

PREVIEW



CORE-RX

• ∞ Meta •

• Δ VIVE

• ⊙ Pico

VR MR AR XR
FPV / FBT



THE LOAD-BEARING COLUMN

CORE RX is born around a backbone that usually costs months of research and development: Full Body Tracking ready, tested and certified on Meta Quest, PICO and VIVE - with support for the PICO Motion Trackers, the HTC VIVE Ultimate Trackers, the VIVE Tracker 3.0 via SteamVR and, as a consequence, any PCVR tracker that goes through SteamVR.

On top of this backbone lives the first-person view with a full avatar and inverse kinematics: you look at your hands, your arms, your feet, and the body responds. All without writing a single line of code: you drag, you wire, you play.

The rest of the book is an orderly assembly line; this page exists so that you know, before you begin, what engine you brought home. Version 2 and version 3 are already in the works: every CORE RX license grants the free framework updates and the included assistance.

THE GEAR THAT DRIVES FFRU DEMO RC AND RX

FFRU was born as a game, not as a framework. I had started the code the old way, level by level; then I saw the common denominator: all the combat arenas shared the same mechanics, the enemies could be mounted at runtime starting from their base mesh, and the same held for the player characters. From there the idea: extract the engine and turn it into a framework, to speed up FFRU Challenge Edition and any other fighting game or fitness app. Once I reached a mature version 1, instead of keeping it in a drawer I chose to put it on sale: to give a hand to whoever faces for the first time the hurdle of trackers, first-person IK and OpenXR without external plugins - and, I say it without beating around the bush, to fund the development of my next creations.

An independent developer has no salary: they live off what they create. This is why I ask you one thing only: if this work saves you time and sweat - because the time and sweat I have already put in myself - buy the original. A pirated copy here does not hurt a multinational: it switches off the only support of an indie like you. And without that support there will be no more frameworks like this, and no more games like FFRU.

TRY IT FIRST, FREE

If you have doubts, try FFRU DEMO RC first: it downloads FREE from www.fightforresurrection.app/crx. The core running under it is exactly the one this guide has you assemble step by step, starting from zero (as if you had never opened Unity) up to the build ready for the store. Create your enemies and in a few days turn out your fighting game or your fitness app, instead of spending months of research and development just to understand how trackers work.

ONE PAGE BEFORE EVERYTHING - FROM DEVELOPER TO DEVELOPER

This framework I built alone: designed, written and certified platform by platform, on real hardware. I know what it means to be stuck at night on a detail that does not add up, with the build due in an hour. This is why the contacts sit here up front, even before the contents.

CORE RX - Framework is a no-code assembly kit: the guide takes you from the empty project to the working game without writing a line of code. But if you would rather have a real hand on part of the work - a custom scene, a particular prefab, a custom modification to the source - write from the email of your mad-vf.store account: assistance on the framework is included (I reply ASAP), customizations are on quote (a time and cost estimate ASAP, verifiable delivery). The details live in chapter 17.

It is a simple pact: inside CORE RX are the six-to-eight most stubborn months of research and development in VR - certified multi-platform Full Body Tracking, first person with avatar and inverse kinematics - delivered working for the price of a handful of assets. If this work saves you months, buy the original: it is what funds version 2 and version 3, already in the works, and every license grants the free updates and the included assistance. No shared copies, no pirated versions: every copy carries a forensic watermark, but above all it carries the signature of the one who built it for you.

OFFICIAL CONTACTS

Email: store@mad-vf.store - write from the address of your account on the MAD-VF store: request recognized on the fly

WhatsApp: +39 329 0777222

Always-current reference: mad-vf.store, the Contacts and Support page

ERRATA

This book I have re-checked several times, with the help of AI and line by line in person; some error may still have escaped me. If you find something that does not add up, write to me (email above): I fix it with an errata note in the following editions - and every updated edition reaches you FREE, because your license includes the updates. One more reason to own the original.

Happy assembling.

Fabio Cecchini - MAD-VF

CORE RX - FRAMEWORK

FFRU CHALLENGE EDITION - ENGINE

USER GUIDE

English edition

No-code assembly kit for Unity

VR - MR - XR - AR (the four game modes)

Meta Quest - PICO - VIVE - SteamVR

Reference source: r147

Unity 6000.5.4f1

(certified version: see chapter 0)

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MAD-VF - Fabio Cecchini

www.mad-vf.store

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BEFORE YOU BEGIN

Who this guide is for and how to read it

WHO THIS GUIDE IS FOR: from the absolute beginner (you have never opened Unity) to the veteran. The writing rule: at worst, the veteran gets bored; the beginner must NEVER go hunting for an entry in the editor. Every step is ONE single action, with the full, literal path, followed right away by a line on WHAT YOU SEE if it worked.

FOR EVERY BODY: whether you are two meters tall or small-framed, at calibration the avatar takes YOUR measurements and the enemies rescale in proportion. And the game can be played seated or with reduced mobility: you move with the thumbsticks, you strike with the motion of your arms (hands stretched forward and a thumbstick charge into the enemies are enough for the hits to land; even then the hit must be re-armed between one hit and the next: back off for an instant and charge in again, rules in 6.5), kicks and jump live on a button. Inclusivity is not an extra: it is in the engine. (And a note of honesty: the closed fist is the full hit; with an open hand the same hit is worth half.)

HOW TO READ THIS GUIDE:

- Paths are written like this: Window > Menu > Submenu > Exact entry.
- The EXACT names of buttons, fields and files are written as you see them on screen.
- IMAGES CUT TO THE BONE, BY CHOICE: the guide is well-laid-out text (callouts, boxes, tables) and the WHAT YOU SEE descriptions replace the screenshots; the few images included are the truly indispensable ones (the collision matrix in 3.4 and the Animator diagrams of chapters 6 and 7).
- NECESSITY TIERS in the assembly steps: REQUIRED = without it, the feature does not start; RECOMMENDED = it starts, but the experience is crippled; OPTIONAL = clean fallback already in the engine (voices, extra clips, effects). Where a list carries no labels, the tier is declared at the top of the list.
- The framework's GOLDEN RULES live in Appendix A: keep them in sight during assembly and go over them again when the work is done.

SUPPORT NOTE (a preview of chapter 17): if you would rather not do part of this work on your own, one email is all it takes: support included for the framework, a quote for customizations (chapter 17).

CHAPTER 0

REQUIREMENTS (hardware, accounts, Unity Hub, editor 6000.5.4f1)

CERTIFICATION STATEMENT: the CORE RX framework is certified on Unity 6000.5.4f1. Use EXACTLY that version. Other versions of the 6000.x family might work, but they are not certified: if something does not add up on a different version, the first question from support will be which editor you are using.

0.1 The hardware you need

- A PC with 64-bit Windows 10 or 11. Recommended: 16 GB of RAM, a dedicated GPU, and at least 30 GB free on disk (editor + project + Android cache).
- One of the supported headsets: Meta Quest (2, 3, 3S, Pro), PICO (4, 4 Ultra, Neo 3), VIVE (XR Elite, Focus 3), or a PCVR headset via SteamVR.
- A USB-C data cable (not charge-only) to connect the headset to the PC when building.
- Optional, only for full-body tracking of the legs: 2 trackers (VIVE Ultimate / VIVE 3.0 on SteamVR, PICO Motion Tracker on PICO). They are covered in the platform chapters: to get started you do NOT need them.

0.2 The accounts you need

1. A Unity account (Unity ID), free: you create it during the installation in step 0.3. The Personal license is perfectly fine for working with the framework.
2. WHAT YOU DO NOT NEED NOW: the store developer accounts (Meta, PICO, etc.) are needed ONLY when you decide to publish. They are covered in chapter 13, store notes. Do not create them now.

0.3 Installing Unity Hub

1. Open your browser and go to unity.com/download.

WHAT YOU SEE: the Unity Hub download page, with a download button for Windows.

2. Click the download button for Windows and save the file.
3. Double-click the downloaded file (UnityHubSetup.exe) and complete the installation with Next all the way through.

WHAT YOU SEE: when it finishes, the Unity Hub window opens.

4. In the Unity Hub window, click Sign in at the top right and log in with your Unity ID (or create it now by following the screens).

WHAT YOU SEE: at the top right, your account's initial or avatar appears.

0.4 Installing the Unity 6000.5.4f1 editor with the Android modules

1. In Unity Hub, in the left column click Installs.
2. Click the Install Editor button at the top right.

WHAT YOU SEE: a window with the list of official releases.

3. Look for version 6000.5.4f1 in the list. If it does not appear among the proposed releases: click the Archive tab in the same window (it sits next to Official releases and Pre-releases), open Unity's download archive page in your browser, find 6000.5.4f1 and use the Install button, which reopens Unity Hub on the right version.

4. In the Add modules screen, tick Android Build Support.
5. Expand the arrow next to Android Build Support and check that the two sub-modules are ALSO ticked: OpenJDK and Android SDK & NDK Tools.

WHAT YOU SEE: three entries ticked under the Android section.

6. Click Install (or Continue and then Install) and wait: the download is several GB.

WHAT YOU SEE: when it finishes, the 6000.5.4f1 card appears in Installs with the Android icon among the modules.

CHAPTER 17**SUPPORT (when you want a real hand)**

The framework is a no-code assembly kit, but you do not have to do everything on your own. Support travels by EMAIL, and there is ONE GOLDEN RULE only: ALWAYS write from the email address tied to your account on the MAD-VF store (the one you bought the framework with): the request is recognized on the fly and work starts right away, with no verification in between.

FRAMEWORK ASSISTANCE (included): email me at store@mad-vf.store and I reply ASAP.

PERSONALIZED ASSISTANCE AND CUSTOMIZATIONS (on quote): email me explaining your need - for example step-by-step support, the creation of a custom component or scene, the modification of a source feature (example: the two-handed magic of chapter 9.1) - and you receive a time and cost estimate ASAP. Work is done to a verifiable delivery.

Secondary channel: WhatsApp +39 329 0777222. Always-current reference: mad-vf.store, the Contacts and Support page.

END OF PREVIEW

This free preview contains 11 pages taken exactly as they are from the official guide: the cover, the load-bearing column, the developer-to-developer page with the contacts up front, the title page, the complete contents, chapter 0 with the requirements and chapter 17 on support, plus the back cover here at the close.

THE COMPLETE GUIDE

CORE RX - Framework - User Guide, English edition: **84 A4 pages**, eighteen chapters and six appendices. It takes you step by step from the empty project to the Android build ready for the store: every step is ONE single action, with the exact path and what you will see on screen. Inside you also find the complete knob reference - twenty pages, every Inspector field explained, with the tooltips taken word for word from the source - and the symptom-remedy table to print.

IN THE BOX

- The complete user guide in English and in Italian (84 pages each)
- The EULA in English and in Italian
- The Quick Reference in English and in Italian (4 pages, with the PLATFORM SWITCH checklist)
- The framework source: 42 scripts + 5 tools, with the 1202-entry source inventory

LICENSE AND ASSISTANCE

Framework updates are INCLUDED in the license (EULA, sec. 6) and distributed at no extra cost. Assistance on the framework is included: write from the email of your store account and I reply ASAP. Custom scenes, prefabs and custom modifications are on quote: you receive a time and cost estimate ASAP, and work is done to a verifiable delivery.

TRY IT FOR FREE BEFORE YOU BUY

FFRU DEMO RC is created with CORE RX as its engine: download it free from www.fightforresurrection.app/crx and play, to see first hand what you can create.

mad-vf.store

MAD-VF - Fabio Cecchini

Meta Quest - PICO - VIVE - SteamVR

CORE RX - FRAMEWORK

From the empty project to your VR game. Without writing a line of code.

WHAT IT IS

CORE RX is a no-code assembly kit for Unity: you take the template, drag the pieces, wire the knobs and get a complete arena beat-em-up in virtual and mixed reality. The engine is already all inside, certified piece by piece on Meta Quest, PICO, VIVE and SteamVR.

WHAT YOU CAN CREATE

Your VR/MR fighting game: full-body avatar, enemies with artificial intelligence, weapons, magic, combos, scores and a second wind. Four game modes: VR, MR, XR and AR. And not only games: punches, kicks and dodges are real training, and with CORE RX you build VR fitness apps without code. From the empty scene to the Android build ready for the store.

WHO IT IS FOR

From the absolute beginner who has never opened Unity to the veteran who wants to save months of work. The guide takes you step by step from zero to the complete demo: every step is ONE single action, with the exact path and what you will see on screen. Eighteen chapters, six appendices, the complete reference of every knob and the symptom-remedy table to print.

FOR EVERY BODY

Two meters tall or small-framed: at calibration the avatar takes your measurements and the enemies rescale in proportion. Played standing or seated: movement on the thumbsticks, strikes with the motion of your arms (hands stretched forward and a thumbstick charge into the enemies are enough), kicks and jump on a button. No body is left out.

FBT AND FIRST PERSON, READY

Full Body Tracking tested and certified on Meta Quest, PICO and VIVE: PICO Motion Tracker, VIVE Ultimate Tracker, VIVE Tracker 3.0 and every PCVR tracker via SteamVR. First-person view with a full avatar and inverse kinematics, zero code: months of research and development already done, tested and delivered. Version 2 and 3 already in the works: the license includes the free updates and the assistance.

WHAT IS NOT INCLUDED AND WHAT YOU NEED

3D models, animations, audio and fonts are NOT included: you use your own (to start, the free Mixamo ones are enough). You need Unity 6000.5.4f1 and a supported headset: Meta Quest, PICO, VIVE or PCVR via SteamVR.

YOU ARE NOT ALONE

Assistance on the framework is included: write from the email of your mad-vf.store account and I reply ASAP. Custom scenes, prefabs and custom modifications are on quote: same email, you receive a time and cost estimate ASAP, work is done to a verifiable delivery.

FFRU DEMO RC

FFRU DEMO RC is created with CORE RX as its engine: download it free from www.fightforresurrection.app/crx and play, to see first hand what you can create. Not just theory: a framework tested on real hardware.

Meta Quest - PICO - VIVE - SteamVR

MAD-VF - Fabio Cecchini

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