C# Script "DotAnimatedMaterial"

Script is meant for cycled playback of single or multiple frame sequences assigned to the material.

Assembling Animated Material

Recommendations for material creating and setup:

1. Frame sequences must be inside textures. And then textures you put in the **Main Maps** section of the Material.

2. Size of the texture should provide optimal space for all of the frame sequences.

3. Positioning of frame sequences on the texture map is done in the following order - from left to right and from top to bottom. So at first the row is being made, then other rows add, filling texture map to the bottom.

4. Setup for parameter **Tiling** for **Main Maps:**

X = 1.0f / {columns_count}, where {columns_count} is a number of frames that are placed horizontally;

Y = 1.0f / {rows_count}, where {rows_count} is a number of frames that are placed vertically.
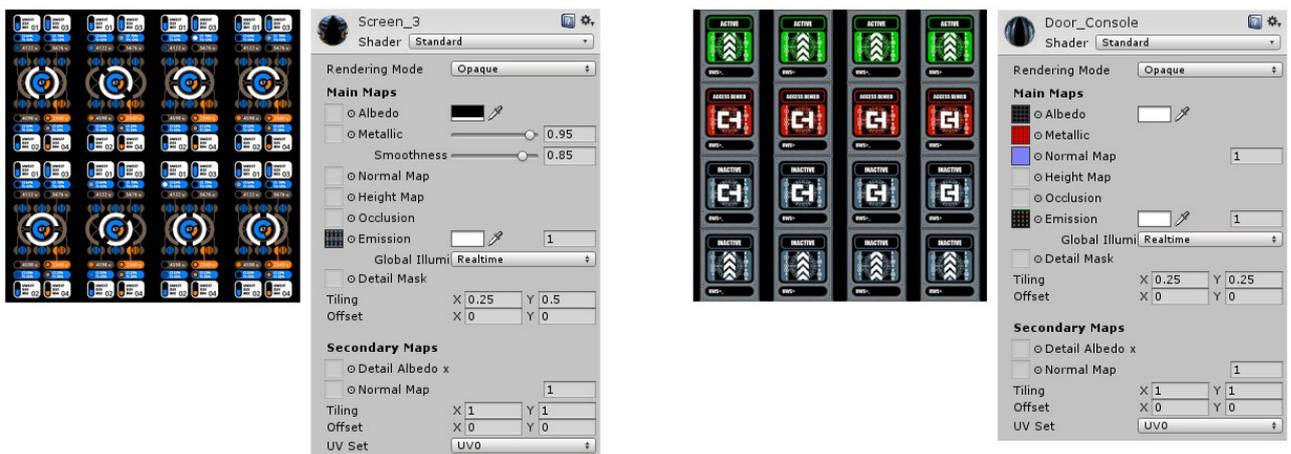
Script setup

1. After material was assembled, assign it to the desired object.

2. To the same object, script **DotAnimatedMaterial** is being attached. Script's parameter **Material Total Frames** is set automatically for a maximum number of frames that can be in the material. The chosen number of frames depends on values of **Tiling** parameter for **Main Maps**.

3. General script configuring:

Active Sequence – the number of current sequence for playback (zero-based);

Size in **Sequences** tab – total number of frame sequences in the animated material;

**FPS** – number of frames per second on playback

4. Individual setup of single or multiple frame sequences, on tab "Element N" of "Sequences" tab.

Total Frames – total number of frames of this particular frame sequence;

First Frame – first frame number, of this particular frame sequence element, in relation to the first frame number on the Material (zero-based);

Starting Frame – sequence playback starts with this frame (zero-based);

Randomly — if checked, frames to playback will be chosen on random.
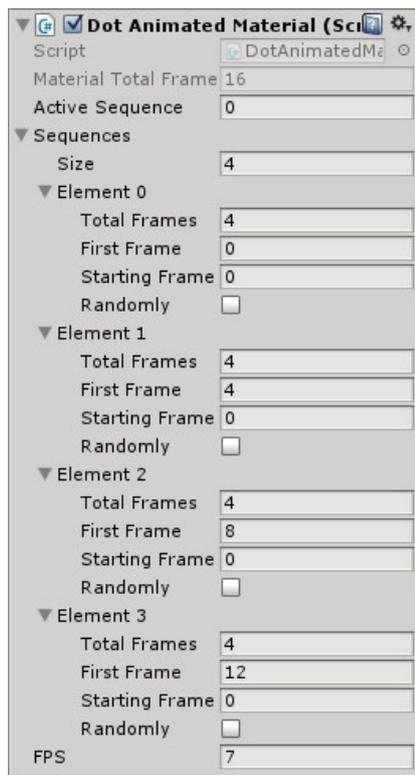
Notes

1. At script setup in EditMode, animated material shows starting frame (parameter **Starting Frame**) of selected sequence (parameter **Active Sequence**). This allows for visual preview of an animated material. Frame sequence can not be run in EditMode, for this select GameMode.

2. If in EditMode options of script was setup in a not intended way, appropriate warnings will show up in the Console window.

3. For switching between frame sequences inside of Script in GameMode it is necessary to:

Step 1: Getting reference on base GameObject (named in example as TV_001) with DotAnimatedMaterial script attached:

GameObject TV_001 = GameObject.Find("TV_001");

Step 2: Getting reference on DotAnimatedMaterial script component:

DotAnimatedMaterial dot_am_script = TV_001.GetComponent<DotAnimatedMaterial>();

Step 3: Assigning sequence number (zero-based) to public property activeSequence.

dot_am_script. activeSequence = 1;

4. Please keep in mind that, if making a Prefab from an object with already attached script, then assigned material will drop out of Prefab. Restoring material is possible within the Inspector, selecting Prefab in Project window and assigning material manually. Then, for preview picture of Prefab to display correctly, it is advised performing Reimport.