



THE CONCEPT

The Light Tracer was conceived and engineered by

Photo-Resist Processes. Masters all formats including:

- DVD
- CD-R
- CD ROM
- CD AUDIO

THE SOFTWARE

Trace's proprietary windows-based user interface controls key settings and functions of the LBR:

ATOMIC PARTICLE ACCURACY

- The Light Tracer delivers atomic particle accuracy through a 43 Angstrom closed loop digital servo interferometer, resulting in superior track pitch production
- More than 8 million micro increments are made over the program area of the CD by a precision linear motor resulting in exceptional radial positioning

Light Tracer Laser

people who use it. Mastering experts, who have been key players in every facet of the optical disc revolution, committed to providing state of the art mastering technology accommodating all formats including DVD, while delivering stable, repeatable, controllable and proven performance.

THE DESIGN

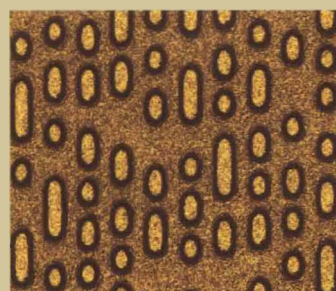
The Light Tracer epitomizes technology mastered by delivering exceptional performance through intrinsic design elements such as:

Precision non-contact air bearings which cushion all moving parts of the optical table.

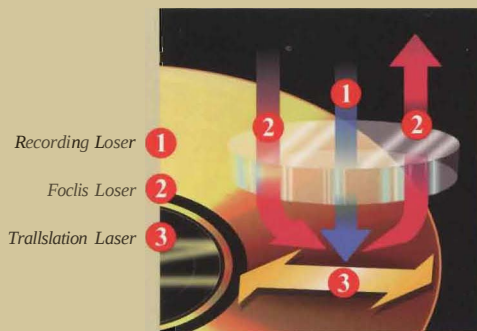
Mastering speeds capable of supporting future signal processing technology.

Compatibility with existing

- Automatic selection of optimum LBR parameters, with point and click execution of tasks
- Integrated Light Probe™ diagnostics, for real time system monitoring
- Functional control of mastering software subsystems



SUPERIOR GEOMETRIC PRODUCTION



- The encoded laser beam is continuously monitored after the Acousto-Optic Modulator guaranteeing 100% signal integrity at the glass surface
- The encoded signal is verified to ensure compliance to industry standards and C1/C2 error detection
- No intermediate handling of encoded data avoids potential data corruption and signal degradation

DIAGNOSTICS BY LIGHT PROBE

- Totally integrated into the system, no auxiliary test or measurement equipment necessary
- Provides and displays performance data on: translation system, focus system, modulation signals, laser power, focus and start recording

rBeam Recorder

Three important parameters; translation, focus position and pit geometry are controlled by three separate lasers:

- A proprietary laser interferometer-based servo controls the translation positioning for superior track pitch geometry
- A red semiconductor laser maintains optimum spot geometry automatically through a closed-loop focus servo
- A proven Coherent Enterprise recording laser maximizes its intrinsic wavelength characteristics for optimum CD and DVD pit geometry

100% SIGNAL INTEGRITY

Read during write instantly detects any faults in the encoded laser beam.

LIGHT SOFT GUI

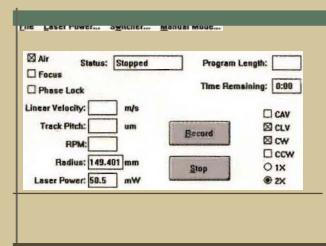
The "Light Soft" graphical user interface provides intuitive point and click access and control of sub-systems, calibration and set up, and diagnostics.

SUB SYSTEMS

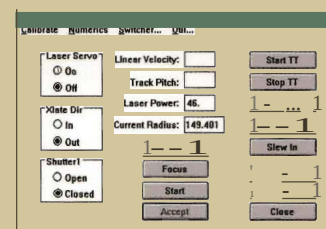
- One screen selects, starts, executes, stops and reports status of focus, track, pitch, linear velocity, laser power and more
- Automatically selects parameters and displays real time status of LBR

CALIBRATION AND SET UP

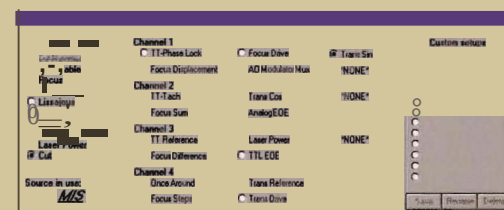
- Enables maintenance override of LBR functions for calibration
- Password protection prevents unauthorized access



Sllb-sysTem screen



Calibration and Set Up screen



Light Probe diagnostics screen