

Infinadeck Software Manual – Infinadeck Unreal Plugin Setup & Installation

For Plugin Version 3.3.0



VERSION HISTORY

Version #	Implemented By	Revision Date	Approved By	Approval Date	Reason
1.0	G. Brunner	10-22-2018	B. Freeman	10-22-2018	Initial Release
1.1	G. Brunner	11-2-2018	B. Freeman	11-2-2018	Updated Supported Unreal Versions
1.2	G. Brunner	11-14-2018	B. Freeman	11-14-2018	Clarified Vive Tracker Requirements
1.3	G. Brunner	11-26-2018	B. Freeman	11-26-2018	Unreal Release
1.4	G. Brunner	12-21-2018	B. Freeman	12-21-2018	Clarified Unreal Documentation
1.5	G. Brunner	1-16-2019	B. Freeman	1-16-2019	Separated IK Documentation
1.6	G. Brunner	6-1-2020	B. Freeman	6-1-2020	Simplification of Plugin Install and Use, Separation between Unity and Unreal documents
2.0	G. Brunner	1-6-2022	B. Freeman	1-6-2022	Updated for major changes of 3.0 release: key binds info, reference panel, runtime edition
2.1	G. Brunner	10-31-2022	B. Freeman	11-1-2022	Updated for IDA release; key bind details matched to InfinaKEYBIND documentation, move to new template
2.2	G. Brunner	3-14-2023			Updated for 3.3.0, Added Reference Images

Infinadeck Template Version: 2019-10-01



TABLE OF CONTENTS

Table of Contents

1	Introduction	5
2	Requirements.....	5
2.1	Required Tools	5
2.2	Required Software	5
2.3	Reference Documents.....	5
3	Software Download	6
3.1	Infinadeck Desktop Application	6
3.2	Infinadeck Unreal Plugin	6
4	Installation Guide.....	7
4.1	Infinadeck App	7
4.2	Unreal Plugin.....	7
4.2.1	Plugin Installation.....	7
4.2.2	C++ Building	7
4.2.3	Blueprint Addition.....	8
4.2.4	Wire Blueprint for Interaction	8
4.3	Test System	8
4.4	Required Coding Practices	8
5	Troubleshooting.....	9
6	Uninstall Guide.....	10
6.1	Infinadeck Desktop Application	10
6.2	Unreal Plugin.....	10
7	Usage.....	11
7.1	Plugin Settings.....	11
7.2	Infinadeck Settings	12
7.2.1	Infinadeck Preferences	12
7.2.2	Game Specific Preferences	13
7.3	Keybinds.....	14
7.3.1	Infinadeck Universal Keybind System.....	14
7.3.2	Function List	14
7.4	Common Game Functionality Implementations.....	15
7.4.1	Non-Walking Scenes	15
7.4.2	Fast-Traveling.....	15



7.4.3	Make Infinadeck a Setting that can be Enabled from the menu	15
8	Advanced Documentation	16
8.1	Reference Points	16
8.1.1	Ring	16
8.1.2	Deck Edge/Center Mark.....	17
8.1.3	Reference Panel	18
8.1.4	Colorblind Elements	20
8.1.5	Virtual Deck/Deck Heading Indicator	20
9	Missing a Feature?	21
10	Known Bugs.....	21



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

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 REFERENCE DOCUMENTS

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

Item	Doc Number	Description
1	910-51-00010	Infinadeck Software Manual- Emulator Mode
2		
3		
4		

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



3 SOFTWARE DOWNLOAD

3.1 INFINADECK DESKTOP APPLICATION

The latest version of the Infinadeck Desktop Application software may be found on the Infinadeck Google Drive. Please follow the link to download the latest files. Demo projects and a short video to help with the installation and setup for Unity and Unreal may be found in the same location.

- [Infinadeck Google Drive - Software](#)

The following items will be included with the download:

- Infinadeck Desktop Application Installer

All documentation for the Infinadeck Desktop Application can be found on the Infinadeck Google Drive.

- [Infinadeck Google Drive - Manuals](#)

3.2 INFINADECK UNREAL 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](#)



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 APP

1. Double click *[DownloadLocation]/IDA_[VersionNumber].exe* to begin installing the Infinadeck Desktop Application.
2. Follow any on-screen prompts to finish the installation.

4.2 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 **Infinadeck 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]/InfinadeckUnrealPlugin_[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 C++ Building

To verify that the plugin is included in the project, do the following:

1. Right click **[ProjectName].uproject** & select **"Generate Visual Studio project files"**.
2. Double click **[ProjectName].sln** to open it in Visual Studio.
3. Right click **[ProjectName]** in the Solution Explorer and select **Build**.
4. Once Visual Studio is done (check the Output Tab), close Visual Studio.



4.2.3 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.
 - If you can't see a large folder named *InfinadeckSDK Content* in your Content Browser, try **closing** and **reopening** your project.
 - If you still 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 **+Infinadeck+**.
3. Grab this blueprint and drag it anywhere in your game world.

4.2.4 Wire Blueprint for Interaction

After clicking on the **+Infinadeck+** blueprint instance, the Details pane for the instance should pop open. In the Details section, set the component values as follows:

- **CameraRig:** Set this to your VR Camera Rig, as in the effective "Room Setup." This is the object the **+Infinadeck+** blueprint will parent itself to at runtime and will be the object moved through the game world.
- **Headset:** Set this to your VR Camera, as in the effective "Headset." This is the object the **+Infinadeck+** blueprint will refer to for appropriate display of reference objects.

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.
The Ring Turns Green BUT the Reference Objects Don't Move	Make sure that MovementLevel is set to true.
The Reference Objects Move, But My Room Setup Doesn't Move With It	Make sure that the blueprint's CameraRig is set correctly. Whatever device it is set to will experience the motions you're seeing in the Reference Objects.
I Can't See A Reference Object I Want To See	Check your system's InfinaDATA settings for the Infinadeck Plugin, found here: [UserDirectory]/Documents/My Games/Infinadeck/Config/settings.ini. It is quite likely the desired object is just disabled here.

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 INFINADECK DESKTOP APPLICATION

1. Press the Windows key and type **add or remove**, then press Enter.
2. In the pop-up window, scroll to find **Infinadeck Desktop Application [Version Number]**. **Select it.**
3. Press **Uninstall** to remove the software from your machine.

6.2 UNREAL PLUGIN

1. Delete any and all instances of **+Infinadeck+** from your scene.
2. Remove any custom dependencies between Infinadeck Plugin objects and functions.

Delete the **InfinadeckSDK** folder under *[ProjectLocation]/Plugins*



7 USAGE

There are several ways to interface with the Infinadeck system once it's been installed (see Section **Error! Reference source not found.**, **Error! Reference source not found.**).

7.1 PLUGIN SETTINGS

There are several values you can change within your prefab to make the system function as desired. Separate prefabs from the default system may be saved.

Optional Settings

- **AutoStart(bool)**: Only set to FALSE if you will later call Boot() on +Infinadeck+. Delays the boot cycle of the plugin to keep things lightweight until necessary.
- **FirstLevel(bool)**: Set to TRUE if this is your initial spawn in-scene. This will spawn a splashscreen with important spec information about the treadmill being used and give awareness that the plugin is hooked into the game. Otherwise, this can be set to FALSE.
- **MovementLevel(bool)**: Set to TRUE if this is a scene where the user should be able to walk. Otherwise, this can be set to FALSE.
- **GuaranteeDestroyOnLevelLoad(bool)**: Set to TRUE if this object is getting parented to something that enters DontDestroyOnLoad, to guarantee that it is not maintained between scenes. Otherwise, this can be set to FALSE.

Advanced Settings

- **SpeedGain(float)**: **Do not tweak this value without first setting your WorldScale. Can be used to artificially adjust player's motion vector such that they can move through the game world faster (or slower).** Value is only referenced in the +Infinadeck+ prefab's Start/BeginPlay function, and as such, if you want to modify this value during runtime, draw reference to InfinadeckLocomotion, which should spawn in the scene during runtime, and directly modify its SpeedGain.
- **WorldScale(Vector3)**: This value should be set to the appropriate value to match the world's Scale. At initial settings of 1x1x1, the system expects that the world is set to default settings, such that 1m = 1 Unity Unit.
- **CorrectPosition(bool), CorrectRotation(bool), CorrectScale(bool)**: Set these to TRUE if the position, rotation, or scale of the actor is incorrect at runtime. This will appropriately fix the position, rotation, or scale after the actor is reparented.
- **ShowCollisions(bool)**: Set to TRUE to get a Debug.Log comment every frame where the CameraRig is moved by something other than Infinadeck Locomotion.
- **ShowTreadmillVelocity(bool)**: Set to TRUE to get a Debug.Log comment every frame, reporting back the treadmill speed according to Infinadeck Locomotion.



7.2 INFINADATA SETTINGS

Many settings used by this plugin are stored via InfiNaDATA, which allows the values to be modified via a custom INI file, accessible across game engines.

7.2.1 Infinadeck Preferences

The general preferences can be found at:

User/Documents/My Games/Infinadeck/Config/settings.ini.

[000 General]

- **pluginEnabled(bool)**: Set to TRUE to enable plugin; Otherwise, set to FALSE.
- **hideNotifications(bool)**: Set to TRUE to hide notifications; Otherwise, set to FALSE.
- **demoMode(bool)**: Set to TRUE if using for demo purposes; Otherwise, set to FALSE.
- **keyboardInputEnabled(bool)**: Set to TRUE to enable input; Otherwise, set to FALSE.
- **rightHandDominant(bool)**: Set to TRUE if user prefers using their right hand for menus over their left hand; Otherwise, set to FALSE.
- **rightFootDominant (bool)**: Set to TRUE if user prefers using their right foot for menus over their left foot; Otherwise, set to FALSE.

[010 ReferenceObject - General]

- **overrideTreadmillPosition(bool)**: Set to TRUE to force controlling the position of the reference objects through this settings file. Otherwise, set to FALSE.
- **overrideX(float)**: Set to the X dimension of the reference object's position.
- **overrideY(float)**: Set to the Y dimension of the reference object's position.
- **overrideZ(float)**: Set to the Z dimension of the reference object's position.

[011 ReferenceObject01 - Ring]

- **ringVisibility(bool)**: Set to TRUE to enable the reference ring. Otherwise, set to FALSE.
- **ringModel(int)**: Set to the index of the desired model (0-5).
- **ringDiameter(float)**: Set to the meter-value of the physical ring's major diameter.
- **ringThickness(float)**: Set to the meter-value of the physical ring's major diameter.

[012 ReferenceObject02 - CenterMark]

- **centerVisibility(bool)**: Set to TRUE to enable the center mark. Otherwise, set to FALSE.
- **centerModel(int)**: Set to the index of the desired model (0-4).

[013 ReferenceObject03 - Edge]

- **edgeVisibility(bool)**: Set to TRUE to enable the reference edge. Otherwise, set to FALSE.
- **walkingSurfaceWidth(float)**: Set to the meter-value of the walking surface width.
- **walkingSurfaceEdgeThickness(float)**: Set to the desired meter-value of the walking surface edge thickness.



[014 ReferenceObject04 - Deck]

- **deckVisibility(bool)**: Set to TRUE to enable seeing a virtual copy of the Infinadeck in-game. Otherwise, set to FALSE. Note: If the Speed Gain in-game is set to 1, the deck's surface should appear to move one-to-one.
- **deckHeadingVisibility (bool)**: Set to TRUE to enable seeing a heading indicator along the edges of the deck surface in-game, better indicating where the treadmill is moving. Otherwise, set to FALSE.

[015 ReferenceObject05 - DynamicPanel]

- **dynamicRingPanel(bool)**: Set to TRUE to enable the “dynamic ring panel”, or the reference panel. Otherwise, set to FALSE.
- **panelWidthM(float)**: Set to the meter-value of the ideal horizontal depth of the panel.
- **panelHeightM(float)**: Set to the meter-value of the ideal vertical height of the panel.
- **panelDiameterM(float)**: Set to the meter-value of the preferred inner diameter.
- **bandThicknessPercent(int)**: Set to preferred dynamic band thickness (0-10).
- **topBoundaryThicknessPercent(int)**: Set to preferred top band thickness (0-10).
- **bottomBoundaryThicknessPercent(int)**: Set to preferred bottom band thickness (0-10).
- **dynamicBackdrop(bool)**: Set to TRUE to make the backdrop grow and shrink with the deck speed. Otherwise, set to FALSE.
- **panelPalette(int)**: Set to the desired panel palette (0-4).
- **colorblindMode(bool)**: Set to TRUE to enable seeing reference symbols that better indicate deck state, both for colorblind users and those who want more reference visibility. Will force-enable the reference panel. Otherwise, set to FALSE.
- **dynamicColorblindElements(bool)**: Set to TRUE to make the colorblind elements move dynamically, based on the treadmill's run state. Otherwise, set to FALSE.
- **dynamicColorblindFrames(int)**: Set to the desired number of frames required to move the dynamic colorblind elements through a full loop.
- **maxTreadmillSpeedMetersPerSecond(float)**: Set to the current maximum speed of the treadmill. This number does not affect treadmill performance but does affect the dynamic panel's illustration of deck speed.

[019 Reference: ReferenceObjectProfiles]

- These values are all for easy reference- see the options visualized in Section 8.

7.2.2 Game Specific Preferences

The game-specific preferences can be found at:

User/Documents/My Games/Infinadeck/Games/[gameName]/gameSettings.ini.

[800 General Game Preferences]

- **gameOverrideX(float)**: Set to the X dimension of the reference object's position.
- **gameOverrideY(float)**: Set to the Y dimension of the reference object's position.
- **gameOverrideZ(float)**: Set to the Z dimension of the reference object's position.



7.3 KEYBINDS

7.3.1 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.

7.3.2 Function List

This system supports the following, all exposed via the InfinaDATA settings file at `[UserDirectory]/Documents/My Games/Infinadeck/Config/keybinds.ini`.

[901- Treadmill]

- **ReloadCurrentLevel**(LeftShift by default): Reloads the current level.
- **StopTreadmill**(Space by default): If connected, stops the treadmill.
- **StartTreadmill**(RightShift by default): If connected, starts the treadmill in user mode.
- **ImportPreferences**(Backslash by default): Manually imports the current settings files.
- **ResetPreferences**(Backspace by default): Resets the settings files to default.

[902- Reference Objects]

- **ToggleDeckRing**(Q by default): Enables/disables the Reference Ring.
- **ToggleDeckEdge**(W by default): Enables/disables the Reference Edge.
- **ToggleDeckCenter** (E by default): Enables/disables the Reference Center.
- **ToggleReferencePanel** (R by default): Enables/disables the Reference Panel.
- **ToggleInEngineDeck** (T by default): Enables/disables the in-engine treadmill.
- **ToggleHeading** (Y by default): Enables/disables the in-engine heading marker.
- **ToggleColorblind** (U by default): Enables/disables Colorblind mode.
- **CyclePanelTheme**(I by default): Cycles between Reference Panel themes.
- **CycleCenterModel**(O by default): Cycles between Reference Center models.

[903- Demo]

- **SetTimer1Minute**(Alpha1 by default): Sets the timer to 1 minute.
- **SetTimer2Minute**(Alpha2 by default): Sets the timer to 2 minutes.
- **SetTimer3Minute**(Alpha3 by default): Sets the timer to 3 minutes.
- **SetTimer4Minute**(Alpha4 by default): Sets the timer to 4 minutes.
- **SetTimer5Minute**(Alpha5 by default): Sets the timer to 5 minutes.
- **SetTimer6Minute**(Alpha6 by default): Sets the timer to 6 minutes.
- **SetTimer7Minute**(Alpha7 by default): Sets the timer to 7 minutes.
- **SetTimer8Minute**(Alpha8 by default): Sets the timer to 8 minutes.
- **SetTimer9Minute**(Alpha9 by default): Sets the timer to 9 minutes.
- **SetTimer10Minute**(Alpha0 by default): Sets the timer to 10 minutes.
- **ToggleDemoMode**(Minus by default): Enables/disables demo mode.



7.4 COMMON GAME FUNCTIONALITY IMPLEMENTATIONS

Given that the base functionality of this UI may not really allow for implementation in a more complex game, a walkthrough on the implementation of several common features has been included.

7.4.1 Non-Walking Scenes

In the plugin settings, set **MovementLevel** to FALSE and **GuaranteeDestroyOnLevelLoad** to TRUE for each scene that should have no walking.

7.4.2 Fast-Traveling

While the Infinadeck can let the user walk anywhere, it may be beneficial in larger scenes to allow the user to teleport to various locations (think the size of Egyptian Pyramids). This can be done with either a submenu that pulls up various desirable fast travel locations or traditional VR teleportation.

The only rule to keep in mind is that the user should not be capable of moving on the deck while no visual is displayed on their screen. An instantaneous teleport, or <50ms black screen teleport should be fine, but anything longer should be accompanied by the appropriate calls to the Infinadeck API's `SetTreadmillPause()`.

7.4.3 Make Infinadeck a Setting that can be Enabled from the menu

In the plugin settings, set `AutoStart` to FALSE. Give the menu object a direct link to the instance of **+Infinadeck+** in the game world. The menu object needs to call the `Boot()` function on **+Infinadeck+** to get it to start up appropriately.

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 REFERENCE POINTS

There are a couple critical reference points that users need to have visible to help ground the use to the real world while in virtual reality.

8.1.1 Ring

The virtual ring serves two primary purposes for the user. First, it is a physical object that any user who is feeling afraid, unsafe, or unstable can grab onto. Second, the ring serves as a visual grounding point. Whenever the deck speed is at a mismatch to the user, the user gains a greatly increased chance of nausea that is mitigated by the existence of the ring. As the ring is tied to the deck and not the user, the brain can easily see how much mismatch exists between the deck and the user, and thus prevent any locomotion-based nausea.

8.1.1.1 Ring Model

The virtual ring can be illustrated with various different models. While a higher resolution ring may be preferable for most VR applications, the lower resolution models are available for use by developers who are trying to optimize performance of their games while still using our plugin (for example, during a developer's debugging session, it may be valuable to do a walkthrough of a scene just as someone on the treadmill would do it whilst minimizing the treadmill plugin's impact on drawcalls).

The various ring models can be selected by changing ringModel in settings.ini (see Section 7.2.1).

- ringModel = 0: Minimum detail model, 48 verts (96 tris). Having any less detail stops this model from looking like a ring, which can be deleterious to its purpose, both as a visible reference object and representation of the object in real space around the user.
- ringModel = 1: Low detail model, 128 verts (256 tris). Default value.
- ringModel = 2: Medium detail model, 256 verts (512 tris).
- ringModel = 3: High detail model, 512 verts (1024 tris).
- ringModel = 4: Maximum detail model, 1024 verts (2048 tris). Very accurate model, stands up to all scrutiny, other than an up-close look.
- ringModel = 5: Ludicrous detail model, 4096 verts (8192 tris). No need for the model to be this accurate, save getting very close to it and inspecting it up close.



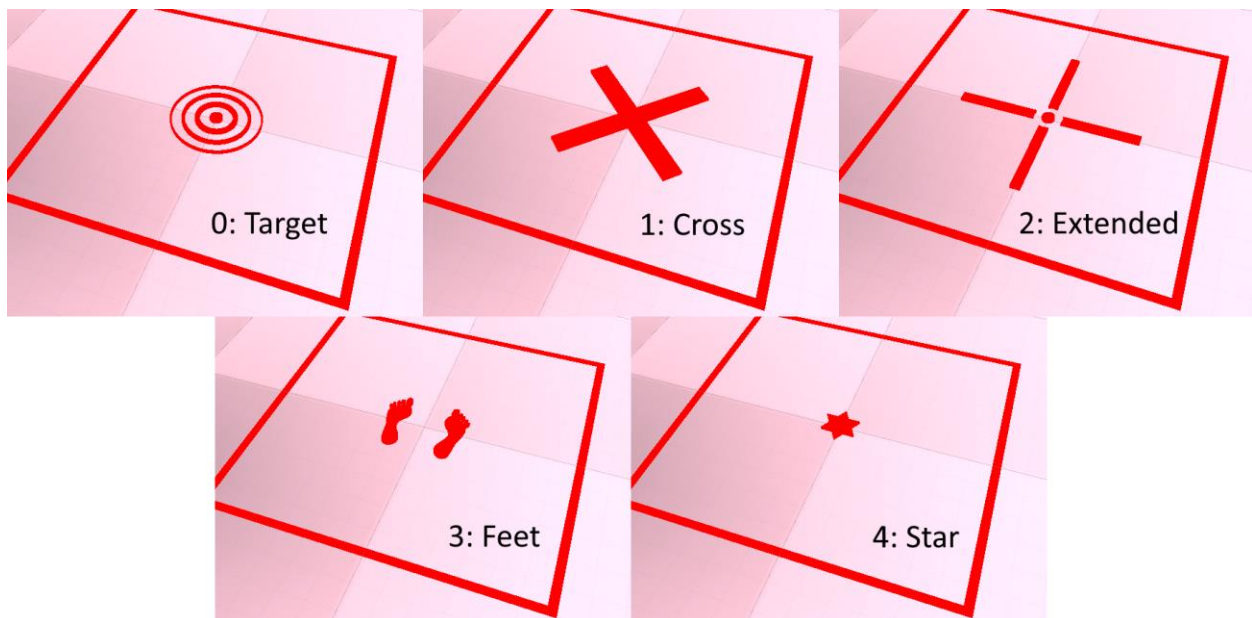
8.1.2 Deck Edge/Center Mark

The deck edge serves a very similar purpose to the ring, functionally being a less-critical floor-based reference point. Given that the system has a speed limit, users can look to see exactly where their stride lands, so that they comfortably and intuitively know the system's limits. The center mark lets users know both how far they are from center.

8.1.2.1 Center Model

The center mark can be illustrated with different models, based on user preferences. These center models can be cycled with the "O" key by default or can be selected by changing centerModel in settings.ini (see Section 7.2.1).

- centerModel = 0: A target shape. Default value.
- centerModel = 1: A diagonal cross shape.
- centerModel = 2: An extended cross shape.
- centerModel = 3: A feet-reminiscent shape.
- centerModel = 4: A 6-pointed star shape.



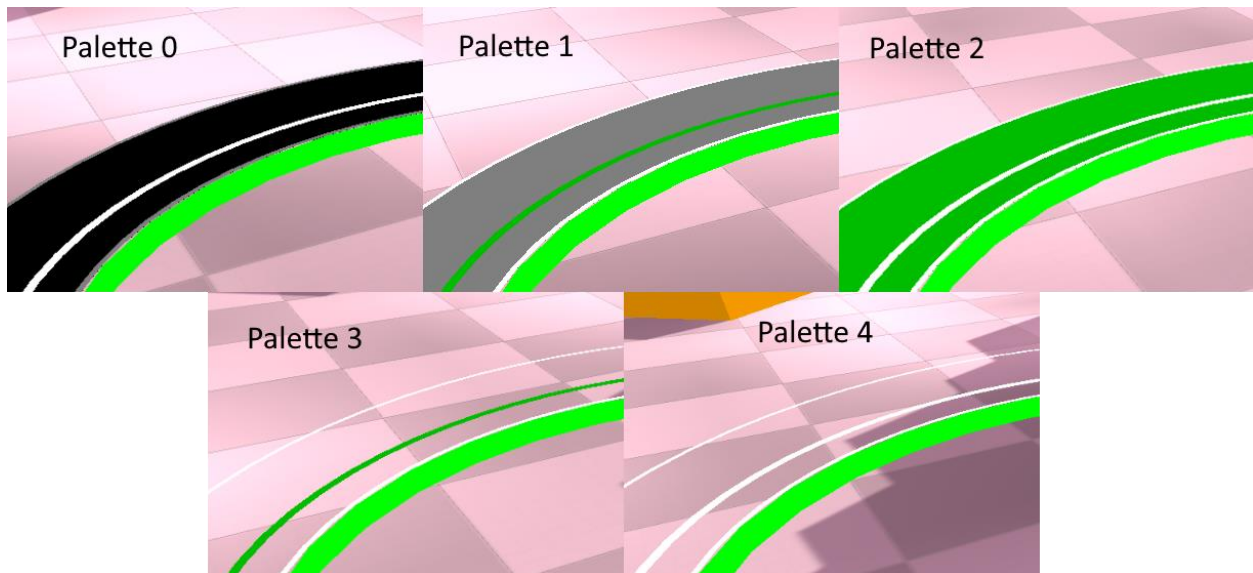
8.1.3 Reference Panel

Some users like having visibility of their current speed relative to the current maximum treadmill speed, to better gauge how fast they can go. The reference panel dynamically illustrates the relative speed in a visual way and is highly customizable to a user's preferences.

8.1.3.1 Panel Palette

The reference panel can appear with different themes. These themes can be cycled with the “I” key by default or can be selected by changing panelPalette in settings.ini (see Section 7.2.1).

- panelPalette = 0: Black background, grey boundaries, white band. Default value.
- panelPalette = 1: Grey background, white boundaries, synced band.
- panelPalette = 2: Synced background, white boundaries, white band.
- panelPalette = 3: No background, white boundaries, synced band.
- panelPalette = 4: No background, white boundaries, white band.



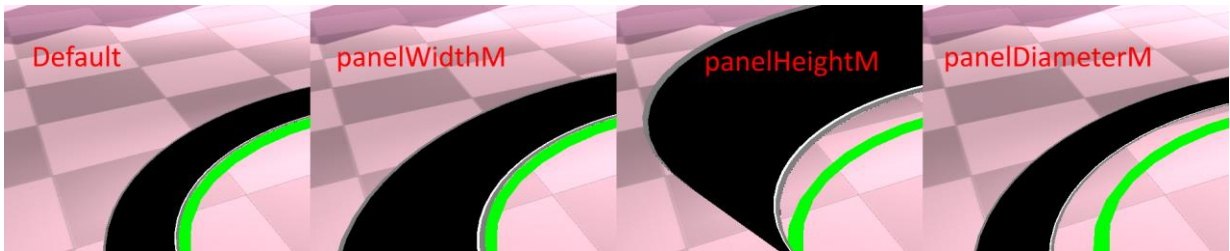
Synced components change color based on the treadmill's current speed relative to its max speed, based on the gradient seen below.



8.1.3.2 Panel Dimensions

The dimensions of the panel can be altered based on the desired preferences of the user. All the dimensions are in meters and can be found in settings.ini (see Section 7.2.1).

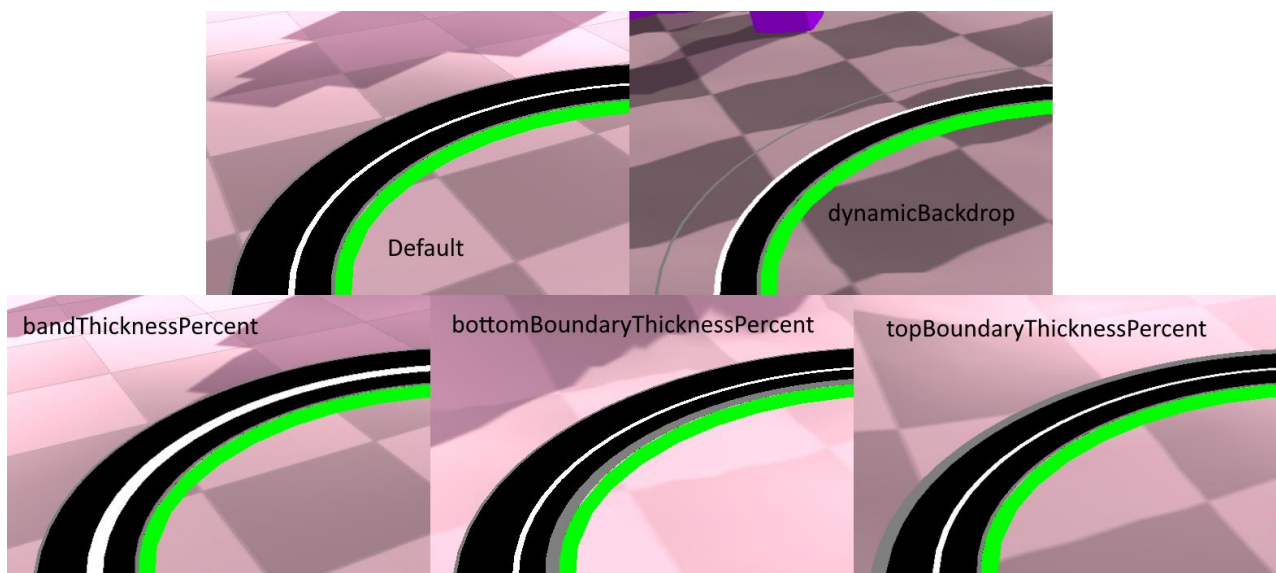
- panelWidthM: The width of the panel.
- panelHeightM: The height of the panel.
- panelDiameterM: The inner diameter of the panel.



8.1.3.3 Panel Components

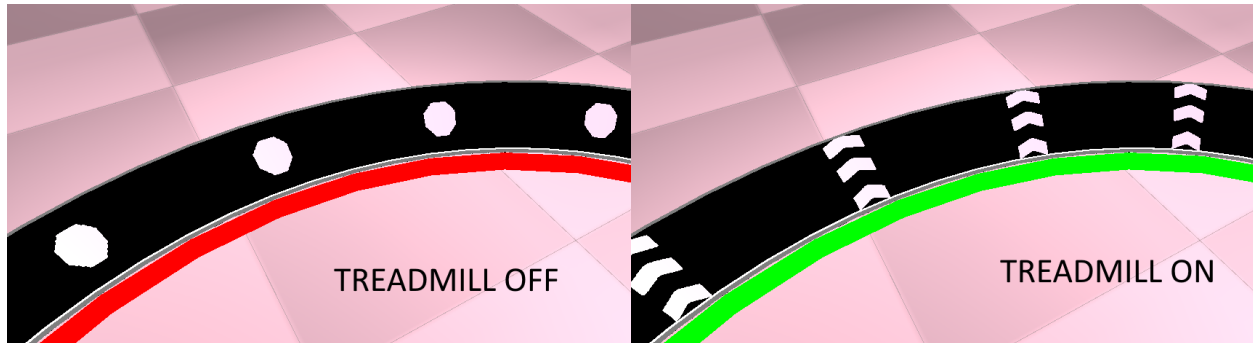
The panel's components can also be altered based on the desired preferences of the user. All of these preferences can be found in settings.ini (see Section 7.2.1).

- dynamicBackdrop: When set to true, will update the backdrop's height to correspond with the dynamic band.
- bandThicknessPercent: Corresponds to the percentage of the panel's size covered by the dynamic band.
- bottomBoundaryThicknessPercent: Corresponds to the percentage of the panel's size covered by the bottom boundary.
- topBoundaryThicknessPercent: Corresponds to the percentage of the panel's size covered by the top boundary.



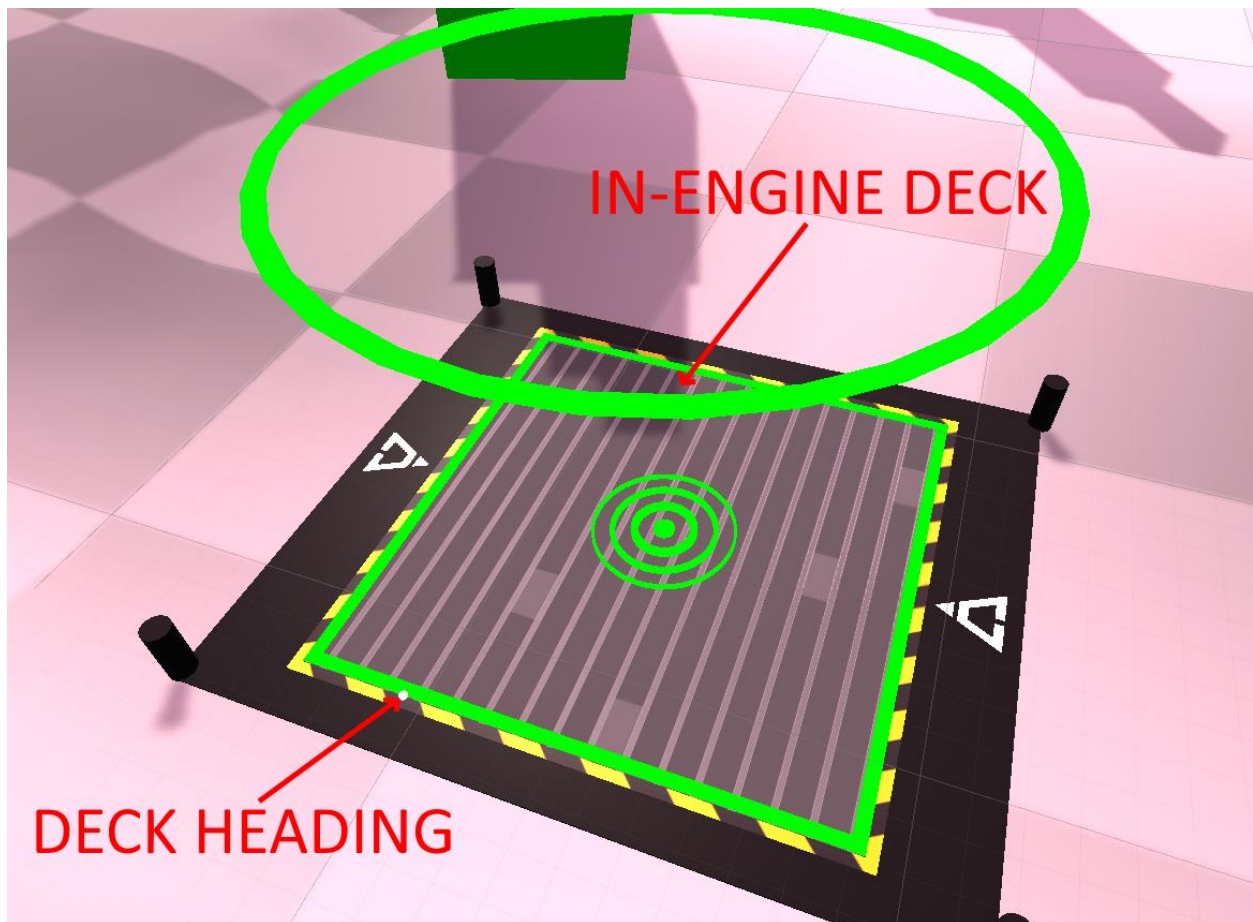
8.1.4 Colorblind Elements

The treadmill's state is usually clarified by changing the color of reference objects. When this isn't sufficient, these symbols can be enabled to clearly tell what state the Infinadeck is in at any given time.



8.1.5 Virtual Deck/Deck Heading Indicator

The virtual copy of the deck allows for checking for parity between deck motion and world translation. In addition, both it and the Deck Heading Indicator give the user a clearer idea of exactly how the deck is moving under their feet, which can be a useful reference point for new users.





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.