

8x8x8 Led cube. User guide

Led cube connectors

- DC_IN: Power supply input 5V 2A. 2.5mm x 0.8mm DC jack connector.
- USB_MISC:
 - USB for PC connection.
 - Synchronization and remote control line .
- AUDIO_IN: Audio input. 3.5mm jack stereo connector.



Software installation

Download LedCube8_Setup.msi from our website www.trilobyteprojects.com and install the software to the default location. If a warning appears click on continue anyway. Tested under Windows XP, Vista, 7 and 8.

Led cube operation modes

The led cube has two operation modes: PC mode and PLAY mode.

When you turn on the cube, it looks for a computer connected to its USB port. If there's a computer connected, the led cube enters into PC operation mode, if not, it enters into PLAY mode and it starts playing the stored presentations.

Once it is playing animations you have to reboot the led cube if you want to change to PC mode operation.

Driver installation

NOTES:

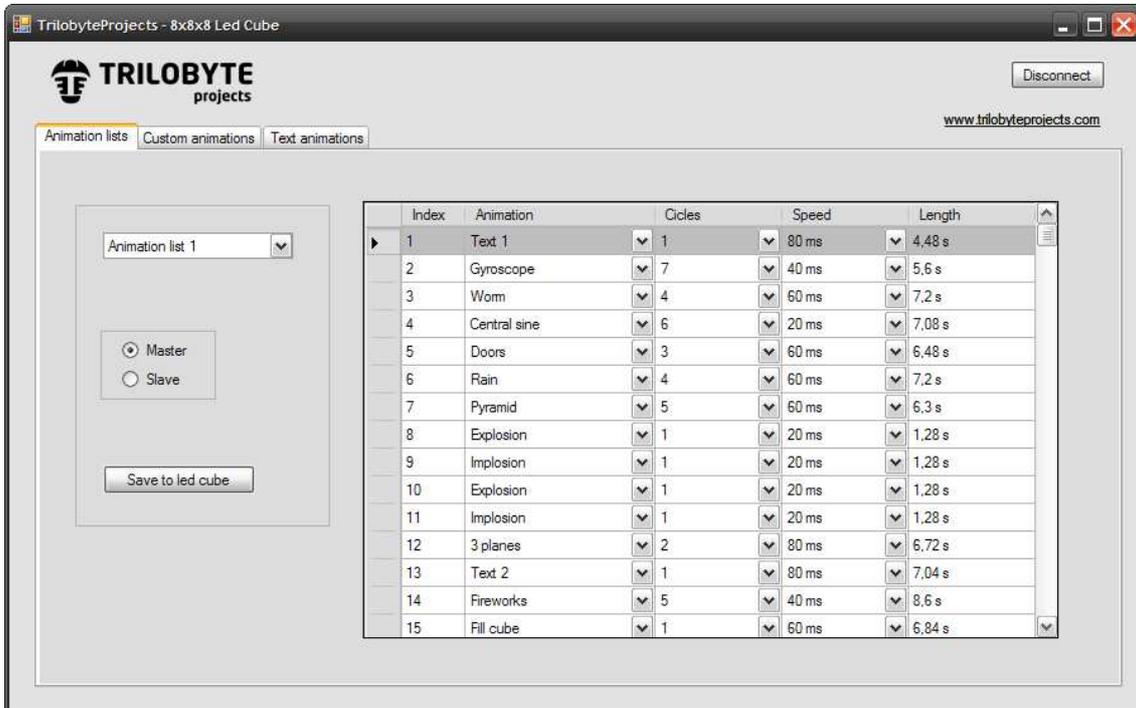
- Install the software LedCube8_Setup.msi before driver installation.
- Allow installing unsigned drivers under Windows 8.

- 1.- Connect the USB port to your computer.
- 2.- Turn ON the led cube.
- 3.- Install drivers manually.
 - 3.1.- Open *Device Manager* and look for a device called *Led Cube 8x8x8*.
 - 3.2.- Right click over it and choose *Update Driver Software*.
 - 3.3.- Click on *Browse my computer for driver software*.
 - 3.4.- Choose the folder that contains the drivers.
(C:/Program Files/TrilobyteProjects/Drivers by default)
 - 3.5.- If a warning appears click on install software anyway.

Contact us at info@trilobyteprojects.com if you have any problem installing the software or drivers.

Animation list

Up to 20 different presentations can be stored in the led cube using the pre-installed animations or your own custom made ones.



1.- *Animation list drop-down menu.* Select the animations list that you want to modify.

2.- *Master – Slave radio button.* Several led cubes can be synchronized, one of them would be the master and the other the slaves.

3.- *Animation list table.*

3.1. *Index.* Up to 255 animations in the same presentation.

3.2. *Animation.* Drop-down menu for animation selection.

3.3. *Cycles.* Number of repetitions or steps of the animation.

3.4. *Speed.* Time that each frame stays on the cube. The higher the time the slower the animation.

3.5. *Length.* Aproximate animation length (in seconds). Calculated from number of cycles and speed.

4.- *Save to led cube button.* Apply changes to the led cube.

NOTE:

Some animations have cycles limitations:

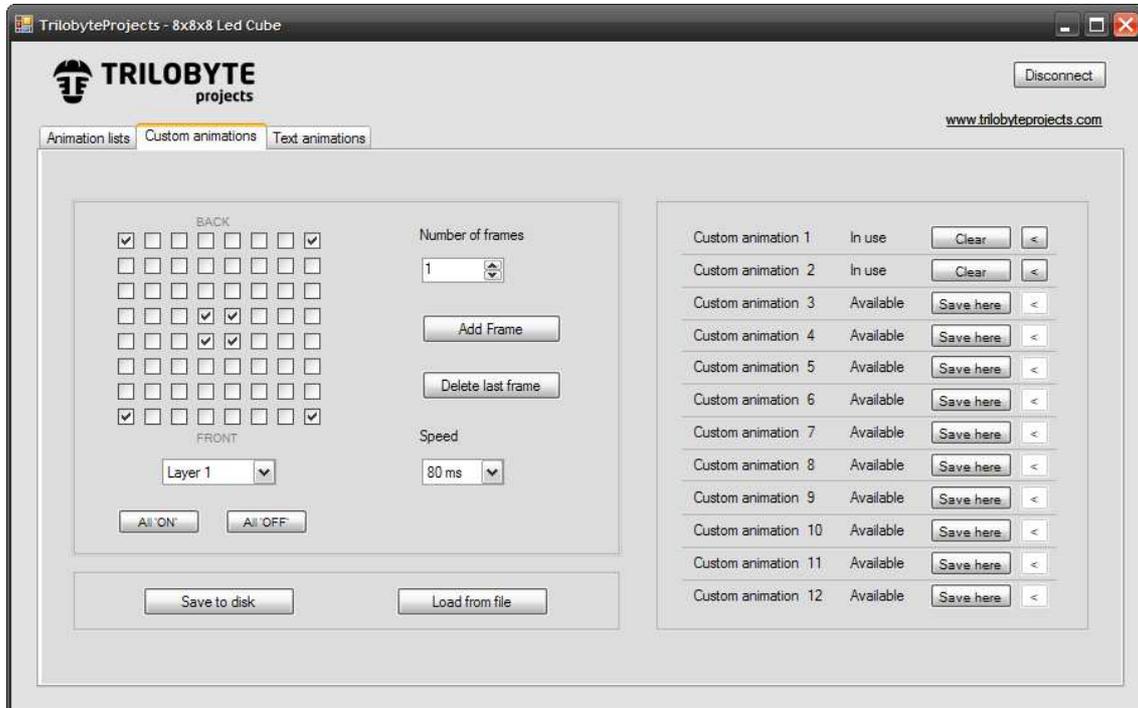
Rain (max. 330 cycles); Hanging leds (max. 500 cycles); Snake (max. 330 cycles);

Dancing plane (max. 500 cycles); Up-down columns (max. 500 cycles);

Worm (max. 330 cycles); Random move (max. 330 cycles).

Custom animations

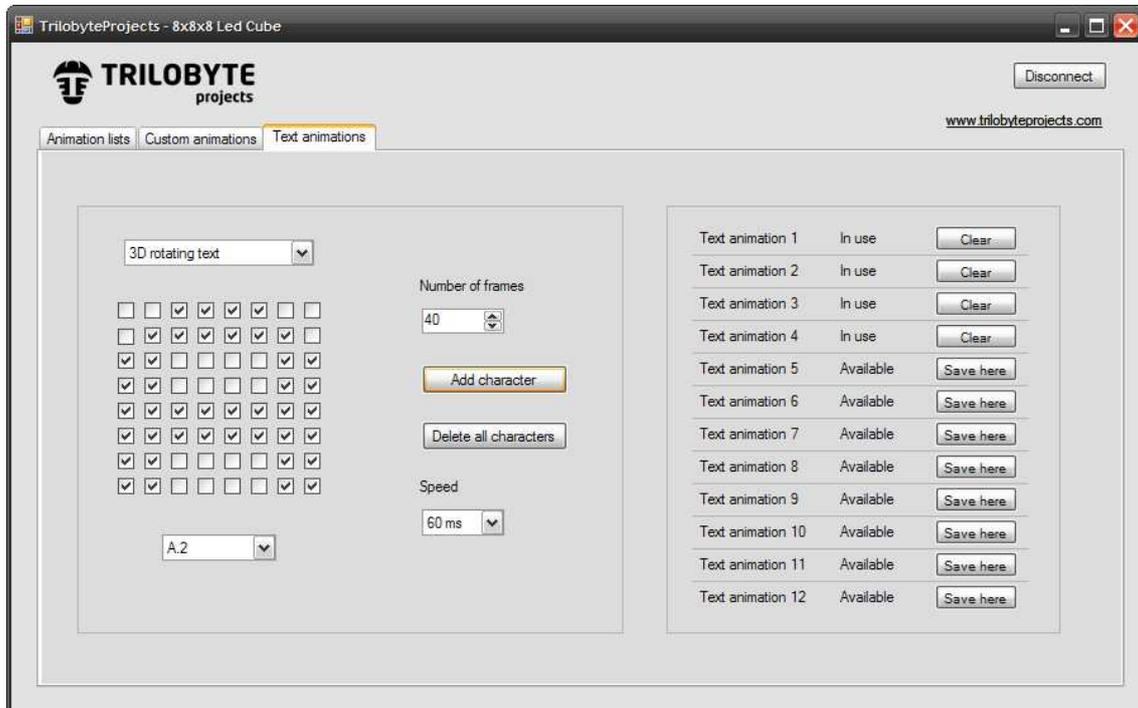
Create easily your own patterns and animations. The led cube will show your 3D image while you are drawing it. You can save 12 custom animations with up to 1000 frames.



- 1.- *Checkboxes matrix*. Leds from the layer selected on the Layer drop-down menu.
- 2.- *Layer drop-down menu*. Select the layer that you are working on.
- 3.- *All 'ON', All 'OFF' buttons*. Set all the leds in the frame to ON or OFF.
- 4.- *Number of frames*. Select the frame that you are working on.
- 5.- *Add frame button*. Add one frame to the custom animation.
- 6.- *Delete last frame button*. Delete last frame of the custom animation.
- 7.- *Speed*. Set the default time that each frame stays on the cube. The higher the time the slower the animation. You can also change this time in the animation list.
- 8.- *Save to disk button*. Save the custom animation to a binary file in the hard disk.
- 9.- *Load from file button*. Load the custom animation from a binary file.
- 10.- *Clear button*. Remove the stored animation from a 'busy slot' of the led cube.
- 11.- *Save here button*. Save the current animation to a 'free slot' of the led cube.
- 11.- *'<' button*. Load the custom animation from the led cube.

Text animations

Save text messages to the led cube using 6 different animations. You can select the pre-installed characters or draw your own 8x8 font.



- 1.- *Text animation drop-down menu.* Select the animation for the text message.
- 2.- *Checkboxes matrix.* Character that will be added to the text message.
- 3.- *Character drop-down menu.* Load one of the pre-installed characters.
- 4.- *Number of frames.* Select the frame of the text message.
- 5.- *Add character button.* Add the selected character to the animation.
- 6.- *Delete all characters button.* Delete all characters from the animation.
- 7.- *Speed.* Set the default time that each frame stays on the cube. The higher the time the slower the animation. You can also change this time in the animation list.
- 8.- *Clear button.* Remove the stored animation from a 'busy slot' of the led cube.
- 9.- *Save here button.* Save the current animation to a 'free slot' of the led cube.

Presentation change

Once you have stored several presentations you can switch between them using the *MODE* button under the led cube.

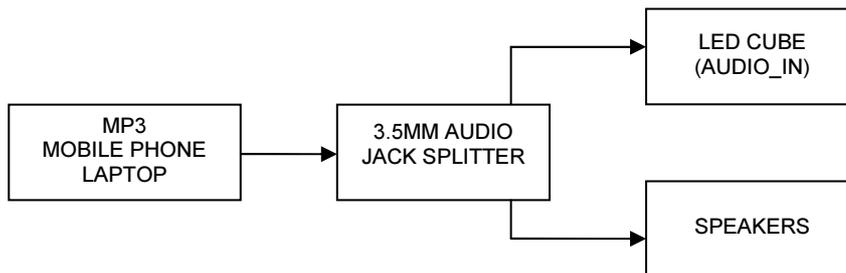
Illumination adjustment

The light intensity of the leds can be modified with the button marked as *ILUM* under the cube. Changes are saved to the internal memory of the led cube when the current animation finish.

Music animations

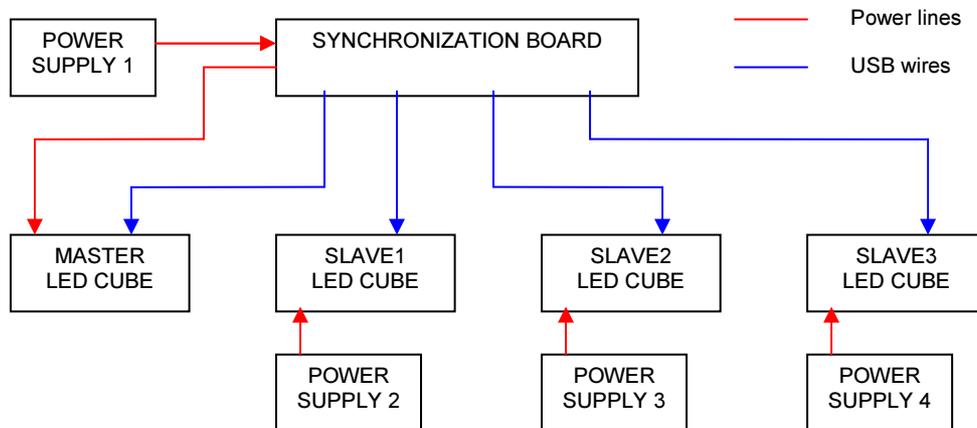
The led cube has a spectrum analyzer circuit that filters and measure the music level. Use a 3.5mm jack stereo connector at the port marked as *AUDIO_IN* and adjust the volume for a correct visualization.

Follow this scheme for connecting the music to the led cube and your speakers:



Synchronization and remote control kit (optional)

Board connections



Remote control

At the back of the remote control there is a switch to control the operation mode.



- Switch position 1: MODE control.
- Switch position 2: ILUMINATION control.

For further information and support contact us by e-mail at info@trilobyteprojects.com