Foundation Project Pack

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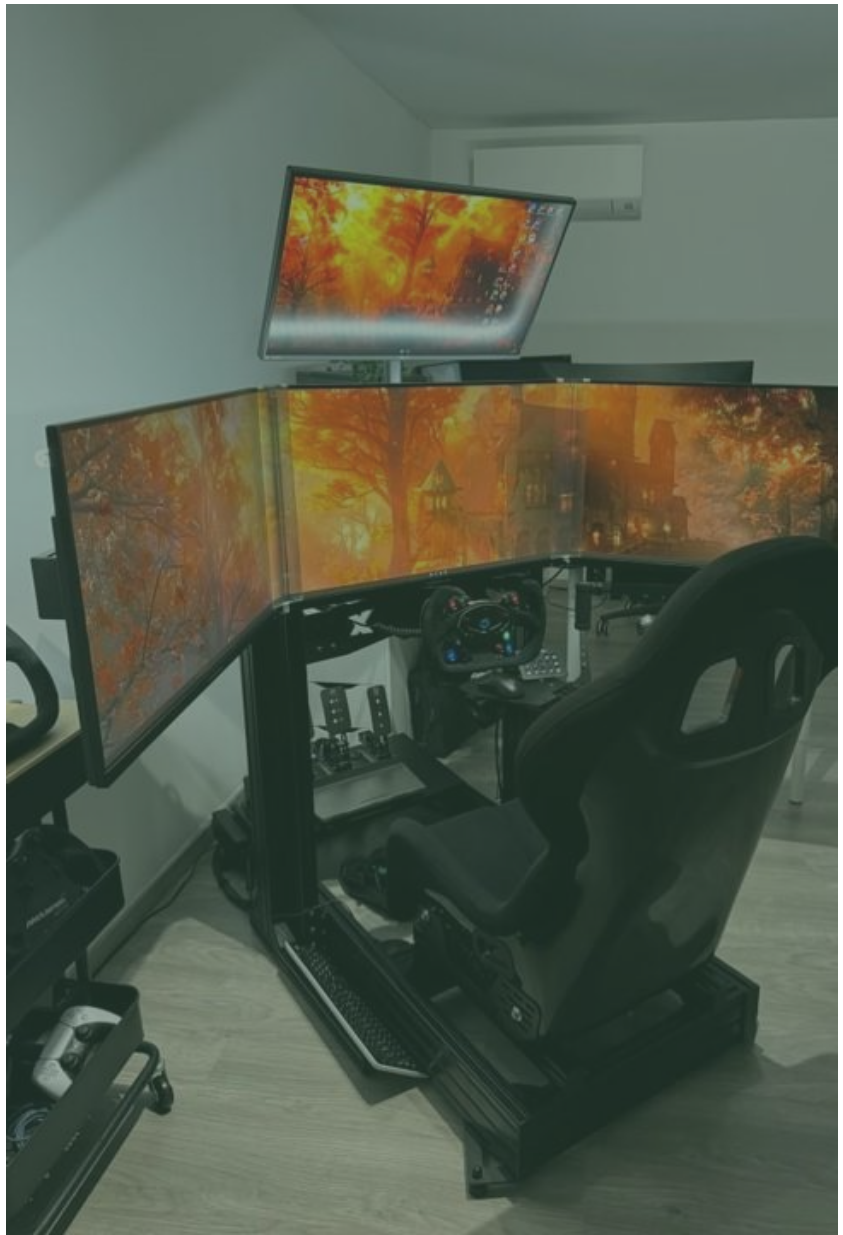
Immersive Racing Room

30th January 2026

Northstead Project Interiors

01 Project Overview



Purpose

This project focuses on converting a spare room into a dedicated racing simulator environment.

The space is intended for regular use (3–5 sessions per week), primarily single-user, with occasional social use.

The priority is a setup that delivers a high level of immersion while remaining clean, controlled, and easy to live with.

Key priorities include:

- Immersion and driving feel are prioritised over visual ‘show’
- Space should feel focused rather than cluttered
- Equipment should be properly integrated, not temporary
- Lighting and glare control are important due to screen use
- Room should remain usable without constant adjustment

02
Existing Space Summary

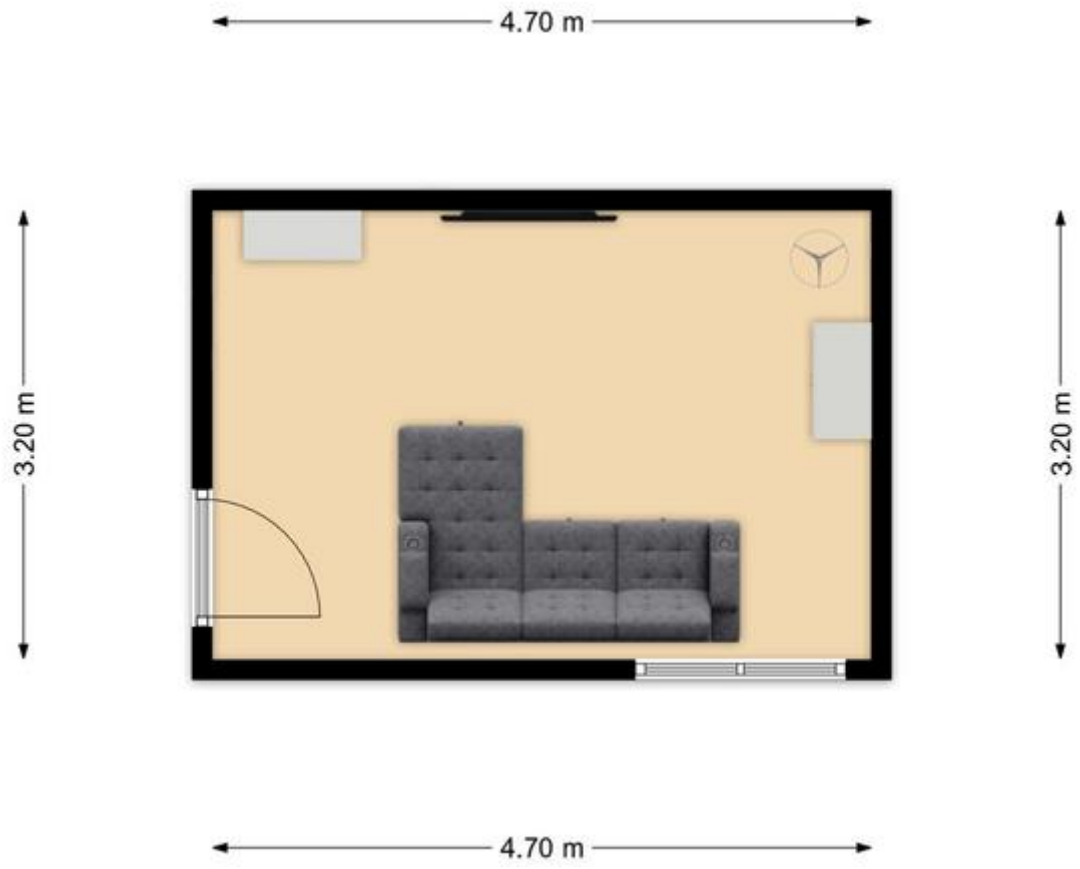
Ground everything in reality

Existing Space: Key details

Room dimensions	3.2m (L) x 4.7m (W)
Ceiling height	2.4m
Access	Single inward-opening door on short wall, 762mm wide, right-hand hinge
Windows	One window (rear wall), left-hand facing Width 1.5m, sill height 0.9m Introduces light control requirement
Existing constraints	- Limited depth for triple-monitor setup without careful positioning - Window introduces glare risk during daytime use - Standard socket positions – additional routing required - Walls generally square; minor variation noted on window wall
Services observed	- 4x double sockets (two usable for AV zone) - Ceiling light centrally positioned - No existing data/ethernet point - No acoustic treatment or soft finishes

Existing Space:
3D Floor plan

Existing Space:
2D Floor plan



03
Resolved Layout Plan

Resolved Layout Plan: Summary

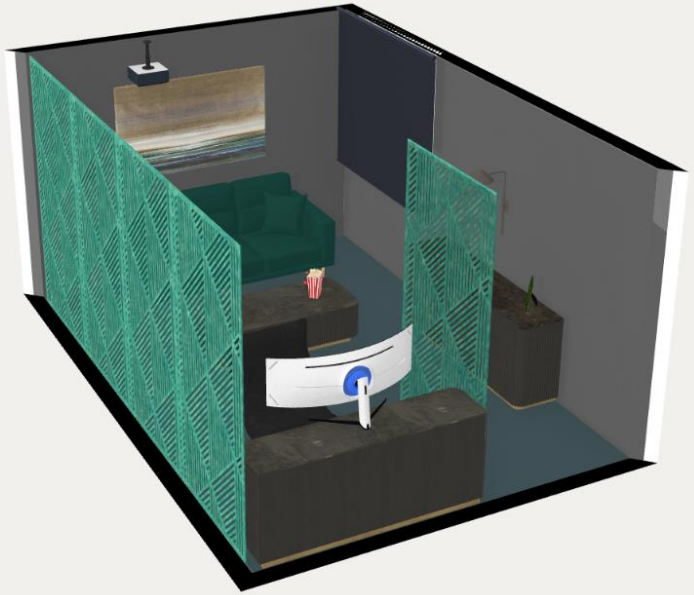
Layout Summary

- Simulator positioned in corner of room furthest from window
- Screen array aligned perpendicular to primary sightline
- Minimum 800mm access maintained along right-hand side
- Window wall treated to reduce light interference, with additional acoustic board to reduce direct light on to monitor
- Power routed behind rig to avoid floor-level cabling
- Projector screen positioned to provide small home cinema and additional light screening for simulator

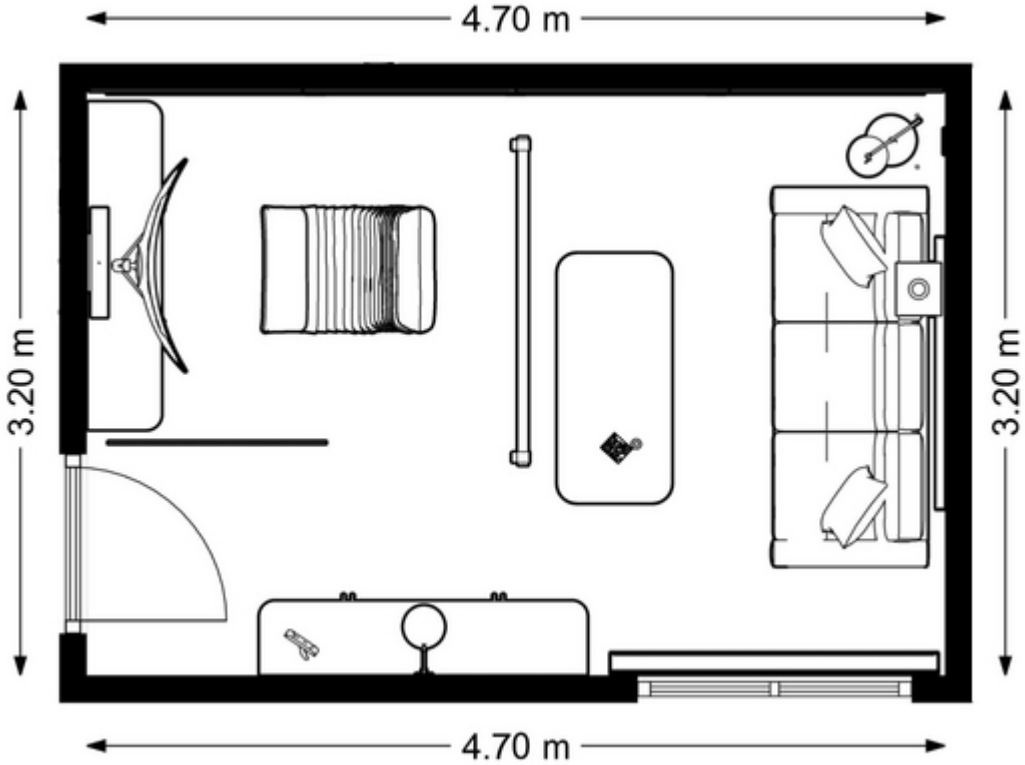
Key Decisions

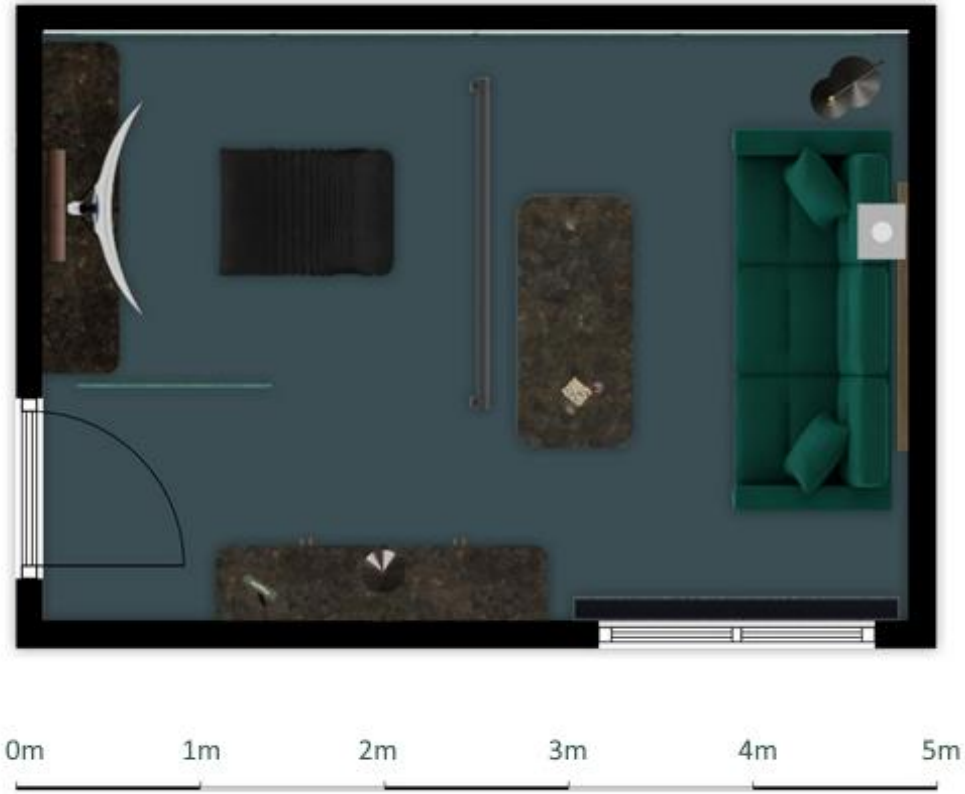
- Triple monitor depth accommodated by reducing rear clearance rather than compromising viewing angle
- Door swing clearance maintained to avoid conflict with rig
- Seating position fixed to align with optimal screen geometry
- Additional storage provided using free-standing aesthetic furniture
- Additional seating provided for home cinema, simulator spectators, and social

Resolved Layout Plan: 3D Floor plan



Resolved Layout Plan: 2D Floor plan





04
Design & Specification Summary

Turn ideas into decisions

Design & Specification Summary

Simulator Setup	Recommended approach: - Aluminium profile rig (mid-tier, 8020-type construction) - Direct drive wheelbase (mid/high torque class) - Load cell pedal set
Display system	Options: - Triple 27–32" monitors - Flat or slight curve - Alternative: single ultrawide screen for space efficiency (reduced immersion)
Seating	- Fixed racing seat for stability, with adjustable mounting rails - Upright GT-style seating position
Desk / secondary use	- Compact desk for casual gaming or work (1200mm width) - Positioned to avoid conflict with main setup, opposite simulator, for occasional use

05 Technical considerations

These are the practical considerations that ensure the space works properly when installed

Technical Considerations

Power & infrastructure	- Minimum 6–8 outlets required within simulator zone - Cable routing to be kept off floor where possible - Consider wall-mounted cable trunking behind rig
AV & data	- Wired internet preferred for stability (ethernet routing required) - PC location to be defined (desk vs dedicated AV position)
Cable management	- Route all power and data behind rig - Avoid floor cables where possible, avoid side-exit cabling where possible - Allow access for maintenance
Acoustics	- Hard surfaces will increase echo - Introduce soft finishes (panels, rug, curtains) - Primary treatment zone: Focus on front-facing absorption and side reflections
Light control	- Window requires blackout solution (glare risk) - Avoid direct overhead light above screen plane - Lighting should be offset or indirect

06
Lighting Approach

Lighting Approach

Functional lighting	- Single diffuse ceiling light retained - Avoid directional spotlights over simulator
Ambient lighting	- Low-level LED strip behind monitors or wall-mounted - Optional wall wash lighting on side wall
Control	- Separate switching preferred (main + ambient) - Dimmable where possible
Key principle	*Lighting should support immersion, not distract from it*

07
Budget & Specification Guide

Budget & Specification Guide

Estimated range	- Entry level: £2,000 – £3,500 - Mid-level (aligned with this layout): £4,500 – £7,500 - High-end: £8,000+
Cost drivers	- Wheelbase and pedals (performance-critical) - Rig stability and adjustability - Display quality
Common cost risks	- Underestimating AV and mounting requirements - Adding accessories before core setup is resolved - Retrofitting cable management after install - Lighting that interferes with screens

Specification Basis

Core Simulator Components	- Aluminium profile rig (e.g. Sim-Lab / Trak Racer type) - Direct drive wheelbase (Fanatec / Simucube class) - Load cell pedal set
Display	- 3x monitors (27”–32”) - Triple monitor stand (rig-mounted or freestanding)
Seating	- Fixed racing seat - Mounting brackets / sliders
AV / Computing	- Gaming PC (mid/high spec) - Monitor cabling + power management
Lighting	- LED strip lighting - Drivers / transformers
Room Elements	- Blackout blind or curtain - Acoustic panels (fabric-wrapped or foam-based) - Floor covering (rug or mat for sound control)

08
Visual Direction

Visual Direction

Direction:

- Dark, controlled environment
- Minimal visual clutter
- Subtle integrated lighting (not decorative)
- Focus on equipment and experience

Item	Hex	
Floor	415459	
Sofa	18443D	
Acoustic panel	387F6C	
Furniture	2E2E2A	
Metal accents	7F6748	
Doors & frames	000000	

09
Next steps

What to do now

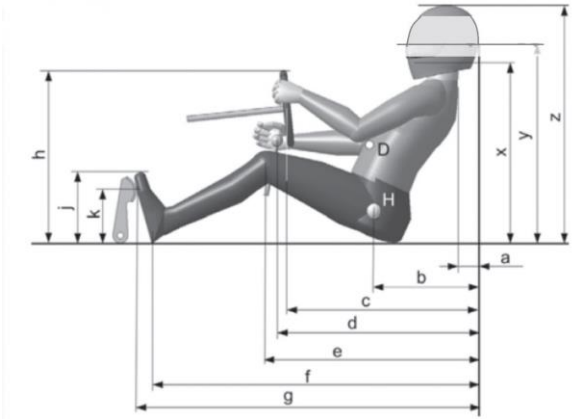
Next Steps

You can now:

- Begin sourcing equipment with clarity
- Set up the room based on the defined layout
- Engage suppliers or installers with a clear plan

If you'd like to take this further, we can:

- Develop the design in more detail
- Refine equipment specification
- Support delivery and setup



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