

## LEDbuckle User's manual

LEDbuckle and LEDjewelry are fashionable spectacular accessories united with the latest innovation in electronics. Modern unique and quality design of these products attracts attention in the daytime. But most important due to the use of light emitting diode technology our spectacular articles become the source of focused attention in the evening and night. And what else do you need in the clubs, discos, on beach etc.?

Make you light more bright and intensive with our amazing accessories of LEDjewelry series -LEDbuckle, LEDheart, LEDcross, LEDapple ...!!!

If you want to really impress your friends or acquire new ones or attract attention of a someone special just put our accessory on a belt, hand, T-shirt, handbag... or put it on a neck or just wear it as a charm and you will be a real party star.

What is LEDbuckle? It is a buckle on a face side of which there is a graphic light emitting diode screen with a resolution of 24x12 pixels.

On this screen any primitive pictures and animations can be displayed. These animations can be downloaded from our site or you can create your own also in our site and then upload to LEDbuckle. Any symbols, letters or words could be displayed on graphic mode.

### Specification

- Resolution 12x24 LEDs
- Possibility to upload 7 animations
- Number of frames in one animation - 70
- Frame duration from 0.7 to 25.5 seconds
- Two modes of work: "rotating animation" or "rotating all animations"
- Animation update via IRDA port of any device (a mobile phone, a handheld or a regular PC)
- Possibility of firmware upgrade
- Li-Ion rechargeable batteries 500 mA/h
- Possibility of charge via USB
- Different colors

### Mounting

Now we offer unique device on a market. Due to the original mounting it can be attached not only to a belt instead of a buckle but to any place

of your favorite belt. Moreover, LEDbuckle can be attached anywhere - to a shirt pocket or a pants' pocket, to baseball hat, bag pack, etc.

### Control

LEDbuckle is sold with the preloaded animations. There is a control button on the back side of LEDbuckle. Long press turns LEDbuckle on and off. Short press changes subsequent animation. At that, you can see animation number before it is displayed. After you choose the animation you want, it is displayed in rotating animation mode. If you want to display all animations in turn consequently press button until animation number 7 the appropriate symbol "all rotating animations" is displayed. To change a mode, choose the animation you want by cascade sweeping.

### New animation upload

LEDbuckle supports the wireless technology of animations update. All you need is any device with IRDA port (cell phone, a handheld, or a PC). No drivers or additional software is needed. Thus, after you downloaded new animations from our web-site, or created your own unique animation, you'll be able to upload it to LEDbuckle from any device with IRDA port.

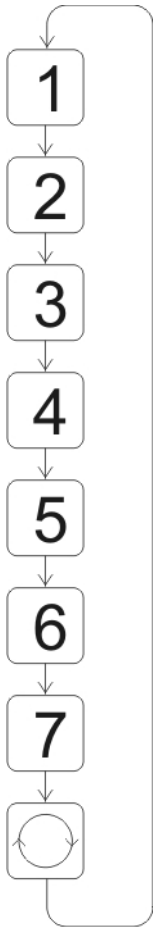
There is an IRDA receiver on the screen of LEDbuckle. Using standard cell phone, a handheld, or PC operations, you may send the downloaded file by directing IRDA port to the screen of LEDbuckle. To conserve energy, IRDA port works only for 3 minutes after the device is turned on. If you want to activate it again, you have to turn LEDbuckle off and on again.

### Creation of your own animation clips

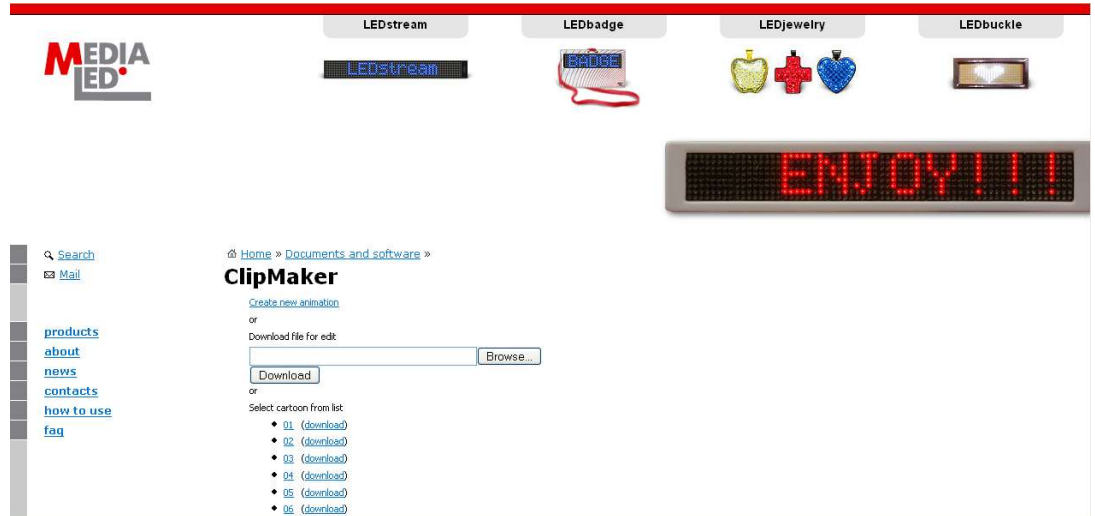
#### Clip Maker

If you need something really extraordinary, and you feel like an artist or there's simply a very important part ahead and you need to draw everybody's attention, then you can create your own animations right on our site. It is as simple as playing a game.

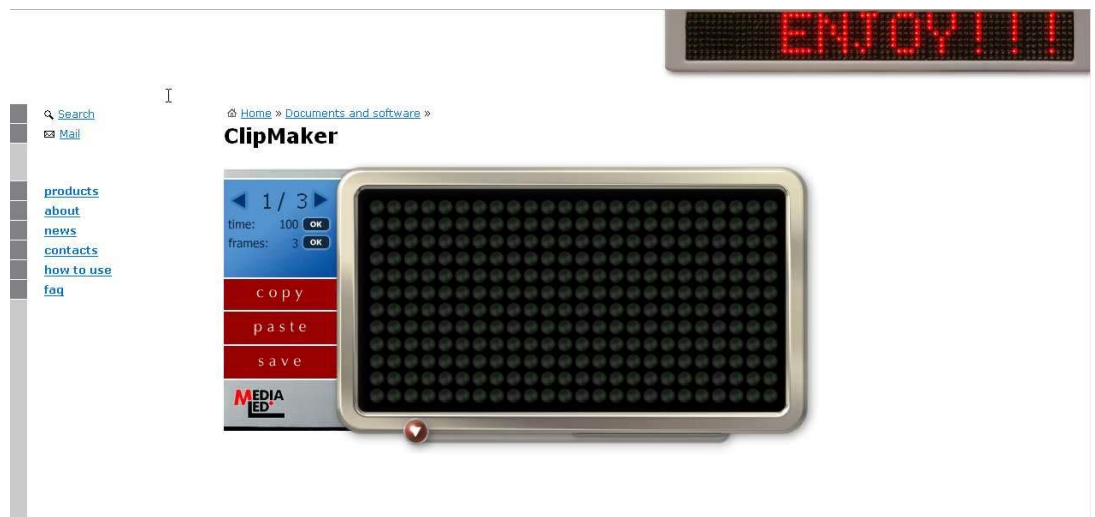
Further we discuss creation of an animation clip step by step.



1. Open page "Products\LEDbuckle\ClipMaker" on our site.

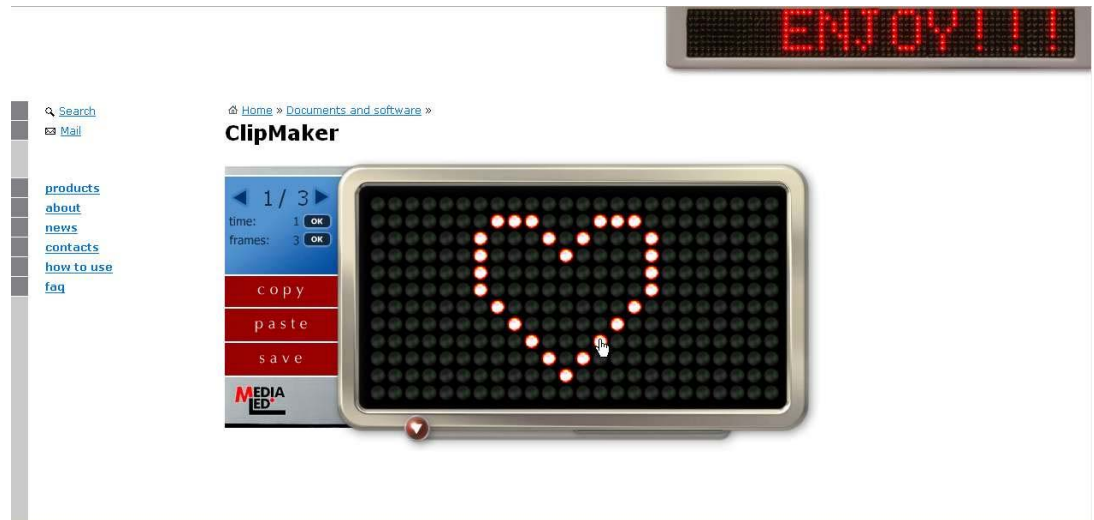


2. Choose what you want to do - to create a new clip or to edit an old one.
3. For editing the old clip, press button "browse", choose the clip on your computer and press button "download". After downloading, you may start editing. But for now we will create a new animation clip, therefore we press the link "Create new animation" and we get to the page with the program that helps to create animations.
4. We specify how many frames will be in the clip. For that, we click in the window "frame" and determine the desired number of frames. The number of frames cannot exceed 70 frames. Press "OK".

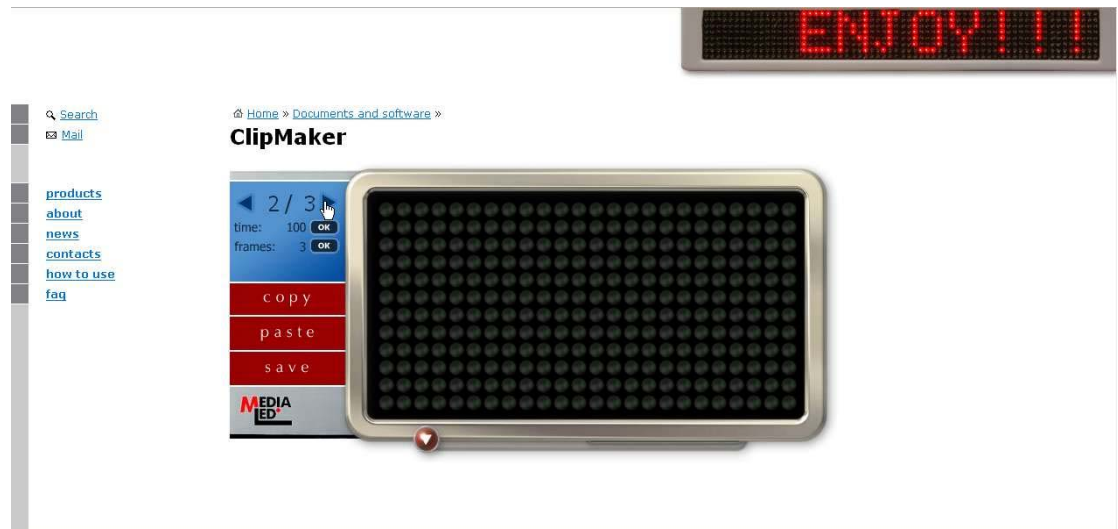


5. Now let's start creating the first frame. For that, click on pixels on a screen. After each click, the pixel turns red. If you need to turn the pixel off, click on the pixel one more time. This way, by

clicking on pixels we need we create the picture of your first frame.



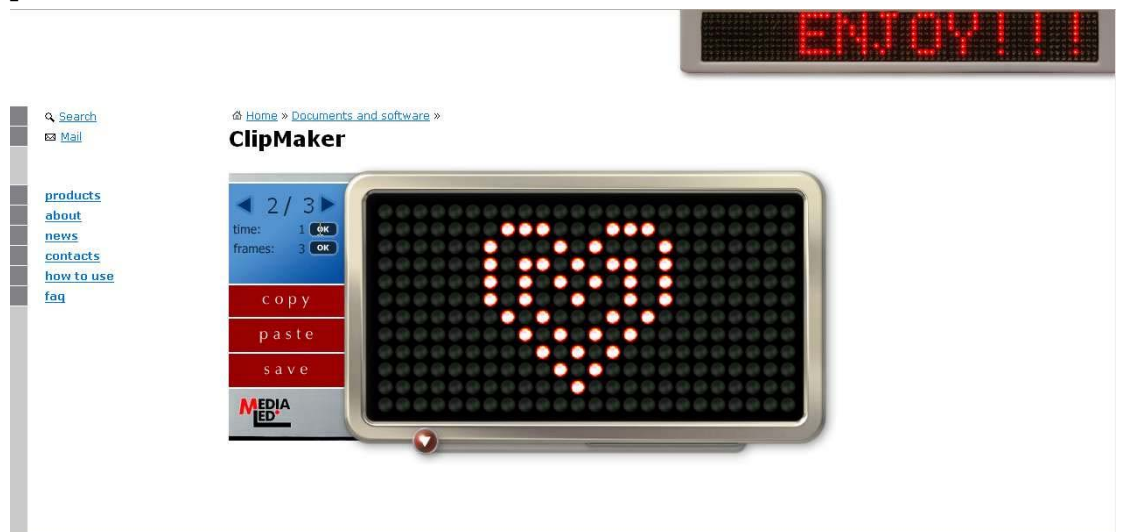
6. Then we have to determine the duration of a frame. It can be anywhere from 1 to 255 units. One unit equals 0.1 sec. For the duration, click on the "time" window, type the desired length in units and press "OK".
7. Now we turn to the next frame by clicking on the arrow in the upper left corner.



8. A hint: if the next frame will be just a slightly different from the previous one, just use copy and paste.

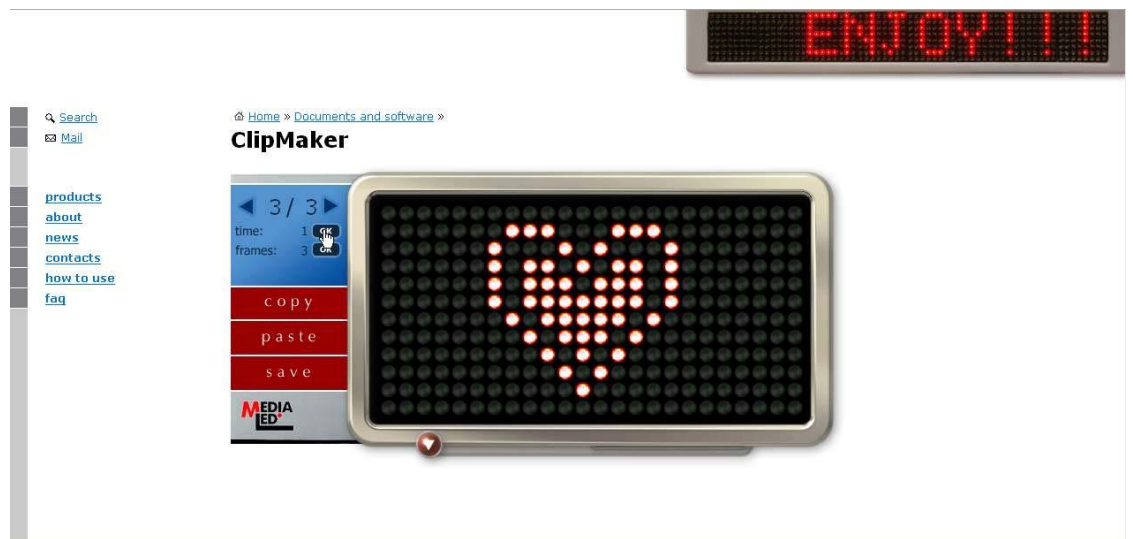


9. We create a second frame by coloring pixels.

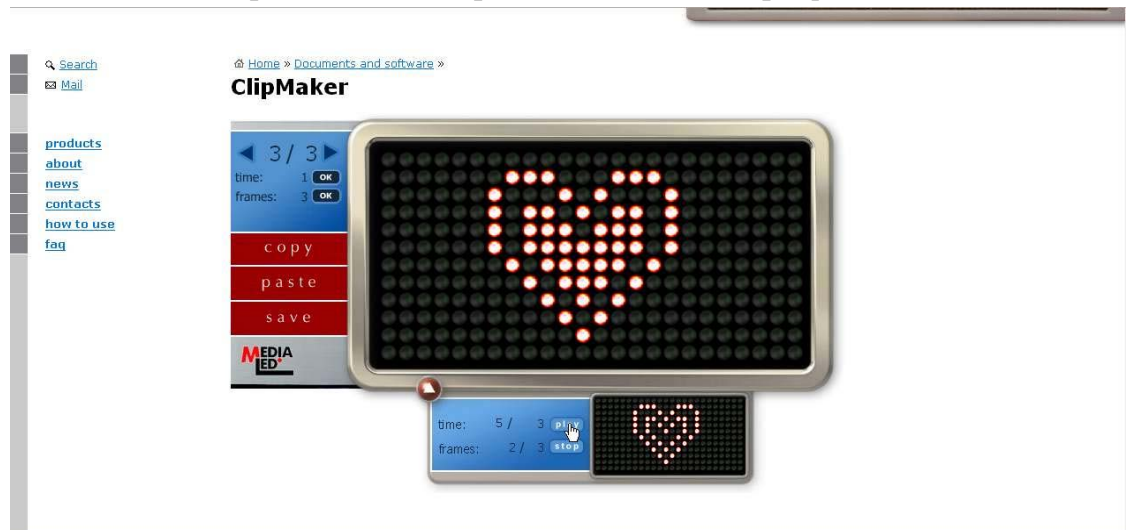


10. After creation of this frame we determine its duration.
11. We proceed to the next frame.
12. We create the third frame.

13. We determine the duration of the third frame.



14. After the creation of a clip, before its upload it is desirable if you look at what you've done. For this, press red button with an arrow. In the opened window, press the button "play".



15. If you are satisfied by your own creation, press "save" and save the resulted animation onto your computer's hard drive.
16. Now we have to upload saved on your computer animation into LEDbuckle.
17. First, we have to rename the saved file. The first symbol in the file name has to be a number from 1 to 7. In accordance with this number, the new animation will replace the old one under the same number. After the number, there can go any word. The file extension

should be "\*.ani".



18. Now we can send the new animation to the LEDbuckle. Turn the LEDbuckle on and bring its screen to the IRDA port on your computer. There will be Windows warning: "There is another computer nearby" and an icon "Send files to another computer" will appear on a desktop.



19. Now move the icon of the animation over the icon "Send files to another computer". You can also send file by right-clicking and choosing in a pop-up menu option: "Send via infrared".

20. After successful upload, move LEDbuckle away from the computer and you will see your clip on a screen of the LEDbuckle.