

This Manual is only intended to use with the custom build "IQ-X for Forumslader", not for original headlights IQ-X from Busch+Müller.

After changing the PCB in the headlight IQ-X to get a "IQ-X for Forumslader" there are several changes in the abilities, the output power and the general use of the headlight.

The new headlight gets 3 stages of brightness:

- Off
- Economy
- full brightness

The headlight gets 2 different operating modes:

- user operated = mode "Manual"
- Automatic sensor operation with dimmer switch = operating mode "Automatic"

## Behavior of the headlight in mode "Manual"

- Connecting to voltage (Start of Forumslader) -> Headlight "Off"
- Press button briefly -> Start always in brightness level "Economy"
- Press button briefly again -> Change between "Economy" and "Full brightness" at each push
- Press button long (approx. 2s) -> Headlight "Off"

## Behavior of the headlight in mode "Automatic"

- Connecting to voltage (Start of Forumslader) -> Headlight starts in level "Economy" for approx. 4s
- Then in daylight -> headlight goes to "Off" or at darkness -> level "Economy"
- Push button briefly -> change in darkness between "Economy" and "Full brightness" at every touch
- Press button long (approx. 2s) -> Headlight goes "Off". Until disconnected from the power supply, the headlamp remains in "Manual" mode and only after the voltage has been disconnected it goes to "Automatic" again

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## Changing the operating mode and setting the "Economy" brightness

- Press the button for a long time (approx. 10s) and do not release it -> activate the programming function in "Economy", now the brightness is continuously increased, decreased, increased, etc. between 5% and 95% of full brightness
- Release the button
  - a) actual brightness will be saved and used in mode "Economy"
  - b) release at rising brightness -> operation mode "Manual" will be saved
  - c) release at falling brightness -> operation mode "Automatic" will be saved

## Technical data of the headlight "IQ-X for Forumslader"

Input voltage: 7-14V DC

Power consumption: 0-9W Economy, 9W at full brightness

Output for the rear light: 6V DC, max. 250mA continuous current

Power consumption in mode "Off": 0.2-0.6mA