Hologram Table

Introduction to Euclideon's 3D Hologram Table

There's a scene that often appears in Science Fiction movies where, in the command room, there is a 3-dimensional miniature duplicate of a region of a real-world floating on the table, known as a "sand table". It is used so commanders can consider strategy and issue battle plans to their troops.

Science Fiction films often guides or promotes technological innovations and many people have been working on ways to create this holographic sand table. The problem was that developers only had the technology to limit one person at a time to be able view the table, which made it impractical for a commercial market.
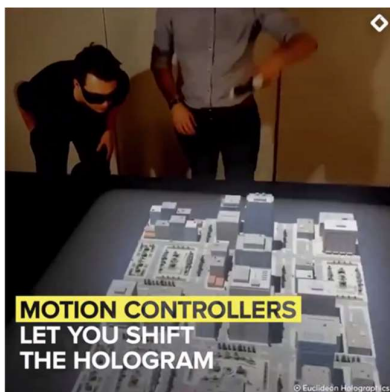
It seemed the only solution to this problem would be VR and AR headsets – but if multiple views couldn't be displayed from a single screen then each user would need to be looking at their own screen built into the headset.
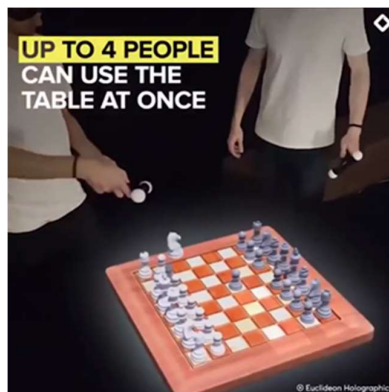
Euclideon has found a better way…..

Euclideon's Hologram Table

Euclideon's Hologram Table is by far the most advanced interactive desktop hologram system that supports multiple viewers. Users may conduct design and planning, build bridges, simulate warfare, play chess, demonstrate their latest building designs, the most advanced prototypes, medical research or archaeological museum displays and much, much more.
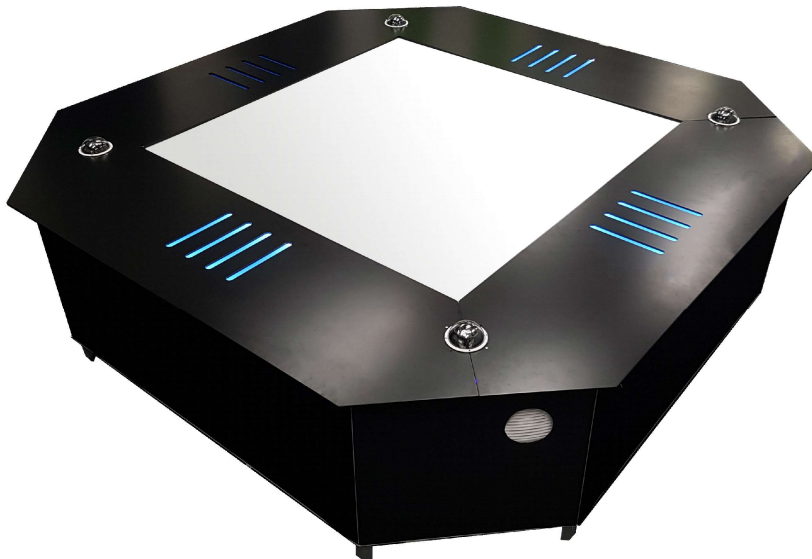

City Planning

Interactive Gaming

Design Demos

Euclideon Hologram Table Specifications

- Table Dimensions
    - Floor Space approx. 2.1m x 2.1m
    - 62cm Height
    - Weight approx. 75kg

- Features
    - Aluminum Table Frame
    - 2 Sets of Wearables (glasses and control wands)
    - 5.1 Surround Sound Speakers
    - All necessary cables and adapters for country of sale
    - Optional - External monitor display and video capture (AVI)

The Freestanding Table will also have the ability to have custom appearances applied to the outside. This will allow customers to change the appearance to match their corporate branding or whatever they are showing on the table (e.g. a car manufacturer might have leather panels on the outside to match their car's leather seats, etc.).

Requirements

The Hologram Table requires a darkened, temperature controlled environment with no IR-light sources (especially no sunlight). Low-level room lighting is possible – contact us for guidance in this matter.

A single, standard Electrical power socket is required – preferably on the floor underneath where the table will be positioned. Additional power wall sockets are required for the wand and glasses USB charging station.

Software

The Hologram Table comes with all required software to make using the Table simple:

- **HoloServer** (runs on your own standalone computer)
    - Allows you to control the table remotely from another computer or tablet on your network. You can turn off the Table, view the status of all of your Tables, and even roll out update packages when we send you software updates.
- **Holoverse Professional** (runs on the Hologram Table)
    - Table-based User Interface to
        - Load, Save and Create Presentations (Projects - UDP files)
        - Import models into a scene
        - Create, edit and delete bookmarks
        - Add sound effects/music
        - Resize, rotate, re-colour, duplicate and delete models
        - Move zoom/pan control with wand to explore the scene

Supported File Formats

The following model file formats can be imported directly into Holoverse Professional for display on the table:

- UDS – Euclideon's own proprietary format, incorporating Unlimited Detail™.
- OBJ – A universal format for 3D image editing applications.
- FBX – A standard binary file format specification used by many 3D tools.
- DAE – Interchange file used to convert between different 3D graphics applications.
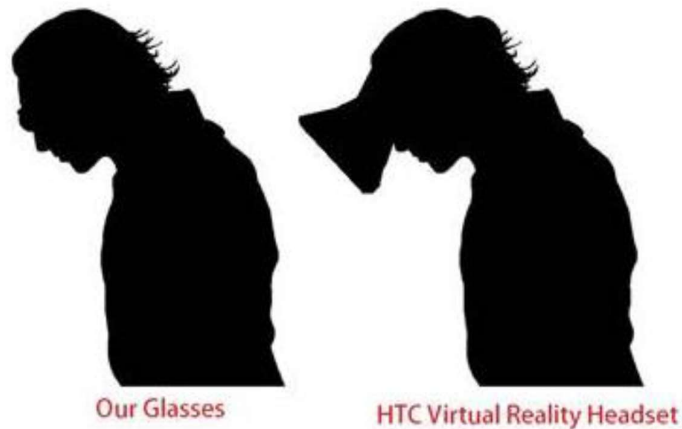
Alternatively, Geoverse Convert allows you to convert laser scan or polygon data into UDS format to utilise Unlimited Detail™. This allows the table to be able to load models from nearly all 3D sources, including design drawings, point cloud data, polygon models, laser scans, photogrammetry, and more.

Input formats: OBJ, BIN, E57, FBX, LAS, LAZ, FLS, PTS, PLY, PTX

Why is the Euclideon 3D Hologram Table Special?

There are no other existing Multi-User Hologram Tables on the market. The closest competitive technologies are Virtual Reality and Augmented Reality headsets. Despite being reasonably successful in the entertainment industry, the adoption of these headsets has not been well received in the corporate market. Many of the business that tried them initially found them to be too heavy and intrusive for meetings, internally or with clients.

Our Glasses   HTC Virtual Reality Headset

The Euclideon Hologram Table does not require a bulky headset for viewing and instead uses light-weight glasses. For a User, the ability to simply slip glasses on and off to view presentations instead of a whole headset makes the experience an effortless one rather than being clunky and awkward.

Additionally as they are glasses (not screens), they allow for ordinary social interaction to occur without needing to remove the glasses in order to see or interact with one another.

Euclideon's Unlimited Detail™

Behind the scenes, Euclideon's Unlimited Detail technology (UD) removes the requirement for expensive, high-end graphics hardware when rendering 3D scenes. At its core, UD operates an extremely efficient 3D search algorithm that can render unlimited quantities of point cloud data in real-time. It can display models of previously unimaginable sizes at high frame-rates, making the Hologram Table one of the most powerful tools available for viewing and interacting with 3D data.

The streaming capabilities of UD allow the data be accessed by users across the world via the internet or their own Private Network. This affords a company to interlink their Hologram Tables and offers the possibility for large-scale, simultaneous collaboration by teams around the world.

Using Unlimited Detail™, 3D data size of Gigabytes (GB), Terabytes (TB - 1,000 GB), or Petabytes (PB - 1,000,000 GB) and even larger can be loaded almost instantly.

About Euclideon

Euclideon is a cutting-edge technology company founded in Brisbane Australia, it is the global leader in visualization of massive real-world 3D data and Hologram Technology.
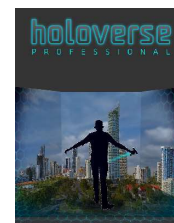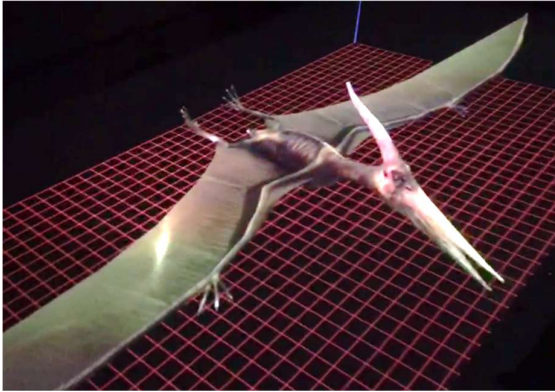
Euclideon have developed some groundbreaking computer graphics technologies such as:

- A technology that eliminates the need for high-end graphics cards and seems to give computers unlimited 3D graphics power.
- A technology that allows computers to run data of enormous size from central servers that can be streamed securely over the internet.
- A technology that enriches laser scans and creates near-perfect copies of the real world.
- Euclideon Hologram Room technology that has been used around the world for a variety of uses, including training & Simulation, demonstrations and virtual experiences (We have a 40-room hologram entertainment centre on the Gold Coast, Australia called "HoloVerse")
- Automatic programming for 3D content development and visualization using our own Content Development Kit.

Euclideon technology is suitable for a wide variety of industries that work with massive quantity 3D data from the real-world, including Geospatial, Smart City, Cultural heritage, Scientific Research institutions & universities, Mining, Water Conservancy, Forestry, Electrical Power Grid, Healthcare / Medicine, Architecture & Planning, Simulation, Education & Training, Entertainment, Tourism, Public security, etc.

For more information about the Euclideon 3D Hologram Table, or any of the other Euclideon Technologies, please email office@meixnerimaging.com or phone +43 1 587 96 16.