

Laser art amazes UI audience

By Michelle Tibodeau
Staff Writer

A THREE dimensional swirl of green light and one of yellow, glowed brightly on the wall in the dark demonstration room. A shot of blue and another of red pierced through the swirls as letters formed on the screen. New technology was on display last week in a special showing of laser technology for Iowa Intensive English Program students in the UI School of Music's laser studio.

Professor Lowell Cross of the Music Department and Dave Muller, an audio-specialist in electronic music studies, have been developing a vector generator during the past year. "It's a new way of interfacing a laser to a computer. It draws more detailed pictures than systems of past," Muller said, comparing it to a stereo equalizer, except that it's digital. "It equalizes the frequency responses of the laser scanners which deflect light beams to draw pictures," he said.

PREVIOUS SYSTEMS have not performed well, according to Muller. The high frequencies of sharp turns in laser beams were hard to transmit. This new invention turns up the high frequencies so sharper corners can be

made. Muller compared the process to cars — for example, a Porsche can turn sharper corners faster and better than a Cadillac. This system allows the laser to turn sharper corners and make clearer pictures.

In Friday's presentation, names of students in the English Program were displayed on the laser studio's wall. Cross decided to share this technology with the students at the suggestion of his wife, who is a secretary for the program. He said many of these foreign students have never seen lasers before. "We've got one and we'll put their names on the wall," Cross said.

According to Cross, the vector generator, unlike past systems, can keep the figures still long enough to see them clearly. This system is not quite perfected, though, and the figures do flicker a bit. But Cross said the pictures look better than those of previous interfacing systems.

Eventually the vector generator will make pictures, detailed scenes and animated sequences, Muller said. He's planning a full-length show using the new invention sometime in the future, but Muller said it could be a year before this takes place. Muller, who's been working on the system as a spare-time project, still wants to refine it.



Lowell Cross

Fascination with electronic music and its absence of visual information led Lowell Cross, UI Professor in the School of Music, to invent the laser light show and become involved with new performing arts' technologies.

Cross said, "the possibility of building this (laser) system" at the School of Music, is what brought him to the UI campus in 1971. This system, Video/Laser III, is the longest operat-

ing laser light show system in existence.

He and Carson Jeffries, a sculptor and physics professor at the University of California at Berkeley, along with David Tudor, a performer of "live electronic" music, gave the first laser light show in 1969 at Mills College in Oakland, Calif., where Cross was teaching at the time. This led to the first laser system which Cross and Jeffries made.