# Detailed comparison between Pro, Basic and Intro

| Frame creation | LD2000 Pro | LD2000 Basic | LD2000 Intro |
|---|---|---|---|
| Drawing coordinates (resolution) | 16000 x 16000 | 16000 x 16000 | 16000 x 16000 |
| Draw true 3D frames | Yes | No | No |
| Auto-trace (convert simple bitmaps to laser outlines) | Yes | Yes | Yes |
| Digitizing tablet input | High-resolution (tablet direct), screen resolution (tablet as mouse) | High-resolution (tablet direct), screen resolution (tablet as mouse) | High-resolution (tablet direct), screen resolution (tablet as mouse) |
| MicroScribe 3D digitizing arm input | Yes | No | No |
| See laser output while drawing/editing | Yes | Yes | Yes |
| Number of drawing colors | 16.7 million: | 48 fixed shades: | 24 fixed shades: |
| Number of possible output colors | Over 1 trillion | Over 1 trillion | Over 1 trillion |
| Create raster (TV-type) picture frames | Yes | Yes | No |
| Create vector (European-style) frames | Yes | Yes | Yes |
| Create abstract (classic planetarium) frames | 3 oscillator banks, color modulator, 4 fixed waveforms plus ability to make any frame an abstract. | 2 oscillator banks, color modulator, 4 fixed waveforms | 1 oscillator bank, color modulator, 4 fixed waveforms |
| Number of TrueType fonts | Unlimited (whatever is on host Windows computer) | Unlimited (whatever is on host Windows computer) | Unlimited (whatever is on host Windows computer) |
| Alphabets supported | Most alphabets, including Chinese, and other Eastern | Most alphabets, including Chinese, and other Eastern | Most alphabets, including Chinese, and other Eastern |
| Number of special laser fonts | 26, plus ability to create and use custom laser fonts | 26. No ability to create or use custom laser fonts | 26. No ability to create or use custom laser fonts |
| Pre-computed morphing between frames | Yes | Yes | Yes |

| | LD2000 Pro | LD2000 Basic | LD2000 Intro |
|---|---|---|---|
| **Real-time morphing between frames (no need to store in-between frames)** | Yes | Yes | No |
| **Recolor tools** | Paint roller, paint brush, rainbow line and point, smooth colors, feathered lines | Paint roller, paint brush, rainbow line and point, smooth colors, feathered lines | Paint roller, paint brush, rainbow line and point |
| **Movement tools** | Manual, quick, numeric | Manual, quick, numeric | Manual, quick |
| **2D tools** | Mirror horizontal and vertical | Mirror horizontal and vertical | Mirror horizontal and vertical |
| **2D warping** | 180 & 360 degree curve. Fisheye lens. Spiral. | 180 & 360 degree curve. Fisheye lens. Spiral. | None |
| **3D tools** | Extrude, spin (lathe) | None | None |
| **3D warping and surface mapping** | Cube, sphere, hemisphere. Cylinder, hemicylinder. Cone, hourglass, black hole. Bump map from bitmap. Stretch Z. | None | None |

| Show creation | LD2000 Pro | LD2000 Basic | LD2000 Intro |
|---|---|---|---|
| **Timeline-based motion (stretch or shrink to change effect timing)** | Yes | Yes | Yes |
| **Playback shows with how many X-Y scanner pairs controlled** | 30 | 30 | 30 |
| **Number of tracks (simultaneous frames doing different things)** | 32 | 16 | 8 |
| **On-screen preview** | Yes | Yes | Yes |
| **View preview as graphics or beams** | Yes | Yes | Yes |
| **Realtime (not pre-computed) animation capabilities** | Time-based (animate for X seconds), refresh-based (draw frame X times) | Time-based (animate for X seconds), refresh-based (draw frame X times) | Time-based (animate for X seconds) |
| **Realtime (not pre-computed) morphing between frames** | Morph between any two frames; sequential morph between any number of frames | Morph between any two frames; sequential morph between any number of frames | None — can create pre-computed morphs but not realtime |
| **Rate-of-change for animations and effects** | Linear (smooth), accelerate, decelerate, | Linear (smooth), accelerate, decelerate, | Linear |

| | LD2000 Pro | LD2000 Basic | LD2000 Intro |
|---|---|---|---|
| | accelerate then decelerate, ping-pong, oscillate, random | accelerate then decelerate, ping-pong, oscillate, random | |
| **Parameters that can be controlled** | Size, rotation, position, 3D perspective, viewing distance, scan speed, window-wipe, brightness, color cycling, draw-out, erase-in, depth cueing, master screen size and position. | Size, rotation, position, 3D perspective, viewing distance, scan speed, window-wipe, brightness, color cycling, draw-out, erase-in, depth cueing, master screen size and position. | <mark>Size, rotation, position, 3D perspective, scan speed, window-wipe, brightness, color cycling, draw-out, erase-in, master screen size and position.</mark> |
| **Automatically synchronize to audio CD in computer** | Yes | Yes | Yes |
| **Automatically synchronize to sound files (WAV, MIDI, MP3, AU formats)** | Yes | Yes | Yes |
| **Automatically synchronize to audio/video files (AVI, MPEG, MOV, QT formats)** | Yes | Yes | Yes |
| **Automatically synchronize to SMPTE timecode** | Yes | Yes | Yes |
| **Automatically synchronize laser frames to video frames (video sync)** | Yes | Yes | Yes |
| **Mark music beats and see visual marks** | Yes | Yes | Yes |
| **Output show (or parts of show) as a sequence of ILDA frames** | Yes | Yes | Yes |
| **Output show (or parts of show) as a Windows AVI file** | Yes | Yes | <mark>No</mark> |

| **Output capabilities** | **LD2000 Pro** | **LD2000 Basic** | **LD2000 Intro** |
|---|---|---|---|
| **Playback any show created on Pro, Basic or Intro versions** | Yes | Yes | Yes |
| **Create shows that can be viewed on Lasershow Player model CD2000** | Yes | Yes | Yes |
| **Hardware output board** | QM2000 dedicated laser computer | QM2000 dedicated laser computer | QM2000 dedicated laser computer |
| **Scan speed remains the same, no matter how fast or slow the PC computer** | Yes | Yes | Yes |
| **Show continues even if PC crashes or freezes** | Yes | Yes | Yes |

| | LD2000 Pro | LD2000 Basic | LD2000 Intro |
|---|---|---|---|
| DMX input | Yes | Yes | Yes |
| DMX output | Up to 512 channels | Up to 512 channels | Up to 512 channels |
| Z-axis signal, for stereoscopic output (requires additional hardware) | Yes | Yes | Yes |

| Included programs    extra | LD2000 Pro | LD2000 Basic | LD2000 Intro |
|---|---|---|---|
| AVS/Laser plug-in for Winamp | Yes | Yes | Yes |
| AutoPlay — automated show playback program | Yes | Yes | Yes |
| Asteroids Laser Game | Yes | Yes | Yes |
| TraceIT bitmap tracing program | Yes | Yes | Yes |
| Lasershow Video – VST | Yes | Yes | Yes |
| Lasershow Converter ADAT | Yes | Yes | Yes |
| Lasershow Converter FLASH | Yes | Yes | No |
| Lasershow Converter 4D | Yes | Yes | No |
| LivePRO | Yes | No | No |

| Miscellaneous | LD2000 Pro | LD2000 Basic | LD2000 Intro |
|---|---|---|---|
| Import file formats for laser frames | LD2000, LD (QM32), LD Amiga, Aura/Laser Fantasy, ILDA | LD2000, LD (QM32), LD Amiga, Aura/Laser Fantasy, ILDA | LD2000, LD (QM32), LD Amiga, Aura/Laser Fantasy, ILDA |
| Export file formats for laser frames | LD2000, ILDA | LD2000, ILDA | LD2000, ILDA |
| Ability to write custom programs using C, Visual Basic or other languages | Yes | Yes | Yes |
| Includes program, for tracing live video to make raster or outlines | Yes | Yes | Yes |
| Help file(s) size, bytes | 8 files, 4.5 MB | 8 files, 4.5 MB | 8 files, 4.5 MB |
| Approximate number of shows (songs) included | Over 120, including shows from International Laser Productions | Over 120, including shows from International Laser Productions | Over 120, including shows from International Laser Productions |
| Money-back trial period (satisfaction guarantee) | 90 days | 90 days | 90 days |

*Features and prices are subject to change without notice, due to continual product improvement.*