



# DEEPFRAME ONE - USER GUIDE

## VERSION 1.4 - ORIGINAL USER GUIDE

### FLAT SCREEN VERSION





It is important to read this manual before using the DeepFrame One, and to follow advices and instructions on safety, operation and general use to get the best possible experience with your DeepFrame One.

The DeepFrame One is designed to showcase products and other objects in combination with free floating 3D video animations. The DeepFrame One is design protected in shape and form. Realfiction and DeepFrame One are registered trademarks owned by Realfiction ApS.

## **Content:**

<b>Security precautions</b>	<b>4</b>
<b>Product warranty</b>	<b>5</b>
<b>When receiving the DeepFrame One</b>	<b>6</b>
<b>Package content</b>	<b>6</b>
<b>Adjusting the hologram</b>	<b>7</b>
<b>Adjusting the hologram over longer distances</b>	<b>9</b>
<b>Adjusting the audio volume</b>	<b>11</b>
<b>Changing the sound to include the external speakers</b>	<b>12</b>
<b>Formatting content for use with flat screen</b>	<b>13</b>
<b>Supported file formats and use of file names</b>	<b>14</b>
<b>Trouble shooting</b>	<b>15</b>

## Eu-declaration of conformity

EU-declaration of conformity	
<p>Realfiction ApS Øster Alle 42, 7 th DK-2100 Copenhagen Ø</p>	
<p>Hereby declares that DeepFrame One meets in Council Directive 2006/42/EC of 17. Maj 2006 on machinery, and amending Directive 95/16/EC. And Council Directive 2014/30/EC of 26. of 26. February 2014. EMC Directive.</p>	
<p>DeepFrame One is designed to function as RF concave window frame for 3D hologram that can enlarge the image from an OLED screen. Content and scope of the color show is designed in an interchangeable memory card and worked with the client's wishes. DeepFrame One consists of a powder painted frame, constructed as a metal frame, which holds a very large glass optic a 15 mm thick glass with radius 2800 mm at a length and width of 1150mm x 1150mm. DeepFrame One comes with a floor rack to hold the large glass optic, which must be mechanically coupled to the disc. This disk is the cabinet for the OLED screen, in which the OLED screen is suspended in its mounting holes. This very large optic with a coated transparent mirror can be used as accessories for CE approved TV / monitor, as magnifying glass to enlarge the screen size, which at the same time can create a mixed reality display.</p>	
<p>Furthermore, the product in accordance with The Danish Working Environment Authority's Executive Order no. 693 of 10 of jun. 2012.</p>	
<p>DK-2100 Copenhagen, date 18/6-2018</p> <div data-bbox="691 1429 898 1659"><p>Clas Dyrholm CEO, Realfiction ApS</p></div>	

## Security precautions

- Installation of the DeepFrame One must be done according to this manual, and must be performed by an adult (Over 21 years).
- The DeepFrame One must be placed on a horizontal, stable and plane surface.
- Do not install the DeepFrame One in narrow passageways or other places where a lot of people and equipment has to pass close by, thereby risking collisions that might cause the Dreamoc to tip over causing human injuries and damage to property.
- The DeepFrame One must be connected to a power outlet with current and voltage as described in the product factsheet
- During service and cleaning the DeepFrame One must be turned off, and the power plug removed from the outlet. To disconnect the apparatus from the mains, the plug must be pulled out from the mains socket, therefore the mains plug shall be readily operable.
- Handle the OLED screen with care. The OLED is a very delicate display device: Do not press its surface with excessive force, hit it or prick it with a sharp object.
- No sand or dust! Fine sand or dust entering the system could cause malfunctions or defects.
- No water or oil! Water or oil entering the system could cause electric shock, malfunctions or defects.
- The surface of the system will be slightly warm when using, but this does not indicate a fault.
- Environmental conditions: Operating Temperature 0 °C to 35 °C , Operating Humidity 10 % to 80 %, Storage Temperature -20 °C to 60 °C, Storage Humidity 5 % to 80 %
- Do not place the DeepFrame One in direct sunlight or near magnetism, corrosive gas or ultrasonic humidifier. This could cause malfunction.
- Do not expose the DeepFrame One to soot or steam. Thick soot or steam could damage the electrical components and cause malfunctions.
- Always remember to secure ground the metal chassis to appropriate electrical installation ground.

Product warranty

The manufacturers warranty includes production, materials and function of the supplied equipment. The warranty is valid only if the supplied material is used as described in this manual, and to the purpose to which it has been designed.

The warranty includes repair or replacement of malfunctioning components.

The warranty is no longer valid if any unauthorized repairs or replacement of parts have been performed on the product.

**The DeepFrame consists of a high-precision glass optic technology. Due to the very large size of the glass optic, small lines, bubbles or dots can be seen, and some tolerance in color temperature for the transparency can be found from batch to batch. Horizontal and vertical lines can have some distortion, but only minor in main area, meaning 150 mm from the edges. This shows the limitations of the current technology, and does not indicate a faulty product.**

The OLED/LCD screen is a product of high precision technology. Out of the total pixels 0.01% or less pixels may be out (black dots) or may remain lit as coloured dots (red, blue, and green). This shows the limitations of the current technology, and does not indicate a fault.

Please note that we cannot be held liable for any damage or failure that has occurred due to the use of third party constructed flight case or packaging. This limitation shall also apply if the original packaging has been altered in any way. In the event of claims the item must be sent back to us in its original packaging.

LG OLED screens may get burn-in problems if the same image is displayed on the screen for a long time. To reduce this problem, LG recommends the following:

- Avoid displaying static images on the screen for more than a couple of minutes at a time.
- Never have the screen turned on more than an absolute maximum of 16 hours a day.
- When the OLED screen has been turned on for 4 hours or more, the OLED screen must be powered down the following way:

Power off the OLED screen with the remote control.

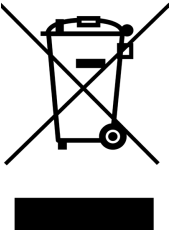
Wait 20 minutes after powering the OLED screens down with the remote control, before removing the power from the OLED screen.

**Failure to follow these recommendations will result in any active warranty to become void.**

Correct Disposal of This Product

(Waste Electrical & Electronic Equipment)

(Applicable in the European Union and other European countries with separate collection systems)

	<p>This marking shown on the product or its literature, indicates that it should not be disposed with other household wastes at the end of its working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources.</p> <p>Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take this item for environmentally safe recycling. Business users should contact their supplier and check the terms and conditions of the purchase contract. This product should not be mixed with other commercial wastes for disposal.</p>
---	---



## WHEN RECEIVING THE DEEPFRAME ONE

The DeepFrame One comes in two flightcases that holds all the different parts.

Please note that we cannot be hold responsible for any damage or failure that has occurred due to the use of third party constructed flight case or packaging. This limitation shall also apply if the original packaging has been altered in any way.

### Package content

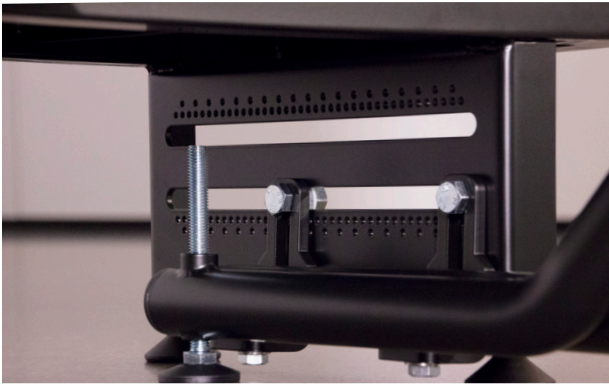


- |                                       |                                |
|---------------------------------------|--------------------------------|
| 1. 1 x Glass optic                    | 7. 1 x Spirit level            |
| 2. 1 x Installation & Service Toolbox | 8. 1 x OLED housing            |
| 3. 2 x Leg Frames                     | 9. 1 x Brightsign Media Player |
| 4. 1 x OLED 65" TV                    | 10. 1 x Top protector          |
| 5. 1 x Optic Safety Bracket           | 11. 2 x Extension rods         |
| 6. 1 x Speaker module                 | 12. 2 x Corner protectors      |

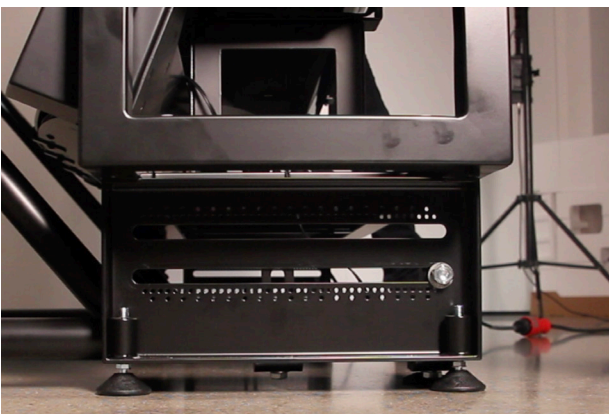
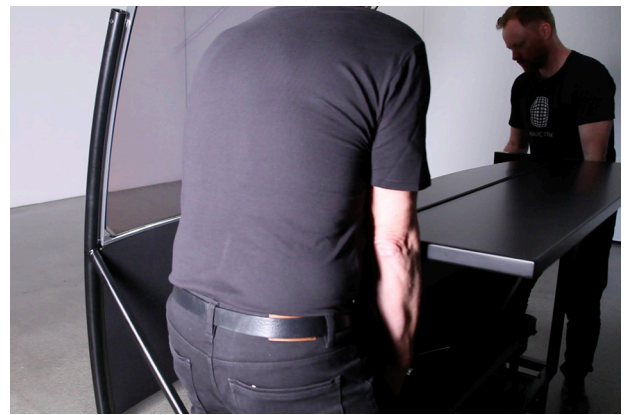
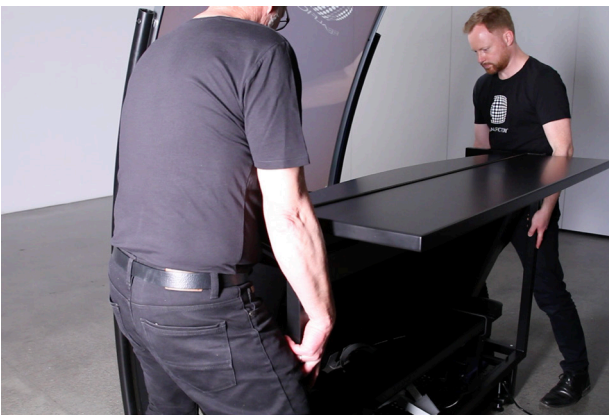


## Adjusting the hologram

1. Loosen the bolts in the groove underneath the OLED Housing.



2. Gently move the OLED Housing back and forth to adjust the distance your hologram appears in, and also the size of it.

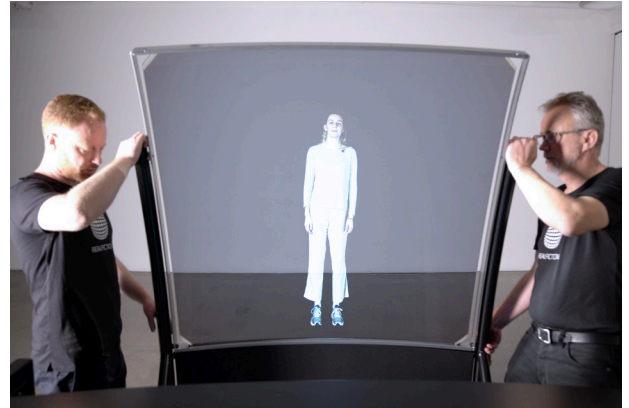
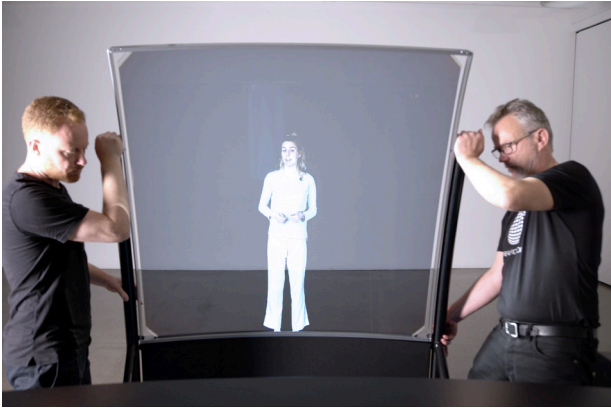


Screen closest to the Optical lens = the hologram is small

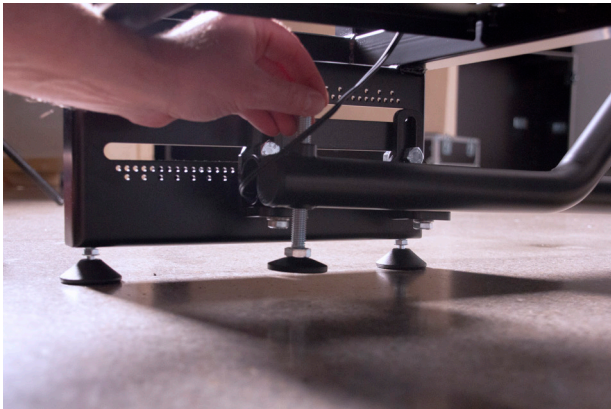


Screen furthest away from the Optical lens = the hologram is big

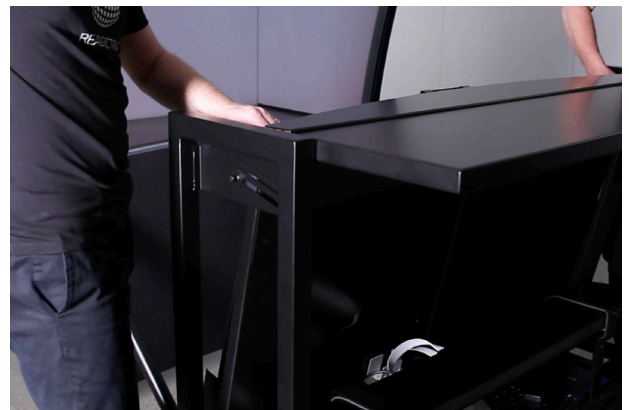
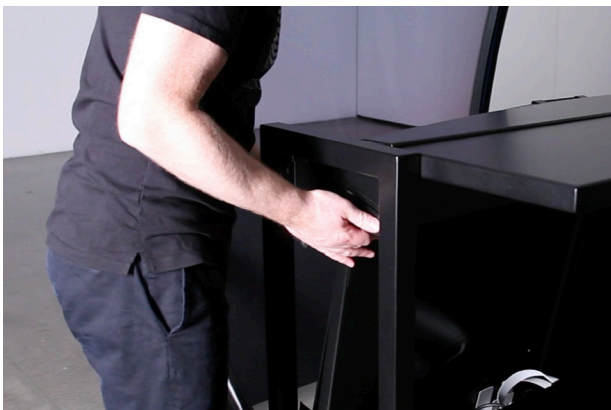
3. Then gently tilt both the Leg Frames back and forth to adjust the height position of the hologram.



4. When you are satisfied, adjust the feet to maintain the height positioning and tighten the bolts again underneath the OLED Housing



5. Loosen the screws for the Screen Adjuster located in each side, and tilt the OLED Screen to obtain the same angle as the DeepFrame Optical Lens. This step is to eliminate distortions in the hologram.



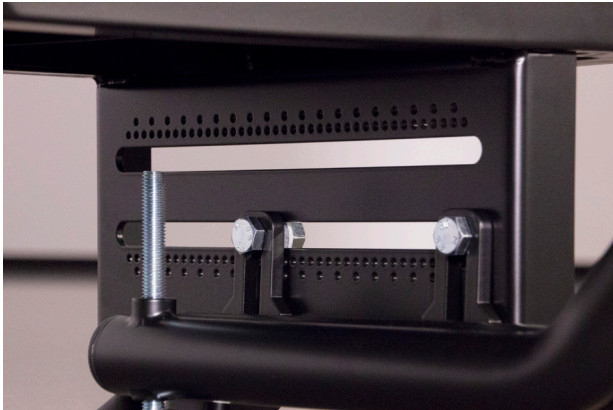
6. When done, tighten the screws on the Screen Adjuster again, making sure that the position is the same for each side.



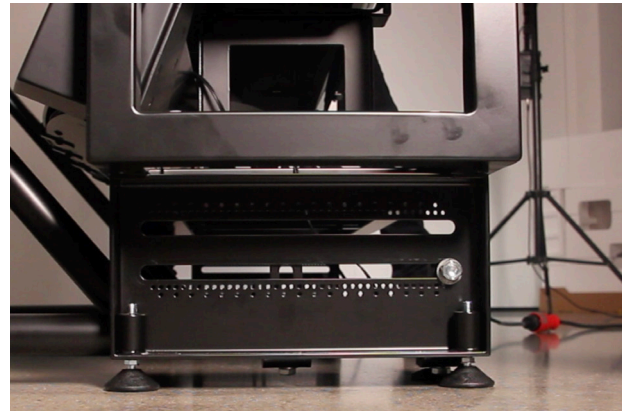
## Adjusting the hologram

If you wish to create a hologram that appears further out in the distance, you can attach the Extension Rods to the Leg Frames.

1. Loosen the bolts in the groove underneath the OLED Housing.



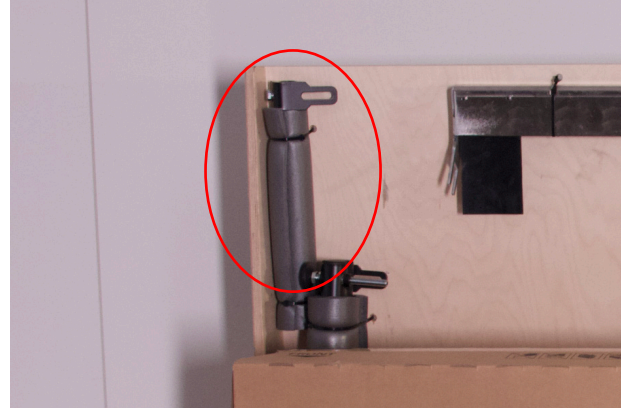
2. Gently slide the Leg Frames forward so the first bracket slides past the OLED Housing. Then remove it.



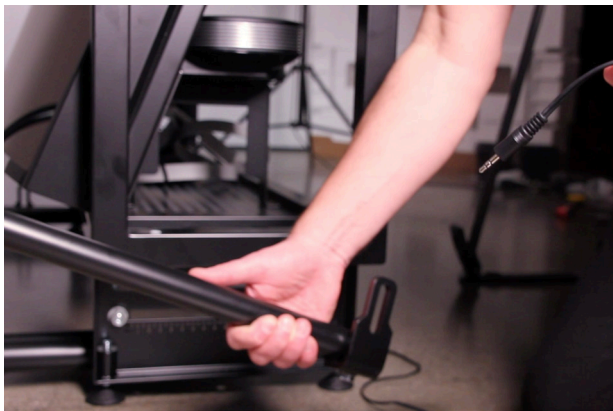
3. Then loosen the remaining screw underneath each Leg Frame, as this will allow you to slide in the Extension Rods.



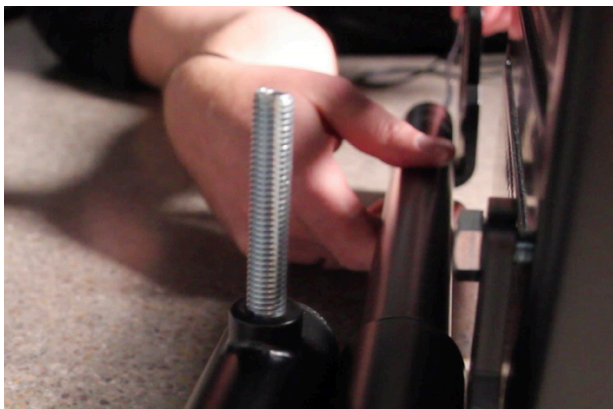
4. Take out the Extension Rods from the flight case.



5. Take the speaker cable and guide it through the Extension Rod.

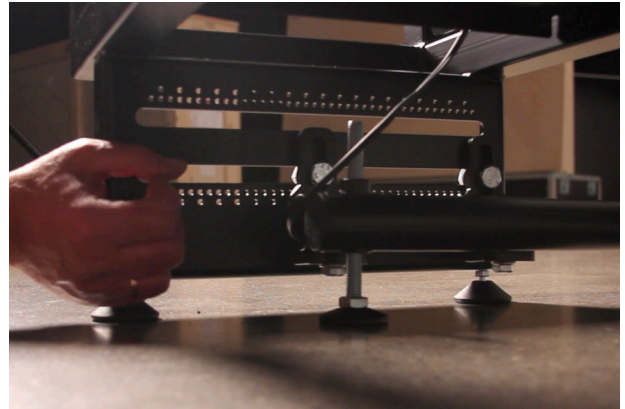


6. Slide on both Extension Rods and tighten the screws underneath each Leg Frame again.

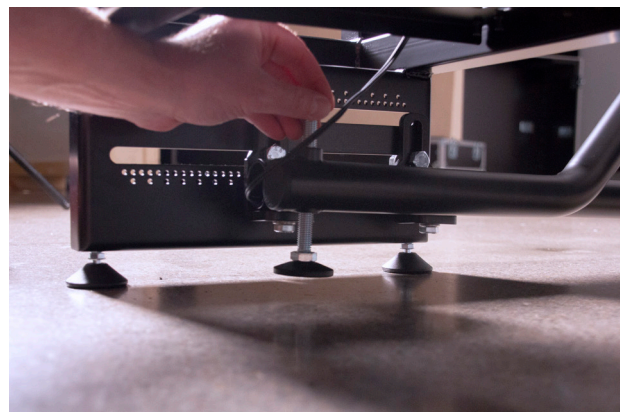




7. Attach the brackets on the Extension Rods to the groove in the OLED Housing.

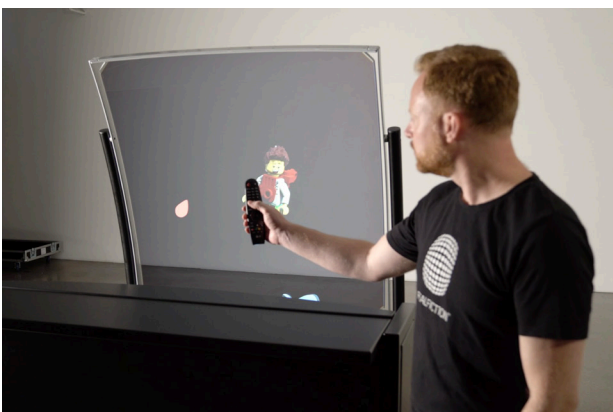


8. Adjust the display and finish by tightening the bolts underneath again to secure the positioning.



## Adjusting the volume

1. Take the remote control and point it towards the DeepFrame Optical Lens. Use the volume up/down buttons to adjust the volume.

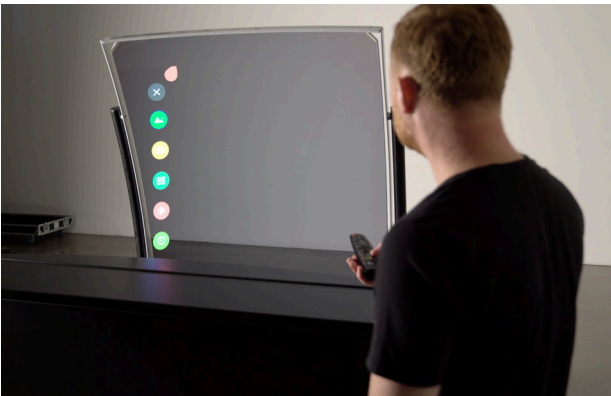


## Changing the sound to include the external speakers

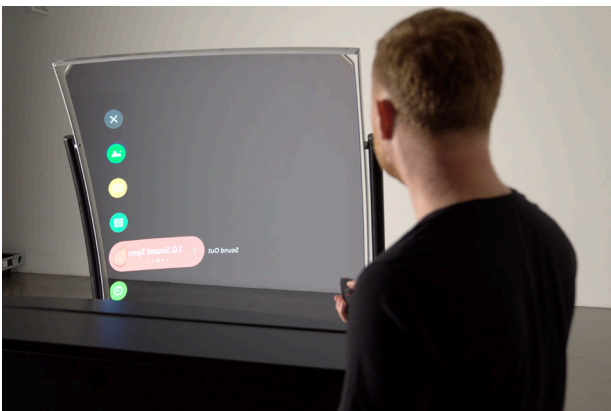
1. Take the remote control and point it towards the DeepFrame Optical Lens.



2. Press the Gear button for the settings menu – look towards the extreme left side of the picture and go the icon 'Sound Settings'.



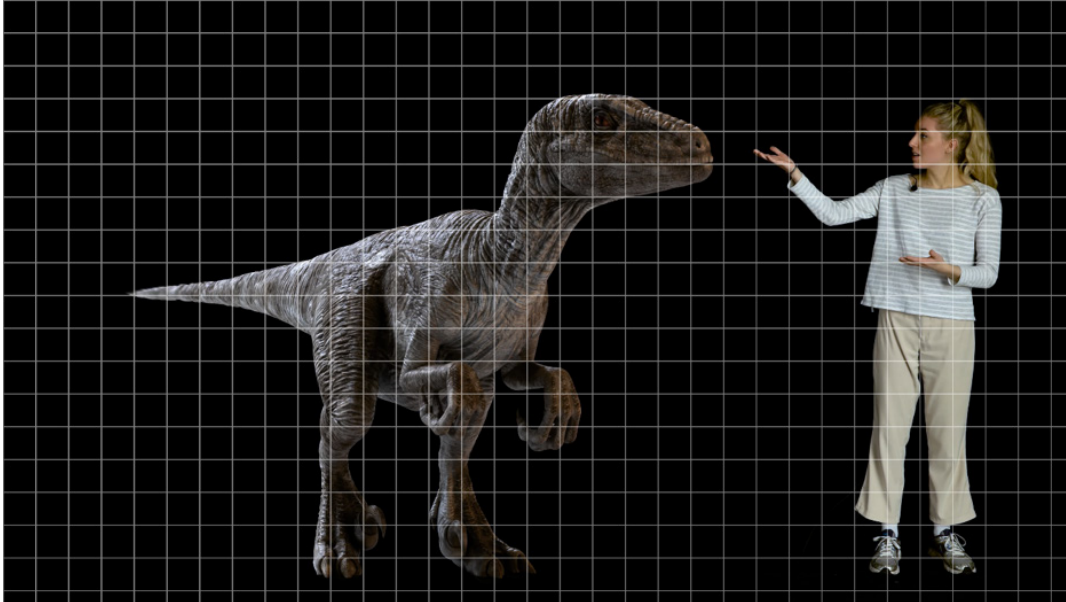
3. Then choose the 'Speaker Out' setting and change the setting to 'Internal Speaker'.



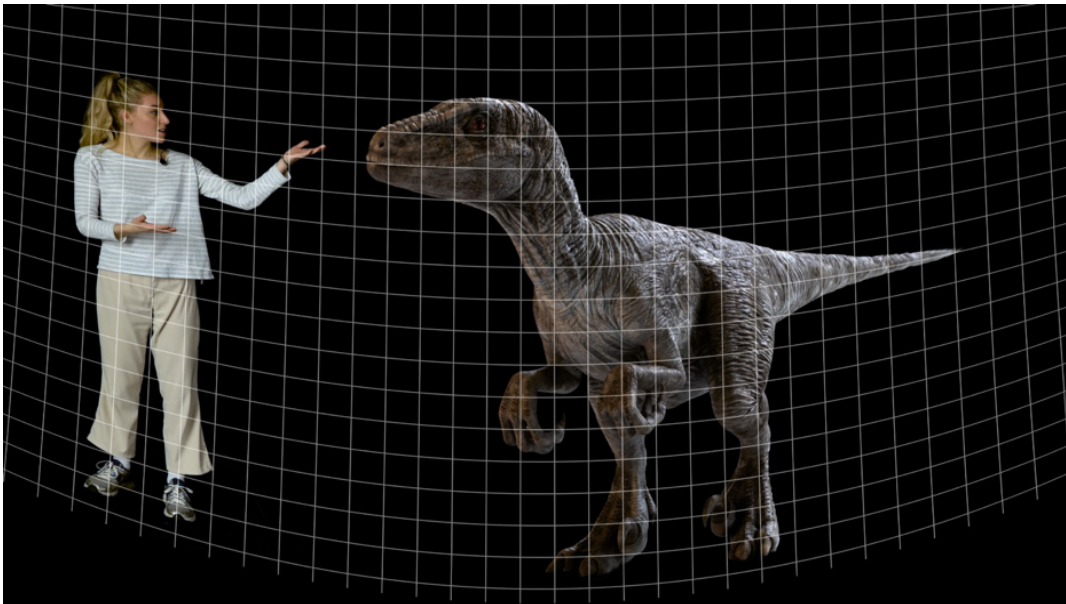
## Formatting content for use with flat screen

Because of the nature of the curved DeepFrame optic, the content playing on a flat screen needs to be compensated so it appears correct in the holographic reflection. An “Adobe After Effects” template (“DeepFrame Content Template for Flatscreen” found on [www.realfiction.com/support](http://www.realfiction.com/support)) does all the distortion needed to make the hologram look as intended. The distortion will look like this.

Original material:



Output from After Effects template:



The output is heavily distorted and flipped horizontally, but this will ensure that the reflected hologram looks correct (like the original material).

If you don't have access to Adobe After Effects, or wish to use other software for the image compensation, please use the 2 supplied image files to make your own distortion (“4K-GridNew000.png” & “4K-GridNewDistorted000.png”). Use distortion or lens correction filters to make the 4K-GridNew000.png look exactly like the 4K-GridNewDistorted000.png, and use those settings on your content. Don't forget to flip the content in the horizontal axis as well.



## Supported file formats and use of file names

The following movie codecs and file types are supported:

### 4K OLED screen

Video Codec: 4K video must be encoded as a H.265 (HEVC) file; it cannot be encoded as H.264.

Resolution: The maximum supported resolution is 3840x2160x60p or 4096x2160x60p.

Image aspect ratio: 16:9

Color Depth: 4K video can be encoded at 4:2:0 subsampling with 8 bits (Main Profile) or 10 bits (Main 10 Profile) of depth.

To avoid problems with file naming, generally avoid file names longer than 20 characters and avoid using special characters including non roman letters.

## How to solve playback issues using Mac

There can be a playback issue when copying movies from Mac to an SD card.

With the introduction of OSX 10.5, Mac changed the behavior of their hidden file structure. This is causing some compatibility problems across platforms in general. More information can be found here:

[http://en.wikipedia.org/wiki/.DS\\_Store](http://en.wikipedia.org/wiki/.DS_Store)

There is no such issue when copying movies from PC.

Watch the How to solve playback issues using Mac tutorial video (<https://vimeo.com/108581691>)

This tutorial shows you how to delete the hidden files and make your movie work on Dreamoc Diamond when copied from Mac.

Download Delete Hidden Files program on Realfiction's support page: [Realfiction.com/support/deepframe-one](http://Realfiction.com/support/deepframe-one)

## Trouble shooting

Problem		Action
1	No power	<ul style="list-style-type: none"><li>• Make sure the AC outlet has power.</li><li>• Make sure that the power cable is properly inserted.</li></ul>
2	Film is lacking or not playing at all.	<ul style="list-style-type: none"><li>• If the movies have been copied to the SD-card with a Mac computer, you need to read: "How to solve the playback issue when using Mac." Check for incorrect use of file names or file type. Check that the screen has power and is turned on.</li><li>• Take out, format and reload the SD card as described under "Changing video content."</li><li>• Replace the SD card with a new one.</li><li>• If the movie doesn't play, make sure that the video is in HEVC H265, as a 4K film in H264 can't be played on the media player.</li></ul>
3	The video images is out of scale/alignment.	<ul style="list-style-type: none"><li>• Boot the Dreamoc Diamond by turning the power switch off and on again.</li><li>• Ensure that Screen adjustment, picture size is set-up for original ratio.</li></ul>
4	The remote control does not work properly	<ul style="list-style-type: none"><li>• Check if the remote has batteries inserted.</li><li>• Ensure the batteries in the remote control are not exhausted. Replace the batteries with new ones.</li><li>• Ensure that you are pointing the remote correctly towards the IR-receivers.</li></ul>
5	Cannot turn on/off the OLED screen	<ul style="list-style-type: none"><li>• Point the remote control directly towards the sound bar.</li></ul>

# *Magic Matters*



For further information and pricing please contact Realfiction  
Phone: +45 70 20 64 90  
email: [contact@realfiction.com](mailto:contact@realfiction.com)

---

Realfiction and Dreamoc are registered trademarks owned by Realfiction ApS. Other marks may be mentioned here in that belong to other companies. © 2018 Realfiction ApS. All rights reserved.

Realfiction ApS | Øster Alle 42, 7th floor | DK-2100 Copenhagen Ø Denmark | Phone: +45 70 20 64 90