Flasher unit

DON

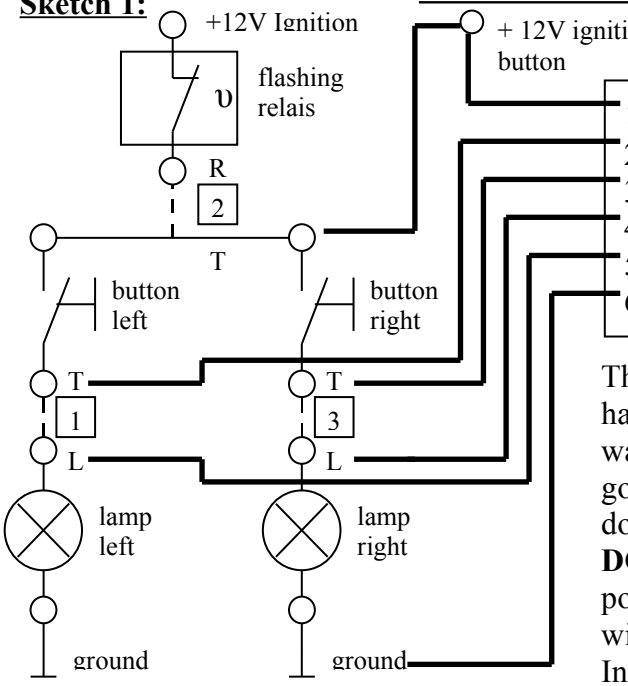
Flashtronics

Häfele, Markus
Hallenstr.6
D-75045 Walzbachtal
0049 (0)7203 / 7859

1. Specific application

This flasher unit is designed for motorbikes that use the flashers via two separate push buttons (without locking mechanism). With a lot of older motorbikes you have to press the flasher during the whole process of flashing. The flashlight signal is usually generated by a 2-pin flashing relay (see circuit diagram, sketch 1). This is not needed any more.
The electronic flasher unit **DON** starts a flashing process of ten times after you tap the push button so that you then have your hands free to couple or brake. The flashing frequency is of course independent of the load so that **DON** will also be interesting if you switch to LED flashers. But **DON** can still do more, see section 4 – functions.

Sketch 1:



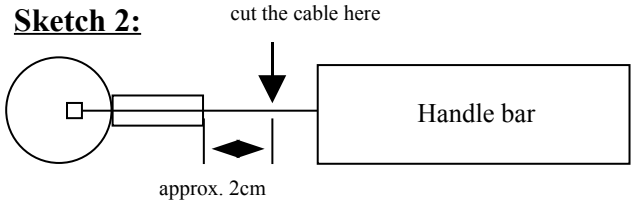
2. Installation – the basics

The dashed connections in sketch 1 have to be disconnected and the bold connections have to be established

The flashing relay needs six wires. All these wires are there in the handlebar if you have bar end flashers (bull's eye). That's why **DON** was designed to make an installation in the handlebar possible. A good installation position is the side of the clutch because then you don't have to work around with the throttle cable. But of course **DON** can be fixed anywhere on the motorbike by cable strap. But its position should not be too close to the ignition coil and the ignition wire.
In section 3 you will find a description of the installation on the side of the clutch.

3. Installation – in the handlebar

Sketch 2:



- remove the bull's eye on the side of the clutch
- cut the wire (see sketch 2) but not too short!
- remove or open the switch block on the side of the clutch
- remove or open the switch block on the side of the throttle cable
- remove the connection of the right switch and the right lamp (see 3 sketch 1)
- pull a yellow cable from the now free switch (3 -T) through the handlebar to the side of the clutch.
- pull a grey cable from the now free lamp (3 -L), through the handlebar to the side of the clutch (solder both cables and isolate them with a heat shrink tube)
- Make sure that both switches are connected via a wire. This wire persists. Now one wire leads to the present flashing relay (2) and put the connection of both switches (2 -T) on +12V ignition (normally at the horn button or the brake light switch). Make sure the +12V are connected and fused.
- put **DON**, cables first, into the handlebar from the side of the clutch. Lead through all cables at the switch block on the side of the clutch. Put back the green cable so that it sticks out at the end of the handlebar. Make sure the green cable stays tangible in the switch block. That makes the mounting of the bull's eye easier later on.
- Now all connections can be established in the switch block. Always work with a heat shrink tube when connecting two wires. Establish a good bonding to ground.
- Connect the green cable with the end of the cable of the bull's eye **(slide on the handle before)**
- mount the bull's eye (now it is helpful if you can pull the green cable from the switch block)
- mount the switch blocks – you're done!

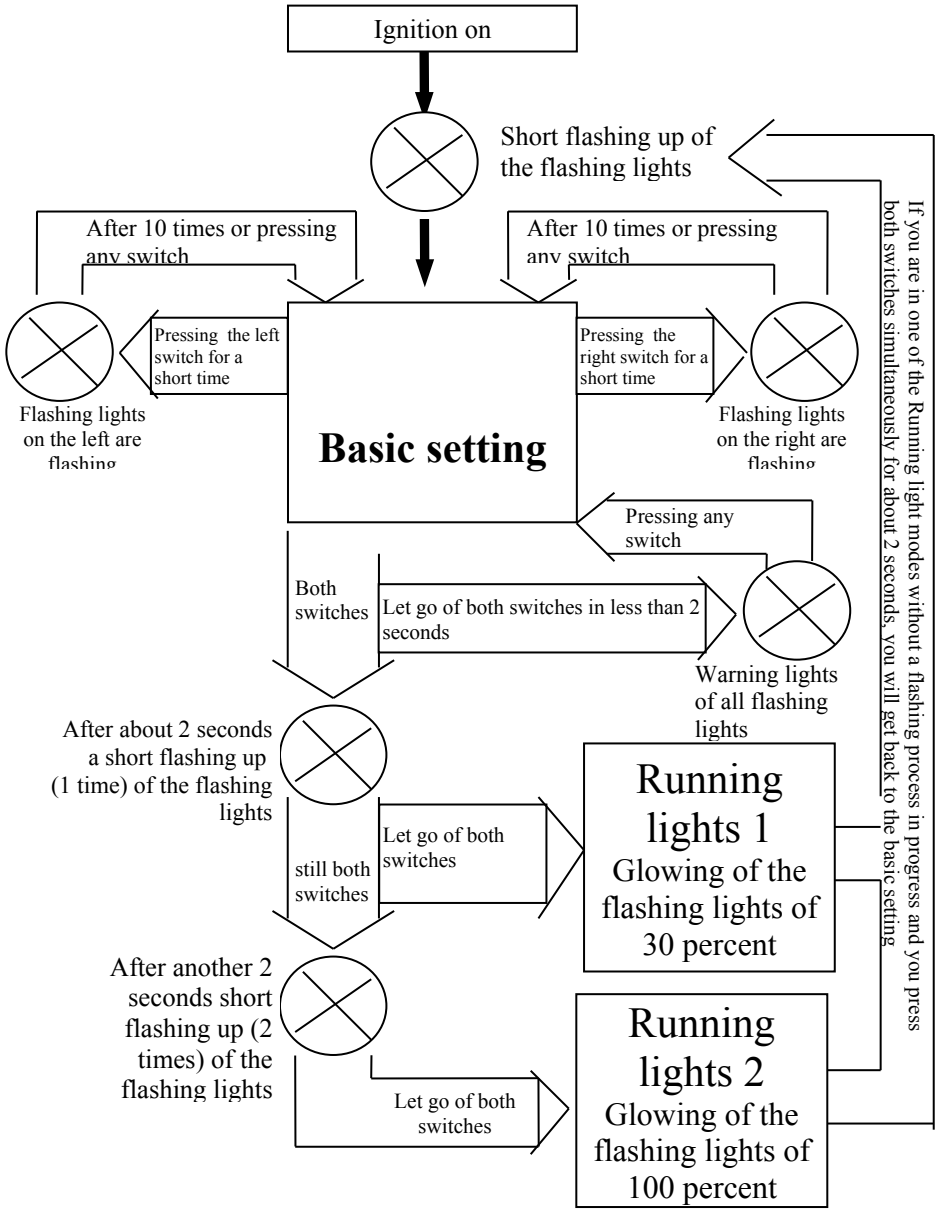
4. Functions:

DON has got three functional blocks:
- basic setting
- running lights 1
- running lights 2

After starting the ignition all flashing lights will flash up. Now **DON** is in the **basic setting** with the following functions:

- tapping one of the switches (left / right) will start a process of flashing (ten times)
- the process of flashing may be stopped by pressing any switch
- if there's no process of flashing activated and no switch is pressed, you can start the warning lights by pressing both switches simultaneously for a short time. The warning lights mode is unlimited and can be stopped by pressing any switch
- if there's no process of flashing activated and no switch is pressed, you can switch to Running lights 1 by simultaneously pressing both switches for about 2 seconds. **DON** indicates this mode by shortly flashing up the flashing lights. Now let go of both switches and Running lights 1 is activated. If you continue pressing both switches for another two seconds there will be a short double flashing up of the flashing lights. If you let go of both switches now, you have activated Running lights 2
- **Running lights 1:** this mode has the same function as the basic setting, but the flashing lights have a glowing of 30 percent. This looks great at night.
- **Running lights 2:** the flashing lights have a glowing of 100 percent (be careful: the flashing lights are getting quite warm)
- to get back to the basic setting you have to press both switches for more than 2 seconds. **DON** indicates this mode by shortly flashing up the flashing lights. If you let go of both switches you have activated the basic setting. Make sure that there is no process of flashing in progress in any Running lights . Otherwise switching back won't be possible.

All of this sounds more complicated than it actually is. Just try!



Notice: Riding the motorbike in a Running lights mode is technically not a problem, but it is not allowed in Germany (Highway Code / STVO)

5. Technical data:

voltage	9 – 16V protection against reverse polarity
current drain:	less than 50mA in static condition
switching capacity:	total 1-100W each side 50W maximum **- not short-circuit-proof**
protection class:	dustproof waterproof