

OLEDs Are Making Display Magic

Research Focuses on Emerging Technologies



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A brighter way to ring in the New Year

On New Year's Eve 2011, the people of Ashgabat, Turkmenistan, celebrated the launch of not just 2012 but a citywide laser installation.

A laser projected "2011" on the capital city's 175-m-high Anayasa tower and then counted down the seconds until the New Year arrived. At just the right moment, the laser projection changed to read "2012." As the fireworks went off, both the New Year and the Ashgabat Towers Project took off.

The project is an immense permanent laser display that connects the city's towers with shining beams of green, the national color of Turkmenistan. LOBO electronic GmbH of Aalen, Germany, which has supplied laser show and multimedia systems for more than 25 years, partnered with Turkish construction company Polimeks to create the spectacle.

Spanning a total distance of almost 30 km between all the towers in an extremely bright environment was a formidable challenge for the engineers, the German company said. Automation and daily operation of the elaborate system required different approaches. The display automatically lights up every evening at 7 o'clock and dims at 3 a.m.

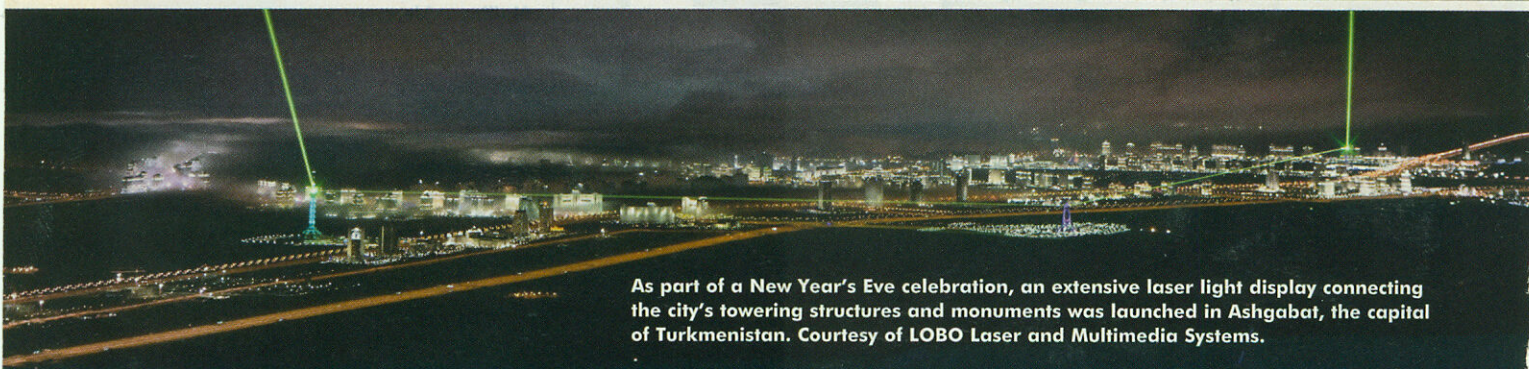
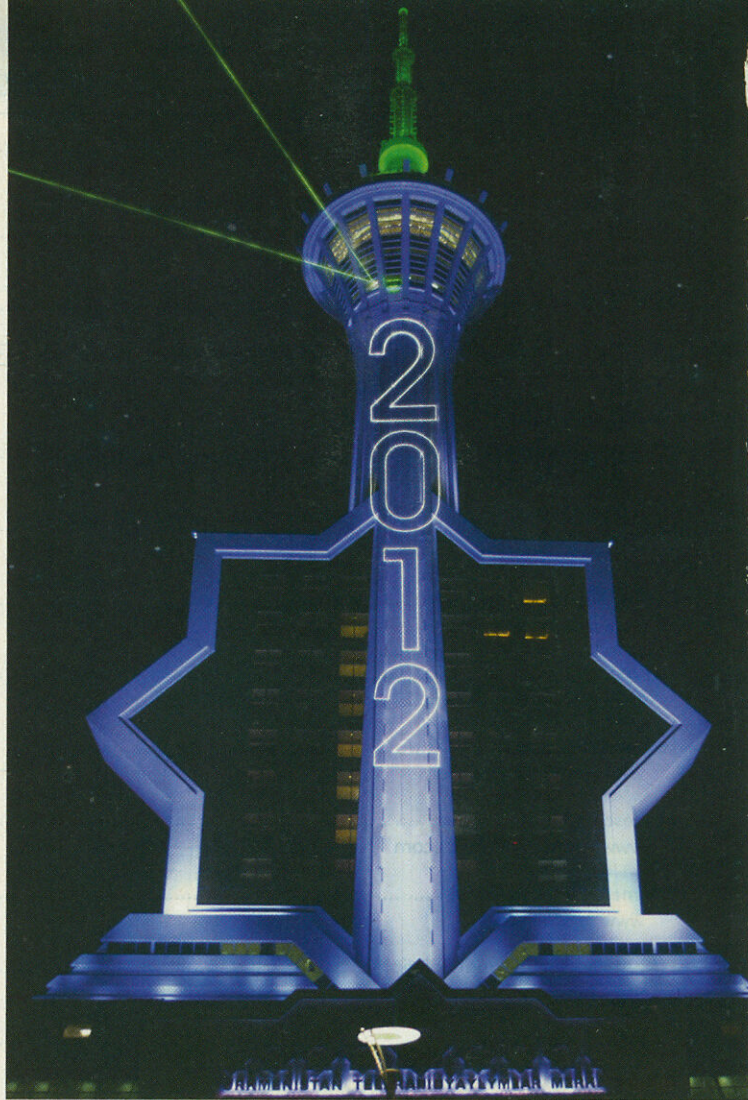
All beams were designed bidirectionally to provide the best visibility. LOBO's ultrabright "sparks" series lasers form the basis of the project, and its Lacon-5 platform handles the automation; integrated global positioning system modules synchronize the laser systems. Coherent Inc.'s Verdi lasers are incorporated into the display as well.

"Superlative beam quality was a key criterion at this project," said Alexander Hennig, LOBO's creative director. The company designed special optics for the installation to guarantee optimal light density over long distances, he added. The much-needed high brightness was accomplished partly through the use of LOBO's 10-km-long laser test track.

Officials of the International Laser Display Association believe that the Ashgabat project is the largest permanent display laser installation in the world, according to LOBO; the association recently accredited LOBO as a professional laser show company.



Caren B. Les
caren.les@photonics.com



As part of a New Year's Eve celebration, an extensive laser light display connecting the city's towering structures and monuments was launched in Ashgabat, the capital of Turkmenistan. Courtesy of LOBO Laser and Multimedia Systems.