



### 1) What is Planar Mosaic?

Planar® Mosaic® Architectural Video Walls are a tiled LCD display solution that feature three different sizes of LCD display tiles, including a truly square tile. Tiles can be any angle and any position relative to each other, allowing for unprecedented flexibility and creativity. Planar Mosaic video walls create ambiance, generate an emotional reaction or build a brand experience.

### 2) How does Planar Mosaic work?

Planar Mosaic video wall tile arrays act like one big screen, where video wall tiles are like windows through to the underlying image or video. The tiles are programmed at the time of installation using the included Planar Mosaic Project Designer™ Windows software. Each tile receives the entire image and knows exactly which pixels to display. If there is physical space between the tiles, the image is correctly displayed automatically.

### 3) Who would use Planar Mosaic?

Planar Mosaic appeals to building owners and tenants for the lobbies or public spaces of their corporate offices, hospitality, healthcare and educational facilities. It also appeals to retailers for showrooms and window displays. Unlike most digital signage and video wall products, Planar Mosaic often features a combination of artistic and informational content. Planar Mosaic video wall tiles may be viewed as a dynamic alternative to traditional wall coverings, architectural lighting or fine art. Architects, consultants and interior designers will find many uses for Planar Mosaic with their clients.

### 4) What components make up the Planar Mosaic system?

The Planar Mosaic family includes three LCD tile sizes: Planar® Vincent™ AD55 (55" diagonal rectangle), Planar® Pablo™ AD46 (46" diagonal rectangle), and Planar® Salvador™ AD22 (21.6" diagonal square). Also included is the Mosaic Ensemble™, a package of components including the Mosaic Mount™, Mosaic Power Supply Module and Mosaic Project Designer™ software. Options include cables, extenders, edge trim, redundant power supplies and extended warranties. Optional Planar® ERO™ (Extended Ruggedness & Optics™) technology is also available on Planar Mosaic video wall tiles.

## 5) Are Planar Mosaic video wall tiles like normal displays?

No. Planar Mosaic video wall tiles are commercial-grade LED-backlit displays built for 24x7 operation. Power supplies are off-board and can be rack-mounted at a distance from the tiles, making tiles cool and quiet, thin profile, light weight and long-lasting. Planar Mosaic video wall tiles are very bright, have excellent contrast and full high definition resolution.

## 6) What are the specifications of Planar Mosaic video wall tiles?

Planar Vincent and Planar Pablo video wall tiles have a resolution of 1920x1080, while Planar Salvador video wall tiles are 960x960 resolution. The Planar Mosaic system will support input resolutions of up to 3840x2160 at 30 Hz. Planar Vincent and Planar Pablo tiles are 700 nits brightness with a contrast ratio of 3500:1. Salvador tiles are 450 nits brightness with a contrast ratio of 4000:1. All Planar Mosaic video wall tiles have an expected backlight life of 50,000 hours to half brightness.

## 7) What can I display on a Planar Mosaic video wall?

Planar Mosaic video wall tiles accept a DisplayPort input. Connect a PC or Mac, DVD player or basic media player. For more elaborate requirements, connect a digital signage system or video wall processor. The content itself can be any imagery or video that is up to 3840x2160 at 30 Hz or the equivalent total bandwidth. Choose artistic content, informational content or any combination of the two. Display existing or stock content or create purpose-built content that plays off the unique shape of a Planar Mosaic video wall array.

## 8) How is Planar Mosaic different from other video walls?

Unlike other solutions, Planar Mosaic supports arbitrary rotation of video wall tiles. Planar Mosaic arrays can incorporate multiple tile sizes and shapes to be combined together, as well as using "negative space" by spreading video wall tiles out. Planar Mosaic also supports overlapping displays. Planar Mosaic does not require image or video pre-processing because of its built-in processing. Planar Mosaic includes a truly square tile with a 1:1 aspect ratio, allowing for tile layouts and arrays never before imagined.

## 9) How do Planar Mosaic video wall tiles compare to rear-projection mini-cubes?

Mini-cubes have become popular in decorative implementations due to their small form factor. Planar Mosaic video wall tiles offer a range of features that mini-cubes cannot support. Unique Planar Mosaic features include an ADA-compliant mounting depth, mixing of multiple tile sizes in a single video wall and arbitrary rotation on a per-tile basis. Planar Mosaic tiles can also be positioned in more flexible angles, pitches and overlaps, as well as in smaller-radius concave and convex arrangements. Planar Mosaic tiles are thinner, lighter, cooler, quieter and have a less expensive list price on a per-square-inch basis. Planar Mosaic tiles are LED-backlit which typically deliver better black uniformity, color balance and off-axis matching than rear-projection cubes.

## 10) Why aren't architectural displays more common?

Traditional video wall displays are not built for arbitrary rotation, arrays with negative space and multiple displays working together as one. It is a complex and expensive process to achieve Planar Mosaic-style functionality using standard displays. You would need to break up the content into pieces, render each one to fit a specific display, load it onto one media player per display and play them all in synchronization. Even if this is done, they still cannot handle live video in real-time. For new content, the entire process must be repeated. Planar Mosaic handles these functions simply and easily right out of the box.

## 11) How much does Planar Mosaic cost?

Planar Mosaic video wall tiles are individually priced. The per-tile price includes the Mosaic Ensemble™, a package of three components: Mosaic Mount, Mosaic Power Supply Modules, and Mosaic Project Designer software. The retail list price (MSRP) for each tile is: Planar Vincent AD55: \$9,999; Planar Pablo AD46: \$6,999; Planar Salvador AD22: \$3,899. All prices are in US dollars and do not include taxes, freight, content sources or additional services. Optional accessory items include edge trim, cabling, redundant power supplies, extension brackets for overlapping tiles, design consulting, installation and extended warranties/maintenance plans.

## **12) How do I design a Planar Mosaic tile layout?**

Create your own Planar Mosaic design using Planar Mosaic Project Designer software. Two versions are available: an installable Windows® application, and a mobile-friendly online application. Both tools allow you to create tile layouts, preview content and save your designs. The online application can also be used for requesting a quotation from Planar. The Windows application is used to program the Planar Mosaic tiles upon installation. You can also get design ideas by visiting the Planar Mosaic Design Library and see Planar Mosaic installation profiles on Planar's Case Studies website.

## **13) Where do I go for Planar Mosaic video content?**

There are several approaches to creating content for a Planar Mosaic video wall. At a basic level you can use stock images or videos from an online content library like iStockPhoto, Pond5 or Getty Images. Your own photo or video library can also be a great place to start. If you wish to create custom content there are numerous motion graphics firms that specialize in designing custom video content. Planar Mosaic software can export a transparent PNG mask file of the tile layout which can be used by content developers to create video to fit the tile layout. Visit Planar's Digital Signage Directory Content Developer Program for a directory of development firms: [www.planar.com/about/content-program/](http://www.planar.com/about/content-program/)

## **14) What does "off-board power" mean?**

Planar Mosaic power supplies are not built into the video wall tiles - they are in rack-mount (1U) modules up to 200 feet (60 meters) away from the Planar Mosaic video wall. Several tiles can be daisy-chained (connected in series) together in a group. There is a low-voltage (48V) connection between a Planar Mosaic Power Supply Module and the first tile in a group of daisy-chained tiles. A single power supply module can support up to 15 Planar Salvador tiles, 7 Planar Pablo tiles, 5 Planar Vincent tiles, or any combination of these tiles up to a cumulative total of 1,200 watts. This means power outlets are not required behind Planar Mosaic tiles. A redundant power supply option is also available.

## **15) What inputs and outputs does a Planar Mosaic video wall tile have?**

Each Planar Mosaic video wall tile has one DisplayPort input and output, one power input and output, and one USB input. Tiles can be daisy-chained with power cables. Tiles can also be daisy-chained with DisplayPort data cables. The power daisy-chain and the DisplayPort daisy-chain are independent of each other and do not have to follow the same path. Up to 256 tiles can be connected on a single DisplayPort daisy chain. The USB input is for programming the video wall upon installation (one-time setup). It requires a PC with Mosaic Project Designer software (Windows edition) and a USB serial driver to connect via USB to a Planar Mosaic daisy-chain.

## **16) Does Planar Mosaic include mounting hardware?**

Yes. The Mosaic Mount is included and an integral part of the Planar Mosaic system. A special mounting plate attaches to the wall, then the video wall tile snaps into this plate with snap catches at the four corners (push-in, push-out). Planar Vincent and Planar Pablo tiles can be positioned in "service mode" for easy connecting and disconnecting of cables. Spacer brackets are available to ensure perfect alignment of any adjacent tiles. The combined Planar Mosaic tiles and mount protrude only 3.7" from the wall, which makes it the only architectural video wall system that is ADA-compliant.

## **17) How does Planar Mosaic handle image scaling?**

A single image or video is automatically scaled up to display properly across an array of Planar Mosaic video wall tiles, regardless of their placement. Planar Mosaic tiles can be connected in different ways depending on the requirements. For example, a single source can be displayed on a single Planar Mosaic tile (1-to-1), over a portion of a Planar Mosaic tile arrangement (tile groups) or over an entire Planar Mosaic tile arrangement (single daisy-chain). Planar Mosaic allows you to optimize resolution for three factors: 1 – the resolution of the source content; 2 – the viewer's distance from the Planar Mosaic video wall; and 3 – the size of the Planar Mosaic video wall. For a detailed explanation, download the Planar Mosaic Content Guide at [www.planar.com/Mosaic](http://www.planar.com/Mosaic)

## 18) Can Planar Mosaic be used for digital signage?

Yes. A common request is to switch between “big picture” (scaling one video across a Planar Mosaic array) and individual screen control (different content on specific displays). This can be achieved multiple ways. You can use digital signage software to merge multiple content sources into a single video feed and position specific elements to appear on specific Planar Mosaic tiles. Also use a video wall processor or multiple synchronized media players to achieve “big picture” and/or display different content on different Planar Mosaic tiles.

## 19) How do I get started with Planar Mosaic?

For inspiration, watch some Planar Mosaic videos on the Planar’s Vimeo and YouTube accounts. The best way to begin is to obtain the dimensions of the physical wall on which you are considering a Planar Mosaic installation. Utilize Mosaic Project Designer to create your tile layout. You can input the size of your wall, upload a photo or rendering of your wall as a background and drag-and-drop Planar Mosaic tiles into position. Choose or upload content and preview your design. When you are finished, click the Quote button and complete the form and submit it to Planar.

## 20) Where can I buy a Planar Mosaic video wall?

Planar Mosaic is available through Authorized Planar Resellers. Many Planar reseller partners are system integrators that can help you design, install and maintain a one-of-a-kind Planar Mosaic video wall implementation. If you do not have a relationship with a Planar Reseller, please contact Planar at 1-855-748-8199 or sales@planar.com. If you are an architect, designer or consultant interested in learning more about architectural displays, consider joining a Planar AIA CES session.