



Infinadeck Software Manual – Infinadeck Unreal Plugin Setup & Installation

For Plugin Version 1.0.0



VERSION HISTORY

Version #	Implemented By	Revision Date	Approved By	Approval Date	Reason
1	G. Brunner	10-31-2022	B. Freeman	11-2-2022	Initial Release

Infinadeck Template Version: 2019-10-01



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1 INTRODUCTION

This guide covers the installation and use of the Infinadeck software and the Infinadeck Unity plugin. Implementation of this system into a game will allow said game to be played with the use of an Infinadeck omnidirectional treadmill.

Please make a backup of your game files before you begin implementing our plugin. If there are issues using our plugin, follow the Uninstall Guide (see Section **Error! Reference source not found.**, **Error! Reference source not found.**) to properly remove it.

2 REQUIREMENTS

2.1 REQUIRED TOOLS

The following table lists all the required tools to complete this process.

Item	Description	ID Number	QTY

2.2 REQUIRED SOFTWARE

The following table lists all the required software to complete this process.

Item	Version	Description
1	4.25 or Higher	Unreal (C++ Project Required)
2	3.2.0 or Higher	Infinadeck Unreal Plugin

It is **critical** that this plugin is only added to a project that includes the Infinadeck Unreal Plugin. Without it, this plugin may attempt to access libraries that don't exist in the game project, which will cause poor performance and a general lack of functionality.

2.3 REFERENCE DOCUMENTS

The following table lists all the required documents required to complete this process.

Item	Doc Number	Description
1	910-51-00005	Infinadeck Software Manual- Infinadeck Unreal Plugin Setup & Installation
2	910-51-00010	Infinadeck Software Manual- Emulator Mode
3		
4		

All documentation for the Infinadeck can be found on the [Infinadeck Google Drive](#).



3 SOFTWARE DOWNLOAD

3.1 INFINADECK UNREAL PLUGIN

A copy of the Infinadeck Unreal Plugin must be installed to use the InfinaDEMO plugin. The latest version of the Infinadeck Unreal Plugin may be found on either the Unreal Engine Marketplace or the InfinadeckUnrealPlugin GitHub. Please follow either link to download the latest files.

- [Infinadeck Unreal Plugin on Unreal Engine Marketplace](#)
- [Infinadeck Unreal Plugin on GitHub](#)

The following items will be included with the download:

- Infinadeck Unreal Plugin

All documentation for the Infinadeck Unreal Plugin can be found on the Infinadeck Google Drive.

- [Infinadeck Google Drive - Manuals](#)

3.2 INFINADEMO UNREAL PLUGIN

The latest version of the InfinaDEMO Unreal Plugin may be found on either the Unreal Engine Marketplace or the InfinaDEMOUnreal GitHub. Please follow either link to download the latest files.

- [InfinaDEMO Unreal Plugin on Unreal Engine Marketplace](#)
- [InfinaDEMO Unreal Plugin on GitHub](#)

The following items will be included with the download:

- InfinaDEMO Unreal Plugin

All documentation for the InfinaDEMO Unreal Plugin can be found on the Infinadeck Google Drive.

- [Infinadeck Google Drive - Manuals](#)



4 INSTALLATION GUIDE

Once you have downloaded the files (see Section 3, Software Download) you are ready to begin the installation process.

4.1 INFINADECK UNREAL PLUGIN

1. Follow Document 910-51-00005 (Infinadeck Unreal Plugin Manual) with regards to installing the Infinadeck Desktop Application and migrating the Infinadeck Unreal Plugin into your new or existing project.

4.2 INFINADEMO UNREAL PLUGIN

4.2.1 Plugin Installation

The Unreal Plugin can be added to your Unreal Engine project in multiple ways.

Install thru Epic Games Launcher:

1. Find **InfinaDEMO Plugin** on the Unreal Engine Marketplace and click **Add to Cart**, then **Check Out** via the shopping cart icon in the upper right corner.
2. In the Epic Games Launcher, **find Unreal Engine > Library > Vault**.
3. Click **Add to Project** to pull up the **Select the Project to Add the Asset To** menu.
4. Navigate to your C++ project and click **Add to Project** (if your project is not visible, please make sure to check “Show all projects” and that the correct engine version is selected in the bottom left corner).

Manual Install:

1. Under your new or existing Project’s game files, look for a folder named *Plugins*. If this folder does not exist yet, create it.
2. Navigate to *[DownloadLocation]/InfinaDEMOUnrealPlugin_[VersionNumber].zip* and unzip it.
3. Locate the folder named *InfinadeckSDK* within the unzipped folder.
4. Copy this folder and paste it into *[ProjectLocation]/Plugins*.

4.2.2 Blueprint Addition

1. After installing the plugin, click on the eye in the corner of the Content Browser and ensure that Plugin Content is set to Visible.
 - o If you can’t see the folder, navigate to **Edit > Plugins** and verify that the InfinadeckSDK plugin is **Enabled**.
2. In the *Content Browser/InfinadeckSDK Content/Blueprints*, find the blueprint named **InfinaDEMO**.
3. Grab this blueprint and drag it anywhere in your game world.



4.3 TEST SYSTEM

The system is now ready to run. To test run the software:

1. Open **Infinadeck.exe** from your install location of the Infinadeck Desktop Application. Press the Windows key and type “Infinadeck” to find it with ease.
 - If you are running the system without a treadmill present, please refer to document 910-51-00010: Infinadeck Software Manual – Emulator Mode.
2. With your game window partially visible, click on **Infinadeck.exe**, and move over to the **Manual** tab. Click the Start button. When you move the virtual joystick, the movement should translate to motion in the game.

4.4 REQUIRED CODING PRACTICES

If you have implemented our system into your game, any call of a popup, menu screen, level load, or similar action **must** be accompanied by a call of the function SetTreadmillPause() to guarantee the user does not enter a situation where the deck is active in a non-movement environment.

Not following this step is a direct violation of our Terms and Conditions.



5 TROUBLESHOOTING

The following table outlines common installation issues and solutions:

Installation Issue	Solution
Unreal Won't Run Post Plugin Installation	Check to make sure you fit within the required versions listed for this Plugin. If the problem persists, report the error to us via email.
The Game Crashes	Open Infinadeck.exe and let it run idly in the background.

If you have additional questions, please email support@infinadeck.com with the words “PLUGIN HELP REQUESTED” in the subject line.



6 UNINSTALL GUIDE

To remove each of the components of the system:

6.1 UNREAL PLUGIN

1. Delete any and all instances of **Infinadeck** from your scene.
2. Remove any custom dependencies between Infinadeck Plugin objects and functions.
3. Delete the **InfinadeckSDK > Infinadeck** folder under *[ProjectLocation]/Plugins*.



7 USAGE

7.1 INFINAKEYBIND UNIVERSAL KEYBIND SYSTEM

The keybinds used by this plugin are part of the Infinadeck Universal Keybind System, which allows these keys to be accessible in any project, no matter what keys have already been bound.

This is done through “links”. **Linked functions** are established by the plugin developer, and **linked keys** are alterable by the end user, without requiring any explicit development by the project developer.

This system supports the following, all exposed via the Infinadeck settings file at *[UserDirectory]/Documents/My Games/Infinadeck/Infinadeck/infinadeck_preferences.ini*.

[Keybind Preferences]

- **keyboardInputEnabled(bool)**: Set to TRUE to enable input; Otherwise, set to FALSE.
- **exportBindings(bool)**: when TRUE, any input detected by the project during runtime will cause link01 through link12 to be freshly exported to the settings file.

[Keybinds]

- **keybindProfile & timerKeybindProfile(string)**: Assign the following **linked keys** to **link01 thru link12** based on your desired input scheme:
 - FUNC
 - F1, F2, F3, F4, F5, F6, F7, F8, F9, F10, F11, F12
 - 1234
 - Alpha1, Alpha2, Alpha3, Alpha4, Alpha5, Alpha6, Alpha7, Alpha8, Alpha9, Alpha0, Minus (-), Equals (=)
 - #PAD
 - Keypad1, Keypad2, Keypad3, Keypad4, Keypad5, Keypad6, Keypad7, Keypad8, Keypad9, KeypadDivide (/), KeypadMultiply (*), KeypadMinus (-)
 - STND
 - LeftShift, LeftControl, LeftAlt, Space, RightShift, RightControl, RightAlt, Return, BackQuote (`), Tab, Backslash (\), Backspace
 - CPAD:
 - LeftArrow (<), DownArrow (↓), RightArrow (→), UpArrow (↑), Delete, End, PageDown, Insert, Home, PageUp, ScrollLock, Pause
 - QWER
 - Q, W, E, R, T, Y, U, I, O, P, LeftBracket ([), RightBracket (])
 - ASDF
 - A, S, D, F, G, H, J, K, L, Semicolon (;), Quote ('), Slash (/)
 - Custom: Custom string of keybinds set with **customBinding**
- **customBinding & timerCustomBinding(string)**: If **keybindProfile** is set to “Custom”, this string of keybinds will be read in for use by the engine.
 - Separate keybinds with a ‘ - ’ character.
 - Example Custom Keybind: Q-W-E-R-T-Y-U-I-O-P-LeftBracket-RightBracket

- Any keybind listed in the keybindProfiles can be used in a custom binding.
- **link01 thru link12 & tlink01 thru tlink12(string):** the exported list of current keybinds being used by the system. Modifying these values in the settings file do nothing; they will only be written to if **exportBindings** is set to TRUE.

7.2 KEYBOUND FUNCTIONS ACCESSIBLE TO THIS PLUGIN

The default **keybindProfile** for this file is STND and the default **timerKeybindProfile** for this file is 1234 (for more information, see **keybindProfile** in Section 7.1, InfinaKEYBIND Universal Keybind System).

- **link01 (LeftShift)- Reload Current Level**
- **link02 (LeftControl)- inactive**
- **link03 (LeftAlt)- inactive**
- **link04 (Space)- Stop Treadmill**
- **link05 (RightShift)- Start Treadmill in User Mode**
- **link06 (RightControl)- inactive**
- **link07 (RightAlt)- inactive**
- **link08 (Return)- inactive**
- **link09 (BackQuote)- inactive**
- **link10 (Tab)- inactive**
- **link11 (Backslash)- Import Preferences-** Manually imports preferences directly from the settings files. Good for bypassing the default long “check if file updated” cycle.
- **link12 (Backspace)- Reset Preferences-** Manually pushes default preferences onto the settings files. This is equivalent to stopping the project, deleting the settings files, and starting the project back up, but without any downtime or loss of progress.
- **tlink01 (Alpha1)- Set Timer to 1 Minute**
- **tlink02 (Alpha2)- Set Timer to 2 Minute**
- **tlink03 (Alpha3)- Set Timer to 3 Minute**
- **tlink04 (Alpha4)- Set Timer to 4 Minute**
- **tlink05 (Alpha5)- Set Timer to 5 Minute**
- **tlink06 (Alpha6)- Set Timer to 6 Minute**
- **tlink07 (Alpha7)- Set Timer to 7 Minute**
- **tlink08 (Alpha8)- Set Timer to 8 Minute**
- **tlink09 (Alpha9)- Set Timer to 9 Minute**
- **tlink10 (Alpha0)- Set Timer to 10 Minute**
- **tlink11 (Minus)- Disable Timer** (sets session time to 5000 seconds).
- **tlink12 (Equals)- inactive**



8 ADVANCED DOCUMENTATION

The following subsections go in-depth for more sophisticated concepts than those covered elsewhere in this guide. They exist to give creators a better understanding of how our system works so that they may better interface and work with our system.

8.1 TIMER

The timer ticks down whenever the treadmill is enabled. Once the clock hits zero, the treadmill is sent a stop command.

9 MISSING A FEATURE?

Missing a feature that you'd like from our plugins? Please contact us at support@infinadeck.com with the words "PLUGIN FEATURE REQUEST" and detail your requested feature as clearly as possible. The more information provided, the better. If the feature makes sense in our roadmap, we'll integrate it; otherwise, we'll try to help support your unique use case directly.

10 KNOWN BUGS

Below are a list of Known Bugs and Fixes we are currently working on. Please contact us at support@infinadeck.com with the words "PLUGIN BUG DISCOVERED" in the subject line if you find any additional bugs or encounter any issues.