

LED & Sound

LED-Flasher

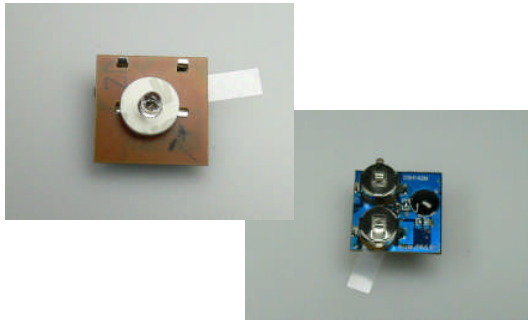


Fig.: Colored bright single LED Flasher

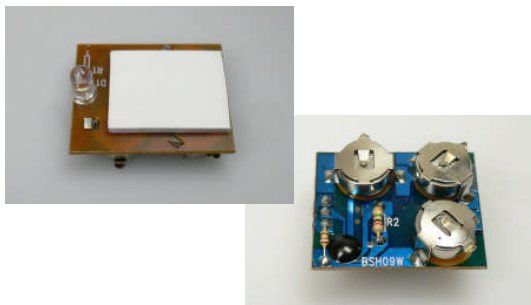


Fig.: Wight bright single LED Flasher

Description:

LED Flashers are compact circuits, with 1 output LED driver chip, 2 or 3 button cells and one LED on board in different colors and brightness.

Plus:

Compact flashers are easy to install, they are ready for use, non-expensive and light.

Use:

Shelf stoppers and big surface displays with several flashers.

Advice:

Due to the limited capacity of the button cells flashers can only "blink", no "fade in / fade out" or constant light allowed. When several flashers on the same display should be started the end user must trigger them by pulling out every pullout stripe from PCBs. When

several LEDs have to be mounted on a display, using a multi LED device might be cheaper than single LED flasher.

Data

Dimensions:

PCB board 27 x 27 mm (colored LED) or 30 x 34 mm (white bright LED) Diameter of clear ultra bright LED 5mm.

Flasher types:

Available in red, orange, yellow, green, blue and white color.

To have a good eye catching impact we only use ultra bright 5mm 20mA LED, minimum 5000 mcd, and narrow viewing angle (20°).

Flashers are also available with flat SMD 20mA or 60mA LED.

Flashing modes:

Blinks about 60 times per minute (0.8 to 1.2 Hz flashing frequency).

Battery / Power Supply:

2 or 3 alkaline G13 or 1 lithium button cells on the back.

Duration:

Apr. 60 days

Activation:

By pullout stripe between battery and PCB board: already installed with the button cell(s),

Easy mounting:

By 3M foam tape on the LED side of the board.

Multi-LED

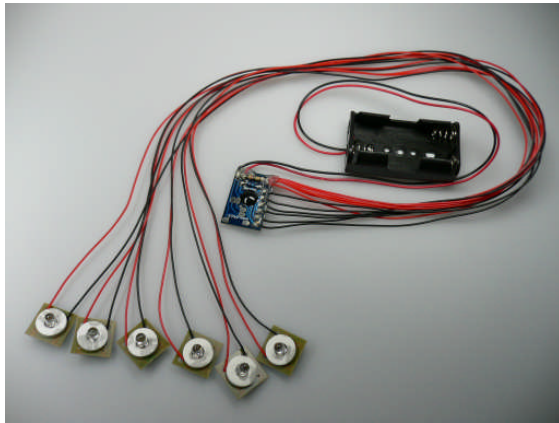


Fig.:6-fold-LED Flasher white, serial blinking with battery holder

Description:

LEDs are on separate boards connected to wires. With 1 up to x output driver chip (s). Works with several LED and every kind of them (color, casing, power).

Plus:

We develop customized software (flashing animation or lighting scenarios) according to your need. Multi-LED also allows all types of hardware: length of wires, connections between LEDs, etc.

Use:

All kind of displays, from shelf stoppers to counter and floor display.

Advice:

Multi-LED devices can be connected to interactive devices such as:

- Light sensor and Infra Red sensor (triggers the device when someone approaches the display).
- Dark switch (device power switches off at night time, battery power saving!)
- Optical fork (device starts blinking when the optical light barrier is cut off, for instance by a game ticket).
- and many other possibilities ...

Data:

Dimensions:

Driver board 20 x 30 mm or depending on customers needs.

- 6 LED boards each 16 x 16 mm
- connected to driver board by 50 cm lead wires
- Battery holder connected to driver board by 30 cm lead wires
- LEDs with 3mm or 5mm, 20mA, and all viewing angles.

LED types:

- Flat smd 20mA
- Flat smd 60mA
- Power 350mA and 700mA LED (complies with 1 and 2 watts)

Flashing modes:

Fade in / fade out (or sweller) software are very power consuming and needs at least C size batteries to run properly during a decent time (for instance one 20mA 5mm white LED will run 500 hours in fade in / fade out mode with 3 x C alkaline cells). All kind of sequence are allowed. Using a standard 5 or 6 outputs driver:

- LED flash all together
- LED flash in sequence (chasing)
- LED flash in up / down mode
- LED flash in random mode
- Fade in / fade out mode:
LED goes on and off gradually, this effect is also known as "sweller". Sweller can drive one or several LEDs, in sequence, randomly or according to your scenario.

Battery / Power Supply:

Power usually comes from a battery holder on wires with alkaline LR6/AA (mignon) cells, LR14/C cells or LR20/D cells.

Which number (volt) depends on the type of LED, color, life time and power needed. When simple blinking is needed, 2 or 3 alkaline AA mignon cells are generally sufficient.

Fade in / fade out light animation works on batteries or AC adaptor. Same for constant lighting LEDs.

Duration:

300 hours by using 2 LR6/AA alkaline batteries.

Activation:

By plug in of the batteries into the holder. In addition to that optionally by motion sensor. To save batteries, light sensor is available also.

Easy mounting:

By 3M foam tape on the LED side of the board on the back side of the driver board and on the battery holder.

Customized LED lighting

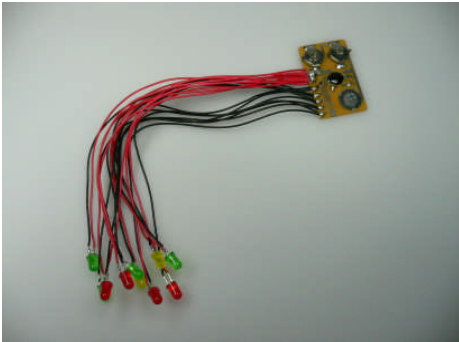


Fig.: 9-fold-LEDs red, green, yellow, random blinking with button cells

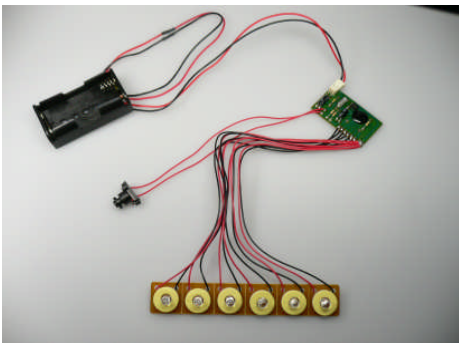


Fig.: 6-fold-LEDs white, serial blinking with motion sensor

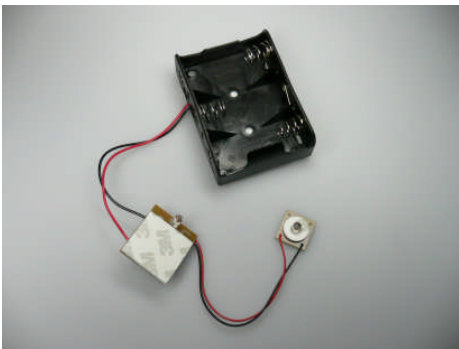


Fig.: 2-fold-LEDs white and red blinking simultaneously

Description:

Using from 20mA, 5mm LED, 60mA or 350 and 700mA power LED.

White LED color temperature can be chosen among warm white, day light white, and cold white.

Development of customized standard FR4 Printed Circuit

Boards and power LED Metal Core Printed Circuit Boards.

Adapting to all displays and point of sale customized furniture.

Please contact us.

Plus:

Almost each customers demands can be realized by development of individual driver boards. For permanent light and sweller operation AC adapter is recommended. All quantities possible (minimum order quantity 100 pieces).

Use:

All kind of displays, shelf stoppers to counter and floor display, figures, pictures, etc.

SOUND for DISPLAY - Voice Box



Fig.: Voice Box in black or white, with or without push button



Fig.: Rear view and battery cabinet of the Voice Box

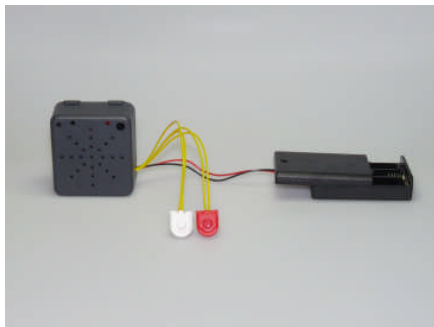


Fig.: Self recordable Voice Box



Fig.: Multi Sound Voice Box (8 different messages)

Description:

Voice box with on/off switch and built-in motion sensor for custom sound playback.

The motion sensor is integrated in the device, thus making it easy to install. Integrated push button for activating playback is available optionally. High quality speaker.

Plus:

Very easy to mount and ready to use.

Use:

Audio sound for all kind of POP displays, from shelf stoppers to counter and floor displays.

Data:

Dimensions:

65 x 94 x 26 mm black injected plastic casing (optional white). Multi sound casing: 43 x 100 x 8 mm, white casing.

Message mode:

Message length is 10 seconds standard. It could be up to several minutes according to customers need.

Battery / Power Supply:

3 x LR6/AA mignon cells.

Duration:

Minimum 2500 playbacks with 10 seconds sound message.

Activation:

On / off switch for standby, activation by integrated motion sensor or optional by push button or optical fork.

Easy mounting:

Optional by 3M foam tape on each side of the box according customers need.

Also available:

Voice box with integrated push button
Voice box with LED flashing when message plays.

Transfer MP3 files from PC via USB plug. Detachable recording switch, motion sensor, audio-in (jack) and volume control.

SOUND for MAILING - Sound Modules (and light optional)

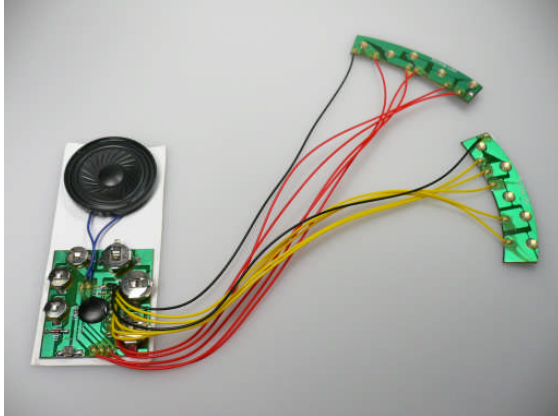


Fig.: Sound Module for greeting card combined with 10 blinking LEDs

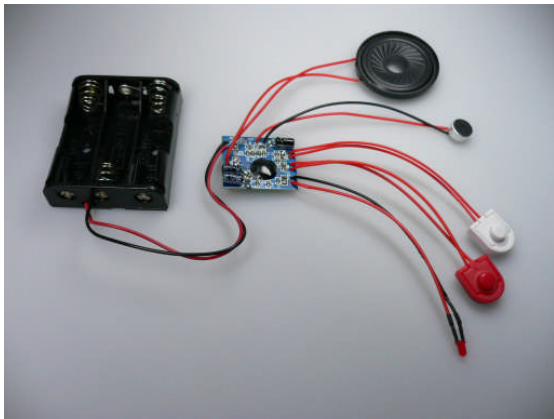


Fig.: Recordable voice module with microphone, pushbuttons and LED on wires

Description:

Sound module slim line version with many options. Available in One Time Programmable (OTP) version for low quantity, and Maskrom technology for higher quantity (> 30,000 pieces because it needs special moulds to print the sound ICs and ROMs).

Plus:

Module is ready to be installed with self adhesive tape on the back side.

Use:

Voice module for mailing, greeting cards or boxes with sliding switch.

Data:

Dimensions:

Module incl. speaker 46 x 100 x 8 mm or according additional options. Depending on customers demand high quality speaker, diameter 27 mm or 40 mm.

+ LEDs (option):

Connection to several 3 mm LEDs which blink when playback sound occurs. Number and color of LEDs and flashing mode according to customers demand.

Message mode:

Message length from 10 seconds to several minutes according to customers need.

Battery / Power Supply:

Several button cells depending on duration and LED options.

Duration:

Minimum 2500 playbacks with 10 seconds sound message.

Activation:

On / off slide switch (slider).

Easy mounting:

Optional 3M foam tape on the back side of the module.

Also available:

- Push button instead of greeting card switch
- Dark switch (starts when module sees the light)
- Recordable voice module for mailing, to be customized by end customer himself. Microphone, push button for recording and play, LED on wires (see photo above).
- Melody sound modules, with piezo speaker (diameter 27 mm). Greeting card switch (slider), minimum order quantity 30,000 pieces.