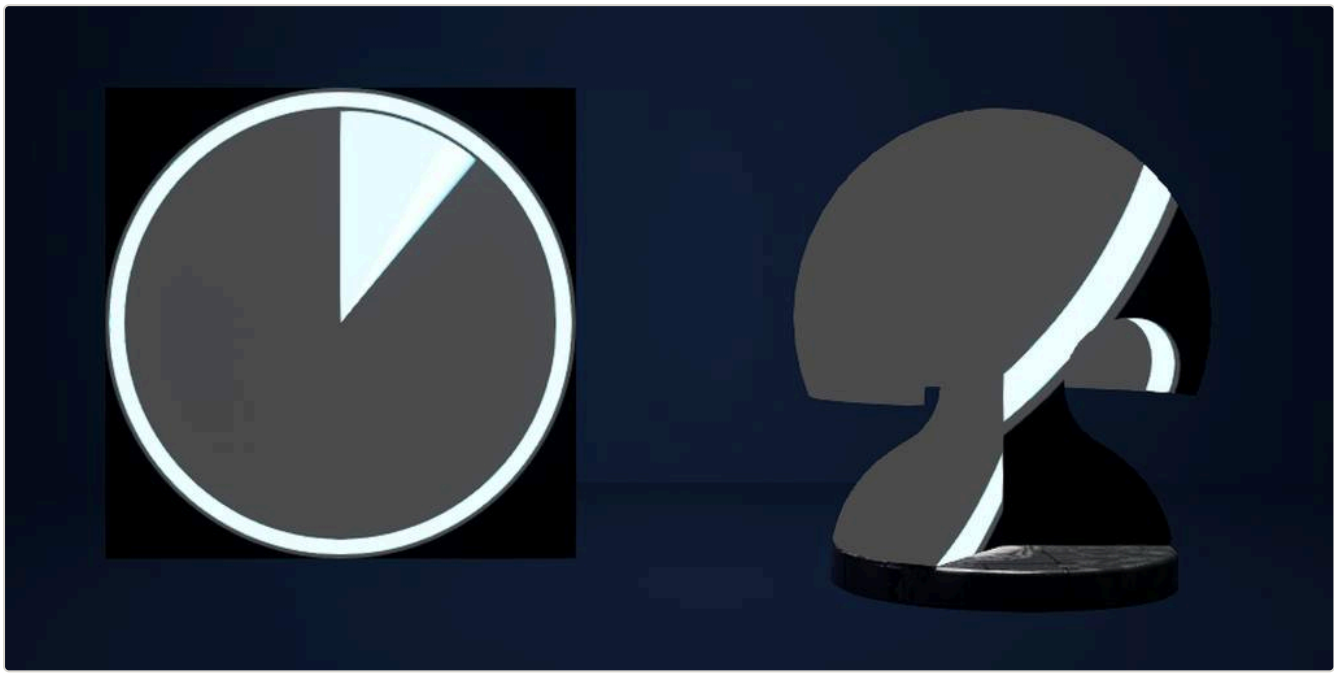
Capture point: radial progress ring in team color, rotating dashes and a pulsing inner field.

`MaterialFX/Gameplay/M_Game_CaptureZone` Surface / Additive / Unlit Instances `3`

Field	Default	Range	Group	What it does
`AutoFillSpeed`	0.15	0 to 2	03 Animation	Automatic fill speed in cycles per second.
`Progress`	0.65	0 to 1	02 Pattern	Capture progress 0-1 (fraction of the ring that is filled).
`TeamColor`	(0.1, 0.55, 1, 1)	-	01 Color	Colour of the zone: ring, fill and glow.
`RingRadius`	0.86	0.2 to 0.95	02 Pattern	Radius of the progress ring (0-1 of the tile).
`RingWidth`	0.07	0.01 to 0.3	02 Pattern	Thickness of the progress ring.
`FieldPulseSpeed`	0.5	0 to 3	03 Animation	Speed of the pulsing rings inside the zone, in cycles per second.
`FieldStrength`	1	0 to 5	04 Glow	Brightness multiplier of the zone floor glow and pulse rings inside the ring.
`Glow`	2	0 to 50	04 Glow	Brightness multiplier of the emissive light (higher = brighter, more bloom).

Instances: `MI_Game_CaptureZone_Blue` , `MI_Game_CaptureZone_Red` , `MI_Game_CaptureZone_Contested`

COOLDOWN



Cooldown: flat panel and shader ball

Ability cooldown dial: radial wipe that refills clockwise with a bright leading edge and a ready flash.

`MaterialFX/Gameplay/M_Game_Cooldown` Surface / Opaque / Unlit Instances `3`

Field	Default	Range	Group	What it does
`AutoSpeed`	0.25	0 to 2	03 Animation	Automatic charge speed in cycles per second.
`Charge`	0.6	0 to 1	02 Pattern	Charge amount 0-1 (fraction of the dial that is filled; a flash plays at 1).
`HoleSize`	0	0 to 0.85	02 Pattern	Radius of the empty centre hole (0 = full disc).
`DialColor`	(0.1, 0.6, 1, 1)	-	01 Color	Colour of the cooldown dial.
`RimWidth`	0.03	0 to 0.1	02 Pattern	Thickness of the outer rim line.
`Glow`	1.5	0 to 50	04 Glow	Brightness multiplier of the emissive light (higher = brighter, more bloom).

Instances: `MI_Game_Cooldown_Blue` , `MI_Game_Cooldown_Orange` , `MI_Game_Cooldown_Green`

DAMAGE ZONE



Damage Zone: flat panel and shader ball

Damage zone floor: pulsing hex grid with warning sweeps.

`MaterialFX/Gameplay/M_Game_DamageZone` Surface / Additive / Unlit Instances `3`

Field	Default	Range	Group	What it does
`Tiling`	1	0.1 to 16	02 Pattern	How many times the pattern repeats across the surface (UV scale).
`HexScale`	8	1 to 40	02 Pattern	Number of hexagon cells per tile.
`PulseRate`	1.2	0 to 5	03 Animation	How fast the pulse repeats.
`ZoneColor`	(1, 0.08, 0.03, 1)	-	01 Color	Colour of the danger zone: fill, edge and glow.
`Glow`	1.5	0 to 50	04 Glow	Brightness multiplier of the emissive light (higher = brighter, more bloom).

Instances: `MI_Game_DamageZone_Red` , `MI_Game_DamageZone_Poison` , `MI_Game_DamageZone_Electric`

HAZARD STRIPES



Hazard Stripes: flat panel and shader ball

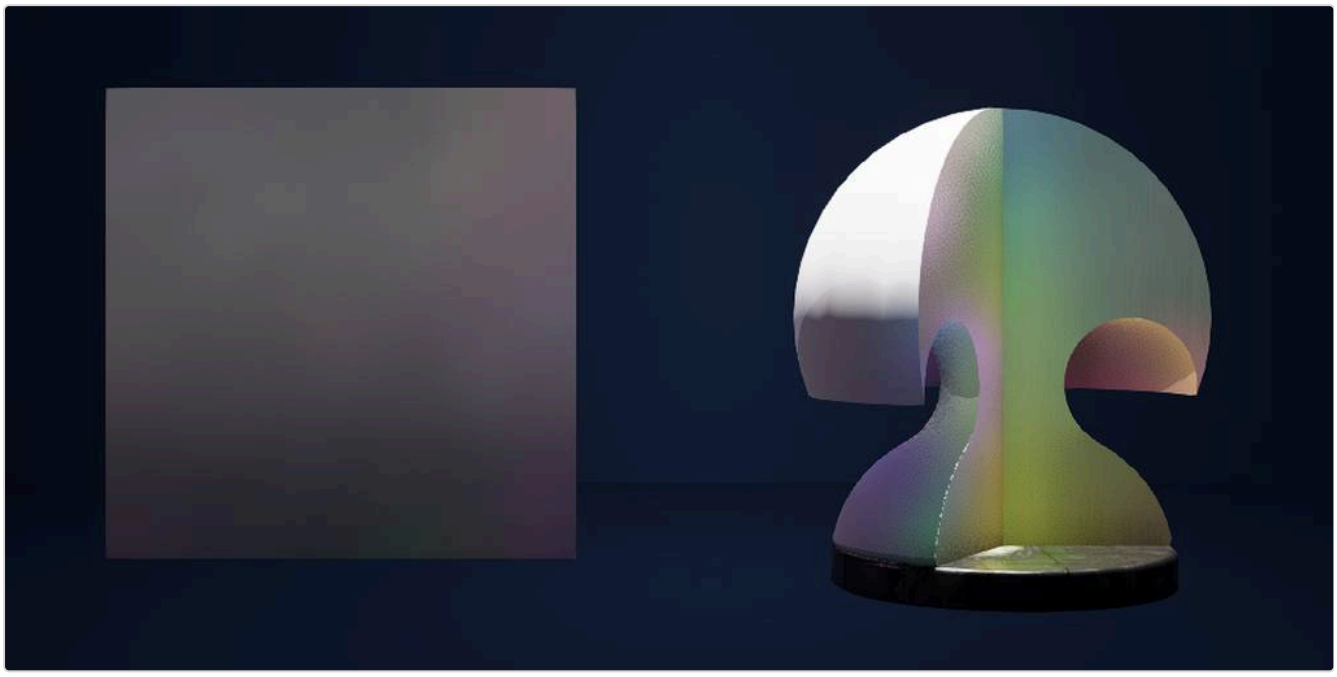
Animated hazard stripes with a warning blink.

`MaterialFX/Gameplay/M_Game_HazardStripes` Surface / Opaque / Lit (default lit) Instances `3`

Field	Default	Range	Group	What it does
`Tiling`	1	0.1 to 16	02 Pattern	How many times the pattern repeats across the surface (UV scale).
`Stripes`	6	1 to 40	02 Pattern	Number of diagonal hazard stripes across the tile.
`Speed`	0.3	-4 to 4	03 Animation	Animation speed.
`ColorA`	(1, 0.75, 0, 1)	-	01 Color	Colour of the first stripe (warning yellow by default).
`ColorB`	(0.02, 0.02, 0.02, 1)	-	01 Color	Colour of the second stripe (near black by default).
`BlinkRate`	1	0 to 5	03 Animation	Warning blink frequency in cycles per second.
`BlinkGlow`	1.2	0 to 50	04 Glow	Glow multiplier of the yellow stripes during the blink-on phase.

Instances: `MI_Game_HazardStripes_Caution`, `MI_Game_HazardStripes_Danger`, `MI_Game_HazardStripes_Static`

HIT FLASH



Hit Flash: flat panel and shader ball

Damage flash: drive Flash Amount (0-1) from gameplay, or set Auto Rate to preview a hit-and-fade loop.

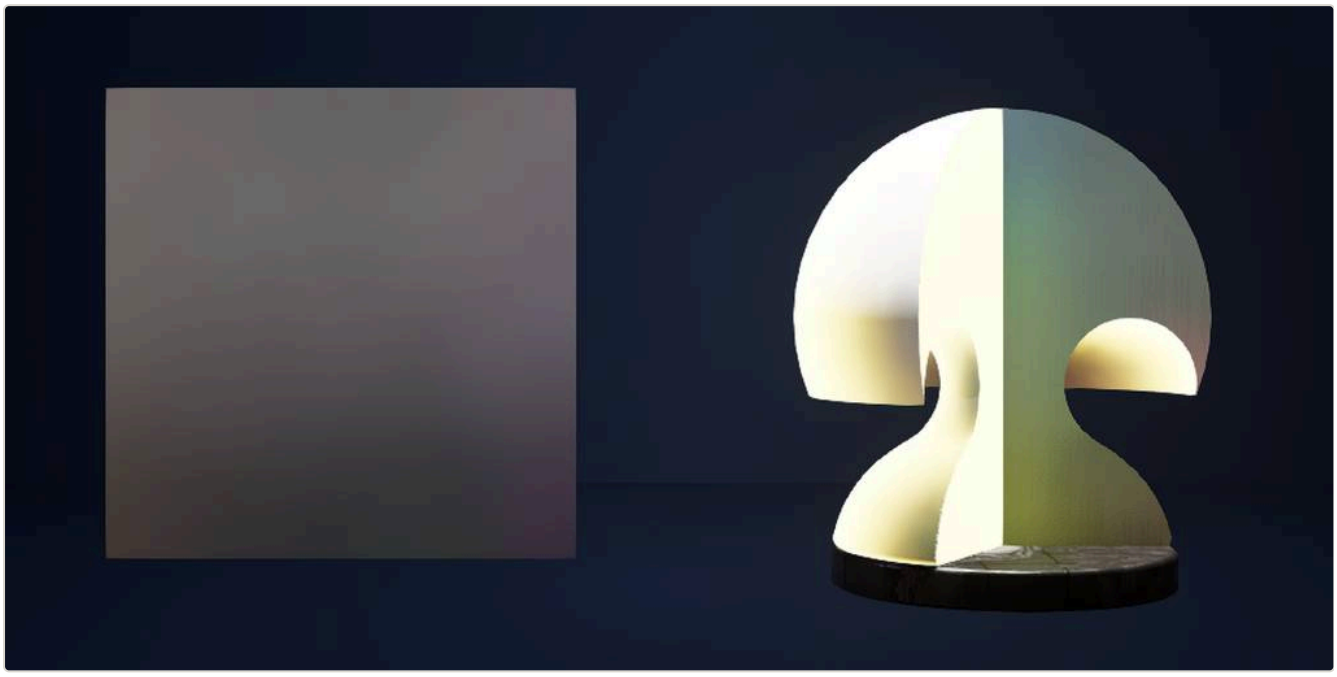
`MaterialFX/Gameplay/M_Game_HitFlash` Surface / Opaque / Lit (default lit) Instances `3`

Field	Default	Range	Group	What it does
`AutoRate`	1	0 to 5	03 Animation	Automatic flash rate in flashes per second (decaying white flash).
`FlashAmount`	0	0 to 1	02 Pattern	Manual flash amount 0-1 (drive this from Verse for a hit flash).
`FlashColor`	(1, 1, 1, 1)	-	01 Color	Colour of the flash when the mesh is hit.
`BaseColor`	(0.4, 0.4, 0.42, 1)	-	01 Color	Main surface color.
`Glow`	4	0 to 50	04 Glow	Brightness multiplier of the emissive light (higher = brighter, more bloom).

Instances: `MI_Game_HitFlash_White` , `MI_Game_HitFlash_Red` , `MI_Game_HitFlash_Heal`

// GAMEPLAY FX

INTERACT PULSE



Interact Pulse: flat panel and shader ball

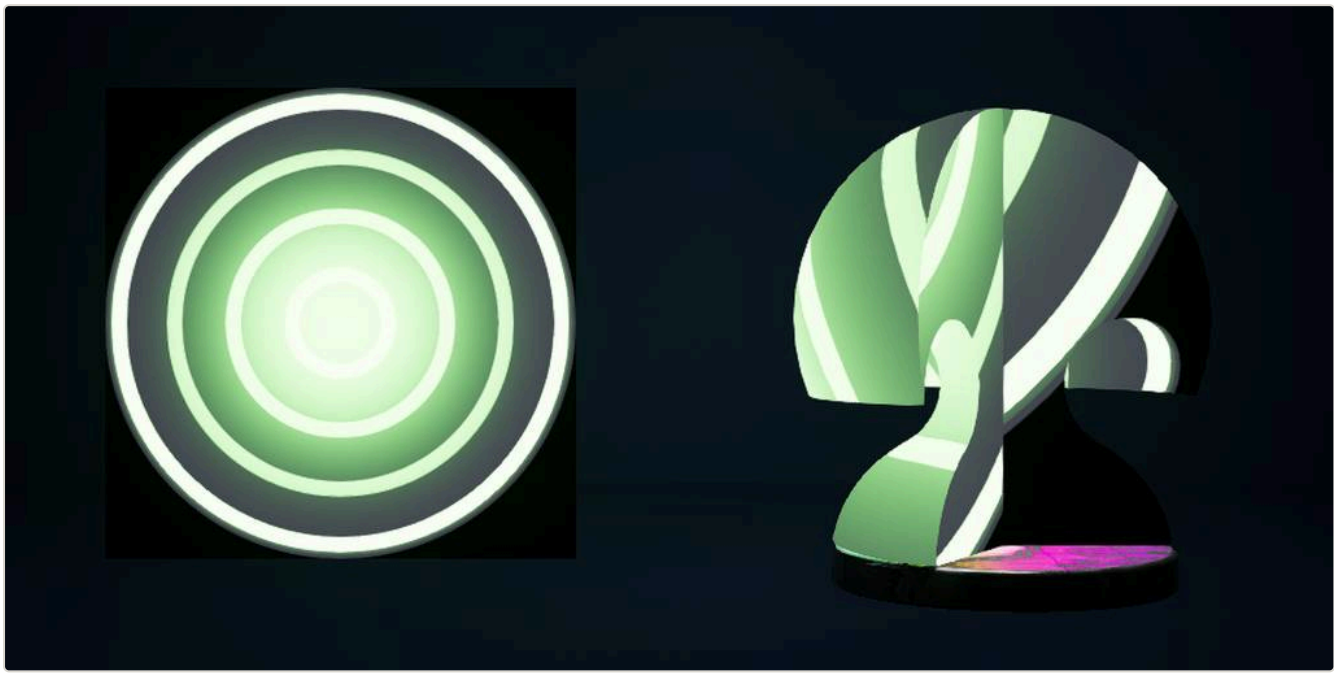
Interactable highlight: a breathing rim glow that says "use me".

`MaterialFX/Gameplay/M_Game_InteractPulse` Surface / Opaque / Lit (default lit) Instances `3`

Field	Default	Range	Group	What it does
`RimPower`	2	0.5 to 8	04 Glow	How tight the edge glow is (higher = thinner rim).
`PulseRate`	1	0 to 5	03 Animation	How fast the pulse repeats.
`BaseColor`	(0.45, 0.45, 0.47, 1)	-	01 Color	Main surface color.
`HighlightColor`	(1, 0.75, 0.15, 1)	-	01 Color	Colour of the pulsing edge glow that marks the object as interactive.
`Glow`	3	0 to 50	04 Glow	Brightness multiplier of the emissive light (higher = brighter, more bloom).

Instances: `MI_Game_InteractPulse_Gold` , `MI_Game_InteractPulse_Cyan` , `MI_Game_InteractPulse_Green`

JUMP PAD



Jump Pad: flat panel and shader ball

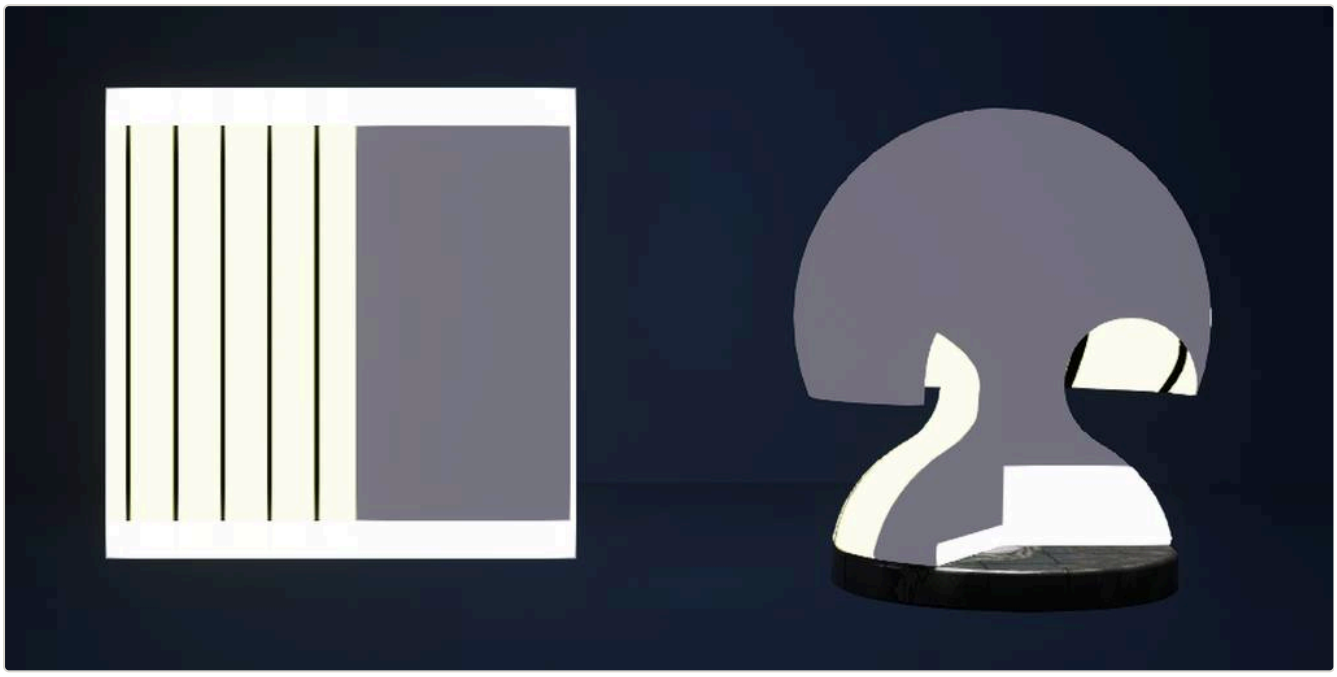
Jump pad: energy rings bursting outward from the center over a glowing core.

`MaterialFX/Gameplay/M_Game_JumpPad` Surface / Opaque / Unlit Instances `3`

Field	Default	Range	Group	What it does
`RingCount`	4	1 to 12	02 Pattern	Number of expanding rings on the pad.
`Speed`	0.8	-4 to 4	03 Animation	Animation speed.
`PadColor`	(0.3, 1, 0.2, 1)	-	01 Color	Colour of the pad glow and chevrons.
`BaseColor`	(0.03, 0.03, 0.04, 1)	-	01 Color	Main surface color.
`Glow`	1.5	0 to 50	04 Glow	Brightness multiplier of the emissive light (higher = brighter, more bloom).

Instances: `MI_Game_JumpPad_Green` , `MI_Game_JumpPad_Blue` , `MI_Game_JumpPad_Hot`

PROGRESS BAR



Progress Bar: flat panel and shader ball

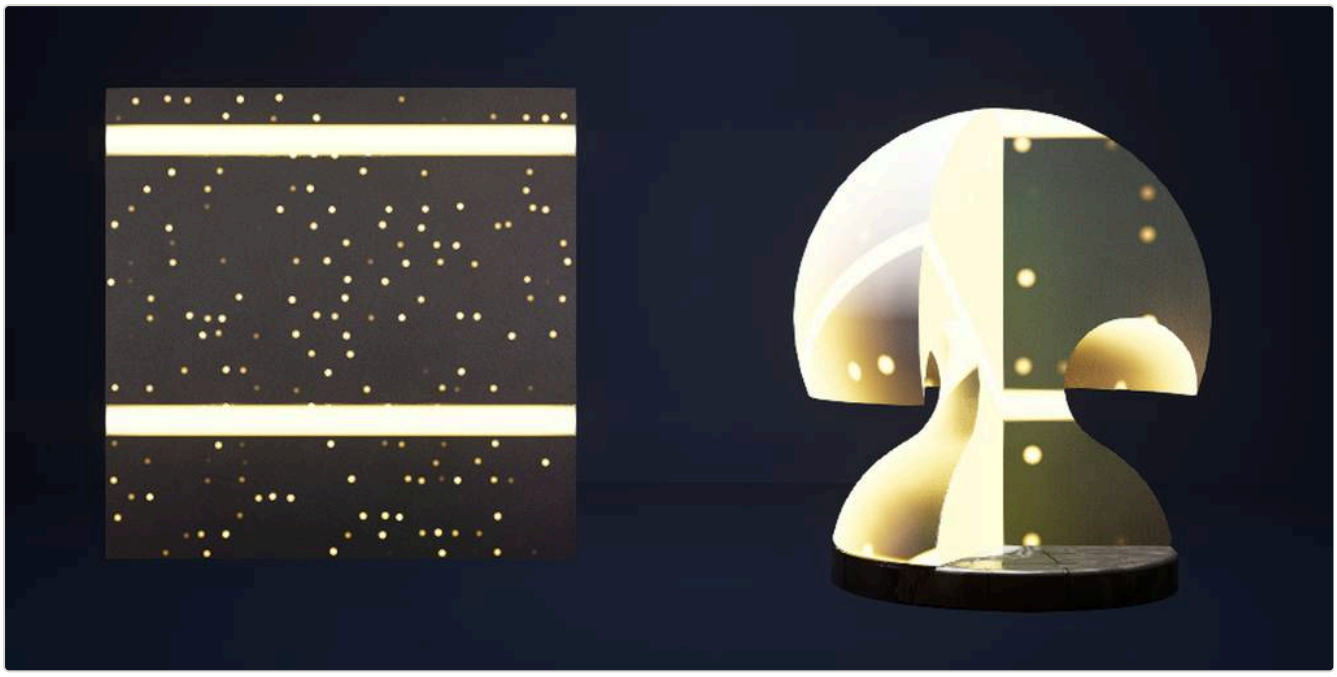
World-space progress bar: segmented fill with a moving shimmer and start-to-end color gradient.

`MaterialFX/Gameplay/M_Game_ProgressBar` Surface / Opaque / Unlit Instances `3`

Field	Default	Range	Group	What it does
`AutoFillSpeed`	0.1	0 to 2	03 Animation	Automatic fill speed in cycles per second.
`Fill`	0.7	0 to 1	02 Pattern	How full the bar is, 0-1 (the start colour fades to the end colour as it fills).
`Segments`	10	1 to 50	02 Pattern	Number of repeated slices/segments.
`StartColor`	(1, 0.15, 0.1, 1)	-	01 Color	Colour of the bar when it is empty; blends toward EndColor as it fills.
`EndColor`	(0.2, 1, 0.3, 1)	-	01 Color	Colour of the bar when it is full.
`EmptyColor`	(0.04, 0.04, 0.05, 1)	-	01 Color	Colour of the unfilled part of the bar.
`Glow`	1.3	0 to 50	04 Glow	Brightness multiplier of the emissive light (higher = brighter, more bloom).

Instances: `MI_Game_ProgressBar_Health` , `MI_Game_ProgressBar_Shield` , `MI_Game_ProgressBar_XP`

RARITY GLOW



Rarity Glow: flat panel and shader ball

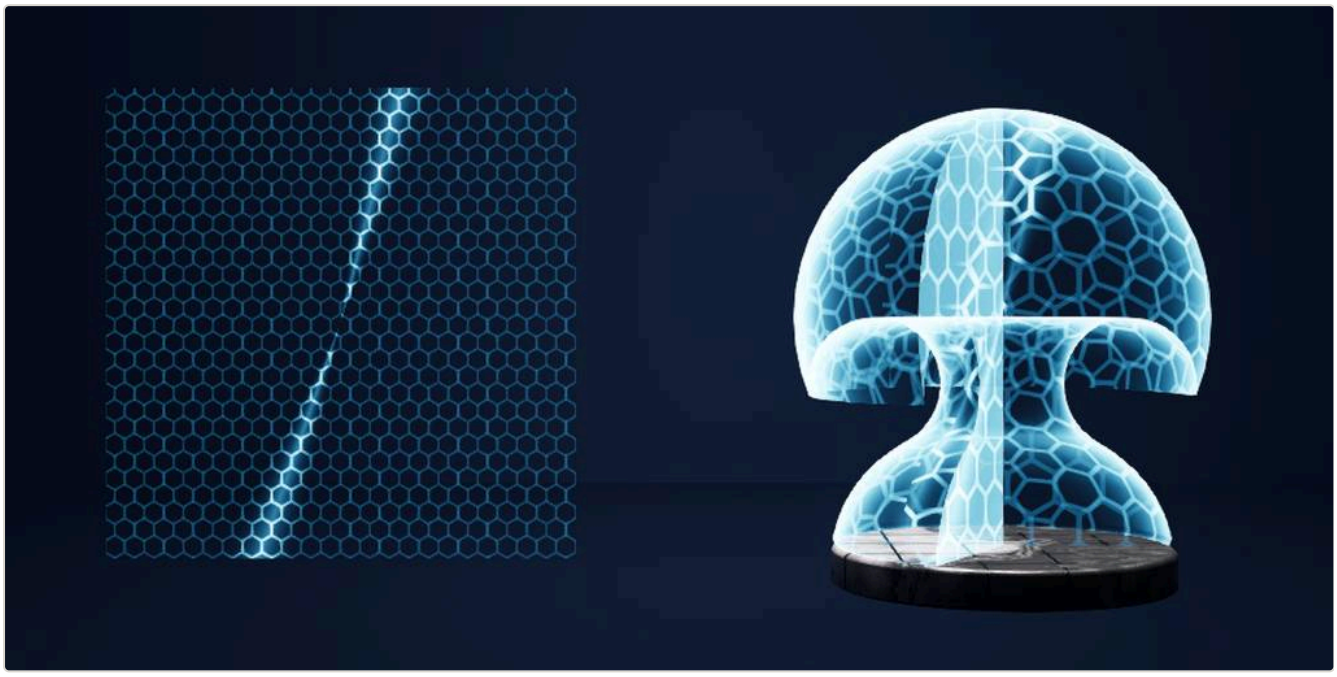
Loot rarity glow: set Rarity 0-5 (Common, Uncommon, Rare, Epic, Legendary, Mythic).

`MaterialFX/Gameplay/M_Game_RarityGlow` Surface / Opaque / Lit (default lit) Instances `6`

Field	Default	Range	Group	What it does
`Rarity`	4	0 to 5	02 Pattern	Rarity tier 0-5 that picks the glow colour: 0 grey, 1 green, 2 blue, 3 purple, 4 orange, 5 gold.
`RimPower`	2.5	0.5 to 8	04 Glow	How tight the edge glow is (higher = thinner rim).
`SweepSize`	250	20 to 3000	02 Pattern	World distance (UE units) over which the shine sweep travels (tier 3 and above).
`SweepSpeed`	0.35	-4 to 4	03 Animation	Speed of the shine sweep in cycles per second.
`SparkleDensity`	26	4 to 100	02 Pattern	Density of the sparkle points (tier 4 and above).
`BaseColor`	(0.35, 0.35, 0.37, 1)	-	01 Color	Main surface color.
`Metallic`	0.6	0 to 1	02 Pattern	Metallic look amount.
`Roughness`	0.35	0 to 1	02 Pattern	Surface roughness (0 = mirror).

1 more parameter in the instance's Details panel. **Instances:** `MI_Game_RarityGlow_Common`, `MI_Game_RarityGlow_Uncommon`, `MI_Game_RarityGlow_Rare`, `MI_Game_RarityGlow_Epic` and 2 more

SHIELD BUBBLE



Shield Bubble: flat panel and shader ball

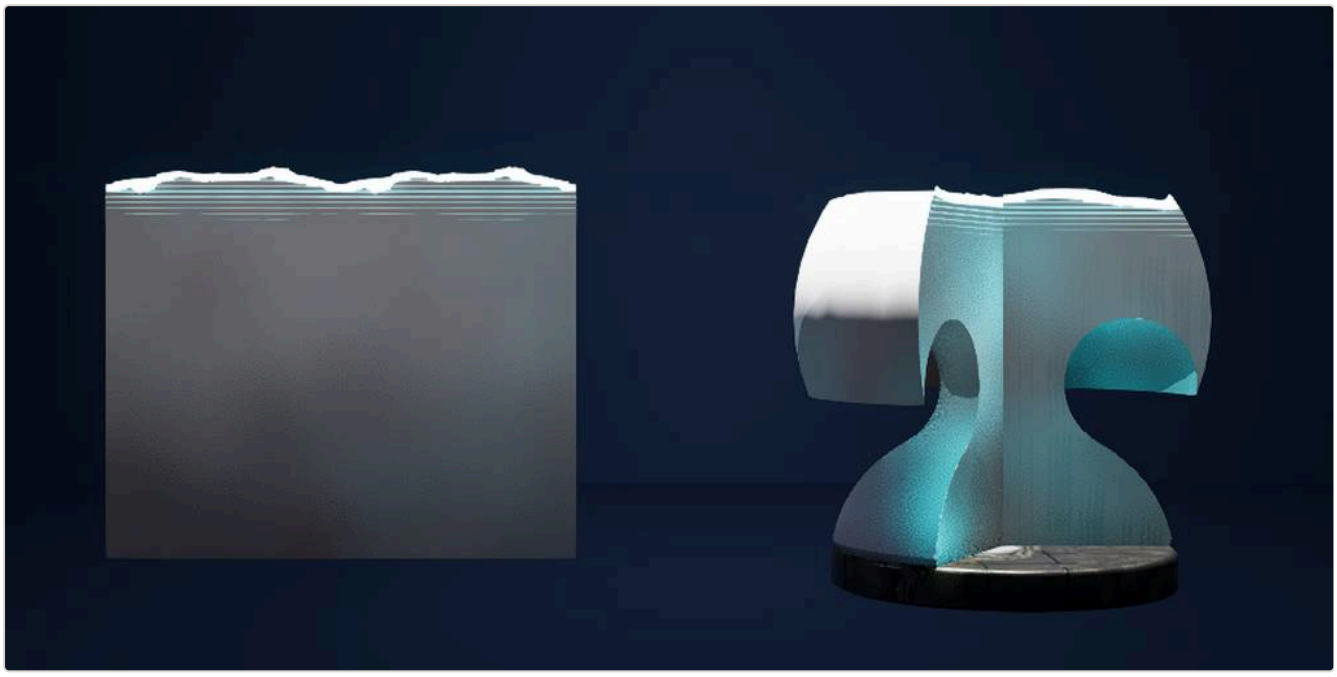
Protective shield bubble: fresnel shell, rolling hex shimmer and repeating hit ripples.

`MaterialFX/Gameplay/M_Game_ShieldBubble` Surface / Translucent / Unlit Instances `3`

Field	Default	Range	Group	What it does
`RimPower`	2.5	0.5 to 8	04 Glow	How tight the edge glow is (higher = thinner rim).
`Tiling`	2	0.1 to 16	02 Pattern	How many times the pattern repeats across the surface (UV scale).
`HexScale`	12	2 to 60	02 Pattern	Number of hexagon cells per tile.
`Speed`	0.5	-4 to 4	03 Animation	Animation speed.
`ShieldColor`	(0.2, 0.6, 1, 1)	-	01 Color	Colour of the shield bubble: rim, hex pattern and hit ripples.
`Glow`	1.5	0 to 50	04 Glow	Brightness multiplier of the emissive light (higher = brighter, more bloom).

Instances: `MI_Game_ShieldBubble_Blue` , `MI_Game_ShieldBubble_Gold` , `MI_Game_ShieldBubble_Purple`

SPAWN IN



Spawn In: flat panel and shader ball

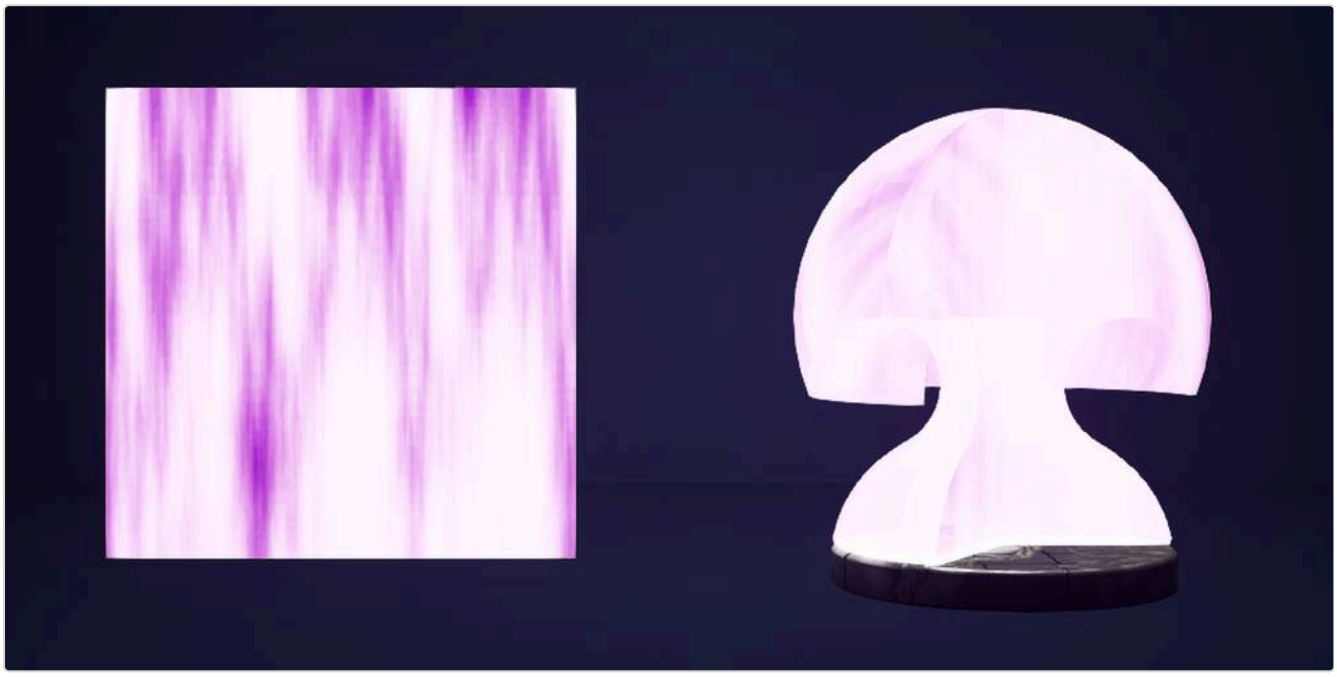
Spawn-in / build effect: the object materializes from the bottom up behind a glowing scan edge.

`MaterialFX/Gameplay/M_Game_SpawnIn` Surface / Masked / Lit (default lit) Instances `3`

Field	Default	Range	Group	What it does
`ObjectHeight`	200	10 to 2000	02 Pattern	Height (UE units) of the object over which the build-in front travels from bottom to top.
`EdgeNoise`	T_MFX_Noise_Packed_A	-	05 Textures	Texture slot: swap in your own texture.
`AutoSpeed`	0.25	0 to 2	03 Animation	Automatic build-in speed in cycles per second.
`BuildAmount`	0.6	0 to 1	02 Pattern	How far up the object the spawn-in has progressed, 0-1 (0 = invisible, 1 = fully built).
`EdgeNoiseAmount`	0.08	0 to 0.5	02 Pattern	How much noise roughens the height of the build-in front.
`BaseColor`	(0.5, 0.5, 0.52, 1)	-	01 Color	Main surface color.
`EdgeColor`	(0.1, 0.8, 1, 1)	-	01 Color	Colour of the glowing edge and grid where the object appears.
`Glow`	1	0 to 50	04 Glow	Brightness multiplier of the emissive light (higher = brighter, more bloom).

Instances: `MI_Game_SpawnIn_Cyan` , `MI_Game_SpawnIn_Gold` , `MI_Game_SpawnIn_Red`

STORM WALL



Storm Wall: flat panel and shader ball

Storm wall: towering bands of churning energy with a bright ground line.

`MaterialFX/Gameplay/M_Game_StormWall` Surface / Translucent / Unlit Instances `3`

Field	Default	Range	Group	What it does
`Tiling`	1	0.1 to 16	02 Pattern	How many times the pattern repeats across the surface (UV scale).
`Speed`	0.06	-4 to 4	03 Animation	Animation speed.
`StormNoise`	T_MFX_Noise_Packed_B	-	05 Textures	Texture slot: swap in your own texture.
`StreakNoise`	T_MFX_Noise_Packed_A	-	05 Textures	Texture slot: swap in your own texture.
`StormDark`	(0.15, 0, 0.35, 1)	-	01 Color	Colour of the dark, quiet parts of the storm wall.
`StormBright`	(0.75, 0.3, 1, 1)	-	01 Color	Colour of the bright, energetic parts of the storm wall.
`Glow`	1.5	0 to 50	04 Glow	Brightness multiplier of the emissive light (higher = brighter, more bloom).
`Opacity`	0.55	0 to 1	02 Pattern	Base opacity of the storm wall (it is modulated by the storm noise and brightened near geometry).

Instances: `MI_Game_StormWall_Classic` , `MI_Game_StormWall_Inferno` , `MI_Game_StormWall_Toxic`

TELEPORTER



Teleporter: flat panel and shader ball

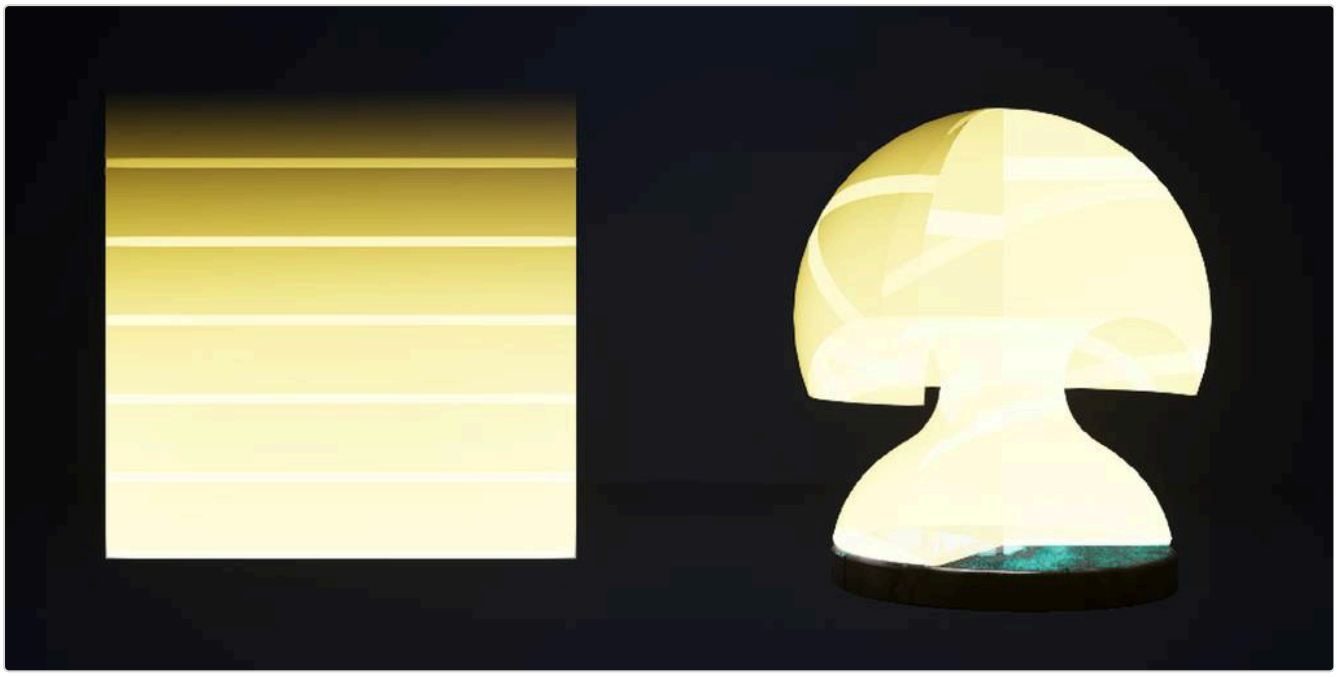
Teleporter pad: counter-rotating segmented rings, a swirling core and a rising pulse.

`MaterialFX/Gameplay/M_Game_Teleporter` Surface / Opaque / Unlit Instances `3`

Field	Default	Range	Group	What it does
`Speed`	0.15	-4 to 4	03 Animation	Animation speed.
`CoreNoise`	T_MFX_Noise_Packed_A	-	05 Textures	Texture slot: swap in your own texture.
`RingColor`	(0.1, 0.85, 1, 1)	-	01 Color	Colour of the outer rings of the teleporter.
`CoreColor`	(0.7, 1, 1, 1)	-	01 Color	Colour of the bright core in the middle.
`BaseColor`	(0.02, 0.025, 0.03, 1)	-	01 Color	Main surface color.
`Glow`	1.5	0 to 50	04 Glow	Brightness multiplier of the emissive light (higher = brighter, more bloom).

Instances: `MI_Game_Teleporter_Cyan` , `MI_Game_Teleporter_Purple` , `MI_Game_Teleporter_Orange`

WAYPOINT BEAM



Waypoint Beam: flat panel and shader ball

Waypoint / objective beam: tall glowing gradient with rising rings.

`MaterialFX/Gameplay/M_Game_WaypointBeam` Surface / Additive / Unlit Instances `3`

Field	Default	Range	Group	What it does
`HeightFalloff`	1.5	0.2 to 6	02 Pattern	Exponent of the fade toward the top of the beam.
`RingCount`	6	1 to 30	02 Pattern	Number of rings travelling up the beam.
`Speed`	0.5	-4 to 4	03 Animation	Animation speed.
`EdgeSoftness`	1.5	0.3 to 6	02 Pattern	Falloff of the beam edge (MF_Rim power); the core is the inverse of the rim.
`BeamColor`	(1, 0.75, 0.15, 1)	-	01 Color	Colour of the beam, its core and the rings travelling up it.
`CoreStrength`	0.5	0 to 3	04 Glow	Brightness multiplier of the beam core.
`RingStrength`	1.2	0 to 5	04 Glow	Brightness multiplier of the travelling rings.
`Glow`	2.5	0 to 50	04 Glow	Brightness multiplier of the emissive light (higher = brighter, more bloom).

Instances: `MI_Game_WaypointBeam_Gold`, `MI_Game_WaypointBeam_Blue`, `MI_Game_WaypointBeam_Green`

SCREENS & RETRO

CRT, VHS, LED, synthwave, plasma and 8-bit looks.

12 masters, 36 instances. Folder `MaterialFX/Retro/` (instances in `MaterialFX/Retro/Instances/`). Uses 6 material functions and 5 textures from `MaterialFX/Functions` and `MaterialFX/Textures`.

Domain	Blend	Shading	Sides	Masters
Surface	Opaque	Unlit	one-sided	12

> **NOTE:** Screen looks (CRT, VHS, LED) work best on flat planes; mesh UVs set the scanline layout.
>
> **AI disclosure:** AI-generated textures used by this bundle (3 of its 5 textures): Galaxy, Nebula, StainedGlass.



MASTERS IN SCREENS & RETRO

Master	Looks like	Instances
`M_Retro_CRT`	CRT monitor: curved glass, RGB phosphor triads, scanlines.	3
`M_Retro_Equalizer`	Audio equalizer bars bouncing to an invisible beat.	3
`M_Retro_handheld2bit`	Handheld LCD look: any texture pixelated and crushed to four…	3
`M_Retro_Halftone`	Comic halftone: any texture rendered as rotated ink dots that…	3
`M_Retro_LEDMatrix`	LED billboard: any texture rendered as round LEDs.	3
`M_Retro_MarqueeLights`	Marquee bulb wall: warm bulbs chasing in diagonal waves.	3
`M_Retro_PixelFire`	8-bit pixel fire: chunky quantized flames with a stepped…	3
`M_Retro_PixelStars`	8-bit starfield: blocky stars scrolling in three parallax…	3
`M_Retro_Plasma`	Classic demoscene plasma: overlapping sine fields with a…	3
`M_Retro_SynthwaveSun`	Synthwave poster in one material.	3
`M_Retro_TVStatic`	Analog TV static: per-frame noise snow.	3
`M_Retro_VHS`	VHS tape playback: tracking bars, chroma bleed.	3

CRT



CRT: flat panel and shader ball

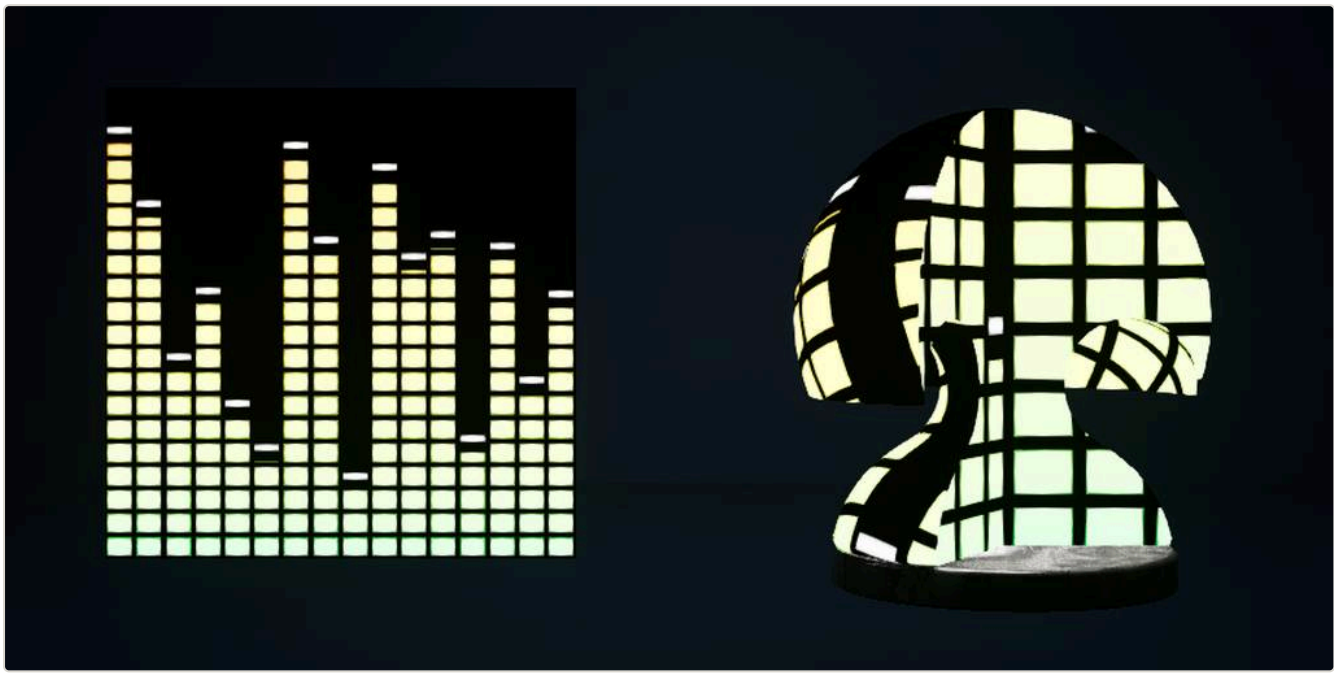
CRT monitor: curved glass, RGB phosphor triads, scanlines, rolling bar and flicker over any texture.

`MaterialFX/Retro/M_Retro_CRT` Surface / Opaque / Unlit Instances `3`

Field	Default	Range	Group	What it does
`Curvature`	0.12	0 to 0.5	02 Pattern	Barrel distortion of the screen edges (how much the picture bulges like a curved CRT tube).
`ScreenTexture`	T_MFX_Galaxy	-	05 Textures	Texture slot: swap in your own texture.
`Tint`	(1, 1, 1, 1)	-	01 Color	Color multiplied over the result.
`ScreenLines`	240	40 to 1000	02 Pattern	Number of scanlines down the screen; it also sets the density of the RGB phosphor mask.
`Glow`	1.4	0 to 50	04 Glow	Brightness multiplier of the emissive light (higher = brighter, more bloom).

Instances: `MI_Retro_CRT_Galaxy` , `MI_Retro_CRT_StainedGlass` , `MI_Retro_CRT_Amber`

EQUALIZER



Equalizer: flat panel and shader ball

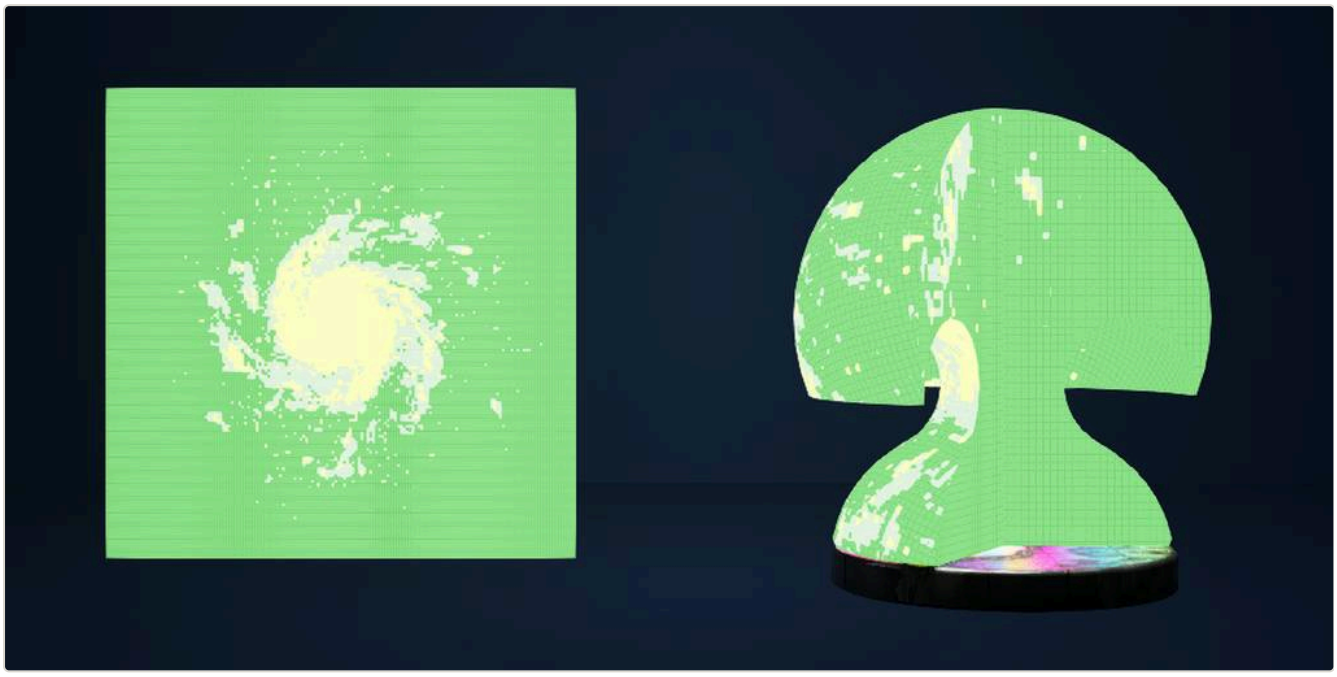
Audio equalizer bars bouncing to an invisible beat, segmented LEDs with peak caps.

`MaterialFX/Retro/M_Retro_Equalizer` Surface / Opaque / Unlit Instances `3`

Field	Default	Range	Group	What it does
`Bars`	16	4 to 64	02 Pattern	Number of equalizer bars across the surface.
`BeatRate`	4	0.5 to 20	03 Animation	How many times per second the bar heights jump to new random targets (blended smoothly between).
`Segments`	20	4 to 60	02 Pattern	Number of repeated slices/segments.
`LowColor`	(0.1, 1, 0.2, 1)	-	01 Color	Colour of the bottom of the bars (blends through MidColor to HighColor toward the top).
`MidColor`	(1, 0.9, 0.1, 1)	-	01 Color	Colour of the middle of each bar; sits between LowColor and HighColor.
`HighColor`	(1, 0.1, 0.05, 1)	-	01 Color	Colour of the top of the bars.
`Glow`	1.6	0 to 50	04 Glow	Brightness multiplier of the emissive light (higher = brighter, more bloom).

Instances: `MI_Retro_Equalizer_Classic` , `MI_Retro_Equalizer_Neon` , `MI_Retro_Equalizer_Mono`

HANDHELD 2-BIT



Handheld 2-Bit: flat panel and shader ball

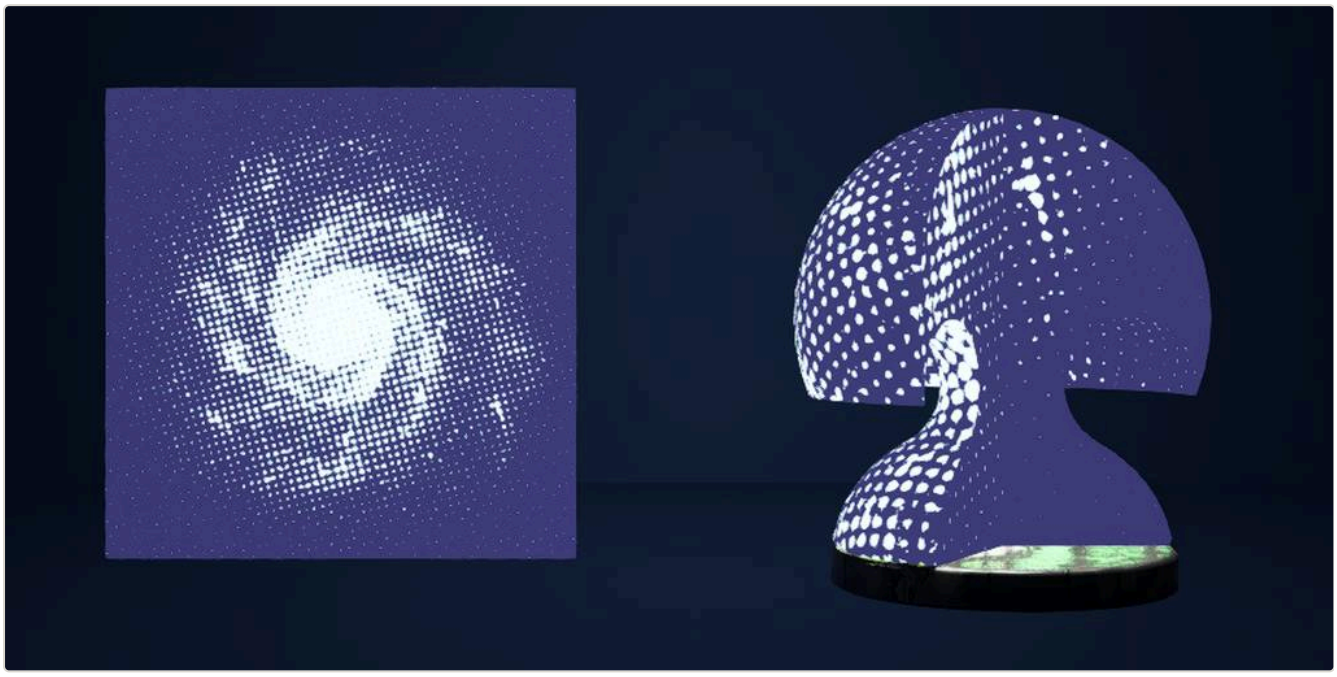
Handheld LCD look: any texture pixelated and crushed to four shades of green with a pixel grid.

`MaterialFX/Retro/M_Retro_handheld2bit` Surface / Opaque / Unlit Instances `3`

Field	Default	Range	Group	What it does
`PixelsX`	160	16 to 512	02 Pattern	Horizontal resolution of the pixel grid (160 matches the original handheld).
`PixelsY`	144	16 to 512	02 Pattern	Vertical resolution of the pixel grid (144 matches the original handheld).
`ScreenTexture`	T_MFX_Galaxy	-	05 Textures	Texture slot: swap in your own texture.
`Contrast`	1.6	0.2 to 4	02 Pattern	Multiplier on the image brightness before it is quantized into the four green shades.
`Shade0`	(0.06, 0.22, 0.06, 1)	-	01 Color	Darkest of the four screen shades.
`Shade1`	(0.19, 0.38, 0.19, 1)	-	01 Color	Second darkest screen shade.
`Shade2`	(0.55, 0.67, 0.06, 1)	-	01 Color	Second lightest screen shade.
`Shade3`	(0.61, 0.74, 0.06, 1)	-	01 Color	Lightest screen shade.

1 more parameter in the instance's Details panel. **Instances:** `MI_Retro_handheld2bit_Classic`, `MI_Retro_handheld2bit_Pocket`, `MI_Retro_handheld2bit_Nebula`

HALFTONE



Halftone: flat panel and shader ball

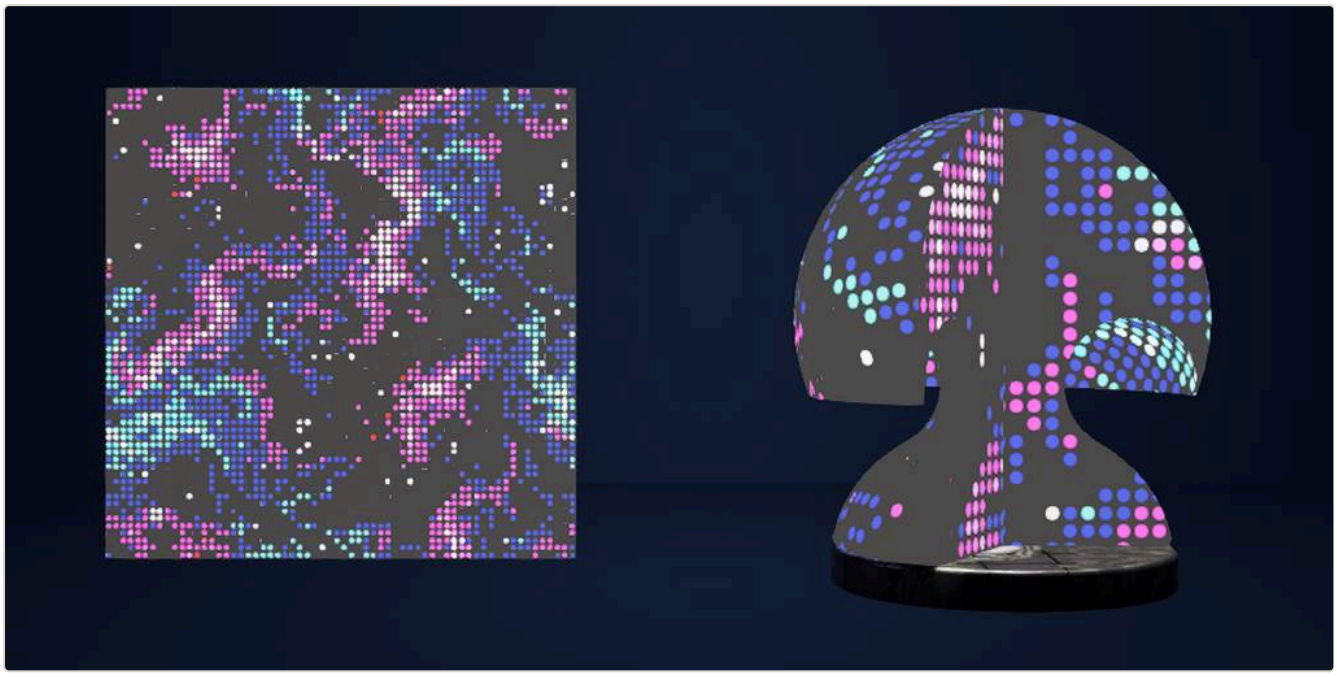
Comic halftone: any texture rendered as rotated ink dots that scale with brightness.

`MaterialFX/Retro/M_Retro_Halftone` Surface / Opaque / Unlit Instances `3`

Field	Default	Range	Group	What it does
`Tiling`	1	0.1 to 16	02 Pattern	How many times the pattern repeats across the surface (UV scale).
`ScreenTexture`	T_MFX_Galaxy	-	05 Textures	Texture slot: swap in your own texture.
`ScreenAngle`	0.04	0 to 0.25	02 Pattern	Rotation of the dot grid, in turns (0.04 is about 14 degrees; 0.125 is 45 degrees).
`DotFrequency`	60	10 to 300	02 Pattern	Number of dots per tile across the image.
`Contrast`	1.5	0.2 to 4	02 Pattern	Multiplier on the image brightness before it sets the dot size.
`PaperColor`	(0.02, 0.02, 0.05, 1)	-	01 Color	Colour behind the dots.
`InkColor`	(0.3, 0.8, 1, 1)	-	01 Color	Colour of the halftone dots.
`Glow`	1.2	0 to 50	04 Glow	Brightness multiplier of the emissive light (higher = brighter, more bloom).

Instances: `MI_Retro_Halftone_Galaxy`, `MI_Retro_Halftone_PopArt`, `MI_Retro_Halftone_Newsprint`

LED MATRIX



LED Matrix: flat panel and shader ball

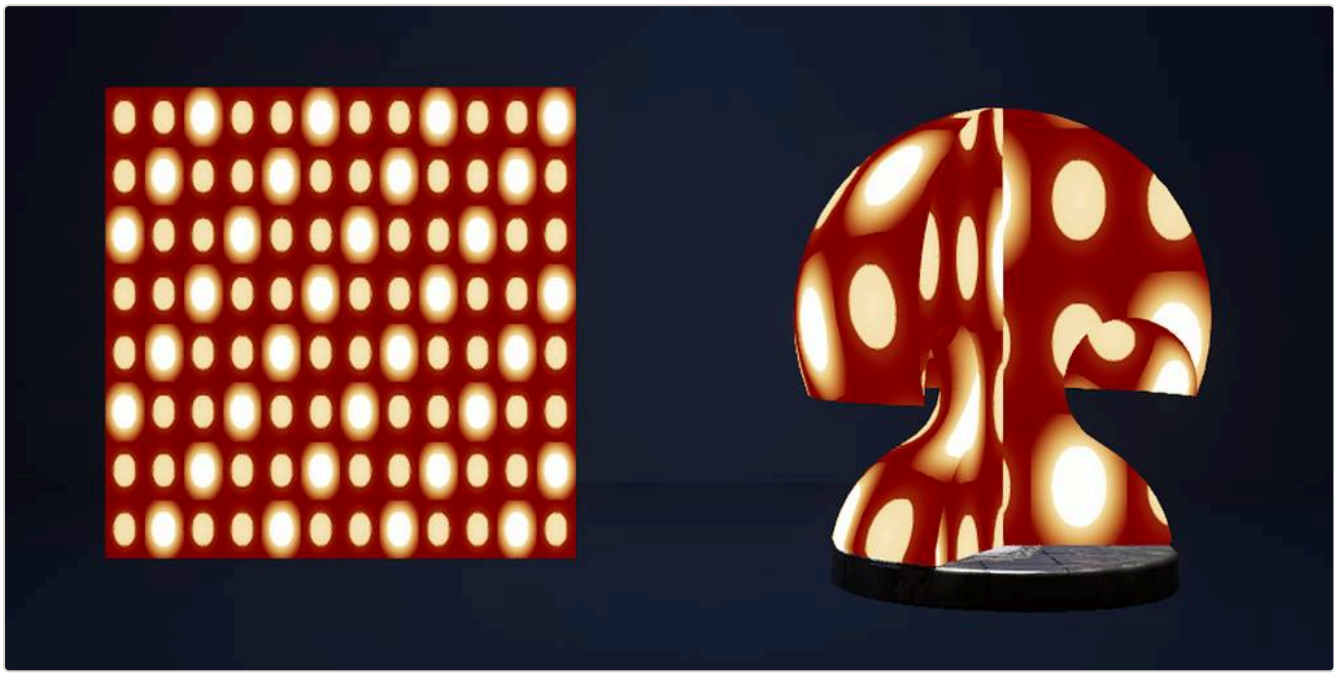
LED billboard: any texture rendered as round LEDs, scrolling sideways with stepped brightness.

`MaterialFX/Retro/M_Retro_LEDMatrix` Surface / Opaque / Unlit Instances `3`

Field	Default	Range	Group	What it does
`Tiling`	1	0.1 to 16	02 Pattern	How many times the pattern repeats across the surface (UV scale).
`LEDColumns`	64	8 to 256	02 Pattern	Number of LED dots across the panel.
`LEDRows`	64	8 to 256	02 Pattern	Number of LED dots down the panel.
`Speed`	0.05	-4 to 4	03 Animation	Animation speed.
`ScreenTexture`	T_MFX_Nebula	-	05 Textures	Texture slot: swap in your own texture.
`Monochrome`	0	0 to 1	01 Color	Colour drain 0-1 (0 = full colour, 1 = grey picture before the Tint).
`Tint`	(1, 1, 1, 1)	-	01 Color	Color multiplied over the result.
`LEDSize`	0.38	0.1 to 0.5	02 Pattern	Radius of each round LED within its cell (larger = less gap between LEDs).

1 more parameter in the instance's Details panel. **Instances:** `MI_Retro_LEDMatrix_Nebula`, `MI_Retro_LEDMatrix_Galaxy`, `MI_Retro_LEDMatrix_Mono`

MARQUEE LIGHTS



Marquee Lights: flat panel and shader ball

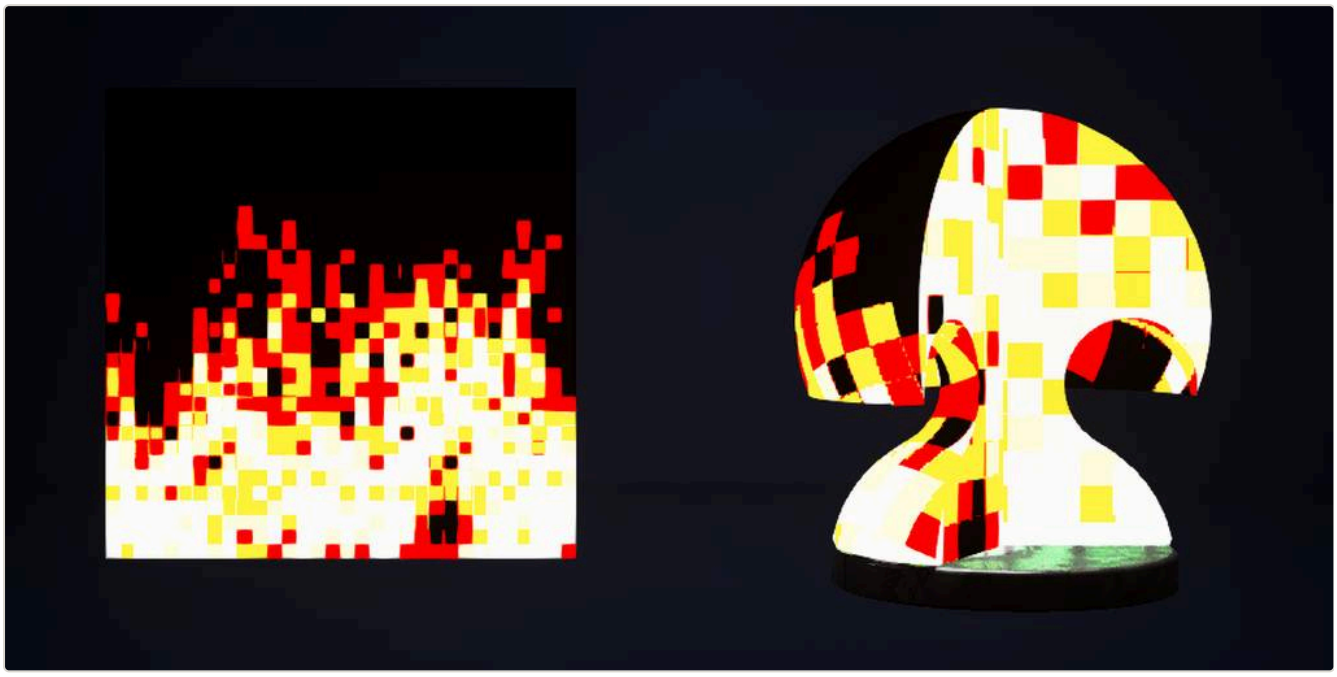
Marquee bulb wall: warm bulbs chasing in diagonal waves, with glow halos.

`MaterialFX/Retro/M_Retro_MarqueeLights` Surface / Opaque / Unlit Instances `3`

Field	Default	Range	Group	What it does
`Tiling`	1	0.1 to 16	02 Pattern	How many times the pattern repeats across the surface (UV scale).
`BulbsX`	12	2 to 64	02 Pattern	Number of bulbs across.
`BulbsY`	8	2 to 64	02 Pattern	Number of bulbs up.
`Speed`	0.8	-4 to 4	03 Animation	Animation speed.
`BulbColor`	(1, 0.75, 0.3, 1)	-	01 Color	Colour of the lit marquee bulbs and their halo.
`Rainbow`	False	-	Switches	Static switch.
`OffBrightness`	0.08	0 to 1	04 Glow	Brightness 0-1 of bulbs in the off phase of the chase animation.
`PanelColor`	(0.05, 0, 0, 1)	-	01 Color	Colour of the panel behind the bulbs.

1 more parameter in the instance's Details panel. **Instances:** `MI_Retro_MarqueeLights_Warm`, `MI_Retro_MarqueeLights_Rainbow`, `MI_Retro_MarqueeLights_Ice`

PIXEL FIRE



Pixel Fire: flat panel and shader ball

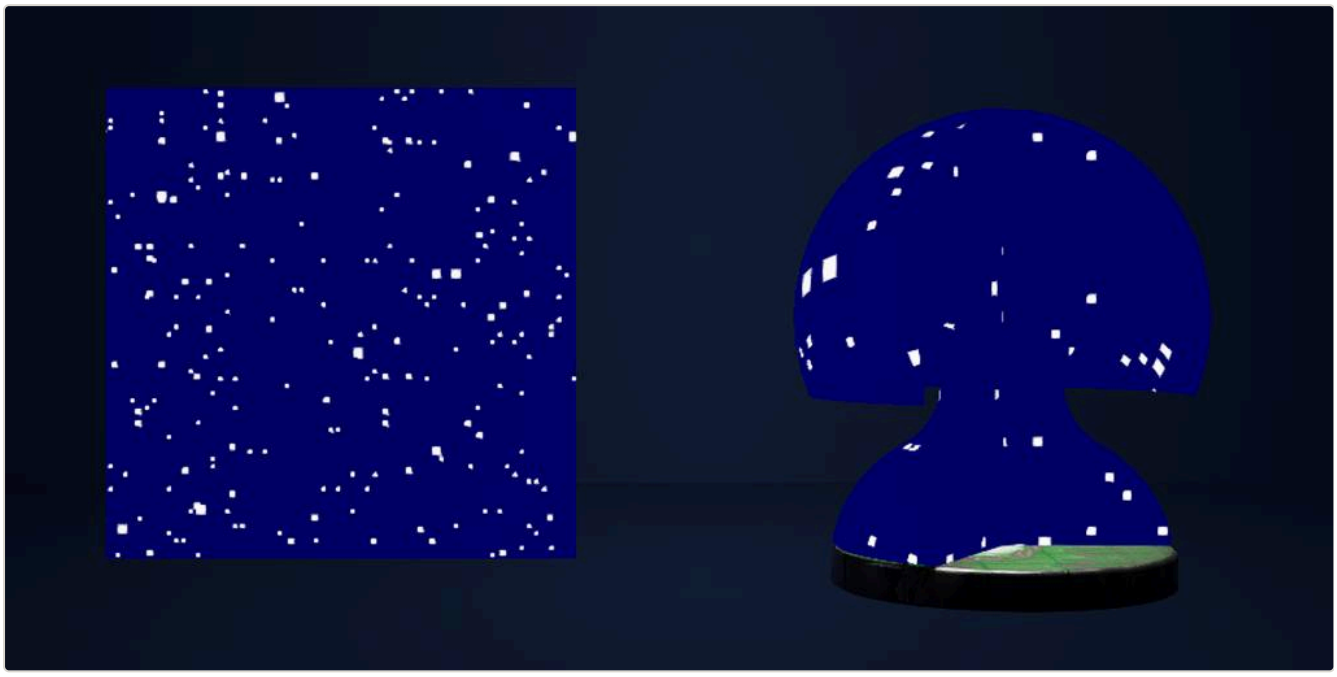
8-bit pixel fire: chunky quantized flames with a stepped retro palette.

`MaterialFX/Retro/M_Retro_PixelFire` Surface / Opaque / Unlit Instances `3`

Field	Default	Range	Group	What it does
`Pixels`	32	8 to 128	02 Pattern	Resolution of the pixel grid (blocks across and up).
`Speed`	0.6	-4 to 4	03 Animation	Animation speed.
`FireNoise`	T_MFX_Noise_Packed_A	-	05 Textures	Texture slot: swap in your own texture.
`FireNoise2`	T_MFX_Noise_Packed_B	-	05 Textures	Texture slot: swap in your own texture.
`Color1`	(0.4, 0, 0, 1)	-	01 Color	Colour of the coolest, darkest fire pixels.
`Color2`	(1, 0.3, 0, 1)	-	01 Color	Colour of the middle fire pixels.
`Color3`	(1, 0.85, 0.2, 1)	-	01 Color	Colour of the hottest, brightest fire pixels.
`Glow`	1.5	0 to 50	04 Glow	Brightness multiplier of the emissive light (higher = brighter, more bloom).

Instances: `MI_Retro_PixelFire_Classic` , `MI_Retro_PixelFire_Blue` , `MI_Retro_PixelFire_Ghost`

PIXEL STARS



Pixel Stars: flat panel and shader ball

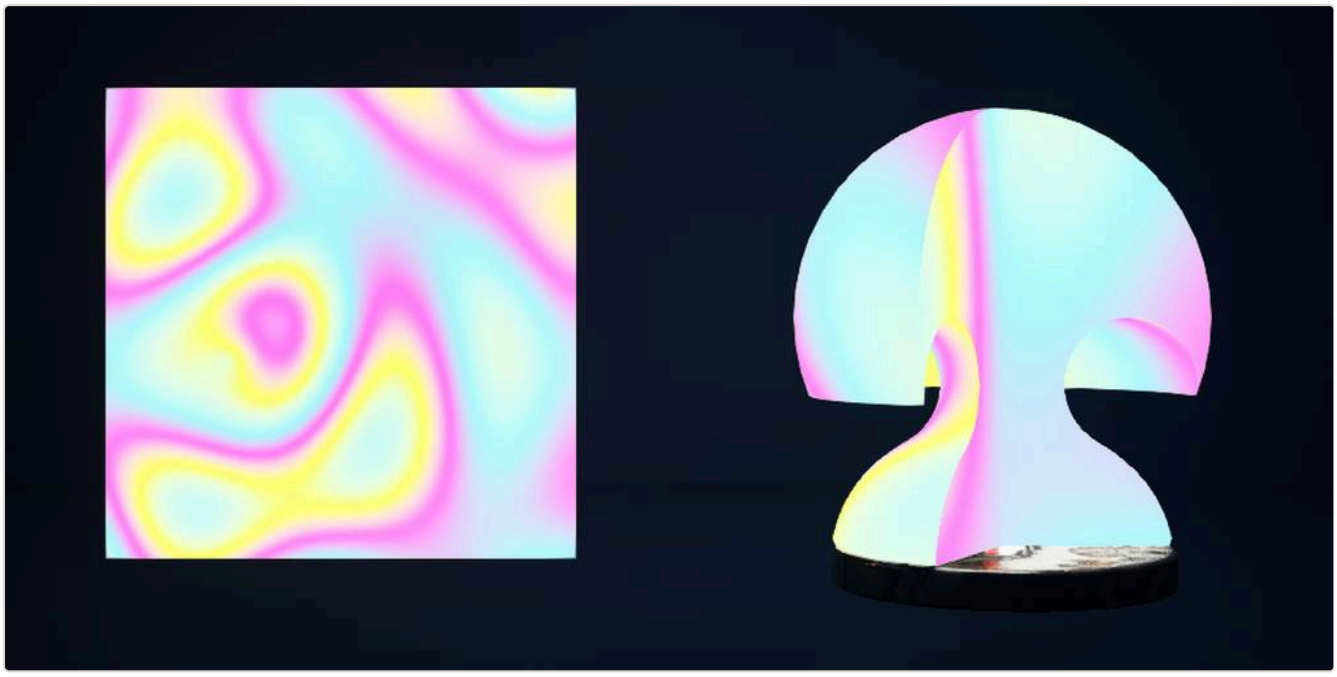
8-bit starfield: blocky stars scrolling in three parallax speeds, with twinkle.

`MaterialFX/Retro/M_Retro_PixelStars` Surface / Opaque / Unlit Instances `3`

Field	Default	Range	Group	What it does
`Speed`	0.1	-4 to 4	03 Animation	Animation speed.
`Background`	(0, 0, 0.03, 1)	-	01 Color	Colour of the pixel sky behind the stars.
`StarColor`	(1, 1, 1, 1)	-	01 Color	Colour of the pixel stars.
`StarDensity`	1	0.25 to 4	02 Pattern	Scales the grid density of all three star layers.
`StarAmount`	0.03	0 to 0.3	02 Pattern	Fraction of grid cells that hold a star (0-0.3).
`Glow`	1.5	0 to 50	04 Glow	Brightness multiplier of the emissive light (higher = brighter, more bloom).

Instances: `MI_Retro_PixelStars_Classic` , `MI_Retro_PixelStars_Warp` , `MI_Retro_PixelStars_Purple`

PLASMA



Plasma: flat panel and shader ball

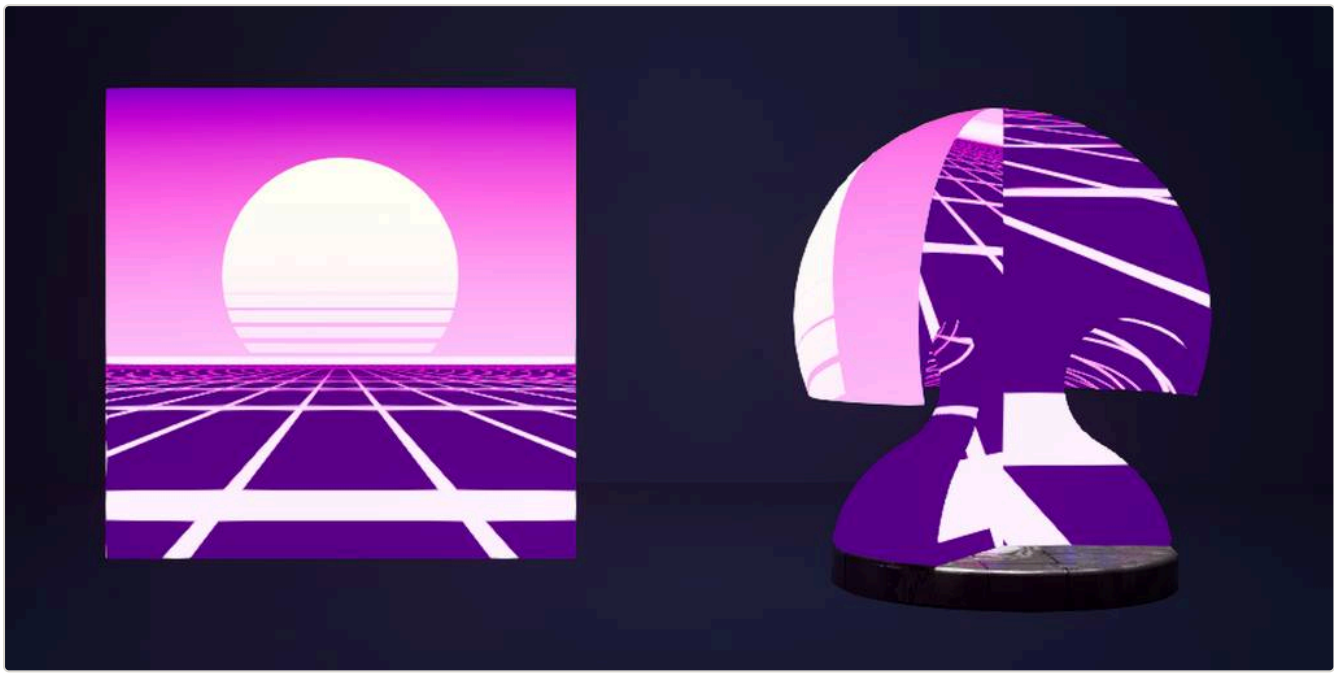
Classic demoscene plasma: overlapping sine fields with a cycling color palette.

`MaterialFX/Retro/M_Retro_Plasma` Surface / Opaque / Unlit Instances `3`

Field	Default	Range	Group	What it does
`Tiling`	2	0.1 to 16	02 Pattern	How many times the pattern repeats across the surface (UV scale).
`Speed`	0.15	-4 to 4	03 Animation	Animation speed.
`PaletteCycle`	0.1	-2 to 2	03 Animation	Speed at which the palette colours cycle, in cycles per second.
`PaletteC`	(1, 1, 1, 1)	-	01 Color	Cosine palette frequency (C): how many colour cycles appear across the plasma.
`PaletteD`	(0, 0.33, 0.67, 1)	-	01 Color	Cosine palette phase (D): shifts which colours appear.
`Glow`	1.2	0 to 50	04 Glow	Brightness multiplier of the emissive light (higher = brighter, more bloom).

Instances: `MI_Retro_Plasma_Rainbow` , `MI_Retro_Plasma_Lava` , `MI_Retro_Plasma_Ocean`

SYNTHWAVE SUN



Synthwave Sun: flat panel and shader ball

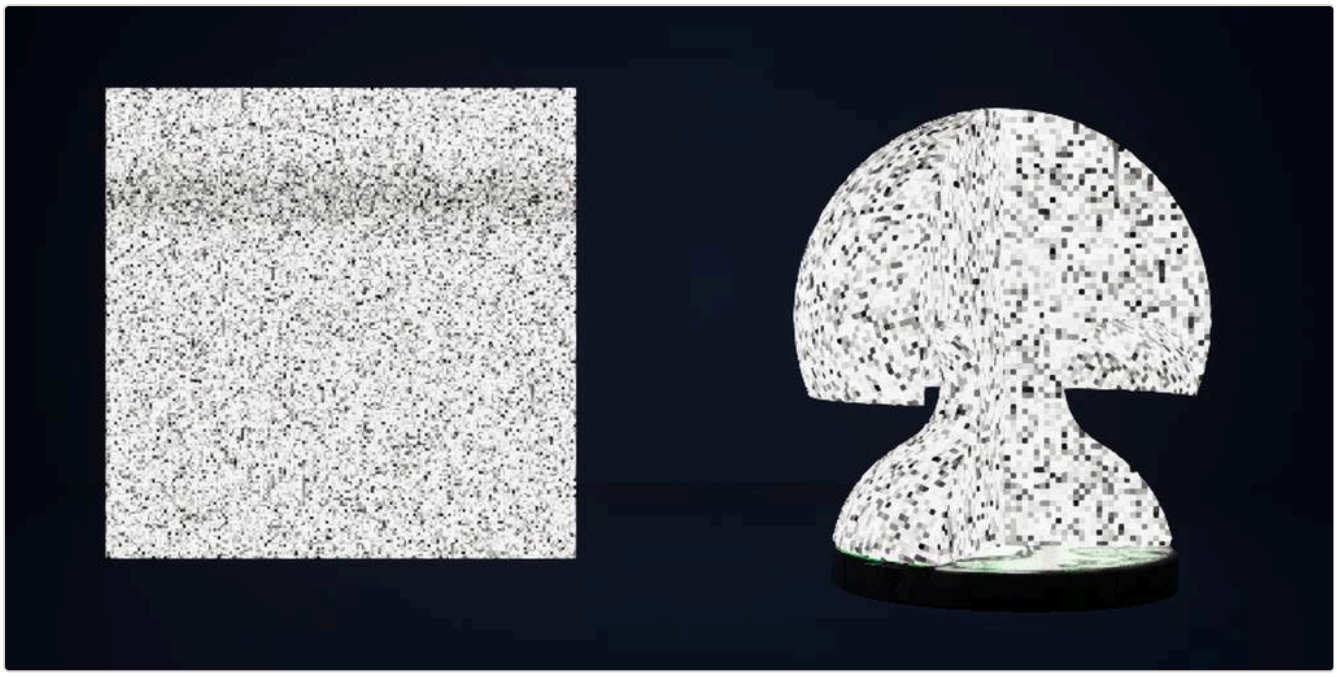
Synthwave poster in one material: striped setting sun over an endless scrolling neon grid.

`MaterialFX/Retro/M_Retro_SynthwaveSun` Surface / Opaque / Unlit Instances `3`

Field	Default	Range	Group	What it does
`Horizon`	0.58	0.2 to 0.9	02 Pattern	Vertical position of the horizon line in the tile (0-1 of the height).
`SkyTop`	(0.05, 0, 0.15, 1)	-	01 Color	Colour of the sky at the top; fades to SkyBottom toward the horizon.
`SkyBottom`	(0.6, 0.05, 0.4, 1)	-	01 Color	Colour of the sky at the horizon.
`SunTop`	(1, 0.85, 0.2, 1)	-	01 Color	Colour of the top of the sun; fades to SunBottom.
`SunBottom`	(1, 0.1, 0.45, 1)	-	01 Color	Colour of the bottom of the sun.
`Speed`	0.5	-4 to 4	03 Animation	Animation speed.
`GroundColor`	(0.03, 0, 0.06, 1)	-	01 Color	Colour of the ground plane under the grid.
`GridColor`	(1, 0.1, 0.8, 1)	-	01 Color	Colour of the ground grid and the horizon glow line.

1 more parameter in the instance's Details panel. **Instances:** `MI_Retro_SynthwaveSun_Classic`, `MI_Retro_SynthwaveSun_Miami`, `MI_Retro_SynthwaveSun_Toxic`

TV STATIC



TV Static: flat panel and shader ball

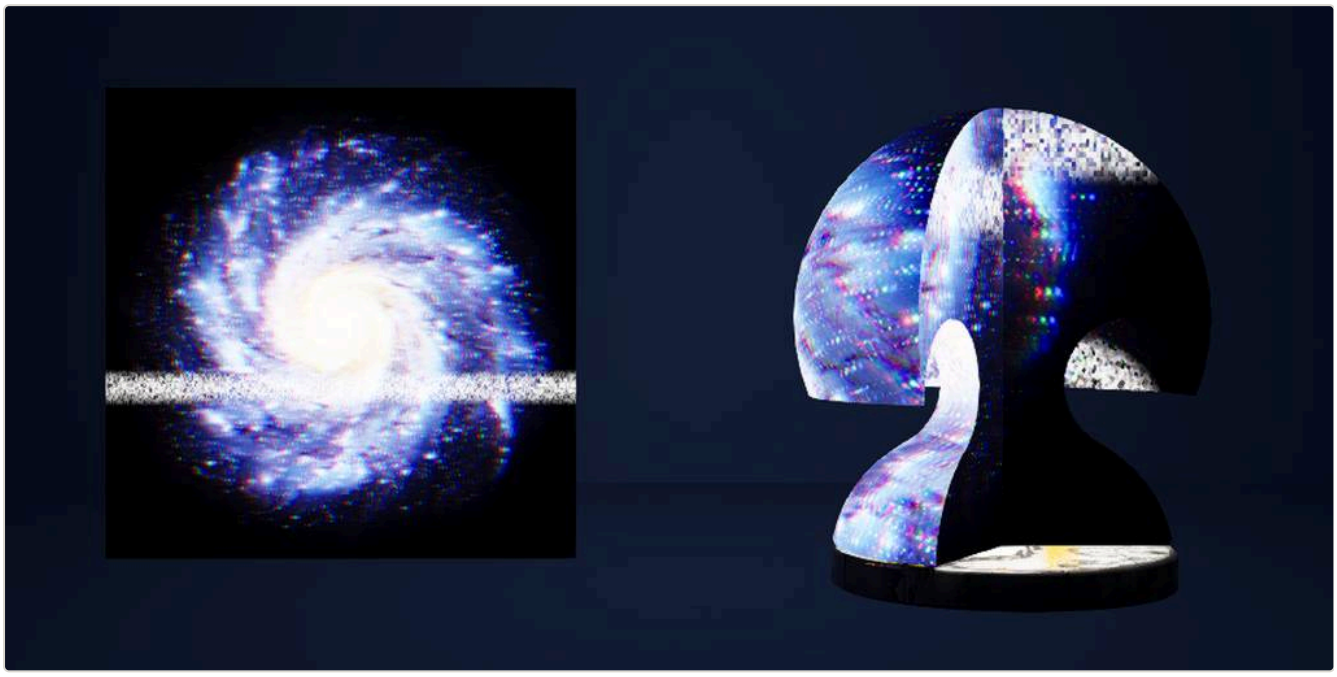
Analog TV static: per-frame noise snow, rolling dark band and optional color noise.

`MaterialFX/Retro/M_Retro_TVStatic` Surface / Opaque / Unlit Instances `3`

Field	Default	Range	Group	What it does
`NoiseResolution`	200	20 to 800	02 Pattern	Number of noise cells per tile.
`FrameRate`	30	1 to 60	03 Animation	How many times per second the static pattern changes.
`ColorNoise`	False	-	Switches	Static switch.
`RollStrength`	0.5	0 to 1	02 Pattern	How much the slowly rolling dark band darkens the picture (0 = none).
`Tint`	(1, 1, 1, 1)	-	01 Color	Color multiplied over the result.
`Glow`	1	0 to 50	04 Glow	Brightness multiplier of the emissive light (higher = brighter, more bloom).

Instances: `MI_Retro_TVStatic_BlackWhite` , `MI_Retro_TVStatic_Color` , `MI_Retro_TVStatic_Haunted`

VHS



VHS: flat panel and shader ball

VHS tape playback: tracking bars, chroma bleed, wobbling lines and tape noise over any texture.

`MaterialFX/Retro/M_Retro_VHS` Surface / Opaque / Unlit Instances `3`

Field	Default	Range	Group	What it does
`Wobble`	0.003	0 to 0.03	03 Animation	Amount of wobble/distortion.
`TrackingNoise`	0.6	0 to 1	03 Animation	Strength 0-1 of the horizontal jitter inside the rolling tracking-error band.
`ChromaShift`	0.008	0 to 0.05	02 Pattern	Horizontal offset (in UV) between the red and blue channels, giving the VHS colour fringing.
`ScreenTexture`	T_MFX_Galaxy	-	05 Textures	Texture slot: swap in your own texture.
`TapeNoise`	0.1	0 to 1	03 Animation	Amount 0-1 of grain noise multiplied over the picture.
`Washout`	0.15	0 to 1	01 Color	Colour drain 0-1 (desaturation of the tape look).
`Glow`	1.2	0 to 50	04 Glow	Brightness multiplier of the emissive light (higher = brighter, more bloom).

Instances: `MI_Retro_VHS_Galaxy` , `MI_Retro_VHS_Nebula` , `MI_Retro_VHS_Worn`

TOON & MATCAP

Adjustable cel, hatching, halftone, watercolor and matcap shading that follows the level sun.



9 masters, 36 instances. Folder `MaterialFX/Toon/` (instances in `MaterialFX/Toon/Instances/`). Uses 2 material functions and 16 textures from `MaterialFX/Functions` and `MaterialFX/Textures`.

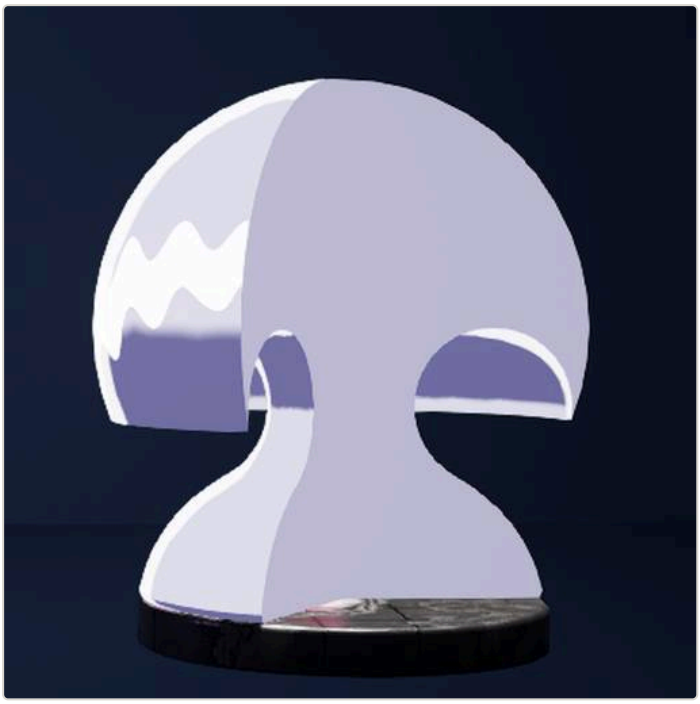
Domain	Blend	Shading	Sides	Masters
Surface	Masked	Unlit	two-sided	1
Surface	Opaque	Unlit	one-sided	8

> **NOTE:** Toon shading follows the level sun (SkyAtmosphereLightDirection) automatically when UseSunDirection is on.
>
> **AI disclosure:** AI-generated textures used by this bundle (12 of its 16 textures): Matcap_Chrome, Matcap_Clay, Matcap_Copper, Matcap_Crystal.

MASTERS IN TOON & MATCAP

Master	Looks like	Instances
`M_Toon_AnimeHair`	Anime hair / glossy toon shading.	3
`M_Toon_DualMatcap`	Two matcaps blended by view angle: e.g.	7
`M_Toon_Gooch`	Gooch cool-to-warm illustration shading with ink outlines.	3
`M_Toon_HalftoneShade`	Comic-book shading: shadows are printed as halftone dots that...	3
`M_Toon_Hatching`	Pen-and-ink crosshatching: shadows are drawn with layered...	3
`M_Toon_MatcapRamp`	Any matcap turned into a toon: matcap brightness is cut into...	6
`M_Toon_Outline`	Inverted-hull ink outline: put it on a duplicate of the mesh...	3
`M_Toon_Ramp`	Fully adjustable cel shader: 3-color light ramp with movable...	5
`M_Toon_Watercolor`	Watercolor paint: soft washes, darker pigment pooling at the...	3

ANIME HAIR



Anime Hair: on a shader ball

Anime hair / glossy toon shading: two-tone cel base with a sliding anisotropic highlight band and rim.

`MaterialFX/Toon/M_Toon_AnimeHair` Surface / Opaque / Unlit Instances `3`

Field	Default	Range	Group	What it does
`LightDirection`	(0.5, -0.4, 0.75, 1)	-	06 Lighting	Direction the light comes from (used when UseSunDirection is off).
`UseSunDirection`	True	-	06 Lighting	On: shading follows the level sun automatically.
`ShadowColor`	(0.05, 0.05, 0.1, 1)	-	01 Color	Color of shadowed areas.
`BaseColor`	(0.2, 0.2, 0.3, 1)	-	01 Color	Main surface color.
`HighlightPosition`	0.35	0 to 1	02 Pattern	Vertical (UV V) position of the highlight band, 0-1.
`StrandCount`	18	1 to 80	02 Pattern	Number of sine wiggles across UV U that bend the highlight band (wobble amplitude 0.02).
`HighlightWidth`	0.04	0.005 to 0.2	02 Pattern	Thickness of the highlight band in UV V (radius of the anti-aliased band around the wiggling centre...
`HighlightColor`	(0.9, 0.9, 1, 1)	-	01 Color	Colour of the hair highlight band.

2 more parameters in the instance's Details panel. **Instances:** `MI_Toon_AnimeHair_Black` , `MI_Toon_AnimeHair_Blonde` , `MI_Toon_AnimeHair_Pink`

DUAL MATCAP



Dual Matcap: on a shader ball

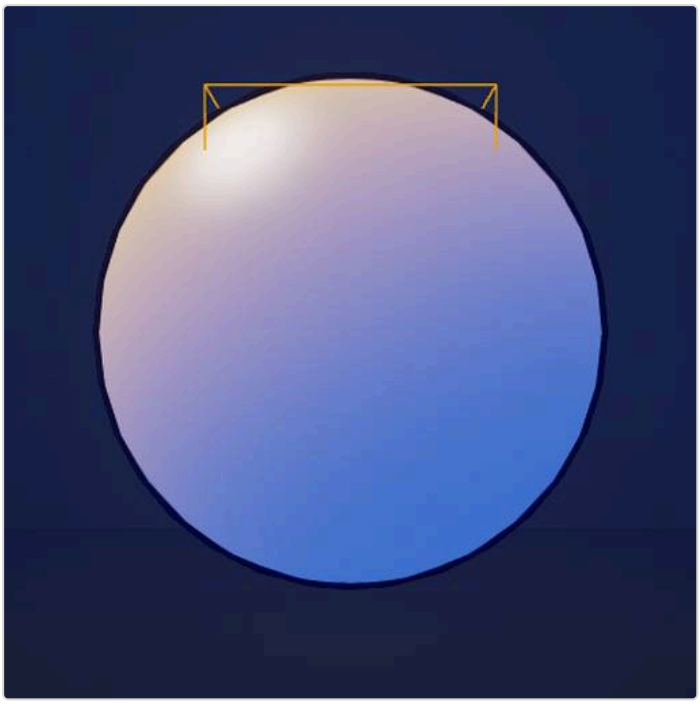
Two matcaps blended by view angle: e.g.

`MaterialFX/Toon/M_Toon_DualMatcap` Surface / Opaque / Unlit Instances `7`

Field	Default	Range	Group	What it does
`CoreMatcap`	T_MFX_Matcap_Chrome	-	05 Textures	Texture slot: swap in your own texture.
`CoreTint`	(1, 1, 1, 1)	-	01 Color	Multiplies the core matcap (the main body of the shading).
`RimMatcap`	T_MFX_Matcap_Pearl	-	05 Textures	Texture slot: swap in your own texture.
`RimTint`	(1, 0.4, 1, 1)	-	01 Color	Multiplies the rim matcap that shows at the edges.
`RimWidth`	0.35	0 to 1	02 Pattern	Width of the zone at the silhouette where the Rim Matcap replaces the Core Matcap (smoothstep on 1.
`PosterizeSteps`	0	0 to 8	02 Pattern	Colour levels per channel for the toon posterize: floor(color * steps + 0.5) / steps.
`Brightness`	1	0 to 50	04 Glow	Overall brightness of the effect.

Instances: `MI_Toon_DualMatcap_ChromeNeon` , `MI_Toon_DualMatcap_ClayGold` , `MI_Toon_DualMatcap_ToonPoster` , `MI_Toon_DualMatcap_ObsidianNeon` and 3 more

GOOCH



Gooch: on a shader ball

Gooch cool-to-warm illustration shading with ink outlines: clean, readable, technical-art look.

`MaterialFX/Toon/M_Toon_Gooch` Surface / Opaque / Unlit Instances `3`

Field	Default	Range	Group	What it does
`LightDirection`	(0.5, -0.4, 0.75, 1)	-	06 Lighting	Direction the light comes from (used when UseSunDirection is off).
`UseSunDirection`	True	-	06 Lighting	On: shading follows the level sun automatically.
`CoolColor`	(0.08, 0.15, 0.6, 1)	-	01 Color	Colour of the surfaces facing away from the light (cool tone of the Gooch shading).
`WarmColor`	(1, 0.62, 0.15, 1)	-	01 Color	Colour of the surfaces facing the light (warm tone of the Gooch shading).
`BaseColor`	(1, 1, 1, 1)	-	01 Color	Main surface color.
`Tiling`	1	0.1 to 16	02 Pattern	How many times the pattern repeats across the surface (UV scale).
`BaseTexture`	T_MFX_StainedGlass	-	05 Textures	Texture slot: swap in your own texture.
`UseBaseTexture`	False	-	05 Textures	Static switch.

6 more parameters in the instance's Details panel. **Instances:** `MI_Toon_Gooch_Classic`, `MI_Toon_Gooch_Sunset`, `MI_Toon_Gooch_Mint`

HALFTONE SHADE



Halftone Shade: on a shader ball

Comic-book shading: shadows are printed as halftone dots that grow with darkness.

`MaterialFX/Toon/M_Toon_HalftoneShade` Surface / Opaque / Unlit Instances `3`

Field	Default	Range	Group	What it does
`LightDirection`	(0.5, -0.4, 0.75, 1)	-	06 Lighting	Direction the light comes from (used when UseSunDirection is off).
`UseSunDirection`	True	-	06 Lighting	On: shading follows the level sun automatically.
`Tiling`	1	0.1 to 16	02 Pattern	How many times the pattern repeats across the surface (UV scale).
`DotFrequency`	30	4 to 200	02 Pattern	Dots per tile: the (rotated) UV is multiplied by this before the dot grid is drawn.
`ShadowStart`	0.7	0 to 1	02 Pattern	Light level (N.L mapped to 0-1) below which halftone dots start to appear.
`BaseColor`	(1, 0.85, 0.2, 1)	-	01 Color	Main surface color.
`BaseTexture`	T_MFX_StainedGlass	-	05 Textures	Texture slot: swap in your own texture.
`UseBaseTexture`	False	-	05 Textures	Static switch.

5 more parameters in the instance's Details panel. **Instances:** `MI_Toon_HalftoneShade_PopArt`, `MI_Toon_HalftoneShade_Noir`, `MI_Toon_HalftoneShade_Retro`

HATCHING



Hatching: on a shader ball

Pen-and-ink crosshatching: shadows are drawn with layered hatch lines that thicken as light falls off.

`MaterialFX/Toon/M_Toon_Hatching` Surface / Opaque / Unlit Instances `3`

Field	Default	Range	Group	What it does
`LightDirection`	(0.5, -0.4, 0.75, 1)	-	06 Lighting	Direction the light comes from (used when UseSunDirection is off).
`UseSunDirection`	True	-	06 Lighting	On: shading follows the level sun automatically.
`Tiling`	1	0.1 to 16	02 Pattern	How many times the pattern repeats across the surface (UV scale).
`HatchDensity`	40	4 to 200	02 Pattern	Hatch lines per UV unit (the tiled UV is multiplied by this).
`LineWeight`	0.35	0.05 to 0.9	02 Pattern	Base stroke thickness of the hatch lines; each of the three hatch layers scales it by how dark the...
`PaperColor`	(0.97, 0.96, 0.92, 1)	-	01 Color	Colour of the paper (the unshaded areas).
`InkColor`	(0.05, 0.05, 0.08, 1)	-	01 Color	Colour of the hatch strokes and (second parameter node with the same name, default 0.03, 0.02.
`InkWidth`	0.2	0 to 0.6	02 Pattern	Width of the dark silhouette ink zone: the result is darkened where N.V (surface facing the camera) is...

2 more parameters in the instance's Details panel. **Instances:** `MI_Toon_Hatching_Ink`, `MI_Toon_Hatching_Sepia`, `MI_Toon_Hatching_Blueprint`

MATCAP RAMP



Matcap Ramp: on a shader ball

Any matcap turned into a toon: matcap brightness is cut into 3 bands and recolored with your own shadow/mid/light colors.

`MaterialFX/Toon/M_Toon_MatcapRamp` Surface / Opaque / Unlit Instances `6`

Field	Default	Range	Group	What it does
`Matcap`	T_MFX_Matcap_Toon	-	05 Textures	Texture slot: swap in your own texture.
`BandSoftness`	0.02	0.001 to 0.3	02 Pattern	Half-width of the smoothstep between the shadow, mid and light bands (in matcap luminance).
`ShadowEdge`	0.35	0 to 1	02 Pattern	Matcap luminance (0-1) where the Shadow colour changes to the Mid colour.
`HighlightEdge`	0.7	0 to 1	02 Pattern	Matcap luminance (0-1) where the Mid colour changes to the Light colour.
`ShadowColor`	(0.45, 0.12, 0.2, 1)	-	01 Color	Color of shadowed areas.
`MidColor`	(1, 0.45, 0.4, 1)	-	01 Color	Colour of the middle shading band; sits between ShadowColor and LightColor.
`LightColor`	(1, 0.9, 0.8, 1)	-	01 Color	Colour of the brightest shading band.
`RimWidth`	0.25	0 to 1	02 Pattern	Width of the rim band at the silhouette (smoothstep on 1 - N.V from 1 - RimWidth).

5 more parameters in the instance's Details panel. **Instances:** `MI_Toon_MatcapRamp_Coral`, `MI_Toon_MatcapRamp_Mint`, `MI_Toon_MatcapRamp_Grape`, `MI_Toon_MatcapRamp_Steel` and 2 more

OUTLINE



Outline: on a shader ball

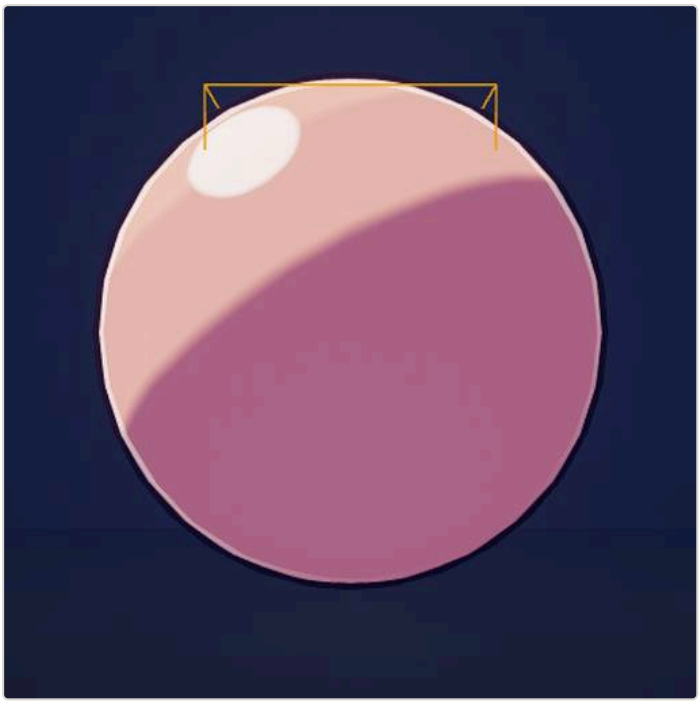
Inverted-hull ink outline: put it on a duplicate of the mesh in the same spot; only back faces render, pushed out by Push Out, giving bold cartoon outlines.

`MaterialFX/Toon/M_Toon_Outline` Surface / Masked / Unlit Instances `3`

Field	Default	Range	Group	What it does
`OutlineColor`	(0.02, 0.02, 0.03, 1)	-	01 Color	Color of the outline.
`Glow`	1	0 to 50	04 Glow	Brightness multiplier of the emissive light (higher = brighter, more bloom).
`PushOut`	2	0 to 30	02 Pattern	Distance the back-face hull is pushed outward along the vertex normal (world position offset = normal x...

Instances: `MI_Toon_Outline_Black` , `MI_Toon_Outline_White` , `MI_Toon_Outline_Neon`

RAMP



Ramp: on a shader ball

Fully adjustable cel shader: 3-color light ramp with movable band edges and softness, hard specular, rim light and ink edges.

`MaterialFX/Toon/M_Toon_Ramp` Surface / Opaque / Unlit Instances `5`

Field	Default	Range	Group	What it does
`LightDirection`	(0.5, -0.4, 0.75, 1)	-	06 Lighting	Direction the light comes from (used when UseSunDirection is off).
`UseSunDirection`	True	-	06 Lighting	On: shading follows the level sun automatically.
`BandSoftness`	0.02	0.001 to 0.3	02 Pattern	Half-width of the smoothstep between shadow, mid and light bands (on N.L).
`ShadowEdge`	0.5	0 to 1	02 Pattern	N.L light level (0-1, half-Lambert) where Shadow colour changes to Mid colour.
`HighlightEdge`	0.75	0 to 1	02 Pattern	N.L light level (0-1) where Mid colour changes to Light colour.
`ShadowColor`	(0.35, 0.3, 0.55, 1)	-	01 Color	Color of shadowed areas.
`MidColor`	(0.85, 0.82, 0.9, 1)	-	01 Color	Colour of the middle shading band; sits between ShadowColor and LightColor.
`LightColor`	(1, 1, 1, 1)	-	01 Color	Colour of the brightest shading band.

13 more parameters in the instance's Details panel. **Instances:** `MI_Toon_Ramp_Classic` , `MI_Toon_Ramp_Anime` , `MI_Toon_Ramp_Comic` , `MI_Toon_Ramp_Pastel` and 1 more

WATERCOLOR



Watercolor: on a shader ball

Watercolor paint: soft washes, darker pigment pooling at the edges, paper grain and gently bleeding color.

`MaterialFX/Toon/M_Toon_Watercolor` Surface / Opaque / Unlit Instances `3`

Field	Default	Range	Group	What it does
`LightDirection`	(0.5, -0.4, 0.75, 1)	-	06 Lighting	Direction the light comes from (used when UseSunDirection is off).
`UseSunDirection`	True	-	06 Lighting	On: shading follows the level sun automatically.
`Tiling`	2	0.1 to 16	02 Pattern	How many times the pattern repeats across the surface (UV scale).
`PaperNoise`	T_MFX_Noise_Packed_B	-	05 Textures	Texture slot: swap in your own texture.
`Speed`	0.01	-4 to 4	03 Animation	Animation speed.
`BleedNoise`	T_MFX_Noise_Packed_A	-	05 Textures	Texture slot: swap in your own texture.
`Bleed`	0.35	0 to 1	02 Pattern	How strongly the slowly drifting Bleed Noise shifts the wash threshold: light level + (noise.
`EdgePooling`	2	0.5 to 8	02 Pattern	Exponent on (1 - N.V) for the darker Pool Color at silhouettes.

4 more parameters in the instance's Details panel. **Instances:** `MI_Toon_Watercolor_Spring` , `MI_Toon_Watercolor_Ocean` , `MI_Toon_Watercolor_Autumn`

POST PROCESS

Full-screen effects for post process volumes: sonar, outlines, thermal, underwater, glitch and more.

20 masters, 67 instances. Folder `MaterialFX/PostProcess/` (instances in `MaterialFX/PostProcess/Instances/`). Uses 4 material functions and 8 textures from `MaterialFX/Functions` and `MaterialFX/Textures`.

Domain	Blend	Shading	Sides	Masters
PostProcess	n/a (post process)	Unlit	one-sided	20



> **NOTE:** Post-process materials do nothing on a mesh.
>
> **Note:** Three masters (PP_DamageVignette, PP_FrostEdges, PP_Poison) each reference their own Material Parameter Collection asset by path) so a Level...
>
> **Note:** Post-process materials are not the same as UI overlays: on mobile, use the UI overlay masters (UI bundle) if post-process is unavailable.
>
> **AI disclosure:** AI-generated textures used by this bundle (3 of its 8 textures): Caustics, Glyphs, Lightning.

MASTERS IN POST PROCESS

Master	Looks like	Instances
`PP_CRTScreen`	Play the whole game through an old CRT: curved glass.	3
`PP_DamageVignette`	Pain: a heartbeat throbs through the screen (lub-dub squeeze...	5
`PP_Dither1Bit`	One-bit dithered look (ordered Bayer dither) in two colors.	3
`PP_FrostEdges`	Frozen lens: crystal ice grows in from the screen borders.	4
`PP_Glitch`	Digital glitch: tearing bands, RGB split and dropout blocks...	3
`PP_GradientMap`	Gradient map / tritone grade: remaps brightness to three...	4
`PP_Kaleidoscope`	Kaleidoscope vision: the whole screen mirrored into rotating...	3
`PP_LensRain`	Rain on the lens: water drops bead up around the edges of the...	3
`PP_MatrixVision`	Code vision: the world is redrawn as glowing glyphs whose...	3
`PP_NightVision`	Night-vision goggles: amplified green image, sensor noise.	3
`PP_Pixelate`	Pixel-art camera: chunky screen pixels with optional color...	3
`PP_Poison`	Poisoned / dizzy vision: wobbling double image.	4
`PP_Posterize`	Posterize: flatten the image into bold color bands with...	3
`PP_Sketch`	Pencil sketch world: ink outlines and crosshatching driven by...	3
`PP_SonarScan`	Sonar / scanner pulse: a ring of light expands from the...	3
`PP_SpeedLines`	Anime speed lines streaming in from the screen edges.	3
`PP_StylizedFog`	Stylized volumetric-look fog: distance fog that starts past...	4
`PP_Thermal`	Thermal camera: heat palette from brightness (and optionally...	3
`PP_ToonOutline`	Comic cel-shade for the whole world.	4
`PP_Underwater`	Underwater: wavy refraction, depth-based water color.	3

CRT SCREEN



CRT Screen: flat panel, sphere and cube

Play the whole game through an old CRT: curved glass, scanlines, phosphor mask and vignette.

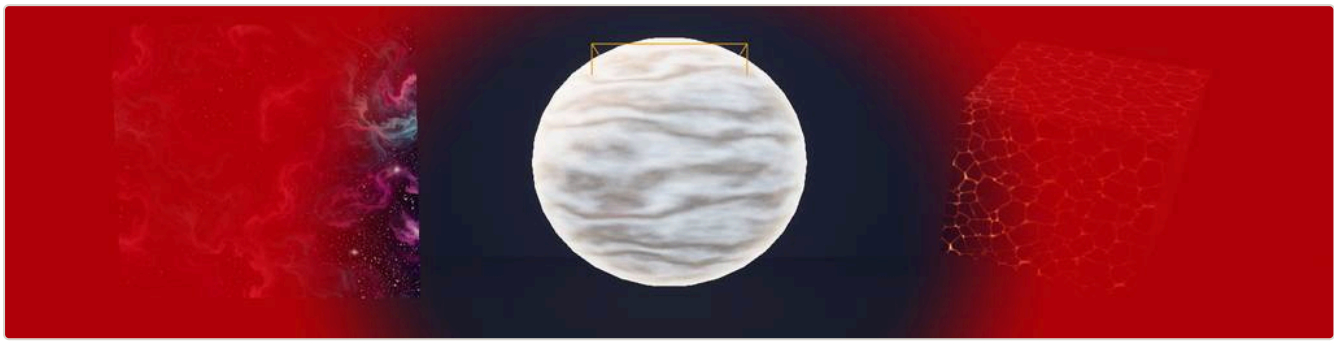
`MaterialFX/PostProcess/PP_CRTScreen` PostProcess / n/a / Unlit Instances `3`

Field	Default	Range	Group	What it does
`Curvature`	0.1	0 to 0.5	02 Pattern	Barrel distortion of the screen edges (curved CRT tube look).
`ScanlineStrength`	0.35	0 to 1	02 Pattern	Darkness of the scanlines, 0-1.
`Brightness`	1.15	0.5 to 3	01 Color	Overall brightness of the effect.
`Intensity`	1	0 to 1	02 Pattern	Strength of the effect (0 = off).

Instances: `MI_PP_CRTScreen_Classic` , `MI_PP_CRTScreen_Flat` , `MI_PP_CRTScreen_Arcade`

// POST PROCESS

DAMAGE VIGNETTE



Damage Vignette: flat panel, sphere and cube

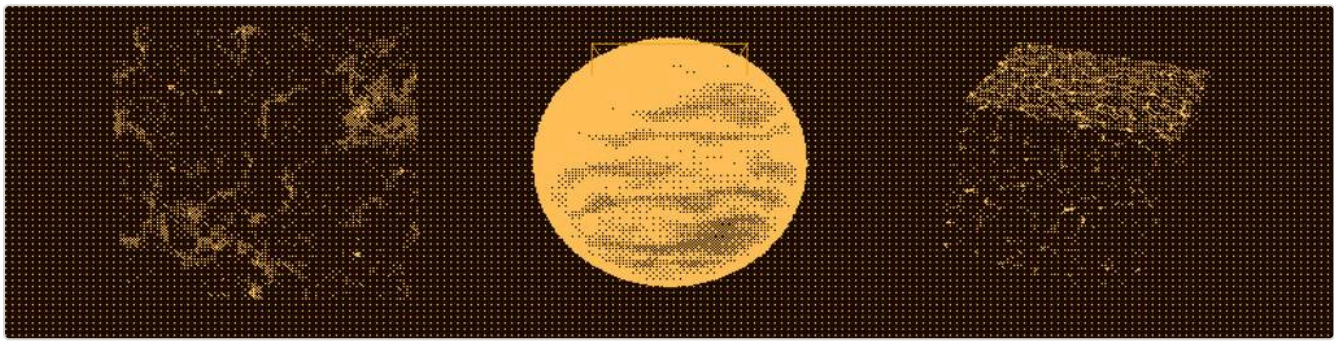
Pain: a heartbeat throbs through the screen (lub-dub squeeze + red split), veins crawl in from darkening, desaturated edges.

`MaterialFX/PostProcess/PP_DamageVignette` PostProcess / n/a / Unlit Instances `5`

Field	Default	Range	Group	What it does
`Vignette`	1	0 to 1	02 Pattern	Strength of the screen-edge effect, 0-1 (animate this or the volume Blend Weight to fade in).
`SequencerDriven`	1	0 to 1	02 Pattern	On: the effect is driven by a Level Sequence MPC track.
`Pain`	0.7	0 to 1	02 Pattern	Pain level 0-1 that scales the heartbeat pulse, the closing tunnel and the colour drain.
`HeartRate`	1.3	0.2 to 4	03 Animation	Heartbeats per second (each beat is a strong pulse followed by a softer one).
`Throb`	0.018	0 to 0.08	03 Animation	How much the image squeezes toward the centre on each beat.
`Split`	0.012	0 to 0.05	03 Animation	Red/blue channel split on each beat (screen offset).
`Softness`	0.6	0.05 to 1	02 Pattern	Softness of the tunnel-vision edge (width of the transition from clear to dark).
`Desaturate`	0.6	0 to 1	01 Color	How much color is drained.

7 more parameters in the instance's Details panel. **Instances:** `MI_PP_DamageVignette_Hurt`, `MI_PP_DamageVignette_Critical`, `MI_PP_DamageVignette_Heal`, `MI_PP_DamageVignette_Shield` and 1 more

DITHER1 BIT



Dither1 Bit: flat panel, sphere and cube

One-bit dithered look (ordered Bayer dither) in two colors - think classic adventure-game screens.

`MaterialFX/PostProcess/PP_Dither1Bit` PostProcess / n/a / Unlit Instances `3`

Field	Default	Range	Group	What it does
`PixelScale`	2	1 to 12	02 Pattern	Size of one dither pixel in screen pixels.
`Contrast`	1.4	0.2 to 4	01 Color	Contrast of the result.
`Brightness`	0	-1 to 1	01 Color	Offset (-1 to 1) added to the scene brightness before the 1-bit threshold.
`DarkColor`	(0.12, 0.05, 0.02, 1)	-	01 Color	Colour used for the dark dots of the dithered image.
`LightColor`	(1, 0.75, 0.35, 1)	-	01 Color	Colour used for the light dots of the dithered image.
`Intensity`	1	0 to 1	02 Pattern	Strength of the effect (0 = off).

Instances: `MI_PP_Dither1Bit_Amber`, `MI_PP_Dither1Bit_handheld2bit`, `MI_PP_Dither1Bit_Paper`

FROST EDGES



Frost Edges: flat panel, sphere and cube

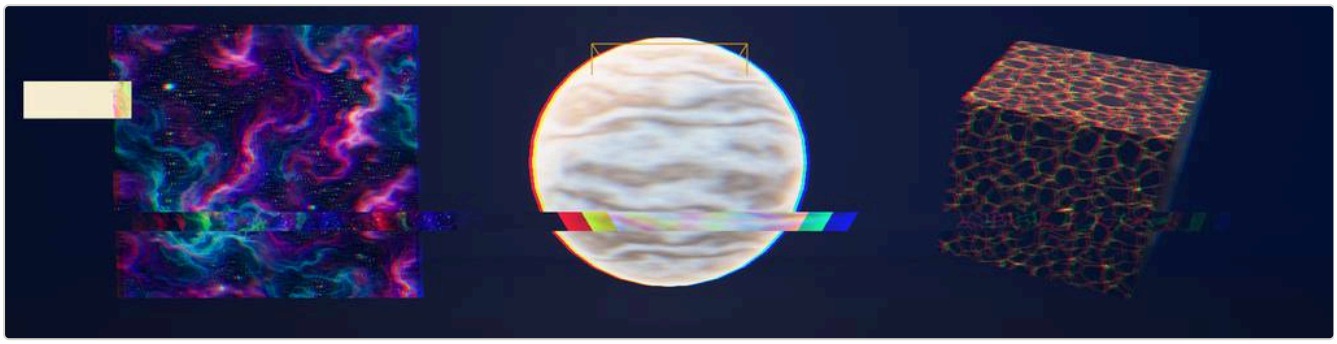
Frozen lens: crystal ice grows in from the screen borders, refracting the world through faceted shards that glint and twinkle; milky frost at the very edge.

`MaterialFX/PostProcess/PP_FrostEdges` PostProcess / n/a / Unlit Instances `4`

Field	Default	Range	Group	What it does
`FrostScale`	2.4	0.2 to 8	02 Pattern	Size of the ice crystals (tiling of the crystal textures; higher = smaller crystals).
`CrystalNormal`	T_MFX_FrostCrystal_N	-	05 Textures	Texture slot: swap in your own texture.
`CrystalMask`	T_MFX_FrostCrystal_M	-	05 Textures	Texture slot: swap in your own texture.
`Vignette`	1	0 to 1	02 Pattern	Strength of the screen-edge effect, 0-1 (animate this or the volume Blend Weight to fade in).
`SequencerDriven`	1	0 to 1	02 Pattern	On: the effect is driven by a Level Sequence MPC track.
`FrostAmount`	0.6	0 to 1	02 Pattern	How far the ice grows in from the screen edges, 0-1 (up to 22 percent of the screen height.
`Refraction`	0.025	0 to 0.1	02 Pattern	How strongly the ice bends the image behind it.
`MilkyBlur`	0.006	0 to 0.03	02 Pattern	Blur radius of the frosted-glass look in thick ice.

6 more parameters in the instance's Details panel. **Instances:** `MI_PP_FrostEdges_Frost` , `MI_PP_FrostEdges_Blizzard` , `MI_PP_FrostEdges_Crystal` , `MI_PP_FrostEdges_Cinematic`

GLITCH



Glitch: flat panel, sphere and cube

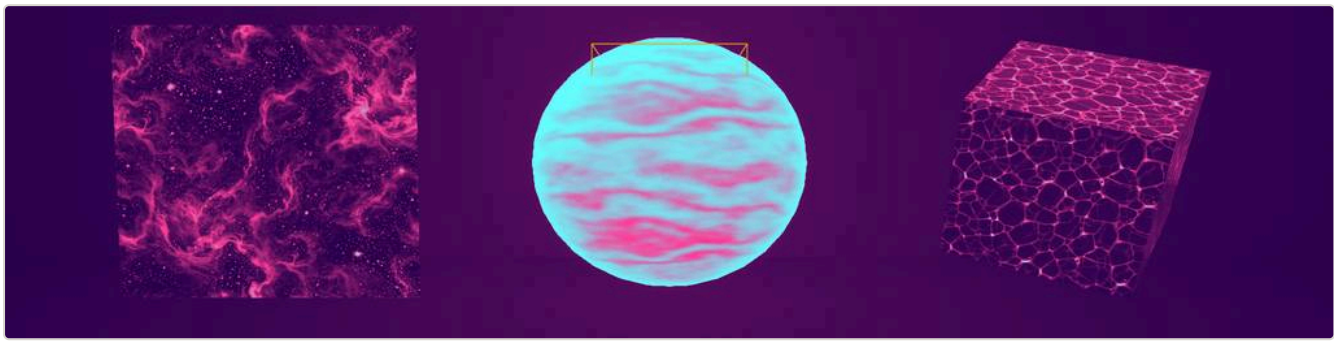
Digital glitch: tearing bands, RGB split and dropout blocks on the whole screen in random bursts.

`MaterialFX/PostProcess/PP_Glitch` PostProcess / n/a / Unlit Instances `3`

Field	Default	Range	Group	What it does
`GlitchFPS`	12	1 to 30	03 Animation	How many times per second the glitch pattern changes (stepped time).
`GlitchIntensity`	0.5	0 to 1	03 Animation	Strength 0–1 of the glitch: chance of a band tearing sideways.
`Intensity`	1	0 to 1	02 Pattern	Strength of the effect (0 = off).

Instances: `MI_PP_Glitch_Burst` , `MI_PP_Glitch_Heavy` , `MI_PP_Glitch_Subtle`

GRADIENT MAP



Gradient Map: flat panel, sphere and cube

Gradient map / tritone grade: remaps brightness to three colors for instant mood.

`MaterialFX/PostProcess/PP_GradientMap` PostProcess / n/a / Unlit Instances `4`

Field	Default	Range	Group	What it does
`Contrast`	1.1	0.2 to 3	01 Color	Contrast of the result.
`ShadowColor`	(0.15, 0, 0.3, 1)	-	01 Color	Color of shadowed areas.
`MidColor`	(1, 0.25, 0.6, 1)	-	01 Color	Colour the mid tones of the scene are mapped to (between ShadowColor and HighlightColor).
`HighlightColor`	(0.4, 1, 1, 1)	-	01 Color	Colour the brightest parts of the scene are mapped to.
`Intensity`	1	0 to 1	02 Pattern	Strength of the effect (0 = off).

Instances: `MI_PP_GradientMap_Vaporwave` , `MI_PP_GradientMap_Noir` , `MI_PP_GradientMap_Sepia` , `MI_PP_GradientMap_Toxic`

KALEIDOSCOPE



Kaleidoscope: flat panel, sphere and cube

Kaleidoscope vision: the whole screen mirrored into rotating wedges.

`MaterialFX/PostProcess/PP_Kaleidoscope` PostProcess / n/a / Unlit Instances `3`

Field	Default	Range	Group	What it does
`Segments`	6	2 to 24	02 Pattern	Number of repeated slices/segments.
`Speed`	0.03	-4 to 4	03 Animation	Animation speed.
`Zoom`	1	0.2 to 4	02 Pattern	Scale of the image inside each mirror segment.
`Intensity`	1	0 to 1	02 Pattern	Strength of the effect (0 = off).

Instances: `MI_PP_Kaleidoscope_Six`, `MI_PP_Kaleidoscope_Twelve`, `MI_PP_Kaleidoscope_Still`

// POST PROCESS

LENS RAIN

> **NOTE:** Post Process material: preview it in a Post Process Volume.

Rain on the lens: water drops bead up around the edges of the view, refract the world upside-down and slowly evaporate, while heavier drops run down the glass leaving wet trails.

`MaterialFX/PostProcess/PP_LensRain` PostProcess / n/a / Unlit Instances `3`

Field	Default	Range	Group	What it does
`RainAmount`	0.65	0 to 1	02 Pattern	How much rain is on the lens, 0-1 (fraction of droplets and running streaks that are present).
`DropSize`	1	0.3 to 3	02 Pattern	Scale of the droplets and of the running drops.
`Evaporate`	0.06	0 to 1	03 Animation	Speed at which droplets shrink away and respawn, in cycles per second.
`DropsNormal`	T_MFX_RainDrops_N	-	05 Textures	Texture slot: swap in your own texture.
`DropsMask`	T_MFX_RainDrops_M	-	05 Textures	Texture slot: swap in your own texture.
`Runners`	12	0 to 40	02 Pattern	Number of columns with a heavy drop sliding down.
`RunSpeed`	1	0 to 4	03 Animation	Multiplier on the sliding speed of the running drops.
`ClearRadius`	0.55	0 to 1.4	02 Pattern	Radius around the screen centre (0-1.4, where 1 touches the screen sides) that is kept free of drops.

6 more parameters in the instance's Details panel. **Instances:** `MI_PP_LensRain_Drizzle`, `MI_PP_LensRain_Downpour`, `MI_PP_LensRain_Sticky`

// POST PROCESS

MATRIX VISION



Matrix Vision: flat panel, sphere and cube

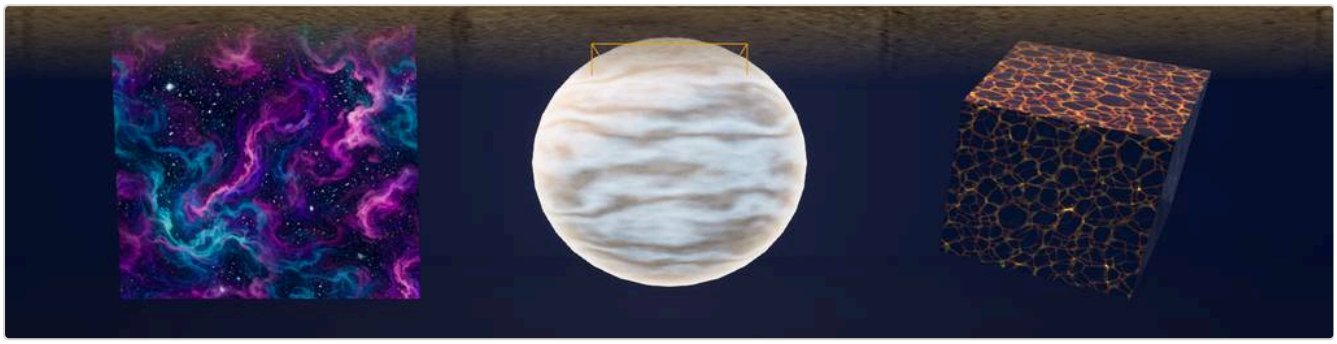
Code vision: the world is redrawn as glowing glyphs whose brightness follows the scene.

`MaterialFX/PostProcess/PP_MatrixVision` PostProcess / n/a / Unlit Instances `3`

Field	Default	Range	Group	What it does
`CellSize`	12	4 to 64	02 Pattern	Size of each glyph cell in screen pixels.
`Gain`	1.5	0.2 to 6	01 Color	Multiplier on the scene brightness that lights up the glyphs.
`GlyphSheet`	T_MFX_Glyphs	-	05 Textures	Texture slot: swap in your own texture.
`GlyphColor`	(0.2, 1, 0.35, 1)	-	01 Color	Colour of the falling glyphs.
`Glow`	1.5	0 to 50	04 Glow	Brightness multiplier of the emissive light (higher = brighter, more bloom).
`Intensity`	1	0 to 1	02 Pattern	Strength of the effect (0 = off).

Instances: `MI_PP_MatrixVision_Green`, `MI_PP_MatrixVision_Amber`, `MI_PP_MatrixVision_Ice`

NIGHT VISION



Night Vision: flat panel, sphere and cube

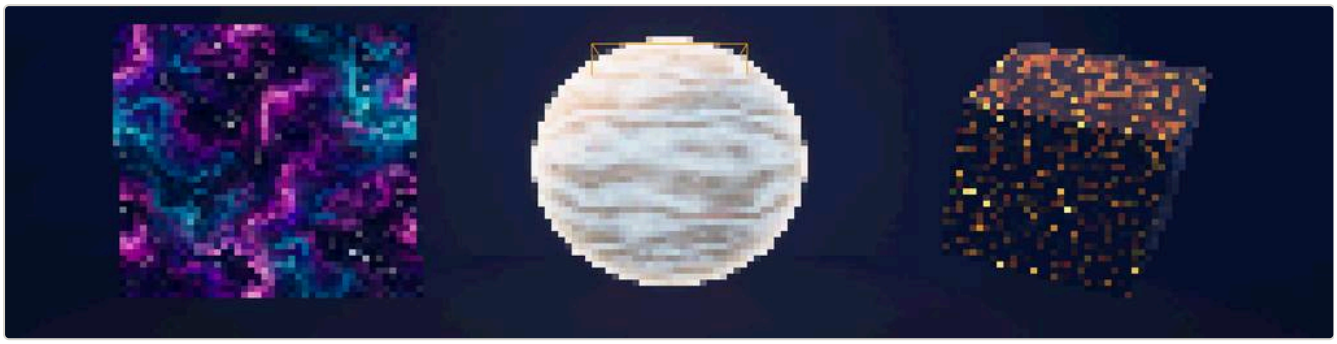
Night-vision goggles: amplified green image, sensor noise, scanlines and goggle vignette (optional binocular mask).

`MaterialFX/PostProcess/PP_NightVision` PostProcess / n/a / Unlit Instances `3`

Field	Default	Range	Group	What it does
`Gain`	3	0.5 to 20	01 Color	Brightness amplification of the scene before it is tinted (light-amplification gain).
`Tint`	(0.25, 1, 0.3, 1)	-	01 Color	Color multiplied over the result.
`Noise`	0.15	0 to 1	03 Animation	Amount of grain added to the image.
`BinocularMask`	False	-	Switches	Static switch.
`Intensity`	1	0 to 1	02 Pattern	Strength of the effect (0 = off).

Instances: `MI_PP_NightVision_Goggles`, `MI_PP_NightVision_Binocular`, `MI_PP_NightVision_Blue`

PIXELATE



Pixelate: flat panel, sphere and cube

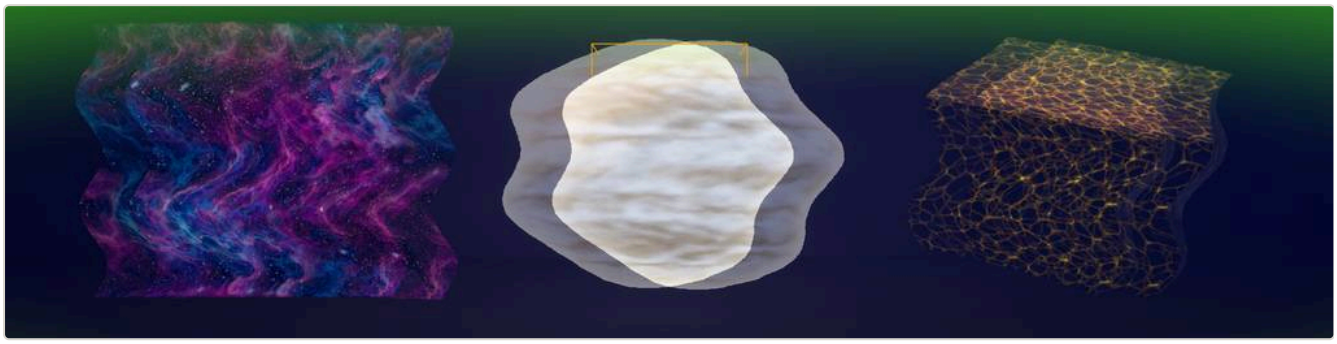
Pixel-art camera: chunky screen pixels with optional color reduction and pixel grid.

`MaterialFX/PostProcess/PP_Pixelate` PostProcess / n/a / Unlit Instances `3`

Field	Default	Range	Group	What it does
`PixelSize`	8	1 to 64	02 Pattern	Size of each big pixel in screen pixels.
`ColorLevels`	32	2 to 64	02 Pattern	Colour levels per channel after pixelating (lower = more banding).
`Grid`	0	0 to 1	02 Pattern	Visibility 0-1 of dark grid lines between the big pixels.
`Intensity`	1	0 to 1	02 Pattern	Strength of the effect (0 = off).

Instances: `MI_PP_Pixelate_Chunky` , `MI_PP_Pixelate_Fine` , `MI_PP_Pixelate_Retro16`

POISON



Poison: flat panel, sphere and cube

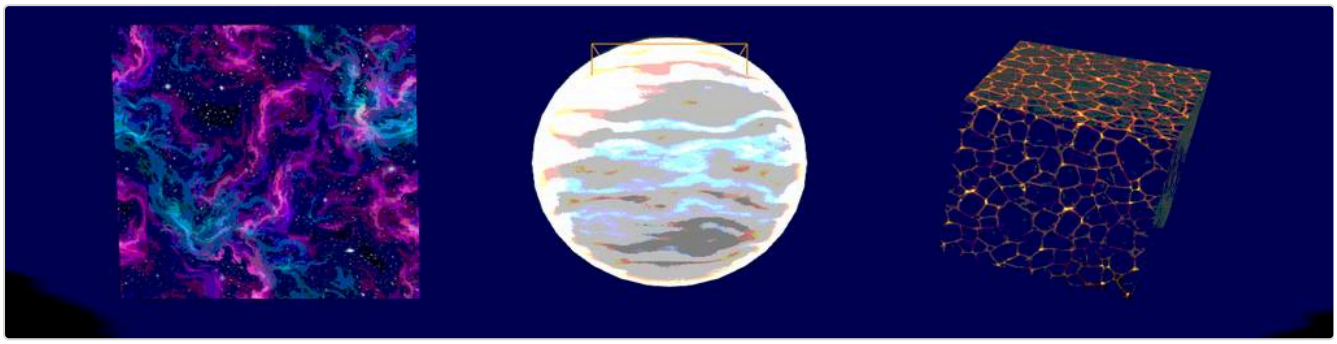
Poisoned / dizzy vision: wobbling double image, color drift and sickly edges closing in.

`MaterialFX/PostProcess/PP_Poison` PostProcess / n/a / Unlit Instances `4`

Field	Default	Range	Group	What it does
`Speed`	0.25	-4 to 4	03 Animation	Animation speed.
`Vignette`	1	0 to 1	02 Pattern	Strength of the screen-edge effect, 0-1 (animate this or the volume Blend Weight to fade in).
`SequencerDriven`	1	0 to 1	02 Pattern	On: the effect is driven by a Level Sequence MPC track.
`Wobble`	0.006	0 to 0.05	03 Animation	Amount of wobble/distortion.
`DoubleVision`	0.012	0 to 0.08	03 Animation	Distance between the two overlaid images (screen offset), scaled by Vignette.
`HueDrift`	0.08	0 to 0.5	03 Animation	How far the colours swing around the hue wheel back and forth, scaled by Vignette.
`EdgeColor`	(0.3, 0.9, 0.1, 1)	-	01 Color	Colour of the sickly tint blended in toward the screen edges.
`Intensity`	1	0 to 1	02 Pattern	Strength of the effect (0 = off).

Instances: `MI_PP_Poison_Poison` , `MI_PP_Poison2` , `MI_PP_Poison_Psychic` , `MI_PP_Poison_Cinematic`

POSTERIZE



Posterize: flat panel, sphere and cube

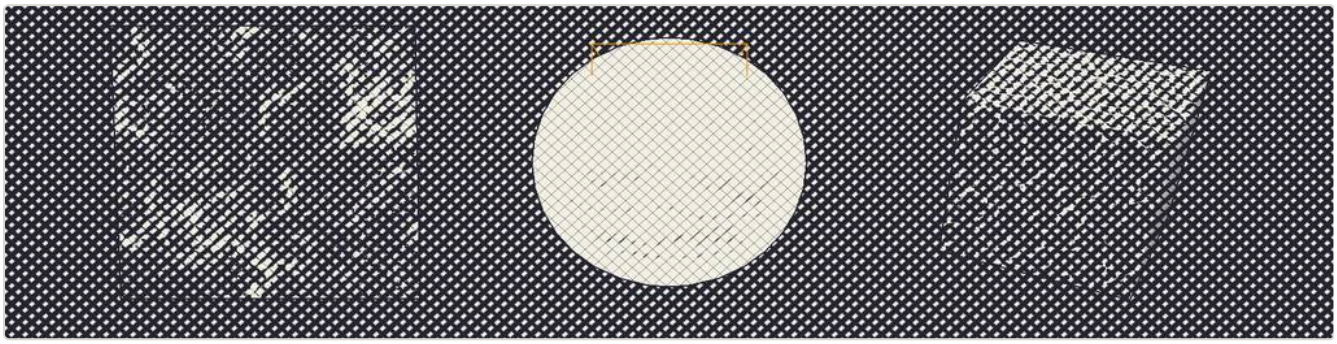
Posterize: flatten the image into bold color bands with saturation and contrast control.

`MaterialFX/PostProcess/PP_Posterize` PostProcess / n/a / Unlit Instances `3`

Field	Default	Range	Group	What it does
`Contrast`	1.1	0.2 to 3	01 Color	Contrast of the result.
`Steps`	4	2 to 16	02 Pattern	Number of colour levels per channel.
`Saturation`	1.3	0 to 3	01 Color	Colour saturation after posterizing: 1 = unchanged, above 1 = boosted, 0 = grey.
`Intensity`	1	0 to 1	02 Pattern	Strength of the effect (0 = off).

Instances: `MI_PP_Posterize_Bands` , `MI_PP_Posterize_Pop` , `MI_PP_Posterize_Muted`

SKETCH



Sketch: flat panel, sphere and cube

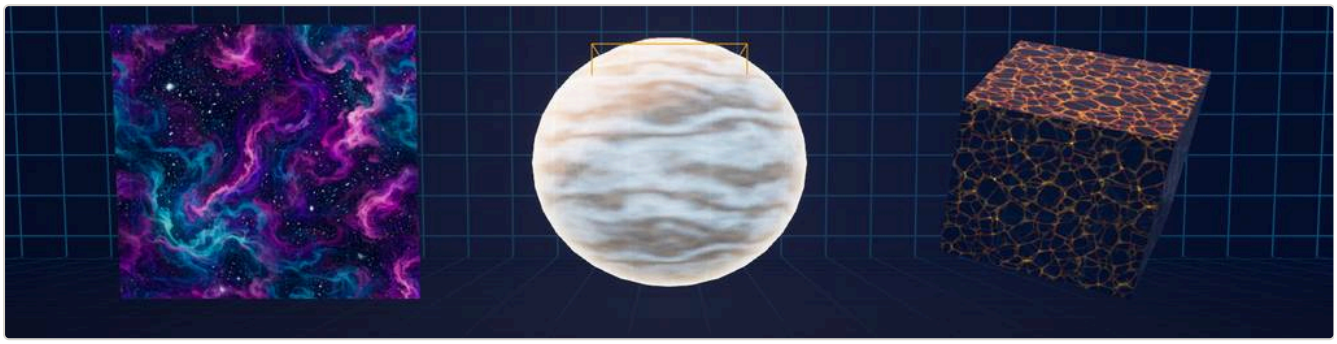
Pencil sketch world: ink outlines and crosshatching driven by scene brightness, on paper.

`MaterialFX/PostProcess/PP_Sketch` PostProcess / n/a / Unlit Instances `3`

Field	Default	Range	Group	What it does
`HatchDensity`	1	0.2 to 4	02 Pattern	Density of the hatch lines.
`EdgeSensitivity`	2	0.1 to 20	02 Pattern	Depth-difference threshold for outlines.
`PaperColor`	(0.96, 0.95, 0.9, 1)	-	01 Color	Colour of the paper (the lit areas of the scene); blends toward InkColor where the pencil lines are.
`InkColor`	(0.15, 0.15, 0.2, 1)	-	01 Color	Color of the ink/line work.
`Intensity`	1	0 to 1	02 Pattern	Strength of the effect (0 = off).

Instances: `MI_PP_Sketch_Pencil` , `MI_PP_Sketch_Blueprint` , `MI_PP_Sketch_Charcoal`

SONAR SCAN



Sonar Scan: flat panel, sphere and cube

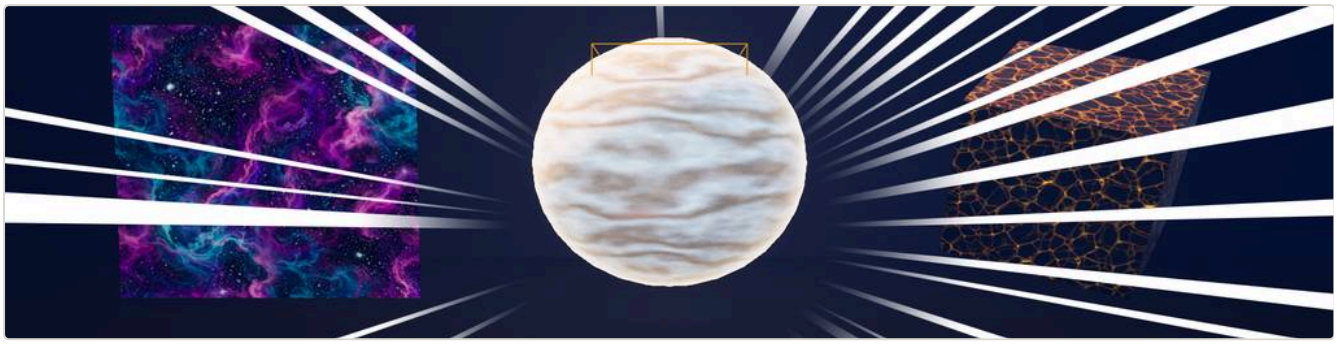
Sonar / scanner pulse: a ring of light expands from the camera across the world, revealing a grid as it passes.

`MaterialFX/PostProcess/PP_SonarScan` PostProcess / n/a / Unlit Instances `3`

Field	Default	Range	Group	What it does
`Speed`	0.3	-4 to 4	03 Animation	Animation speed.
`Range`	4000	200 to 50000	02 Pattern	World distance (UE units) the sonar ring travels from the camera in one pulse.
`RingWidth`	60	2 to 1000	02 Pattern	Thickness of the sonar ring in world units.
`TrailLength`	600	10 to 10000	02 Pattern	World distance (UE units) behind the ring over which the afterglow fades out.
`GridSize`	100	5 to 2000	02 Pattern	World-space spacing (UE units) of the 3D grid that is revealed behind the ring.
`PulseColor`	(0.1, 0.9, 1, 1)	-	01 Color	Colour of the expanding sonar pulse ring.
`DarkenBehind`	0.3	0 to 1	02 Pattern	How much the scene is darkened inside the trail behind the ring (0 = not at all, 1 = fully).
`Glow`	1.5	0 to 50	04 Glow	Brightness multiplier of the emissive light (higher = brighter, more bloom).

1 more parameter in the instance's Details panel. **Instances:** `MI_PP_SonarScan_Cyan` , `MI_PP_SonarScan_Orange` , `MI_PP_SonarScan_Red`

SPEED LINES



Speed Lines: flat panel, sphere and cube

Anime speed lines streaming in from the screen edges.

`MaterialFX/PostProcess/PP_SpeedLines` PostProcess / n/a / Unlit Instances `3`

Field	Default	Range	Group	What it does
`LineCount`	80	10 to 400	02 Pattern	Number of radial speed lines around the screen.
`LineFPS`	15	1 to 30	03 Animation	How many times per second the lines re-roll (stepped time).
`LineAmount`	0.45	0 to 1	02 Pattern	Fraction 0-1 of the lines that are drawn at any moment.
`InnerRadius`	0.3	0 to 1	02 Pattern	Radius of the clear centre (lines fade in beyond it).
`LineColor`	(1, 1, 1, 1)	-	01 Color	Colour of the speed lines.
`Intensity`	1	0 to 1	02 Pattern	Strength of the effect (0 = off).

Instances: `MI_PP_SpeedLines_White`, `MI_PP_SpeedLines_Black`, `MI_PP_SpeedLines_Fire`

STYLIZED FOG



Stylized Fog: flat panel, sphere and cube

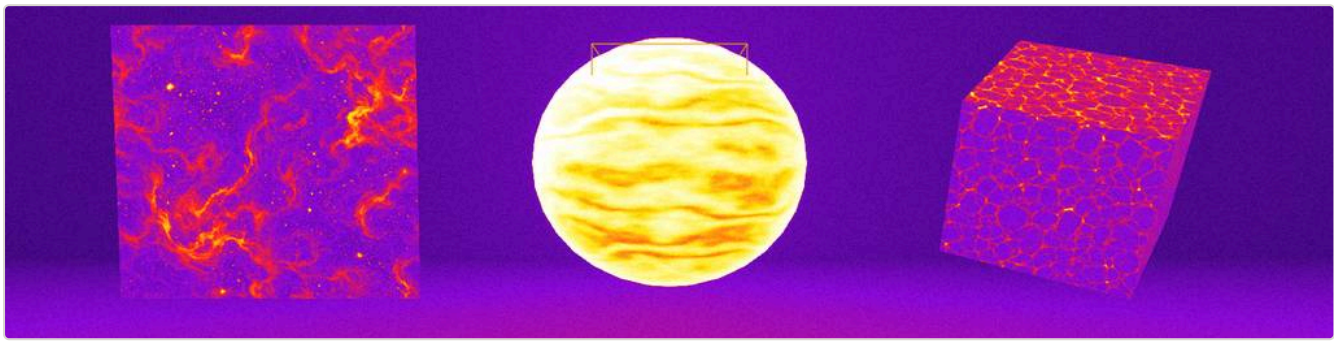
Stylized volumetric-look fog: distance fog that starts past Start Distance, ground mist below Fog Height, wind-blown wisps with real depth.

`MaterialFX/PostProcess/PP_StylizedFog` PostProcess / n/a / Unlit Instances `4`

Field	Default	Range	Group	What it does
`MaxDistance`	30000	500 to 200000	02 Pattern	Depth clamp (UE units) beyond which distance fog stops growing.
`StartDistance`	60	0 to 5000	02 Pattern	Distance (UE units) from the camera where fog starts.
`Density`	0.0012	0 to 0.01	02 Pattern	Thickness of the distance fog (exponent per UE unit past StartDistance).
`FogHeight`	160	-5000 to 20000	02 Pattern	World height (UE units, Z) below which ground mist forms.
`HeightFalloff`	220	1 to 20000	02 Pattern	Vertical distance (UE units) over which the ground mist fades out around FogHeight.
`GroundMist`	0.85	0 to 1	02 Pattern	Strength 0-1 of the ground mist.
`WispScale`	900	50 to 10000	03 Animation	World size (UE units) of the drifting mist wisps.
`WindSpeed`	0.02	-1 to 1	03 Animation	Speed and direction the wisps drift (negative reverses).

13 more parameters in the instance's Details panel. **Instances:** `MI_PP_StylizedFog_Dawn`, `MI_PP_StylizedFog_Toxic`, `MI_PP_StylizedFog_Alien`, `MI_PP_StylizedFog_Storm`

THERMAL



Thermal: flat panel, sphere and cube

Thermal camera: heat palette from brightness (and optionally closeness), with sensor grain.

`MaterialFX/PostProcess/PP_Thermal` PostProcess / n/a / Unlit Instances `3`

Field	Default	Range	Group	What it does
`HeatRange`	3000	100 to 50000	02 Pattern	Distance (UE units) at which depth contributes no heat; closer objects read hotter.
`DepthHeat`	0.3	0 to 1	02 Pattern	Blend 0-1 between scene brightness (0) and closeness (1) as the heat value.
`Gain`	1.2	0.2 to 4	01 Color	Multiplier on the heat value before it picks a colour on the cold-to-hot ramp.
`ColdColor`	(0, 0, 0.2, 1)	-	01 Color	Colour of the coldest areas (darkest parts of the scene).
`CoolColor`	(0.5, 0, 0.8, 1)	-	01 Color	Colour of cool areas; the first step up from ColdColor.
`WarmColor`	(1, 0.1, 0.1, 1)	-	01 Color	Colour of warm areas, the step before the hottest.
`HotColor`	(1, 0.85, 0, 1)	-	01 Color	Colour of the hottest areas (brightest parts of the scene).
`Grain`	0.08	0 to 0.5	03 Animation	Amount of sensor noise added to the image.

1 more parameter in the instance's Details panel. **Instances:** `MI_PP_Thermal_Classic`, `MI_PP_Thermal_Predator`, `MI_PP_Thermal_WhiteHot`

TOON OUTLINE



Toon Outline: flat panel, sphere and cube

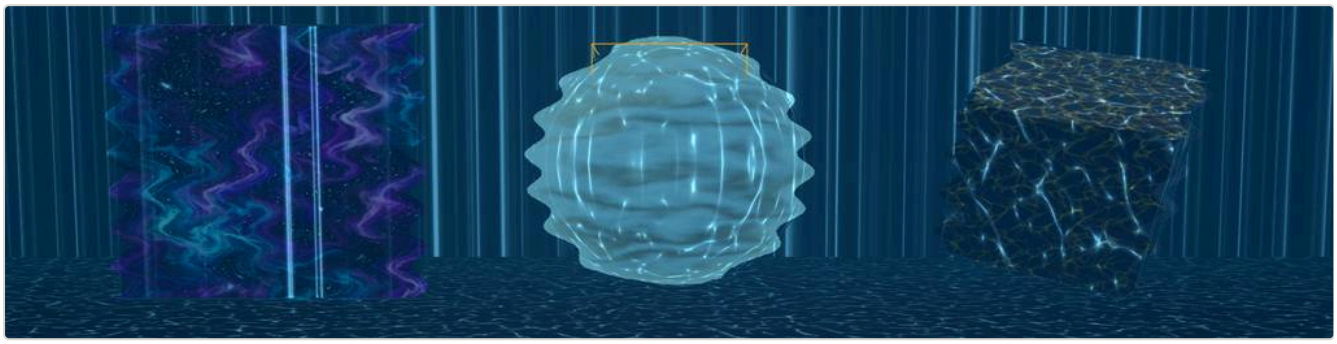
Comic cel-shade for the whole world: hand-inked outlines from depth and colour edges (with line boil), 3-tone cel lighting that keeps every hue, tinted shadows and halftone dots.

`MaterialFX/PostProcess/PP_ToonOutline` PostProcess / n/a / Unlit Instances `4`

Field	Default	Range	Group	What it does
`BoilFPS`	4	0 to 12	03 Animation	How many times per second the ink lines re-jitter (hand-drawn boil).
`BoilNoise`	T_MFX_Noise_Packed_A	-	05 Textures	Texture slot: swap in your own texture.
`Boil`	1	0 to 4	03 Animation	Size of that jitter (screen offset up to 0.0025 x Boil).
`OutlineThickness`	1.6	0.5 to 6	02 Pattern	Line thickness in pixels (multiplier on the edge-sampling offset).
`EdgeSensitivity`	2	0.1 to 20	02 Pattern	Depth-difference threshold for outlines.
`ColorEdgeThreshold`	0.15	0 to 1	02 Pattern	Brightness difference needed before an inner colour edge is drawn.
`ColorEdges`	0.7	0 to 1	02 Pattern	Strength 0-1 of the inner lines found from brightness changes (0 = depth outlines only).
`ShadowThreshold`	0.2	0 to 1	02 Pattern	Scene brightness below which pixels take the flat shadow tone.

11 more parameters in the instance's Details panel. **Instances:** `MI_PP_ToonOutline_Classic`, `MI_PP_ToonOutline_Comic`, `MI_PP_ToonOutline_Manga`, `MI_PP_ToonOutline_WhiteInk`

UNDERWATER



Underwater: flat panel, sphere and cube

Underwater: wavy refraction, depth-based water color, and caustics dancing on every surface.

`MaterialFX/PostProcess/PP_Underwater` PostProcess / n/a / Unlit Instances `3`

Field	Default	Range	Group	What it does
`Speed`	0.3	-4 to 4	03 Animation	Animation speed.
`Wobble`	0.004	0 to 0.03	03 Animation	Amount of wobble/distortion.
`FogDistance`	2500	50 to 50000	02 Pattern	Depth (UE units) at which the water fog reaches about 63 percent: fog = 1 - exp(-depth / FogDistance).
`CausticSize`	400	20 to 5000	02 Pattern	World size (UE units) of the caustic light pattern.
`Caustics`	T_MFX_Caustics	-	05 Textures	Texture slot: swap in your own texture.
`CausticStrength`	0.6	0 to 4	04 Glow	Brightness of the caustic light on nearby surfaces.
`Tint`	(0.6, 0.9, 1, 1)	-	01 Color	Color multiplied over the result.
`WaterColor`	(0, 0.25, 0.35, 1)	-	01 Color	Colour of the water fog that the scene fades into with distance.

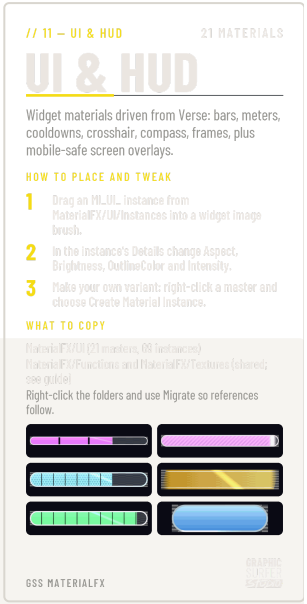
1 more parameter in the instance's Details panel. **Instances:** `MI_PP_Underwater_Tropical`, `MI_PP_Underwater_Deep`, `MI_PP_Underwater_Swamp`

UI & HUD

Widget materials driven from Verse: bars, meters, cooldowns, crosshair, compass, frames, plus mobile-safe screen overlays.

21 masters, 69 instances. Folder `MaterialFX/UI/` (instances in `MaterialFX/UI/Instances/`). Uses 5 material functions and 5 textures from `MaterialFX/Functions` and `MaterialFX/Textures`.

Domain	Blend	Shading	Sides	Masters
UI	Translucent	Unlit	one-sided	21

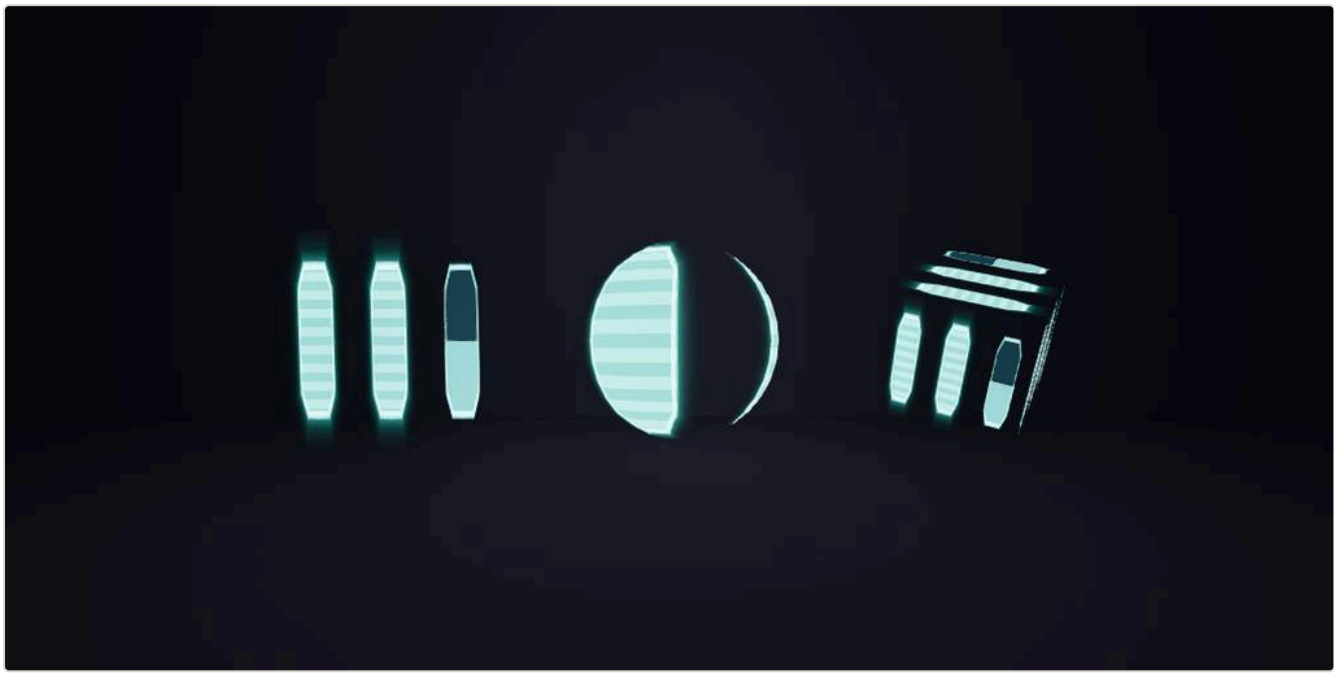


> **NOTE:** UI masters need a widget to show them.
>
> **Note:** Each master has a generated Verse class named after the asset (e.g.
>
> **Note:** 11 of the 21 UI masters (AmmoPips, Banner, Compass, Cooldown, Crosshair, DamageDirection, HealthBar, Radar, RadialMeter, ShieldBar.
>
> **AI disclosure:** AI-generated textures used by this bundle (1 of its 5 textures): Lightning.

MASTERS IN UI & HUD

Master	Looks like	Instances
`UI_AmmoPips`	Charges / ammo row in three styles (holo cells.	3
`UI_Banner`	Banner background in three styles (holo slab / skewed esports…	3
`UI_Button`	Button background: rounded gradient plate with a light…	4
`UI_Compass`	Compass strip in three styles: scrolls with Heading (0-1 =…	3
`UI_Cooldown`	Sprint + item cluster in three styles.	3
`UI_Crosshair`	Dynamic crosshair in three styles.	3
`UI_DamageDirection`	Full-screen damage direction indicator in three styles…	3
`UI_HealthBar`	Health bar in three styles (SciFi holo / Clean esports /…	3
`UI_HoloPanel`	Sci-fi HUD panel background: translucent glass with grid.	3
`UI_Overlay_Frost`	Frozen-lens overlay (mobile-safe twin of PP_FrostEdges).	3
`UI_Overlay_HelmetHUD`	Full-screen helmet / visor overlay: scanlines, edge vignette.	3
`UI_Overlay_LowHealth`	Pain overlay (mobile-safe twin of PP_DamageVignette).	3
`UI_Overlay_Poison`	Poison overlay (mobile-safe twin of PP_Poison).	3
`UI_Overlay_SpeedLines`	Full-screen anime speed lines from the edges.	3
`UI_Overlay_Transition`	Screen transitions: Progress 0 (clear) to 1 (covered).	5
`UI_Radar`	Radar in three styles - no map needed, works on any island.	3
`UI_RadialMeter`	Radial meter (stamina / charge / timer) in three styles.	3
`UI_RarityFrame`	Item tile frame: rarity-colored border and backdrop (Rarity…	6
`UI_ShieldBar`	Shield bar in three styles: flowing hex cells (SciFi).	3
`UI_Spinner`	Loading spinner: rotating arc segments with a fading comet…	3
`UI_XPBar`	Experience bar in three styles with rolling stripes and a…	3

AMMO PIPS



Ammo Pips: UI widget material in a widget, flat, sphere and cube

Charges / ammo row in three styles (holo cells, slanted esports bars, toon candies).

`MaterialFX/UI/UI_AmmoPips` UI / Translucent / Unlit Instances `3`

Field	Default	Range	Group	What it does
`MaxPips`	3	1 to 30	02 Pattern	Total number of pips shown (1-30).
`Count`	2	0 to 30	02 Pattern	Number of pips that are lit (current ammo).
`Recharge`	0.5	0 to 1	02 Pattern	Fill 0-1 of the next pip that is recharging.
`Aspect`	4	0.2 to 20	02 Pattern	Width-to-height ratio of the widget shape, so circles stay round and bars stay straight at any size.
`LitColor`	(0.3, 1, 0.95, 1)	-	01 Color	Colour of the pips that are lit (ammo left).
`EmptyColor`	(0.08, 0.2, 0.25, 1)	-	01 Color	Colour of the pips that are used up.
`PipWidth`	0.32	0.05 to 0.5	02 Pattern	Width of each pip cell (SciFi/Clean looks).
`OutlineColor`	(0.06, 0.02, 0.12, 1)	-	01 Color	Color of the outline.

3 more parameters in the instance's Details panel. **Instances:** `MI_UI_AmmoPips_SciFi`, `MI_UI_AmmoPips_Clean`, `MI_UI_AmmoPips_Toon`

BANNER

> **NOTE:** UI widget material: preview it in a widget (no usable picture of it on a mesh).

Banner background in three styles (holo slab / skewed esports bars / toon ribbon).

`MaterialFX/UI/UI_Banner` UI / Translucent / Unlit Instances `3`

Field	Default	Range	Group	What it does
`Aspect`	6	1 to 20	02 Pattern	Width-to-height ratio of the widget shape, so circles stay round and bars stay straight at any size.
`Reveal`	1	0 to 1	03 Animation	Wipe-in progress 0-1: the banner opens from the centre outward (a flash plays during the wipe).
`BannerColor`	(0.02, 0.1, 0.14, 1)	-	01 Color	Colour of the banner body.
`AccentColor`	(0.3, 1, 0.95, 1)	-	01 Color	Colour of the banner accent lines and trim.
`OutlineColor`	(0.06, 0.02, 0.12, 1)	-	01 Color	Color of the outline.
`StyleClean`	False	-	00 Style	Static switch: swaps in the Clean (esports-style) look.
`StyleToon`	False	-	00 Style	Static switch: swaps in the stylized Toon look.

Instances: `MI_UI_Banner_SciFi` , `MI_UI_Banner_Clean` , `MI_UI_Banner_Toon`

BUTTON

> **NOTE:** UI widget material: preview it in a widget (no usable picture of it on a mesh).

Button background: rounded gradient plate with a light flowing around the border.

`MaterialFX/UI/UI_Button` UI / Translucent / Unlit Instances `4`

Field	Default	Range	Group	What it does
`Aspect`	3.5	0.2 to 20	02 Pattern	Width-to-height ratio of the widget shape, so circles stay round and bars stay straight at any size.
`Roundness`	0.5	0 to 0.5	02 Pattern	Corner rounding of the widget shape.
`Hover`	0	0 to 1	02 Pattern	Hover highlight amount 0-1 (brightens the body and the travelling border light).
`Pressed`	0	0 to 1	02 Pattern	Pressed amount 0-1 (darkens the body).
`BottomColor`	(0.05, 0.25, 0.7, 1)	-	01 Color	Colour at the bottom of the button; the gradient runs up to TopColor.
`TopColor`	(0.3, 0.65, 1, 1)	-	01 Color	Colour at the top of the button.
`BorderWidth`	0.06	0.005 to 0.3	02 Pattern	Thickness of the button border.
`Speed`	0.35	-4 to 4	03 Animation	Animation speed.

2 more parameters in the instance's Details panel. **Instances:** `MI_UI_Button_Blue`, `MI_UI_Button_Gold`, `MI_UI_Button_Danger`, `MI_UI_Button_Hovered`

COMPASS

> **NOTE:** UI widget material: preview it in a widget (no usable picture of it on a mesh).

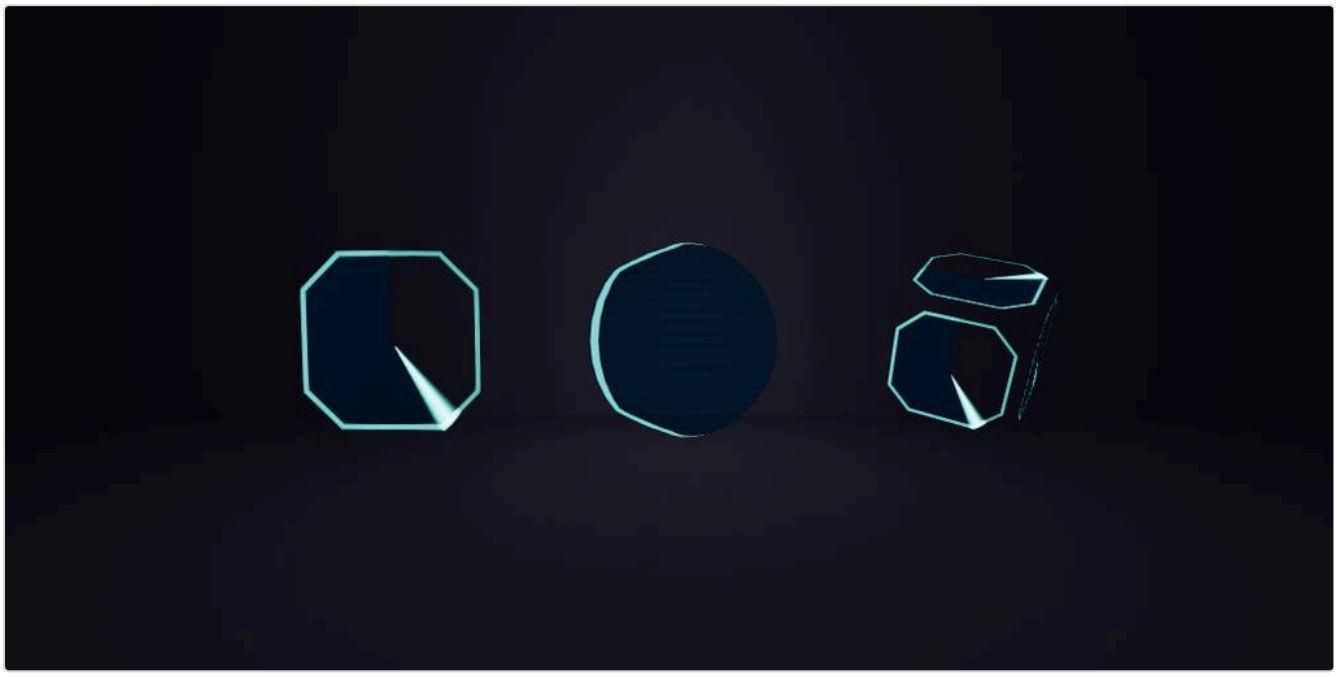
Compass strip in three styles: scrolls with Heading (0-1 = full turn); cardinal ticks, a north marker and an optional objective marker at TargetHeading.

`MaterialFX/UI/UI_Compass` UI / Translucent / Unlit Instances `3`

Field	Default	Range	Group	What it does
`Aspect`	9	1 to 20	02 Pattern	Width-to-height ratio of the widget shape, so circles stay round and bars stay straight at any size.
`Heading`	0	0 to 1	02 Pattern	Player facing direction in turns (0-1, 0 = north); scrolls the strip.
`VisibleArc`	0.35	0.05 to 1	02 Pattern	Fraction of the full 360 degrees visible across the strip width (0.35 = about 126 degrees).
`TickColor`	(0.45, 1, 0.95, 1)	-	01 Color	Colour of the compass tick marks.
`MarkerColor`	(1, 0.6, 0.15, 1)	-	01 Color	Colour of the map markers shown on the compass.
`NorthColor`	(1, 0.25, 0.2, 1)	-	01 Color	Colour of the north mark.
`TargetHeading`	0.3	0 to 1	02 Pattern	Bearing of the objective marker in turns (0-1, 0 = north).
`ShowTarget`	1	0 to 1	02 Pattern	Objective marker visibility, 0-1 (0 hides it; the marker is also hidden when it is outside the visible...

4 more parameters in the instance's Details panel. **Instances:** `MI_UI_Compass_SciFi`, `MI_UI_Compass_Clean`, `MI_UI_Compass_Toon`

COOLDOWN



Cooldown: UI widget material in a widget, flat, sphere and cube

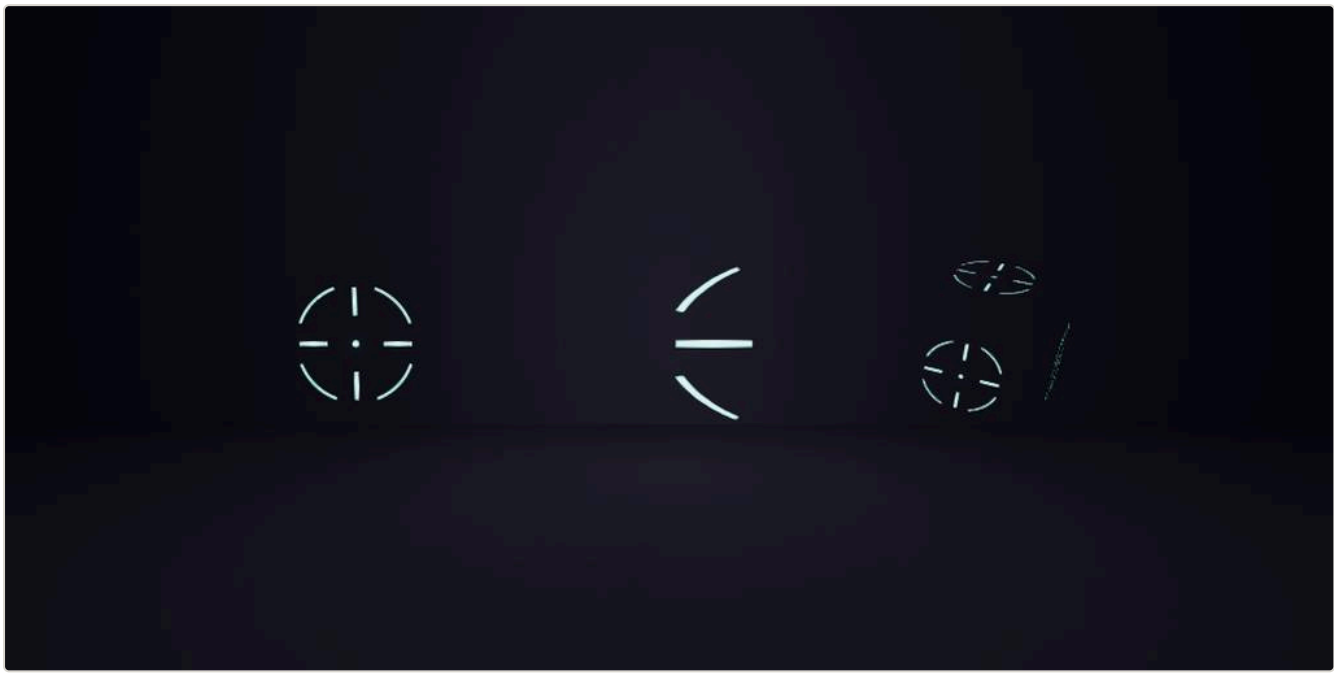
Sprint + item cluster in three styles, one outline language each: a sprint ring (Stamina; pulses while Sprinting.

`MaterialFX/UI/UI_Cooldown` UI / Translucent / Unlit Instances `3`

Field	Default	Range	Group	What it does
`Aspect`	0.79	0.3 to 2	02 Pattern	Width-to-height ratio of the widget shape, so circles stay round and bars stay straight at any size.
`AutoAnimate`	0	0 to 2	03 Animation	Above 0 the Stamina ring and the cooldown wipe animate by themselves (demo).
`Stamina`	0.7	0 to 1	02 Pattern	Sprint stamina ring fill, 0-1.
`Sprinting`	0	0 to 1	02 Pattern	Sprinting amount 0-1: makes the stamina ring brighter and pulsing while it is on.
`LowThreshold`	0.25	0 to 1	02 Pattern	Fill level below which the bar pulses as a low warning, 0-1.
`Progress`	1	0 to 1	02 Pattern	Ability cooldown wipe 0-1 on the item tile (0 = just used, 1 = ready; a ready flash plays at 1).
`AccentColor`	(0.3, 1, 0.92, 1)	-	01 Color	Colour of the accent edge of the cooldown wipe.
`RingColor`	(0.3, 1, 0.92, 1)	-	01 Color	Colour of the ring cooldown style.

11 more parameters in the instance's Details panel. **Instances:** `MI_UI_Cooldown_SciFi`, `MI_UI_Cooldown_Clean`, `MI_UI_Cooldown_Toon`

CROSSHAIR



Crosshair: UI widget material in a widget, flat, sphere and cube

Dynamic crosshair in three styles.

`MaterialFX/UI/UI_Crosshair` UI / Translucent / Unlit Instances `3`

Field	Default	Range	Group	What it does
`Spread`	0.1	0 to 0.4	02 Pattern	Gap between the centre and the four ticks (weapon bloom).
`Hit`	0	0 to 1	03 Animation	Hit-marker amount 0-1: shows an X marker that pops outward as it rises (the toon ticks also bounce...
`CrosshairColor`	(0.4, 1, 0.95, 1)	-	01 Color	Colour of the crosshair.
`HitColor`	(1, 0.3, 0.3, 1)	-	01 Color	Colour the crosshair flashes on a hit marker.
`OutlineColor`	(0, 0, 0, 1)	-	01 Color	Color of the outline.
`ToonInk`	(0.06, 0.02, 0.12, 1)	-	01 Color	Colour of the outline in the Toon look.
`StyleClean`	False	-	00 Style	Static switch: swaps in the Clean (esports-style) look.
`StyleToon`	False	-	00 Style	Static switch: swaps in the stylized Toon look.

1 more parameter in the instance's Details panel. **Instances:** `MI_UI_Crosshair_SciFi` , `MI_UI_Crosshair_Clean` , `MI_UI_Crosshair_Toon`

DAMAGE DIRECTION

> **NOTE:** UI widget material: preview it in a widget (no usable picture of it on a mesh).

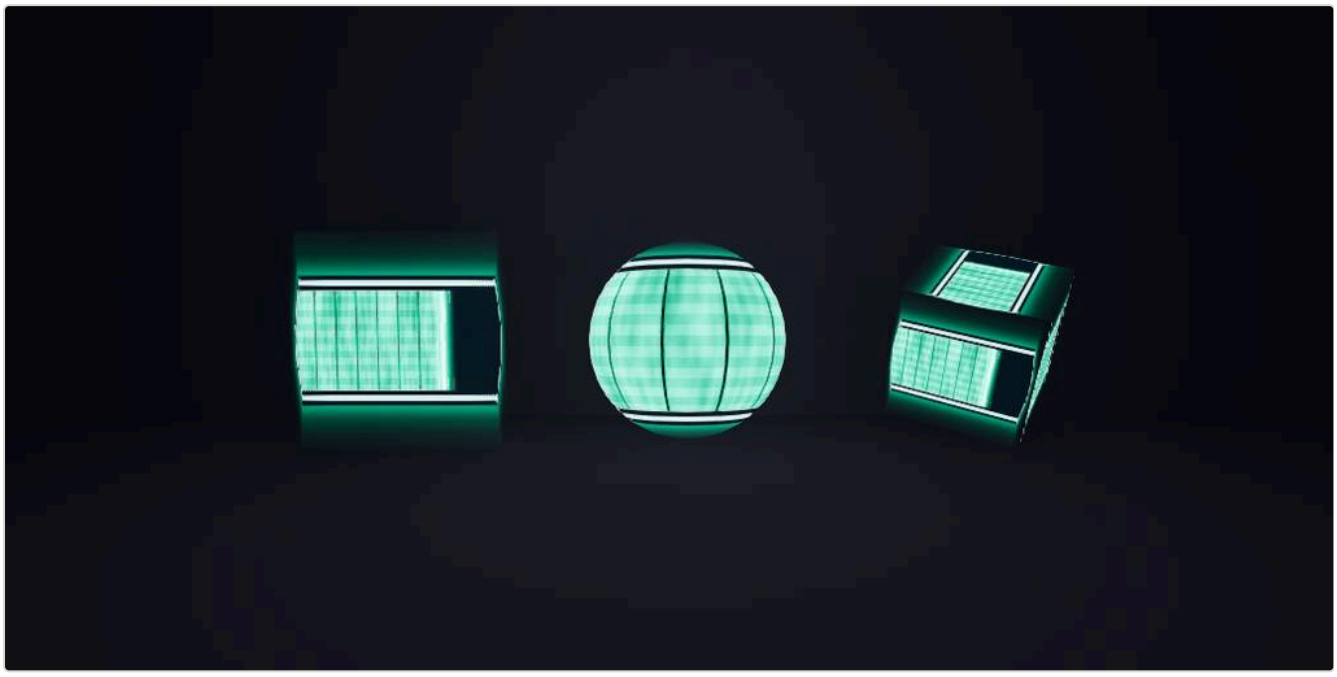
Full-screen damage direction indicator in three styles (energy arc / sharp esports wedge / toon splat).

`MaterialFX/UI/UI_DamageDirection` UI / Translucent / Unlit Instances `3`

Field	Default	Range	Group	What it does
`Aspect`	1.78	0.2 to 4	02 Pattern	Width-to-height ratio of the widget shape, so circles stay round and bars stay straight at any size.
`Angle`	0.125	0 to 1	02 Pattern	Direction of the incoming damage in turns (0-1), measured clockwise from straight up (0 = ahead.
`Intensity`	1	0 to 1	02 Pattern	Strength of the effect (0 = off).
`Radius`	0.55	0.1 to 1.5	02 Pattern	Distance of the indicator arc from the screen centre (0.1-1.5.
`IndicatorColor`	(1, 0.25, 0.1, 1)	-	01 Color	Colour of the damage direction indicator.
`OutlineColor`	(0.12, 0, 0.04, 1)	-	01 Color	Color of the outline.
`StyleClean`	False	-	00 Style	Static switch: swaps in the Clean (esports-style) look.
`StyleToon`	False	-	00 Style	Static switch: swaps in the stylized Toon look.

Instances: `MI_UI_DamageDirection_SciFi` , `MI_UI_DamageDirection_Clean` , `MI_UI_DamageDirection_Toon`

HEALTH BAR



Health Bar: UI widget material in a widget, flat, sphere and cube

Health bar in three styles (SciFi holo / Clean esports / Toon).

`MaterialFX/UI/UI_HealthBar` UI / Translucent / Unlit Instances `3`

Field	Default	Range	Group	What it does
`Aspect`	9	1 to 30	02 Pattern	Width-to-height ratio of the widget shape, so circles stay round and bars stay straight at any size.
`AutoAnimate`	0	0 to 2	03 Animation	Above 0 the widget animates by itself (demo/preview); 0 = driven by your own values.
`Fill`	0.72	0 to 1	02 Pattern	How full the widget is, 0-1.
`Trail`	0	0 to 1	02 Pattern	Lagging trail value (shows a delayed drain/fill), 0-1.
`Hit`	0	0 to 1	03 Animation	Flash amount for a hit/impact pulse, 0-1.
`Segments`	10	1 to 50	02 Pattern	Number of repeated slices/segments.
`LowColor`	(1, 0.08, 0.12, 1)	-	01 Color	Color at the low/empty end.
`HighColor`	(0.15, 1, 0.6, 1)	-	01 Color	Color at the high/full end.

9 more parameters in the instance's Details panel. **Instances:** `MI_UI_HealthBar_SciFi`, `MI_UI_HealthBar_Clean`, `MI_UI_HealthBar_Toon`

HOLO PANEL

> **NOTE:** UI widget material: preview it in a widget (no usable picture of it on a mesh).

Sci-fi HUD panel background: translucent glass with grid, scanlines, corner brackets, edge glow and subtle flicker.

`MaterialFX/UI/UI_HoloPanel` UI / Translucent / Unlit Instances `3`

Field	Default	Range	Group	What it does
`Aspect`	1.6	0.2 to 20	02 Pattern	Width-to-height ratio of the widget shape, so circles stay round and bars stay straight at any size.
`Roundness`	0.06	0 to 0.5	02 Pattern	Corner rounding of the panel.
`PanelColor`	(0.1, 0.8, 1, 1)	-	01 Color	Colour of the holographic panel: edge, scanlines and glow.
`GridCells`	16	2 to 80	02 Pattern	Number of grid cells across the panel in each direction.
`Flicker`	0.1	0 to 1	03 Animation	Depth 0-1 of the random brightness flicker (12 steps per second).
`Brightness`	1.3	0 to 50	04 Glow	Overall brightness of the effect.
`GlassOpacity`	0.35	0 to 1	02 Pattern	Opacity of the glass body of the panel, 0-1 (grid, edge and brackets add on top).

Instances: `MI_UI_HoloPanel_Cyan` , `MI_UI_HoloPanel_Amber` , `MI_UI_HoloPanel_Red`

OVERLAY FROST

> **NOTE:** UI widget material: preview it in a widget (no usable picture of it on a mesh).

Frozen-lens overlay (mobile-safe twin of PP_FrostEdges): faceted crystal ice grows in from the screen borders with glints, twinkling shards and a milky rim.

`MaterialFX/UI/UI_Overlay_Frost` UI / Translucent / Unlit Instances `3`

Field	Default	Range	Group	What it does
`Aspect`	1.78	0.2 to 4	02 Pattern	Width-to-height ratio of the widget shape, so circles stay round and bars stay straight at any size.
`FrostScale`	2.4	0.2 to 8	02 Pattern	Size of the ice crystals (tiling of the crystal textures; higher = smaller crystals).
`CrystalNormal`	T_MFX_FrostCrystal_N	-	05 Textures	Texture slot: swap in your own texture.
`CrystalMask`	T_MFX_FrostCrystal_M	-	05 Textures	Texture slot: swap in your own texture.
`Amount`	0.6	0 to 1	02 Pattern	How far the ice grows in from the screen edges, 0-1 (up to 22 percent of the screen height).
`Glint`	1.5	0 to 6	04 Glow	Brightness of the light catching the crystal facets.
`Twinkle`	0.35	0 to 3	03 Animation	Speed of the twinkling ice shards in cycles per second.
`FrostColor`	(0.85, 0.95, 1, 1)	-	01 Color	Colour of the frost crystals at the screen edges.

3 more parameters in the instance's Details panel. **Instances:** `MI_UI_Overlay_Frost_Frost`, `MI_UI_Overlay_Frost_Heavy`, `MI_UI_Overlay_Frost_Crystal`

OVERLAY HELMET HUD

> **NOTE:** UI widget material: preview it in a widget (no usable picture of it on a mesh).

Full-screen helmet / visor overlay: scanlines, edge vignette, corner brackets and faint noise.

`MaterialFX/UI/UI_Overlay_HelmetHUD` UI / Translucent / Unlit Instances `3`

Field	Default	Range	Group	What it does
`Aspect`	1.78	0.2 to 4	02 Pattern	Width-to-height ratio of the widget shape, so circles stay round and bars stay straight at any size.
`HUDColor`	(0.2, 0.85, 1, 1)	-	01 Color	Colour of the helmet frame and HUD lines.
`ScanlineCount`	220	20 to 800	02 Pattern	Number of scanlines down the screen.
`ScanlineStrength`	0.08	0 to 0.5	02 Pattern	Opacity of the scanlines.
`Noise`	0.04	0 to 0.3	03 Animation	Amount of animated grain over the HUD.
`Intensity`	1	0 to 1	02 Pattern	Strength of the effect (0 = off).

Instances: `MI_UI_Overlay_HelmetHUD_Cyan` , `MI_UI_Overlay_HelmetHUD_Amber` , `MI_UI_Overlay_HelmetHUD_Red`

OVERLAY LOW HEALTH

> **NOTE:** UI widget material: preview it in a widget (no usable picture of it on a mesh).

Pain overlay (mobile-safe twin of PP_DamageVignette): heartbeat lub-dub, red tunnel vision closing in with Pain, branching veins that flash red on each beat.

`MaterialFX/UI/UI_Overlay_LowHealth` UI / Translucent / Unlit Instances `3`

Field	Default	Range	Group	What it does
`Aspect`	1.78	0.2 to 4	02 Pattern	Width-to-height ratio of the widget shape, so circles stay round and bars stay straight at any size.
`Intensity`	1	0 to 1	02 Pattern	Strength of the effect (0 = off).
`Pain`	0.7	0 to 1	02 Pattern	Pain level 0-1 that scales the heartbeat pulse and how far the red tunnel closes in.
`HeartRate`	1.3	0.2 to 4	03 Animation	Heartbeats per second (a strong pulse followed by a softer one).
`OverlayColor`	(0.75, 0, 0.02, 1)	-	01 Color	Colour of the low-health vignette (red by default).
`VeinScale`	1.6	0.3 to 6	02 Pattern	Size of the vein pattern at the screen edge (higher = more, smaller veins).
`Veins`	T_MFX_Lightning	-	05 Textures	Texture slot: swap in your own texture.
`VeinAmount`	1	0 to 2	02 Pattern	Visibility of the veins (0 = none).

1 more parameter in the instance's Details panel. **Instances:** `MI_UI_Overlay_LowHealth_SciFi`, `MI_UI_Overlay_LowHealth_Clean`, `MI_UI_Overlay_LowHealth_Toon`

OVERLAY POISON

> **NOTE:** UI widget material: preview it in a widget (no usable picture of it on a mesh).

Poison overlay (mobile-safe twin of PP_Poison): sickly edges that wobble and breathe, hue drifting between green and yellow, crawling veins and rising bubbles.

`MaterialFX/UI/UI_Overlay_Poison` UI / Translucent / Unlit Instances `3`

Field	Default	Range	Group	What it does
`Aspect`	1.78	0.2 to 4	02 Pattern	Width-to-height ratio of the widget shape, so circles stay round and bars stay straight at any size.
`Speed`	0.25	-4 to 4	03 Animation	Animation speed.
`OverlayColor`	(0.3, 0.85, 0.08, 1)	-	01 Color	Colour of the poison vignette.
`DriftColor`	(0.75, 0.9, 0.1, 1)	-	01 Color	Second colour that drifts through the vignette.
`Veins`	T_MFX_Lightning	-	05 Textures	Texture slot: swap in your own texture.
`ScreenTint`	0.12	0 to 0.5	01 Color	Constant green tint alpha over the whole screen, 0-0.5, on top of the sick edge effect.
`Intensity`	1	0 to 1	02 Pattern	Strength of the effect (0 = off).

Instances: `MI_UI_Overlay_Poison_Poison` , `MI_UI_Overlay_Poison_Curse` , `MI_UI_Overlay_Poison_Fire`

OVERLAY SPEED LINES

> **NOTE:** UI widget material: preview it in a widget (no usable picture of it on a mesh).

Full-screen anime speed lines from the edges.

`MaterialFX/UI/UI_Overlay_SpeedLines` UI / Translucent / Unlit Instances `3`

Field	Default	Range	Group	What it does
`Aspect`	1.78	0.2 to 4	02 Pattern	Width-to-height ratio of the widget shape, so circles stay round and bars stay straight at any size.
`LineCount`	90	10 to 400	02 Pattern	Number of radial speed lines around the screen.
`LineFPS`	15	1 to 30	03 Animation	How many times per second the lines re-roll (stepped time).
`LineAmount`	0.45	0 to 1	02 Pattern	Fraction 0-1 of the lines drawn at any moment.
`InnerRadius`	0.45	0 to 1.5	02 Pattern	Radius of the clear centre (lines fade in beyond it, in aspect-corrected screen units).
`LineColor`	(1, 1, 1, 1)	-	01 Color	Colour of the speed lines.
`Intensity`	1	0 to 1	02 Pattern	Strength of the effect (0 = off).

Instances: `MI_UI_Overlay_SpeedLines_White`, `MI_UI_Overlay_SpeedLines_Black`, `MI_UI_Overlay_SpeedLines_Electric`

OVERLAY TRANSITION

> **NOTE:** UI widget material: preview it in a widget (no usable picture of it on a mesh).

Screen transitions: Progress 0 (clear) to 1 (covered).

`MaterialFX/UI/UI_Overlay_Transition` UI / Translucent / Unlit Instances `5`

Field	Default	Range	Group	What it does
`Aspect`	1.78	0.2 to 4	02 Pattern	Width-to-height ratio of the widget shape, so circles stay round and bars stay straight at any size.
`AutoAnimate`	0	0 to 2	03 Animation	Above 0 the widget animates by itself (demo/preview); 0 = driven by your own values.
`Progress`	0.5	0 to 1	02 Pattern	Progress amount, 0-1.
`Style`	0	0 to 3	02 Pattern	Transition shape: 0 = iris, 1 = diagonal wipe, 2 = hexagon reveal, 3 = dots (values are thresholds.
`CellScale`	12	2 to 60	02 Pattern	Number of hexagon / dot cells across (styles 2 and 3 only).
`CoverColor`	(0.02, 0.02, 0.04, 1)	-	01 Color	Colour of the screen cover that wipes in and out.

Instances: `MI_UI_Overlay_Transition_Iris`, `MI_UI_Overlay_Transition_Wipe`, `MI_UI_Overlay_Transition_Hex`, `MI_UI_Overlay_Transition_Dots` and 1 more

RADAR

> **NOTE:** UI widget material: preview it in a widget (no usable picture of it on a mesh).

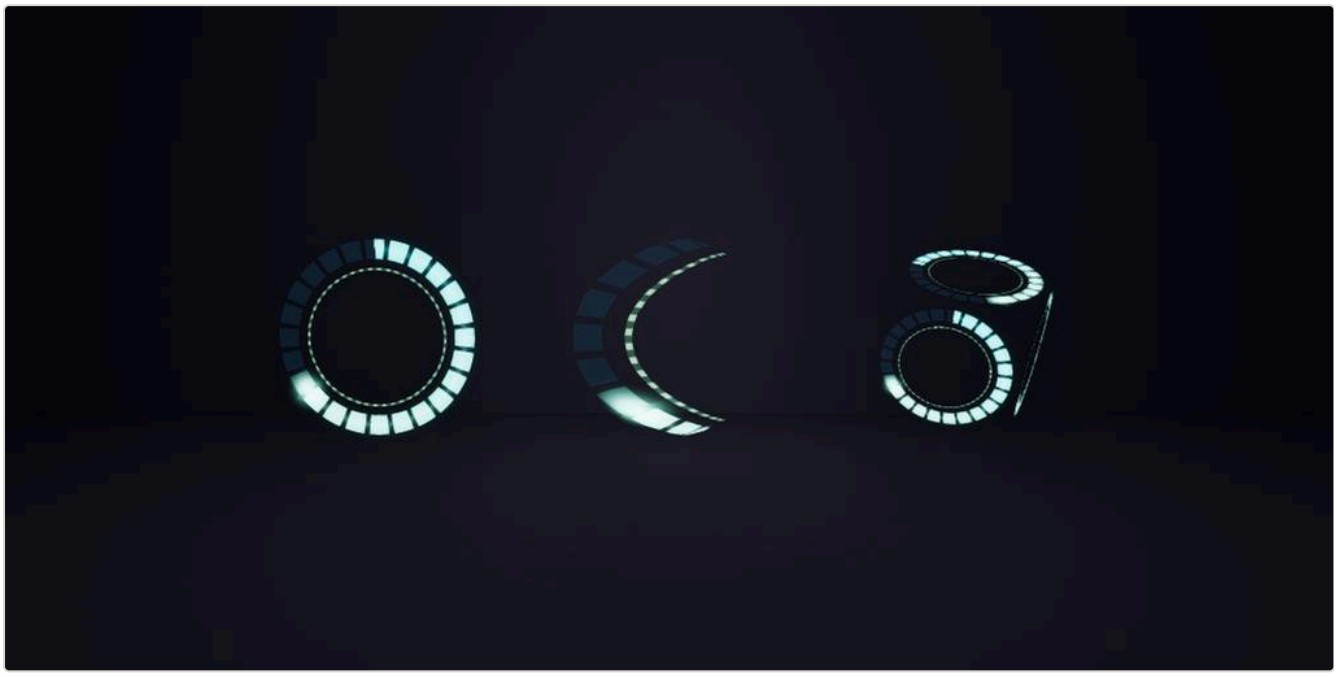
Radar in three styles - no map needed, works on any island: sweep, range rings, facing cone, north marker, an objective (TargetX / TargetY in radar space.

`MaterialFX/UI/UI_Radar` UI / Translucent / Unlit Instances `3`

Field	Default	Range	Group	What it does
`Heading`	0	0 to 1	02 Pattern	Player facing direction in turns (0-1).
`ScreenColor`	(0.3, 1, 0.9, 1)	-	01 Color	Colour of the radar screen graphics (rings and sweep).
`BlipColor`	(1, 0.75, 0.2, 1)	-	01 Color	Colour of neutral blips.
`HostileColor`	(1, 0.16, 0.14, 1)	-	01 Color	Colour of hostile blips.
`FriendlyColor`	(0.25, 0.7, 1, 1)	-	01 Color	Colour of friendly blips.
`Speed`	0.3	-4 to 4	03 Animation	Animation speed.
`TargetX`	0.55	-10 to 10	02 Pattern	Objective position to the right (+) or left (-) of the player in radar units (the dot is clamped to the...
`TargetY`	0.6	-10 to 10	02 Pattern	Objective position ahead (+) or behind (-) the player in radar units.

23 more parameters in the instance's Details panel. **Instances:** `MI_UI_Radar_SciFi`, `MI_UI_Radar_Clean`, `MI_UI_Radar_Toon`

RADIAL METER



Radial Meter: UI widget material in a widget, flat, sphere and cube

Radial meter (stamina / charge / timer) in three styles: segmented holo ring, crisp esports arc or chunky toon donut.

`MaterialFX/UI/UI_RadialMeter` UI / Translucent / Unlit Instances `3`

Field	Default	Range	Group	What it does
`AutoAnimate`	0	0 to 2	03 Animation	Above 0 the widget animates by itself (demo/preview); 0 = driven by your own values.
`Progress`	0.65	0 to 1	02 Pattern	Progress amount, 0-1.
`Segments`	24	1 to 120	02 Pattern	Number of repeated slices/segments.
`StartColor`	(0.2, 0.9, 1, 1)	-	01 Color	Colour at the start of the ring; blends toward EndColor around it.
`EndColor`	(0.5, 1, 0.7, 1)	-	01 Color	Colour at the end of the ring.
`TrackColor`	(0.03, 0.06, 0.09, 1)	-	01 Color	Colour of the empty track behind the meter.
`LowThreshold`	0.2	0 to 1	02 Pattern	Fill level below which the bar pulses as a low warning, 0-1.
`OutlineColor`	(0.06, 0.02, 0.12, 1)	-	01 Color	Color of the outline.

3 more parameters in the instance's Details panel. **Instances:** `MI_UI_RadialMeter_SciFi` , `MI_UI_RadialMeter_Clean` , `MI_UI_RadialMeter_Toon`

RARITY FRAME

> **NOTE:** UI widget material: preview it in a widget (no usable picture of it on a mesh).

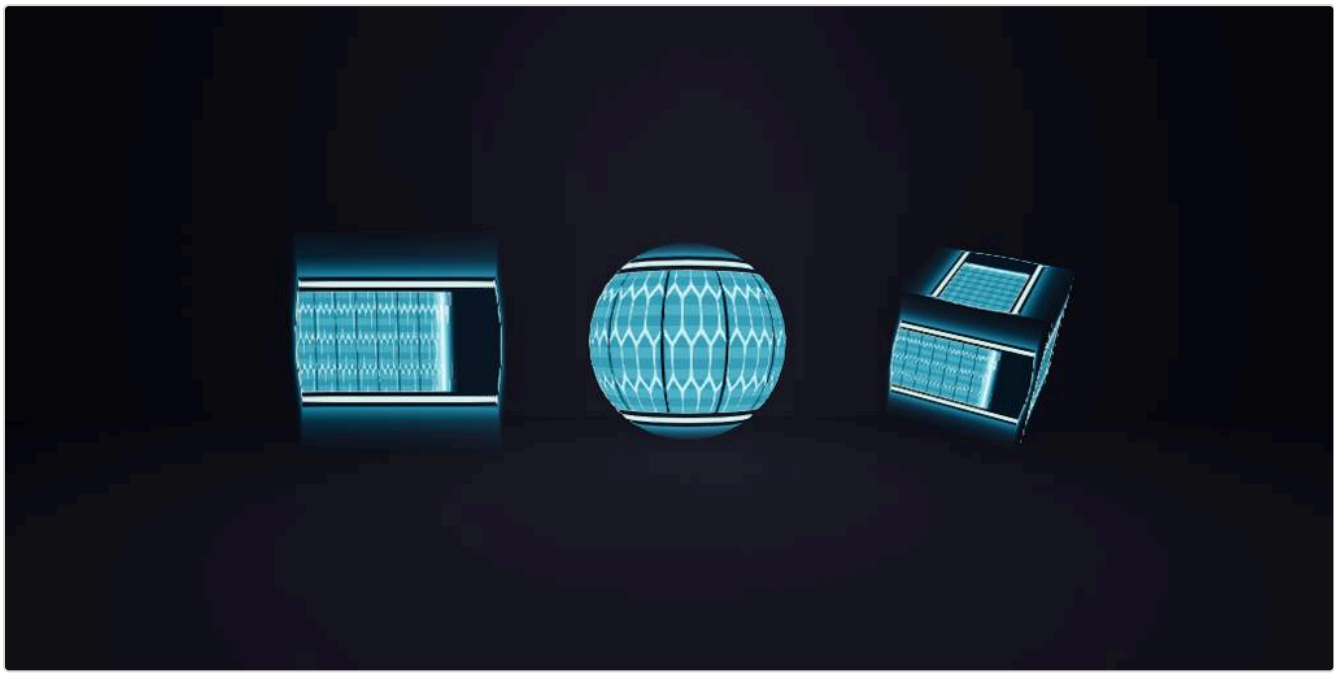
Item tile frame: rarity-colored border and backdrop (Rarity 0-5), shine sweep and corner sparkles on higher tiers.

`MaterialFX/UI/UI_RarityFrame` UI / Translucent / Unlit Instances `6`

Field	Default	Range	Group	What it does
`Aspect`	1	0.2 to 20	02 Pattern	Width-to-height ratio of the widget shape, so circles stay round and bars stay straight at any size.
`Roundness`	0.12	0 to 0.5	02 Pattern	Corner rounding of the widget shape.
`Rarity`	3	0 to 5	02 Pattern	Rarity tier that picks the frame color.
`BorderWidth`	0.06	0.005 to 0.3	02 Pattern	Thickness of the coloured frame border.
`ShineSpeed`	0.35	0 to 3	03 Animation	Speed of the shine sweep in cycles per second (visible from rarity 2 up).
`Brightness`	1	0 to 50	04 Glow	Overall brightness of the effect.
`BackdropOpacity`	0.85	0 to 1	02 Pattern	Opacity of the dark tinted backdrop inside the frame, 0-1 (the border itself is always opaque).

Instances: `MI_UI_RarityFrame_Common`, `MI_UI_RarityFrame_Uncommon`, `MI_UI_RarityFrame_Rare`, `MI_UI_RarityFrame_Epic` and 2 more

SHIELD BAR



Shield Bar: UI widget material in a widget, flat, sphere and cube

Shield bar in three styles: flowing hex cells (SciFi), hatched esports fill (Clean) or bubbly toon fill.

`MaterialFX/UI/UI_ShieldBar` UI / Translucent / Unlit Instances `3`

Field	Default	Range	Group	What it does
`Aspect`	9	1 to 30	02 Pattern	Width-to-height ratio of the widget shape, so circles stay round and bars stay straight at any size.
`AutoAnimate`	0	0 to 2	03 Animation	Above 0 the widget animates by itself (demo/preview); 0 = driven by your own values.
`Fill`	0.72	0 to 1	02 Pattern	How full the widget is, 0-1.
`Trail`	0	0 to 1	02 Pattern	Lagging trail value (shows a delayed drain/fill), 0-1.
`Hit`	0	0 to 1	03 Animation	Flash amount for a hit/impact pulse, 0-1.
`Segments`	10	1 to 50	02 Pattern	Number of repeated slices/segments.
`HighColor`	(0.2, 0.7, 1, 1)	-	01 Color	Color at the high/full end.
`TrailColor`	(1, 0.95, 0.85, 1)	-	01 Color	Colour of the lagging trail that shows chip damage.

8 more parameters in the instance's Details panel. **Instances:** `MI_UI_ShieldBar_SciFi`, `MI_UI_ShieldBar_Clean`, `MI_UI_ShieldBar_Toon`

SPINNER

> **NOTE:** UI widget material: preview it in a widget (no usable picture of it on a mesh).

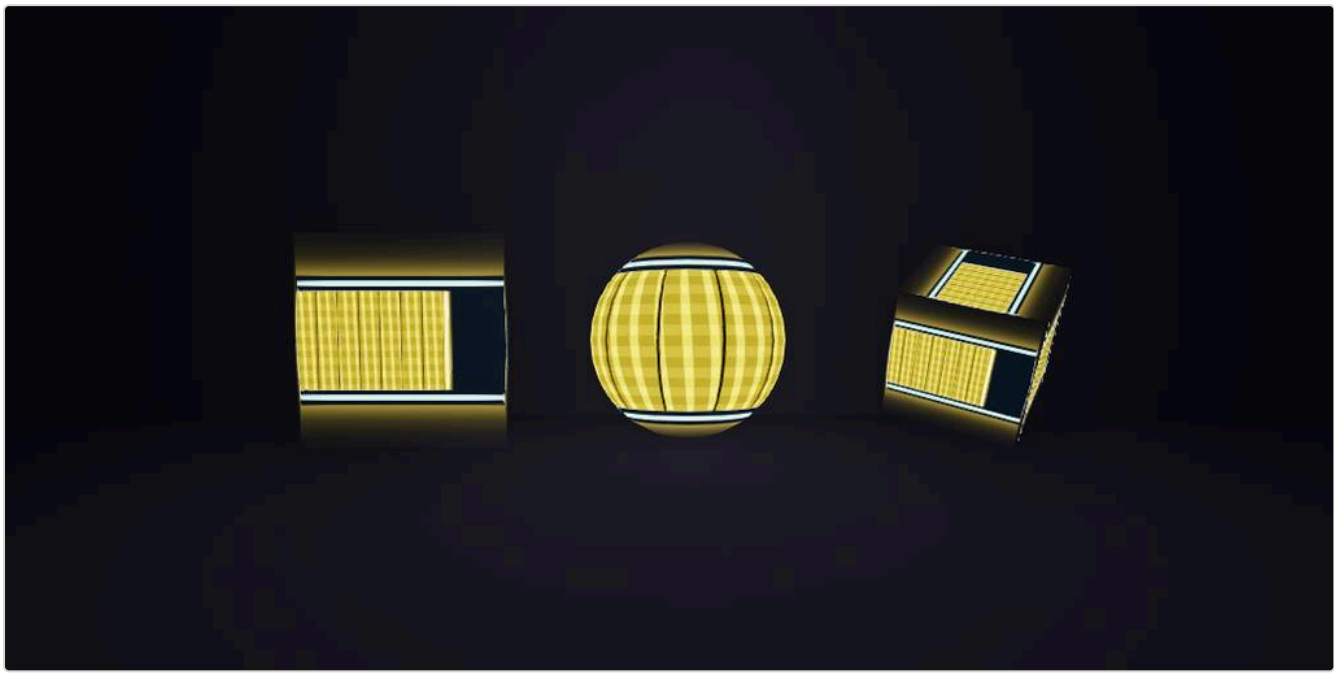
Loading spinner: rotating arc segments with a fading comet tail.

`MaterialFX/UI/UI_Spinner` UI / Translucent / Unlit Instances `3`

Field	Default	Range	Group	What it does
`Thickness`	0.1	0.02 to 0.4	02 Pattern	Thickness of the spinner ring.
`Arcs`	1	1 to 6	02 Pattern	Number of comet arcs travelling around the ring.
`Speed`	0.8	-4 to 4	03 Animation	Animation speed.
`TailSharpness`	2	0.3 to 10	02 Pattern	Exponent on the arc tail fade.
`Segments`	1	1 to 40	02 Pattern	Number of dashes the ring is cut into (1 = solid ring).
`SpinnerColor`	(0.4, 0.85, 1, 1)	-	01 Color	Colour of the spinning arc.
`Brightness`	1.5	0 to 50	04 Glow	Overall brightness of the effect.

Instances: `MI_UI_Spinner_Classic`, `MI_UI_Spinner_Dots`, `MI_UI_Spinner_Triple`

XP BAR



XP Bar: UI widget material in a widget, flat, sphere and cube

Experience bar in three styles with rolling stripes and a glowing head.

`MaterialFX/UI/UI_XPBar` UI / Translucent / Unlit Instances `3`

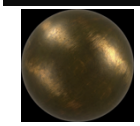
Field	Default	Range	Group	What it does
`Aspect`	20	1 to 30	02 Pattern	Width-to-height ratio of the widget shape, so circles stay round and bars stay straight at any size.
`AutoAnimate`	0	0 to 2	03 Animation	Above 0 the widget animates by itself (demo/preview); 0 = driven by your own values.
`Fill`	0.72	0 to 1	02 Pattern	How full the widget is, 0-1.
`Trail`	0	0 to 1	02 Pattern	Lagging trail value (shows a delayed drain/fill), 0-1.
`Hit`	0	0 to 1	03 Animation	Flash amount for a hit/impact pulse, 0-1.
`LevelUp`	0	0 to 1	03 Animation	Level-up flash amount 0-1: blends the whole bar toward white (same flash path as Hit).
`Segments`	10	1 to 50	02 Pattern	Number of repeated slices/segments.
`HighColor`	(1, 0.78, 0.15, 1)	-	01 Color	Color at the high/full end.

8 more parameters in the instance's Details panel. **Instances:** `MI_UI_XPBar_SciFi`, `MI_UI_XPBar_Clean`, `MI_UI_XPBar_Toon`

AI-GENERATED ASSETS

These textures started from AI-generated images. Replace them with your own to make the pack fully yours.

MATCAPS (16)

Preview	Asset
	**T_MFX_Matcap_Bronze** `/MaterialFX/Textures/T_MFX_Matcap_Bronze`
	**T_MFX_Matcap_CarPaint** `/MaterialFX/Textures/T_MFX_Matcap_CarPaint`
	**T_MFX_Matcap_Chrome** `/MaterialFX/Textures/T_MFX_Matcap_Chrome`
	**T_MFX_Matcap_Clay** `/MaterialFX/Textures/T_MFX_Matcap_Clay`
	**T_MFX_Matcap_Copper** `/MaterialFX/Textures/T_MFX_Matcap_Copper`
	**T_MFX_Matcap_Crystal** `/MaterialFX/Textures/T_MFX_Matcap_Crystal`
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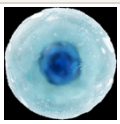
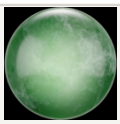
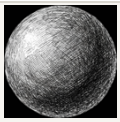
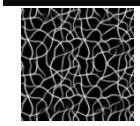
	**T_MFX_Matcap_Ice** `/MaterialFX/Textures/T_MFX_Matcap_Ice`
	**T_MFX_Matcap_Jade** `/MaterialFX/Textures/T_MFX_Matcap_Jade`
	**T_MFX_Matcap_LavaGlow** `/MaterialFX/Textures/T_MFX_Matcap_LavaGlow`
	**T_MFX_Matcap_NeonRim** `/MaterialFX/Textures/T_MFX_Matcap_NeonRim`

Preview	Asset
	**T_MFX_Matcap_Obsidian** `/MaterialFX/Textures/T_MFX_Matcap_Obsidian`
	**T_MFX_Matcap_Pearl** `/MaterialFX/Textures/T_MFX_Matcap_Pearl`
	**T_MFX_Matcap_PurplePaint** `/MaterialFX/Textures/T_MFX_Matcap_PurplePaint`
	**T_MFX_Matcap_Sketch** `/MaterialFX/Textures/T_MFX_Matcap_Sketch`

PATTERNS (14)

Preview	Asset
	**T_MFX_Caustics** `/MaterialFX/Textures/T_MFX_Caustics`
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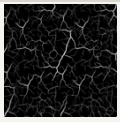
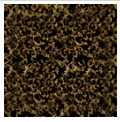
	**T_MFX_Cracks** `/MaterialFX/Textures/T_MFX_Cracks`
	**T_MFX_Filigree** `/MaterialFX/Textures/T_MFX_Filigree`
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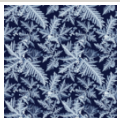	**T_MFX_Frost** `/MaterialFX/Textures/T_MFX_Frost`
	**T_MFX_Galaxy** `/MaterialFX/Textures/T_MFX_Galaxy`
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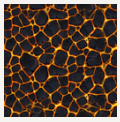
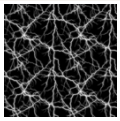
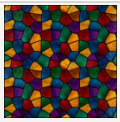
Preview	Asset
	**T_MFX_Lava** `/MaterialFX/Textures/T_MFX_Lava`
	**T_MFX_Lightning** `/MaterialFX/Textures/T_MFX_Lightning`
	**T_MFX_Nebula** `/MaterialFX/Textures/T_MFX_Nebula`
	**T_MFX_RuneCircle** `/MaterialFX/Textures/T_MFX_RuneCircle`
	**T_MFX_StainedGlass** `/MaterialFX/Textures/T_MFX_StainedGlass`

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