



Infinadeck Plugin

Unity Setup & Installation Manual

Original Release for Plugin Version 1.0.0

Manual Version 1.0

10-31-2022



VERSION HISTORY

Version #	Implemented By	Revision Date	Approved By	Approval Date	Reason
1.0	G. Brunner	10-31-2022			Initial Release

InfinaDeck Template Version: 2018-06-20



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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 6, Uninstall Guide) to properly remove it.

2 REQUIREMENTS

The following hardware and software components are required to run the InfinaDEMO Plugin:

- ☐ Unity Version: 2018.3.8 or higher (tested through 2021.2.7)
- ☐ InfinaDeck Unity Plugin: 3.2.0 or higher

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.

3 SOFTWARE DOWNLOAD

InfinaDeck Unity Plugin

A copy of the InfinaDeck Unity Plugin must be installed to use the InfinaDEMO plugin. The latest version of the InfinaDeck Unity Plugin may be found on either the Unity Asset Store or the InfinaDeckUnityPlugin GitHub. Please follow either of the links to download the latest files.

- Asset Store: <https://assetstore.unity.com/packages/slug/210974>
- GitHub: <https://github.com/InfinaDeck/InfinaDeckUnityPlugin>

InfinaDEMO Unity Plugin

The latest version of the InfinaDEMO Unity Plugin may be found on either the Unity Asset Store or the InfinaDEMOUnity GitHub. Please follow either link to download the latest files.

- UE Marketplace: **To Be Added**
- GitHub: **To Be Added**

The following items will be included with the download:

- InfinaDEMO Unity Plugin

All documentation for the InfinaDEMO Unity Plugin can be found at the GitHub link.



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 UNITY PLUGIN

1. Follow Document 910-51-00001 (InfinaDECK Unity Plugin Manual) with regards to installing the InfinaDECK Desktop Application and migrating the InfinaDECK Unity Plugin into your new or existing project.

4.2 INFINADEMO UNITY PLUGIN

4.2.1 Plugin Installation

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

Install thru Asset Store:

1. Find **InfinaDEMO Plugin** on the Unity Asset Store and click **Add to My Assets**.
2. In the Unity Editor, find **Window > Package Manager**.
3. In the pop-up window, switch **Packages:** to display **My Assets**.
4. Find **InfinaDEMO Plugin**, click Download, then Import.
5. Ensure all boxes are checked to import the entire package.

Manual Install:

6. In the Unity Editor, find **Assets > Import Package > Custom Package**.
7. In the pop-up window, find *[DownloadLocation]/InfinaDEMO Unity.package* and click Open.
8. Ensure all boxes are checked to import the entire package.

4.2.2 Prefab Addition

1. After installing the plugin, navigate to the **InfinaDECK** folder in your Project tab.
2. In the subfolder **Prefabs**, find the prefab named **InfinaDEMO**.
3. Grab this prefab and drag it anywhere in your Hierarchy.



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.
 - o 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
Unity Won't Run Post Plugin Installation	Check your console window and follow through with the problems you encounter.
The Game Crashes	Open InfinaDeck.exe and let it run idly in the background.

If you have additional questions, please email info@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 UNITY PLUGIN

1. Delete any and all instances of **InfinaDEMO** from your scenes.
2. Remove any custom dependencies between InfinaDEMO Plugin objects and functions.
3. Delete the **InfinaDeck > InfinaDEMO** folder under your **Project** tab.



7 USAGE

7.1.1 InfinaKEYBIND Universal Keybind System

The keybinds used by this plugin are part of the InfinaKEYBIND 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 InfinaDATA settings file at *[UserDirectory]/Documents/My Games/InfinaDeck/InfinaDEMO/infDemo_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.

7.1.2 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 7.1.1, 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 info@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 info@infinadeck.com with the words "PLUGIN BUG DISCOVERED" in the subject line if you find any additional bugs or encounter any issues.