ALGE·TIMING offers a wide range of videowalls for any application. From small dimensions to enormous sizes, from a pixel pitch of 1.42 mm up to 26.7 mm you will find the right solution for your project. On request we can offer curtain displays (transparent in front of a building) or curved videowalls (e.g. for buildings). Models especially made for perimeter advertising are available with stands and protection for the top.

The videowalls offered by ALGE·TIMING can be used for sports applications, as stage display (e.g. music festivals, fairs, fashion shows), for advertising, etc.


This video wall consists of individual modules, which can be set up in any order. You can also select between models that allow the maintenance from the back side or the front side.

Because of quick release couplings it is possible to set it up in a matter of minutes.

If you use the videowall for sport in combination with timing equipment from ALGE·TIMING, we guarantee an optimal interface between the devices.

Model CH-LITE II (indoor use):

Modular design with SMD LEDs (3 in 1 SMD-LEDs) and each module is very light (about 18 kg). The modules have the measurements of 768 mm x 768 mm or 576 mm x 384 mm. The thickness of the case is with 92 mm extremly thin. It has front or back maintenance, a quick setup (fast lock system) and low power consumption (up to 150 W (small cabinet) or 300 W for a module (big cabinet)). This makes this type of videowall ideal for flexible use (e.g. rental).

Cabinet size: 768 × 768 mm   Cabinet size: 576 × 384 mm
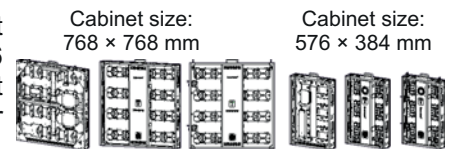
Model	CH-L-1,4	CH-L-3	CH-L-6	CH-L-8	CH-L-10,6	CH-L-12
Physical Pixel Pitch	1.42 mm	3 mm	6 mm	8 mm	10.6 mm	12 mm

Model CH-EIII (outdoor use):

Modular design with SMD LEDs (3 in 1 SMD-LEDs) and each module is very light (about 20 kg). A module has the measurements of 768 mm x 768 mm. The thickness of the case is 120 mm. It has front maintenance and a quick setup (fast lock system). This makes this type of videowall ideal for flexible use (e.g. rental for outdoor use).

The combination of a specially-designed mask and a lens plate with a ball-shaped lens on top of each pixel greatly reduces the reflection of sunshine and ensures the best contrast ratio, thus delivering more clearly visible images. Additionally, it protects the lens from objects that hit the display board (e.g. balls).

Our most sold model has 72 x 72 pixels with a pixel pitch of 10.6 mm. Ideal is this board as well with 3 modules as flexible display board in combination with a timing device. We offer as well a flight case for a safe transport, stands and top protectors for perimeter displays.


| Model	CH-EIII-6,4	CH-EIII-8	CH-EIII-8,7S	CH-EIII-10,6S	CH-EIII-12S	CH-EIII-16S
Physical Pixel Pitch	6.4 mm	8 mm	8.7 mm	10.6 mm	12 mm	16 mm

Model CH-EII (outdoor use)

Modular design with a separate LED for each color (red, green, blue) of a pixel. A module has the measurements of 1280 mm (H) x 640 mm (W). The thickness of the case is 122 mm. Cabinets for rear and front maintenance are available. It has a quick setup (fast lock system). Installation of blocks is also available. Ideal for rental use or fix installation.

The cabinets can be freely used for fixed installation, rental purposes, or even as a perimeter display with front or back maintenance cabinets


Fix Installation 1280 x 640 mm Front maintenance   Fix Installation 1280 x 640 mm Back maintenance   Mobile Use   E2L Serie 960 x 1536 mm
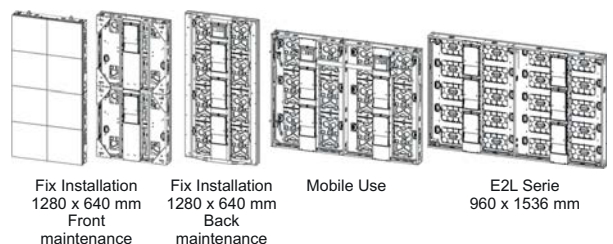
Model	CH-EII-10	CH-EII-13,3	CH-EII-16	CH-EII-20	CH-EII-26,7
Physical Pixel Pitch	10 mm	13.3 mm	16 mm	20 mm	26.7 mm
Virtual Pixel Pitch	5 mm	6.7 mm	8 mm	10 mm	13.35 mm
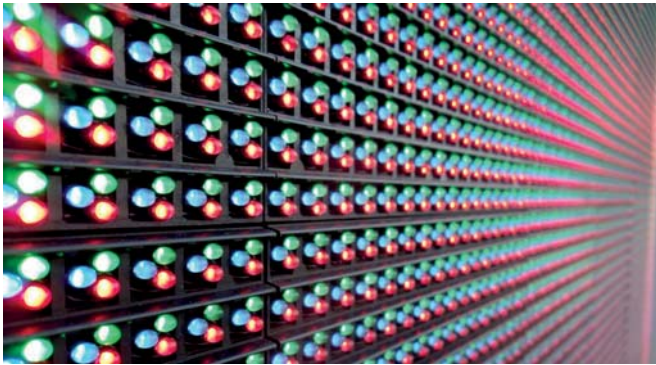
Honeycomb Structure Module:

The module is a new kind of composite back shell with outstanding features like high intensity, low cost and excellent heat dissipation. The module structure is simple but three-dimensional. Both sides of the bottom shell are equipped with upward reinforcing ribs, which make up the regular hexagons in succession. On the premise of not conflicting the shell and the electric components on the LED module, both the intensity and stiffness of this structure is high, meanwhile it can also make full use of material and better match different LED modules.
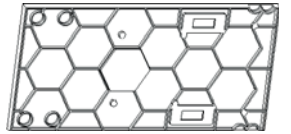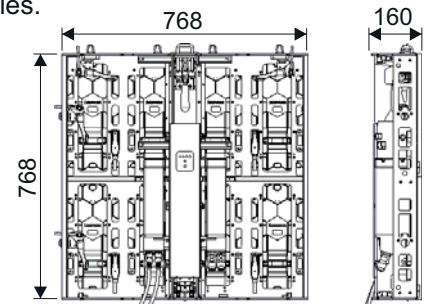

Modules

Slim and compact modules. Different modules for permanent installations and rental systems are offered. Both have the same measurements.

768   160

768

Setup:

The modules are equipped with „unit positioning guide" posts, connection and combination devices and a self lock system, which allows a fast and simple setup of the videowall without any tools. Precise positioning and easy assembly.

Hanging Mode:

Optionally we offer hanging beams special made for the cabinet.
Max. hanging capacity: 20 cabinets high

Flight Cases:

Specially-designed flight cases (optional) guarantee a safe transport and storage of the modules.

Plug connector for rental systems:

Neutric signal and power connectors are applied, ensuring great reliability and convenience.

Power Supply Hot Backup:

The power supply is part and parcel of an LED screen. Its performance directly influences the viewing effect of the LED screen. To avoid damaging screen effect due to power failure, we use the power back up function for the LED screen. The cabinets are equipped with double power supplies. When a power supply fails, the spare power can backs up immediately and supply power for the cabinet. Malfunction indicator light is on at the same time. When the dynamic load is less than half of the total power consumption of the cabinet, images are normally displayed on the screen. Otherwise, screen brightness automatically drops by half .

Signal Hot Backup System:

Signal hot backup system enhances the reliability of a screen while it is working. Automatic error detection enables the system to switch between each signal channel within milliseconds, so as to guarantee the consistent display effects.

Easy Maintenance:

Modules are modular built and the maintenance is easy and simple.

LED Matrix Boards are very complex. A lot of specifications influence the price. We would like to give you a short introduction on different terms that are used for LED Matrix Boards:

Pixel: One pixel is the smallest point you can show with a Matrix Scoreboard. Any pixel can consist of several LEDs.

Pitch: Describes the distance from pixel to pixel. In general, the pitch starts with 4 mm and goes up to 50 mm. The smaller the pitch, the better the resolution and the more expensive the board per m².

Pixel Size: The bigger the pixel dimension compared to the pitch, the sharper the picture (fill grade).

LED/Pixel: Any pixel can consist of one or more LEDs. The more LEDs per pixel the better the scoreboard. But the quality also depends on the type of the LEDs. In our full color LED screens we only use Nichia LEDs that have the best performance.

Resolution: The resolution is the amount of pixels in vertical and horizontal order. The higher the resolution, the better is the quality of the picture or text!

Pixelsharing or virtual pixels: The pixelsharing mode is using LEDs from adjoining pixels to construct virtual pixels. The virtual resolution is four times higher than the physical number of pixels. But the picture quality of a physical videowall with 16 mm is a lot better than the one of a 16 mm shared mode!

Luminosity: The luminosity is measured in cd/m² or in Nit (Candela per square meter) and is important for the brightness of the board. This technical characteristic is also stated in different ways. Some producers quote the luminosity for all colors in maximum brightness. Any serious producer specifies the brightness in the white-balanced state. Different colored scoreboards need different luminosity for outdoors.

1 color	2,000 cd/m²
full color	5,000 cd/m² in white-balanced state!!

For full color scoreboards it is very important to indicate the luminosity in white-balanced status. Some manufacturers state the brightness in all colors with 100%. This can result in a brightness of 8,000 cd/m² but after the board is calibrated (white-balanced) it actually means 5,000 cd/m²!

Viewing Angle: This is a dimension that is not 100% the same for different manufacturers. Some producers define the maximum angle as before the scoreboard gets dark. This is a poor definition!

All serious manufacturers define the half-center brightness, which means in simple words the angle where you still have 50 % of the full luminosity!
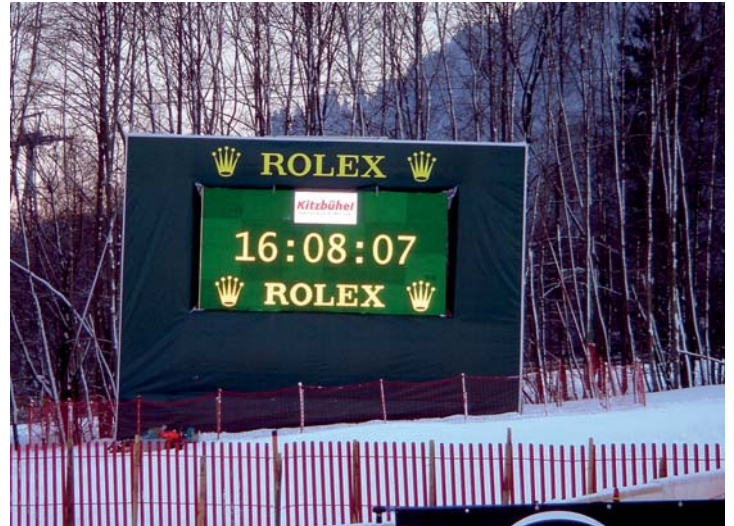
Refresh rate: The higher the refresh rate the more soft-focused is the picture.

We have a standard refresh rate of 240 and for the professional series we have a refresh rate of 500.

Static or Multiplex Driving: The driving method of the LEDs should be static.

You can test this with a digital camera, just watch the videowall and see if there is a flicker in the picture of the camera.

The same happens if a TV camera films the videoscreen and it is broadcasted on TV.

Outdoor: The LEDs are completely sealed with a special silicone; horizontal louvers are integrated in the LED modules to maximize the contrast.

1 Color: The display features only one color (e. g. red). This color can have different shades to create a better picture (e. g. 256 shades, like a black and white picture). Most of these displays are also able to show animation files.

Video Wall: The display offers LEDs with three different colors in each pixel (RGB – red, green, blue). These colors can be mixed so it has the complete true color spectrum (68 million colors). Such a board has a video input and it is able to show a TV picture. There are also scoreboards available with 10 bit color processing which result in 1,073 million colors.

DISPLAY BOARD
Videowall - LED Matrix

Mains
100-240V/50-60Hz

DVI
VGA
Serial or Ethernet

PREVIEW

VIDEO SCALER CH-LVP605S
- 10 bit processing
- advanced algorithm for scaling
- video inputs: CVBS, S-Vid, VGA, DVI, YPrPb, SD/HD SDI
                   and HDMI

LED DRIVING UNIT CH-LDU8000R
- automatic brightness control
- color correction pixel by pixel and module by module
- pixel diagnostic function

HDTV