Destructible Sprite

This component allows you to make sprites destructible.

Alpha Tex

This allows you to set the alpha texture for your sprite. By default, this should probably match the alpha channel of your main sprite, but it will gradually change as you damage the sprite.

NOTE: If you set this field to **None** (i.e. null), then the alpha data will be automatically copied from the main sprite.
NOTE: Only the alpha channel is read.

Density Tex

This allows you to set the density texture. A density texture tells D2D how solid each pixel in the **Alpha Tex** is. For example: if you set the Density Tex to be a 50% transparent image, then you will need to use double the amount of explosions to cause the same amount of damage to your sprite.

NOTE: Only the alpha channel is read.

Source Material

This allows you to set the material used by the destructible sprite. Because each sprite needs a unique Alpha Texture, Destructible 2D needs to clone the material for each instance, and this field allows you to set the base material that will be copied from.

Sharpness

This allows you to set how sharp the transparency edge is.

Collider Type

This allows you to set the type of collider for the sprite.

NOTE: The collider data is automatically updated when the sprites get damaged.

None

This will remove all colliders.

Edge

This will generate accurate edge colliders, which are very useful for static sprites (e.g. terrain).

NOTE: This creates an **Edge Collider** GameObject and attaches it to this sprite GameObject. You can find the collider settings in there.

Polygon

This will generate accurate polygon colliders.

NOTE: This creates a **Polygon Collider** GameObject and attaches it to this sprite GameObject. You can find the collider settings in there.

Auto Polygon

This will generate approximate polygon colliders that are sometimes faster than the Polygon collider.

NOTE: This creates an **Auto Polygon Collider** GameObject and attaches it to this sprite GameObject.

Allow Split

This setting allows the sprite to split into smaller children when the sprite has been split up (e.g. sliced in half).

NOTE: When a sprite is split, the original sprite is cloned, so all the split pieces will have the same components and settings as the original.

Split Min Pixels

This allows you to set how many separated pixels are required (i.e. a pixel island) for the split to be split up.

Split Threshold

This allows you to set the alpha value required to split a sprite.

For example: if you slice a 75% opacity line through your sprite, the split threshold would need to be set to 0.25 or less for the object to be split in half.

Split Order

This allows you to choose which sprite remains the original, and which ones get cloned.

Default

This will use scanline order, which means the top-left area of the destroyed sprite will remain the parent.

Keep Largest

This will make sure the original sprite will always be the largest of the split pieces.

Keep Smallest

This will make sure the original sprite will always be the smallest of the split pieces.

Solid Pixel Count

This allows you to see how many solid pixels remain in the sprite.

Original Solid Pixel Count

This allows you to see how many solid pixels were in the sprite before you began destroying it.

Solid Pixel Ratio

This allows you to see how much % (0..1) os the original sprite remains.

[CONTEXT] Blur Alpha Tex

This allows you to blur the Alpha Tex, which can be used to make smoother edges.

[CONTEXT] Blur Alpha Tex And Double Sharpness

Same as the above, but doubles the **Sharpness** setting to compensate.

[CONTEXT] Halve Alpha Tex

This allows you to halve the **Alpha Tex** resolution, which will drastically improve performance at the cost of accuracy.

[CONTEXT] Halve Alpha Tex And Split Min Pixels

Same as the above, but also halves the **Split Min Pixels** setting to compensate.

[CONTEXT] Force Destroy Sprite

Sometimes Unity can mess up the script-generated sprite assigned to the Sprite Renderer. This option allows you to force it to be recreated.

[CONTEXT] Recalculate Original Solid Pixel Count

If you've modified your AlphaTex and want to use that as the original, then you can call this to reset the original solid pixel count.

[MESSAGE] OnAlphaTexModified()

When a sprite is modified (resized, stamped, split, etc), this message will get broadcast on the sprite, and all children.

[MESSAGE] OnSpriteSplit (int isClone)

When a sprite is split in half, it is cloned into two pieces, this message is then broadcast on all pieces. If the piece is the original non-clone, then isClone will be set to false.