





# **5th Dimension World Builder**

## User Guide

Version 1



"Any sufficiently advanced technology is indistinguishable from magic"

- Isaac Asimov



### **Introduction**

5th Dimension is a strategic world builder and RPG MMO that empowers players to compete in a story-driven battle to create and then control the virtual world of 5th Dimension.

Within this world, players build, buy and sell robotic A.I. agents called 'Mechs' that they control to compete in an array of high-intensity competitions and Esports tournaments.

Set within a rich, sprawling fantasy universe, the virtual world of 5th Dimension is unlimited in scale and is created by the community of players and creators who populate it using a sandbox style, world building interface, the '5th Dimension World Builder' (referred to herein as the 5D Builder).

The 5D Builder operates as a companion app to the 5th Dimension game, and functions as a level designer and game content creation tool that's used in tandem with the core game, thus empowering players to craft and create the game world of 5th Dimension as they see fit.

This document provides a guide for users on how to operate the 5D Builder and also summarizes its utility during the early access stage of the product lifecycle.



### <u>The 5th Dimension World Builder v1.0</u>

### Overview

Using the 5D Builder, players and content creators are empowered to craft beautiful, triple-A quality game environments. Once created, players can publish their environment on one of any available build locations within the game's world map by purchasing a license called a 'Deed' which empowers them to add their environment to the 5th Dimension game world.

Once added, the player's environment forms a permanent and concrete part of the game's geography and exists as part of the game.

In future releases a community voting system will be employed to determine which environments actually make it into the game, however during early access its first come, first served.

Once an environment is built, it then becomes available to any other player of the World Builder to enter and move around inside, exposing the builders' work for all the world to see.

Version 1.0 is a single player game, however in the near future an updated release will be made available that incorporates multiplayer features including in-game voice / audio.



### **Early Access Strategy**

During early access which is scheduled to end in QI 2026 (please note this date is subject to change) the 5th Dimension World builder gives community members the ability to collaborate to create and design the virtual world of 5th Dimension, effectively crowdsourcing the build of the 5th Dimension game world.

Early Access is divided into stages in accordance with the game's published road map, which can be found here: <u>https://5thdimension.gg/roadmap/</u>

In the first stage of early access the World Builder will be accessible to players prior to the release of the game. In this way we aim to build a community of passionate builders and players who cooperate with our team to build out the core game world together, ahead of the alpha and beta game release.



### **Esports & Prizes**

As early access progresses, an alpha iteration of the game will be made available, with the alpha release scheduled for Q2 2022. The playable area in this iteration will be strictly limited however will include a selection of the environments made by community members with the World Builder.

Immediately upon the release of the Alpha, Esports tournaments will begin using a 3rd person shooter style game experience, offering up to \$10,000 in prizes per month. Esports gameplay will take place across the game world, including in the environments (also referred to as Esports 'venues') built by community members. The latest anti-cheat software from Steam will be integrated with the game alpha to ensure fairness for all players.

Approximately 20% of the total prize pool will be divided between the owners of the environments (aka venues) that are used by players to compete. The more frequently players decide to use a certain venue for match play, the larger the share of the prize pool earned by the venue owner will be. More detailed information about the exact process for calculating venue prizes will be published in future iterations of this app and will also be made available via the 5th Dimension website: <u>www.5thdimension.gg</u>



### Steam Workshop

When the 5D Builder is released on Steam in QI 2025 following Steam's review process, it will be interoperable with the <u>Steam Workshop</u> and players will be empowered to publish their Environments via our Steam Workshop page and make them available for sale and community review.

### **Special Events**

During the alpha release of the 5th Dimension game (above) selected venues will also host live music events including DJ sets and MC battles, using the game's motion capture service which empowers creators to control avatars live in real time using a camera-based motion capture system that animates avatars within the 5th Dimension game world.

These performances will coincide with Esports tournaments, whereby music performers will appear and perform live, in-world during Esports tournaments and provide a live soundtrack to the Esports gameplay.



### **3D Models**

When working with the 5D Builder, players gain access to a library of high quality 3D models and environmental assets to empower them to easily craft rich, beautiful worlds with ease.

3D models included in the 5D Builder library are provided by Kitbash, arguably the gaming industry's best producer of triple-A game environment assets. Kitbash 3D models and game content assets are regularly used by some of the world's best game studios and appear in many of the most played triple-A game titles. To ensure our community gets the very best building tools possible, we've selected an array of the finest Kibash assets for use within the 5D Builder.

Find out more about the Kitbash product range at www.kitbash3d.com

Players can also craft their own 3d models from scratch using the Unity Pro Builder 3D modelling app which is directly integrated with the World Builder's Environment Editor interface (see below).



## <u>Quick Start Guide</u>

To get started using the 5D Builder, begin by following the steps below. At any time you can get help and support from our team via our Discord server

https://discord.com/invite/5thdimension

#### Installation

To get started using the 5D Builder, begin by downloading and installing the application package from our Itch.io page <u>https://realityjam.itch.io</u> decompress / extract the downloaded folder and run the application file labelled World Builder, no installation is required.

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🕫 World Builder	2/14/2025 8:51 AM	Application	651 KB
UnityCrashHandler64	2/14/2025 8:51 AM	Application	1,087 KB
🚞 World Builder_Data	2/14/2025 8:52 AM	File folder	
World Builder_BurstDebugInformation_D	2/14/2025 8:51 AM	File folder	
🛅 MonoBleedingEdge	2/14/2025 8:51 AM	File folder	



#### Minimum System Spec

Your PC must have a 64-bit Windows 11 OS. Your CPU should be at least an Intel i3-4150 or Ryzen 3 1200 (AMD). The game requires a minimum of 4GB RAM, although more is recommended. The minimum GPU requirement is Geforce GT 730, Radeon R7 240 with 4GB VRAM, however a higher GPU spec is recommended, ideally Nvidia GeForce RTX 2080 or better. We do not support Mac OSX, Linux or Mobile platforms at this time.

#### **Create Your RealityJam Account**

The 5th Dimension World Builder operates in tandem with the <u>RealityJam platform</u>. Various functions of the World Builder require you to be logged into your RealityJam platform account.

Others, such as 5th Dimension's quests system and game item marketplace are available only on RealityJam. The 5D Builder and the 5th Dimension core game combine with the RealityJam platform to form a software ecosystem designed to maximize the quality of player experience. Click the link below to create your account:

https://realityjam.io/login?app=5thdimension

#### **Create Your First Environment**

After signing in to your RealityJam account return to the 5D Builder and navigate to the



'My Venues' page using the left hand nav bar, and get started designing your very own piece of the 5th Dimension game world.

Click the '+' symbol on any one of the 3 environment slots available to launch the World Editor interface to begin creating, please continue reading below for instructions on how to use the World Editor to create beautiful 3D environments. Each player is limited to owning a maximum of 3 Venues within the game world to avoid individuals hoarding real estate.





### **User Interface**

The 5D Builder application is accessed using the navigation bar, displayed on the left side of the UI which is used to navigate between pages within the app.

#### The World Map Page

Click the button labelled World Map in the left hand nav bar to reveal a map of the 5th Dimension game world, which comprises 5 islands that float in a sea of primordial energy known as 'Prana'. Find out more about the game's geography on the 5th Dimension website at <u>this link</u>

Clicking the hexagonal waypoint marker for each island opens a detailed map of a given island. In the first release of the game only one island is available for development, the island of Utara.





#### Utara Island Map Page

The detailed map of the island of Utara displays the 3 major cities that exist on the island, the capital Neotokyo, and 2 regional cities, Magmoria and Apocrypha. In the current release, only the city of Neotokyo is available for development, the remaining 2 cities will be opened for development in future releases of the 5D Builder.

Clicking the hexagonal waypoint marker for the city of Neotokyo opens a map of the city.





#### Neotokyo City Map

The city map of Neotokyo displays the city's regions and districts, each of which is available for development. Each district is divided into 3 regions as follows;

Inner City - densely populated interior of the city and also its central business district Mid Metro - the city's inner urban zone, immediately beyond the inner city, a mix of business and more upmarket residential real estate development Outer Limits - the industrial zone, a mix of industrial buildings and lower value real estate

development

Each region is divided into 3 districts that are labeled according to the district naming convention above.

At the centre of the city map is Neotokyo's 'Battle Arena' hub, a wide expanse of formed terrain and customized structures used for the activation of competition combat events known as Battles.





Clicking on any of the regions in the map reveals the Region Browser on the right side of the screen as shown below.



The Region Browser reveals a list of all the Venues (or built Environments) that are available in that region. Available build locations are displayed with a green label, and



build locations upon which an Environment has been built are displayed accordingly. Clicking the Enter button for a Venue opens it, empowering players to move around inside the Venue and tour its interior.

The process for publishing and building environments so that they become available to enter via the Region Browser is described below.

There are 1110 available build locations in the city of NeoTokyo and the number of locations is limited per region. The number of available locations per region as shown below is the same for each of NeoTokyo's 6 districts.

- Inner City 37
- Mid Metro 55
- Outer Limits 93

After these regions are consumed by built Venues, new cities will be made available in future releases of the 5D Builder, however NeoTokyo's identity as the very first city in 5th Dimension game world to be built and populated will always hold special significance within the game's lore and storyline and the builders of Neotokyo will always be recognized as the originators of the 5th Dimension game world.



#### **My Venues Page**

The My Venues page displays the 3 environment slots available to each player. Players are limited to creating / owning a maximum of 3 Venues to avoid individuals hoarding real estate due to the fact that the available number of build locations within Neotokyo is capped at 1110.

The first time the My Venues page is loaded the 3 available slots will display in the Empty status, as indicated by the red label, showing that design work has yet to begin.



To begin designing your piece of the game world, click the plus button on the toolbar. Following this you'll be asked to name your Venue, add a thumbnail image and save by clicking the Create button. The thumbnail image will centre and scale any image added,



however for best results use a 9x16 aspect ratio image at 150 pixels per inch resolution, PNG or JPEG file format.



After creating your new Venue, the status label will change from Empty to Draft, denoted by a yellow label. Once in Draft status, the Venue's toolbar will display 3 new icons as shown below:





#### Launch Button



The Launch button opens the World Editor interface to empower the player to access the 5D Builder's 3D environment design tool set to design an environment which, when complete may be published as a Venue, or in the near future, uploaded the Steam Workshop for sale and voting.

#### **Edit Button**



The Edit button empowers the player to change the name and thumbnail image for each environment they create.

#### **Publish Button**



The Publish button empowers a player to change the status of an environment that is completely designed to prepare it to be added to the 5th Dimension game world. Publishing an environment is the first step in the process to build a Venue within the game world so that it becomes visible in the Utara city map and available to other players to enter and experience. Publishing an Environment requires the builder to spend a Deed (see below). When published, the status label will change from Draft (yellow) to Published (green).



**Deeds Counter** 



The Deeds counter displays the number of Deeds owned by a player. Deeds may be purchased from the RealityJam platform when logged in (see below)



The Deeds Refresh Button refreshes the number of Deeds available to a user after they have been purchased from the RealityJam platform (or the Steam Store following release on Steam). If after purchasing a Deed the counter does not increase to display the number of Deeds owned as expected, click the Refresh button to update the counter and the correct number of Deeds will be displayed.



### **Environments, Deeds & Venues**

The 5D Builder empowers players to design and create playable game environments which, once completed, can be published and then built as Venues within the 5th Dimension game world.

#### Venues

Venues are made available as a permanent part of the game world within which competition Esports matches will be activated when the game's alpha and Esports tournaments are launched in Q2 this year.

Venue owners share in a monthly cash prize pool of up to \$5,000 with the more popular Venues that log the most play time during Esports producing the greatest share of the rewards pool.

Prizes are distributed on the last Friday of each month based on a weighted distribution whereby the more time that players have spent inside a particular Venue during Esports events in that month, the greater the share of rewards will be for that particular Venue. Venues that are not frequented by any players in a given month will not be eligible for a share of the rewards pool.

At the end of each month, a leaderboard will be produced ranking every Venue in 5th Dimension by popularity i.e. by total play time.

The more players spend time inside a Venue during Esports, the higher the share of rewards that Venue will produce.



#### Deeds

To publish a Venue, players must first purchase a Deed from the Utara city council which gives them ownership of their preferred build location within the city limits. Deeds are key to a player's ability to build their environment and establish it as a Venue for Esports gameplay so that it forms a permanent part of the game world. Players may purchase Deeds by logging into the 5th Dimension app on the RealityJam platform at the link below and clicking the Environments link in the left hand nav bar <u>https://realityjam.io/5thdimension</u>

Deeds are purchased using 5th Dimension's in-game currency, Dimens, and cost \$15.00 (or 4000 Dimens) each. Players purchase Dimens using the payment service available via the RealityJam platform at the link below using credit or debit card via Stripe, or using any major cryptocurrency via the Radom Network Web3 payment service.

#### https://realityjam.io/deusx/on-ramp

To use the RealityJam payment service, players must create a digital wallet within which to store their Dimens using the Metamask Chrome browser extension. Once created, players must connect the wallet to RealityJam to use it to store their Dimens and to access the payment service. Install the Metamask Chrome extension at the below link,



https://chromewebstore.google.com/detail/metamask/nkbihfbeogaeaoehlefnkodbefgp gknn

Once installed, navigate to the <u>dashboard page</u> of your RealityJam account and click the 'Connect' button in the user interface as shown below.



After connecting your wallet, you'll be able to quickly and easily purchase Dimens tokens to get yourself a Deed.

As described above, owners of Venues will share in a monthly cash prize pool of up to \$5000 from the launch of 5th Dimension game alpha in Q2, accordingly they are priced at \$15.00.



#### **Building Your Environment**

The steps required to design and publish an environment and then build it into a publicly available Venue are as follows;

1. Log into your RealityJam account

2. Create an environment in Draft status as described above.

3. Purchase a Deed from the RealityJam platform (or, in future versions of the 5D Builder, from the Steam Store)

4. Click the publish button marked with a tick in the given environments toolbar on the My Venues page as shown below, after this is done, you will be asked to confirm that you want to purchase a Deed to publish your venue as once a Deed is used it is consumed and can't be refunded.





PLEASE NOTE: ONCE AN ENVIRONMENT IS PUBLISHED IT WILL NO LONGER BE AVAILABLE TO EDIT AND CANNOT BE CHANGED OR ADDED TO. PLEASE ENSURE THE DESIGN WORK WITHIN YOUR ENVIRONMENT IS 100% COMPLETE AND THAT YOU ARE SATISFIED WITH ITS DESIGN BEFORE PUBLISHING AS THIS STEP CANNOT BE UNDONE.

5. Following the consumption of a Deed, the environment's status will change from Draft to published, indicated by a green label.

6. Using the left nav bar, navigate to the NeoTokyo city map and select a region within which to build your newly published environment. Select any build location marked as 'Available' and click Build.





7. Your Environment's name and thumbnail image will then appear in the list of Venues within the selected region, click the Enter button to enter your Venue and move around inside it. Your environment has now become a Venue available for any players of the 5D Builder to experience. It will exist forever as part of the game world of 5th Dimension, you have now secured ownership of your piece of the 5th Dimension sci-fi universe.



### **World Editor**

The 5th Dimension World Editor is 3D content creation, 3D modeling and level design app used to craft and create the game world of 5th Dimension.

The editor is built on the <u>Unity Game Engine</u> and operates on the same basic principles as Unity. The Editor UX and UI follows the same basic logic flow as the Unity game engine, however is much simpler and more compact than Unity, empowering regular game content creators to get access to the power of Unity, without the need for any domain knowledge of, or experience using the Unity Game Engine.

The toolset available via the Editor includes an array of scripts and prefabs designed to help you create scenes and game levels for the 5th Dimension game. The Editor leverages Unity's Universal Render Pipeline.

PLEASE NOTE: This user guide is intended to provide a general overview of the key features of the World Editor to empower players to design and create environments, it is not an exhaustive instruction manual detailing the functionality of every single feature of the World Editor. As we progress through early access, an array of educational materials will be published including more finely detailed instruction manuals, master classes and tutorials.

Please begin with the Getting Started section for an overview of the Editor and its features.



### **Getting Started**

1. Launch the World Editor by clicking the launch button shown below



2. On launch a new Environment will be created with one 'default' scene. Environments consist of one space within which player experience manifests called a Scene, however players can create multiple scenes to allow them to prototype different designs without destroying their existing work, creating near limitless creative freedom during the design process.

If using multiple scenes during the design stage.

Please note: players must ensure they delete any unwanted scenes before publishing as only one scene can be included within a published environment.





The standard 'default' scene contains a single camera which is used to position the players point of view, a directional light and a skybox, and these objects (along with any others you add) are common to any scene you create and are displayed in the Hierarchy on the right side of the screen.

PLEASE NOTE: WITHOUT AT LEAST ONE LIGHT AND CAMERA OBJECT ADDED, THE ENVIRONMENT WILL NOT BE VISIBLE, DO NOT UNDER ANY CIRCUMSTANCES PUBLISH A VENUE WITHOUT THESE FEATURES AS ITS FEATURES WILL BE INVISIBLE TO OTHER PLAYERS.

3. Press the "Play" button in the top toolbar to see the game world at runtime.





The runtime view of the game world is then displayed at the foot of the screen, the editor at the top. To view the gameplay full screen, click the full screen button at the top right of the player window.



- 4. Import some 3D models for use in the scene. In the File menu, click Import Assets, select the Addressables folder and then select the assets you'd like to import, after importing they will appear in the Project window on the right hand side.
- 5. Drag your newly imported 3D models into the scene and get to work creating your environment.



### Windows

#### Scene

The Scene window is the primary visual interface for editing and designing content within each environment and contains the various game objects (including lights, cameras, VFX and 3D models) used in the design process

#### Game

The Game window appears when the Play button in the top toolbar is clicked and displays the environment as it will appear when it is 'played' by other users (players). This is like the viewing the 'finished product' that is produced by the work you do in the Scene window.

#### Hierarchy

Displays a list of all the game objects present in the Scene, click on an object to display an array of detailed information and editing options in the Inspector

#### Inspector

The Inspector provides a host of detailed technical information and also various editable parameters for each of the game objects in the Scene and the Hierarchy windows.

#### Project

The project contains a list of each scene in our environment and the 3D models you've imported for use in the Scene.



#### Console

The console window contains a chronological list of code line commands that are produced via the changes that you make in the Scene, you can think of this as a way of looking 'under the hood' to understand what's happening at the code level when using the World Editor, including a list of any errors that occur when using the Editor.

#### Animation

The Animation window allows players to create rich complex animations, bring the 3D models they import to life. Animations can be applied to game objects in a wide variety of ways to help bring static spaces to life.

#### Builder

Empowers players to create and texture their own 3D models from scratch and then insert them into the Scene (see below for more information)



### Navigation

Navigation in the Scene window is controlled by the mouse, scroll wheel, and the AWSD keys on your keyboard.

Scroll wheel - Zooms in / out Right Mouse button - hold to activate navigation Mouse - control the direction (point of view) of the camera AWSD - directional navigation (while the right mouse button is held) Left Mouse button - select an object in the scene

PLEASE NOTE: The content displayed in the Play window is controlled by the position of the camera in the scene, to change the point of view of the play window, move the camera in the Scene.

### Game Objects

Game objects are the assets used in the environment design process to create a playable game environment, these are added to the scene to provide you different functionalities and tools to aid in the design process.



#### Positioning

Control the position of each game object in the Scene by clicking and dragging the directional controls to move the object along its X, Y and Z axis (back, forward, up and down)





#### Rotation

Rotate objects using the rotation tool in the top toolbar, select the object, click the rotate button and adjust along 3 axes.



#### Cameras

In order to display or view the content in a scene, a camera must be added to the scene. The position of the camera in the scene allows you to simulate navigation and inspect the model at runtime using Play mode.

#### **3D Objects**

3D Objects are imported (as above) and made available via the Project Window. Once inserted (dragged and dropped) into the Scene they appear in the Hierarchy and Inspector windows. Basic shapes can also be added to the Scene from the Game Object Menu. By selecting the Mesh Renderer in the Inspector, basic shapes can be given realistic textures to help transform them into usable environment assets.

Players can also create their own 3D objects from scratch using the Unity Pro Builder app (see below)



#### Lights

Lights allow the objects in the environment to be illuminated. Each light inserted the Scene has an array of properties that can be edited in the Inspector window. 3 different types of lights are available directional, spot and point, each offering different methods of lighting the objects in the Scene





## **3D Asset Library**

To access the Environment Editor's library of 3D models, you must first import them using

the Import Assets command in the File Menu to open the Import Browser.

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	Select	Cancel

Click Select to open the default addressables folder, select the items you wish to Import and click Import.

The selected imported objects will appear in the Project Window on the right side of the screen and can then be dragged and dropped into the scene.

### Pro Builder

The Environment Editor integrates Unity's 'Pro Builder' 3D modeling software, allowing you to create your own high quality 3D Models from scratch.



Access the Pro Builder application by clicking the 'Builder' item in the Window Menu. A detailed instruction manual for the Pro Builder application is available at the link below:

### https://docs.unity3d.com/Packages/com.unity.probuilder@4.0/manual/index.html

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### **Top Toolbar**



#### Play

Plays the Scene (as described above)

#### Hand Tool

Allows you to drag the point of view of the Scene window and when used in combination with the right mouse button allows you to quickly and easily navigate inside the Scene

#### **Move Tool**

Moves objects in the scene using the directional controls (as above)

#### **Rotate Tool**

Rotates objects in the Scene

#### Scale Tool

Extrudes objects, enlarges or shrinks objects in the Scene



#### **Global Rotation**

Switches global rotation on and doff

#### **Tool Handle Position**

Controls the position of the tool handle for selected objects

### **Boundary Limits**

The size of each environment is limited to a maximum 'workable' space or geographic area. The boundaries or limits or this workable are are defined in the Scene by the red boundary limits marker. Content positioned outside the boundaries will be automatically deleted from published environments.





### **Saving Scenes**

Each Scene within an environment can be saved and reopened as required. Click the Save Scene item in the File Menu before exiting the World Editor to save your work. If you fail to save your work you will lose it!

### **Memory Profiler**

The Memory Profiler gives players a real time view of the size and performance of their environment as they create it.

All environments that are published in 5th Dimension MUST conform to a maximum GC (graphics card) memory count of 4GB, environments that exceed this size limit may negatively the performance of the game and its owner will be asked to modify it to reduce its size or risk having their Venue removed from the game.





## Animation

The Animation window allows game objects in the scene to be animated using the Animation Timeline Editor. The Animation tool set will not work while playing. Stop Play mode by selecting the stop item from the Edit Menu.

To begin, select the game object you want to animate and create a new animation clip. Add properties to define the position, scale and rotation of your animation. Use the timeline to drag and drop triggers that define new stages of the animation and edit the values you wish to change to create the desired animation.



### STH DIMENSION

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