

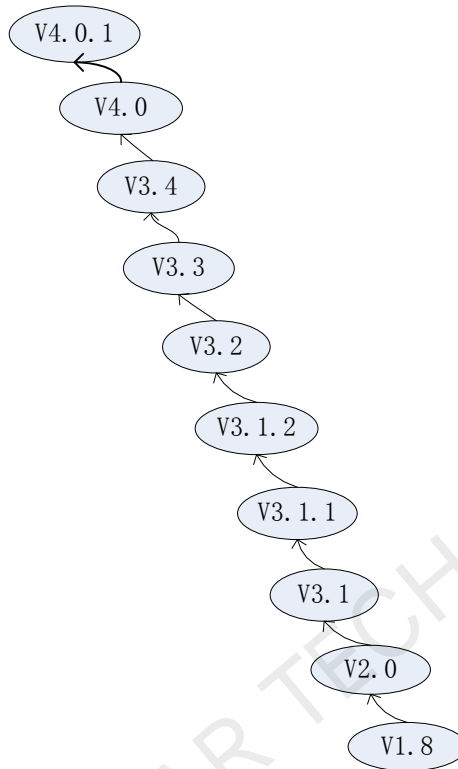


# Update Description

NovaCLB-Screen

TIJAN NOVASTAR TECHNOLOGY CO., LTD.

# 1 Roadmap



## 2 The main update content of every version (Relative to the previous version)

Version & Publish	V4.0.1 2015-12-10	
Time:		
Update Content:	Functions	<ol style="list-style-type: none"> <li>1. Integrated 'Cabinet To Screen' tool;</li> <li>2. Modify the judgment target method;</li> <li>3. Modify 'Auto Partition' to 'Recommend'.</li> </ol>
	Bug Fixes	<ol style="list-style-type: none"> <li>1. Relocate abnormal when manual location;</li> <li>2. Eliminate the boundary abnormal when use large partition sometimes;</li> <li>3. Show number abnormal when trim coefficients in the process modify the dark or bright lines.</li> </ol>
Writer:	Ruitao Zheng	

Version & Publish Time:	V4.0 2015-09-15	
Update Content:	Functions	<ol style="list-style-type: none"> <li>1. It supports smart partitioning, and set borders before correction.</li> <li>2. It supports high-precision color correction;</li> <li>3. It support a correction for 2K area;</li> <li>4. It supports change the target to regenerate correction coefficients;</li> <li>5. It supports enlarge part of the area image when enabled background off;</li> <li>6. It supports check the hardware can achieve proportional;</li> <li>7. It supports use your camera to eliminate splicing of light and dark lines;</li> <li>8. It supports select the path of the collection images;</li> <li>9.It supports continue correction when the correct process was forced to interrupt(Low battery,etc.)。</li> </ol>
	Bug Fixes	
Writer:	Ruitao Zheng	
Version & Publish Time:	V3.4 2015-05-10	
Update Content:	Functions	<ol style="list-style-type: none"> <li>1.Support NovaPro online calibration.;</li> <li>2.Support Russian.</li> </ol>
	Bug Fixes	<ol style="list-style-type: none"> <li>1.Individual camera connection exception;</li> <li>2.Cannot modify the terminated row or column number when there is just one partition.</li> <li>3.If the whole left subarea modify the start column, hemp dots may appear on the left bottom of the screen after partition boundary elimination.</li> </ol>
Writer:	Ruitao Zheng	
Version & Publish Time:	V3.3 2014-12-08	
Update Content:	Functions	<ol style="list-style-type: none"> <li>1. Add the menu bar;</li> <li>2. Add authorization documents manage, authorization document can be added when software opening, if there exists noauthorization document or the match authorization dog, it's unable to connect with LCT;</li> <li>3. Add database backup, which can effectively prevent file damage caused by software</li> </ol>

		<p>suddenly shut down;</p> <p>4. Use sqlite instead of access, in order to improve the write/read speed;</p> <p>5. Support the calibration of the display has one or two LEDs;</p> <p>6. Adjust the targets advanced page, allow users input targets manually, and support three common temperature point;</p> <p>7. Add ISO adjustment, limite the LED imaging area, to reduce the probability of Moore grain appear after calibration;</p> <p>8. Adopt processing image while collectiong, to improve efficiency;</p> <p>9. Support eliminate the boundaries even though all the partitions are not be calibrated;</p> <p>11. Add the tool which can update targets and recalculate the coefficients;</p> <p>12. Users can pause the calibration when large partition;</p> <p>13. Users can modify the allowed dead ratio when calibration.</p>
	Bug Fixes	<p>1. It fixed the problem that if LCT disconnect when saving to database in eliminate the boundaries, reconnect to LCT and save again, the database cannot be loaded to LCT or other relevant softwares.</p>
Writer:	Ruitao Zheng	
Version & Publish Time:	V3.2 2014-07-08	
Update Content:	Functions	<p>1. Separate of image acquisition and image analysis procedures, improve the calibration efficiency;</p> <p>2. Integrated Tool of the screen to cabinet and screen data merging;</p> <p>3. Modify the software icon.</p>
	Bug Fixes	
Writer:	Lei Yin	
Version & Publish Time:	V3.1.2 2014-06-20	
Update Content:	Functions	
	Bug Fixes	<p>1. It fixed the problem that for regular partition wrapping correction, the whole partition tends to be darker;</p> <p>2. It fixed the problem that after regular partition wrapping correction, the wrapping tends to</p>

		<p>be brighter;</p> <p>3. It fixed the problem that in some countries, camera parameters in the operating system cannot be set;</p> <p>4. It fixed the problem that for regular partition, the starting point of partition topology cannot be changed using the right-button.</p>
Writer:	Lei Yin	
Version & Publish Time:	V3.1.1 2014-04-10	
Update Content:	Functions	
	Bug Fixes	<p>1. It fixed the problem that the captured image is black when camera exposure time is equal to 200 or less than 200.</p> <p>2. It fixed the problem that an exception occurred when connecting camera failed.</p> <p>4. It fixed the problem that the notification is wrong when software covered installation.</p>
Writer:	Lei Yin	
Version & Publish Time:	V3.1 2014-03-12	
Update Content:	Functions	<p>1. Eliminate the seam between module and cabinet after calibration.</p> <p>2. It can calibrate the new module, make its uniformity as same as the surroundings.</p> <p>3. It can find out that the LED lights on the border are covered, then avoid these lights and continue calibration.</p> <p>4. It can avoid the influence of interference light around a fixed partition (e.g. Street light).</p> <p>5. It can detect the difference between control system and control computer, and give prompt.</p> <p>6. When LED point positioning failed in complex environment or In a partition of complex shape, the user can adjust the LED location manually.</p> <p>7. Supports Canon 70D camera.</p> <p>8. Interface easier to use.</p> <p>9. It reduced the time of single image acquisition in large partition mode.</p>
	Bug Fixes	<p>1.It fixed the problem that red changed soft red after calibration.</p> <p>2. It fixed the problem that white change reddish white after calibration.</p>

		<p>3. It fixed the problem that partition boundary cannot be eliminated when the size of partitions were different.</p> <p>4. It fixed the problem that a memory error happened when having lots of partitions.</p> <p>6. It fixed the problem that camera did image acquisition before displaying corresponding image. After calibration, the screen uniformity became worse.</p> <p>7. It fixed the problem that some blue highlights appeared on the display after normal partition calibration.</p> <p>8. It fixed the problem that a rainbow phenomenon appeared on the display after large partition calibration.</p> <p>9. It fixed the problem that a caterpillar phenomenon appeared on the display after calibration. (eight or sixteen lights together are brighter than surroundings)</p>
Writer:	Lei Yin	
Version & Publish Time:	V2.0 2013-10	
Update Content:	Functions	<p>1. Add large partition mode which size can be 224 plus 150.</p> <p>2. Add partition boundary elimination function.</p> <p>3. Add screen boundary elimination function.</p> <p>4. Add the function for locating the screen position by artificial auxiliary way when there was more interference light source.</p> <p>5. Add the function that the software removed the background light interference before analyzing image data under large partition mode.</p> <p>6. New automatic analysis function of saturation.</p>
	Bug Fixes	<p>1. It fixed an occasional problem that the software may be no response during running.</p> <p>2. It fixed an occasional problem that the camera occasionally did not do image acquisition when clicking 'Auto', 'Analyze' or 'Start' button.</p> <p>3. It fixed an occasional problem that the screen display white as green after screen modification.</p> <p>4. It fixed the problem that the partition information may be lost if the software exits abnormally.</p>
Writer:	Lei Yin	

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### 3 Compatibility

Large Partition Mode	Synchronous control system —NovaLCT-Mars	Supported version: V4.2.4 and above V3.2.2 RT5.0 V3.2.2 RT7.0
		Not supported version: others
	Asynchronous control system —NovaLCT-Pluto	Not supported

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