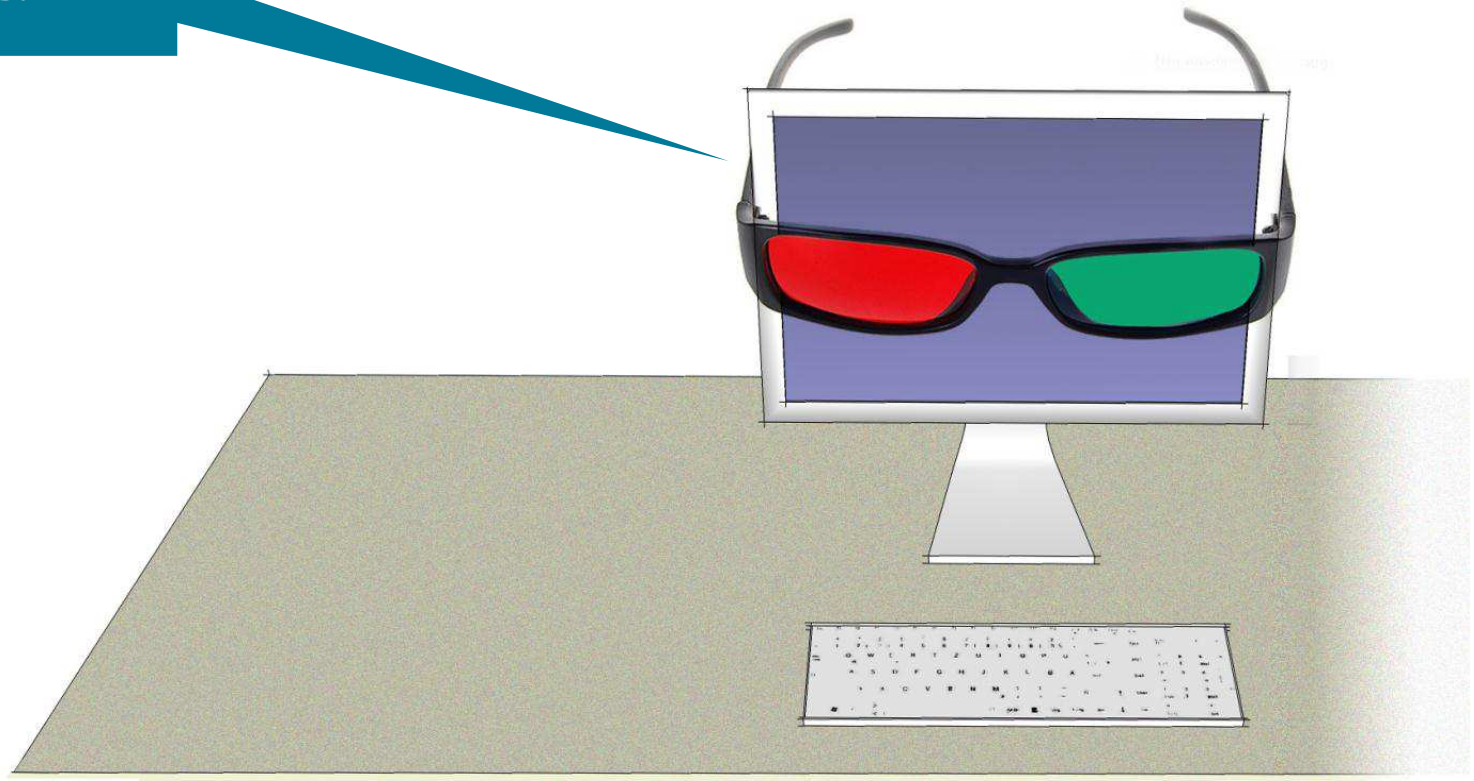
SeeFront
3D GETTING REAL

Technology Overview

SeeFront's approach to glasses-free 3D

SeeFront's approach to glasses-free 3D

Let the display wear the 3D glasses!



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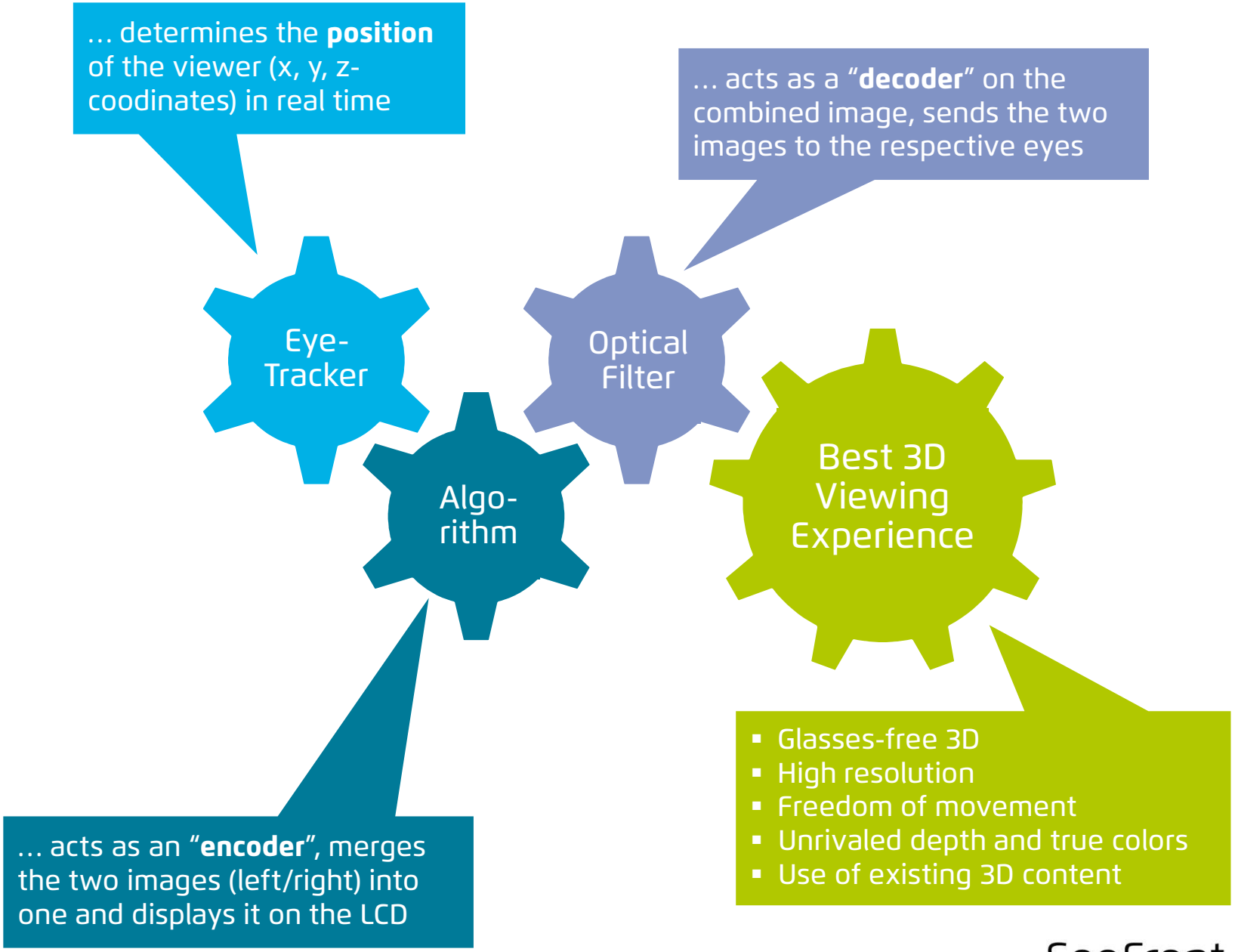
3 components working together for the best viewing exerience



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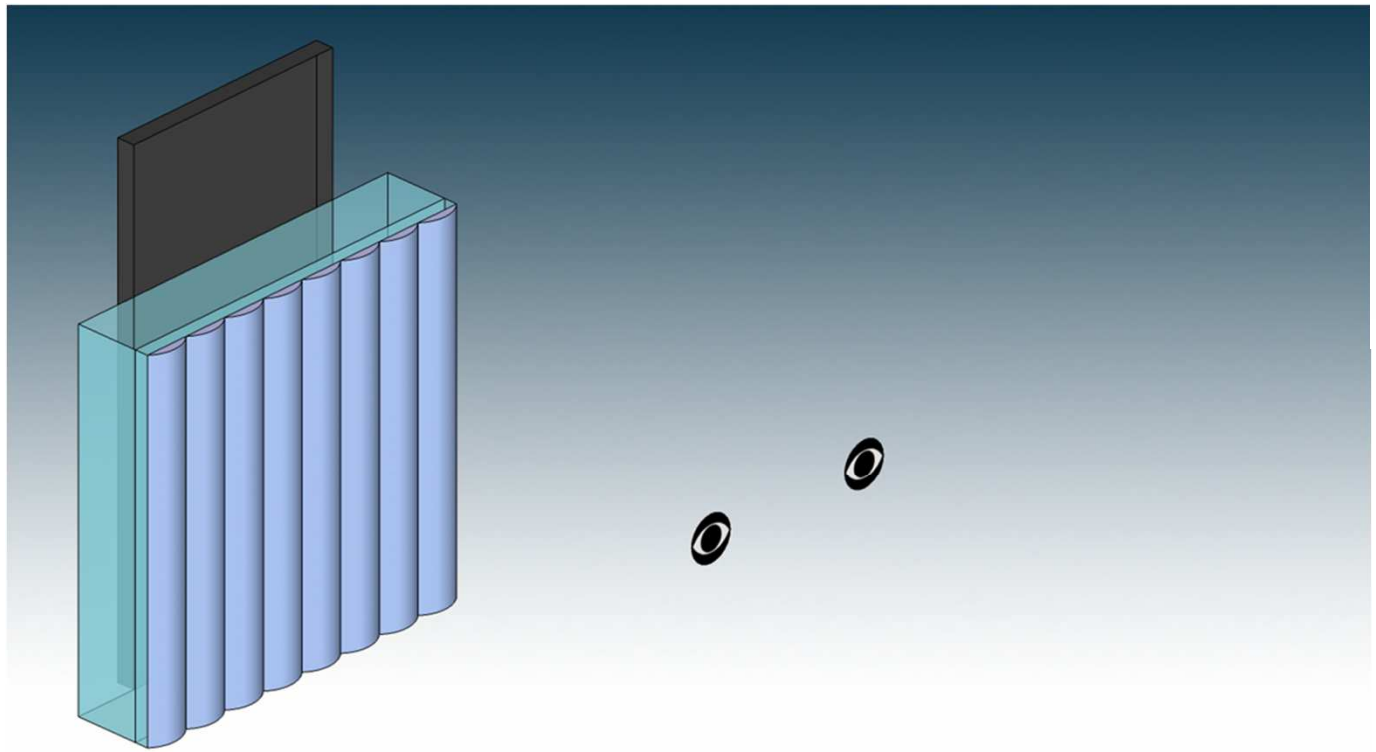
SeeFront 3D: Freedom of Movement



The SeeFront 3D process…

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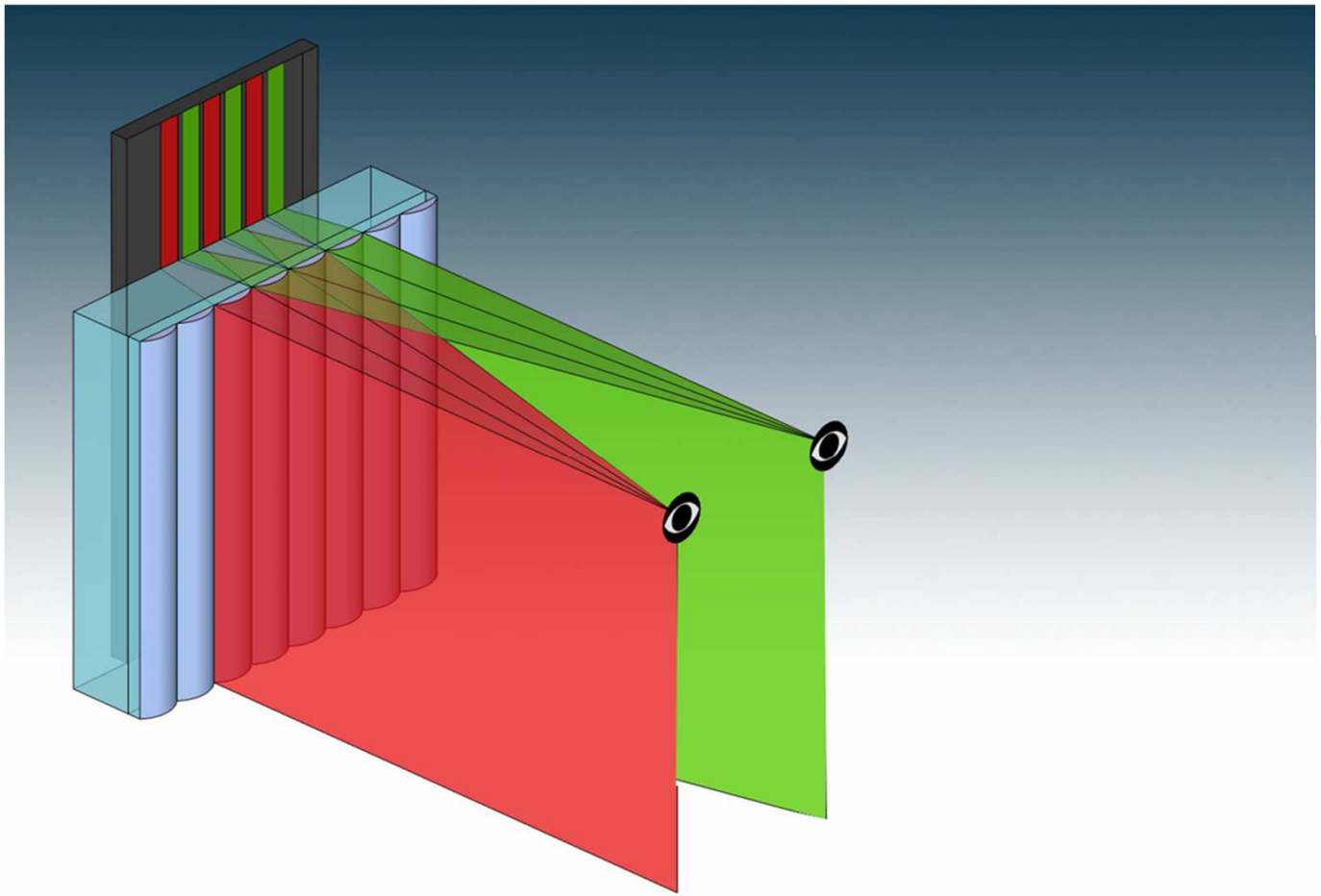
SeeFront 3D: Freedom of Movement



… adapts to the user's change of distance…

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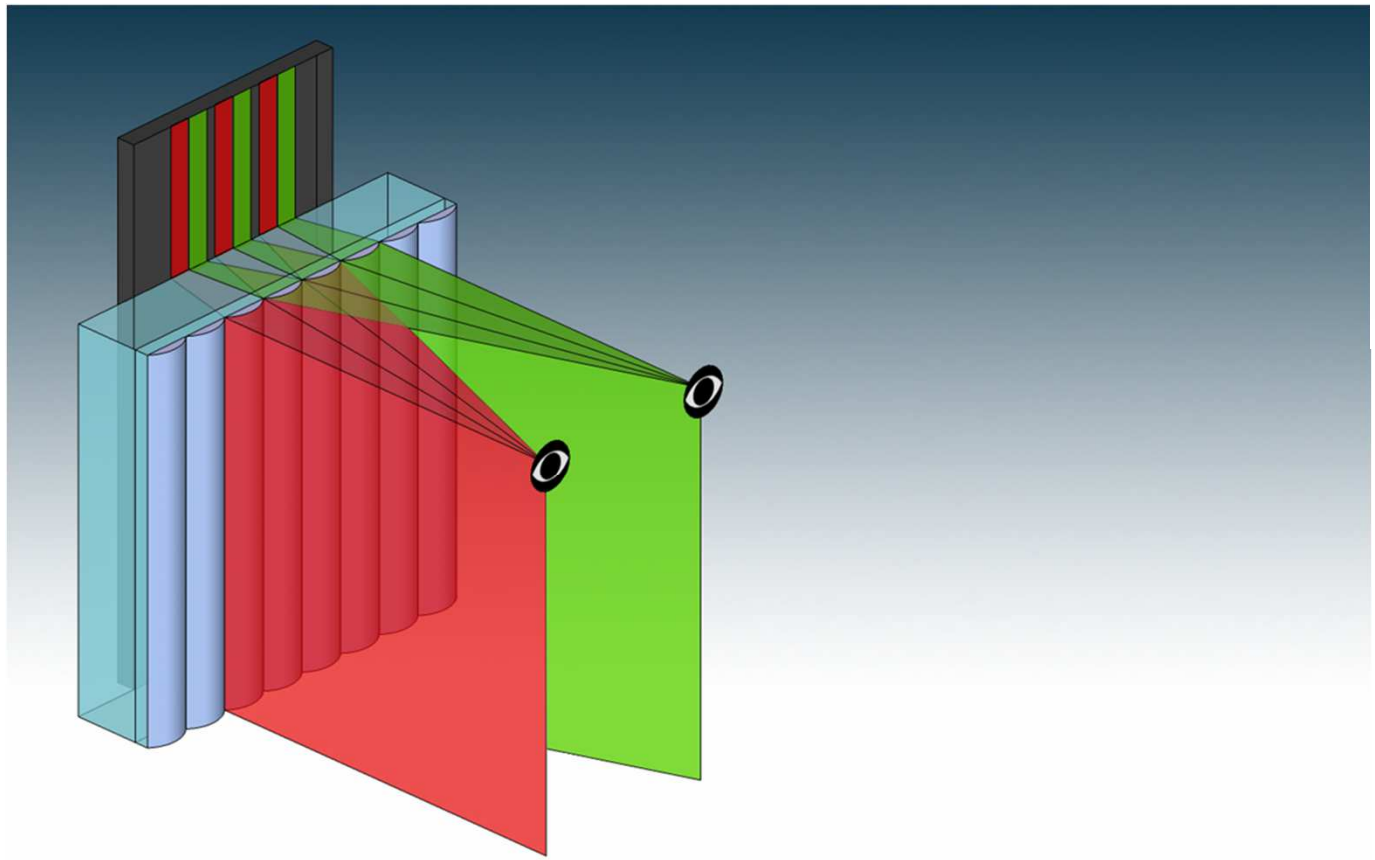
SeeFront 3D: Freedom of Movement



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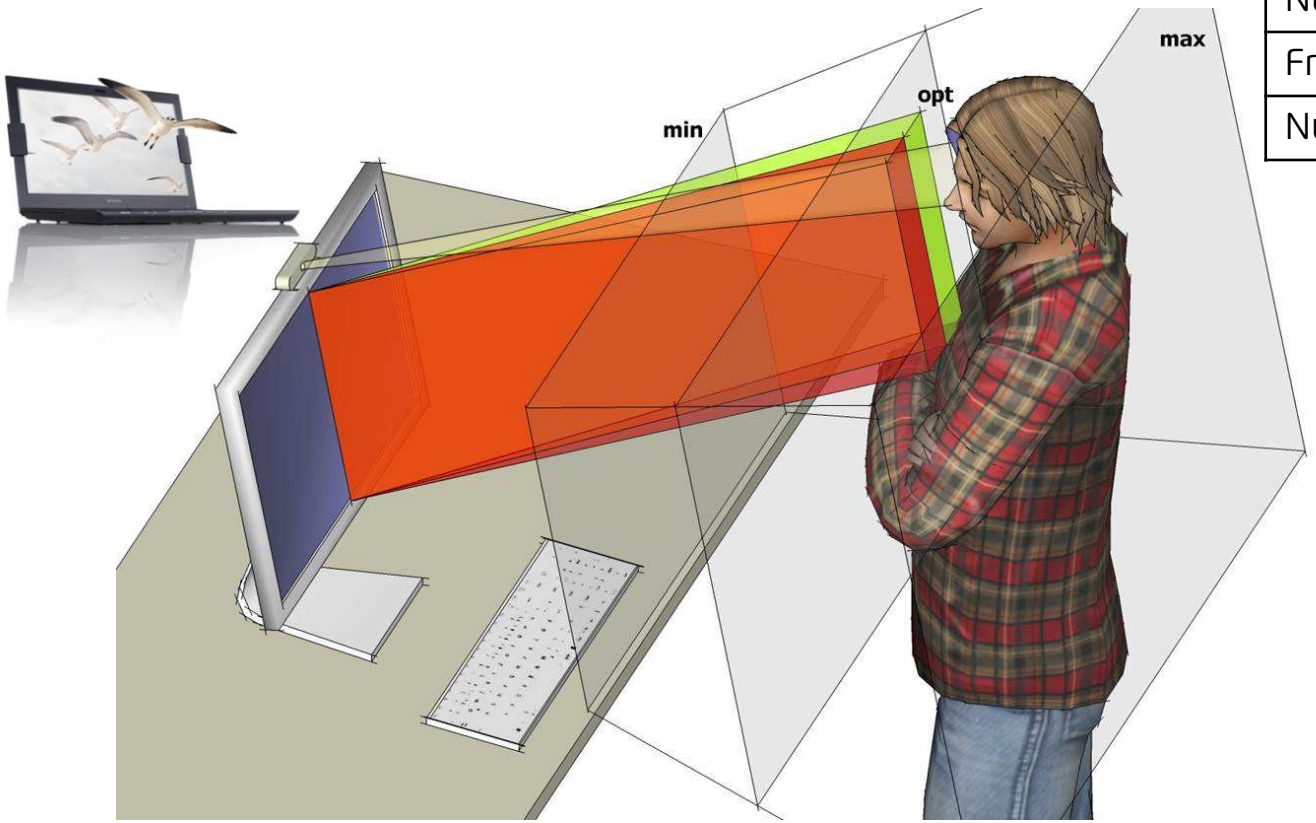
SeeFront 3D: Freedom of Movement



Perceived resolution	Good
Number of users	1
Freedom of movement	Yes
Number of 3D views	1

… and other changes of position, by use of **eye-tracking**

SeeFront
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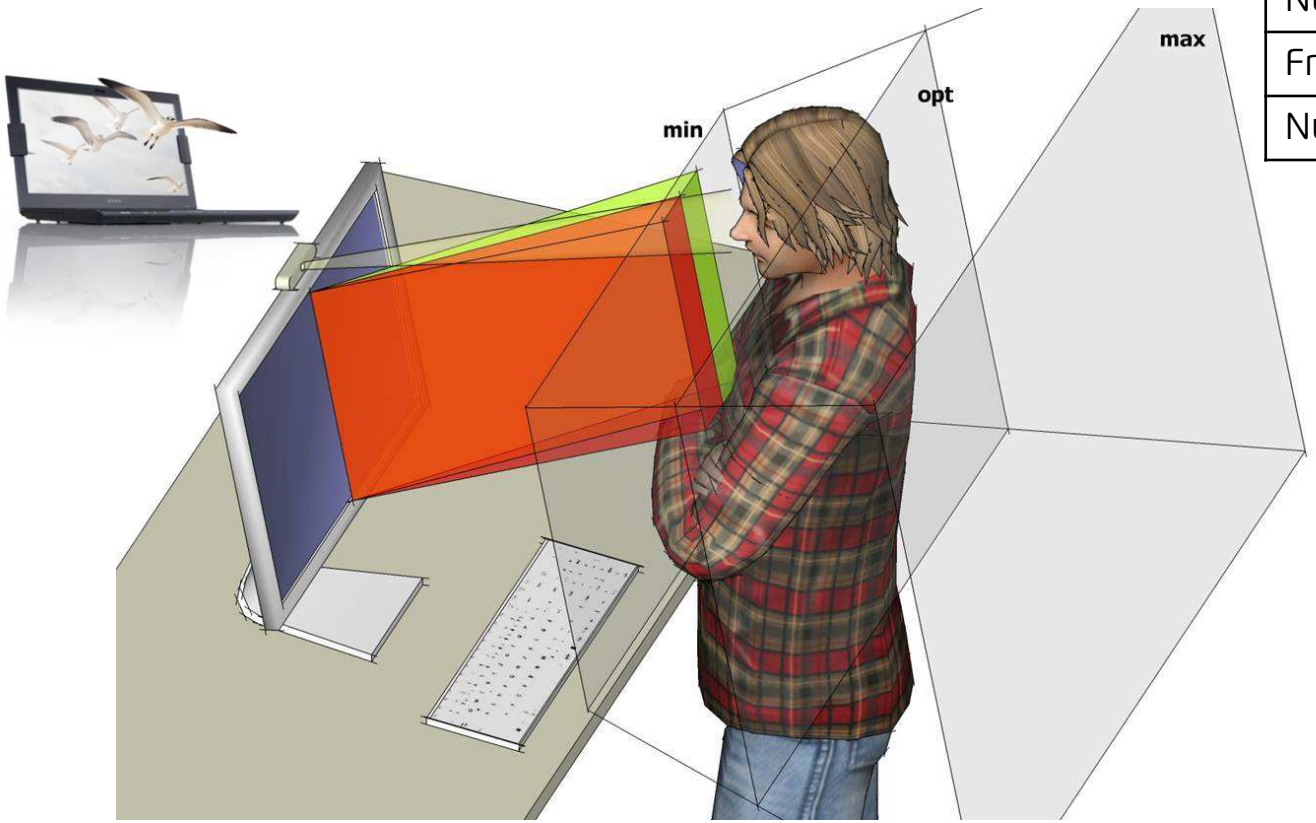
SeeFront 3D: Freedom of Movement



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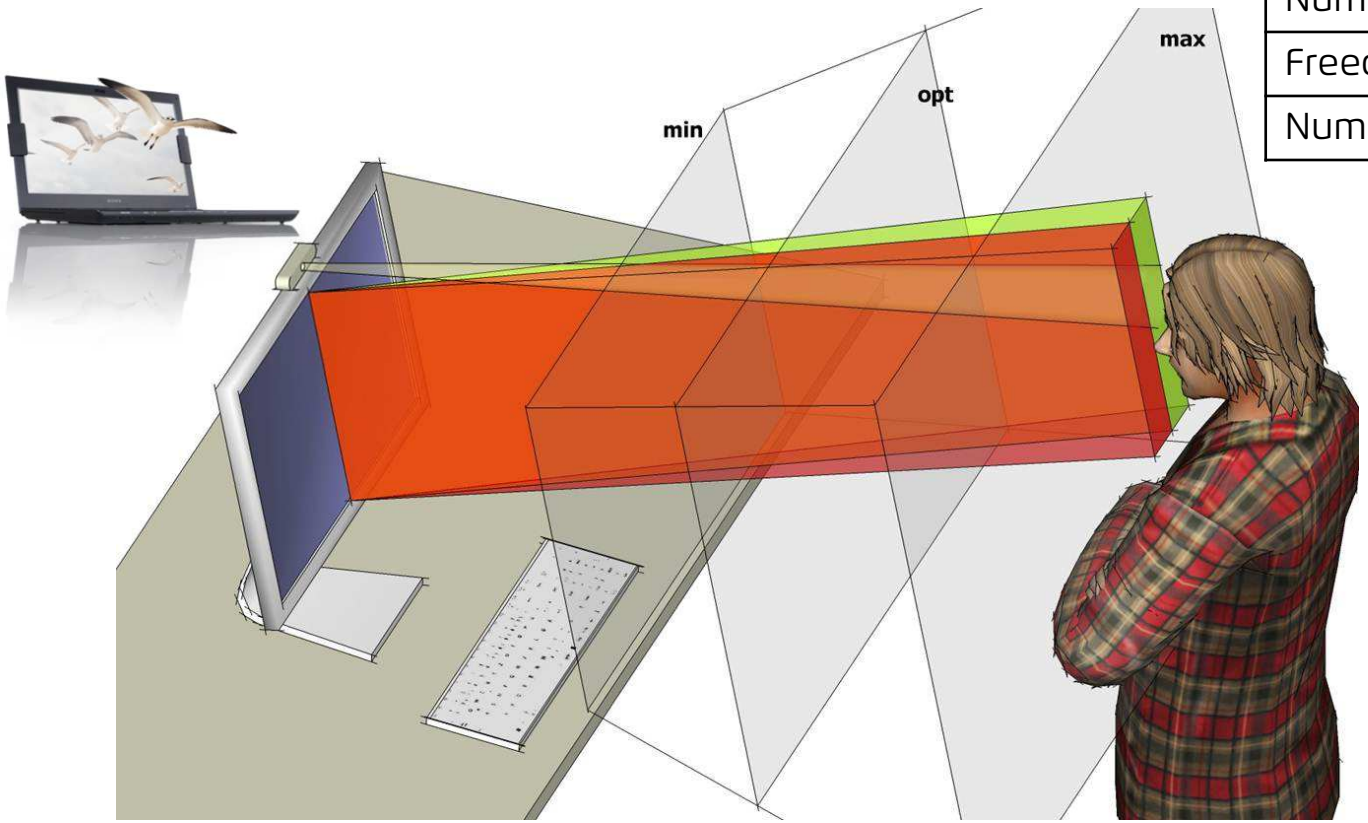

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… and other changes of position, by use of **eye-tracking**

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Versatility and Flexibility in SeeFront 3D products and applications

Sony 3D Panel 15,5'' and 13,3''
for Sony Vaio SE-Series Notebooks

Product launched at IFA Consumer Electronics Show 2011

SeeFront 3D
27'' Display by ACL GmbH

Prototype shown at CeBIT 2011

3D Cockpit Cluster Instrument in Mercedes-Benz F 125! Research Car

Shown at IAA 2011

IGT Sphinx 3D™ slot machine

Product in the field since 2014
(formerly as SPIELO, GTECH)

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SeeFront 3D can be implemented in Hardware or Software

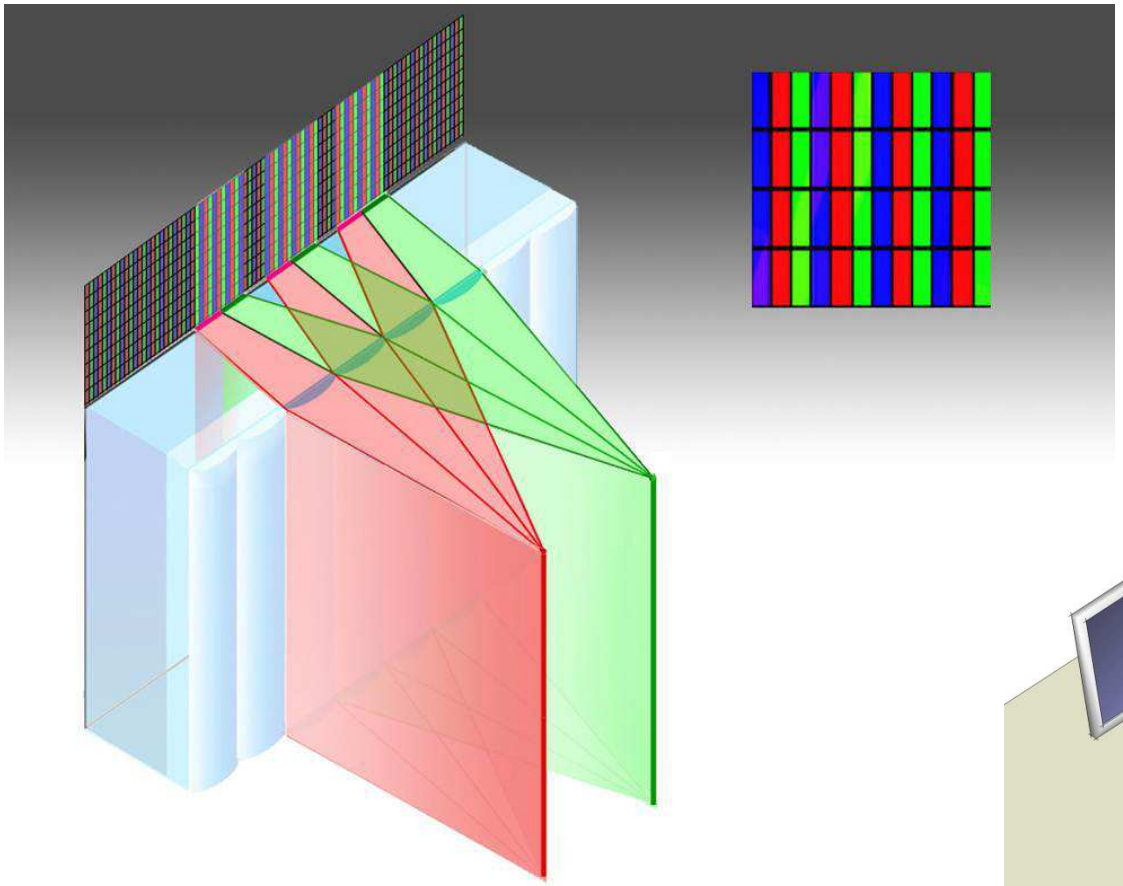
```
vp.Height = SCREEN_HEIGHT;    //Hohe der Zeichenflache
vp.MinDepth = 0.0f;           //Minimaler T
vp.MaxDepth = 1.0f;           //Maximaler Ti
// Viewport festlegen

_sf_handle->setScreen(0, 0, SCREEN_WIDTH, SCREEN_HEIGHT);
_sf_handle->resize(SCREEN_WIDTH, SCREEN_HEIGHT);
_sf_handle->setViewportOffset(sfutil::Vector<2, int>(0, 0));

if (_li.format() != QImage::Format_RGB32 && _li.format() != QImage::Forma
{
    assert(false);
    return;
}
float texSize[2] = {_li.width(), _li.height()};

// Is it sideByside or leftright mode (when the right image is empty, it
if (_ri.isNull())
{
    texSize[0] /= 2.0;
}
_sf_handle->setTextureSize(sfutil::Vector<2, unsigned>(static_cast<unsign
```

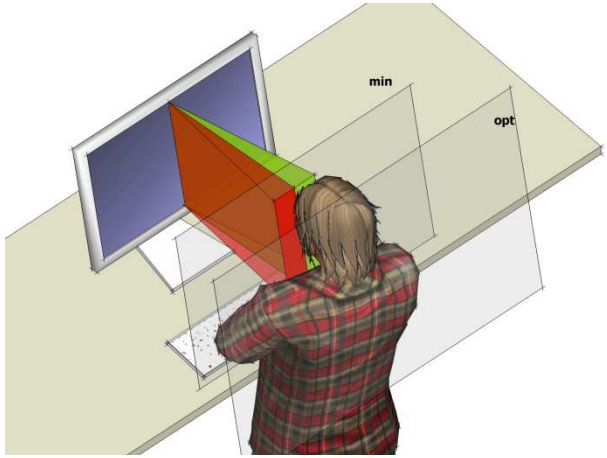
Sony 3D Panel for selected VAIO laptops (based on SeeFront 3D technology)

SeeFront 23" **open frame display** with proprietary hardware

SeeFront
3D GETTING REAL

SeeFront 3D: Highest Image Quality





One optical structure works with different pixel pitches

SeeFront
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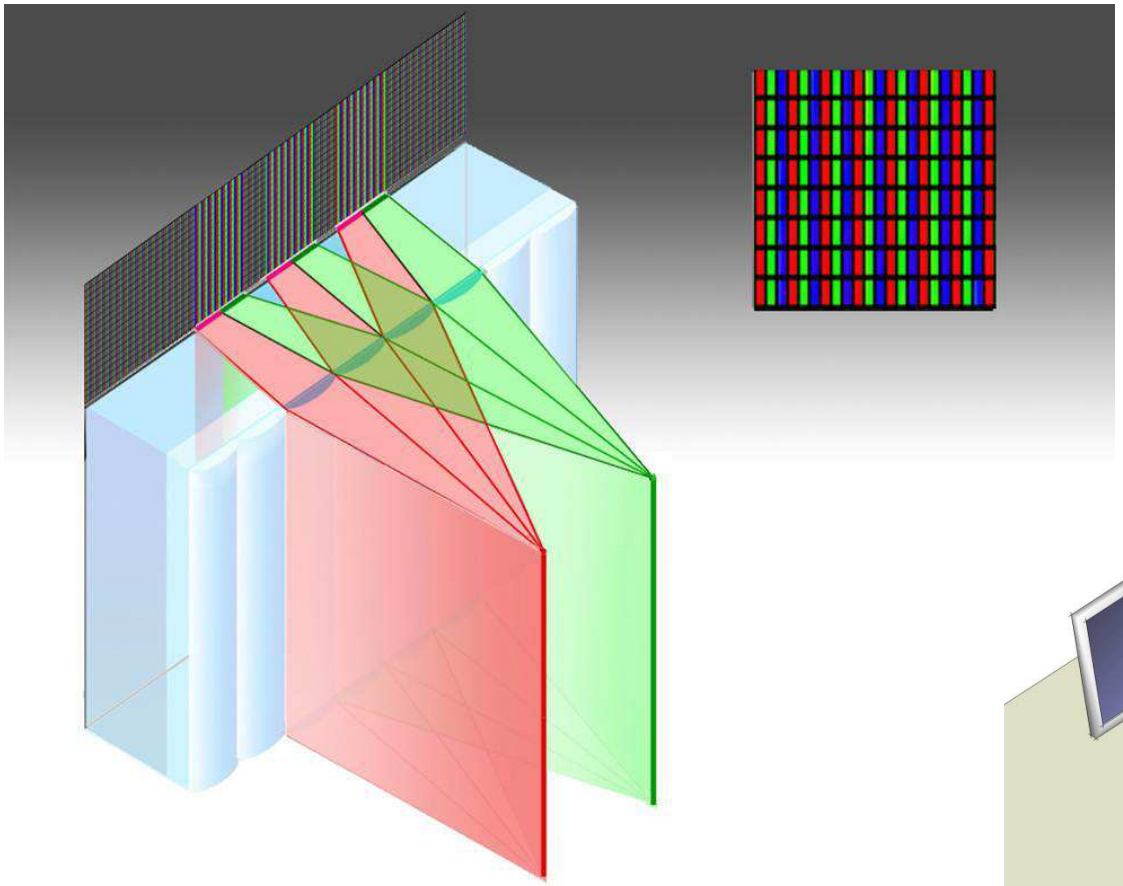
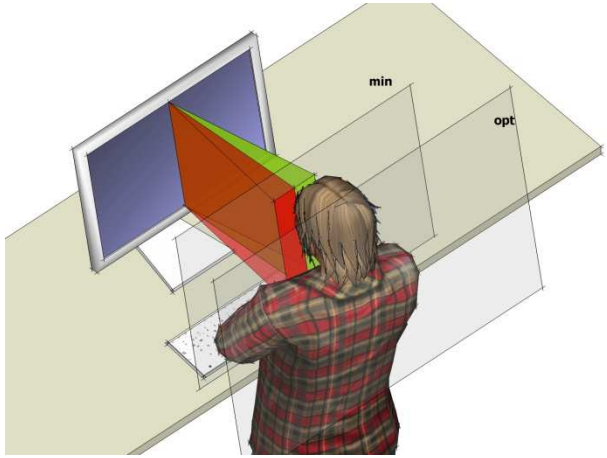
SeeFront 3D: Highest Image Quality





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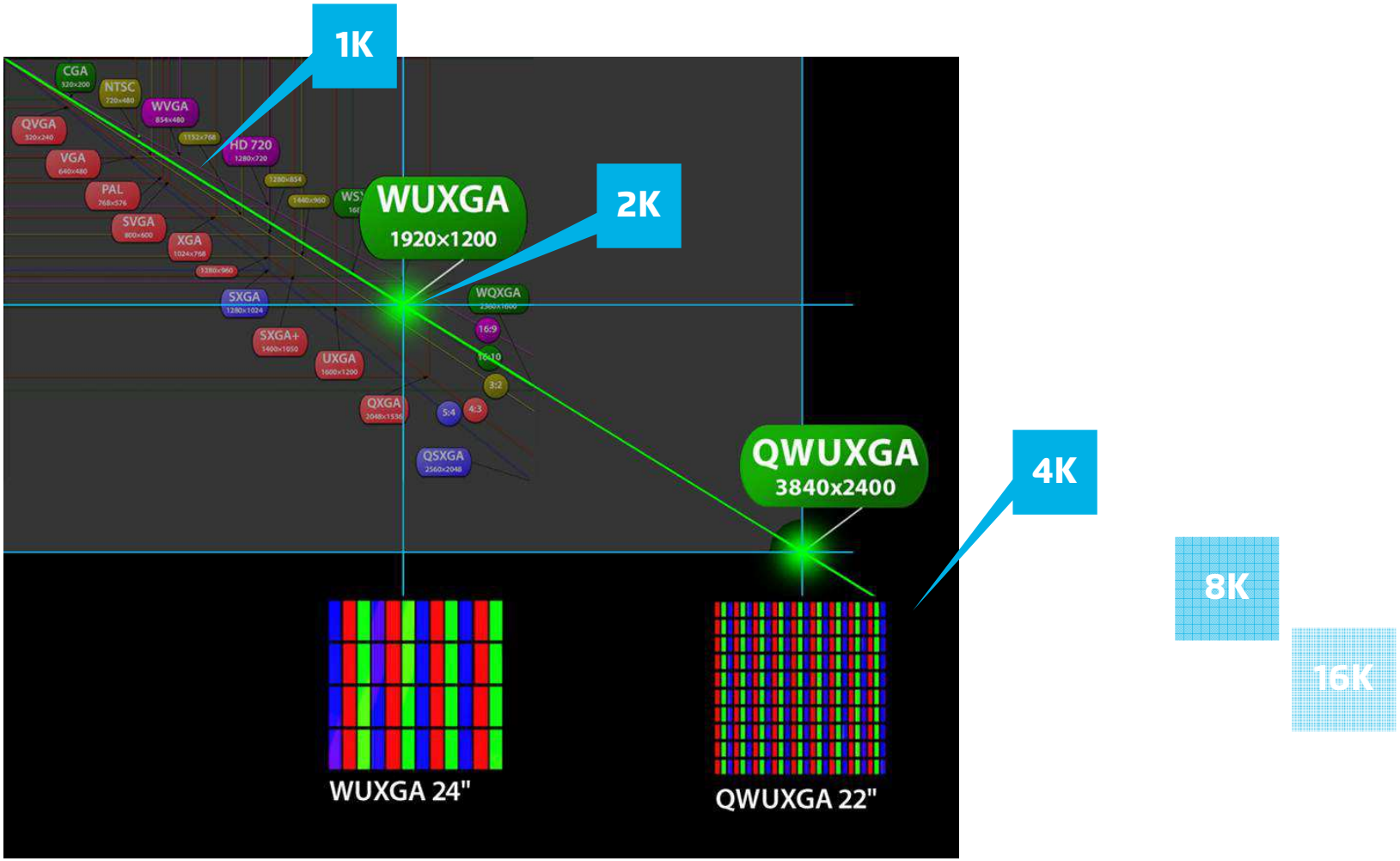
SeeFront 3D: Highest Image Quality



Unlimited resolution is possible, depending on the base LCD

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SeeFront 3D: Highest Image Quality

… of future 3D devices

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SeeFront 3D USPs

Highest Image Quality

SeeFront 3D delivers true colors, natural brightness and highest resolutions based on LCD panels from HD to 4K and beyond

Flexibility

SeeFront 3D is fully customizable for specific usage scenarios as it supports screen sizes from 1″ to 30″

True 3D Depth

SeeFront 3D provides the accurate depth impression by displaying the full spatial information of the 3D content

Versatility

SeeFront 3D supports the widest possible range of 3D applications for stand-alone monitors as well as for open-frame OEM displays

Freedom of Movement

SeeFront 3D delivers a 3D experience that is optimized for the user's actual position in real time, allowing movement in all directions

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