



Exciting personal 3D experience

20" frame-mount and desktop 3D display

Add an extra dimension to your professional application with Philips 3D displays. Based on WOWvx technology, its stunning 3D effect immediately grabs the attention and gives a more entertaining experience to the viewer. This 'magical' appeal attracts the consumer's attention making it ideal for use in digital signage, point-of-sale advertising, games and 3D visualization.

Exciting out-of-screen 3D effects

- Immediately grabs the attention of the viewer

Easy integration

- Slim bezel for easy integration in console

Autostereoscopic lenticular technology

- No need for special 3D glasses
- Multiple users experience 3D at the same time
- Full brightness, full contrast, true color representation

High quality 3D and 2D mode

- 2D high-definition video playback
- Autosensing between 2D and 3D mode

End-to-end system solution

- Integrated intelligent signal processing
- Flexible 3D data format through 2D-plus-depth
- 3D application performance and distribution bandwidth close to 2D

Declipse supported for enhanced viewing experience

- Additional occlusion information
- Enables the 'look around' effect

3D content enabling products (optional)

- Plug-ins for popular 3D animation software available
- WOWvx OpenGL Control
- WOWvx Compositor
- Semi-automated stereoscopic and 2D video to 3D conversion

Product offering

- Frame-mount (20-3D2W01/00)
- Desktop (20-3D2W04/00)

3D Intelligent Display Solution

20" WOW
3D & 2D dual-mode display

WOWvx



20-3D2 W 01/00
20-3D2 W 04/00



PHILIPS

Technical Specifications

Multi-view Lenticular Display

- **Autostereoscopic 3D display:** 9 view
- **3D Technology:** fixed lenticular
- **Optimal viewing distance:** 80 cm
- **Image diameter:** 20.1 inch (51 cm)
- **Resolution:** 1,600 x 1,200 x RGB (UXGA)
- **Aspect ratio:** 4 : 3
- **Display colors:** 16.7 M colors
- **Brightness:** 240 cd/m²
- **Contrast:** 800:1
- **Response time:** 8 ms (gray-to-gray)
- **Input format:** 2D-plus-depth in 3D mode
- **Front screen protection:** protective glass sheet

Connectivity

- **Video input:**
 - DVI-D single link
 - 60 Hz, 1600 x 1200 p
- **Monitor control** via DDC/CI channel; no additional RS232 cable needed
- **Power supply:** 120V 60 Hz, 230V 50 Hz
- **Power consumption:**
 - Normal operation: 59 W
 - Standby: 5 W
- AC switch

Physical Characteristics

- **Dimensions(mm):** 435(W) x 337(H) x 82(D)
- **Weight:** 7.5 kg
- **Slim bezel:** Easy integration in console
- **Mounting:**
 - **Console:** 14x M4 mounting points on the 4 sides
 - **Desktop:** VESA 100x100 on backside

Advanced display signal processing

- Integrated 2D/3D display processing hardware
- 3D data interface
- 2D-plus-depth converted to 9 different views and interwoven into a 3D image

- Rendering is tuned for lenticular optical behavior
- Two modes:
 - 3D rendering mode
 - 2D mode with picture quality improvement

Display Control Tool

The Display Control Tool, running on the PC, offers real-time control of the following monitor functions:

- WOW offset
- WOW factor
- Contrast
- Brightness
- Advanced visualization parameters

3DS Media Player

The 3DS Media Player is an application to play 3D video clips in the 2D-plus-depth format on a PC. The 3DS Media Player ensures that the monitor switches to 3D mode with the appropriate settings.

Packaging

The desktop model (20-3D2W04/00) comes in 3 separate boxes:

- Frame-mount box containing:
 - frame-mount display (20-3D2W01/00)
- Table stand box containing:
 - table stand
 - 4 screws for attachment
- Accessories box containing:
 - cosmetic front
 - 4 screws for attachment
 - DVI cable
 - 3 main cords (USA, EU and UK)
 - display user manual hardcopy
 - CD-ROM with Display Control Tool, 3DS Media Player and 3D sample content

Certification

- CE, cETLus, FCC, C-Tick, CB certificate

Product highlights

3D intelligent dual-mode display

Philips 3D Solutions offers an autostereoscopic 3D display family, for professional applications, that provides today's best 3D viewing experiences by using WOWvx technologies. The slanted multi-view lenticular lens technology affords full brightness and full contrast and allows multiple users to view 3D content at the same time. Moreover, a true color representation is ensured by the lenticular lens technology. The display is based on a high resolution panel and thus enables great picture quality in 2D and 3D mode. Integrated advanced display signal-processing offers content creators and end-users full control over the quality and depth-effect characteristics of the picture. The flexible 3D data format, in the form of 2D-plus-Depth, allows easy creation or adaptation of applications and content for the display.

The 20" 3D display is designed for narrowcasting, point-of-sale advertising, games and 3D visualization applications. Moreover, Philips can supply the 42-inch WOW for astonishing 3D viewing.

3D system solution

The displays can be applied in a broad range of applications, since it can be operated in both 2D and 3D mode. The system solution is designed for maximum reuse of content/concepts from the 2D world. The key enabler for this is the flexible 2D-plus-Depth format that allows decoupling of content creation and content visualization. This allows applications where different 3D display screen sizes and designs can be applied in the same system. The 3D display selects the best way to visualize the 3D content.

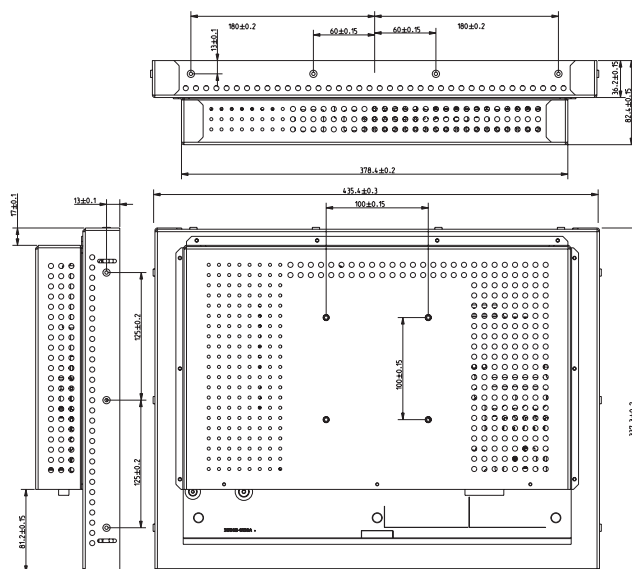
Philips autostereoscopic 3D displays support the unique Declipse image format. The Declipse image format enables a true look-around effect along with the 3D visualization. Furthermore, easy creation of 3D overlays is provided by applying the Declipse format.

3D content visualization

The 2D-plus-depth format is compatible with existing compression tools, where the additional bandwidth of the depth is small. The 3DS Media Player is provided with a 3D display to show the 3D content. The actual 3D content can be created via a plug-in available for popular 3D animation software packages, that allows existing and new content to be exported in this format.

There are many digital signage or narrowcasting software solutions in which the 3DS Media Player can be integrated easily. However, for smaller systems the 3DS Media Sequencer available offers a way to create XML based play lists that can be supported with an HTML based user interface design for infotainment applications.

In addition to real-time and offline content creation tools, there are also many applications that operate on a 3D dataset. Most of these applications, such as games, design, etc. use the OpenGL or DirectX API. The WOWvx OpenGL Control support real-time extraction and usage of the depth information and thus real-time visualization on the 3D display.



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