

HYBRID REALITY DI LUISA VITTADELLO

TECHNICAL DATA SHEET

Virtual Fire-Safety Training

Emergency management - low risk

Virtual Reality training system

Proprietary virtual-reality fire-safety training software, developed by **Hybrid Reality di Luisa Vittadello** and specialized in low-risk emergency management. The application runs standalone on Meta Quest headsets, with no PC and no additional physical equipment. The trainee moves through an immersive environment, performs the actions required by the emergency procedure, and is assessed in real time on time and errors. The course consists of a tutorial scene and two exercises, **Fire Extinguishing** and **Evacuation**.

PLATFORM

**Meta Quest
standalone**

SESSION LENGTH

5 - 20 min

COMPATIBILITY

Quest 2 and later

APP SIZE

525 MB

PLAY SPACE

**Stationary / room
scale**

LICENSE

**Perpetual, per
headset**

LANGUAGE

Italian

APPLICATION STRUCTURE

TUTORIAL

Introductory scene to become familiar with the application and the controls: rotating the view to observe the environment and interacting with objects using the controllers.

FIRE-EXTINGUISHING SCENE

Exercise on first-response fire extinguishing: alarm, alerting emergency services, selecting and using the appropriate extinguisher, compartmentation.

EVACUATION SCENE

Exercise on evacuation: reading the emergency plan, escape route, identifying the emergency exit and the assembly point.

TRAINING CONTENT AND ACTIVITIES

FIRE-EXTINGUISHING SCENE

- Observing the environment and identifying fire-fighting equipment
- Activating the fire alarm button
- Calling emergency services by dialing the correct Fire Brigade number (115)
- Identifying the fire class and selecting the appropriate extinguisher
- Extinguishing a Class A fire and a fire of electrical origin (>3 kV)
- Haptic controller feedback during the extinguishing action
- Compartmentation by closing doors and windows
- Correct management of flows, avoiding their crossing

EVACUATION SCENE

- Activating the alarm and calling emergency services
- Handling a person caught in the flames using the correct procedure
- Reading and interpreting the emergency and evacuation plan
- Following the escape route without using the elevator
- Identifying the correct emergency exit
- Reaching the correct assembly point
- Distractor elements along the route, to assess independent decision-making under stress



ASSESSMENT SYSTEM

Each exercise records the **completion time** and the **number of errors** for each session. At the end, the result is shown directly in the headset and can be reviewed by the trainer, who can thus analyze participants' performance and guide them in improving their reactions.

One session is recorded at a time.

Session summary	Time	Errors
Fire-Extinguishing Scene	05:34	4
Evacuation Scene	01:37	2

Example of the summary shown at the end of the exercises.

ERRORS DETECTED - FIRE EXTINGUISHING

- Fire alarm not activated
- Call to 115 not made or wrong number
- Class A fire not extinguished or wrong extinguisher
- Fire of electrical origin (>3 kV) not extinguished or wrong extinguisher
- Window not closed
- Crossing of flows or wrong extinguisher

ERRORS DETECTED - EVACUATION

- Fire alarm not activated
- Call to 115 not made or wrong number
- Person caught in the flames not helped, or helped improperly with the extinguisher
- Evacuation plan not carried out correctly
- Use of the elevator
- Failure to reach the correct assembly point

TECHNICAL REQUIREMENTS

Platform	Meta Quest (Oculus Quest) headsets - standalone operation, no PC required
Minimum version	Meta Quest 2
Compatible headsets	All Meta Quest generations: Quest 2, Quest Pro, Quest 3S, Quest 3
Play space	Stationary or room scale
Interaction	Standard headset and controllers; no physical accessories or pressurized objects
Language	Italian
Storage space	525 MB
Average session length	Approximately 5 to 20 minutes
Uses	Unlimited throughout the day, one recorded session at a time
Distribution	Installation in Developer Mode (sideload); not available on the Meta Store

RECOMMENDED MODELS

Feature	Meta Quest 3S	Meta Quest 3
Resolution per eye	1832 × 1920 px	2064 × 2208 px (4K, +30% pixels)
Field of view	96° horiz. / 90° vert.	110° horiz. / 96° vert.
Storage	128 GB or 256 GB	512 GB

The software is also fully optimized for the Meta Quest 2, still available at a low cost. The version with the highest resolution and field of view is the Meta Quest 3.

INSTALLATION AND DISTRIBUTION

TURNKEY

The customer purchases the recommended Meta Quest headset and sends it to the Hybrid Reality technician, who installs the software and returns the headset complete and ready to use.

DIY

The installation file is provided together with a detailed guide. The procedure requires enabling Developer Mode on the Meta account, the use of a PC, and intermediate technical skills.

LICENSE

Type	Permanent (perpetual) license tied to the individual headset, with no fees or subscriptions
Use	Unlimited throughout the day, with use of one session at a time
Training	Initial usage training included
Ownership	Proprietary software registered with SIAE