

# Xyz.Vasd.ProtoShaders

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Contains shaders for prototype grid and ruler. It's based on [Shader Graph](#) with few custom [.hlsl](#) functions and includes.

There are two shaders:

[Xyz.Vasd/ProtoPaper/ProtoPaper-Lit](#) for lite version

and

[Xyz.Vasd/ProtoPaper/ProtoPaper-Unlit](#) for unlit version.

## Demo Scenes

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Note, you can install only your currently using Render Pipeline subfolder.

### HDRP

[Packages/xyz.vasd.proto-paper/Content/Demo/HDRP/XV@ProtoPaper@Demo-HDRP.unity](#)

### URP

[Packages/xyz.vasd.proto-paper/Content/Demo/URP/XV@ProtoPaper@Demo-URP.unity](#)

### Built-In

[Packages/xyz.vasd.proto-paper/Content/Demo/BuiltIn/XV@ProtoPaper@Demo-BuiltIn.unity](#)

## Shader properties

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Below are listed all properties to set in material.

### Orientaion

[Local](#) means grid zero point is determined by mesh zero point (pivot).

[Global](#) means grid zero point is world coordinates zero (0, 0, 0).

### Text Scale

[0](#) - [1](#)

Scale of printed text (Grid Size and Grid Position).

### Grid

Settings for main grid.

## Grid

Boolean.

Enable/Disable grid cells rendering.

## Grid Text

Boolean.

Enable/Disable grid text (cell size and position) rendering.

## Grid Size

Slider: 0 - 999

Determines main grid cell size in units. Note, it's floored in the shader, so it's like an interger. For example, 10.5 will be 10.

## Grid Border

Slider: 0 - 1

Size of grid border in percent of cell size cell size.

## Grid Fade Distance

Float.

Determines the distance on which grid will be totaly faded out.

0 means fading is disabled.

Note, it's scaled according to cell and border size.

## Grid Color

Color.

Grid borders and text color.

## Subgrid

Properties for subgrid.

## Subgrid

Boolean.

Enable/Disable subgrid cells rendering.

## Subgrid Text

Boolean.

Enable/Disable subgrid text (cell size and position) rendering.

## Subgrid Cells

Number of cells per each main grid cell.

## Subgrid Fade Distance

Float.

Determines the distance on which subgrid will be totally faded out.

0 means fading is disabled.

Note, it's scaled according to cell and border size.

## Subgrid Color

Color.

Subgrid borders and text color.

## Background

Basic background color and texture.

## Background Tint.

Color.

Background tint.

## Background Texture.

Texture.

Background texture for cells. Each cell has uv from 0,0 to 1,1, so it will be tiled according to main grid cell size.