When standard solutions don’t fit – Christie has the custom solutions you need

Many monitoring applications require that a large amount of information be displayed for shared use by many users simultaneously. Typically situations or assets are being monitored or managed and it is critical that all information is legible and reliably displayed at exacting design sizes and requirements. Most information walls – also known as video walls – are comprised of an array of displays seamlessly tiled together.

Christie® has seamless display solutions that use rear screen projection technology in the form of display cubes and video wall structures for monitoring applications including emergency operations, utilities and power, government, transportation, security and surveillance, telecommunications, process control and broadcast to name a few.
Christie’s custom video wall display solutions address the demanding needs of monitoring applications.

**Christie solutions:**
- Display high quality video and information feeds so that operators can monitor, detect and act
- Integrate data from multiple sources to provide timely and accurate information
- Bring together multiple sources of information into a controllable and useable visual format
- Allow content to be viewed at any size by multiple operators
- Offer instant access to real-time intelligence and reliable display
- Provide a high-performance solution that offers low maintenance, high reliability and complete display flexibility

Encompassing a variety of tried and true technologies, engineering strength and expertise, we offer both revolutionary standardized solutions and complete customized display solutions. Christie’s exceptional products, knowledge and expertise are an integral part of the entire customized solution.

With over 30 years of providing customized video wall solutions around the world, Christie understands that each customer has a unique set of needs and requirements. Many of today’s leading global organizations rely on Christie’s control room solutions because we consistently meet and exceed industry standards. Christie is the only manufacturer of control room products that designs, builds and installs solutions specific to your project needs.

A unique benefit of working with Christie is that we provide system configurations and sizes which are customer-specified to meet specific design requirements. Our custom video wall display cube solutions are built to order and can be promptly delivered to meet critical project deadlines. We have all of the most common screen sizes but our scalable design tools allow us to support any specific screen size required up to 120", for instance – 88.5", or 90”.

All systems are designed and manufactured at our main factory for use with our 1-chip and 3-chip DLP® projection engine products. Our customized display solutions provide customers with confidence and assurance that the entire display system is of superior quality and is fully supported by one manufacturer – Christie.

They are available in both front and rear access formats and are modularly constructed utilizing the latest screen technologies and options. Most designs offer a nominal screen gap of only 1mm! If there are special requirements such as a curved wall system or unique pedestal cosmetics, we can do it. It’s not unusual for us to work with specific requirements and preferences to design a custom system.

We also offer customized options for standard products to create a unique solution that fits your exact needs. Custom pedestals and rolling pedestals can address your special requirements where standard solutions may not fit as effectively.

You may also have to address other factors such as ambient lighting, display viewability and brightness, contrast, data text size, colors, etc., which affect the day-to-day health and performance of each operator. Eye acuity and operator position are used to determine the pixel density so that text and information is legible and quick to discern. Christie can work with you to ensure such factors are appropriately considered to ensure that the requirements of the system are properly defined and understood prior to determining which products are most appropriate.
1-chip DLP rear projection light engine options for customized video wall display systems

<table>
<thead>
<tr>
<th></th>
<th>Entero LED RPMSP-LED01</th>
<th>RPMHD-LED01</th>
<th>Entero LED RPMWU-LED01</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resolution</td>
<td>SXGA+</td>
<td>HD</td>
<td>WUXGA</td>
</tr>
<tr>
<td>Pixels</td>
<td>1400 x 1050</td>
<td>1920 x 1080</td>
<td>1920 x 1200</td>
</tr>
<tr>
<td>Display technology</td>
<td>1-chip DLP</td>
<td>1-chip DLP</td>
<td>1-chip DLP</td>
</tr>
<tr>
<td>Illumination type</td>
<td>LED</td>
<td>LED</td>
<td>LED</td>
</tr>
<tr>
<td>Illumination lifetime (hours)</td>
<td>60,000</td>
<td>60,000</td>
<td>60,000</td>
</tr>
<tr>
<td>Aspect ratio</td>
<td>4.3</td>
<td>16.9</td>
<td>16.10</td>
</tr>
<tr>
<td>Brightness at normal usage mode (ANSI lumens)</td>
<td>600</td>
<td>540</td>
<td>600</td>
</tr>
<tr>
<td>Projection design type</td>
<td>Rear screen</td>
<td>Rear screen</td>
<td>Rear screen</td>
</tr>
<tr>
<td>Lens types</td>
<td>0.69:1, 1.2:1</td>
<td>0.64:1</td>
<td>0.64:1</td>
</tr>
<tr>
<td>Lens throw range</td>
<td>40-100” diagonal</td>
<td>40-100” diagonal</td>
<td>40-100” diagonal</td>
</tr>
</tbody>
</table>

Notes: 1. See a Christie representative for more information. 2. Entero brightness values shown are based on reduced color space settings. 3. Brightness values are with shortest focal lens (typical) as listed. 4. Illumination lifetime rating are at typical operating mode.

Display solution design considerations:

<table>
<thead>
<tr>
<th></th>
<th>Will the solution look good and perform well for many years to come?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long term</td>
<td>What maintenance is involved to maintain the performance of the video wall, and how much will it cost on an ongoing basis?</td>
</tr>
<tr>
<td>Cost of operation</td>
<td>Is the solution proven capable for 24/7 operation and is it designed to perform reliably for the long term? What is the expected reliability of the system?</td>
</tr>
<tr>
<td>Reliability</td>
<td>Is the technology proven and current?</td>
</tr>
<tr>
<td>Brightness</td>
<td>Is the brightness appropriate for the application? Too bright may be harmful for users, too dim may not be usable.</td>
</tr>
<tr>
<td>Pixel density</td>
<td>Is the pixel density sufficient for the content and information being displayed? Too dense and some content may be too small to read making the system too excessive and a waste of money. Low density limits the amount of information displayed and can affect display quality and legibility.</td>
</tr>
<tr>
<td>Viewability</td>
<td>Is the information appropriately viewable by all using the video wall at the positions and locations within the room?</td>
</tr>
</tbody>
</table>

Moveable wall systems

When space is limited to support service access to the video wall system, Christie offers manual or motorized moveable wall systems for our cubes and custom displays. This allows the display system to be positioned directly up against a rear facing wall. In the event that wall maintenance is required, the entire video wall can temporarily move forward by 18 to 24 inches via motorized control thus allowing service personnel to easily access the system. In many cases this is a much better solution over traditional “front access” cube systems since there is little or no interruption in front of the video wall while the system is being serviced. Also, gaps between screens can remain at a nominal 1mm rather than at the typical 2mm spacing of other front access systems. Overall cost of the system can be much less with reduced interruption and down-time.

Retrofitting – upgrading existing video wall systems

Christie offers customized design services to facilitate field upgrading of older systems so you can utilize the latest projection and display technologies. Upgrading is a great alternative to complete video wall replacement – it cannot only save on costs, but also reduce the time and disruption involved with system replacement. In many cases existing cubes, structures and screens can remain intact and only the projection engine is replaced, enabling a greener solution overall. Christie’s experience of providing upgrade support is unmatched in the industry.

Custom pedestals

Christie also provides built-to-order pedestals for our standard 50”, 67”, 70” and 72” cube solutions at customer specified heights, finishes, and requirements. Finish your video wall to your specific room needs to make it stand as a showpiece, or blend into the room.

Christopher B. Costello 2/1/10 7:00 PM
India
ph: +91 80 6708 9999

Singapore
ph: +65 6877 8737

China (Shanghai)
ph: +86 21 6278 7708

China (Beijing)
ph: +86 10 6561 0240

Japan (Tokyo)
ph: 81 3 3599 7481

Korea (Seoul)
ph: +82 2 702 1601

Corporate offices
Christie Digital Systems USA, Inc
USA – Cypress
ph: 714 236 8610

Christie Digital Systems Canada Inc.
Canada – Kitchener
ph: 519 744 8005

Independent sales
consultant offices

Italy
ph: +39 (0) 2 9902 1161

South Africa
ph: +27 (0) 317 671 347

Worldwide offices

United Kingdom
ph: +44 (0) 118 977 8000

Germany
ph: +49 2161 664540

France
ph: +33 (0) 1 41 21 44 04

Spain
ph: +34 91 633 9990

Eastern Europe and
Russian Federation
ph: +36 (0) 1 47 48 100

United Arab Emirates
ph: +971 4 3206688

India
ph: +91 80 6708 9999

Singapore
ph: +65 6877 8737

China (Shanghai)
ph: +86 21 6278 7708

China (Beijing)
ph: +86 10 6561 0240

Japan (Tokyo)
ph: 81 3 3599 7481

Korea (Seoul)
ph: +82 2 702 1601

For the most current specification information, please visit www.christiedigital.com

Copyright 2012 Christie Digital Systems USA, Inc. All rights reserved. All brand names and product names are trademarks, registered trademarks or tradenames of their respective holders. Christie Digital Systems Canada Inc.’s management system is registered to ISO 9001 and ISO 14001. Performance specifications are typical. Due to constant research, specifications are subject to change without notice.

Printed in Canada on recycled paper. 3303 May 12