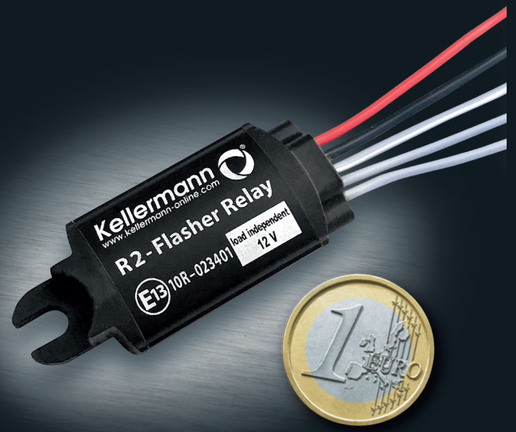
Kellermann®

Mounting Guideline
Kellermann R2
universal, load independent flasher relay



english

Thank you for placing your trust in us
buying the Kellermann R2.

INTRODUCTION

The Kellermann R2 is an ideal replacement for original relays with two or three contacts, especially in combination with accessory indicators. The relay provides a constant blinking frequency over a wide load range. Even in the particular case that all indicators are flashing independant from the selected turn direction, this all-rounder provides assistance.

WARNING

WARNING! Before mounting the relay you should read this guideline completely! Don't connect the two equally coloured cables, if your motorcycle has hazard lights (have a look at the text)! There is no guarantee, if the relay is damaged because of wrong installation!

WARNING! If you are uncertain about the correct electrical connection you should charge a specialist because only a skilled connection of the relay can assure an accurate functionality. Incorrect electrical connection can lead to short circuiting (cable fire) or damage to other electronic components or deletion of the relay. **In this case there is no guarantee!**

WARNING! Before fitting, ensure the motorcycle is standing securely as a falling motorcycle could cause injury and damage to the motorcycle.

FITTING

Turn off the engine and disconnect the battery. Get unobstructed access to the original relay by dismantling the seat and the sidecovers or the fairing. Dismantle the original relay and mount the Kellermann relay near the original slot. The design of the case provides easy mounting. Now you have to connect the wires of the Kellermann relay with the slot.

Electrical connections:

black cable:	minus - (31 or E)
red cable:	(ignition) plus + (49 or B)
two coloured cable:	outlet +…+…+… (49a or L)

If there are no notes on the relay you have to find out the pin configuration. Therefore you need a testing lamp or a demounted original indicator. Remove the original relay ant turn the ignition key to „on". Connect one cable of the testing lamp with ground and the other one by one with the connections in the slot. If the lamp lights up, you have found the permanent plus (red) connection. For a 2-pin relay the accurate terminal assignment is clarified. The other connection meets the outlet +…+…+… (two coloured). The black cable needs to be connected directly with the battery or the frame.

To find out the ground connector of a 3-pin relay, connect one cable of the test lamp with the before detected permanent plus connector and the other one by one with the remaining connectors. If the lamp lights up you have found the ground connector for the black cable of the Kellermann relay. The two coloured cable meets the remaining connector.

Cut of the red, the black and the two coloured cable to a proper length and strip of the insulation on a length of about 1 cm. Crimp the enclosed male disconnects/ ring type terminal on the cables (original 2-pin relay: ring type terminal on the black cable). Put the male disconnects into the slot and fix the ring type terminal on the battery or the frame. Connect the wires and test, if the blinkers work.

Now test the function of the indicators. Are they flashing? If they light up permanent, you probably mixed up the red and the two coloured cable. If the four of them are flashing, independent from the selected turn direction, you connect one cable with the plus feed line of the left indicator and the other cable with the plus feed line of the right indicator (front or rear). Use the enclosed connector sleeves. Be sure to connect both cables.
Connect the equally coloured cables only, if you are very sure, that the connections of the red and the two coloured cable are the right ones.
If there is a hazard light, first shut it down and after that connect the equally coloured cables. Wrong installation - no guarantee.
Check the correct function of the flasher and complete the bike.
Then the job is done.

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